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Preface

This documentation describes how to use and work with Active Technologies. It is intended for administrators and developers who are responsible for creating active reports, using active reports to create active dashboards, and creating active reports for Adobe® Flash® Player and for PDF.

The WebFOCUS® tool set generates the rich FOCUS® fourth generation language. While this language is very extensive, the WebFOCUS tool set supports only a subset of the language and only specific syntax constructs. While you can manually modify the content of these WebFOCUS procedures and files, there is no guarantee that you will be able to open the modified procedure in the tool.

How This Manual Is Organized

This manual includes the following chapters:

<table>
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<th>Chapter/Appendix</th>
<th>Contents</th>
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</thead>
<tbody>
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<td>1 Active Technologies</td>
<td>Provides an overview of Active Technologies and describes the product requirements.</td>
</tr>
<tr>
<td>2 Creating Active Technologies Components With InfoAssist</td>
<td>Describes how to create a report, chart, or dashboard that is enabled for Active Technologies using InfoAssist.</td>
</tr>
<tr>
<td>3 Creating Active Technologies Reports With Report Painter</td>
<td>Describes how to create a report that is enabled for Active Technologies, using Report Painter in the Developer Studio environment.</td>
</tr>
<tr>
<td>4 Using an Active Technologies Report</td>
<td>Describes how to run reports enabled for Active Technologies and use their features and functionalities.</td>
</tr>
<tr>
<td>5 Active Technologies for Mobile Web Apps</td>
<td>Describes how Active Technologies features and functions are implemented on mobile devices with multi-touch capability, such as the Apple® iPhone® device and Apple iPad® tablet.</td>
</tr>
<tr>
<td>6 Working With Active Technologies Reports for Adobe Flash Player</td>
<td>Describes the features that are available for Active Technologies reports for Adobe Flash Player, including support of basic and advanced chart types.</td>
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### Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>THIS TYPEFACE</strong> or <strong>this typeface</strong></td>
<td>Denotes syntax that you must enter exactly as shown.</td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td>Represents a placeholder (or variable) in syntax for a value that you or the system must supply.</td>
</tr>
<tr>
<td><strong>underscore</strong></td>
<td>Indicates a default setting.</td>
</tr>
</tbody>
</table>
## Convention Description

- **this typeface**: Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.

- **Key + Key**: Indicates keys that you must press simultaneously.

- **{}**: Indicates two or three choices. Type one of them, not the braces.

- **[]**: Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.

- **|**: Separates mutually exclusive choices in syntax. Type one of them, not the symbol.

- **...**: Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).

- **.**. Indicate that there are (or could be) intervening or additional commands.

### Related Publications


You can also contact the Publications Order Department at (800) 969-4636.

### Customer Support

Do you have questions about this product?

Join the Focal Point community. Focal Point is our online developer center and more than a message board. It is an interactive network of more than 3,000 developers from almost every profession and industry, collaborating on solutions and sharing tips and techniques. Access Focal Point at [http://forums.informationbuilders.com/eve/forums](http://forums.informationbuilders.com/eve/forums).
You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our website, http://www.informationbuilders.com. It connects you to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section of http://www.informationbuilders.com also provides usage techniques, diagnostic tips, and answers to frequently asked questions.

Call Information Builders Customer Support Services (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your questions. Information Builders consultants can also give you general guidance regarding product capabilities. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- Your six-digit site code (xxxx.xx).

- Your WebFOCUS configuration:
  - The front-end software you are using, including vendor and release.
  - The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
  - The software release.
  - Your server version and release. You can find this information using the Version option in the Web Console.
  - The stored procedure (preferably with line numbers) or SQL statements being used in server access.
  - The Master File and Access File.

- The exact nature of the problem:
  - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
  - Provide the error message and return code, if applicable.
Is this related to any other problem?

Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?

What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?

Is this problem reproducible? If so, how?

Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?

Do you have a trace file?

How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website http://documentation.informationbuilders.com/connections.asp.

Thank you, in advance, for your comments.

Information Builders Consulting and Training

Interested in training? Information Builders Education Department offers a wide variety of training courses for this and other Information Builders products.

For information on course descriptions, locations, and dates, or to register for classes, visit our website (http://education.informationbuilders.com) or call (800) 969-INFO to speak to an Education Representative.
This topic provides an overview of Active Technologies and describes the product requirements.

This topic also describes the features of an Active Technologies report, which is a report that is enabled to use the full capabilities of Active Technologies. An Active Technologies report is also called an active report.

**In this chapter:**

- Active Technologies Report Overview
- Available Output Formats for Using Active Technologies
- Product Requirements for Using Active Technologies

---

**Active Technologies Report Overview**

An active report is a report that is designed for offline analysis. When using an active report, you can:

- Interact with the data, using analysis options similar to those found in an Excel® workbook, without any connection to a server. Analysis options include filtering, sorting, charting, and much more.

- Work offline without any additional plug-ins or programs. An active report is a self-contained report, meaning that it contains all the data and JavaScript® within the HTML output file. Packaging the data and the interactive functions in the HTML file also makes the output highly compressible for email and transparent to security systems.

- Save the report on a local machine with active report functionality. Since no connection to a server is required to view the data or use the analysis options, you can save and use the report anywhere.

Performance may vary across browsers due to browser-specific memory limitations. For very large reports, Internet Explorer® may produce an error. For more information, refer to the Microsoft® website.
An active report for Adobe Flash Player includes most of the capabilities available in the HTML version of active reports in a visually enhanced, user-friendly report format. An active report delivered as a self-contained Adobe Flash SWF file that is Adobe Flash Player compatible allows for faster analysis of large data sets and interaction with the active report. For more information about active reports for Adobe Flash Player, see *Active Technologies Report Integration With Adobe Flash Player* on page 187.

When working with an active report, you can:

- Filter or highlight data.
- Sort data within any column in ascending or descending order.
- Apply calculations to columns and choose the location at which to display results.
- Control the display of data by hiding columns, freezing columns, limiting the number of rows per page, and using graphic visualization to compare column values.
- Create a variety of simple or advanced charts (pie, line, bar, or scatter) and Rollup Tables.
- Apply a global filter to multiple reports within the same HTML page.
- Export report data and chart data.
- Restore original report settings.
- Run active reports on your mobile device with the Opera™ browser (Version 8.60 U2 or higher) installed. See the Opera website for a list of supported devices.
- Run active reports on your iPhone® mobile device. For the best performance results, it is recommended that you set a maximum of 500 records for a mobile report.

Some active report functionality is drag and drop based, and thus not supported with iPhone.
The following image shows an HTML active report. The pop-up menu is open for the Quantity column, with the Avg Calculate operator selected.

<table>
<thead>
<tr>
<th>Manufacturing Plant</th>
<th>Product Type</th>
<th>Product Name</th>
<th>Order Numbers</th>
<th>Date Of Order</th>
<th>Line Total</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS</td>
<td>Analog</td>
<td>110 VHS-C Camcorder 20 X</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$66,011.08</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td>2</td>
</tr>
<tr>
<td>DAL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$18,807.96</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZC Digital PDA - Standard</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td>2</td>
</tr>
<tr>
<td>LA</td>
<td>Analog</td>
<td>110 VHS-C Camcorder 20 X</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$51,216.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td></td>
</tr>
<tr>
<td>OPL</td>
<td>Analog</td>
<td>110 VHS-C Camcorder 20 X</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$51,216.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td></td>
</tr>
<tr>
<td>SEA</td>
<td>Analog</td>
<td>110 VHS-C Camcorder 20 X</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$51,216.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZC Digital PDA - Standard</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td></td>
</tr>
<tr>
<td>STL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$51,216.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZC Digital PDA - Standard</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$93,630.19</td>
<td></td>
</tr>
</tbody>
</table>

**Security Features**

You can password protect an active report. This feature restricts users from viewing the report by requiring them to enter a password before opening the report. The data is encrypted using the 256-bit Advanced Encryption Standard (AES) specification. The password is used as the key for decrypting and encrypting the data. Therefore, the password is not stored in the report, and you do not need a connection to go back to the server for password verification.

The HTML page that you receive contains both the JavaScript and the data for the report so that you can interact with the data in a disconnected mode. Internet Explorer detects the JavaScript and issues a warning. If you look at the Internet Explorer warning, it mentions explicitly the detection of active content, which is the JavaScript. The same warning appears when pop-ups are blocked in the browser.
Handling a Large Amount of Data

Because all post-retrieval processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The active cache option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the WebFOCUS Reporting Server. The server also becomes the resource for performing all calculations, sorting, and filtering when active cache is enabled. Since active cache uses on-demand paging functionality, WebFOCUS Viewer is not supported.

The active report with active cache option in the clustered server environment, using Cluster Manager (CLM), will maintain the connection with the WebFOCUS Reporting Server where the temporary cache is created in order to retrieve subsequent pages from the browser, while the report is in the same browser session.

The active cache feature uses a POST instead of a GET in an HTTP request. If your applications run active cache reports that use WebFOCUS Web Services, see the WebFOCUS Web Services manual for more information.

Available Output Formats for Using Active Technologies

Active Technologies include all the active report features, the combination of multiple active reports as dashboards, and the extension of these reports or dashboards in different output format types. You can use WebFOCUS report or application development tools to generate the procedures that are in .FEX file extensions to create these reports and dashboards. Regardless of the output or format types, these reports and dashboards will always have the active report menus and options.

The following output types are available in Active Technologies.

- Active Technologies Report
  - HTML version. The WebFOCUS syntax is:
    
    ```
    FORMAT AHTML
    ```
    The output file extension is .HTML.
  
  - Adobe Flash Player version. The WebFOCUS syntax is:
    
    ```
    FORMAT FLEX
    ```
    The output file extension is .SWF, where SWF is a file that is Adobe Flash Player compatible.
For PDF. The WebFOCUS syntax is:

```
FORMAT APDF
```

The output file extension is .PDF, with an embedded SWF file that is Adobe Flash Player compatible.

Active Technologies Dashboard

- HTML version. The WebFOCUS syntax is:

```
FORMAT AHTML
```

The output file extension is .HTML.

- Adobe Flash Player version. The WebFOCUS syntax is:

```
FORMAT FLEX
```

This format is available in Document Composer and InfoAssist.

The output file extension is .SWF, where SWF is a file that is Adobe Flash Player compatible.

For PDF. The WebFOCUS syntax is:

```
FORMAT APDF
```

This format is available in Document Composer and InfoAssist.

The output file extension is .PDF, with an embedded SWF file that is Adobe Flash Player compatible.

**Product Requirements for Using Active Technologies**

In some cases, additional products are required in order to use Active Technologies.

Some product requirements and device support depend on the Active Technologies chart engine that you are using. The chart engine is set with the WebFOCUS StyleSheet ARGRAPHENGINE attribute in an active report procedure, or in the SECTION declaration of a compound layout report. For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see *Switching the Chart Engine* on page 354.
Reference:  Active Technologies for Adobe Flash Player Installation Requirements

The following additional installations are required:

- An active report for Adobe Flash Player is generated using a Java-based compiler engine that comes with Adobe Open Source Flex® SDK included on the WebFOCUS Reporting Server. As of WebFOCUS Reporting Server Release 7.7 Version 04, this compiler has been upgraded to Flex 4.5.1. JSCOM3 is a listener installed with the WebFOCUS Reporting Server that is used when the server compiles an active report for Adobe Flash Player. Ensure that the JSCOM3 service is started on the WebFOCUS Reporting Server and that enough memory for Java is allocated to the JSCOM3 service by setting the Maximum Java Heap Size. The recommended Maximum Java Heap Size is 512 megabytes.

For more information, see the WebFOCUS and ReportCaster Installation and Configuration for Windows manual.

- In order to run a report using the active report for Adobe Flash Player (FLEX) format, Adobe Flash Player 10.2.159.1 or higher is required to render Active Flash content. If your machine does not detect a Flash Player, you will be prompted to download a Flash Player. If an older version of Flash Player exists, you will need to upgrade.

- Adobe Flash Player 10 or higher is required when you use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). This requirement applies to active charts for Adobe Flash Player (FLEX output format) and for PDF (APDF output format).

- If there is no valid license for Active Technologies, the report output displays the text Active Technologies Trial Version above the data, and charts display the text in the background of the chart image.

- The following browser setting is required to prevent a script error when opening an active report for Adobe Flash Player file in Internet Explorer:

  1. In Windows Internet Explorer, click Internet Options from the Tools menu.
  2. Select the Advanced tab.
  3. Scroll to the Security section and ensure that Allow active content to run in files on My Computer is not selected.
  4. Click OK to close the Internet Options dialog box.
**Reference:** Active Technologies for PDF Installation Requirements

In order to run an active report for PDF (APDF output format), Adobe Reader® 9.4.5 or higher is required so that the Adobe Flash Player run-time code included in the Reader can render the SWF files that are Adobe Flash Player compatible.

For details on enabling Adobe Reader for Google Chrome™, Mozilla® Firefox®, and Safari® on Mac OS® so that you can view active reports for PDF in those browsers, see Viewing an Active Technologies Report for PDF in Adobe Reader on page 233.

**Mobile and Tablet Device Support Information**

The following apply to Active Technologies.

- Active Technologies for Adobe Flash Player and for PDF are not supported on Apple® iOS-based devices or Android™ devices.

- Active Technologies charts that use the Flash chart engine for connected mode (ARGRAPHENGINE=FUSION) are not supported on Android devices.

- Active Technologies charts that use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART) are not supported on Android devices with OS version 3.0 or lower.

- In Active Technologies for mobile on Android devices, you cannot select the chart type when using the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). Charts are not available in the chart selection tool.

- Running an AHTML report with more than 30,000 records may cause the mobile Safari browser to close on the Apple iPad. To handle a large set of data when using Safari on iPad, turn on the active cache feature.

**UNC Path Considerations**

An active report for Adobe Flash Player is generated using a Java-based compiler engine that is included with the Adobe Open Source Flex SDK for the WebFOCUS Reporting Server. The Adobe Flex compiler does not support the use of a UNC (Universal Naming Convention or Uniform Naming Convention) path.

If the WebFOCUS Reporting Server is installed on a network share using a UNC path name, you must set the CLASSPATH to flex-compiler-oem.jar and mxmlc.jar on a mapped drive before starting the server.

For example, before calling edastart on a user PC, issue the following commands:

```
net use E: \\mypc\C$\ibi
```
set CLASSPATH=E:\srv77\home\etc\flex\lib\flex-compiler-oem.jar;
E:\srv77\home\etc\flex\lib\mxmlc.jar

Traditional MVS Considerations

z/OS (traditional MVS) users running under PDS deployment must allocate their temporary HTML data sets so that the data sets have a wider LRECL to use HOLD FORMAT AHTML syntax.

Language Requirements

On some UNIX® systems, such as Linux and Oracle® Solaris, the system locale may be set by default to a UTF-8 encoding value, such as en_US.UTF-8.

Unless you are running the WebFOCUS Reporting Server in Unicode, this setting causes JSCOM to run in UTF-8 mode and corrupts the buffer.

On these systems, you can check the language that is set by typing:

locale

Make sure that the setting reflects the language that you are planning to use on the WebFOCUS Reporting Server. For example, if the WebFOCUS Reporting Server is set to 437 English only, make sure that the server is started with the correct English system locale.

You can add the LANG setting to the edastart shell script, or you can add it to the profile of the user ID that starts the server. For example, add the following to set the language to English on Linux:

export LANG=en_US.iso88591

On Oracle Solaris, you need to set LC_ALL, in addition to LANG. For more information, contact your UNIX administrator.

If data in active reports contains National Language Support (NLS) characters, you must configure the server for NLS in order to display the correct characters. For more information, see the Server Administration for UNIX, Windows, OpenVMS, IBM i, and z/OS manual.

The web server must support NLS file names if you are using NLS characters in an SWF file name. For example, Tomcat standalone does not support the use of NLS file names.
This topic describes how to create a report, chart, or dashboard that is enabled for Active Technologies using InfoAssist.

These reports, charts, and dashboards use the full capabilities of Active Technologies. They are also referred to as active reports, charts, and dashboards.

**In this chapter:**

- Creating an Active Technologies Report
- Creating an Active Technologies Chart
- Creating an Active Technologies Dashboard

## Creating an Active Technologies Report

An active report is a self-contained report that is designed for offline analysis, meaning it contains all the data and JavaScript within the output file. Using an active report, you can:

- Interact with the data, using analysis options similar to those found in an Excel workbook, without any connection to a server. Analysis options include filtering, sorting, charting, and much more.

- Work offline without any additional plug-ins or programs. An active report is a self-contained report, meaning it contains all of the data and JavaScript within the HTML output file. Packaging the data and the interactive functions in the HTML file also makes the output highly compressible for email and transparent to security systems.

- Save the report on a local machine with active report functionality. Since no connection to a server is required to view the data or use the analysis options, a user can save and use the report anywhere.

An active report using Adobe® Flex® includes most of the capabilities available in the HTML version of active reports in a user-friendly report format. An active report delivered as a self-contained Adobe Flash file (.SWF files that are Adobe® Flash® Player compatible) allows for faster analysis of large data sets and interaction with the active report.
**Procedure: How to Create an Active Technologies Report**

1. With InfoAssist open in Report view, on the Format tab, in the Output Types group, click *active report*.
2. Create a report.
3. Run the report.

The following image shows an active report with the available menu options for the Product Category column.
### Active Technologies Report Menu Options

Menu options for an active report are described in the following table.

<table>
<thead>
<tr>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort Ascending</td>
<td>Sorts the column in ascending order.</td>
</tr>
<tr>
<td>Sort Descending</td>
<td>Sorts the column in descending order.</td>
</tr>
<tr>
<td>Filter</td>
<td>Filters the data. Options are:</td>
</tr>
<tr>
<td></td>
<td>- Equals</td>
</tr>
<tr>
<td></td>
<td>- Not equal</td>
</tr>
<tr>
<td></td>
<td>- Greater than</td>
</tr>
<tr>
<td></td>
<td>- Greater than or equal to</td>
</tr>
<tr>
<td></td>
<td>- Less than</td>
</tr>
<tr>
<td></td>
<td>- Less than or equal to</td>
</tr>
<tr>
<td></td>
<td>- Between</td>
</tr>
<tr>
<td></td>
<td>- Contains</td>
</tr>
<tr>
<td></td>
<td>- Contains (match case)</td>
</tr>
<tr>
<td></td>
<td>- Omits</td>
</tr>
<tr>
<td></td>
<td>- Omits (match case)</td>
</tr>
<tr>
<td>Option</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Calculate</td>
<td>Calculation types that you can apply to the column:</td>
</tr>
<tr>
<td></td>
<td>- Clear</td>
</tr>
<tr>
<td></td>
<td>- Clear all</td>
</tr>
<tr>
<td></td>
<td>- Count</td>
</tr>
<tr>
<td></td>
<td>- Count distinct, which counts the number of distinct values within a field.</td>
</tr>
<tr>
<td></td>
<td>For numeric fields, you can also apply:</td>
</tr>
<tr>
<td></td>
<td>- Sum</td>
</tr>
<tr>
<td></td>
<td>- Avg</td>
</tr>
<tr>
<td></td>
<td>- Min</td>
</tr>
<tr>
<td></td>
<td>- Max</td>
</tr>
<tr>
<td></td>
<td>- % of Total</td>
</tr>
<tr>
<td>Chart</td>
<td>Creates a chart from the report. Options are Pie, Line, Bar, and Scatter.</td>
</tr>
<tr>
<td>Rollup</td>
<td>Lists the fields available to create a Rollup table.</td>
</tr>
<tr>
<td>Pivot (Cross Tab)</td>
<td>Lists the fields available to create a Pivot table.</td>
</tr>
<tr>
<td>Visualize</td>
<td>Adds or removes visualization bars to the selected column. The Visualize option is available for numeric data columns.</td>
</tr>
<tr>
<td>Hide Column</td>
<td>Suppresses the display of the selected column in the report.</td>
</tr>
<tr>
<td>Show Columns</td>
<td>Lists the names of the columns that are hidden in the report, allowing you to individually restore a column.</td>
</tr>
<tr>
<td></td>
<td>Select the name of a specific column in the hidden columns list to restore that column to the report.</td>
</tr>
</tbody>
</table>
### Option | Definition
--- | ---
Freeze Column | Freezes the report at a particular point so that columns to the left of the freeze point remain in view while the user scrolls through the other report columns.

**Note:** If the report can be fully viewed in the browser window, freeze is not applied. The Freeze column option is not available for expandable report (Accordion) views.

Unfreeze All | Unfreezes the columns.

Grid Tool | Opens the Grid Tool which you can use to change the column order, select multiple columns to sort ascending or descending, hide and show columns, add a calculation result to a column, and add subtotals in the active report.

Chart/Rollup Tool | Opens the Chart/Rollup Tool which you can use to select multiple group fields to generate the chart or rollup table. The Chart/Rollup Tool contains a list of columns available in the active report to add to Group By and Measure fields. Drag the columns into the field that you want.

Pivot Tool | Opens the Pivot Tool, which you can use to select multiple group fields to generate the chart or pivot table. The Pivot Tool contains a list of columns available in the active report to add to Group By, Across, and Measure fields. Drag the columns into the field that you want.

Show Records | Opens the Show Records menu option to list the number of records available for display per page in the report. Select a number (for example, 10) to display, per page. Default displays the number of records (lines) per page that is specified in the WebFOCUS report procedure.

Comments | Options to display comments under cells or hide indicators for comments in the active report output.
<table>
<thead>
<tr>
<th><strong>Option</strong></th>
<th><strong>Definition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Send as E-mail</td>
<td>Sends report as email.</td>
</tr>
<tr>
<td><strong>Note:</strong> To use this feature, you must have ActiveX enabled in your browser security settings.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This feature is only supported in Internet Explorer.</td>
</tr>
<tr>
<td>Save Changes</td>
<td>Saves changes.</td>
</tr>
<tr>
<td><strong>Note:</strong> To use this feature, you must have ActiveX enabled in your browser security settings.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This feature is only supported in Internet Explorer.</td>
</tr>
<tr>
<td>Export</td>
<td>Exports all records or filtered only records to HTML, CSV, or XML.</td>
</tr>
<tr>
<td><strong>Note:</strong> To use this feature, you must have ActiveX enabled in your browser security settings.</td>
<td></td>
</tr>
<tr>
<td>Print</td>
<td>Prints all records or filtered only records.</td>
</tr>
<tr>
<td>Window</td>
<td>Displays reports in a cascade or separate tabs.</td>
</tr>
<tr>
<td>Restore Original</td>
<td>Restores the active report to its default state specified in the report procedure.</td>
</tr>
</tbody>
</table>

**Configuring Active Technologies Report Options**

You can configure active report options, including menu options, based on user role through the active report options dialog box.

You access the dialog box on the Format tab, in the Features group, by clicking the *active report options* button. The button is available when active report, active Flash, or active PDF is selected as the output type.

The active report options dialog box contains the following tabs:

- General
- Menu Options
Colors

Advanced

**General Tab**

Use the General tab to set common properties specific to active reports. The General tab is shown in the following image.

![Active Report Options](image-url)
The General tab contains the following options:

**Display.** This area contains options to set the window to cascade or tabs, and options to freeze columns.

- **Window.** Select the window setting. The options are Cascade and Tabs.
- **Freeze Columns.** Select the columns you would like to freeze. You can also select None.

**Page Options.** This area contains options to set the number of records per page, enable the display of page information, edit the alignment, and set the location of the page information.

- **Records Per Page.** Select or type the number of records that you would like to display per page. The default value is 57. The options are:
  - All
  - 10
  - 20
  - 30
  - 40
  - 50
- **Display Page Information.** Select this option to display page information. Clear this option to disable the display of page information.

- **Alignment.** Click the appropriate button to set the alignment of the page information. Options are Left, Center, and Right.

- **Location.** Select the location for the page information. The options are Top Row and Bottom Row.

**Chart Options.** This area contains options that pertain to charts.

- **Chart Engine.** Select the chart engine to determine the set of charts that you can create. The options are:
  - **Standard.** Uses the Active Technologies default chart engine. This option is available for output format types AHTML, FLEX, and APDF.
- **Flash.** This setting is the default for the output format types AHTML and FLEX. For AHTML, this uses the current Flash charts by default on browsers with Flash Player that might not support the functionality in the new JavaScript charts, such as older releases of Internet Explorer. These charts automatically switch to the new JavaScript charts on browsers that do not support Flash, such as Safari® on the iPad.

- **HTML5.** Uses the new JavaScript charts for the output format type AHTML. These charts work in both connected and disconnected mode. The current AHTML default four JavaScript charts will not be available at run time.

- **Flex.** Uses the default four Adobe Flex charts when output format is FLEX or APDF. These are the existing charts that work in both connected and disconnected mode. No additional chart types will be available at run time.

- **Legend (check box).** Select this option to collapse the legend if necessary. Clear this option if you do not want the legend to collapse. This is for active Flash and active PDF only.

- **Legend (menu).** Select the location for the legend. This is for active Flash and active PDF only. The options are:
  - Bottom Left
  - Bottom Center
  - Bottom Right
**Menu Options Tab**

Use the Menu Options tab to select a user type and select which options to display in the menu. The Menu Options tab is shown in the following image.

The Menu Options tab contains the following options:

- **User Type.** The options are Power, Analyst, Basic, and Custom.
  - **Power.** This is the default user type and enables all functionality.
  - **Analyst.** This user type has the following functionality: Show Records, Freeze, Hide/Unhide, Export, Sorting, Pivot, Filter, Calculations, Chart, Visualize, Restore Original, Save Changes, and Accordion.
Basic. This user type has the following functionality: Show Records, Freeze, Hide/Unhide, Sorting, Filter, Calculations, Visualize, and Restore Original.

Custom. If you select a combination of options that does not match one of the existing user types (Power, Analyst, Basic), the User level name that appears in the User Type field is Custom. This is not a default user type or a selectable user type. It is used to show that options for this user do not match any of the existing user types.

- **Show Records.** Shows all records or specific numbers of records.
- **Freeze.** Freezes and unfreezes columns.
- **Hide/Unhide.** Hides and shows columns.
- **Export.** Exports data as HTML, .CSV, or Excel (XML) formats.
- **Sorting.** Sorts data in ascending and descending order.
- **Pivot.** Pivots data.
- **Window Type.** Shows windows as cascade or tabs.
- **Send as Email.** Sends reports as email.
- **Print.** Prints all records or filtered-only records.
- **Advanced Tools.** Accesses the Chart/Rollup, Pivot, and Grid Tools.
- **Filter.** Opens the Filter Selection dialog box.
- **Calculations.** Performs the following calculations: Sum, Avg, Min, Max, Count, Distinct, % of Total.
- **Chart.** Converts report to pie, line, bar, or scatter charts.
- **Visualize.** Adds data visualization bars to report.
- **Rollup.** Performs rollup on data.
- **Comments.** Adds comments.
- **Restore Original.** Restores original data.
- **Save Changes.** Saves changes.
- **Accordion.** Produces accordion reports.
- **Grid Tool.** Opens the Grid Tool dialog box.
**Colors Tab**

Use the Colors tab to select colors for various objects on the report. The Colors tab is shown in the following image.

The Colors tab contains the following options:

- **Page.** This area contains options to set the colors for the font and background for the page text.
  - Font. Opens the Color dialog box, where you can select the font color.
  - Background. Opens the Color dialog box, where you can select the background color for the page text.
**Row Selection.** This area contains options to set the colors that appear when you point to or select a row on the report.

- **Hover.** Opens the Color dialog box, where you can select the color that the row becomes when you pause the mouse over the row.

- **Selected.** Opens the Color dialog box, where you can select the highlight color that the row becomes when you use the highlight option.

**Visualization.** This area contains options to set the colors for the data visualization bars.

- **Positive.** Opens the Color dialog box, where you can select the color for a positive data visualization bar.

- **Negative.** Opens the Color dialog box, where you can select the color for a negative data visualization bar.

**Calculations.** This area contains options to set the colors for values in a calculation.

- **Font.** Opens the Color dialog box, where you can select the font color for the calculation.

- **Background.** Opens the Color dialog box, where you can select the background color for the calculation.

**Menu.** This area contains options to change the color of the menu.

- **Normal**
  - **Font.** Opens the Color dialog box, where you can select the color for the text of the options on the column menus.
  
  - **Background.** Opens the Color dialog box, where you can select the background color for the column menus.

  - **Border.** Opens the Color dialog box, where you can select the color for the border of the column menus.

- **Hover**
  - **Font.** Opens the Color dialog box, where you can select the color for the text of the options on the column menus when you point to them.
  
  - **Background.** Opens the Color dialog box, where you can select the background color that appears behind options on the column menus when you point to them.
**Advanced Tab**

Use the Advanced tab to control the number of rows retrieved from active cache and to make security settings.

**Note:** active cache is enabled when you select *active report* as the output type on the Format tab, in the Output Types group, and click *Pages on Demand* on the Format tab, in the Navigation group.

The Advanced tab is shown in the following image.

![Active Report Options](image)

The Advanced tab contains the following options:

- **active cache.** Enables reports to cache the data in a binary file and return the data to the output window in pre-set increments.

- **Rows Retrieved.** Select the number of rows retrieved in the output. The options are:
  - 100 (default)
  - 500
  - 1000
  - 2000
3000
4000
5000

Security. This area allows you to set a password to access the report and enable expiration by date or by days.

Note: When setting security options for active reports, be aware that security options can be set for each individual component on the canvas, but only one password can be set for the entire document.

Creating an Active Technologies Chart

An active report is a report that is designed for offline analysis. For more information, see Creating an Active Technologies Report on page 31.

Procedure: How to Create an Active Technologies Chart

1. Create a chart.
2. On the Format tab, in the Output Types group, click active report, active Flash, or active PDF.
3. Generate the chart.
The following image shows an HTML5 pie chart that displays the sum of the values in the Quantity Sold field by Region.

### Active Technologies Options for Charts

Options for an active chart are described in the following table.

<table>
<thead>
<tr>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group By (X)</td>
<td>Changes groups by the horizontal sort field.</td>
</tr>
<tr>
<td>Add (Y)</td>
<td>Adds vertical sort field.</td>
</tr>
<tr>
<td>Export to</td>
<td>Exports to Excel, Word, and PowerPoint.</td>
</tr>
<tr>
<td>Top</td>
<td>Displays the top values. Options are Top 3, Top 5, Top 10, and Clear Top.</td>
</tr>
</tbody>
</table>
### Option | Definition
--- | ---
Chart/Rollup Tool | Opens the Chart/Rollup Tool which you can use to select multiple group fields in the chart or rollup table generated. The Chart/Rollup Tool contains a list of columns available in the active report and Group By and Measure sort fields. Drag the columns into the desired sort field.
Pie | Views data as a pie chart.
Bar | Views data as a bar chart.
Line | Views data as a line chart.
Scatter | Views data as a scatter chart.
Advanced Chart | Opens the Chart/Rollup Tool.
Original Chart | Restores the active chart to the chart type specified in the report procedure.
Sum | Applies the following options to the Measure field: Sum, Avg, Min, Max, Count, and Distinct.

### Creating an Active Technologies Dashboard

You can create an active dashboard by inserting active dashboard prompts into a document to act as filters on the reports of the dashboard. You can also cascade (chain) prompts to populate based on the selections of the previous prompts. The output format of the active dashboard must be active report, active Flash, or active PDF in order to add active dashboard prompts.
Active Technologies Dashboard Prompts

The Active Dashboard Prompts group contains buttons to click to insert active dashboard prompts into your dashboard. This group is only visible when the output format of the dashboard is set to active report, active PDF, or active Flash. You can access the active dashboard prompts on the Format tab, in the Output Types group. The Active Dashboard Prompts group is shown in the following image.

![Active Dashboard Prompts Group](image)

The following are the types of active dashboard prompts that you can use to apply filters to an active dashboard:

- **Drop Down.** Inserts a drop down prompt placeholder in the upper-left corner of the canvas.
- **List.** Inserts a list prompt placeholder in the upper-left corner of the canvas.
- **Checkbox.** Inserts a check box prompt placeholder in the upper-left corner of the canvas.
- **Radio Button.** Inserts a radio button prompt placeholder in the upper-left corner of the canvas.
- **Text.** Inserts a text area prompt placeholder in the upper-left corner of the canvas.

**Note:** The display of values populated in active dashboard prompts is dependent on the data setting. For example, if sample data is turned on, then active dashboard prompts will show sample data, such as:

WF_RETAIL1
WF_RETAIL2
WF_RETAIL3
Target Reports

When you bind a field to an active dashboard prompt, the default target report is the report from which you dragged the field. You can add or remove target reports from an active dashboard prompt through the active dashboard properties dialog box. For more information on using the active dashboard properties dialog box, see Using Multiple Reports as Targets and Sources on page 52.

A report must meet one of the following requirements to be a target report:

- The report contains a field with the same name as the source field (actual field name or AS name).
- The Master File of the report has a field with the same name as the source field.

If a report is eligible to be a target report because the field has the same user-entered title and the title is changed, the report is automatically removed as a target.

Procedure: How to Add an Active Technologies Dashboard Prompt to a Dashboard

This procedure describes how to begin to create a dashboard by creating one report and binding a single prompt to one of the fields of the report.

2. On the Format tab, in the Output Types group, select an active output type (active report, active Flash, active PDF).
   A placeholder appears on the canvas.
4. Drag fields onto the canvas, or into the Query pane, to create the report and start building the dashboard.
5. On the Insert tab, in the active dashboard prompts group, select a dashboard prompt to insert into the document.
   For example, the following image shows a radio button prompt added to the dashboard.
An active dashboard prompt appears in the upper-left corner of the canvas. If you have left the report in the upper-left corner of the canvas, then you will have to drag the prompt off the report, as shown in the following image.
6. Select the report and bind one of its data source fields to the prompt in one of the following ways:

- **Query pane**: Select the report. From the Query pane, drag the field that you want to bind onto the prompt.

- **Report on the canvas**: Right-click the report and click *Edit Report*. The report becomes editable. Highlight the column that contains the data that you want and drag it on the prompt.

Once you have bound the field to the prompt, the values of the field appear in the prompt.

**Note**: Once an active dashboard prompt is added to the canvas, the document is locked in an active output format. You cannot change out of active report, active Flash, or active PDF format if there are prompts present on the canvas. To switch to a non-active output format, all prompts must be removed.

The following image shows an active dashboard in which the Product Category field of the report has been bound to a radio button prompt.

![Active Dashboard Example](image)

The following image shows an example of a dashboard at run time. The active report has a radio button prompt bound to the Product Category field. Since it is a radio button, and *Televisions* is selected, only Regions that have sold televisions appear on the report.
Using Multiple Reports as Targets and Sources

You can add multiple reports and charts to a dashboard. Each report can have multiple prompts associated with it.

Procedure: How to Build a Dashboard With Multiple Reports as Targets and Sources

The following procedure describes how to set up active dashboard prompts for two reports on a dashboard. In the example that is used, the first report contains information about the categories of electronics products sold in various regions. The Region field will be bound to a group of radio buttons. Each radio button will represent a particular region in which the electronics are sold. When you select a radio button for a region, for example, NorthEast, the report will be filtered by your selection.

The second report contains information about the gender and age group of electronics consumers. The Gender field will be bound to a drop-down list. The list will display the values, male and female. When you select a gender from the drop-down list, the report will be filtered by your selection.

1. With InfoAssist open in Document view, and at least two reports on the canvas, add two active dashboard prompts, as described in How to Add an Active Technologies Dashboard Prompt to a Dashboard on page 49.
The following image shows a dashboard with the region report and the gender report described in the introduction. Next to the region report is a radio box. Next to the gender report is a drop-down list prompt. The prompts are not yet bound to any report fields.

2. Right-click the active dashboard prompt you want to bind a field to and click Properties.
For example, in the following image, the right-click menu for the radio button prompt is open.

The active dashboard properties dialog box opens, as shown in the following image. The Prompts list displays the two prompts (radiobuttons_1 and combobox_1) that were added to the dashboard in step 1. The prompt titled radiobuttons_1 is highlighted because it was selected in step 2.
3. From the Report drop-down menu, select the report that contains the field you want to bind an active dashboard prompt to.

In this example, shown in the following image, the radio buttons list (radiobuttons_1) has been selected as the prompt for the region report (table_1).

![Active Dashboard Properties](image)

The next step describes how to bind the Region field from the region report to the radio buttons list to filter that report.

4. From the Field drop-down menu, select the field to which you want to bind the active dashboard prompt.
In this example, the Region field has been selected for the radio buttons list (radiobuttons_1), as shown in the following image.

The following image shows Region as the selected field for the radio buttons list. The region report (table_1) is a target report because it is the one from which you selected the field. In addition, table_2, the gender report, now appears in the Candidate Reports list.

5. Click OK.
The prompt is now bound to the field on the dashboard.

In the following image, the radio buttons list is bound to the Region field. It displays all regions by which a user can filter the report.
The following steps describe how to bind the Gender field in the gender report (table_2) to the drop-down list prompt.

6. Right-click the next active dashboard prompt to which you want to bind a field and click Properties.
For example, in the following image, the drop-down list prompt on the gender report is selected.
The active dashboard properties dialog box opens again, as shown in the following image.

Notice that combobox_1, the prompt selected on the dashboard, is selected in the Prompts list.

7. From the Report drop-down menu, select the report that contains the field you want to bind an active dashboard prompt to.
In this example, shown in the following image, the drop down list (combobox_1) has been selected as the prompt for the gender report (table_2).

![Prompt Properties](image)

The next step describes how to bind the Gender field from the gender report to the drop down list to filter that report.

8. From the Field drop-down menu, select the field to which you want to bind the active dashboard prompt.
In this example, the Gender field has been selected for the drop-down list (combobox_1), as shown in the following image.

Once the Gender field has been selected, table_2 (gender report) appears in the Target list and table_1 (region report) appears in the Candidate Reports list.
Note: To move a report from the Candidate Reports list box to the Targets list box, select it and click the Add to List arrow. To remove a report from the Targets list box, select it and click the Remove from List arrow. You can select multiple reports by holding down the Ctrl key and clicking each one.

9. Click OK.

The prompt is now bound to the field on the dashboard.

In this example, the drop-down list is bound to the Gender field. A user could filter the gender report by male or female.

The following image shows the final dashboard with two reports and two prompts.
In this example, the region report has been filtered by the NorthEast region and the gender report has been filtered by Female.

Procedure:  How to Change the Field

You can change the field to which the active prompt is bound.

1. With InfoAssist open in Document view, bind an active prompt to a field, as described in Using Multiple Reports as Targets and Sources on page 52.

2. Right-click the active dashboard prompt that you want to configure, and click Properties.

   The active dashboard properties dialog box opens.
3. From the Field menu, select a different field, as shown in the following image.

A warning message alerts you that changing the source field for the prompt will remove the existing prompt and any children prompts from the cascades. The warning message is shown in the following image.

4. Click OK to close the warning.
5. Click OK to close the active dashboard properties dialog box.

The active dashboard prompt is updated with the new source field.
In the following example, the check box prompt is updated with electronics products, as shown in the following image.

**Procedure: How to Change the Filter Condition**

1. With InfoAssist open in Document view, bind an active dashboard prompt to a field, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 49.

2. Right-click the active dashboard prompt that you want to work with, and from the right-click menu, select *Properties*.

   The active dashboard properties dialog box opens.

3. From the Condition drop-down menu, select the filter condition for the active dashboard prompt. The options are Equal to, Not equal to, Less than, Less than or equal to, Greater than, and Greater than or equal to.

4. Click *OK*.

   The filter condition is applied to the active dashboard prompt.

**Procedure: How to Add Multiple Prompts to a Dashboard**

1. With InfoAssist open in Document view, and at least one report on the canvas, add at least two active dashboard prompts, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 49.
The following image shows a dashboard with a list prompt and a radio button prompt.

2. Bind the fields to prompts that you have added, as described in *How to Add an Active Technologies Dashboard Prompt to a Dashboard* on page 49.
In the following image, the list prompt has been bound to the Product Category field and the radio button prompt has been bound to the Region field. The two prompts work independently of each other to filter the dashboard in different ways.
The following image shows the dashboard indicating the quantity of stereo systems sold for all regions.

![Dashboard Image]

The following image shows the dashboard indicating the electronics products sold in the NorthEast region.

![Dashboard Image]

**Procedure: How to Cascade Prompts**

When you have more than one prompt on the canvas, you can cascade prompts to populate based on the selections of the previous prompts. Cascading prompts have a parent-child relationship, in which the parent filters the available options of the child.

An active prompt can be the parent of more than one other prompt, but cannot be a child of more than one prompt.
1. With InfoAssist open in Document view, bind at least two active prompts to fields, as described in *Using Multiple Reports as Targets and Sources* on page 52.

In the following image, a report has been created to show the quantity of electronics sold by states within a region. Two prompts, a radio button to select the region, and a check box to select the state, have been added to the report. The objective is to be able to select a region, and then cascade down to the state level.

2. Right-click the active dashboard prompt that you want to configure, and click *Properties*.

The active dashboard properties dialog box opens.
3. Click Cascades.

By default, a cascade named Cascade1 appears in the Cascades section of the active dashboard Properties dialog box.

- You can click the Create a new cascade button to create a new cascade.

- You can click the Delete selected cascade button to delete the selected cascade.

The following image shows that the Region field is associated with the radio button prompt and the State Code field is associated with the check box in the Available Prompts list.

4. Select the cascade to which you want to add prompts.

5. From the Available Prompts list box, select the prompt that you want to add.
6. Click the Add to List arrow to move the selected prompt to the Selected Prompts list box, as shown in the following image.

![Image of Active Dashboard Properties window](image)

**Note:** You can remove prompts from the Selected Prompts list box by selecting them and clicking the Remove from List arrow.

7. Add any additional prompts you want to be part of the cascade by repeating steps 5 and 6.

By default, the hierarchy of the prompts is determined by the order in which they are added to the Selected Prompts list. The cascade of the prompts is from top to bottom. The prompts that come first in the Selected Prompts list are the parents of the lower prompts.
8. You can change the hierarchy of the prompts by selecting a prompt in the Selected Prompt list box and clicking the Move Up and Move Down arrows, as shown in the following image.

9. Click OK.
   The cascade is created.

10. Run the report.
The following image shows the report with the region radio box and the state check box.
The following image shows the dashboard output with the region prompt cascading down to the state level.

Note: If you set up more than one cascade, the cascade that you interact with last is the one that filters the report.
This topic describes how to create a report that is enabled for Active Technologies using Report Painter in the Developer Studio environment.

A report that is enabled for Active Technologies is called an Active Technologies report or an active report.

**In this chapter:**
- Creating an Active Technologies Report
- Styling Different Elements of a Tabular Active Technologies Report

### Creating an Active Technologies Report

Report Painter provides you with many powerful reporting features that enable you to create and style complex reports. You can graphically paint the report on the Report Painter window. For more information about using Report Painter in Developer Studio, see the *Creating Reports With Report Painter* manual.

#### Procedure: How to Create an Active Technologies Report Using Report Painter

2. From the Report menu, select **Output**.
   
   The Report Options dialog box opens.
3. From the Select Format drop-down list, select HTML active report (AHTML).

   **Tip:** You can also select active report for Adobe Flash Player (FLEX) or active report for PDF (APDF).
4. Click **OK**.
**Reference:** Report Options Features Tab for Active Technologies Reports

The following image shows the Features tab of the Report Options dialog box for the active report formats.

---

**active cache**

Because all post-retrieval processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The active cache option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the WebFOCUS Reporting Server. The server also becomes the resource for performing all calculations, sorting, and filtering when active cache is enabled. Since active cache uses on-demand paging functionality, WebFOCUS Viewer is not supported.

**active cache**

Enables reports to cache the data in a binary file and return the data to the output window in pre-set increments.

In Report Painter, the active cache option is not applicable to active reports for Adobe Flash Player.
Number of rows retrieved

The number of rows retrieved in the output. The default number of rows retrieved is 100.

**Tip:** It is recommended that you set the number of rows retrieved five times greater than the number of lines retrieved per page (as indicated in SET LINES). The minimum number of rows retrieved is 100.

Calculations

Enables you to turn on calculations for fields in the report. All visible fields in the report appear in the Column list in the order they appear in the report. Hidden fields do not appear in the Column list.

You can select a calculation for each field in the Column list from the Calculation drop-down list. Calculation options are determined by the field type. If the field is an alphanumeric format, the drop-down list contains: Count and Count Distinct. If the field is a numeric format, the drop-down list contains: Sum, Average, Count, Count Distinct, Minimum, and Maximum.

Viewing restrictions

Specifies that a password is required to view the active report output. Prior to opening the report output, you are prompted to enter a password to unlock the report.

**Password**

A character string up to 32 characters in length.

Only standard alphanumeric English characters are allowed in the password for an active report in AHTML format. National Language Support (NLS) characters are not allowed in the password. Any NLS character in the password for an AHTML report makes the password invalid.

**Expire**

The date when an active report expires and the report output can no longer be opened (displayed).

Enter the expiration date in year, month, day (yymmdd) format or in day format (1-999 DAYS) where the value indicates the number of days from the current date that the report expires. Valid values are 1 to 999 days. Note that you must enter the number and the word DAYS as part of the value.
In Report Painter, the Viewing restrictions option is not applicable to active reports for Adobe Flash Player.

**Default Chart Engine**

- **<Not Set>**. No selection has been made.
- **Legacy**. The default JavaScript charts will be used.
- **Dynamic**. This option will change the engine to use Fusion charts.
- **HTML5**. This option will change the engine to use High charts. This is the default chart engine for AHTML and FLEX formatted reports.
- **Flash**. This option will change the engine to use Flex charts, if available.

**Reference:** Report Options Format Tab for Active Technologies Reports

The following image shows the Format tab of the Report Options dialog box for the active report formats. This tab provides options for formatting an active report.
Note: The colors shown on the Format tab are different depending on what style sheet you have selected. The Information Builders style sheet is selected by default.

Initial Presentation

Sets the active report output to appear as a default active report, Grid, Pivot, or chart. This is especially useful when creating compound reports from other Developer Studio tools. The active report for Adobe Flash Player (FLEX) output format has an additional Other Chart option. The Other Chart option provides the following chart types, which are available by clicking the ellipsis (...) button to the right of the drop-down menu.

Bar
Bar charts plot numerical data by displaying rectangular blocks against a scale (numbers or variable measures that appear along the axis). The length of a bar corresponds to a value or amount. You can clearly compare data series (fields) by the relative heights of the bars. Use a bar chart to display the distribution of numerical data. You can create horizontal, as well as vertical bar charts. The following bar chart types are available.

- Column 2D
- Column 3D
- Multi-Series Column 2D
- Multi-Series Column 3D
- Stacked Column 2D
- Stacked Column 3D
- Scroll Multi-Series Column 2D
- Scroll Stacked Column 2D
- Logarithmic Multi-Series Column 2D
- Inverse Y-Axis Multi-Series Column 2D
- Bar 2D
- Multi-Series Bar 2D
- Multi-Series Bar 3D
- Stacked Bar 2D
- Stacked Bar 3D

**Pie**

Pie charts emphasize where your data fits, in relation to a larger whole. Pie charts work best when the data consists of several large segments. Too many variables divide the pie into small segments that are difficult to see. Use the different dimensions available to create visual contrast. The following pie chart types are available.

- Pie 2D
- Pie 3D
- Doughnut 2D
Doughnut 3D

You may receive a JavaScript error message when executing a large chart request, especially a pie chart request.

This happens because HTML active reports run scripts that can time out before they complete. Internet Explorer tracks the script execution count associated with these AJAX controls and by default displays a message when the count exceeds a certain number. To avoid this, you can place an entry in the registry for these scripts and set the value to a high number, such as 5,000,000.

Line

Line charts are useful for emphasizing the movement or trend of numerical data over time. They allow you to trace the evolution of a data point by working backward or interpolating. Highs and lows, rapid or slow movement, or a tendency towards stability are all types of trends well suited to a line chart. The following line chart types are available.

- Line 2D
- Multi-Series Line 2D
- Scroll Multi-Series Column 2D
- Logarithmic Multi-Series Line
- Inverse Y-Axis Multi-Series Line 2D
- Spline
- Multi-Series Spline
- Area 2D
- Multi-Series Area 2D
- Stacked Area 2D
- Scroll Multi-Series Area 2D
- Inverse Y-Axis Multi-Series Area 2D
- Spline Area
- Multi-Series Spline Area
**Scatter**

Scatter charts share many of the characteristics of basic line charts. You can plot data using variable scales on both axes. When you use a scatter chart, the data is plotted with a basic line pattern so that you can visualize the density of individual data values around particular points, or discern patterns in the data. The following scatter chart types are available.

- Scatter (XY Plot)
- Bubble

**Other**

Includes a variety of additional charts.

- Funnel
- Pyramid
- Radar

**Legend Options**

Legend options are applicable when using active report for Adobe Flash Player (FLEX) and active report for PDF (APDF) output formats, where you can click the Legend button to show or hide the chart legend. Legend options are only available when the initial presentation format is set to Bar, Line, Pie, or Scatter chart.

**Report view**

You can set the report view as a standard table (Tabular) or as an expandable report (Accordion). An expandable report is a collapsed report that can be fully expanded for sorting and other purposes.

If you are working with an Accordion active report, the Freeze columns option and Pagination options are not available.

Accordion Reports are not supported when creating HTML active reports using active cache and active reports for Adobe Flash Player.

Accordion Reports do not work when using By Hierarchy data.

**Window display**

Sets the window display option in the report output when multiple windows are open in the active report web browser. Select from Default, Cascade, or Tabs.

The window display option can also be changed directly from the active report web browser.
Freeze columns

You can freeze the report at a particular point so that columns to the left of the freeze point remain in view while the user scrolls through the other report columns. Options include:

- None, which turns off the freeze option. This is the default value.
- The fields in the request. If the report can be fully viewed in the browser window, freeze is not applied.

The Freeze columns option is not available for expandable report (Accordion) views.

Pagination options

You can set the justification for the information that appears in the record status and page navigation bar. You can also set the number of records that appear per page.

The following are the pagination options for active reports.

Justification

Controls the location of the record status and page navigation bar, and justifies the text that appears in the bar. Options are Top Left, Top Center, Top Right, Bottom Left, Bottom Center, and Bottom Right. Top Center is the default value.

Lines per page

Sets the number of records that appear per page. Options are Default, 10, 20, 30, 40, 50, and Show All. The default is 57 lines per page.

Text

Sets the color for the text in the record status and page navigation bar. Black is the default color.

Background

Sets the background color for the record status and page navigation bar. Silver is the default color.

Pagination Check Box

Turns the pagination bar off when selected. With the Pagination check box selected, Justification, Text, and Background will be unavailable. By default, this check box is not selected.
Pagination options are not available for expandable report (Accordion) views.

**Visualization colors**

Users can apply data visualization to numeric fields in an active report. You can designate the colors of the bars and set different colors for positive and negative values. The default color for positive and negative values is black.

**Row selection colors**

An active report offers visual assistance for viewing data in the report. For example, when a user hovers over a row of data the row is highlighted with a background color, and when the user clicks a row of data it is also highlighted with a background color. You can set the colors for these options, Hover and Selected. The default color for Hover is RGB(255 252 204), which is pale yellow, and the default color for Selected is RGB(51 255 204), which is blue-green.

**Calculations**

**Colors**

Specifies the colors for the values in a calculation.

- Values sets the font color of the calculation results. The default color is black.
- Background sets the background color of the calculation results. The default color is white.

**Location**

Sets the location of the calculations. Options are Top row or Bottom row. Top row is the default value.

**Menu options**

Set options for the menu.

**User type**

Select a user type to determine the level of functionality and interactivity available to the user in the report output. The user types are logical groupings of functionality enabling a quick selection of options, and have no dependency on Managed Reporting user types, security, and so on. Each user type can be customized. The user types are:

- **Default user.** This is the default user type. All functionality is available for this user except the advanced tools and grid tools.
- **Power user.** All functionality is available for this user.
- **Analytical user.** All functionality is available for this user type except visualization and charting.

- **Business user.** All functionality is available for this user type except visualization, charting, filtering, and exporting.

**Customize User Interactivity**

Click the ellipsis (...) button, located next to the User type drop-down list in the Menu options section, to open the Customize User Interactivity dialog box. The Customize User Interactivity dialog box enables you to customize the options for each user type. For a Power user, all options are selected by default. Uncheck any option that you want to hide in the active report.
If you select a combination of options that does not match one of the existing user types (Power user, Analytical user, or Business user), the User level name that appears in the Customize User Interactivity dialog box is Custom user. This is not a default user type or a selectable user type. It is used to show that options for this user do not match any of the existing user types.

Font color

Enables you to set the colors for the menu text:

- Text sets the color of the text. The default color is black.
- Hover sets the color of the text when the mouse hovers over it. The default color is black (text hover does not show).
Menu color

Sets the colors for the menu:

- Background sets the background color of the menu. The default color is silver.
- Hover sets the background hover color of an individual item on the menu. For example, if the background color of the menu is black, the hover color can be set to white to show which option on the menu the mouse is currently hovering over. The default color is white.
- Border sets the color of the menu border. The default color is white.

Dimension

Sets the width and height for an active report for Adobe Flash Player (FLEX) or active report for PDF (APDF) report container on the page. The measurement unit is specified in the Measurement Units drop-down box under the Output tab of the Report Options dialog box.

Styling Different Elements of a Tabular Active Technologies Report

This topic describes how to use Report Painter format options to style the following elements of a tabular active report:

- Pop-up menu of a column.
- Status/navigation bar at the top of the tabular report. This bar displays the number of records (rows) that have been retrieved. It also enables you to navigate among report pages.

Another way to achieve the same styling result is to include WebFOCUS StyleSheet code in the tabular report procedure, as described in Styling the Pop-up Menu and Status/Navigation Bar Using WebFOCUS Code on page 93.
The following image shows a styled pop-up menu and status/navigation bar.

![Pop-up Menu and Status/Navigation Bar]

**Procedure:** How to Style the Pop-up Menu and Status/Navigation Bar of a Tabular Active Technologies Report

This procedure describes how to style the pop-up menu and status/navigation bar of a tabular report. It supplies sample values, but you can substitute your own values to achieve the desired result.

1. Open the active report in Report Painter.
2. Select the *Report* menu option, followed by *Format*.
   
   The Report Options dialog box opens. HTML active report (AHTML) is selected as the output format.
3. In the Menu options section, open the *Background* color palette under Menu color.
4. On the color palette, click *Custom*.

5. Type either the HSL (hue, saturation, luminosity) values, or the RGB (red, green, blue) values, as follows.
   - For HSL, type *146, 120, 172*.
   - For RGB, type *147, 172, 219*.
   
   Click *OK* to close the Color dialog box.

6. Change the menu Hover color to dark gray (50%).

7. Change the menu Border color to light gray (25%).

8. Change the menu font Text color to white.

9. Change the menu font Hover color to dark gray (80%).

10. In the Pagination options section, set the Text color to white.

11. For the Background color, click *Custom*. Type either the HSL values or the RGB values, as follows.
    - For HSL, type *146, 120, 172*.
    - For RGB, type *147, 172, 219*.
    
    Click *OK* to close the Color dialog box.

12. For the Justification under Pagination options, select *Top Center* from the drop-down list.
Styling Different Elements of a Tabular Active Technologies Report

The following image shows the Report Options dialog box, with the selected sample values.

13. Click OK to close the Report Options dialog box.
14. Run the active report to display the newly styled pop-up menu and status/navigation bar.
Styling the Pop-up Menu and Status/Navigation Bar Using WebFOCUS Code

You can add the following StyleSheet code to the end of the tabular report procedure instead of performing the steps in *How to Style the Pop-up Menu and Status/Navigation Bar of a Tabular Active Technologies Report* on page 90. The code produces the same styling result that the steps produce.

```plaintext
TYPE=REPORT,
   OBJECT=MENU,
   COLOR='WHITE',
   HOVER-COLOR=RGB(51 51 51),
   BACKCOLOR=RGB(147 172 219),
   HOVER-BACKCOLOR='GRAY',
   BORDER-COLOR='SILVER',
$ TYPE=REPORT,
   OBJECT=STATUS-AREA,
   JUSTIFY=CENTER,
   PAGE-LOCATION=TOP,
   COLOR='WHITE',
   BACKCOLOR=RGB(147 172 219),
$```

Styling Different Elements of a Tabular Active Technologies Report
Using an Active Technologies Report

This topic describes how to run reports enabled for Active Technologies and use their features and functionalities.

A report that is enabled for Active Technologies is called an Active Technologies report or an active report.

In this chapter:

- Navigating Between Pages
- Filtering and Highlighting Data
- Calculating Data
- Sorting Data
- Using Tab Window Navigation
- Controlling Report Display
- Using Data Visualization
- Viewing Data as a Chart
- Using the Grid Tool
- Using the Chart/Rollup Tool
- Using the Pivot Tool
- Saving, Exporting, and Sending Active Technologies Reports

Navigating Between Pages

The following image shows the pagination options in an active report.

Use any of the following options to navigate between pages in the active report.
Filtering and Highlighting Data

You can apply operators to your report data so that you either filter or highlight data based on criteria you define. You can apply multiple filters to a report and you can apply filters to filtered data. If your active dashboards contain multiple reports, you can apply a global filter to all reports. A global filter is a filter that is applied to reports that contain the column you are filtering on.

Operators include:

- **Equals.** Equals a specific value or values. If you select more than one value, OR logic is used to retrieve records.

- **Not equal.** Does not equal a specified value.

- **Greater than OR Greater than or equal to.** Greater than or greater than or equal to a specific value.

- **Less than OR Less than or equal to.** Less than or less than or equal to a specific value.

- **Between.** Between a set of values.

- **Contains OR Contains (match case).** Finds values that include a character string you specify. The string can occur in any position in the value you are testing. You can use this option for case-insensitive (Contains) and case-sensitive strings (Contains (match case)).
Omits OR Omits (match case). Finds values that do not include a character string you specify. You can use this option for case-insensitive (Omits) and case-sensitive strings (Omits (match case)).

**Procedure:** How to Filter or Highlight Data in an Active Technologies Report

1. Click the arrow in the heading of the column you want to filter on. Click *Filter* and then the operation.
   
   The Filters Selection dialog box opens. You can change the operation after you select it.

2. Enter a value or values, depending on the operation you select.
   
   Values are entered, either by typing a value in a text box, or selecting a value from a drop-down list.

3. Click *Add Condition* if you want to enter additional filters.

   If you are adding additional filters, you can apply either AND or OR logic. AND logic considers all filters and all data must pass all filters in order to be included in the report output. OR logic considers filters independently and includes data that meets any of the applied filters in the report output.

4. Click *Filter* or *Highlight*.

   Once you apply a filter or highlight, and minimize the selection dialog box, the selection dialog box appears as a button (Filter Selection or Highlight Selection) in the bottom of the window. You can click the button to access the dialog box. If you close the dialog box, all filters and highlights clear from the report output.

**Procedure:** How to Remove Filters or Highlighting

In the Filter Selection dialog box, click the X adjacent to the filter or highlight you want to remove. To remove all filters or highlights, click *Clear All*.

Also note that if you close the Filter Selection dialog box, all filters clear from the report output.

**Procedure:** How to Filter Selections Using Multiple Values

When you select a value in the Filter Selection dialog box, a value selection dialog box displays if there are more than 20 data values. Additionally, when items are selected in the value selection dialog box, the item is highlighted and checked to indicate the selection.

Selecting multiple values is available for Equals and Not Equal conditions.
1. Click the arrow in the heading of the column you want to filter on. Click *Filter* and then the operation.

The Filter Selection dialog box opens.

2. Enter a value or values, depending on the operation you select.

Values are entered either by typing a value in a text box or selecting a value from a drop-down list.

If there are more than 20 data values for the column, a value selection dialog box opens, as shown in the image below. For more information about selecting values to be filtered, see *Usage Notes for Selecting Values* on page 99.

3. Select a value, or values, in the value selection dialog box.
The items selected are highlighted and checked, as shown in the following image.

While the value selection dialog box appears for both alphanumeric and numeric data, indicated selections only appear for alphanumeric data.

4. Close the value selection dialog box to add your selections to the Filter Selection dialog box.

5. Click Filter to apply the filter to the report.

**Reference: Usage Notes for Filtering Data**

The following apply when filtering data:

- Filtering data in the Scientific Notation format is not supported.
- Applying a filter to an active report with a calculation applied to a numeric column correctly displays the filtered percentage. The filtered percentage does not appear for non-numeric columns.
- If no records are returned after applying a filter, the Status Bar states Page 1 of 1 and, for example, 0 of 10 records.

**Reference: Usage Notes for Selecting Values**

The following apply when selecting values to be filtered:

- If there are less than 20 unique values in the matching records to be filtered, they will be displayed in a drop-down list, as shown in the following image.
You cannot type input values in the filter field.

If there are more than 20 and less than 1,000 unique values, the value selection dialog box appears, as described in *How to Filter Selections Using Multiple Values* on page 97.

You may not type input values in the filter field.
Procedure: How to Toggle Calculation Types for Filtered Data

When a filter is applied to a report with calculations, the report refreshes and the calculated column total shows the value for the filtered data. A calculation icon appears on the pagination bar, enabling you to toggle between calculation types for the filtered data.

The calculation icon only appears when a filter is applied to a report with calculations.

Click the calculation icon on the pagination bar to toggle between calculations for the filtered data. Note that the column total value changes accordingly, as shown in the following images.

Filtering, Highlighting, and Commenting Individual Rows of Data

In addition to using column controls to filter and highlight your report, you can also filter, highlight, and comment individual rows of data in the active report output.
When a row is selected, the context menu offers options to add comments, highlight values and rows, and filter cells.

For example, the following image shows the context menu for a row in the active report output.

![Context Menu Image]

**Procedure:** How to Add Comments to a Row in the Active Technologies Report Output

You can add multiple comments per row. Comments cannot be edited but they can be deleted.

1. Select the row of data that you want to add a comment for, click and select Comments from the context menu.

   The Add Comment dialog box opens.

   ![Add Comment Dialog Box]

2. Type in a comment in the Enter Comment field.

3. Click Add Comment to add the entry and close the dialog box.

   An asterisk (*) indicates that there is a comment in the row.

   ![Comment Example]

   NR MALTESE FALCON, THE[*]
4. To view existing comments:

- Click the row with comments, and select Comments from the context menu.
  
  The Add Comment dialog box opens displaying the comment entry and the date it was created.

- Select Expand from the Comments submenu of any column control.

The comment date and entry is shown in the output.

5. To delete an existing comment:

- Click the row with comments, and select Comments from the context menu.

  The Add Comment dialog box opens.

- Click the X next to the comment date and entry.
Procedure: How to Highlight Values and Rows in the Active Technologies Report Output

To highlight a row:

Select the row of data that you want to highlight, and click and select Highlight Row from the context menu.

The row is highlighted in yellow.

You can highlight multiple rows.

To highlight a value:

Select the row of data that you want to highlight, and click and select Highlight Value from the context menu.

The row is highlighted in an aqua color.

Highlight Value is only applicable for one row. When you apply Highlight Value, any other highlighted rows are unhighlighted.

You can use the context menu to highlight other rows, unhighlight the row, or unhighlight all rows.

Procedure: How to Filter a Row in the Active Technologies Report Output

The filter option enables you to filter the output and only show a selected row of data.

1. Select the row of data that you want to filter, and click and select Filter Cell from the context menu.

   The output refreshes and only shows the filtered row of data.
2. Select *Remove Cell Filter* from the context menu to remove the filter and return to the original output results.

Calculating Data

You can perform calculations on data in an active report. Types of calculations that you can apply are:

- **Count all**, which counts the number of occurrences of the field.
- **Count distinct**, which counts the number of distinct values within a field.
- **Recomputes**, which inserts a RECOMPUTE function to show totals for columns containing numeric values, and recalculate temporary fields containing information, such as ratios using subtotals, each time a specified sort field changes values.
- **Summarize**, which uses the SUMMARIZE function to recalculate a computed field at every sort break.

For numeric fields, you can also apply:

- **Sum**, which sums the values of all the fields in the column.
- **Avg**, which computes the average value of the field.
- **Min**, which generates the minimum value of the field.
- **Max**, which generates the maximum value of the field.
- **% of Total**, which computes the percentage of a field, based on the total values for the field.
Calculations are applied to the entire data set and to the filtered and/or expanded data in the report. What this means is that reports that have filters applied, or are not fully expanded, will have multiple results appear for calculations. The first is the calculation for the visible data (that is the data that currently appears in the report output). The second is the result for all values in the report even if they are filtered out or are not currently showing in an expandable report.

All calculations appear in the top or bottom row of a report, except the % of Total calculation. The % of Total calculation appears in a new column to the right of the selected column.

When a filter is applied, you can toggle between different displays of calculated data. Calculations are not recalculated on page breaks. Some calculations may initially appear in your report. You can change these.

Calculations on data in the Scientific Notation format are not supported.

The following image shows a filtered report in which the Sum calculation for Quantity appears in the top row and the % of Total calculation appears in a new column to the right of the selected column, Line Total.

![Image of a report with calculations](image)

**Procedure:** **How to Calculate Data in an Active Technologies Report**

Click the arrow in the heading of the column you want to calculate, click *Calculate* and then the operation.

Calculation results appear in the top or bottom row of the report, depending on how the report is designed.
**Procedure:** How to Clear Calculations

Click the arrow in the heading of the column where you want to clear calculations. Select *Calculate*, then *Clear* (to clear the calculation for the individual column) or *Clear All* (to clear all calculations).

**Procedure:** How to Recompute a BY Sort Field in an Active Technologies Report

Recompute recalculates values only at the specified sort break.

1. Select a By sort field in the Report Painter window.
2. Choose *Recompute* from the Insert menu.

   The recomputed field appears in the Report Painter window, indicated by the word *TOTAL*.

3. You can add to or type over *TOTAL*.

The following image is an example of an HTML active report (AHTML) with Rating as the RECOMPUTE field.

![HTML active report example](image)

**Procedure:** How to Summarize a Sort Field in an Active Technologies Report

Summarize recalculates values at all outer sort breaks.

1. Select a By sort field in the Report Painter window.
2. Choose Recompute on all outer sort fields from the Insert menu.
   The recomputed field appears in the Report Painter window, indicated by the word *TOTAL.

3. You can add to or type over *TOTAL.
   The following image is an example of an HTML active report (AHTML) with Rating as the
   Summarized field.

   ![Example of an HTML active report (AHTML) with Rating as the Summarized field.]

**Sorting Data**

You can sort data in any column of an active report in ascending or descending order.

Click the arrow in the heading of the column you want to sort and select Sort Ascending or
Sort Descending.

You can also sort data by adding a Table of Contents (TOC). The TOC enhances the display
of groups of data. You can view one section of a report at a time, or you can view all sections
at once.

** Procedure: How to Add a Table of Contents to a Sort Field**

You can enhance navigation within a large executed report by adding a dynamic-based Table
of Contents (TOC). To take advantage of this feature, the report must contain at least one
vertical sort (By) field.
1. From Report Painter, right-click a By column in the report and select *Table of Contents*.

2. Select *Report* to embed the TOC in the executed report.

3. Run the report to see the Table of Contents in the report output.

   The following image is an example of an HTML active report with a Table of Contents sort option.

4. To remove the Table of Contents, right-click the (By) sort field and select *None* from the Table of Contents context menu.

   You can also select the Table of Contents options by using the General Tab of the Fields Properties dialog box. Right-click the (By) sort field, select *Options*, and click the Table of Contents options from the General tab.

**Using Tab Window Navigation**

Tab window navigation options are available when multiple windows are open in the active report within a web browser.

**Procedure:** How to Use Tab Window Navigation in an Active Technologies Report

1. Run the active report and open multiple windows by viewing data as a chart, or in a Rollup Table, and so on.

2. Click the arrow in any column heading and select Window.
3. Select **Tabs** from the Window submenu.

Tabs show the open windows as tabs across the top of the active report. Click the tabs to navigate between the open windows.

4. Select **Cascade** from the Window submenu to turn off tabs and return to the default window navigation.

You can also select Restore Original from any column heading to return to the original view of the active report.
Controlling Report Display

You can control the columns and subtitles that appear and the number of records that appear in an active report. When you hide a column in an active report, you can still filter and highlight the report based on values in the hidden column. Hide respects all other report functions. For example, if you have a filter or calculation applied to a report and then you hide a column, the calculations and filters remain unchanged.

You can also freeze report columns so you can keep some data stationary while you scroll to the right in the report output.

If you are working with an accordion active report, the Freeze and Pagination options are not available.

Procedure: How to Show/Hide Report Columns

Click the arrow in the heading of the column you want to hide and select Hide Column from the menu.

You can restore hidden fields by clicking the arrow in the heading of the column and selecting Show Columns, then Unhide All or a particular field name.

To set the hide column option before running the active report output, select the Present Hidden option from the Style tab of the Field Properties dialog box.

For more information about the Field Properties Style tab, see Field Properties Style tab, located in the Creating Reports With Report Painter manual.

Procedure: How to Show/Hide Subtitles for SubHeadings or SubFootings

Click the arrow in the heading of the column and select Hide Subtitles from the menu.

You can hide subtitles from any sort column in the report. However, when you sort the report with any other column besides the first sort column, subtitles automatically disappear.

You can restore hidden subtitles by clicking the arrow in the heading of the column and selecting Show Subtitles.

The Hide/Show Subtitles option appears when a SubHeading or SubFooting column is available in the report.

Procedure: How to Control the Number of Records

Click the arrow in any column heading and then select Show Records and a value from the menu.
The report shows the number of records you select. All report information appears in the record status and page navigation bar, which can be moved from the top to the bottom of the report by clicking the pagination icon.

**Important:**

- The Default option shows the number of records per page that were set by the report developer.
- If a filter has been applied, the Show all option displays only the filtered records.

**Procedure:** How to Freeze Report Columns

Select Freeze options from the column pop-up menu.

Note that Freeze options are only available when a report does not fit in the current window. Therefore, if your report fits in the current window, Freeze options are unavailable in the menu. If you resize the report, or a column or row extends beyond the proportion of the window, then Freeze options become activated and are available for use.

Pop-up menus sometimes get cut off when freezing columns, depending on which column is frozen and how wide it is.

**Using Data Visualization**

Data visualization, or peer graphics, enable you to visually compare the values of numeric columns. When you select the visualization option, bars that reflect the value of the data display in a column to the right of the data. Data visualization bars do not represent true proportions. They are algorithmically scaled to be relative to the other values in the column to make comparisons of similar values simple.

Data visualization bars update dynamically when you add a filter to the report. You can toggle between visualization of filtered data or total data.
The following report shows the Quantity field with visualization applied.

![Image of a report showing Quantity field with visualization applied.]

**Procedure:** How to Apply Data Visualization

Click the arrow in the heading of the column you want to visualize and select **Visualize** from the menu.

The Visualize option only appears for numeric columns.

**Viewing Data as a Chart**

You can view data in your active report as a line, bar, scatter, or pie chart. For example, the following image shows an HTML active report.

![Image of a report showing data as a chart.]

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The following image shows a chart that was rendered from the data in the report. This is a pie chart that shows the sum of the values in the Quantity field by Plant.

Once a chart is rendered, you can use the chart icons as follows.

<table>
<thead>
<tr>
<th>Chart Icon</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Chart Icon" /></td>
<td>Create new charts to compare values, especially when using the Freeze options. Change or add fields. You can only add fields to a bar or line chart. Export charts to another application or open the Chart/Rollup Tool.</td>
</tr>
<tr>
<td><img src="image" alt="Chart Icon" /></td>
<td>Change the chart type to a bar chart.</td>
</tr>
<tr>
<td><img src="image" alt="Chart Icon" /></td>
<td>Change the chart type to a pie chart.</td>
</tr>
<tr>
<td><img src="image" alt="Chart Icon" /></td>
<td>Change the chart type to a line chart.</td>
</tr>
<tr>
<td><img src="image" alt="Chart Icon" /></td>
<td>Change the chart type to a scatter chart. Scatter charts are available for numeric columns.</td>
</tr>
</tbody>
</table>
### Chart Icon  |  Action
---|---
| | View the chart as a report in table format.
| | Return to the Series tab in the Chart/Rollup Tool.
| | Restores the current chart type to the initial chart type that was displayed.
| | Freeze chart. You can link or unlink a chart to the filters you have applied in your report using the Freeze chart icon. The icon indicates whether the report is linked to the filter (Freeze chart) or not (UnFreeze chart).
| | Change the aggregation method.

**Note:** If your startup presentation is an active chart instead of a tabular active report, then the Rollup and Freeze icons are not available. For example, on the Format tab in the Report Options dialog box in Report Painter, if the Initial Presentation is set to Bar Chart instead of Grid, then you will not see the Rollup and Freeze icons on the bar chart toolbar.

**Procedure:**  **How to View Data in a Chart**

1. Click the arrow in the heading of the column you want to chart and select *Chart*.
2. Select the chart type (Pie, Line, Bar, Scatter) from the menu.

   Scatter charts are available for numeric columns.

   The menu that appears shows you how the chart is going to be created. The first row tells you the calculation, for example Group By (SUM), then the following rows list the vertical (By) sort fields in the report that you can select for the X-axis. The column title you clicked is the field that displays on the Y-axis.

3. Select a sort field.

   The chart is rendered. You can create a new chart from the chart window, create a Rollup Table, change the type of calculation for the column, and view data tips for the chart items.
**Tip:** To view data tips in a chart, point to the pie slice (or column, or dot, depending on your chart type), to view the data tip for the field. For example, the following image shows a data tip for a column in a bar chart.

If you click on a column, the data tip includes the column data and name, as shown in the following image.
Procedure: How to Create New Charts From a Chart Window

1. From a chart window in the active report output, select New from the chart menu icon.
Another chart window opens with the same chart.

2. Select the **Freeze** icon to unlink the chart to the filters you applied in your report. Any additional filters that you apply do not affect this chart window. Select the **Freeze** icon again to unfreeze the chart and link the chart to the report when new filters are applied.

3. Change the type of calculation for data in the column.
You can select *Sum, Avg, Min, Max, Count,* or *Distinct* as the aggregation method (calculation type) for numeric data. You can select *Count* or *Distinct* as the aggregation method (calculation type) for non-numeric data.

For more information about the available types of calculation in active reports, see *Calculating Data* on page 105.

4. To return to the original view of the active chart, select *Restore Original* from the chart menu icon in the chart window.

*Reference:  Usage Notes for Charts*

The following apply to charts.

In some cases, the behavior is the result of the Active Technologies chart engine that you are using. The chart engine is set with the WebFOCUS StyleSheet ARGRAPHENGINE attribute in an active report procedure, or in the SECTION declaration of a compound layout report. For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see *Switching the Chart Engine* on page 354.
Internet Explorer 8 is not supported with saved or shared active reports and dashboards with the AHTML output format when you use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART) in disconnected mode. When you are working in disconnected mode in Internet Explorer 8, use the JavaScript fallback chart engine (ARGRAPHENGINE=JSFUSION) or the Active Technologies legacy chart engine (ARGRAPHENGINE=DEFAULT).

You can schedule the distribution of Active Technologies reports, charts, and dashboards using any of the ReportCaster distribution options (for example, email, FTP, or printer) when you use one of the following chart engines: the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART); the JavaScript fallback chart engine (ARGRAPHENGINE=JSFUSION); the Active Technologies legacy chart engine (ARGRAPHENGINE=DEFAULT); or the Adobe Flex legacy chart engine when the output format is FLEX or APDF (ARGRAPHENGINE=FLEX). The setting for the Flash chart engine (ARGRAPHENGINE=FUSION) does not support the ReportCaster distribution options. Starting with WebFOCUS Reporting Server Release 7.7 Version 05, we recommend that you use ARGREPHENGINE=JSCHART for all Active Technologies output formats.

The following applies when you use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). When a pie chart has four or more slices with a value of zero (0), the stack of 0% labels may be cut off or overlaid.

When you use the Flash chart engine (ARGRAPHENGINE=FUSION) with the FLEX output format, the rightmost X-axis label on a horizontal bar chart is cut off. Use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART) instead.

When you use the Active Technologies legacy chart engine (ARGRAPHENGINE=DEFAULT), the X-axis labels on a scatter chart overlap. Use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART) instead.

X-axis labels overlap and are cut off when you reduce the size of a chart.

If there are multiple Y-axis fields for a pie chart, the chart uses the first field selected to draw the chart. If adding multiple Y-axis fields to draw the pie chart from the chart window, the chart uses the first Y-axis field selected to draw the pie chart.

Scatter charts can represent only detailed data (numeric) without any aggregation method applied.
When you create a pie chart using the HTML active report output format (AHTML), the values are sorted alphabetically in the pie slices clockwise, from left to right. When you create a pie chart using the active report for Adobe Flash Player (FLEX) and active report for PDF (APDF) output formats, the values are sorted alphabetically in the pie slices counter-clockwise, from right to left.

**Viewing Data in a Rollup Table**

You can view data in an active report in a Rollup Table. For example, consider an active report that has the Order Number, Date of Order, Line Total, and Quantity sorted by Plant and by Product. If you need to see only the quantity in stock for each plant, you can create a Rollup Table with only those fields, as shown in the following image.
Procedure: How to Create a Rollup Table

1. Click the arrow in the heading of the column you want to create a Rollup Table for and select Rollup.

2. Select the sort field from the submenu.

The Rollup Table opens in a separate window.

Viewing Data in a Pivot Table

Pivot Tables reorganize and summarize selected fields of data in order to obtain a specific report. A Pivot Table pivots, or turns, the data to view it from different perspectives, without actually changing the data from the report.

Procedure: How to Create a Pivot Table in an Active Technologies Report

1. Run the active report, click the arrow in any column heading, and select Pivot (Cross Tab).
2. Select a Group By field, and Across field, respectively, from the Pivot (Cross Tab) submenu.

<table>
<thead>
<tr>
<th>RATING</th>
<th>CATEGORY</th>
<th>TITLE</th>
<th>COPY</th>
<th>WHOLESALEPR</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>CHILDREN</td>
<td></td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Filter</td>
<td>3</td>
<td>12.00</td>
</tr>
<tr>
<td></td>
<td>CLASSIC</td>
<td></td>
<td>2</td>
<td>29.99</td>
</tr>
<tr>
<td></td>
<td>FOREIGN</td>
<td></td>
<td>3</td>
<td>40.99</td>
</tr>
<tr>
<td></td>
<td>MUSICALS</td>
<td></td>
<td>1</td>
<td>13.25</td>
</tr>
<tr>
<td>NR</td>
<td>CHILDREN</td>
<td></td>
<td>1</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hide Column</td>
<td>1</td>
<td>7.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grid Tool</td>
<td>1</td>
<td>9.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chart/Rollup Tool</td>
<td>1</td>
<td>7.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pivot Tool</td>
<td>1</td>
<td>7.99</td>
</tr>
<tr>
<td></td>
<td>CLASSIC</td>
<td></td>
<td>1</td>
<td>15.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Show Records</td>
<td>1</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Comments</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Send as E-mail</td>
<td>10.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Save Changes</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Export</td>
<td>15.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Print</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Window</td>
<td>15.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Restore Original</td>
<td>14.99</td>
<td></td>
</tr>
</tbody>
</table>

The selected Group By field is the vertical sort field, and the selected Across field is the horizontal sort field in the Pivot Table.
The Pivot Table appears in the same web browser session.

The Pivot Table inherits the style used in the original active report.

You can use the Pivot controls and Pivot Table menu options to select additional values and calculations.
Reference: Pivot Table Menu Options

The following image is an example of a Pivot Table for an HTML active report.

![Pivot Table Example]

The following icons are available from the Pivot Table:

**New**

The New icon opens a new window with the same Pivot Table. This Pivot Table window can be used to compare values, especially when you use the Freeze option.

Add additional vertical sort fields (Add (Y)) and horizontal sort fields (Group By (X)) to the Pivot Table.

You can also export the Pivot Table to another application and open the Pivot Tool.

**Freeze**

Select the Freeze icon to keep the Pivot Table frozen so that additional selection criteria does not reflect in the Pivot Table.

Select the Freeze icon again to unfreeze the table and reflect new selection criteria in the Pivot Table.
**Calculation**

The Calculation icon identifies the calculation value for the Pivot Table. Options are Sum, Avg, Min, Max, Count, and Distinct.

Sum is the default calculation value.

**Reference: Pivot Controls**

The Pivot Table has individual controls for each sorting column or row. These controls enable you to alternate the sorting to analyze the data. The following image is an example of the Pivot controls in a Pivot Table.
The following controls are available from the Pivot Table.

<table>
<thead>
<tr>
<th>Button</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>![arrow]</td>
<td>Moves a column sort to a row sort or vice versa.</td>
</tr>
<tr>
<td>![up-down-arrows]</td>
<td>Up and down arrows enable you to switch the order of the sorts and move the column to a new position in the Pivot Table. Arrows are unavailable if there is only one sort column.</td>
</tr>
<tr>
<td>![left-right-arrows]</td>
<td>Left and right arrows enable you to switch the order of the sorts and move the row to a new position in the Pivot Table. Arrows are unavailable if there is only one sort row.</td>
</tr>
<tr>
<td>![delete]</td>
<td>Deletes the column or row from the Pivot Table.</td>
</tr>
</tbody>
</table>

**Working With an Accordion Active Technologies Report**

An accordion report is a report that has expandable views of data for each vertical (By) sort field. Only data values of the first (highest-level) vertical sort field are shown initially for accordion reports. All other data is hidden.

You can use an inner sort with accordion reports, where the sort column values are sorted within the parent to which they belong. To sort on all values in the report, you must first expand all data in the report.

**Procedure: How to Expand Data in an Accordion Active Technologies Report**

You can expand your view to expose data values of lower-level sort fields, either manually by clicking the plus signs (+) or if you are viewing an accordion report.

Click the arrow in a column heading. From the Accordion menu, select *Expand All*.

**Using the Grid Tool**

The Grid Tool enables you to change the column order, select multiple columns to sort ascending or descending, hide and show columns, add a calculation result to a column, and add subtotals in the active report.
This topic describes how to show the Grid Tool menu option when an active report is run, and how to use the Grid Tool.

**Procedure: How to Show the Grid Tool Menu Option for an Active Technologies Report**

2. From the Report menu, select Output.
   - The Report Options dialog box opens.
3. From the Output Format drop-down list, select HTML active report (AHTML).
4. On the Report Options dialog box, click the Format tab.
   - The Format tab of the Report Options dialog box provides options for formatting an active report.
5. In the Menu options section, to the right of the User type drop-down list, click the ellipsis button.
   - The Customize User Interactivity dialog box opens, enabling you to customize the options for each user type.
The following image shows the options on the Customize User Interactivity dialog box for a Power user. The Grid Tool check box is located at the lower-right of the dialog box. For a Power user, the Grid Tool is selected by default. For an Analytical or Business user, the Grid Tool is deselected by default.

![Customize User Interactivity](image)

**Tip:** The Advanced Tools include the Grid Tool, the Pivot Tool, and the Chart/Rollup Tool. The Advanced Tools check box at the lower-left of the Customize User Interactivity dialog box controls the display of the menu options for all three tools when an active report is run.

6. Locate the **Grid Tool** check box, and do one of the following.

- Select the **Grid Tool** check box to show the Grid Tool menu option for the active report at run time. Click **OK**.
Deselect the *Grid Tool* check box to hide the Grid Tool menu option at run time, and click *OK*.

7. Click *OK* on the Report Options dialog box to close it.

8. Run the active report.

Click the arrow in any column heading of the active report to display a menu of options.

- If you selected the check box for the Grid Tool on the Customize User Interactivity dialog box, you see the Grid Tool option on the menu, as shown in the following image.

![Image of Grid Tool menu](image)

- If you deselected the check box for the Grid Tool on the Customize User Interactivity dialog box, you do not see the Grid Tool option on the menu when you click the arrow in a column heading.
Procedure: How to Use the Grid Tool

1. Run the active report, click the arrow in any column heading, and select Grid Tool.

The Grid Tool opens, as shown in the following image.

![Grid Tool](image)

The columns are displayed in the order that they appear in the active report.

**Tip:** You can drag the columns in the Column Order section to reorder the list.

2. To hide or show columns, click the Hide Column icon next to the column name.

By default, the Grid Tool displays Hide icons for the hidden fields (HIDE=ON StyleSheet setting) and NOPRINT fields in the procedure. The Grid Tool displays Show icons for anything else.

![Click the Hide Column icon](image) ![Click the Show Column icon](image)

3. To add a calculated result to the column, click the calculation icon next to the column name. You can assign a different calculation result for each field.
There are no calculations set by default.

- Sum, Avg, Min, Max, Count, or Distinct are available for numeric fields.
- Min, Max, Count, or Distinct are available for Date type fields.
- Count or Distinct are available for non-numeric alpha string fields.
- None indicates that there will be no aggregation performed or applied for the column in the report. When None is selected, Detail appears next to the calculation icon, implying that the report will display detailed data for this column in the report.

4. Drag the columns from the Column Order into the Sort Order section. You can also double-click to add columns.

When columns are added to the Sort Order section, options for sorting ascending or descending appear. The default sort order is ascending, lowest to highest (A to Z). Click the sort order icon to switch to descending, highest to lowest (Z to A).

In the example below, Product is descending and Unit Sales is ascending.

5. You can edit the sort fields by clicking the X icon to delete columns, drag multiple columns into the Sort Order section, reorder the sort fields, and group sort columns.

6. Click Group sort columns to group the report by columns in the Sort Order section.

A Subtotal column appears in the Sort Order section. No subtotals are selected by default.
When Group sort columns is selected, the columns in the report are grouped by the order specified in the Sort Order section. These columns are repositioned to the beginning of the report and override the Column Order list.

7. To add a subtotal for an aggregated column.
   - Select the Subtotal check box next to the column name.
   - Click Group sort columns again to hide the Subtotal column.

In the following example, CITY and PRODUCT are hidden, BUDGET UNITS and BUDGET DOLLARS have a Sum aggregation type, CITY, REGION, PRODUCT, and UNIT SALES appear in the Sort Order column, Group sort columns is selected, and Subtotal is applied to REGION.

8. Click OK to close the Grid Tool.
   
The active report is generated based on the sort fields selected.
In the following example, the subtotal of sum values appear under BUDGET UNITS and BUDGET DOLLARS by the REGION field. You can select Grid Tool from the column menu to open the Grid Tool again.

![Grid Tool Image]

**Reference:** Grid Tool Usage Notes

The following apply when you use the Grid Tool in active reports:

- The same column can appear in both the Column Order and Sort Order section.
- Column Order displays the order of how columns appear in the report, unless Group sort columns is selected. The Sort Order list overrides the Column Order if Group sort columns is selected.
The Column Order and Sort Order sections can contain field names in a different order, as long as Group sort columns is not selected.

Columns can be dragged from Column Order to Sort Order but they cannot be dragged from Sort Order to Column Order.

Sort ascending is the default sort order, when columns are added to the Sort Order section.

There are no calculations set by default. Sum, Avg, Min, Max, Count, or Distinct are available for numeric fields. Min, Max, Count, or Distinct are available for Date type fields. Count or Distinct are available for non-numeric alpha string fields. None indicates that there will be no aggregation performed or applied for the column in the report.

When the Subtotal option is selected and an aggregation type is selected in the Column Order, subtotals display by the corresponding sort field (for the fields that have calculations specified).

Total plus the aggregation type (Cnt, Sum, and so on) appears with the column in the report output when Subtotal is selected.

You cannot add additional columns to Sort Order once Group sort columns is selected. Deselect Group sort columns to add additional columns.

If a column is hidden and appears in the Sort Order section, the subtotal value is also hidden if Group sort columns is selected.

When a filter is applied to the report, the subtotal displays the filtered value.

Subtotals are not supported with date fields.

The active report Sort Ascending and Sort Descending menus override the options set in the Sort Order section of the Grid Tool.

The subtotal background color and font color can be changed by using CALC-AREA object in the STYLE section of the procedure. For example:

```
TYPE=REPORT, OBJECT=CALC-AREA, COLOR=WHITE, BACKCOLOR=BLACK,
```

The font style for the subtotal values can be changed by using TITLE type in the STYLE section of the procedure. For example:

```
TYPE=TITLE, FONT='GEORGIA', COLOR=RGB(78 137 187),
```
Using the Chart/Rollup Tool

The Chart/Rollup Tool enables you to select multiple group fields in the Chart or Rollup Table generated.

The Chart/Rollup Tool contains a list of columns available in the active report and Group By and Measure sort fields. Drag the columns into the desired sort field.

Procedure: How to Use the Chart/Rollup Tool

1. Run the active report, click the arrow in any column heading, and select Chart/Rollup Tool.

   The Chart/Rollup Tool opens, as shown in the following image.

   ![Chart/Rollup Tool Image](image)

2. Drag the columns into the Group By and Measure sort fields.

   For charts, the Group By section is the columns used for the X-axis and Measure is the columns used for the Y-axis.

3. You can edit the sort fields by clicking the X icon to delete columns, drag multiple columns into the Group By and Measure sort fields, reorder the sort fields, and change the aggregation type of the Measure by clicking the Calculation icon.

4. You can select the Line, Pie, Bar, Scatter, or Rollup icon.

   Pie chart is selected by default.
In the example below, CAR and MODEL are the Group By sort fields, DEALER_COST and RETAIL_COST are the Measure fields, and Line chart is selected.

5. Click OK to close the Chart/Rollup Tool.
The Chart or Rollup Table is generated based on the sort fields selected. You can click the New icon from the Chart or Rollup Table and select Chart/Rollup Tool to open the Chart/Rollup Tool again.

![Chart/Rollup Tool Image](image)

Reference: **Chart/Rollup Tool Usage Notes**

The following apply when you use the Chart/Rollup Tool in active reports:

- The Group By and Measure sort fields are required.
- You can use multiple Group By and Measure sort fields. The Group By section is the columns used for the X-axis and Measure is the columns used for the Y-axis.
- You can only use one Measure sort field (as the Y-axis) when using a Pie chart.
- The same column can appear in both the Group By and Measure sort field.
- Columns can be dragged between the Group By and Measure sections but they cannot be dragged back to the Columns section.
The Measure sort field displays Sum for numeric fields and Count for non-numeric fields by default.

Headings for the chart are generated using the field name, or column title name. The report HEADING is inherited only if REPORT-VIEW=CHART is set in the WebFOCUS procedure.

When you use the Chart/Rollup Tool with hidden fields (HIDE=ON StyleSheet setting), the hidden columns are not displayed in the Rollup Table. To display the hidden columns in the Rollup Table, select Show Columns from the active report menu, and select the column name you want to display.

Using the Pivot Tool

By default, a Pivot Table groups the selected column as the vertical sort field and the selected row as the horizontal sort field. The Pivot Tool enables you to select multiple group fields in the Pivot Table generated.

Pivot Tables reorganize and summarize selected columns and rows of data in order to obtain a desired report. For more information, see Viewing Data in a Pivot Table on page 122.

The Pivot Tool contains a list of columns available in the active report and Group By, Across, and Measure sort fields. Drag the columns into the desired sort field.

Procedure: How to Use the Pivot Tool

1. Run the active report, click the arrow in any column heading, and select Pivot Tool.

   The Pivot Tool opens, as shown in the following image.

   ![Pivot Tool Image]

2. Left-click and drag the columns into the Group By, Across, and Measure sort fields.

   A column must be included for the Group By and Measure sort fields (Measures typically define how much or how many). The Across sort field is optional.
In the example below, CATEGORY and RATING are the Group By sort field, COPIES is the Across sort field, and WHOLESALEPR is the Measure field.

3. You can edit the sort fields by clicking the X icon to delete columns, drag multiple columns into the Group By or Across sort fields, reorder the columns in the sort fields, and change the aggregation type of the Measure by clicking the Calculation icon.

You cannot use multiple Measures.

4. Click OK to close the Pivot Tool.
The Pivot Table is generated based on the sort fields selected. You can click the New icon from the Pivot Table and select Pivot Tool to open the Pivot Tool again.

Reference: Pivot Tool Usage Notes

The following apply when you use the Pivot Tool in active reports:

- The Group By and Measure sort fields are required.
- You cannot use multiple Measures.
- The same column cannot appear in both the Group By and Across sort field.
- Columns can be dragged between the Group By, Across, and Measure sections but they cannot be dragged back to the Columns section.
- If a column already exists in the Measure sort field, an additional column that is dropped into Measures section replaces the existing column.
- The Measure sort field displays Sum for numeric fields and Count for non-numeric fields by default.
Saving, Exporting, and Sending Active Technologies Reports

You can save an active report from your browser to another location. You can send active reports as an HTML attachment. You can also export data in an active report to HTML, CSV (comma delimited), or XML (Excel) formats. You can export the entire data set or only filtered records. Export does not include the JavaScript that makes interaction possible due to browser security settings, only static data is exported. All data that you see in your report is exported. For example, if you have applied calculations to a column, those calculations appear in the exported data. In addition to exporting data, you may also export charts created in active reports to Microsoft® Excel®, Word®, and PowerPoint®.

The active cache feature does not support the Save Changes and Send as E-mail options for active reports.

**Procedure: How to Save an Active Technologies Report**

In order to save an active report, ensure that your Temporary Internet Files setting is set to Automatic.

1. From your browser File menu, use the Save Page As option. For example, in Internet Explorer, select **Save as**.
2. In the Save as type drop-down list, select **Webpage, HTML only**.

**Note:**

- Starting with WebFOCUS Release 8.0 Version 01, if you have included the command `SET AROUTPUT = EXTJS` in the profile or in a WebFOCUS procedure that generates an active report or document, you cannot use the browser Save as option to save the active report or document. Make sure to change the command to `SET AROUTPUT = ALL` to allow users to save the report or document with the Save as option. For more information on the SET AROUTPUT command, see *How to Control the Generation of the Active Technologies for HTML Output File* on page 324.

- Starting with WebFOCUS Release 8.0 Version 02, make sure that the IBIF_active_extjs parameter is set to NO in the WebFOCUS Administration Console to use an active report or document (format AHTML) in a fully disconnected mode that supports the browser Save as option. You can find this parameter in the General category of Client Settings in the Configuration menu of the WebFOCUS Administration Console. For details on this parameter, see the *WebFOCUS Security and Administration* manual. Alternatively, you can add the command `SET AROUTPUT = ALL` to the WebFOCUS procedure that generates the active report or document.
Procedure: How to Use Save Changes in an Active Technologies Report

1. Click the arrow in any column heading, select Save Changes.
   The Prompt dialog box opens.
   To use the Save Changes option, you must enable ActiveX® in your browser security settings.

2. If a filter is applied to the active report, Filtered Only appears as an additional option in the Save as dialog box.
   Click Filtered Only to save only the filtered result instead of the entire report.

3. If the active report is part of an active dashboard, Selected Grid Only appears as an additional option in the Save as dialog box.
   Click Selected Grid Only to save only the active report that you selected on the active dashboard instead of the entire dashboard with multiple reports.

4. Enter a file name and location (or keep the default) and click Save Report.
The report is saved with the most recent modifications applied.
The original report name does not show these modifications.

Procedure: How to Print Active Technologies Report Data

1. Click the arrow in any column heading and select *Print*.
   
   You can print All records or Filtered only.

   - Select *All records* to open an HTML-formatted page, showing all records, in a new browser window.
   - Select *Filtered only* to open an HTML-formatted page, showing filtered data, in a new browser window.

   **Tip:** Click the arrow in any column heading and select *Filter* to filter data. For more information about filtering, see *Filtering and Highlighting Data* on page 96.

2. The print dialog menu automatically appears when selecting a print option from active reports.
   
   The data is sent to the printer.

Procedure: How to Export Data

Browsers other than Internet Explorer, such as Mozilla Firefox and Safari, do not support the Export XML (Excel) feature of HTML active reports.

A limitation for browsers other than Internet Explorer, such as Mozilla Firefox and Safari, is the unavailability of the export directly to Microsoft Excel function in the HTML active report. The export directly to Microsoft Excel function in HTML active reports requires ActiveX controls, which are supported only when you use Internet Explorer as the web browser.

The active report menu options Export to HTML and Export to CSV (comma delim) export data in Unicode (UTF-16) only. Exporting data in an encoding scheme other than Unicode is not supported. For instance, in the Save HTML Document dialog box in Internet Explorer, you must select Unicode from the Language drop-down list. The requirement that you export data in Unicode applies to all platforms.

1. Click the arrow in any column heading, select *Export*, and then click the format.

   Formatting is only preserved for reports that are exported in HTML format. If you export data to HTML and then change the file extension in the Save as dialog box to .xls, when you open the file in Excel, it does retain all formatting.
2. Select All Records or Filtered only.

   The Save as dialog box opens.

   A new browser window also opens that shows the exported data. This data shows due to browser security features.

3. Navigate to a location to save the exported file, enter a name, and click Save.

4. A second window appears in the browser when you export content to XML (Excel). Since exporting content to Excel is done using XML, this second window appears in the browser during the export process, which performs a security check on the data. To prevent this second window from appearing, give the file name an explicit Excel extension (.XLS) in the Save dialog.

   Column titles and field values for ACROSS sort fields are not exported to CSV and XML (Excel) formats.

   Field formats with dollar signs and decimals are not exported to CSV and XML (Excel) formats. They export as plain integers.

**Procedure: How to Export Charts to Microsoft Excel, Word, and PowerPoint**

When you export charts, the selected application opens and a chart is created in a new worksheet, document, or presentation. You must use Internet Explorer as the default browser in order to successfully export data to a Microsoft Office application.

1. Ensure that ActiveX controls are enabled in your web browser security settings.
   
   a. From your web browser, select Internet Options from the Tools menu.
   
   b. Select the Security Tab.
   
   c. Click Custom Levels.

      Ensure that ActiveX controls and plug-ins are enabled.

2. Run your active report and create a chart.
3. From the chart window, select the *Export To* option from the first chart icon, as shown in the following image.

4. Select *Excel*, *Word*, or *PowerPoint*.
   
   The chart is exported to the selected application.

   The chart opens in the corresponding Microsoft Office application.
The following image is an example of a chart exported to Excel.
The following image is an example of a chart exported to Word.
The following image is an example of a chart exported to PowerPoint.

![Image of chart exported to PowerPoint](image)

**Procedure: How to Send Active Technologies Reports**

You must use Internet Explorer as the default browser in order to successfully send active reports.

Browsers other than Internet Explorer, such as Mozilla Firefox and Safari, do not support the Send as E-mail feature of HTML active reports.

A limitation for browsers other than Internet Explorer, such as Mozilla Firefox and Safari, is the unavailability of Send as E-mail functions in the HTML active report. Send as E-mail functions in HTML active reports require ActiveX controls, which are supported only when you use Internet Explorer as the web browser.

The HTML file that is created by Active Technologies contains JavaScript so that you can interact with the data in a disconnected mode. When you send an active report or active dashboard in HTML using email, many email client programs on a smartphone or any other mobile device can block the JavaScript in the attachment. A third-party tool, such as the Mobile Faves App for the iPhone or iPad, may be required in order to correctly view the attachment.
1. Click the arrow in the heading of a column and select Send as E-mail from the menu. The Prompt dialog box opens.

2. If a filter is applied to the active report, Filtered Only appears as an additional option in the Prompt dialog box.
   Click Filtered Only to send only the filtered result instead of the entire report.

3. If the active report is part of an active dashboard, Selected Grid Only appears as an additional option in the Prompt dialog box.
   Click Selected Grid Only to send only the active report that you selected on the active dashboard instead of the entire dashboard with multiple reports.

4. Enter a file name and location (or keep the default) and click Save Report to save the active report as a HTML document.
If Microsoft Outlook® is your default email system, a message is opened with the AHTML report as an attachment.

If Microsoft Outlook is not your default email system, save the active report as an HTML document and attach the file to your message.

**Note:** When using Internet Explorer 7 and Microsoft Office Outlook 2003 or 2007 on the Windows operating system, you may receive the error message *Access is denied* if you click the attached HTML file to preview the active report or active dashboard before you send it. Once the email message is sent, the HTML file opens and the active report or active dashboard appears correctly on the machine of the email recipient.

### Generating Images for Active Technologies Reports

You can generate images for active reports in connect or disconnect mode by placing images in the apps directory. If images are in the WebFOCUS Reporting Server application directory and no URL is specified, the JPEG image converts to a JavaScript image at run time.

All resizing of images should be done outside of Developer Studio and image size should not be larger than 200x200 pixels. Embedding images does not support sizing or positioning of the image and it uses the current size and default position for that object. Larger images increase the time required for conversion and the loading of the report in the browser.

There are multiple ways to generate images for active reports. You can do one of the following, but not both.
Procedure: How to Place Images in the WebFOCUS Reporting Server Application Directory for Active Technologies Reports

To place an image in the WebFOCUS Reporting Server application directory:

1. From the Images tab of the Report Options dialog box, click the Browse button.
   - In disconnected mode, images for AHTML reports must be JPEG images.
2. Select Developer Studio Desktop from the Look in drop-down list.
3. Double-click Projects on localhost, WebFOCUS Environments, or Windows Desktop, and navigate to the image.
4. Select the image and click Open.
5. From the Location drop-down list, click Page Header or Page Footer to indicate the placement of the image in the report.
6. Click Add.
   - The image is added to the image list.
7. Click OK to apply and save your selection.
   - The image is added to your apps directory and inserted into your report at the selected location.

Procedure: How to Specify the Image Path for Active Technologies Reports

To specify a full or relatively qualified URL:

1. Type a full or relatively qualified URL path in the Image Source input field.
   - If no URL is specified, the JPEG image converts to a JavaScript image at run time.
2. From the Location drop-down list, click Page Header or Page Footer to indicate the placement of the image in the report.
3. Select the Include as Reference check box.
4. Click Add to add the image to the image list.
5. Click OK to apply and save your selection.
This topic describes Active Technologies features and functions available on mobile and gesture-enabled devices with multi-touch capability, such as the Apple® iPhone® and Apple iPad®.

In this chapter:

- Requirements for Mobile Web Apps
- Mobile Web Apps Features
- Standard Gesture Support
- Running an Active Technologies Report on a Mobile Device
- Running an Active Technologies Dashboard on a Mobile Device

Requirements for Mobile Web Apps

Active Technologies for mobile web apps require Internet Explorer 8 or higher.

Apple requires that any web content that is accessed from an iPhone app is compatible with, and optimized for display on, all Apple iOS-based devices. Active Technologies comply with web standards and are compatible with the Apple Safari browser.

Older browsers running on a Blackberry OS prior to OS 6 do not fully support JavaScript. Blackberry OS 6 or higher may be required in order to render an active report or dashboard in HTML correctly.

Mobile and Tablet Device Support Information

The following apply to Active Technologies for mobile web apps.

in some cases, device support depends on the Active Technologies chart engine that you are using. The chart engine is set with the WebFOCUS StyleSheet ARGRAPHENGINE attribute in an active report procedure, or in the SECTION declaration of a compound layout report. For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see Switching the Chart Engine on page 354.

- Active Technologies for Adobe Flash Player and for PDF are not supported on Apple iOS-based devices or Android devices.
Active Technologies charts that use the Flash chart engine for connected mode (ARGRAPHENGINE=FUSION) are not supported on Android devices.

Active Technologies charts that use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART) are not supported on Android devices with OS version 3.0 or lower.

In Active Technologies for mobile on Android devices, you cannot select the chart type when using the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). Charts are not available in the chart selection tool.

Running an AHTML report with more than 30,000 records may cause the mobile Safari browser to close on the Apple iPad. To handle a large set of data when using Safari on iPad, turn on the active cache feature.

**Mobile Web Apps Features**

The following features apply to Active Technologies implemented on mobile devices.

- Active Technologies check for the screen size of the device at run time. If the height of the screen is less than 500 pixels, Active Technologies assume that the report or dashboard is running on a mobile device and the mobile user interface is used. This feature applies when the device is in either portrait or landscape mode.

- By default, Active Technologies use tab window navigation, familiar to most users. In tab window navigation, open windows are represented by tabs across the top of a report. Tap a tab to navigate between windows.

- Only Active Technologies HTML JavaScript charts are available on devices that do not support Adobe® Flash® Player, such as an iPhone or iPad.

**Standard Gesture Support**

Active Technologies support the following standard interactive gestures that are used on a multi-touch screen.

<table>
<thead>
<tr>
<th>Gesture</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap</td>
<td>To press or select a control or item (analogous to a single mouse click).</td>
</tr>
</tbody>
</table>
### Gesture | Description
---|---
Drag | To move columns left and right or up and down slowly when an active report is in a grid in full-screen web app view.
Flick | To move columns left and right or up and down quickly when an active report is in a grid in full-screen web app view.
Swipe | To page forward or backward in a pagination bar when an active report is in a grid in full-screen web app view.
Double tap | To zoom in and center a block of content or an image. If you are already zoomed in, a double tap zooms out. You can also double tap the screen to hide both the top and bottom toolbars, as well as the pagination bar. Double tap the screen again to show both toolbars and the pagination bar.
Running an Active Technologies Report on a Mobile Device

The following image shows a sample active report that is running on an iPad in full-screen web app view.

<table>
<thead>
<tr>
<th>Region</th>
<th>State</th>
<th>Product Type</th>
<th>Product Name</th>
<th>Revenue</th>
<th>Cost of Goods Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>East North Central Illinois</td>
<td>Camcorders</td>
<td>Digital8 Easycam Camcorder 18x Power Zoom</td>
<td>$64,371.00</td>
<td>$59,880.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital8 Easycam Camcorder 20x Power Zoom</td>
<td>$137,772.00</td>
<td>$138,840.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital8 Easycam Camcorder 22x Power Zoom</td>
<td>$6,708.00</td>
<td>$7,280.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MiniDV Easycam Camcorder - 3CCD</td>
<td>$59,419.00</td>
<td>$864,800.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MiniDV Easycam Camcorder - 3CCD Pro</td>
<td>$7,787.00</td>
<td>$20,800.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MiniDV Easycam Camcorder 14x Power Zoom</td>
<td>$43,860.00</td>
<td>$136,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MiniDV Easycam Camcorder 18x Power Zoom</td>
<td>$3,725.00</td>
<td>$13,750.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EasyShot Digital Camera</td>
<td>$223,293.00</td>
<td>$820,260.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EasyShot Digital Camera 6.1 Megapixel</td>
<td>$947,646.00</td>
<td>$2,507,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EasyShot Digital Camera 8 Megapixel</td>
<td>$6,39,561.00</td>
<td>$1,283,400.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EasyShot Ultra Zoom Digital Camera</td>
<td>$162,929.00</td>
<td>$471,730.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EasyShot Wide Zoom Digital Camera</td>
<td>$63,342.00</td>
<td>$183,600.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easytole Electronic Organizer 10MB Memory</td>
<td>$12,441.00</td>
<td>$8,580.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easytole Electronic Organizer 8MB Memory</td>
<td>$52,440.00</td>
<td>$32,775.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easytole Voice Recorder 6 Hours</td>
<td>$39,406.00</td>
<td>$28,975.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easytole Voice Recorder 8 Hours</td>
<td>$135,213.00</td>
<td>$104,010.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easytole VoiceEmail - Digital Recorder</td>
<td>$16,456.00</td>
<td>$13,090.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Handheld PDA 32MB Memory</td>
<td>$91,561.00</td>
<td>$254,980.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Handheld PDA 64MB Memory</td>
<td>$51,254.00</td>
<td>$366,100.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pocket PC Handheld Organizer 128MB Memory</td>
<td>$33,019.00</td>
<td>$115,010.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pocket PC Handheld Organizer 32MB Memory</td>
<td>$31,679.00</td>
<td>$48,120.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pocket PC Handheld Organizer 64MB Memory</td>
<td>$63,724.00</td>
<td>$225,200.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13 Inch Portable DVD Video System</td>
<td>$1,255,800.00</td>
<td>$5,040,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 Inch Portable DVD Video System</td>
<td>$885,226.00</td>
<td>$2,661,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 Inch LCD TV with PC/DVD/TVD Inputs</td>
<td>$147,706.00</td>
<td>$642,200.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 Inch LCD TV with PC/DVD/TVD Inputs</td>
<td>$216,617.00</td>
<td>$1,662,900.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-Head Hi-Fi Stereo Super VHS VCR</td>
<td>$4,015.00</td>
<td>$113,150.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-Head Hi-Fi Super VHS VCR</td>
<td>$39,184.00</td>
<td>$104,180.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4-Head Hi-Fi VHS VCR</td>
<td>$99,591.00</td>
<td>$212,610.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>42 Inch Plasma Monitor/TVD</td>
<td>$164,151.00</td>
<td>$1,811,700.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 Inch HD A/V Wireless Plasma TV</td>
<td>$323,219.00</td>
<td>$3,999,700.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>56 Inch Widescreen HDTV Monitor TV with DLP</td>
<td>$154,542.00</td>
<td>$1,022,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-VHS Digital Video Recorder</td>
<td>$27,538.00</td>
<td>$168,840.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-VHS Digital Video Recorder</td>
<td>$344,337.00</td>
<td>$690,400.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DVD Player</td>
<td>$155,477.00</td>
<td>$475,950.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DVD Recorder</td>
<td>$661,826.00</td>
<td>$1,400,300.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>World Wide VHS VCR</td>
<td>$176,121.00</td>
<td>$533,700.00</td>
<td></td>
</tr>
<tr>
<td>Indiana Audio</td>
<td></td>
<td>100 Watt Front-Firing Powered Subwoofer</td>
<td>$409,381.00</td>
<td>$49,160.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-Way Speaker Pair</td>
<td>$57,663.00</td>
<td>$31,290.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-Way Speaker Pair</td>
<td>$92,697.00</td>
<td>$52,470.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>400 Disc Super Audio CD Changer</td>
<td>$23,880.00</td>
<td>$84,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,1 Channel Home Theater Receiver 100 WPC</td>
<td>$23,393.00</td>
<td>$23,350.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,1 Channel Home Theater Receiver 150 WPC</td>
<td>$21,605.00</td>
<td>$29,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-Piece Home Theater Speaker System</td>
<td>$531,471.00</td>
<td>$202,290.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6,1 Channel Home Theater Receiver 100 WPC</td>
<td>$92,880.00</td>
<td>$252,000.00</td>
<td></td>
</tr>
</tbody>
</table>
You can use the icons on the pagination bar of the grid in an active report to:

- Adjust the viewing mode, which can be either full-screen web app view or original active report view.
- Position the pagination bar at the top or bottom of the report.

By tapping the column title of a report, you can access the report column drop-down menu to refine the data in different ways and manipulate the way that you present it.

You can also use the icons on the chart, rollup, or pivot tool bar of an active report to adjust the viewing mode, which can be either full-screen web app view or original active report view.

**Adjusting the Views**

Tap the Full Screen View icon to display the report in full-screen web app view mode. Full-screen web app view means that the report is presented as a gesture-enabled web app with the features and functionalities customized for mobile and touch-screen devices. This is the default view for the display of a report on mobile and multi-touch devices.

In full-screen web app view, tap the Original View icon to restore the report to its original active report view. Original active report view means that the report is presented as a regular active report running inside the browser. All the functionalities of active reports in the desktop browser are intact in this mode, except the window display option, which is set to Tabs instead of Cascade by default to accommodate devices with small screen sizes.

**Adding an Active Technologies Report or Dashboard to the Home Screen**

For easy access, you can add an active report or dashboard to the Home screen of your device. When an active report or dashboard is added to the Home screen, it will create an icon of the report or dashboard. The user can tap the icon to access the active report or dashboard instead of entering its URL in the device browser. When the active report or the dashboard is opened from the Home screen, it will connect to WebFOCUS to retrieve the most up-to-date information. Accessing active reports and dashboards from the icon provides more space to view reports or dashboards on devices with small screen sizes. There will be no browser toolbars to take up screen space.

To add an active report or dashboard to the Home screen on the iPhone and iPad, open an active report or dashboard in the browser and then tap the Action icon at the bottom of the screen. Tap the Add to Home Screen option.
To add an active report or dashboard to the Home screen on Android devices, open an active report or dashboard in the browser and open the menu options. Tap *Add shortcut to Home*. Depending on your device, you may need to tap *Add bookmark* first. In this case, go to the Bookmarks list and touch and hold the bookmark you just added to bring up the *Add shortcut to Home* option.

**Hiding and Showing the Pagination Bar and the Top and Bottom Toolbars**

In full-screen web app view, you can hide the pagination bar and the top and bottom toolbars of the grid and chart. This is done so that there is more space to view the active reports and charts on devices with small screen sizes.

To do this:

1. Click the *Full Screen View* icon to display the report in full-screen web app view, if it is not already in that view.
2. In the grid cell data area or in a chart, double tap to hide the pagination bar and the top and bottom toolbars.
3. In the grid cell data area or in a chart, double tap to show the pagination bar and the top and bottom toolbars.

**Navigating Between Pages**

To navigate between the pages of an active report:

1. Click the *Full Screen View* icon to display the report in full-screen web app view if it is not already in that view.
2. On the pagination bar, swipe from right to left to display the next page of the report.
3. On the pagination bar, swipe from left to right to display the previous page of the report.
Accessing the Report Column Drop-Down Menu

The following image shows a sample report column drop-down menu for a numeric data column in full-screen web app view.

The menu option Visualize is available only for numeric data. The menu options Show Columns and Show All are available only when there are hidden columns in the report. The menu options Freeze Column and Unfreeze All are available only in full-screen web app view.
Procedure: How to Access the Report Column Drop-Down Menu

1. On a run-time tabular report (grid), tap once on a column title. The report column drop-down menu is displayed, with a selection of options.

2. Tap the desired menu option. An arrow to the right of a menu option means that there is an additional menu associated with that option. The options and their associated menus are described in the topics that follow.

3. To remove the report column drop-down menu, tap Cancel.

Sorting Data

You can sort data in any column of an active report in ascending or descending order.

Tap Sort Ascending to sort the data in ascending order.

Tap Sort Descending to sort the data in descending order.

Filtering Data

On a run-time active report, locate and tap the title of the column that you wish to filter. From the report column drop-down menu, tap Filter or touch the right arrow for the Filter menu option. The Filter menu is displayed, specifying the default filter condition and default values for the selected column in the existing report.

The following image shows a sample Filter menu. In this example, the default condition is Equals and the default value is Alabama. Alabama is the first value in the existing report for the selected column.

The menu retains any previous filters that were applied to this column of the report.
You can:

- Tap *Done* once to see the result of the default condition and values. The filtered report is automatically generated, and a new Filter tab is appended after the Report tab and any other existing tabs. On the new Filter tab, you can change the default condition and values to customize the filter for your reporting needs.

- You can also tap the Condition and Values drop-down dialog box to change the filter condition or values before tapping the Done button.

- Tap *Clear All* to remove all the filters that are currently applied to this report.

**Using the Filter Tab**

The following image shows a sample Filter tab for an active report (grid).

![Filter Tab Image]

The Filter tab shows all the filters that are applied to the report.

An individual filter applies only to the specific report from which the filter was created or to which the filter was added. You can scroll up and down the list to view all the individual filters.

From the Filter tab, you can do the following.

- Tap a drop-down list to change the filter condition or values. An asterisk next to a value (for example, next to Alabama in the preceding example) means that multiple values define the condition.

- Tap the *Delete* icon to remove an individual filter from the report.

- Tap *Operator: AND* to change the condition (operator) between all existing filters from AND (the default) to OR.

- Tap *Add Condition* to define a new filter.

- Tap *Filter* to apply a modified or new filter and generate the new report.

- Tap *Highlight* to apply highlight to the filtered values in the report.

- Tap *Clear All* to remove all the filters that are currently applied to the report.
Calculating Data

From the report column drop-down menu, tap Calculate or touch the right arrow for the Calculate menu option to display a menu from which you can apply a calculation to the selected column.

The following image shows the Calculate menu for a numeric data column. The calculations that are available on the menu depend on the data type of the selected column: numeric, alphanumeric, or date.

![Calculate Menu](image)

You can do the following:

- Tap a calculation type in the list. A new report is generated on the Report tab. The calculated result for the selected column is displayed at the location in the grid specified in the WebFOCUS report procedure. Depending on the size of the screen that you are using, the calculated result may be displayed over two lines.

- Tap Clear to remove the calculation that was last applied to the report.

- Tap Clear All to remove all the calculations that are currently applied to the report.
Viewing Data as a Chart

When you run an active report on an iPad, you can tap Chart or touch the right arrow for the Chart menu option to display a menu that specifies the default value for the type of chart that will be displayed and the default aggregation (calculation) that will be used to draw the chart. Also listed are the columns that are available for display on the X-axis of the chart (the Group By columns).

The following image shows a sample Chart menu. In this example, the default chart type is Bar and the default aggregation is Sum, for the selected numeric data column. Columns that can be displayed on the X-axis (Group By columns) are listed on the menu.

You can access the same menu from the Advanced Chart icon at the bottom of the screen if you are already in a chart in full-screen web app view. This menu and icon apply to the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see Switching the Chart Engine on page 354.

Tap a Group By column for the X-axis to automatically generate a chart that is the result of the default values and the selected X-axis column. The chart is displayed in tab view, with a new Chart tab appended after the Report tab and any other existing tabs.

The chart is generated in full-screen web app view by default, if you are in that view.
Alternatively, you can tap the Chart Type menu to change the chart type or tap the Aggregation drop-down menu to change the calculation type, before selecting the Group By column to generate the new chart.

Tapping the Chart Type menu displays the Chart Type options, as shown in the following image.

![Chart Type Options](chart-type-options.png)
You can now tap a category, such as Pie, and then tap the Donut chart type that will be used to display the chart. The following image shows some of the charts in the Pie category.

If you are using the WebFOCUS Mobile Faves for iOS app, it may take a moment for the chart types in a chart category to be displayed. There is no JavaScript engine that renders JavaScript faster inside the iOS app, and JavaScript cannot take advantage of features such as hardware acceleration.

On the new Chart tab, you can change the values to customize the chart for your reporting needs. You can also manipulate the way that you present the data.
Running an Active Technologies Report on a Mobile Device

Using the Chart Tab

The following image shows a sample Chart tab.
Beneath the chart is the active chart or rollup tool bar, which contains the icons described in the following table.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Menu</td>
<td>Displays the active chart or rollup menu. For details, see <em>Using the Active Technologies Chart Menu</em> on page 168.</td>
</tr>
<tr>
<td></td>
<td>Column</td>
<td>Changes the chart type to column.</td>
</tr>
<tr>
<td></td>
<td>Pie</td>
<td>Changes the chart type to pie.</td>
</tr>
<tr>
<td></td>
<td>Line</td>
<td>Changes the chart type to line.</td>
</tr>
<tr>
<td></td>
<td>Scatter</td>
<td>Changes the chart type to scatter. Scatter charts are available for numeric columns.</td>
</tr>
<tr>
<td></td>
<td>Rollup</td>
<td>Displays the chart as a rollup table.</td>
</tr>
<tr>
<td></td>
<td>Advanced Chart</td>
<td>Opens the chart tool to change the chart type. Applies when ARGRAPHENGINE=JSCHART.</td>
</tr>
<tr>
<td></td>
<td>Original Chart</td>
<td>Restores the current chart type to the initial chart type that was displayed.</td>
</tr>
<tr>
<td></td>
<td>Lock/Unlock</td>
<td>Freezes the chart or rollup table. You can link or unlink a chart or rollup table to the filters that you have applied in your report using the Freeze Chart or Freeze Rollup icon. The icon indicates whether the report is linked to the filter (Freeze Chart or Freeze Rollup) or not (Unfreeze Chart or Unfreeze Rollup).</td>
</tr>
<tr>
<td></td>
<td>Aggregation</td>
<td>Changes the aggregation method.</td>
</tr>
</tbody>
</table>
Using the Active Technologies Chart Menu

The active chart menu and its submenus allow you to change the columns used in the chart or rollup table or select multiple columns from those available in the report, including hidden and NOPRINT columns.

The following image shows the active chart menu.

You can:

- Tap **New** to create a copy of the same chart on a new Chart tab.
- Tap **Original View** or **Fullscreen** to display the chart in the desired viewing mode.
- Tap **Group By (X)** to change the column selected for the X-axis (the Group By field) or add any column available in the report, including hidden and NOPRINT columns. On the Group By (X) submenu, values used in the existing chart are displayed at the top of the column names and are selected (checked) by default. A newly selected X-axis column is displayed at the top of the column names and is checked.
For a bar chart, tap *Stacked* to create a stacked AHTML bar chart.

The following image shows a sample Group By (X) submenu. The column Product Type is used as the X-axis in the existing chart.

Tap once to select an additional column, or tap again to deselect the column. Once you select or deselect a column, the Chart tab displays the modified chart, reflecting all the changes.

- Tap *Add (Y)* to change the column selected for the Y-axis or add any column available in the report, including hidden and NOPRINT columns. On the Add (Y) submenu, the values used in the existing chart are selected by default.
The following image shows a sample Add (Y) submenu. The column Cost of Goods Sold is used as the Y-axis in the existing chart.

Tap once to select an additional column, or tap again to deselect the column. Once you select or deselect a column, the Chart tab displays the modified chart, reflecting all the changes.

**Viewing Data in a Rollup Table**

Tap Rollup or touch the right arrow for the Rollup menu option to display a menu that specifies the default aggregation (calculation) that will be used to generate the rollup table. Also listed are the Group By columns that are available for display in the rollup table.
The following image shows a sample Rollup menu. In this example, the default aggregation is Sum for a numeric data column. The available Group By columns are listed on the menu.

Tap a Group By column to automatically generate a rollup table that is the result of the default aggregation value and the selected column. You must select at least one Group By column. After you select a column, the rollup table is displayed in tab view, with a new Rollup tab appended after the Report tab and any other existing tabs.

The rollup table is generated in full-screen web app view by default, if you are in that view.

You can also tap the Aggregation drop-down menu to change the calculation type before selecting the Group By field to generate the new rollup.

On the new Rollup tab, you can change the values to customize the rollup table for your reporting needs, making it more complex as required for analysis. You can also manipulate the way that you present the data.
Using the Rollup Tab

The following image shows a sample Rollup tab.

<table>
<thead>
<tr>
<th>State</th>
<th>Cost of Goods Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>$571,920.00</td>
</tr>
<tr>
<td>Arizona</td>
<td>$4,030,620.00</td>
</tr>
<tr>
<td>Arkansas</td>
<td>$5,085,740.00</td>
</tr>
<tr>
<td>Barcelona</td>
<td>$32,340,670.00</td>
</tr>
<tr>
<td>Bavaria</td>
<td>$14,364,220.00</td>
</tr>
<tr>
<td>Bouches-du-Rhône (13)</td>
<td>$19,082,595.00</td>
</tr>
<tr>
<td>British Columbia</td>
<td>$20,019,430.00</td>
</tr>
<tr>
<td>California</td>
<td>$66,157,730.00</td>
</tr>
<tr>
<td>Colorado</td>
<td>$12,040,510.00</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$26,756,390.00</td>
</tr>
<tr>
<td>Córdoba</td>
<td>$9,247,345.00</td>
</tr>
<tr>
<td>Delaware</td>
<td>$22,864,950.00</td>
</tr>
<tr>
<td>Florida</td>
<td>$40,167,920.00</td>
</tr>
<tr>
<td>Georgia</td>
<td>$38,037,395.00</td>
</tr>
<tr>
<td>Hawaii</td>
<td>$1,415,665.00</td>
</tr>
<tr>
<td>Illinois</td>
<td>$47,232,110.00</td>
</tr>
<tr>
<td>Indiana</td>
<td>$19,835,680.00</td>
</tr>
<tr>
<td>Kansas</td>
<td>$2,209,835.00</td>
</tr>
<tr>
<td>Kentucky</td>
<td>$12,102,395.00</td>
</tr>
<tr>
<td>Loire-Atlantique (44)</td>
<td>$11,028,530.00</td>
</tr>
<tr>
<td>Louisiana</td>
<td>$1,202,160.00</td>
</tr>
<tr>
<td>Manitoba</td>
<td>$10,181,070.00</td>
</tr>
<tr>
<td>Maryland</td>
<td>$37,102,295.00</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>$47,615,275.00</td>
</tr>
<tr>
<td>Michigan</td>
<td>$18,541,660.00</td>
</tr>
<tr>
<td>Minnesota</td>
<td>$22,379,540.00</td>
</tr>
<tr>
<td>Missouri</td>
<td>$8,264,940.00</td>
</tr>
<tr>
<td>Nebraska</td>
<td>$1,915,750.00</td>
</tr>
<tr>
<td>Nevada</td>
<td>$1,738,030.00</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$41,008,610.00</td>
</tr>
<tr>
<td>New York</td>
<td>$79,598,680.00</td>
</tr>
<tr>
<td>Nord (59)</td>
<td>$6,246,140.00</td>
</tr>
<tr>
<td>North Carolina</td>
<td>$1,979,660.00</td>
</tr>
<tr>
<td>North Rhine-Westphalia</td>
<td>$8,975,045.00</td>
</tr>
<tr>
<td>Ohio</td>
<td>$36,638,925.00</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>$15,289,435.00</td>
</tr>
<tr>
<td>Ontario</td>
<td>$97,477,295.00</td>
</tr>
<tr>
<td>Oregon</td>
<td>$1,448,980.00</td>
</tr>
<tr>
<td>Paris (75)</td>
<td>$10,964,275.00</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$28,660,390.00</td>
</tr>
<tr>
<td>Québec</td>
<td>$3,033,075.00</td>
</tr>
</tbody>
</table>
Beneath the rollup table is the chart or rollup tool bar, which contains the icons described in the following table.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Menu icon]</td>
<td>Menu</td>
<td>Displays the active chart or rollup menu. For details, see Using the Rollup Menu on page 174.</td>
</tr>
<tr>
<td>![Column icon]</td>
<td>Column</td>
<td>Changes the report to a column chart.</td>
</tr>
<tr>
<td>![Pie icon]</td>
<td>Pie</td>
<td>Changes the report to a pie chart.</td>
</tr>
<tr>
<td>![Line icon]</td>
<td>Line</td>
<td>Changes the report to a line chart.</td>
</tr>
<tr>
<td>![Scatter icon]</td>
<td>Scatter</td>
<td>Changes the chart type to scatter. Scatter charts are available for numeric columns.</td>
</tr>
<tr>
<td>![Rollup icon]</td>
<td>Rollup</td>
<td>Displays the chart as a rollup table.</td>
</tr>
<tr>
<td>![Advanced Chart icon]</td>
<td>Advanced Chart</td>
<td>Opens the chart tool to change the chart type. Applies when ARGRAPHENGINE=JSCHART.</td>
</tr>
<tr>
<td>![Original Chart icon]</td>
<td>Original Chart</td>
<td>Restores the current chart type to the initial chart type that was displayed.</td>
</tr>
<tr>
<td>![Lock/Unlock icon]</td>
<td>Lock/Unlock</td>
<td>Freezes the chart or rollup table. You can link or unlink a chart or rollup table to the filters that you have applied in your report using the Freeze Chart or Freeze Rollup icon. The icon indicates whether the report is linked to the filter (Freeze Chart or Freeze Rollup) or not (Unfreeze Chart or Unfreeze Rollup).</td>
</tr>
<tr>
<td>![Sum icon]</td>
<td>Aggregation</td>
<td>Changes the aggregation method.</td>
</tr>
</tbody>
</table>
Using the Rollup Menu

The rollup menu and its submenus allow you to select multiple columns from those available in the report, including hidden and NOPRINT columns.

The following image shows the rollup menu.

To access the Rollup menu, tap the menu icon with a rollup table open.

You can:

- Tap New to create a copy of the same rollup table on a new Rollup tab.
- Tap Original View or Fullscreen to display the rollup table in the desired viewing mode.
- Tap Group By (X) to change the column selected for the X-axis (the Group By field) or add any column available in the report, including hidden and NOPRINT columns. On the Group By (X) submenu, the Group By column used in the existing rollup table is displayed at the top of the column names and is selected (checked) by default.
The following image shows a sample Group By (X) submenu. The column Product Type is the Group By column for the existing rollup table.

Tap once to select an additional column, or tap again to deselect the column. Once you select or deselect a column, the Rollup tab displays the modified rollup table, reflecting all the changes.

- Tap Add (Y) to change the column selected for the Y-axis or add any column available in the report, including hidden and NOPRINT columns. On the Add (Y) submenu, the Y-axis column used in the existing report is selected by default.
The following image shows a sample Add (Y) submenu. The column Cost of Goods Sold is the Y-axis column for the existing report.

![Add (Y) Submenu](image)

Tap once to select an additional column, or tap again to deselect the column. Once you select or deselect a column, the Rollup tab displays the modified rollup table, reflecting all the changes.

### Viewing Data in a Pivot Table

Tap **Pivot (Cross Tab)** or touch the right arrow for the Pivot (Cross Tab) menu option to display a menu that specifies default values for the aggregation (calculation) that will be used to generate the pivot table, the column that will be displayed across the pivot table, and the Group By column that will be used to generate the table.
The following image shows a sample Pivot (Cross Tab) menu. In this example, the default aggregation is Sum for a numeric column, the default across column is Revenue, and the default Group By column is Region. A pivot table requires at least one across column and one Group By column. The first value for the column in the report is displayed by default.

Tap *Done* once to see the result of the default values. The pivot table is automatically generated in tab view, and a new Pivot tab is appended after the Report tab and any other existing tabs. The pivot table is generated in full-screen web app view by default, if you are already in that view.

On the new Pivot tab, you can change the default values to customize the pivot table for your reporting needs, making it more complex as required for analysis.
Using the Pivot Tab

The following image shows a sample Pivot tab.
Beneath the pivot table is the active pivot tool bar, which contains the icons described in the following table.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Displays the active pivot menu. For details, see <em>Using the Pivot Menu</em> on page 179.</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Freezes the pivot table. You can link or unlink a pivot table to the filters that you have applied in your report using the Freeze Pivot icon. The icon indicates whether the report is linked to the filter (Freeze Pivot) or not (Unfreeze Pivot).</td>
</tr>
<tr>
<td><img src="image" alt="Icon" /></td>
<td>Changes the aggregation method.</td>
</tr>
</tbody>
</table>

**Using the Pivot Menu**

The pivot menu and its submenus allow you to select multiple columns from those available in the report, including hidden and NOPRINT columns.

The following image shows the pivot menu.

![Pivot Menu Image]

You can:

- Tap *New* to create a copy of the same pivot table on a new Pivot tab.
- Tap *Group By (X)* to change the column selected for the X-axis (the Group By field) or add any column available in the report, including hidden and NOPRINT columns. On the Group By (X) submenu, the Group By and Across columns used in the existing pivot table are displayed at the top of the column names and are selected (checked) by default. You can switch Group By and Across columns using the arrow icons in the pivot table at run time.
The following image shows a sample Group By (X) submenu. The Product Type column is used for the Across column and the Region column is used for the Group By column in the existing pivot table.

Tap once to select an additional column, or tap again to deselect the column. Once you select or deselect a column, the Pivot tab displays the modified pivot table, reflecting all the changes.

- Tap Add (Y) to change the column selected for the measure field to any column available in the report, including hidden and NOPRINT columns. On the Add (Y) submenu, the measure column used in the existing report is selected by default.
The following image shows a sample Add (Y) submenu. The column Cost of Goods Sold is the measure field for the existing report.

<table>
<thead>
<tr>
<th>Region</th>
<th>Add (Y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Product Type</td>
<td></td>
</tr>
<tr>
<td>Product Name</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>✓</td>
</tr>
</tbody>
</table>

Tap once to select a column, or tap again to deselect the column. Once you select or deselect a column, the Pivot tab displays the modified pivot table, reflecting all the changes.

**Using Data Visualization**

Tap **Visualize** to add or remove visualization bars to the selected column. The Visualize option is available for numeric data columns.

**Hiding or Restoring a Column**

Tap **Hide Column** to suppress the display of the selected column in the report.

Tap **Show All** to restore all the hidden columns to the report.

Tap **Show Columns** to list the names of the columns that are hidden in the report, allowing you to individually restore a column.

Tap the name of a specific column in the hidden columns list to restore that column to the report.

The Show All and Show Columns options are available only when there are hidden columns in the report.
Freezing or Unfreezing a Column

Tap Freeze Column to freeze the selected column and all the columns to the left of it. You cannot scroll left or right within the frozen part of the report, but you can scroll up and down within the frozen part. You can scroll in any direction in the unfrozen part of the report.

Tap Unfreeze All to unfreeze all the frozen columns in the report.

In full-screen Web app view, the column titles and report headings will stay fixed as you scroll through the report when the Freeze Column option is turned on.

Controlling the Number of Records Per Page

Tap Show Records or touch the right arrow for the Show Records menu option to list the groups of records available for display per page in the report. On the Show Records menu, you can:

- Tap a group of records (for example, 20 Records) to display, per page, only the number of records in that group.
- Tap Default to display the number of records (lines) per page that is specified in the WebFOCUS report procedure.
- Tap **Show All** to display all the records in a single page.

### Restoring a Report to Its Original State

Tap **Restore Original** to restore the active report to its default state specified in the WebFOCUS report procedure.

### Unsupported Menu Options

The following menu options are not supported by Active Technologies for mobile web apps.

- Comments
- Send as E-mail
- Save Changes
- Grid Tool
- Chart/Rollup Tool
- Pivot Tool
Running an Active Technologies Dashboard on a Mobile Device

The following image shows a sample active dashboard that is running on an iPad.

The dashboard bar at the top of an active dashboard contains the page layout tabs and global filter drop-down list. On mobile devices, the bar is floating instead of fixed, making the available functions always accessible, no matter where you move within the dashboard.

You can use standard gestures on an active dashboard to scroll left and right or up and down, or zoom in and zoom out.

Note: Active cell menus are not supported.
You can tap the Full Screen View icon on the right edge of the pagination bar for an individual grid or on the right edge of a chart tool bar or pivot tool bar to view the grid, chart, rollup table, or pivot table on the dashboard in full-screen mode.

**Procedure: How to Apply a Filter to a Dashboard**

1. Tap the Global Filter icon to apply a filter to the dashboard. The Global Filter dialog box opens under the dashboard bar.
2. Tap the Add Condition button to add the new filter.
3. Select the filter condition and value, and tap the Filter button.
4. Tap the Global Filter icon again to hide the Global Filter dialog box.
This topic describes how to use Active Technologies reports for Adobe Flash Player for enhanced report presentation, more in-depth data interaction, and faster analysis.

For details on the installation requirements for Active Technologies reports for Adobe Flash Player and for PDF, see Product Requirements for Using Active Technologies on page 27.

The reports and dashboards described in this topic are enabled to use the full capabilities of Active Technologies. They are called Active Technologies reports or active reports, and Active Technologies dashboards or active dashboards.

**In this chapter:**

- Active Technologies Report Integration With Adobe Flash Player
- Using the Pivot Tool With Active Technologies Reports for Adobe Flash Player
- Using the Chart/Rollup Tool With Active Technologies Reports for Adobe Flash Player
- Formatting Legend Options for an Active Technologies Chart for Adobe Flash Player
- Using an Alternate Adobe Flex Compiler With the WebFOCUS Reporting Server
- Setting the Maximum Java Heap Size When Using an Alternate Adobe Flex Compiler
- Customizing Containers and the Dashboard Bar
- Using Active Technologies for PDF

**Active Technologies Report Integration With Adobe Flash Player**

An active report for Adobe Flash Player includes most of the capabilities available in the HTML version of active reports in a visually enhanced, user-friendly report format. An active report delivered as a self-contained Adobe Flash file (an SWF file that is Adobe Flash Player compatible) provides faster analysis of large data sets and interaction with the active report. Internet Explorer, Mozilla Firefox, and Opera internet browsers recognize an active report for Adobe Flash Player as a Shockwave® Flash Object.

The following HTML active report functionality is not available when you use Adobe Flash Player: printing, the value selection dialog box when filtering multiple values, the Grid Tool, tab window navigation, comments, saving, exporting, and sending active reports.
The active report for Adobe Flash Player output format is available in Report Painter. ON TABLE HOLD/PCHOLD FORMAT FLEX syntax is added to the procedure for the active report. The output is compiled into an Adobe Flash file (an SWF file that is Adobe Flash Player compatible) with the data embedded at the time that the procedure is run. You can open the file with the Flash Player installed on your machine, and have all the active report functionality without the need of connecting to the server.

The following image is an example of the active report for Adobe Flash Player output and the active report menu options available.
Use the column menus to create charts, apply filters, and so on. For example, you can generate a chart to view the interactivity embedded in the report, show or hide the chart legend, and use the chart icons to change the chart type, as shown in the sample image.

![Sample Image](image_url)

**Procedure:** How to Create an Active Technologies Report for Adobe Flash Player Using Report Painter

2. From the Report menu, select Output.
   The Report Options dialog box opens.
3. From the Output Format drop-down list, select active report for Adobe Flash Player (FLEX).
4. Click Apply.
   The Features and Format tabs of the Report Options dialog box are identical to the active report options.
5. Click OK to close the Report Options dialog box.

   **Tip:** You can also select the FLEX output format from the Output Format toolbar in Report Painter.

6. Click Run to view the report output.
ON TABLE HOLD/PCHOLD FORMAT FLEX syntax is added to the procedure and the output is compiled into an Adobe Flash file (an SWF file that is Adobe Flash Player compatible). You can retrieve the Shockwave Flash object from your Temporary Internet Files folder.

**Procedure: How to Retrieve Adobe Flash Files Using Internet Explorer**

When you use the active report for Adobe Flash Player output format, the output is compiled into an Adobe Flash file (an SWF file that is Adobe Flash Player compatible) with the data embedded at the time that the procedure is run. To retrieve the Adobe Flash file (SWF), follow these instructions.

1. From your internet browser, select *Internet Options* from the Tools menu.
2. In the General Tab, click the *Settings* button in the Browsing History section.
3. Click *View Files* to open your Temporary Internet Files folder.
4. Locate the Flash file (SWF), right-click, and choose *Copy*.
   
   The default file name may appear similar to WFServlet?PG_REQTYPE=REDIRECT.... If you use any other browser, the Save/Save As menu option is available to save the Flash file with a desired name. For more information, see *How to Retrieve Adobe Flash Files Using Other Internet Browsers* on page 191.

   **Tip:** Click *Details* from the View menu and Arrange Icons By - *Type* to locate the Flash files (Shockwave Flash Object). If you have trouble locating the Flash files, you may need to clear the browser cache if the file does not appear.

5. Paste the Flash file into any other directory.

   **Tip:** Be sure to keep the page and Internet Explorer open to avoid clearing the cache file.

6. Open the Adobe Flash file (SWF) with Internet Explorer.
   
   If you double-click to open the SWF file and receive a message that the file type is not associated with any programs on your computer, choose the *Select the program from a list* option and select *Internet Explorer* as the program.

The Adobe Flash file opens in Internet Explorer, displaying the embedded data from the active report and all its functionality.
Procedure: How to Retrieve Adobe Flash Files Using Other Internet Browsers

To retrieve the Adobe Flash file (an SWF file that is Adobe Flash Player compatible) using Mozilla Firefox, Apple Safari, or the Opera internet browser, follow these instructions.

1. From the active report for Adobe Flash Player output window, click Save Page As from the File menu in the internet browser.

   The Save As dialog box opens.

2. Select the Save in location, enter a File name, and click Save.

3. To open the saved Adobe Flash file in Windows Explorer, locate the Flash file (SWF), and open it with the associated internet browser.

   If you double-click to open the SWF file and receive a message that the file type is not associated with any programs on your computer, choose the Select the program from a list option and select the appropriate internet browser as the program.

   The Adobe Flash file opens in the selected browser, displaying the embedded data from the active report and all its functionality.

Procedure: How to Filter or Highlight Data in an Active Technologies Report for Adobe Flash Player

An active report for Adobe Flash Player includes most of the capabilities available in the HTML active report output format. The Filter and Highlight menus appear individually when you use the active report for Adobe Flash Player output format.

1. Click the arrow in the heading of the column that you want to filter or highlight. Click Filter or Highlight, and then the operation.

   The Filter Selection or Highlight Selection dialog box opens. You can change the operation after you select it.

2. Enter a value or values, depending on the operation that you select.

   Values are entered either by typing a value in a text box or selecting a value from a drop-down list.

   **Tip:** Hold down the Ctrl or Shift key when selecting multiple values in the Filter or Highlight dialog box.

3. Click the Add Condition drop-down list if you want to enter additional filters or highlights.
If you are adding other filters, you can apply either AND or OR logic. The AND logic considers all filters, and all data must pass all filters, in order to be included in the report output. The OR logic considers filters independently and includes data that meets any of the applied filters in the report output.

4. Click *Filter* or *Highlight*.

Once you apply a filter or highlight, and minimize the selection dialog box, the selection dialog box appears as a button (Filter Selection or Highlight Selection) in the bottom of the window. You can click the button to access the dialog box. If you close the dialog box, all filters and highlights are cleared from the report output.

**Using the Pivot Tool With Active Technologies Reports for Adobe Flash Player**

Pivot Tables reorganize and summarize selected columns and rows of data in order for you to obtain a desired report.

By default, a Pivot Table groups the selected column as the vertical sort field and the selected row as the horizontal sort field. The Pivot Tool enables you to select multiple group fields in the Pivot Table generated.

The Pivot Tool contains a list of columns available in the active report and Group By, Across, and Measure sort fields. Click and drag the columns into the desired sort field.
Procedure: How to Use the Pivot Tool With Active Technologies Reports for Adobe Flash Player

1. Create an active report with an output format of either active report for Adobe Flash Player (FLEX) or active report for PDF (APDF). In the following image, active report for Flash is selected from the output format drop-down list on the Report Painter toolbar.

2. Run the active report.
3. In any column heading, click an arrow to display a drop-down menu. From the menu, click *Pivot Tool*, as shown in the following image.
The Pivot Tool opens, as shown in the following image.

4. Left-click and drag the desired columns into the Group By, Across, and Measure sort fields.

You must include a column in the Group By and Measure sort fields (a Measure typically defines how much or how many). The Across sort field is optional.

In the following example, Product and Category are the Group By sort fields, Region is the Across sort field, and Dollar Sales is the Measure field.
5. You can edit the sort fields by clicking the X icon to delete columns, drag multiple columns into the Group By or Across sort fields, reorder the columns in the sort fields, and change the aggregation type of the Measure by clicking the Calculation $\sum$ icon.

You cannot use multiple Measures.

6. The Pivot Table is generated in a new window based on the sort fields selected, as shown in the following image.

![Pivot Table Example](image)

7. Click the close button, X, in the upper-right corner of the Pivot Tool to exit the tool.
8. You can click the **Menu** icon on the Pivot Table toolbar, and click **Pivot Tool**, to open the Pivot Tool again.

On the Pivot Table toolbar, you can optionally lock (freeze) the table by clicking the **Lock** icon, or change the aggregation type by clicking the **Calculation** icon.

**Reference:** **Pivot Tool Usage Notes**

The following apply when you use the Pivot Tool in an active report for Adobe Flash Player format:

- The Group By and Measure sort fields are required.
- You cannot use multiple Measures.
- The same column cannot appear in both the Group By and Across sort fields.
- You can drag columns between the Group By, Across, and Measure sort fields, but you cannot drag the columns back into the Columns section.
- If a column already exists in the Measure sort field, an additional column that is dropped into the Measure sort field replaces the existing column.
- The Measure sort field displays Sum for numeric fields and Count for non-numeric fields by default.
Using the Chart/Rollup Tool With Active Technologies Reports for Adobe Flash Player

The Chart/Rollup Tool enables you to organize and summarize selected columns of data in order for you to obtain a desired report.

The Chart/Rollup Tool contains a list of columns available in an active report, and Group By and Measure sort fields. You can click and drag the desired columns into the sort fields. Once you define the report, you can display the data as a chart or Rollup Table.

**Important**: In order for you to generate all the charts described in this topic, your environment must have access to (or a connection to) a WebFOCUS Client hosted on a web server. When you are connected to a WebFOCUS Client, you are in connected mode. When you are not connected to a WebFOCUS Client (that is, when you are in disconnected mode), you can also generate certain charts. The supported charts in disconnected mode are the default bar, pie, line, and scatter charts.

Selecting and Displaying Data Using the Chart/Rollup Tool

This topic provides step-by-step instructions for selecting and organizing the data that you want to include in a report. It also describes how to present the selected data in chart format, or in tabular format as a Rollup Table.

**Procedure**: How to Select and Display Data Using the Chart/Rollup Tool

1. Create an active report with an output format of either active report for Adobe Flash Player (FLEX) or active report for PDF (APDF).
2. Run the active report.
3. In any column heading, click the arrow to display a drop-down menu. From the menu, click *Chart/Rollup Tool*, as shown in the following image.
The Chart/Rollup Tool opens, with the Series tab displayed, as shown in the following image.

![Chart/Rollup Tool](image)

The Series tab includes the Columns, Group By, and Measure lists. The Columns list includes all available columns in the active report. You can drag and drop columns from the Columns list into the Group By or Measure sort field.

The Charts tab allows you to select the desired chart type.

The Data tab displays the result of your report design as a Rollup Table.

4. Left-click and drag the desired columns from the Columns list into the Group By and Measure sort fields.

5. You can edit the sort fields by clicking the X icon to delete columns, drag multiple columns into the Group By and Measure sort fields, reorder the columns in the sort fields, and change the aggregation type of the Measure by clicking the Calculation icon.
The following image shows a report that has been designed on the Series tab.

![Image of Chart/Rollup Tool]

WebFOCUS automatically generates a new window that contains a pie chart when there is more than one field in the Group By and Measure sort fields.

6. To change the chart type, click the Charts tab and then click the chart type of your choosing (Bar, Pie, Line, Scatter, or Other), as shown in the following image.

![Image of Chart/Rollup Tool with chart types]

Only the four default charts (pie, bar, line, and scatter) are available on the Charts tab if you are running an active report or an active dashboard for PDF.

When you point to a chart label, the complete descriptive name of the chart is provided. The chart type in the output window dynamically changes to the chart type selected. The chart image in the tool window is highlighted to indicate the chart type selected and displayed in the output window.
The following image shows an output window with the selected data presented as a pie chart.

7. Click the close button, X, in the upper-right corner of the Chart/Rollup Tool to exit the tool.

8. From the output window, you can change the chart format to one of the available types.

- The Column icon changes the type to the default column chart.

- The Pie icon changes the type to the default pie chart.

- The Line icon changes the type to the default line chart.

- The Scatter icon changes the type to the default scatter chart.

You can click the Rollup icon to display the data in tabular (grid) format.

You can click the Advanced Chart icon to return to the Series tab in the Chart/Rollup Tool.
You can click the Lock/Unlock icon to lock (freeze) the report.

You can click the Original Chart icon to restore the current chart type to the initial chart type that was displayed.

You can click the Aggregation icon to change the aggregation type.

You can click the Menu icon, and click Chart/Rollup Tool, to open the Chart/Rollup Tool again.

9. To display the result of your chart design as a Rollup Table, open the Chart/Rollup Tool and click the Data tab.

The selected data is displayed in tabular format. Click the arrow on a column heading to display a menu of your data sort options, as shown in the following image.

![Chart/Rollup Tool](chart-rollup-tool.png)

From the Data tab, you can return to the Series or Charts tab.
Reference: Chart/Rollup Tool Usage Notes

The following apply when you use the Chart/Rollup Tool in an active report for Adobe Flash Player:

- The Group By and Measure sort fields are required.
- You can use multiple Group By and Measure sort fields. Group By is the column used for the X-axis, and Measure is the column used for the Y-axis.
- You can use only one Measure sort field (as the Y-axis) when using a pie chart.
- The same column can appear in both the Group By and Measure sort fields.
- You can drag columns between the Group By and Measure sort fields, but you cannot drag them back to the Columns section.
- The Measure sort field displays Sum for numeric fields and Count for non-numeric fields by default.
- Headings for the chart are generated using the field name, or column title name. The report HEADING is inherited only if REPORT-VIEW=CHART is set in the WebFOCUS procedure.
- When you use the Chart/Rollup Tool with hidden columns (HIDE=ON StyleSheet setting), the hidden columns will not be displayed in the Rollup Table. To display the hidden columns in the Rollup Table, select Show Columns from the active report menu, and select the column name that you want to display.

Working With Charts

A chart often conveys meaning more clearly and effectively than data displayed in tabular form. A chart enables you to visually communicate quantitative information. On a chart, you can give data a shape and form, and reveal patterns and relationships among many data values.

It is important that you select a chart type that is appropriate for your data. The Chart/Rollup Tool provides a complete chart type library, which includes advanced chart types, as well as basic types. You can select from a wide variety of chart types to best represent the data that you want to display.
The Charts and Pie tabs on the Chart/Rollup Tool are shown in the following image.

![Chart/Rollup Tool](image)

**Chart Types**

The following are the chart types that you can select.

- **Bar charts.** Bar charts plot numerical data by displaying rectangular blocks against a scale (numbers or variable measures that appear along the axis). The length of a bar corresponds to a value or amount. You can clearly compare data series (fields) by the relative heights of the bars. Use a bar chart to display the distribution of numerical data. You can create horizontal as well as vertical bar charts. For a complete list of available bar chart types, see [Bar Chart Types](#) on page 210.

The following is an example of a basic bar chart.

- **Pie charts.** Pie charts emphasize where your data fits, in relation to a larger whole. Pie charts work best when the data consists of several large segments. Too many variables divide the pie into small segments that are difficult to see. Use color on individual segments to create visual contrast. For a complete list of available pie chart types, see *Pie Chart Types* on page 211.
The following is an example of a basic pie chart.

- **Line charts.** Line charts are useful for emphasizing the movement or trend of numerical data over time. They allow you to trace the evolution of a data point by working backward or interpolating. Highs and lows, rapid or slow movement, or a tendency towards stability are all types of trends well suited to a line chart.

  You can also plot line charts with two or more scales to present a comparison of the same value, or set of values, in different time periods. For a complete list of available line chart types, see *Line Chart Types* on page 212.
The following is an example of a basic line chart.

- **Scatter.** Scatter charts share many of the characteristics of basic line charts. You can plot data using variable scales on both axes. When you use a scatter chart, the data is plotted with a basic line pattern so that you can visualize the density of individual data values around particular points, or discern patterns in the data. A numeric X-axis, or sort field, always yields a scatter chart by default.

Scatter charts and line charts are distinguishable from one another only by virtue of their X-axis format. Line charts can appear without connecting lines, making them look like scatter charts, and scatter charts can appear with connecting lines, making them look like line charts. For a complete list of scatter chart types, see *Scatter Chart Types* on page 212.
The following is an example of a basic scatter chart.

![Basic Scatter Chart Example](image)

- **Other charts.** The Other chart options include:

  - **Funnel.** A funnel chart depicts data that is equal to 100 percent when the total is calculated. Each data slice in a funnel chart is displayed as a portion of 100 percent. A funnel chart is a single-series chart.

    On a stream line funnel chart, each slice in the funnel depicts a process flow that has filtered the data. Data points are arranged in descending order, based on their cumulative percentage value. Like a funnel chart, a stream line funnel chart is a single-series chart.

  - **Pyramid.** The data sets for a pyramid chart and funnel chart are basically the same. However, a pyramid chart depicts data in a different way than a funnel chart. The data slices on a pyramid chart represent increasing proportions of a whole. WebFOCUS determines the size of a slice on a pyramid chart by the series value when calculated as a percentage of the total of all values. There is no stream line option for a pyramid chart.
Radar. A radar chart compares two or more data sets. You can use axes or polygons to represent values in a star or spider configuration. Radar charts are essentially analogous to line charts, except that the scale wraps around. Radar charts work well with data that is cyclical, such as the months of a year.

Supported Chart Types

This topic contains reference tables which list the chart types that are supported by Active Technologies for Adobe Flash Player and for PDF.

As noted in the tables, the default chart types (bar, pie, line, and scatter) are available for both active report/active dashboard for Adobe Flash Player and active report/active dashboard for PDF. You can use the default chart types when you are not connected to a WebFOCUS Client (that is, when you are in disconnected mode).

The non-default chart types are available only for active report/active dashboard for Adobe Flash Player. You must have access to a WebFOCUS Client in order to use the non-default chart types.

Reference: Bar Chart Types

<table>
<thead>
<tr>
<th>Bar Chart Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Bar</td>
<td>Default Active Technologies bar chart for Adobe Flash Player. Available for both active report/active dashboard for Adobe Flash Player and active report/active dashboard for PDF. Can be used in disconnected mode.</td>
</tr>
</tbody>
</table>

The following bar chart types and column chart types are available for active report/active dashboard for Adobe Flash Player. To use these charts, you must have access to a WebFOCUS Client.

<table>
<thead>
<tr>
<th>Bar Chart Type</th>
<th>Column Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bar 2D</td>
<td>Column 2D</td>
</tr>
<tr>
<td>Multi-Series Bar 2D</td>
<td>Column 3D</td>
</tr>
<tr>
<td>Multi-Series Bar 3D</td>
<td>Multi-Series Column 2D</td>
</tr>
</tbody>
</table>
### Chart Types

<table>
<thead>
<tr>
<th>Bar Chart Type</th>
<th>Column Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stacked Bar 2D</td>
<td>Multi-Series Column 3D</td>
</tr>
<tr>
<td>Stacked Bar 3D</td>
<td>Stacked Column 2D</td>
</tr>
<tr>
<td></td>
<td>Stacked Column 3D</td>
</tr>
<tr>
<td></td>
<td>Scroll Multi-Series Column 2D</td>
</tr>
<tr>
<td></td>
<td>Scroll Stacked Column 2D</td>
</tr>
<tr>
<td></td>
<td>Logarithmic Multi-Series Column 2D</td>
</tr>
<tr>
<td></td>
<td>Inverse Y-Axis Multi-Series Column 2D</td>
</tr>
</tbody>
</table>

### Reference: Pie Chart Types

<table>
<thead>
<tr>
<th>Pie Chart Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Pie</td>
<td>Default Active Technologies pie chart for Adobe Flash Player. Available for both active report/active dashboard for Adobe Flash Player and active report/active dashboard for PDF. Can be used in disconnected mode.</td>
</tr>
</tbody>
</table>

The following pie chart types and doughnut chart types are available for active report/active dashboard for Adobe Flash Player. To use these charts, you must have access to a WebFOCUS Client.

<table>
<thead>
<tr>
<th>Pie Chart Type</th>
<th>Doughnut Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pie 2D</td>
<td>Doughnut 2D</td>
</tr>
<tr>
<td>Pie 3D</td>
<td>Doughnut 3D</td>
</tr>
</tbody>
</table>
Reference: Line Chart Types

<table>
<thead>
<tr>
<th>Line Chart Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Line</td>
<td>Default Active Technologies line chart for Adobe Flash Player. Available for both active report/active dashboard for Adobe Flash Player and active report/active dashboard for PDF. Can be used in disconnected mode.</td>
</tr>
</tbody>
</table>

The following line chart types and area chart types are available for active report/active dashboard for Adobe Flash Player. To use these charts, you must have access to a WebFOCUS Client.

<table>
<thead>
<tr>
<th>Line Chart Type</th>
<th>Area Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 2D</td>
<td>Area 2D</td>
</tr>
<tr>
<td>Multi-Series Line 2D</td>
<td>Multi-Series Area 2D</td>
</tr>
<tr>
<td>Scroll Multi-Series Line 2D</td>
<td>Stacked Area 2D</td>
</tr>
<tr>
<td>Logarithmic Multi-Series Line</td>
<td>Scroll Multi-Series Area 2D</td>
</tr>
<tr>
<td>Inverse Y-Axis Multi-Series Line 2D</td>
<td>Inverse Y-Axis Multi-Series Area</td>
</tr>
<tr>
<td>Spline</td>
<td>Spline Area</td>
</tr>
<tr>
<td>Multi-Series Spline</td>
<td>Multi-Series Spline Area</td>
</tr>
</tbody>
</table>

Reference: Scatter Chart Types

<table>
<thead>
<tr>
<th>Scatter Chart Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Scatter</td>
<td>Default Active Technologies scatter chart for Adobe Flash Player. Available for both active report/active dashboard for Adobe Flash Player and active report/active dashboard for PDF. Can be used in disconnected mode.</td>
</tr>
</tbody>
</table>
The following scatter chart types and bubble chart types are available for active report/active dashboard for Adobe Flash Player. To use these charts, you must have access to a WebFOCUS Client.

<table>
<thead>
<tr>
<th>Scatter Chart Type</th>
<th>Bubble Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scatter (XY Plot)</td>
<td>Bubble</td>
</tr>
</tbody>
</table>

Reference: Other Chart Types

The following charts are available for active report/active dashboard for Adobe Flash Player. To use these charts, you must have access to a WebFOCUS Client.

<table>
<thead>
<tr>
<th>Funnel and Pyramid Chart Type</th>
<th>Radar Chart Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funnel</td>
<td>Radar</td>
</tr>
<tr>
<td>Pyramid</td>
<td></td>
</tr>
</tbody>
</table>

Creating a Bubble Chart

When you create a bubble chart, you must include a pair of columns for each series on the chart.

- The value of the first column in a pair of columns determines the position of each bubble in the series.
- The value of the second column in the pair of columns determines the size of each bubble in the series.

For example, consider the following sample code.

```sql
TABLE FILE CENTURYSALES
SUM LINEPRICE AS 'Revenue' PROFIT
.
.
.
```

As written, the code creates a single-series bubble chart. The pair of columns for the series includes LINEPRICE and PROFIT. WebFOCUS uses the value of LINEPRICE to position each bubble in the series, and the value of PROFIT to size each bubble in the series.
To add another series to the sample bubble chart, you must include a pair of columns for that series also, as shown in the following code.

```
TABLE FILE CENTURY SALES
SUM LINEPRICE AS 'Revenue' PROFIT COSTOFGOODSSOLD PROFIT
```

The pair of columns for the second series includes COSTOFGOODSSOLD and PROFIT. WebFOCUS uses the value of COSTOFGOODSSOLD to position each bubble in the second series, and the value of PROFIT to size each bubble in the second series.

When the sample bubble chart is run, the bubbles in each series are positioned and sized correctly, as shown in the following image. The first bubble series (Revenue) is displayed in blue, and the second bubble series (Cost of Goods Sold) is displayed in red.

For every new series that you add to the chart, you must include a pair of columns.

If you do not specify a pair of columns for a series, WebFOCUS sets the size of each bubble in the series to 1.
Formatting Legend Options for an Active Technologies Chart for Adobe Flash Player

When displaying an active report for Adobe Flash Player as a chart in Report Painter, you can modify the legend options by using the Format tab of the Report Options dialog box. When the chart is run, you can click a Legend icon to show or hide the chart legend.

Legend options are available only when the initial presentation of the active report is set to Bar Chart, Line Chart, Pie Chart, or Scatter Chart.

The legend options are available in active reports for Adobe Flash Player and for PDF.

**Procedure: How to Format Legend Options for an Active Technologies Chart for Adobe Flash Player**

2. From the Report menu, click Output.
   The Report Options dialog box opens.
3. From the Output Format drop-down list, click active report for Adobe Flash Player (FLEX) or active report for PDF (APDF).
   
   **Tip:** You can also select these output formats from the output format drop-down list on the Report Painter toolbar.
4. On the Report Options dialog box, click the Format tab.
   The Format tab provides options for formatting an active report.
5. To enable the Legend Options on the Format tab, use the Initial Presentation drop-down list to select Bar Chart, Line Chart, Pie Chart, or Scatter Chart.
   The Legend Options are enabled. The Legend Options are not available for the Default, Grid, Pivot, or Other Chart initial presentations.
6. Select the Legend Options.
   The chart legend can be fixed or collapsible in the output.

   - **Fixed.** When the chart legend is fixed, the legend appears underneath the chart, and you cannot hide the legend or position a Legend icon. This is the default selection when the legend options are enabled.

   - **Collapsible.** When the chart legend is collapsible, you can show or hide the chart legend in the output. You can also choose where the Legend icon appears on the chart.
From the Minimized Position drop-down list, click *Bottom Left, Bottom Center, or Bottom Right*. Bottom Left is the default minimized position when you select Collapsible as the legend option.

7. Click OK to close the Report Options dialog box.

8. Click Run to view the output.

The following image shows a pie chart with a fixed legend. The format of the chart is FLEX.
The following image shows a pie chart with a collapsible legend. The format of the chart is FLEX. The Legend icon is positioned at the lower-left by default. Click the arrow to show or hide the chart legend.
The following image shows a pie chart with a collapsible legend. The format of the chart is FLEX. The Legend icon is positioned at the bottom center. Click the arrow to show or hide the chart legend.
The following image shows a pie chart with a collapsible legend. The format of the chart is FLEX. The Legend icon is positioned at the lower-right. Click the arrow to show or hide the chart legend.

Using an Alternate Adobe Flex Compiler With the WebFOCUS Reporting Server

An active report for Adobe Flash Player is generated using a Java-based compiler that comes with the Adobe Open Source Flex SDK. The SDK is installed on the WebFOCUS Reporting Server and used to create an active report for Adobe Flash Player. As of Release 7.7 Version 04 of the WebFOCUS Reporting Server, the compiler has been upgraded to Flex 4.5.1.

Active Technologies provide backward compatibility, enabling you to use earlier SDKs to compile your existing interactive PDF and Flex documents with active reports for Adobe Flash Player. You can run an earlier version of the compiler, such as the compiler that comes with the Adobe Open Source Flex SDK 3.5, with WebFOCUS Reporting Server Release 7.7 Version 04 and higher.

If you are using the interactive PDF feature, make sure to copy the necessary WebFOCUS Enable for Adobe Flex SWC files to the \frameworks\libs directory of your Flex SDK installation. For more information, see the WebFOCUS Enable for Adobe Flex 4.x User's Guide.
**Procedure: How to Use an Alternate Adobe Flex Compiler With the WebFOCUS Reporting Server**

1. Download the Adobe Flex SDK. Previous releases produced by Adobe, including 3.5, are available at the Adobe SourceForge site.

2. To install a copy of the SDK on your system, extract the ZIP file to your drive.

3. In the WebFOCUS procedure that contains SET HTMLFORMTYPE=FLEX to generate the interactive PDF or Flex document with an active report for Adobe Flash Player, add the following command

   ```
   SET FLEXSDK = path_to_sdk
   ```

   where:

   `path_to_sdk`

   Is the full path to the SDK whose compiler you want to use to generate the interactive PDF or Flex document with the active report for Adobe Flash Player.

**Setting the Maximum Java Heap Size When Using an Alternate Adobe Flex Compiler**

If you are using the SET FLEXSDK command, as described in *Using an Alternate Adobe Flex Compiler With the WebFOCUS Reporting Server* on page 219, you can also use the SET FLEXMEM command to specify the maximum Java heap size allocated to the Flex compiler to compile Flash or Flex files. If there is not enough available memory allocated to the Flex compiler at compilation time, errors may occur.

By default, the maximum Java heap size is typically set to 384m (megabytes) in a script file named mxmlc, in a variable named $VMARGS. The mxmlc file resides in the Flex SDK \bin directory installed on your system.

**Syntax: How to Set the Maximum Java Heap Size When Using an Alternate Adobe Flex Compiler**

In the WebFOCUS procedure that contains the SET FLEXSDK command, add the following

```
SET FLEXMEM = maximum_java_heap_size
``` 

where:

`maximum_java_heap_size`

Is the maximum Java heap size allocated to the Flex compiler to compile Flash or Flex files. For example, the command

```
SET FLEXMEM = 640m
``` 

increases the maximum Java heap size from the default value (384 megabytes) to 640 megabytes.
Customizing Containers and the Dashboard Bar

Active Technologies for Adobe Flash Player allow you to customize the way that the containers for the various parts of an application are displayed on an active report or active dashboard. For example, you can define the visual characteristics of the container (the component) that holds the contents of an application report or the contents of an application window. You can also customize how the dashboard bar appears on an active dashboard.

All the styling options for the containers and dashboard bar are stored in the irpfsty.js file, found in the \home\etc directory of the WebFOCUS Reporting Server. You can copy this file to your application folder and edit the contents to customize the containers or dashboard bar for your application.

**Upgrade requirement:** If an irpfsty.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must replace it with the latest version of irpfsty.js that is supplied with the product. This requirement applies to other JavaScript files as well, including irpstd.js and irpfstd.js. Use the files from the WebFOCUS Reporting Server (\home\etc directory), and apply your customization changes to them.

**Procedure:** How to Customize Containers and the Dashboard Bar

1. Copy the irpfsty.js file from the WebFOCUS Reporting Server default location (\home\etc directory), and paste it to your application folder.

   This should be the same directory as the location of the active report or active dashboard. For example, from the Projects on localhost area of the Developer Studio Desktop, paste irpfsty.js in the Other subfolder of the project folder.

   The section of the irpfsty.js file that controls how a report container is styled is as follows.

   ```javascript
   .arReportObject {
     borderColor: #b7babc;
     dropShadowEnabled: true;
     shadowDistance: 10;
     shadowDirection: right;
     dropShadowColor: #666666;
     fontSize: 12;
     borderStyle: solid;
     verticalGap: 0;
     backgroundColor: white;
     horizontalAlign: center;
   }
   ```

2. Adjust the values for the properties as desired. For example, you can:
Accept the default value, true, for the dropShadowEnabled property to display a shadow behind a report container.

- Change the value of the dropShadowEnabled property to false to suppress the shadow behind a report container. The code for suppressing the shadow is:

  ```javascript
  dropShadowEnabled: false;
  ```

In this example, do the following:

- Accept the dropShadowEnabled default value of true.

- Change the dropShadowColor default value (#666666) to a shade of blue, such as #009dff.

  The code looks like this:

  ```javascript
  dropShadowEnabled: true;
  ...
  ...
  ...
  dropShadowColor: #009dff
  ```

3. Save and close the irpfsty.js file.

4. Run the procedure. Your styling choices for report containers are applied.
On the following sample active dashboard, there is a blue shadow behind all report containers.

5. You can also style a window container.

The section of the irpfsty.js file that controls how a window container is styled is as follows.

```
.arWindow{
   dropShadowEnabled: true;
   shadowDistance: 10;
   shadowDirection: right;
   dropShadowColor: #666666;
   fontSize: 12;
}
```

Adjust the values for the properties as desired. For example, you can:

- Accept the default value of true for the dropShadowEnabled property to display a shadow behind a window container.
- Change the value of the dropShadowEnabled property to false to suppress the shadow behind a window container. The code for suppressing the shadow is:

```
dropShadowEnabled: false;
```

In this example, do the following:

- Accept the dropShadowEnabled default value of true.
- Change the dropShadowColor default value (#666666) to a shade of magenta, such as #b60cb0.

  The code looks like this:

  ```javascript
  dropShadowEnabled: true;
  dropShadowColor: #b60cb0;
  ```

6. Save and close the irpfsty.js file.

7. Run the procedure. Your styling choices for window containers are applied.

On the following sample active dashboard, there is a magenta shadow behind the container for the filter selection window.

8. You can also style the dashboard bar on an active dashboard.
The default section of the irpfsty.js file that controls how the dashboard bar is styled is as follows.

```javascript
.arDashboardBar {
  backgroundColor: #ffffff;
  borderColor: #cccccc;
  selectionColor: #7FCEFF;
  color: #003300;
  textRollOverColor: #0b333c;
  textSelectedColor: #0b333c;
  themeColor: #009dff;
  fontSize: 12;
  fontWeight: bold;
  textAlign: left;
  paddingTop: 2;
  paddingBottom: 2;
  paddingLeft: 4;
  paddingRight: 4;
  borderStyle: outset;
  borderThickness: 10;
}
```

By default, an active dashboard displays a shadow underneath the dashboard bar. You can add the following line of code to the .arDashboardBar section of the irpfsty.js file to suppress the shadow:

```javascript
dropShadowEnabled: false;
```

For the purpose of this example, suppress the shadow underneath the dashboard bar by adding the preceding line of code to the irpfsty.js file.

The code looks like this:

```javascript
.arDashboardBar {
  backgroundColor: #ffffff;
  borderColor: #cccccc;
  dropShadowEnabled: false;
  .
  .
  .
}
```

9. Save and close the irpfsty.js file.

10. Run the procedure. Your styling choices have been applied.

   Based on the sample values used in this procedure, there is:

   - A blue shadow behind each report container on the dashboard.
- A magenta shadow around the window containers (such as the container for the Filter Selection window).
- No shadow underneath the dashboard bar.
If you had also chosen to suppress all the shadows behind the report containers and the window containers (dropShadowEnabled: false;), the dashboard would look like the following.

Using Active Technologies for PDF

Using Active Technologies for PDF provides the ability to include interactive Flash-based reports, dashboards, and animations in PDF documents. An active report for PDF is available in Report Painter in the Developer Studio environment and from WebFOCUS InfoAssist in the Managed Reporting environment. You can also create active dashboards for PDF from Document Composer in Developer Studio and from InfoAssist.

SWF files that are Adobe Flash Player compatible combine vector graphics with animation effects that are scalable and provide perfectly smooth transition of lines and images, creating the highest quality, outward-facing PDF documents with engaging functionality, and better visualization of data.
Adobe Reader 9.4.5 or higher is required so that the Flash run-time code included in the Adobe client can render the Flash content. For details on enabling Adobe Reader for browsers such as Google Chrome and Safari on Mac OS, see Viewing an Active Technologies Report for PDF in Adobe Reader on page 233.

The following image shows Document Composer with active PDF selected as the Output format for a Compound document, and the active dashboard for PDF.

![Image of Document Composer with active PDF selected]

**Procedure:** How to Create an Active Technologies Report for PDF

The active report for PDF is available from Report Painter and Document Composer in Developer Studio, and from WebFOCUS InfoAssist in Managed Reporting.

- An active dashboard for PDF is available in Document Composer and can be generated using COMPOUND HOLD/PCHOLD FORMAT APDF syntax. For more information about active dashboards, see Creating Active Technologies Dashboards in Document Composer on page 239.

- An active report for PDF is available in Managed Reporting InfoAssist and can be generated using HOLD/PCHOLD FORMAT APDF syntax. For more information about InfoAssist, see the WebFOCUS InfoAssist User's Manual.
1. **Select active report for PDF (APDF) in Report Painter.**
      
      The Report Options dialog box opens at the Output tab.
   b. From the Select Format drop-down list, choose active report for PDF (APDF) as the output format for the report.
      
      **Tip:** The Features and Format tabs show the options that are available for the active report for PDF.
   c. Click OK to close the Report Options dialog box.
      
      You can also select active report for PDF (APDF) from the Output Format toolbar.

2. **Select active PDF in Document Composer.**
   b. Select the following properties from the Properties window in Document Composer:
      
      - Select active PDF from the Output format properties field.
      - Select *On* from the Coordinate report properties field.
      
      A coordinated compound layout coordinates all reports and graphs from the document with a common sort field. The coordinated report is burst into separate page layouts at run time, where each value for the first sort field displays on a separate page.
   c. Add multiple active reports to create the active dashboard.
   d. Position the reports in the document.
      
      Repeat these steps to embed multiple active reports into the coordinated compound document that will create the active dashboard.

3. **Select active PDF in WebFOCUS InfoAssist.**
   a. Create a new report or a new document with WebFOCUS InfoAssist.
   b. Select active PDF from the Format tab of InfoAssist.

4. Run the report.
   
   The report loads the active report for PDF.
Tip: For information about the available WebFOCUS syntax formatting options for active PDF reports, see *Active Technologies for PDF Formatting Options* on page 230.

**Reference:** *Active Technologies for PDF Formatting Options*

If you are using Active Technologies for PDF, you can use the following WebFOCUS syntax to format the width and height, background color, and scale options for the active PDF report.

- To set the Flash (SWF) application width and height to a fixed size inside a PDF report

  ```
  SET ARWIDTH=width
  SET ARHEIGHT=height
  ```

  where:

  - `width`
    - Is the width of the SWF application in pixels, such as 1024 or 800.
  - `height`
    - Is the height of the SWF application in pixels such as 768 or 600.

- To set the Flash (SWF) application background color

  ```
  SET ARCOLOR=color
  ```

  where:

  - `color`
    - Is a hex value or color name such as #aebae4 or NAVY.

  The default color is white if the value string is empty.

- To scale the Flash (SWF) application inside a PDF report when the report is zoomed in or out, using the plus or minus toolbar icons in Adobe Reader, add the following syntax to your procedure:

  ```
  SET ARSCALE=[ON|OFF]
  ```

  The default value is OFF.
Changing the Font Type for Active Technologies Report Menus for PDF

You can change the font type for active report menus when using active reports and active dashboards for PDF output formats.

By default, the font type information is stored in the irpcfg.js file, located in the WebFOCUS Reporting Server \home\etc directory. The .arMenu section of the irpcfg.js file enables you to modify the font type and size for the active report menu items in the report output.

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpcfgu.js file in your application folder, and add all your custom contents to this JavaScript file. This ensures that there will not be any issues with the different versions of JavaScript used between releases.

Upgrade requirement:

The style section for active reports and dashboards for PDF formats has been moved from the irpfsty.js file to the irpcfg.js file in the \home\etc directory of the WebFOCUS Reporting Server, starting with Release 7.7 Version 04.

The style section for active reports and dashboards for PDF format in the irpcfg.js file shares the same style section as active reports and dashboards for Adobe Flash Player.

If an irpfsty.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpcfgu.js file. The styling section of the JavaScript file for active reports and dashboards for Adobe Flash Player and for PDF has been updated to compile with Adobe Flex SDK 4.5.1. You can verify the contents with the styling section in the irpcfg.js file found in the \home\etc directory of the WebFOCUS Reporting Server.

Here is a summary of the steps that you follow.

1. Search for irp*.js files in your ibi\apps folder.
2. Rename the files. Do not delete them, as you need the customized style section from these files.
3. In your application folder, create a new, empty text file. Name it irpcfgu.js for active reports and dashboards for PDF.

Procedure: How to Change the Font Type for Active Technologies Report Menus for PDF

By copying the styling section from the irpcfg.js JavaScript file, and pasting it into the irpcfgu.js file, you can edit the JavaScript code to modify the font type for the active report menus for PDF formats.

1. In your application folder, create a new, empty text file, and name it irpcfgu.js.
2. Copy the styling section of the irpcfg.js file from the WebFOCUS Reporting Server location (`\home\etc directory), and paste it into the irpcfgu.js file in your application folder.

This should be the same directory in which the active report or active dashboard resides. For example, from the Projects on localhost area in Developer Studio, create the irpcfgu.js file in the Other subfolder of the project folder.

3. Open the JavaScript file and modify the .arMenu section

```javascript
.arMenu {
  backgroundColor: #ffffff;
  borderColor: #cccccc;
  selectionColor: #7FCEFF;
  color: #003300;
  textRollOverColor: #0b333c;
  textSelectedColor: #0b333c;
  themeColor: #009dff;
  fontSize: 12;
  fontWeight: bold;
  textAlign: left;
  fontFamily: Arial
}
```

where:

- `fontSize`
  - Sets the font size of the active report menu.

- `fontWeight`
  - Sets the font type of the active report menu to bold.

- `fontFamily`
  - Sets the font family of the active report menu.
  - Currently, Adobe Flash Player supports the Arial, Times, and Courier font types. For details about supported font types, see the Adobe documentation.

- `fontStyle`
  - Sets the font type of the active report menu to italic.

4. Save and close the JavaScript file.

The next time that you run an active report or active dashboard, the active report menus appear with the font type that you selected in the customized JavaScript file.
The following image shows the active report for Adobe Flash Player output with the Courier font type for the active report menus.

Viewing an Active Technologies Report for PDF in Adobe Reader

This topic describes how to enable Adobe Reader for Google Chrome, Mozilla Firefox, and Safari on Mac OS so that you can view active reports for PDF (APDF output format) in those browsers.
Enabling Adobe Reader for Chrome

By default, the Chrome browser uses a built-in PDF viewer to open a PDF. This viewer is not compatible with the PDF functionality of Active Technologies.

When you generate an active report for PDF, active chart for PDF, or active dashboard for PDF, Active Technologies embeds Flash SWF files. These files are not supported by the Chrome PDF Viewer. As a result, if you are using Chrome as your primary browser, an active report for PDF, active chart for PDF, or active dashboard for PDF will not be displayed correctly unless you disable the default Chrome PDF Viewer and set Chrome to display PDFs using Adobe Reader.

Use the steps in the following procedure to disable the Chrome PDF Viewer and enable Adobe Reader.

**Note:** You may be prompted by a message in the browser to open a PDF using Adobe Reader. You can choose that option rather than use the following procedure to enable Adobe Reader.

**Procedure:** How to Disable the Chrome PDF Viewer and Enable Adobe Reader

1. In the Chrome address bar, type:

   `chrome://plugins`
2. On the Plug-ins page in the Chrome browser, locate the entry for Chrome PDF Viewer and click *Disable*, as shown in the following image.

![Chrome Plug-ins Page](image)

3. Locate the entry for Adobe Reader and click *Enable*.

4. On the Plug-ins page, click the left arrow to go back to the Chrome home page.

5. Open the active report for PDF, active chart for PDF, or active dashboard for PDF in the Chrome browser.

   For example, you can copy the URL of an active report for PDF that you ran in Developer Studio and paste it in the Chrome address bar. The PDF will open in Adobe Reader.

   For details on using Chrome, press the F1 key to access Chrome online Help.
Enabling Adobe Reader for Mozilla Firefox

To view active reports for PDF (APDF output format) using Mozilla Firefox, you must disable the Firefox built-in PDF viewer and enable Adobe Reader.

**Procedure: How to Disable the Firefox Built-In PDF Viewer and Enable Adobe Reader**

1. On the Mozilla Firefox Start Page, click the Firefox button at the top left, and select Options.
2. On the Options dialog box, click the Applications panel.
3. Scroll down the Content Type list on the left, and locate and click Portable Document Format (PDF).
4. On the right, in the Action drop-down list for Portable Document Format (PDF), click the drop-down arrow, and click Use Adobe Reader (default), as shown in the following image.

```
[Image: Options dialog box with Applications panel selected, showing Content Type list with Portable Document Format (PDF) selected and Action dropdown set to Use Adobe Reader (default)]
```

5. Click OK when you are done.

By default, your active reports for PDF will now open in Adobe Reader.

For more information on using Firefox, click the Firefox button and select Help.
Enabling Adobe Reader for Safari on Mac OS

If you are using Safari on Mac OS, you must install Adobe Reader to view active reports for PDF (APDF output format). If you do not install Adobe Reader, Safari displays PDF files using the Mac OS native PDF support. Much of the Adobe PDF functionality is not fully available in the Mac OS native PDF support.

For details on system requirements and configuration of Acrobat to display PDF files in Safari, go to http://helpx.adobe.com/acrobat/kb/troubleshoot-safari-plug-acrobat-x.html.

Active Technologies Reports for PDF Usage Notes

The following apply when you use active reports for PDF.

Accessing the Menu

The menu in an Active Technologies report for PDF always opens on the right side of the screen instead of dynamically switching to the left side when there is not enough width on the right. The positioning of the menu is the result of a known issue in the Adobe Flex SDK. As a work-around, a horizontal scroll bar is added at the bottom of an Active Technologies report in APDF format so that you can access the menu in the rightmost column.

Executing Drill Downs

In order to execute drill downs with the APDF output format even when the report is in disconnected mode, you must specify a fully qualified FOCEXURL in the environment.

By default, FOCEXURL is set to a relative URL, for example,

/ibi_apps/WFServlet

You can modify the FOCEXURL setting in the WFS file of the WebFOCUS Client, or issue the SET command in the procedure for individual reports that need the fully qualified URL, as shown here

SET FOCEXURL = http://host_name:port_number/ibi_apps/WFServlet?

where:

host_name

Is the web server host name that end users enter in the browser to access WebFOCUS.

port_number

Is the HTTP port number of the web server that end users use to access WebFOCUS.

For more information, see the Developing Reporting Applications manual.
Creating SWF Files

When using Flex to create SWF files that play on the PDF page, you must set the scaleMode to StageScaleMode.EXACT_FIT. This enables Adobe Reader to scale the content when you zoom in and out on the page. It also allows you to print the PDF with the SWF scaled properly.

Active Technologies for PDF automatically sets this property. However, when the scaleMode is set to EXACT_FIT, image distortion may occur.
An active report is a self-contained report that is designed for offline analysis, meaning it contains all of the data and JavaScript within the output file. Document Composer can be used to develop active dashboards which combine multiple active reports into a variety of scenarios that are coordinated with a common sort field and controls to filter the data in active reports.

**In this chapter:**

- Active Technologies Dashboard Overview
- Positioning Report Objects in the Active Technologies Dashboard
- Working With Active Technologies Form Controls

---

**Active Technologies Dashboard Overview**

An active report is a self-contained report that is designed for offline analysis, meaning it contains all of the data and JavaScript within the output file. Document Composer can be used to develop active dashboards which combine multiple active reports into a variety of scenarios that are coordinated with a common sort field.

An active report for Adobe® Flash® Player includes most of the capabilities available in the HTML version of an active report in a visually enhanced, user-friendly report format. An active report delivered as a self-contained Adobe Flash Player compatible file (SWF) allows for faster analysis of large data sets and interaction with the active report. Internet Explorer, Mozilla Firefox, and Opera Internet browsers recognize an active report for Adobe Flash Player as a Shockwave Flash Object.

**Tip:** Any discussion of active reports includes active reports for Adobe Flash Player and for PDF, unless otherwise noted.

- Select the active report or active Flash output format from the output format drop-down list in the Properties window of Document Composer.
You may also use Active Technologies for PDF, which provides the ability to include interactive reports, dashboards, and animations compatible with Adobe Flash Player in PDF documents. Select the active PDF output format from the output format drop-down list in the Properties window.

An active dashboard is an extension of an active report. Therefore, all active report features are available for an active dashboard.

An active dashboard is best suited for developing storyboards with multiple charts and tables that give you a complete view of a business issue. You can send active dashboards as stand-alone dashboard pages or incorporate them into corporate dashboards.

A typical active dashboard displays several different scenarios, each on its own page, that are accessible by selecting the appropriate panel at the top of the page. The following image shows an example of an active dashboard with three scenarios, Revenue Report (selected), Regional Report, and Product Report.
The following image shows an active dashboard for Adobe Flash Player. The active dashboard displays several different scenarios, each on its own page, that are accessible by selecting the appropriate panel at the top of the page. The image shows an example of an active dashboard with three scenarios, Revenue Report (selected), Regional Report, and Product Report.

When you create an active dashboard in Document Composer with the active PDF output format (APDF), bookmarks are not supported.

**Positioning Report Objects in the Active Technologies Dashboard**

When all active reports have been imported or referenced in Document Composer, you must position the active report objects into their respective pages (page layouts). Each page corresponds to a different scenario represented by multiple active report objects.
The end result is the visual, analytical active dashboard that universally binds multiple active reports into separate scenarios that can be paged through to view the content. Because all of the reports are a type of active report, each report retains its own menu functionality, pivoting, or charting capabilities. This enables each active report to be modified and saved individually, or as an entire active dashboard, which creates a small, portable file.

**Procedure: How to Position Report Objects in the Active Technologies Dashboard**

Each page layout in the coordinated compound document creates a separate page in the active dashboard. These pages are accessible through the active dashboard panels at run time. You must build each page layout in Document Composer.

1. In Document Composer, name the panels for the active dashboard by changing the name of the TOC description in the Page Layout.
   - Click anywhere in the Page Layout, or select Page layout(n), where n is the number, from the Properties window drop-down list.
   - In the Properties window, double-click the **TOC description** properties field.
   - Enter a name for the active dashboard.
   Each panel name in the active dashboard corresponds to the TOC description properties field.

2. On the Insert menu, select **Add New Page Layout** to add additional page layouts and repeat the steps from *How to Create an Active Technologies Dashboard in Document Composer* on page 247.

3. Optionally, you can insert images and text in the page layout that will appear in the active dashboard.

4. Save and run the active dashboard.
**Example:**  **An Active Technologies Dashboard**

The following image is an example of an active dashboard.

![Active Technologies Dashboard Image]

Every type of active report visualization is demonstrated in the image above. These types include pie, line, and bar charts, a tabular report, and a pivot table. You can quickly switch from one reporting scenario to another by clicking on each of the panels at the top of the page.

Each panel on the active dashboard corresponds to a page layout from the coordinated compound document, and displays as the name in the TOC description properties field.

The active dashboard is universally filtered by the region field, represented by the Region dropdown list, which is also located at the top of the page in the preceding image.

---

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The drop-down list for the primary sort field lists all the values found for the primary sort field among the active reports, and will filter the entire active dashboard.

The tabs and drop-down list in an active dashboard are shown in the following image.

Each type of active report in an active dashboard provides you with powerful reporting menus that you can use to further refine the content. An example is the active report column heading menu that is shown in the following image.
Working With Active Technologies Form Controls

The use of active dashboards adds to the existing capabilities of active reports and integrates them using Document Composer Coordinated Compound Report functionality.

The following are characteristics of active dashboards:

- All active reports in an active dashboard must have the same first (primary) sort field, which can originate from multiple Master Files, but must be the same name and format.

- The common primary sort (BY) field is used to merge all of the active reports for cross-scenario and cross-report filtering. When an active dashboard is executed, WebFOCUS uses the common primary sort field to automatically build the drop-down list that is used to select sort field values at the top of the page.

- Multiple active reports are embedded into a compound document to create an active dashboard.

- In the compound document Properties window of Document Composer, set the Coordinate report property of the object to On and the Output format to active report, active Flash, or active PDF.

- Each page layout of a compound document represents a different business scenario and appears as a separate tab at the top of the active dashboard.

- All active dashboard characteristics are available when using the active Flash output format.

You also have the ability to set an active report initial presentation style, which enables active reports to render as reports, pivot tables, or charts. With these types of visualizations packaged into the active report output, active reports can be integrated with Coordinated Compound Reports to present reports, pivot tables, and charts all within the same page.

Tip: When you create active dashboards using Document Composer, active reports (regardless of the initial presentation style setting) are to be imported, referenced, or created using the Report object, not the Graph object.

Adding active form controls to an active dashboard locks you into the active dashboard mode. For more information, see Active Technologies Dashboard Mode on page 256.

Procedure: How to Create an Active Technologies Report With Active Technologies Dashboard Characteristics

Ensure that your active reports comply with the characteristics of active dashboards. You can modify an existing active report or create new ones that meet the criteria.
1. Open or create a new report in Report Painter.
2. Select an active report format from the Output Format drop-down list.
3. Select *By* from the Columns toolbar and add the primary sort field to the active report.
   The first field must be a visible By field for active dashboards. All values found as the primary sort field will be listed in the active dashboard.
4. Ensure that the first field has the same name as the column name.
   The first field must be the same name and format for active dashboards.
   - Right-click on the By field and select *Column Title* from the context menu.
     The Title dialog box appears.
   - Type the column field name that will be used as the primary sort field among the active dashboards, if applicable.
   - Click OK to close the Title dialog box.
5. Select *Format* from the Report menu.
   The Format tab of the Report Options dialog box opens.
6. Click the Initial Presentation drop-down list to select a presentation style for the active report.
   When the active report is integrated in the active dashboard, it can present reports, pivot tables, and charts all within the same page.
   **Tip:** When you create active dashboards using Document Composer, active reports (regardless of the initial presentation style setting) are to be imported, referenced, or created using the Report object, not the Graph object.
7. Save and close the active report.
In the following example, there are three HTML Reports that show REGION as the first visible By field in the report. These active reports comply with the active dashboard characteristics.

**Procedure:**  How to Create an Active Technologies Dashboard in Document Composer

1. Create a new procedure with Document Composer:
   - With the Procedures folder highlighted, select New/Procedure from the File menu. The Add Procedure dialog box opens.
   - Enter a name for the new procedure in the File name field.
   - Select Composer from the Create with drop-down list.
   - Click Open. Document Composer opens.

2. Select the following properties from the Properties window:
   - Select active report, active Flash, or active PDF from the Output format properties field.
   - Select On from the Coordinate report properties field.
A coordinated compound layout coordinates all reports and graphs from the document with a common sort field. The coordinated report is burst into separate page layouts at run time. Each value for the first sort field displays on a separate page.

The following image shows the Properties window with these options selected.

3. Add multiple active reports to create the active dashboard:
   a. Select *New Report* from the Insert menu.
      The cursor changes into a crosshair.
   b. Click and drag the crosshair to create a report object and adjust it to the size you want.
   c. Import or reference an existing active report.
      - Right-click on the report object and select *Import existing report* from the context menu.
      - or
      - Right-click on the report object and select *Reference existing procedure* from the context menu.
      The Get source file dialog box opens.
   d. Select the active report and click *Open* to add it to Document Composer.
Repeat these steps to embed multiple active reports into the coordinated compound document that will create the active dashboard.

4. Position the reports in the document. For more information about positioning reports, see *Positioning Report Objects in the Active Technologies Dashboard* on page 241.

5. Optionally, you can bind objects to an active report. For more information about binding reports, see *Binding Objects to an Active Technologies Report* on page 249.

6. Add an active form control to the document. For more information about active form controls, see *How to Add an Active Technologies Form Control to the Layout* on page 251.

**Note:** Adding an active form control to a document with synchronized active reports results in Document Composer being switched into a limited active dashboard mode. For more information on the active dashboard mode, see *Active Technologies Dashboard Mode* on page 256.

**Binding Objects to an Active Technologies Report**

You can create multiple views of an active report by binding an active report object to another active report. Binding or synchronizing is the act of configuring an association between an active report and other active report objects in Document Composer.

You can synchronize active report objects and show the synchronized report groups in Document Composer. The synchronize options are available from the Positioning toolbar in Document Composer.

You can only synchronize objects to one active report at a time. If you try to synchronize an object to a second active report, the first synchronization is removed.

**Procedure:** How to Synchronize Active Technologies Report Objects to Active Technologies Reports

When there are objects synchronized to an active report, those objects are updated any time the active report updates.

1. With at least two active report objects on the canvas, select active report, active Flash, or active PDF from the Output format drop-down list of the Compound document Properties window.
2. Select the objects to be synchronized.
   - Select the active report object as the object to be synchronized.
   - While pressing and holding the Ctrl key, select the active report as the report that you want to bind to.

   The synchronize buttons on the Positioning toolbar are activated.

   The binding object (active report) is indicated by clear boxes around the edges. The synchronized object (active report object) is indicated by solid black boxes around the edges.

3. Click the Relate Bottom_Left button on the Positioning toolbar.

   The active report object is synchronized and refreshed with data from the active report.

   There is no separate procedure associated with these active report objects. If you right-click these items, there are no options to edit the procedure.

**Procedure:** How to Show Active Technologies Report Relationships

Select Show relationships from the Positioning toolbar.

An arrow displaying the relationship is shown in the layout.

**Configuring Active Technologies Form Controls in Document Composer**

To add an active form control, it is required that you insert a new control to the layout. Inserting a control type while the output is set to active reports creates an association between the control and an active report, thereby linking actions to directly affect bound active reports.

An active form control is only applicable if there are active reports embedded or referenced in Document Composer.
**Procedure: How to Add an Active Technologies Form Control to the Layout**

Any input control from the Components toolbar can be configured as an active form control.

To add an input control:

1. Select the control type (*Text Box*, *Drop Down List*, *List Box*, *Radio Button*, or *Check Box*) from the Insert menu or toolbar.

   **Note:** There must be at least one active report on the canvas for the input controls to be available.

2. Click and drag the crosshair to create a control object and adjust it to the size you want. The input control is added as an active form control. You can now configure the control by right-clicking the control and selecting *Properties and settings*.

**Procedure: How to Insert a Dashboard Bar Into the Layout**

A Dashboard Bar is an additional page layout where you can insert controls, reports, and charts that display above the dashboard tabs. The Dashboard Bar is only available for the active report formatted documents. A Dashboard Bar can be a maximum of one page.

You can insert a Dashboard Bar into active Flash and active PDF formatted documents. However, if you run these documents, an empty page will be returned.

To insert a Dashboard Bar:

1. From the Compound document Property list, select either *active report*, *active PDF*, or *active Flash*.

2. From the Insert menu, click *Add Dashboard Bar*.

   The Dashboard Bar is inserted into the document.

   You can now insert controls, reports, and charts that display above the dashboard tabs.

   **Note:** Though the Dashboard Bar can be a full page, it is not recommended that you insert large reports and charts, as this would make the Dashboard Bar appear the same size or larger than the dashboard.
Properties and Settings Dialog Box (Active Technologies Reports)

The Properties and settings dialog box appears when you right-click an input control.

The Properties and settings dialog box is shown in the image below.

The Properties and settings dialog box contains the following settings:

**Source report**

The selected report will be the report that the target reports are filtered on. The values in Columns will be populated by the columns of the source report. Only one source report can be selected.

**Columns**

Lists all columns from the source report. The target reports will be filtered on the selected column value. Only one column can be selected.

**Condition**

This option sets the condition for how to populate the target reports.

- Equal (default)
- Not Equal
Greater Than

Greater Than or Equal

Less Than

Less Than or Equal

**Add "ALL" option**

Adds the option to select ALL data source values for the control.

**Apply filter on load**

When selected, this option causes the default value to be applied to the reports and charts when the page is loaded. This option is not active while Add “ALL” option is selected.

**Multiselect**

When selected, you can select multiple values from a list box or check box.

**Target reports**

The selected report or reports that the source report will filter. You can select multiple reports by holding down the Ctrl key.

**Procedure: How to Chain Active Technologies Form Controls**

You may chain controls to one another by using the *Add to current chain* button on the Positioning toolbar. Chaining populates controls based on the selected value from the prior control in the chain.

1. With at least two controls on the canvas, select the controls you want to chain.
   - Select the control you want to be first in the chain.
   - While pressing and holding the Ctrl key, select the controls you want to be in the chain from first to last.

   The chaining buttons on the Positioning toolbar are activated.

2. Click the *Add to current chain* button on the Positioning toolbar.
The selected controls are now chained. The controls will populate based on the selections from each prior control in the chain. To see the chaining relationship between controls, use the *Show Chain order* button on the Positioning toolbar.

**Procedure: How to Remove Active Technologies Form Controls From a Chain**

You can remove controls from a chain by using the *Remove from current chain* button on the Positioning toolbar. To see the chaining relationship between controls, use the *Show Chain order* button on the Positioning toolbar.

1. With a set of chained controls on the canvas, select the first control you want to remove from the chain. While pressing and holding the Ctrl key, select any additional controls you want to remove from the chain. The chaining buttons on the Positioning toolbar are activated.

2. Click the *Remove from current chain* button on the Positioning toolbar.

The selected controls are now unchained.
Switching the Chart Engine

You can switch between the default JavaScript charts and Fusion™ charts. To do this, select compound document from the Properties tab and then select active report from the Output format property list. The Chart Engine property is now available. Select one of the options from the Chart Engine property drop-down list, as shown in the following image.

The Chart Engine options are described below:

- **Standard.** This option changes the engine to use JavaScript charts.
- **Flash.** This option changes the engine to use Fusion charts.
- **Flex.** This option changes the engine to use Flex charts.
- **HTML5.** This is the default chart option. This option changes the engine to use High charts.
Reference: **Active Technologies Dashboard Mode**

Selecting an active report output type (active report, active Flash, active PDF) from the Output format drop-down list of the Compound document Properties window and inserting an active report activates the input controls in the Insert menu and on the toolbar. Adding an active form control switches Document Composer into a limited active dashboard mode.

In the active dashboard mode, the Output format drop-down list will be populated by only active report, active Flash, and active PDF, as shown in the following image:

![Properties Window with active PDF selected](image)

To access the other output types, you must remove any active form controls from the canvas. If there are any active form controls on the canvas, the only available output types will be for active reports.
This topic describes how to use several advanced design features to create interesting and distinct Active Technologies dashboards.

The dashboards described in this topic are enabled to use the full capabilities of Active Technologies. They are called Active Technologies dashboards or active dashboards.

**In this chapter:**

- **Overview**
- Changing the Background Color of an Individual Tab
- Controlling Active Technologies With Custom JavaScript Code
- Working With the Global Filter Feature
- Managing Active Technologies Form Controls

**Overview**

An active report is a self-contained report that is designed for offline analysis. It contains all data and JavaScript code within the HTML output file.

You can use Document Composer in Developer Studio to develop active dashboards that combine multiple active reports into a variety of business scenarios. An active dashboard provides a single analytical view of the state of a business.

This topic describes design features that are available when you develop active reports for active dashboards. It includes the following topics:

- How to change the background color of a tab on an active dashboard. See Changing the Background Color of an Individual Tab on page 258.

- How to extend your control of an active report with custom JavaScript code. See Controlling Active Technologies With Custom JavaScript Code on page 264.

- How to use the Active Technologies global filter feature to present a single analytical view of data in the active reports and active charts on an active dashboard. See Working With the Global Filter Feature on page 268.
How to add active form controls to an active dashboard to create complex filter relationships among report and chart components. See Managing Active Technologies Form Controls on page 289.

This topic assumes that you are familiar with the basic features of active reports and active dashboards, and that you know how to create and run active reports and active dashboards using the appropriate Developer Studio tool.

Changing the Background Color of an Individual Tab

To change the background color of an individual tab on an active dashboard, you add the code BACKCOLOR='value' to the dashboard procedure. You can specify either the RGB (red, green, blue) color values for the tab, or you can specify the name of the color.

The specified color is applied to the background of the tab on the active dashboard when the dashboard is run.

The default background color of a tab is white.

To enable this feature, you must set the Output format property to active report when you create the active dashboard in Document Composer.

Important: If you add BACKCOLOR='value' syntax to an active dashboard procedure, and then open the procedure in Document Composer, the BACKCOLOR='value' syntax is removed from the procedure. For more information, see How to Change the Background Color of an Individual Tab on page 258.

Procedure: How to Change the Background Color of an Individual Tab

This procedure describes how to change the background color of two tabs on an active dashboard. You can change the background color of multiple tabs using the same steps.

1. Create an active dashboard in Document Composer.
2. For the Compound document, set the Output format property to active report, as shown in the following image.

![Properties window showing Output format set to Active Report](image)

3. Save the active dashboard and close Document Composer.

4. In Developer Studio Explorer, right-click the name of the active dashboard procedure, and select **Edit in Text Editor**.

5. Locate the code for PAGELAYOUT, which is under SECTION in the COMPOUND syntax.
In the following sample code, the syntax elements COMPOUND, SECTION, PAGELAYOUT=1, PAGELAYOUT=2, and PAGELAYOUT=3 are shown in bold.

```
COMPOUND LAYOUT PCHOLD FORMAT AHTML
.
.
.
SECTION=section1, LAYOUT=ON, METADATA='0.5^0.5^0.5^0.5', MERGE=AUTO, ORIENTATION=LANDSCAPE, PAGESIZE=Legal, $
PAGELAYOUT=1, NAME='Revenue Report', text='Revenue Report',
TOC-LEVEL=1, BOTTOMMARGIN=0.5, TOPMARGIN=0.5,
METADATA='BOTTOMMARGIN=0.5,TOPMARGIN=0.5, LEFTMARGIN=0,
RIGHTMARGIN=0,', $
COMPONENT='T1R1',
.
.
.
PAGELAYOUT=2, NAME='Regional Report', text='Regional Report',
TOC-LEVEL=1, BOTTOMMARGIN=0.5, TOPMARGIN=0.5,
METADATA='BOTTOMMARGIN=0.5,TOPMARGIN=0.5,
LEFTMARGIN=0,RIGHTMARGIN=0,', $
COMPONENT='T2R6',
.
.
.
PAGELAYOUT=3, NAME='Product Report', text='Product Report',
TOC-LEVEL=1, BOTTOMMARGIN=0.5, TOPMARGIN=0.5,
METADATA='BOTTOMMARGIN=0.5,TOPMARGIN=0.5,
LEFTMARGIN=0,RIGHTMARGIN=0,', $ 
COMPONENT='T3R10',
.
.
.
END
```

Each tab on an active dashboard is defined in the code for PAGELAYOUT=1, PAGELAYOUT=2, PAGELAYOUT=3, and so forth.

For example, in the preceding sample code, the Revenue Report tab of the active dashboard is defined in PAGELAYOUT=1, the Regional Report tab is defined in PAGELAYOUT=2, and the Product Report tab is defined in PAGELAYOUT=3.

6. To change the color of a tab, find the PAGELAYOUT code for the tab. After the syntax element text='text', type the RGB values for the desired background color, or type the name of the color.
For example, you can change the background color of the sample Revenue Report tab from white (the default) to a light shade of yellow, using RGB color values. Type the following code after text='Revenue Report' in PAGELAYOUT=1:

```
BACKCOLOR='RGB(255 255 187)',
```

The new line of sample code looks like this:

```
PAGELAYOUT=1, NAME='Revenue Report', text='Revenue Report',
BACKCOLOR='RGB(255 255 187)', TOC-LEVEL=1,
```

7. Save the active dashboard procedure and run it.

8. Select the tab with the background color that you changed. WebFOCUS displays the selected tab on the active dashboard using the new color.
On the sample active dashboard in the following image, the Revenue Report tab is selected. The background of the dashboard is displayed in a light shade of yellow, as specified in the active dashboard procedure.

9. In the Procedure Viewer, find the code for PAGE_LAYOUT=2, which defines the second tab. After the syntax element text='Regional Report', type the value for the desired background color.

For example, to change the background color of the sample Regional Report tab to yellow, type the following code after text='Regional Report':

```
BACKCOLOR='YELLOW',
```
The new line of sample code looks like this:

```plaintext
PAGE_LAYOUT=2, NAME='Regional Report', text='Regional Report',
BACK_COLOR='YELLOW', TOC_LEVEL=1,
```

10. Save the active dashboard procedure and run it.

11. Select the second tab with the background color that you changed to see the new color.

On the sample active dashboard in the following image, the Regional Report tab is selected. The background is displayed in the color specified in the active dashboard procedure.

Keep in mind, if you open the active dashboard in Document Composer, the BACKCOLOR='value' syntax is removed from the procedure.

**Controlling Active Technologies With Custom JavaScript Code**

You may want to control an active report beyond the capabilities that are provided by Developer Studio. The Active Technologies feature has its own Application Programming Interface (API), which you can access as you develop reports.

This topic describes how to access the Active Technologies API with custom JavaScript code. It assumes that you have basic knowledge of JavaScript.

**Procedure: How to Set Up an Active Technologies Dashboard for Custom JavaScript Code**

Access to an HTML object on an active dashboard relies on the name that you supply in Document Composer. The custom JavaScript code uses the name to refer to the object.

1. Open the active dashboard in Document Composer.
2. Add an object and assign a name to it. The name is case-sensitive. Note the name for later use, when you write the custom code.
For example, in the following image, the name Text_1 has been assigned to a Text object, and a title for the dashboard has been supplied in the object. In the next procedure, you will see how to replace the current title, using custom JavaScript code. You can apply the same technique to other objects.

3. Save the active dashboard.

**Procedure: How to Create a Custom JavaScript File and Initialize the Active Technologies API**

When you run the procedures with Active Technologies format types, the custom JavaScript file is integrated into the active report and the active dashboard that are generated. To use the Active Technologies API, you must first initialize it. You initialize the Active Technologies API by assigning a new activeReport object to a variable.

The custom function executes before any other JavaScript executes.

1. Create a JavaScript file in the same directory as the active report or active dashboard. For example, in Developer Studio, create the file in the Other subfolder of the project folder.

2. Name the file irpcusf.js.
3. Add the following code.

```javascript
// ArApi is set to the activeReport object
var ArApi = null;
function user_init() {
  if(ArApi==null) ArApi=new getAReportObj();
  // ADD CUSTOM CODE HERE
}
```

4. Add custom code that accesses the object that was created previously in Document Composer.

For example, the following custom code adds the text CONFIDENTIAL REVENUE REPORT, in bold, to the Text object that is named Text_1. The new text replaces the previous text, Century Electronics Regional Revenue Report.

```javascript
// Values used in the following example
var newValue = '<b>CONFIDENTIAL REVENUE REPORT</b>';
/* Here is an example of how a Text object created as part of an active report or active dashboard is accessed and modified at run time.
   Reference the object to modify, then
   Set the object with new text */
var obj = document.getElementById('Text_1');
if(obj) obj.innerHTML = newValue;
```

5. Add the code that controls the text that precedes the tabs (panels) of an active dashboard. A set of three sample tabs is shown here.

Following is an example of code that adds the text Layouts in front of the tabs.

```javascript
// This overwrites the text presented prior to the panels.
ibiMsgStr['Layouts'] = "Layouts";
```

You can change the value in double quotation marks to specify the text that will be displayed. Blanks are allowed.
The following image shows the contents of a sample irpcusf.js file in the Developer Studio Text Editor.

6. Save the irpcusf.js file.

7. Run the active report or active dashboard. The text that was initially set in Document Composer changes to the text that is supplied in the JavaScript code.
Working With the Global Filter Feature

You can apply one or more filters to all the active reports and active charts on an active dashboard. This is called global filtering. When you apply global filtering to an active dashboard, you present the selected data in a single analytical view.

Populating the Global Filter Drop-Down List

In Document Composer, when you set the Output format property to active report and the Coordinate report property to On for a compound document, WebFOCUS generates a drop-down list at the top of the window when you run the active dashboard. The drop-down list contains values from which you can select.
WebFOCUS builds the list of values from the first BY field in the first report on the active dashboard. If the user selects a value from the list, WebFOCUS filters any report on the active dashboard that contains the BY field, whether or not it is the first BY field in the procedure. The BY field in the other reports can be visible or hidden.

WebFOCUS generates the drop-down list even if there are multiple tabs on the active dashboard.

When you build an active dashboard, follow these best practices to populate the drop-down list.

- In the first report, the first BY field should be the primary field on which to filter from the drop-down list.

- Include the same BY field in all other reports that you want to filter. It is recommended, but not required, that the BY field be the first BY field in the other reports. The BY field can be either visible or hidden.

- Omit the BY field in all other reports that you do not want to filter.

**Example: Populating the Global Filter Drop-Down List**

In Document Composer, the Output format property is set to active report and the Coordinate report property is set to On for a sample compound document.

Assume that the first report on an active dashboard is a pie chart with the following code:

```
TABLE FILE CENTURYSALES
SUM LINEPRICE
BY COUNTRY
BY REGION
.
.
.
END
```
The second report on the active dashboard is a bar chart with this code.

```
TABLE FILE CENTURYSALES
SUM REGION
BY STATE
BY COUNTRY

$ENDSTYLE
END
```

When you run the active dashboard, WebFOCUS automatically generates a drop-down list with the values for COUNTRY because COUNTRY is the first BY field in the first report. The following image shows the drop-down list at the top of the window.
The value selected from the drop-down list filters both reports because COUNTRY is also a BY field in the second report. COUNTRY is a hidden field in the second report. The following image shows the filtered output after you select United States from the drop-down list.

As shown in the following image, you can now filter the pie chart only on REGION because the chart is already filtered on COUNTRY from the drop-down list.

### Using the Global Filter Icon

When you run an active dashboard, you can apply a global filter to all the reports on the dashboard, using the Global Filter icon. The Global Filter icon is located at the top of an active dashboard, to the right of the drop-down lists from which you select field values.
For information on suppressing the display of the Global Filter icon, see *Controlling the Display of the Global Filter Icon and Dashboard Bar* on page 425.

When you click the Global Filter icon, the Global Filter dialog box opens. For instructions on using that dialog box, see *Applying a Global Filter to a Tabular Report* on page 277.

On the Add Condition button on the Global Filter dialog box, only the fields that are common to the active reports on the active dashboard are listed. This feature enables you to quickly identify, select, and filter on a field that is used in all reports.

In the following image, the common field Revenue is selected on the Add Condition button on the Global Filter dialog box.

Selecting from a list of fields is an alternative to selecting a field that is graphically represented on a bar chart, pie chart, or line chart. Selecting from a list of common fields ensures that you can make meaningful data comparisons on the active dashboard.

**Using the HIDE StyleSheet Feature**

Assume that you have an active dashboard with three charts (pie, line, and bar) and one tabular report.

For the sample procedures that produce the filtering results described in this topic, see *Pie Chart Procedure* on page 284, *Line Chart Procedure* on page 286, *Bar Chart Procedure* on page 287, and *Tabular Report Procedure* on page 288. You may want to refer to the procedures as you read this topic.
On the pie chart, you want to filter the data using Product Type=Camcorders, as shown in the following image. You also want to apply that filter to all the other active reports on the active dashboard to create a single perspective of the data.

In order for one report to filter a second report, the filtered field in the first report must also be present in the second report.

The field Product Type is present in the procedure for the pie chart as a BY field (PRODUCTTYPE). It is also present in the procedure for the tabular report as a BY field. As a result, WebFOCUS updates the pie chart and the tabular report with the filter when you run the active dashboard.

However, if the field PRODUCTTYPE is not present in the procedure for the line chart or the bar chart, WebFOCUS does not update the line chart or the bar chart with the filter when you run the active dashboard.

The image that follows shows the result of the filter Product Type=Camcorders. WebFOCUS updates the pie chart with the filter, and the value Camcorders is now 100% in the pie chart. WebFOCUS also updates the tabular report with the filter, and Camcorders is now the only value that is displayed in the Product Type column. The pie chart and the tabular report are updated because the procedure for each one contains the filtered field.
WebFOCUS does not update the line chart or the bar chart because neither procedure contains the filtered field. The field Product Type is not used on either axis of the line chart or the bar chart.

To filter the line chart and the bar chart using Product Type=Camcorders, you must add the field Product Type to the procedures for those charts. You can add the field Product Type as a hidden field in both the line chart procedure and the bar chart procedure.
When you run the active dashboard and select the filter Product Type=Camcorders, the following is generated.

Notice that the line chart and the bar chart are now updated with the filter Product Type=Camcorders, even though the field is not displayed in either chart. PRODUCTTYPE is a BY field in the line chart procedure and the bar chart procedure. Since the field is desired only for filtering and not for display, it is hidden in the StyleSheet code of both procedures.

You can filter each active report on the following fields and values:

- Product Type=Camcorders (pie chart)
- Region=East North Central (line chart)
- Store Name=AV VideoTown (bar chart)
The result of the filtering selections is shown in the following image. All the active reports on the active dashboard are filtered with the preceding fields and values.

Removing a Global Filter

On an active dashboard, you can remove a global filter from all the reports that were updated with that filter. The reports are restored to their previous state.

**Procedure: How to Remove a Global Filter**

1. Display the active dashboard in the browser.

2. Click the right-most icon above the chart from which you globally filtered the reports on the active dashboard.
In the following image, the cursor above the bar chart points to the correct icon.

WebFOCUS removes the global filter from all the applicable reports.

**Global Filtering Rules for Charts**

The following global filtering rules apply to charts on an active dashboard. Notice that the rules for charts are different from the rules for tabular reports.

- You can filter a chart only on a BY field.
- If you filter a chart on a field that is not present in any other report on an active dashboard, no other report is filtered.

**Applying a Global Filter to a Tabular Report**

You can also perform global filtering with the Global Filter option on a column pop-up menu on a tabular report. See *Global Filtering Rules for Tabular Reports* on page 280 for a list of the rules that apply to filtering a tabular report.
**Procedure:** How to Apply a Global Filter to a Tabular Report With the Global Filter Menu Option

1. Click a column control on a tabular report, and select *Global Filter* from the pop-up menu, as shown in the following image.

![Image of a tabular report with a global filter menu option](image.png)

2. On the Global Filter dialog box, do one of the following:
   - Accept the default operator *AND*.
   - Click *Operator: AND* to display and select the operator *OR*.

3. On the Add Condition button, specify the field on which to filter.
   The list of fields from which you can choose contains fields that are common to all the active reports on the active dashboard.
In the following image, the field State is selected.

![Example dashboard](image)

4. Select the operator and the field value from the available drop-down lists.

In the following image, the operator Equals is selected from the first drop-down list, and the field value Kentucky is selected from the second drop-down list.

![Example dashboard](image)

5. Click **Filter** to run the active dashboard.
The following image shows the result of the preceding global filtering selection. Note that Kentucky is the only state that is displayed in the tabular report.

6. Optionally, click:
   - **Highlight** to highlight the values in a report that meet the filter criteria. This feature is available for active dashboards with format AHTML.
   - **Clear All** to remove all existing filters from the active dashboard.

**Global Filtering Rules for Tabular Reports**

The following global filtering rules apply to tabular reports on an active dashboard. Notice that the rules for tabular reports are different from the rules for charts.

- You can filter a tabular report on any common field.
- The common field can be either a SUM field or a BY field.
- The common field can be either a visible (non-hidden) field or a hidden field.
- If you filter a tabular report on a field that is not present in any other report on an active dashboard, no other report is filtered.
Designating a Hidden Field in Report Painter

When you develop an active report in Report Painter, you can specify that a field in the report is hidden. WebFOCUS generates the correct HIDE Style Sheet code so that you do not need to manually type it.

To enable this option, set the output format of the report to one of the active report format types.

**Procedure:** How to Designate a Hidden Field in Report Painter

1. Open the active report in Report Painter.
2. Right-click the field that you want to hide, and select *Options* from the pop-up menu.
   
The Field Properties dialog box is displayed, as shown in the following image.

3. In the active reports section, select the check box that is labeled *Present Hidden*.
WebFOCUS adds the appropriate HIDE StyleSheet code to the report procedure.

**Reference: Usage Notes for Report Painter**

The Actions tab is accessible from the Sort tab on the Field Properties dialog box for a vertical sort field. The following menu options on the Actions tab are not available for the Active Technologies output formats AHTML, FLEX, and APDF: Fold Line, Page Break, and Restart Page Numbering.

**Procedures**

In the example, all procedures include the same SUM and BY fields.

```
TABLE FILE CENTURYSALES
SUM
    'CENTURYSALES.ORDERS.LINEPRICE' AS 'Revenue'
    'CENTURYSALES.PRODSEG.PROFIT'
    'CENTURYSALES.PRODSEG.COSTOFGOODSSOLD'
    'CENTURYSALES.ORDERS.QUANTITY'
BY 'CENTURYSALES.STORESEG.COUNTRY'
BY 'CENTURYSALES.STORESEG.REGION'
BY 'CENTURYSALES.STORESEG.STATE'
BY 'CENTURYSALES.STORESEG.STORENAME'
BY 'CENTURYSALES.PRODSEG.PRODUCTTYPE'
.
.
.
```

All the procedures use the following filter and record limitation to more easily show the result of a filtering selection, with a manageable number of items in the charts.

```
WHERE COUNTRY EQ 'United States' OR 'France';
WHERE RECORDLIMIT EQ 500;
```

In the HIDE StyleSheet code for each of the four active reports, different fields are hidden while others are commented. A hidden field is available for use in the global filter. A line that is commented in a StyleSheet is ignored, resulting in the display of a field.

- In the pie chart, LINEPRICE, COUNTRY, and PRODUCTTYPE are visible.
- In the line chart, LINEPRICE, COUNTRY, and REGION are visible.
- In the bar chart, LINEPRICE, COUNTRY, and STORENAME are visible.
- In the tabular report, all fields except COUNTRY are visible.
**Tip:** When you develop an active report in Report Painter, you can specify that a field is hidden on the Field Properties dialog box. For instructions on using that option, see *Designating a Hidden Field in Report Painter* on page 281.

In the example, all active reports on the active dashboard have the same primary sort (BY) field, which is COUNTRY.

**BY 'CENTURYSALES.STORESEG.COUNTRY'**

When you run the active dashboard, WebFOCUS automatically builds a drop-down list that contains the possible values for COUNTRY. In the sample output throughout the example, the user selected United States as the value for COUNTRY.

For more information on the drop-down list and development recommendations, see *Populating the Global Filter Drop-Down List* on page 268.

In the following image, the selected value (United States) for the primary sort field (COUNTRY) is shown in the tab at the upper-left of the window.
Pie Chart Procedure

/* File CentSalesChartZero.fex
TABLE FILE CENTURYSALES
SUM 
 'CENTURYSALES.ORDERS.LINEPRICE' AS 'Revenue'
 'CENTURYSALES.PRODSEG.PROFIT'
 'CENTURYSALES.PRODSEG.COSTOFGOODSSOLD'
 'CENTURYSALES.ORDERS.QUANTITY'
BY 'CENTURYSALES.STORESEG.COUNTRY'
BY 'CENTURYSALES.STORESEG.REGION'
BY 'CENTURYSALES.STORESEG.STATE'
BY 'CENTURYSALES.STORESEG.STORENAME'
BY 'CENTURYSALES.PRODSEG.PRODUCTTYPE'
HEADING
"
FOOTING
"
WHERE COUNTRY EQ 'United States' OR 'France';
WHERE RECORDLIMIT EQ 500;
ON TABLE SET PAGE-NUM OFF
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT AHTML
ON TABLE SET STYLE *
  UNITS=IN,
  SQUEEZE=ON,
  ORIENTATION=PORTRAIT,
$ TYPE=REPORT,
  GRID=OFF,
  FONT='ARIAL',
  SIZE=9,
  LINES-PER-PAGE=20,
  REPORT-VIEW=CHART,
  CHART-TYPE=PIE,
$ --TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.LINEPRICE',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PROFIT',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.COSTOFGOODSSOLD',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.QUANTITY',HIDE=ON, $ --TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.COUNTRY',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.REGION',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STATE',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STORENAME',HIDE=ON, $ --TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PRODUCTTYPE',HIDE=ON, $
8. Using Advanced Design Features for Active Technologies Dashboards
Reference:  Line Chart Procedure

- File CentSalesChartOne.fex

TABLE FILE CENTURYSALES
SUM
  'CENTURYSALES.ORDERS.LINEPRICE' AS 'Revenue'
  'CENTURYSALES.PRODSEG.PROFIT'
  'CENTURYSALES.PRODSEG.COSTOFGOODSSOLD'
  'CENTURYSALES.ORDERS.QUANTITY'
BY 'CENTURYSALES.STORESEG.COUNTRY'
BY 'CENTURYSALES.STORESEG.REGION'
BY 'CENTURYSALES.STORESEG.STATE'
BY 'CENTURYSALES.STORESEG.STORENAME'
BY 'CENTURYSALES.PRODSEG.PRODUCTTYPE'
HEADING
""
FOOTING
"
WHERE COUNTRY EQ 'United States' OR 'France';
WHERE RECORDLIMIT EQ 500;
ON TABLE SET PAGE-NUM OFF
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT AHTML
ON TABLE SET STYLE *
  UNITS=IN,
  SQUEEZE=ON,
  ORIENTATION=PORTRAIT,
$ TYPE=REPORT,
  GRID=OFF,
  FONT='ARIAL',
  SIZE=9,
  LINES-PER-PAGE=20,
  REPORT-VIEW=CHART,
  CHART-TYPE=LINE,
$ -*TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.LINEPRICE',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PROFIT',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.COSTOFGOODSSOLD',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.QUANTITY',HIDE=ON, $
-*TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.COUNTRY',HIDE=ON, $
-*TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.REGION',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STATE',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STORENAME',HIDE=ON, $
  TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PRODUCTTYPE',HIDE=ON, $
  .
  .  (remainder of code is same as pie chart code)
  .
**Reference:** Bar Chart Procedure

```plaintext
-* File CentSalesChartTwo.fex
TABLE FILE CENTURYSALES
SUM
  'CENTURYSALES.ORDERS.LINEPRICE' AS 'Revenue'
  'CENTURYSALES.PRODSEG.PROFIT'
  'CENTURYSALES.PRODSEG.COSTOFGOODSSOLD'
  'CENTURYSALES.ORDERS.QUANTITY'
BY 'CENTURYSALES.STORESEG.COUNTRY'
BY 'CENTURYSALES.STORESEG.REGION'
BY 'CENTURYSALES.STORESEG.STATE'
BY 'CENTURYSALES.STORESEG.STORENAME'
BY 'CENTURYSALES.PRODSEG.PRODUCTTYPE'
HEADING
  ""
FOOTING
  ""
WHERE COUNTRY EQ 'United States' OR 'France';
WHERE RECORDLIMIT EQ 500;
ON TABLE SET PAGE-NUM OFF
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT AHTML
ON TABLE SET STYLE *
  UNITS=IN,
  SQUEEZE=ON,
  ORIENTATION=PORTRAIT,
$ TYPE=REPORT,
  GRID=OFF,
  FONT='ARIAL',
  SIZE=9,
  LINES-PER-PAGE=20,
  REPORT-VIEW=CHART,
  CHART-TYPE=BAR,
$ -*TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.LINEPRICE',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PROFIT',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.COSTOFGOODSSOLD',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.ORDERS.QUANTITY',HIDE=ON, $ -*TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.COUNTRY',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.REGION',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STATE',HIDE=ON, $ -*TYPE=REPORT, COLUMN='CENTURYSALES.STORESEG.STORENAME',HIDE=ON, $ TYPE=REPORT, COLUMN='CENTURYSALES.PRODSEG.PRODUCTTYPE',HIDE=ON, $.
.
(remainder of code is same as pie chart code)
.
```
Reference: Tabular Report Procedure

```fex
 -* File CentSalesGridOne.fex
 TABLE FILE CENTURYSALES
 SUM
 'CENTURYSALES.ORDERS.LINEPRICE' AS 'Revenue'
 'CENTURYSALES.PRODSEG.PROFIT'
 'CENTURYSALES.PRODSEG.COSTOFGOODSSOLD'
 'CENTURYSALES.ORDERS.QUANTITY'
 BY 'CENTURYSALES.STORESEG.COUNTRY'
 BY 'CENTURYSALES.STORESEG.REGION'
 BY 'CENTURYSALES.STORESEG.STATE'
 BY 'CENTURYSALES.STORESEG.STORENAME'
 BY 'CENTURYSALES.PRODSEG.PRODUCTTYPE'
 HEADING
 ""
 FOOTING
 ""
 WHERE COUNTRY EQ 'United States' OR 'France';
 WHERE RECORDLIMIT EQ 500;
 ON TABLE SET PAGE-NUM OFF
 ON TABLE NOTOTAL
 ON TABLE SET BYDISPLAY ON
 ON TABLE PCASLHOLD FORMAT AHTML
 ON TABLE SET STYLE *
     UNITS=IN,
     SQUEEZE=ON,
     ORIENTATION=PORTRAIT,
 $ Type=REPORT,
     GRID=OFF,
     FONT='ARIAL',
     SIZE=9,
     LINES-PER-PAGE=20,
 $
 -*Type=REPORT, COLUMN='CENTURYSALES.ORDERS.LINEPRICE',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.PRODSEG.PROFIT',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.PRODSEG.COSTOFGOODSSOLD',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.ORDERS.QUANTITY',HIDE=ON, $
 Type=REPORT, COLUMN='CENTURYSALES.STORESEG.COUNTRY',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.STORESEG.REGION',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.STORESEG.STATE',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.STORESEG.STORENAME',HIDE=ON, $
 -*Type=REPORT, COLUMN='CENTURYSALES.PRODSEG.PRODUCTTYPE',HIDE=ON, $
 .
 . (remainder of code is same as pie chart code)
```
Managing Active Technologies Form Controls

Active Technologies form controls enable you to create complex filter relationships among the report and chart components on an active dashboard. This topic describes the capabilities that are available to you when you incorporate active form controls into the design of your active dashboards.

Active Technologies form controls are available for an active dashboard in HTML and for an active dashboard for Adobe Flash Player and for PDF.

For details on the WebFOCUS code that supports the implementation of active form controls, see Configuring Active Technologies Form Controls With WebFOCUS Syntax on page 400. For the procedures used in Document Composer to add active form controls to an active dashboard, see Creating Active Technologies Dashboards in Document Composer on page 239. For the procedures used in InfoAssist to add active form controls to a compound document, see Creating an Active Technologies Dashboard on page 47.

Types of Active Technologies Form Controls

The following are the types of active form controls that you can use to apply filters to an active dashboard.

- List box
- Drop-down list
- Text input field
- Check box
- Radio button

Adding Active Technologies Form Controls and Establishing Relationships

The following general guidelines apply to active form controls.

- The active form controls do not support the use of ACROSS sort fields in active reports or charts. For example, in Document Composer, if you associate an active report that has an ACROSS field with an active form control, the Columns list in the Properties and settings dialog box will not include the ACROSS field.

- You can add active form controls to any PAGELAYOUT when the active dashboard contains multiple tabs.

- An active form control can have a relationship with another active form control within the same PAGELAYOUT, but not across different PAGELAYOUTs.
An active form control can apply a filter to a component within the same PAGELAYOUT, but not across different PAGELAYOUTs.

When the Coordinate option is set (MERGE=AUTO), the Global Filter drop-down list is the top-most parent of all the other active form controls on the active dashboard.

If active form controls have a chained or nested relationship, all the target reports and charts of the chained filter must contain all the fields, either shown or hidden, used in the active form controls of the chain.

If active form controls have a chained or nested relationship, each control in the same chain must have the same set of target reports and charts.

**Specifying the Source Report and Target Report**

A source report (ARDATA_REPORT='name_of_source_report') contains the data that populates an active form control with selection values from which you choose at run time. A target report or target chart (ARFILTER_TARGET='target_report_name1,target_report_name2,...') is the report or chart component that is filtered by the control.

The following features apply to the source report and target report.

- The source report and target report for an active form control can be the same report or chart component, or a different report or chart component. For example, the source report for an active form control can be the report1 component, and the target report for that active form control can also be the same report1 component. Alternatively, the source report for an active form control can be the report1 component, and the target report for that active form control can be the report2 component, and/or the report3 component, and so on.

- The data source for the source report and target report can be different, as long as a common field exists in both reports, on which to apply the filter.

**Specifying the Report Column**

A report column (ARDATA_COLUMN='column_name') in a source report populates the data selection values in a list, drop-down list, check box, or radio button. For a text input field, the report column is the column to which the filter condition is applied.

The following features apply to the report column.

- The ARDATA_COLUMN field can be a NOPRINT field, or a field with the attribute HIDE=ON in the WebFOCUS StyleSheet.
The ARDATA_COLUMN field, either shown or hidden, must exist in both the source report and target report.

On an active dashboard for HTML (AHTML output format), you can use a check box control to display a list of column names from the source report instead of data values. For more information, see Using an Active Technologies Form Control to Show or Hide Columns in a Report or Chart on page 410.

Using Independent Active Technologies Form Controls

If you do not set chained or nested relationships among active form controls, the controls will be independent of each other. At run time, only one filter condition will be in effect. The filter condition from the control that is selected overwrites the filter condition from another, unselected control, providing an OR condition between the two controls.

For example, if the first control is for the YEAR column, and the second control is for the REGION column, when you select the value 2001 from the YEAR control, the target reports and charts are filtered based on the condition YEAR = 2001. When you select the value Northeast from the REGION control, the target reports and charts are filtered based on the condition REGION = Northeast for any YEAR value, as those controls are not related to each other. In the target reports and charts, you can display the result of either YEAR = value or REGION = value, but not both.
Using another example, you can change the data displayed in the following active report by using independent active form controls that provide data for REGION = West or CATEGORY = Gifts. In the following image, CATEGORY = Gifts in the right-most active form control overwrites REGION = West in the left-most active form control.

![Active Report Example](image)

**Nesting Active Technologies Form Controls**

You can set a second active form control to be the child of a prior active form control, to create a nested filter relationship. In the second active form control, specify the name of the prior active form control as the parent. By specifying a filter component name in the ARFILTER_PARENT property (ARFILTER_PARENT='name_of_parent_object'), you can chain the active form controls to provide a nested filter with a parent/child relationship between the controls.

At run time, when you select a value from the first control, the values in the second control are filtered, based on the value selected in the first control.

In the following example, all three drop-down lists are chained, with the precedent filter component name set as the parent. When you select a value from the first drop-down list, which is populated with values for REGION, the values in the other active form controls will change, based on the value selected in the first drop-down list.
For example, when you select the value West from the first drop-down list, the report is filtered by REGION = West. The second drop-down list, which is populated with values for STATE, dynamically changes to display only the STATE values, CA and WA, for the West REGION. You can now select a STATE value, such as CA, and the report is filtered to display data for STATE = CA within REGION = West.

You can also nest the third drop-down list, which is populated with values for PRODUCT, to display the data for PRODUCT = Gifts in STATE = CA within REGION = West in the report, as shown in the following image.

**Chaining Two Groups of Filter Conditions**

When there are two groups of filter conditions and the filtered result must meet any combination of those conditions, you can chain all the controls so that they act together. For example, consider two chained groups.

- The first chained group contains the YEAR, QUARTER, and MONTH columns.
- The second chained group contains the REGION, STATE, and CITY columns.

The two groups are shown in the following diagram.

In this example, depending on which control you use, you can have any combination of the filtered result in the report. For instance, you can have:

- 2001 + Q3 + September + Pacific + CA + LA
Chaining Three Groups of Filter Conditions

When there are three groups of filter conditions, you can chain all of them as you would do with two groups, to meet any combination of conditions. Alternatively, the chain can have two nodes to provide two different combinations of filter conditions, based on the data in the source report and target report.

For example, consider three chained groups.

- The first chained group contains the YEAR, QUARTER, and MONTH columns.
- The second chained group contains the REGION, STATE, and CITY columns.
- The third chained group contains the PRODUCT, CATEGORY, and TYPE columns.

The three groups are shown in the following diagram.

In this example, depending on which control you use, you can have a combination of filtered conditions, based on one of the following.

- Time and location, for instance:
  - 2001 + Q3 + September + Pacific + CA + LA
  - Q3 + LA
  - September + CA

- Time and product, for instance:
  - 2001 + Q3 + September + Camera + Digital Camera + DSLR
Q3 + DSLR

September + Digital Camera

Displaying the All Selection Value

The following features apply to the All selection value.

- You can optionally suppress the display of the string value "[ALL]" as a selection value when the active form control is a list box, drop-down list, check box, or radio button (ARFILTER_SHOWALL=OFF). The default behavior is to display the selection value All in those controls.

- You can remove a filter from a list box, drop-down list, check box, or radio button by selecting the value All. All the values in the reports and charts will be displayed on the active dashboard.

- Selecting the value All displays all the values in the reports and charts on the active dashboard, regardless of the filter condition specified.

- The All selection value does not apply to a text input field. You can delete a value from a text input field to remove the filter and display all the values in the reports and charts on the active dashboard.

- If you run a report without specifying the name of a source report for the active form control (ARDATA_REPORT='name_of_source_report'), the control displays only the string value "[ALL]" in the list of data selection values, or is blank if ARFILTER_SHOWALL is set to OFF (ARFILTER_SHOWALL=OFF).

Selecting Multiple Values

You can optionally allow the selection of multiple values at run time if the active form control is a list box or check box (ARFILTER_MULTIPLE=ON). The default is single-value selection, prohibiting multiple-value selection at run time.

When multiple-value selection is set to ON, you can select more than one value in a list box by holding down the Shift key or Ctrl key. You can select multiple check boxes for the check box control at run time.

Typing a Value in a Text Input Field

The text input field (OBJECT=TEXTINPUT) for an active dashboard is case-sensitive. The value that is typed in the text input field at run time must match the exact case of the value that is stored in the database.
For example, typing TV City (the value stored in the database) is valid and returns data for an active report or chart, whereas typing TV CITY is invalid and does not return data.
An active report is a report that is designed for offline analysis.

HTML Composer has extended the functionality of active reports by providing the features to build an active dashboard. An active dashboard is an HTML form with one or more active report procedures, and controls to mimic active report menu options to allow global modification of multiple active reports in HTML created pages.

The process of creating active dashboards in HTML Composer consists of:

- Adding an active report to HTML Composer.
- Binding or synchronizing other active report and active chart objects to the active report in the layout.
- Configuring active controls that mimic active report menu options at run time.
- Exporting the HTML form as a FOCUS procedure (.fex) for scheduling and distributing active dashboards.

In this chapter:

- Binding Objects to an Active Technologies Report
- Configuring Active Technologies Controls in HTML Composer
- Refreshing Active Technologies Reports
- Exporting the Active Technologies Dashboard
- Scheduling and Distributing Active Technologies Dashboards
- Usage Notes for Active Technologies Dashboards Created With HTML Composer

**Binding Objects to an Active Technologies Report**

You can create multiple views of an active report by binding an active report or active chart object to an active report. Binding or synchronizing is the act of configuring an association between an active report and an active report or active chart object in HTML Composer.
You can synchronize active report and active chart objects and show the synchronized report groups in HTML Composer. The synchronize options are available from the Positioning toolbar in HTML Composer.

You can only synchronize objects to one active report at a time. If you try to synchronize an object to a second active report, the first synchronization is removed.

**Procedure: How to Synchronize Report and Chart Objects to Active Technologies Reports**

1. In HTML Composer, you can add an active report to the layout by using any of the following methods:
   - Select *New Report* from the Insert menu.
     - Double-click the report object to create the active report in Report Painter.
   - Select *New Report* from the Insert menu.
     - Right-click the report object and select *Reference existing procedure* from the context menu to add the active report.
   - Select *Import Existing Procedure* from the Insert menu to add the active report.

2. Add an active report or active chart object to the layout.
   - Select *New Report* or *New Graph* from the Insert menu.
     - The cursor changes into a crosshair.
   - Drag the crosshair to create an active report or active chart object and adjust it to the size you want.
3. Select the objects to be synchronized.

- Select the active report or active chart object as the object to be synchronized.

- While pressing and holding the Ctrl key, select the active report as the report that you want to bind to.

The synchronize buttons on the Positioning toolbar are activated.

In the example below, the active report is the binding object and the chart object is about to be synchronized to the active report.

![Diagram showing synchronization between report and chart]

The binding object (active report) is indicated by clear boxes around the edges. The synchronized object (active report or active chart object) is indicated by solid black boxes around the edges.

4. Click the *Synchronize to active report* button on the Positioning toolbar.
The active report or active chart object is synchronized and refreshed with data from the active report.

There is no separate procedure associated with these active report objects. If you right-click these items, there are no options to edit the procedure.

**Procedure:** How to Show Synchronized Active Technologies Report Groups

Select Show synchronized reports from the Positioning toolbar.

The synchronized groups are shown in the layout.

In the following example, there are two synchronized report groups. The Production Units Analysis graph is synchronized to the Production Units Analysis active report, and the Sales by Category graph is synchronized to the Sales by Category active report.
**Procedure: How to Select Properties for Synchronized Reports**

You can change the active report object properties by using the Properties tab in the Properties window.

1. Select the synchronized active report object in the layout and click the Properties tab. The active report object properties appear.

2. Select the active report type drop-down list to change the type of active report for the object. The options are <Not Set>, Grid, Pivot, Bar, Line, Pie.

3. Optionally, if you select Bar, Line, or Pie as the active report type, additional X-axis and Y-axis selections are available for the synchronized report.
   - Select the active report X axis drop-down list.
   - Select the active report Y axis drop-down list.

If you change the X and Y values for a chart object, the selections are not reflected in the Design view of HTML Composer. These values are applied at run time.
**Procedure: How to Delete an Active Technologies Report Object**

An active report object can only be populated if it is synchronized with an active report. To break the synchronization between an active report or active chart with an active report, delete the object.

1. Select the synchronized active report or active chart object in the layout.
2. Click *Delete* from the Edit menu.

The active report object is deleted.

**Configuring Active Technologies Controls in HTML Composer**

To add an active control, you need to insert a new control to the layout and configure it as an active control on the Parameters tab. Selecting active report as the control type creates an association between the HTML Composer control and an active report, thereby linking actions to directly affect bound active reports.

Only when there are active reports embedded or referenced in HTML Composer, are active controls applicable. An active control cannot be associated to any parameters in the layout. This type of control can only be associated with an active report in the Layout.

**Note:**

- An active report that has a password (ARPASSWORD) set for viewing restrictions is not supported in an active dashboard created with HTML Composer.

- When creating active dashboards in HTML Composer, the combination of using an active report with the active cache option enabled and using an active control that is a Date field (such as dates with format MDY and MDYY) results in an error. The active control date field works correctly if you deselect the active cache option in the active report.

- If a control displaying report types appears in an AHTML report in HTML Composer, and the Pivot report type is selected at run time, the report is incorrectly reduced in size. If the user selects Pie, Chart, Line, or the default report type of Grid, the frame is not resized to the original positioning set by the user. Although scroll bars are added, output cannot be fully viewed.

**Procedure: How to Add an Active Technologies Control to the Layout**

Any HTML Composer control can be configured as an active control, but the following controls are the most applicable: *Check box, Drop down list, List box, Radio button, and Push button*. 
Add an HTML Composer control that mimics an active report menu option:

1. Select the control type (for example, Drop Down List or List Box) from the Components or Controls submenu of the Insert menu.

   The cursor changes into a crosshair.

2. Drag the crosshair to create a control object and adjust it to the size you want.

   The HTML Composer control is added as the active control. You can now configure the control by using the Parameters tab.

**Reference:** Properties and Settings Dialog Box (Active Technologies Reports)

The Properties and settings dialog box appears when creating or editing an active report value on the Parameters tab.

The following image is the Properties and settings dialog box with an active report Data type.
The Parameters tab contains the following fields and options when active report is selected as the Data type:

**Data type**

Determines whether values are obtained from a static or dynamic list, an active report, or TOC.

Selecting active report will require you to bind the HTML Composer control to an active report.

**Available active reports**

The Available active reports list binds active controls to active reports in the layout. At run time, when the Refresh for active reports setting is triggered, the active reports selected in the Available active reports list are modified based on the current state of each active control it is bound to.

Available active reports lists all active reports currently embedded in HTML Composer. No active reports are selected by default.

**Menu Option Types**

The Menu Option Types determine how active reports are modified when the Refresh for active reports setting is triggered. Menu Option Types configure active controls to sort columns, filter content, and change the active report presentation. Multiple active controls, each with different Menu Option Types settings, can be used in combination to modify the active dashboard.

Menu Option Types presents a list of options to designate which active report menu option an active control inherits. To set the behavior of the current active control, select only one Menu Option Types item.

If no option is selected, the active control has no effect on the active dashboard.

**List of columns**

At run time, the active control lists all common columns found in each bound active report. When the Refresh for active reports setting is triggered, the data is sorted by the selected column.

If using AS Names for a field in a report, all common columns must have the same name across all reports.
**Column value**

At run time, the active control lists all unique values found in a specified column, common in each bound active report. When the Refresh for active reports setting is triggered, the active control filters bound active reports based on the column value selected.

The Add "ALL" Option is activated when the Column value option is selected. This adds the option to select ALL data source values to the control.

**List of filters**

At run time, the active control lists multiple filtering actions. This type of control does not affect bound active reports by itself, but only when used in conjunction with active controls set to Column Value. When the Refresh for active reports setting is triggered, the active control instructs how to filter bound active reports based on the value selected in the Column Valued control.

The available list of filters is: Equals, Not equal, Greater than, Greater than or equal to, Less than, Less than or equal to, Between, Contains, Contains (match case), Omits, and Omits (match case).

**Sort order**

At run time, the active control lists two sorting actions, Sort Ascending and Sort Descending. When the Refresh for active reports setting is triggered, the active control sorts bound active reports based on the sorting action selected.

By default, the active control sorts the first common column in each of the bound active reports.

**Report type**

At run time, the active control lists different active report presentation types; Grid, Pie Chat, Line Chart, Bar Chart, and Pivot Table. When the Refresh for active reports setting is triggered, this active control changes bound active reports to the presentation type selected.

**Common Columns**

The Common Columns list only appears when the Column value Menu Option Type is selected. Common Columns lists all common columns found in each bound active report. Select one field to bind to the active control. At run time, the Column value control lists all unique values across each bound active reports Common Columns field selected.

The Common Column selection can be overridden at run time when the Column Value control is chained to the List of columns Menu Option Type.
Refresh for active reports

Enables active controls to automatically modify current views of bound active reports when you select a new value at run time.

Refresh for active reports is enabled by default when you select an Available active report from the Parameters window.

For more information about the Refresh for active reports option, see Refreshing Active Technologies Reports on page 310.

Selected Value

Enter the values to be selected as the default value whenever the procedure is run.

The Selected Value option is only available for active controls when the Column Value Menu Option Type is selected.

Add "ALL" Option

Adds the option to select ALL data source values to the control. Alternate text can be substituted for "ALL" using the text field to the right.

The Add "ALL" Option is available when the Column value option is selected from the Menu Option Types.

Procedure: How to Configure an Active Technologies Control

Once the active control is added to the layout, you can configure it by using the Properties and settings dialog box on the Parameters tab.

It is important to note that you can only chain List of columns to List of column values.

1. Select the active control in the layout and click the Parameters tab.

   The Properties and settings dialog box opens.

2. Select active report as the Data type.

   The active report options appear.

3. Bind the active control to an Available active report in the layout:

   Select one or more active reports from the list of Available active reports.
When an active report is selected, Refresh for active reports is enabled by default.

The active reports selected in the Available active reports list are modified based on the current state of each active control it is bound to. Refresh for active reports refreshes current views of bound active reports when you select a new value at run time.

For more information about the Refresh for active reports option, see *Refreshing Active Technologies Reports* on page 310.

4. Select the *Menu Option Types* for the active control to sort, filter, list or select columns, and/or change presentation styles of the bound active report and the associated report and graph objects synchronized to the active report.

If no option is selected, the active control has no effect on the active dashboard.
a. Select List of columns from Menu Option Types to list all common columns found in each bound active report. At run time, the bound active report output is sorted by the selected column.

For example, the following active control shows a list of all the columns in the bound active report.

![List of columns example](image)

b. Select the Column value option from the Menu Option Types to list all unique values found in a specified column, common in each bound active report at run time.

**Note:** You can only chain List of columns to Column value. You cannot chain a Column value to another Column value.

When the Column value option is selected, the active control panel dynamically presents Common Columns in each of the selected active reports in the Available active reports list.

Select one column from the Common Columns list.

![Column value example](image)

You can also use the Selected Value field to enter the values to be selected as the default value whenever the procedure is run. The Add "ALL" option adds the option to select ALL common column values to the control at run time.
For example, the following active control shows RATING as the selected common column for the bound active report.

![Active Control Showing RATING as Selected Column](image1)

### c. Select List of filters from the Menu Option Types to list multiple filtering actions at run time.

List of filters is used in conjunction with the Column value. Both controls should be bound to the same active reports. The active control instructs how to filter bound active reports based on the value selected in the Column value control.

For example, the following active control shows a list of filters in the bound active report.

![List of Filters](image2)

### d. Select Sort order from the Menu Option Types to list sorting options (Ascending or Descending) at run time. The active control sorts bound active reports based on the sorting action selected.

By default, the active control sorts the first common column in each of the bound active reports.
For example, the following active control shows list sort order options in the bound active report.

![Sort options](image)

Select the **Report types** option from the Menu Option Types to list different active report presentation types at run time. The active control changes bound active reports to the presentation type selected.

For example, the following active control shows report type options in the bound active report.

![Report types](image)

### Refreshing Active Technologies Reports

The Refresh for active reports setting enables active controls to automatically modify current views of bound active reports when you select a new value. Each bound active report is modified not only by the new selection in the active control with the Refresh for active reports setting, but is based on the current state of all active controls in the active dashboard. This action is triggered at run time when you select a new value in an active control with Refresh for active reports set.

- **Enabled (or checked)** empowers the active control, only after you make a new selection, to modify bound active reports.

- **Disabled (or unchecked)** prevents any bound active report from being modified when you select a new value in the active control.

In order to update active reports when a value in the active control changes, you must check the *Refresh for active reports* check box on the active reports Properties and settings dialog box.

Refresh for active reports is selected by default.
You may want to disable the Refresh option if there are multiple active controls that require each control to be set before you refresh your output. If you are using multiple controls, you can associate the refresh option with a Push Button or Hyperlink, enabling you to refresh the output once all the controls are selected.

**Procedure:** How to Refresh Active Technologies Reports in the Active Technologies Control Panel

1. From the Parameters tab, select active report as the Control Value.
   
   The active report options appear.

2. Select the Refresh for active reports check box.
   
   When an active report is first selected, Refresh for active reports is enabled by default.

**Procedure:** How to Refresh Active Technologies Reports With a Push Button or Hyperlink

1. Insert a Push Button or Hyperlink to the layout:
   
   - From the Insert menu, select Controls, then click Push Button.
   
   - From the Insert menu, select Components, then click Hyperlink.
   
   The cursor changes into a crosshair.

2. Drag the crosshair to add the Push Button or Hyperlink object to the layout and adjust it to the size you want.

   - If inserting a Push Button, right-click the push button object and select Create hyperlink from the context menu.
     
     The Hyperlink Properties dialog box opens.

   - If inserting a Hyperlink, the Hyperlink Properties dialog box opens.

3. Optionally, you may change the name of the Push Button or Hyperlink in the Display Text field.

4. From the Hyperlink Properties dialog box, select the New icon to add a request to execute.

5. Select Refresh active reports from the Action drop-down list.

6. Select the Source drop-down list to select which active reports should be refreshed.
The Source drop-down only lists the embedded or referenced active reports in the layout.

7. Click OK to close the Hyperlink Properties dialog box.

**Exporting the Active Technologies Dashboard**

A benefit of active reports is the ability to run these reports offline. You can export an HTML form as a FOCUS procedure (.fex) to provide the ability to schedule and distribute active dashboards, so these too can be run offline.

Export As Procedure converts the HTML page and embeds the code into a FOCUS procedure. The layout is no longer a webpage or HTML file, but a FOCUS procedure with embedded HTML code. The procedure (.fex) is added to the Procedures folder (in your local projects) or in your Standard Reports group folder (Managed Reporting environment).

Once the HTML form is saved as a procedure, it cannot be converted back to HTML Composer.

The Export as procedure is recommended for saving active dashboards only, as many layout controls and report formats are not supported.

**Procedure: How to Use Export as Procedure**

Once the HTML form is exported as a procedure, it cannot be converted back to HTML Composer.

1. After creating an active dashboard in HTML Composer, select Export as procedure from the File menu.
   
The New Procedure File dialog box opens.
2. Type a File name and click Create.

If the layout contains any parameter controls other than an active control, the Export as procedure option is unavailable.

**Reference:** Conversions of Export as Procedure

Export As Procedure converts the HTML page and embeds the code into a FOCUS procedure. The layout is no longer a webpage or HTML file, but a FOCUS procedure with embedded HTML code. This conversion requires conversion of each object on the HTML page.

The purpose of creating a procedure from an HTML form is to provide the ability to run these forms offline. Because you may not be connected to a WebFOCUS environment, the new procedure removes all referenced objects and adds them to the procedure. Layouts with controls that require multiple requests to the server are not supported.

The following conversions occur when exporting as a procedure:

- Referenced procedures get read from and written to, or embedded in, the saved procedure.
- The display format of FLEX and APDF reports and chart objects is converted to HTML format. For example, if the layout has embedded or referenced Excel, PowerPoint, or PDF documents, these are converted to an HTML-formatted output.
  
  The active reports (AHTML) format is preserved.

- A reference to an image file is removed, and the image is embedded in the procedure as inline HTML code.
  
  This code can become very long and it is recommended that only small images be used in layouts that will be exported as procedures.
Reference: Limitations of Export as Procedure

Note the following limitations when applying the Export As Procedure in HTML Composer:

- If using Static and Dynamic Parameter controls, the Export as Procedure menu item is disabled for any layouts with static or dynamic parameter controls. Any scheduled report supports only one request to the server at run time. These types of controls require multiple requests to the server, and cannot be supported offline.

- If exporting a procedure with background images, background images are not embedded into the procedure due to size. The procedure keeps the reference. In offline mode, if this reference cannot be resolved, no image is displayed.

- If exporting a procedure and using cascading style sheets, the referenced style sheets are not embedded into the procedure and the procedure keeps the reference. In offline mode, if this reference cannot be resolved, no style from the CSS file is applied.

Scheduling and Distributing Active Technologies Dashboards

If an HTML form has been exported as a procedure (.fex), it is now available to be scheduled with ReportCaster.

Usage Notes for Active Technologies Dashboards Created With HTML Composer

The following apply when you create an active dashboard with HTML Composer:

- HTML Composer enables you to graphically create and run an HTML page that incorporates reports, charts, forms, and web objects. Certain processing occurs when HTML Composer generates an active report or chart (format AHTML). An HTML Composer request is executed after the HTML file is loaded into the browser. The active report or chart is returned to the browser from the server and the result is appended to the HTML. The key operations are retrieving the active report or chart content from the server and merging the content with the HTML page.

  HTML Composer displays a progress message that informs you of the processing that is taking place.

- At run time, an active chart embedded in a frame on an active dashboard uses the frame size specified in the HTML Composer layout when one of the following settings is in effect: ARGRAPHENGINE=FUSION, ARGRAPHENGINE=JSFUSION, or ARGRAPHENGINE=JSCHART. With the default setting, ARGRAPHENGINE=DEFAULT, the active chart does not adjust to the frame size specified.
Chapter 10
Creating Active Technologies Components With WebFOCUS Syntax

This topic describes how to create and use Active Technologies reports, Active Technologies charts, and Active Technologies dashboards with WebFOCUS syntax.

The reports, charts, and dashboards described in this topic are enabled to use the full capabilities of Active Technologies. They are called Active Technologies reports or active reports, Active Technologies charts or active charts, and Active Technologies dashboards or active dashboards.

For more information about how to create, style, and analyze reports and charts with the WebFOCUS language, see the Creating Reports With WebFOCUS Language manual.

In this chapter:
- Creating an Active Technologies Report
- Creating an Active Technologies Chart
- Creating an Active Technologies Dashboard

Creating an Active Technologies Report

An active report provides customizable options for creating an HTML-formatted report that enables users to experience features similar to those found in Excel workbooks. An active report is designed for distribution to users to perform offline analysis and interactive functions without any connection to a server. All of the data and JavaScript code are stored within the HTML file, which also makes the output highly compressible for email and transparent to security systems.

Tip: Whenever the term active reports is mentioned, it includes active reports for Adobe Flash Player and for PDF, unless otherwise noted. Use AHTML (HTML active report), FLEX (active report for Adobe Flash Player), or APDF (active report for PDF) as the report output format.

Specific WebFOCUS StyleSheet commands enable developers to set the initial state of the report and control the options available to users. When you develop active reports, the options that you can control include:

- Viewing reports in either tabular or expandable formats.
Creating an Active Technologies Report

- Applying calculations to columns and choosing the location to display results.
- Controlling the display of data by hiding or freezing columns.
- Limiting the number of rows displayed per page.
- Adding a graphic visualization column to compare column values.
- Customizing the colors for most of the report components.

Syntax: How to Create an Active Technologies Report

To create an HTML active report, use

```plaintext
ON TABLE {PCHOLD|HOLD|SAVE} FORMAT {AHTML|FLEX|APDF}
```

where:

- **PCHOLD**
  - Displays the report output in a web browser in the format specified. PCHOLD is the default value.
- **HOLD**
  - Saves the report output to a temporary file for later use.
- **SAVE**
  - Saves the report output to a file for later use.
- **AHTML**
  - Creates an HTML version of the report.
- **FLEX**
  - Creates an Adobe Flash Player version of the report (Adobe Flash file).
- **APDF**
  - Creates an Adobe Flash Player version of the report (Adobe Flash file), embedded in a PDF file.
**Example:** Creating an Active Technologies Report

The following code generates an HTML active report.

All customized (non-default) values and corresponding keywords, used to specifically format an HTML active report, are shown in bold.

```sql
TABLE FILE CENTURYSALES
  SUM
    ORDERNUMBER
    ORDERDATE
    QUANTITY
    LINEPRICE
    BY PLANTCODE AS 'Plant'
ON TABLE SET PAGE-NUM OFF
ON TABLE SET BYDISPLAY ON
ON TABLE NOTOTAL
ON TABLE PCHOLD FORMAT AHTML
ON TABLE SET STYLE *
    UNITS=IN,
    SQUEEZE=ON,
    ORIENTATION=PORTRAIT, $
TYPE=REPORT,
    GRAPHCOLOR='GREEN',
    GRAPHCOLORNEG='RED', $
TYPE=REPORT,
    FONT='ARIAL',
    SIZE=9,
    COLOR='BLACK',
    BACKCOLOR='NONE',
    STYLE=NORMAL,
    FREEZE-WIDTH=AUTO,
    LINES-PER-PAGE=30,
    CALC-LOCATION=BOTTOM, $
TYPE=TITLE, STYLE=BOLD, $
TYPE=REPORT,
    OBJECT=MENU,
    COLOR=RGB(0 51 102),
    HOVER-COLOR='WHITE',
    BACKCOLOR=RGB(51 204 204),
    HOVER-BACKCOLOR='PURPLE',
    BORDER-COLOR='FUCHSIA', $
TYPE=REPORT,
    OBJECT=STATUS-AREA,
    COLOR=RGB(153 51 0),
    BACKCOLOR='AQUA', $
```
The output is:

Starting at the top of the report, notice the customized background colors, the record status and page navigation bar, and the calculation row at the bottom.
The following image shows the same report in which the first data row is highlighted. The mouse is pointing to the fourth data row.

```
<table>
<thead>
<tr>
<th>Plant</th>
<th>Order Number</th>
<th>Order Date</th>
<th>Quantity</th>
<th>Line Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS</td>
<td>9937A</td>
<td>2006/09/22</td>
<td>1,275,843</td>
<td>$881,737,037.00</td>
</tr>
<tr>
<td>DAL</td>
<td>9810A</td>
<td>2005/09/23</td>
<td>201,193</td>
<td>$141,089,667.00</td>
</tr>
<tr>
<td>LA</td>
<td>9751A</td>
<td>2005/09/02</td>
<td>165,755</td>
<td>$108,025,795.00</td>
</tr>
<tr>
<td>ORL</td>
<td>9955A</td>
<td>2006/09/26</td>
<td>213,405</td>
<td>$136,998,975.00</td>
</tr>
<tr>
<td>SEA</td>
<td>97112</td>
<td>2006/09/28</td>
<td>97,242</td>
<td>$69,131,048.00</td>
</tr>
<tr>
<td>STL</td>
<td>9758A</td>
<td>2005/09/02</td>
<td>333,143</td>
<td>$224,941,397.00</td>
</tr>
</tbody>
</table>
```

### Controlling Formatting Options for Active Technologies Reports

Some of the formatting options can only be controlled or implemented from the user menus in the output of an active report. For more information about these options, see *User-Controlled Options in an Active Technologies Report* on page 338.

You can set the initial state of an active report by customizing many report options with WebFOCUS `t` syntax. You can enable or disable some options prior to distribution to users. The following syntax sections describe the options you can control.

**Syntax: How to Control the Report View Options**

To control the report view options, which determine whether a tabular or expandable report is created, use

```
ON TABLE SET EXPANDABLE={ON|OFF}
```

where:

- **ON**
  
  Creates an expandable report.

- **OFF**
  
  Creates a tabular report. OFF is the default value.

The pagination and freeze options are not available with the expandable report view option.
Tip: When you use active reports, it is recommended that you set the system font display to normal to ensure that the menu icons display correctly.

To set the system font display, right-click anywhere on the desktop, select Properties from the pop-up menu, select the Settings tab in the Display Properties dialog box, click the Advanced button, set the Font Size to Small Fonts, and click OK. These steps are for Windows 2000. They may vary by operating system.

Syntax: How to Control the Window Display Option

To control how windows display in the report output when multiple windows are open in the web browser, use

```
TYPE=REPORT, WINDOW-DISPLAY=coldesc, $
```

where:

- **coldesc**
  
  Enables the report to display multiple open windows as tabs or cascaded windows in the web browser. Multiple windows are created in the browser when viewing data as a chart, a roll-up table, and so on.

  Valid values are CASCADE or TAB.

Syntax: How to Control the Row Selection Colors

To control the colors of the row being selected or pointed to, use

```
TYPE=REPORT, OBJECT=CURRENT-ROW, HOVER-BACKCOLOR=hovercolor, BACKCOLOR=selectcolor, $
```

where:

- **CURRENT-ROW**
  
  Specifies the object, which is the current row where the mouse is clicked or is pointing.

- **hovercolor**
  
  Specifies the background color of the row where the mouse is pointing. The default value is RGB(255 252 204), which is a shade of yellow. Valid values can be either a preset color name in single quotes, for example, 'YELLOW', or the RGB (red green blue) numeric values, for example, RGB(255 255 153).
selectcolor

Specifies the background color of the row selected (click anywhere within a row). The default is RGB(51 255 204), which is a mix of green and blue. Valid values can be either a preset color name in single quotes, for example, 'BLUE', or the RGB (red green blue) numeric values, for example, RGB(153 53 0).

Syntax: How to Control User Menu Options

To control the user menu options, which determine the location and color characteristics of the user menu in the report, use the appropriate syntax section that follows.

To control all of the colors of the user menu, use

```
TYPE=REPORT, OBJECT=MENU, COLOR=textcolor,
HOVER-COLOR=hovertextcolor, BACKCOLOR=backcolor,
HOVER-BACKCOLOR=hoverbackcolor, BORDER-COLOR=bordercolor, $
```

where:

- **MENU**
  Specifies the object, which is the user menu.

- **textcolor**
  Specifies the color of the text (font) in the user menu. BLACK is the default value. Valid values can be either a preset color name in single quotes, for example, 'YELLOW', or the RGB (red green blue) numeric values, for example, RGB(153 153 153).

- **hovertextcolor**
  Specifies the color for the hover text in the user menu. BLACK is the default value. Valid values can be either a preset color name in single quotes, for example, 'RED', or the RGB (red green blue) numeric values, for example, RGB(255 255 153).

- **backcolor**
  Specifies the color for the background (non-text) areas in the user menu. SILVER is the default value. Valid values can be either a preset color name in single quotes, for example, 'GOLD', or the RGB (red green blue) numeric values, for example, RGB(153 51 0).
**hoverbackcolor**

Specifies the color for the background area of the user menu where your mouse is pointing. WHITE is the default value. Valid values can be either a preset color name in single quotes, for example, 'ORANGE', or the RGB (red green blue) numeric values, for example, RGB(51 204 204).

You can use this, along with the hover text color, to visually contrast the menu option where the mouse is currently pointing from the rest of the menu.

**bordercolor**

Specifies the color for the borders of the user menu. WHITE is the default value. Valid values can be either a preset color name in single quotes, for example, 'BLUE', or the RGB (red green blue) numeric values, for example, RGB(255 255 153).

**Syntax:**  
**How to Control the Calculation Options**

To control the calculation options, which determine the column and the calculation you want to perform, along with the styling characteristics of the calculation results row, use the appropriate syntax section that follows.

- To perform column calculations, use

  
  
  \[
  \text{TYPE=} \text{REPORT, COLUMN=} \text{coldesc, CALCULATION=} \text{calc,} \\
  \text{where:}
  
  \text{coldesc}
  
  Specifies the description (column name or identifier) of the column where you want to perform a calculation.

  \text{calc}
  
  Specifies the calculation to be performed. The default is no calculation.

  For columns containing numeric data, select from: SUM, AVE, MIN, MAX, CNT, CNT.DST, PCT.TOT.

  PCT.TOT values appear in a separate column adjacent to the column for which it is calculated, and styling is inherited from the visualization column.

  For columns containing text (alphanumeric) data, select from: CNT, CNT.DST.

- To control the location of the calculation results row, use

  \[
  \text{TYPE=} \text{REPORT, CALC-LOCATION=} \text{TOP|BOTTOM,} \\
  \text{where:}
  
  \text{calc}
  
  Specifies the calculation to be performed. The default is no calculation.
where:

**TOP**

Specifies the top row of the report as the location of the calculation results. TOP is the default value.

**BOTTOM**

Specifies the bottom row of the report as the location of the calculation results.

To control the colors of the calculation results row, use

```
TYPE=REPORT, OBJECT=CALC-AREA, COLOR=color, BACKCOLOR=backcolor, $
```

where:

**CALC-AREA**

Specifies the object, which is the calculation results row.

**color**

Specifies the color for the calculation values in the calculation results row. The default value is BLACK and is inherited from the column title font color. Valid values can be either a preset color name in single quotes, for example, 'RED', or the RGB (red green blue) numeric values, for example, RGB(255 255 153).

**backcolor**

Specifies the color for the background in the calculation results row. The default value is WHITE and is inherited from the column title background color. Valid values can be either a preset color name in single quotes, for example, 'GOLD', or the RGB (red green blue) numeric values, for example, RGB(153 51 0).

**Syntax:** How to Control the Active Technologies Cache Option

Because all post-retrieval processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The active cache option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the WebFOCUS Reporting Server. The server also becomes the resource for performing all calculations, sorting, and filtering when active cache is enabled. Since active cache uses on-demand paging functionality, WebFOCUS Viewer is not supported.
To enable active cache for active reports, use

ON TABLE SET WEBVIEWER {ON|OFF}
ON TABLE SET CACHELINES {n|100}

where:

ON

Runs the active report with active cache enabled.

OFF

Will not enable active cache when the active report is run. OFF is the default value.

n|100

 Specifies the number of rows from cache. The default is 100.

**Tip:** It is recommended that you set the number of rows retrieved five times greater than the number of lines retrieved per page (as indicated in SET LINES). The minimum number of rows retrieved is 100. Setting LINES greater than 200 with the AHTML output format produces a report with no output. If editing the SET LINES syntax for a procedure with AHTML, it is recommended that you code SET LINES equal to or less than 200 since the Internet Explorer JavaScript engine is slower than any other browser (such as Firefox, Opera, Google Chrome, and so on).

**Syntax:**  How to Control the Generation of the Active Technologies for HTML Output File

The SET AROUTPUT command enables you to control how and where the Active Technologies for HTML output file is generated.

For example, because all JavaScript processing is performed in the memory of the web browser, an active report has a processing limit of approximately 5,000 records or 100 pages of output. The SET AROUTPUT = EXTJS command enables you to use external JavaScript files instead of embedding the JavaScript within the HTML output file, in order to improve performance at run time.

The SET AROUTPUT command applies to active reports with the AHTML output format.
The syntax for the command is as follows. You can add the command to the profile (edasprof.prf) or to the WebFOCUS procedure that generates the active report.

```plaintext
SET AROUTPUT = {EXTJS | ALL | DATALOOK}
```

where:

**EXTJS**

Uses external JavaScript files instead of embedding the JavaScript within the HTML output file.

This option generates styling structures, data structures, images, and the JavaScript that launches the active report. Active Technologies JavaScript is called using external SCRIPT tags and is downloaded from the middle tier at run time.

The EXTJS option:

- Applies only to connected mode.
- Requires the installation of WebFOCUS Release 8.0 Version 01 or higher.

**ALL**

Generates and embeds all items within the HTML output file, including Active Technologies JavaScript, styling structures, data structures, images, and the JavaScript that launches the active report. Maintains disconnected mode for an active report. ALL is the default value.

**Note:** Starting with WebFOCUS Release 8.0 Version 01, make sure to use the command `SET AROUTPUT = ALL` to allow users to save an active report or document with the browser Save as option. For more information on saving active reports and documents, see *Saving, Exporting, and Sending Active Technologies Reports* on page 142.

**DATALOOK**

Generates styling structures and data structures. This option is similar to AHTMLTAB. The output produced is not a complete HTML active report. However, you can include the output file in another HTML document using the Dialogue Manager command `-HTMLFORM`. Always use this option with ACTIVEREPORTJS.

For more information on AHTMLTAB and the `!IBI.OBJ.ACTIVEREPORTJS;` command, see the reference section on FORMAT AHTMLTAB, in the topic *Choosing Output File Formats*, in Chapter 8, *Saving and Reusing Your Report Output*, of the *Creating Reports With WebFOCUS Language* manual.
**Syntax:** How to Control the Visualization Color Options

To control the colors of the graphic values used with the visualization option, use

```
TYPE=REPORT, GRAPHCOLOR=positivecolor, GRAPHCOLORNEG=negativecolor, $
```

where:

- **positivecolor**
  - Specifies the color for the positive values displayed in the optional visualization column. BLACK is the default value. Valid values can be either a preset color name in single quotes, for example, 'BLUE', or the RGB (red green blue) numeric values, for example, RGB(255 255 153).

- **negativecolor**
  - Specifies the color for the negative values displayed in the optional visualization column. BLACK is the default value. Valid values can be either a preset color name in single quotes, for example, 'VIOLET', or the RGB (red green blue) numeric values, for example, RGB(153 153 153).

**Syntax:** How to Control the Freeze Column Options

To control the freeze column options, which determine the column (and all columns to the left) that will freeze when scrolling to the right to view other columns in the report output, use

```
TYPE=REPORT, FREEZE-COLUMN=coldesc, $
```

or

```
TYPE=REPORT, FREEZE-WIDTH=AUTO, $
```

where:

- **coldesc**
  - Specifies the description (column name or identifier) of the column you want to freeze. You can only specify one freeze column, which must be a BY sort field. The default value is none (no freeze column).

- **AUTO**
  - Enables the report to freeze at a particular column that is automatically determined by WebFOCUS for optimal viewing.

If you can view the entire report output on the screen without scrolling, the freeze is not applied.

The freeze option is not available with the expandable report view option.
**Syntax:** How to Control the Hide Column Options

To control the hide column options, which determine the columns that are hidden from view in the report output, repeat the following for each column you want to hide.

```
TYPE=REPORT, COLUMN=coldesc, HIDE={ON|OFF}, $
```

where:

- **coldesc**
  Specifies the description (column name or identifier) of the column you want to hide. You can hide multiple columns, but you cannot hide all columns (at least one column must always be visible).

- **ON**
  Enables the option.

- **OFF**
  Disables the option. OFF is the default value.

**Syntax:** How to Display NOPRINT Fields in an Active Technologies Report Menu

To control the display of NOPRINT fields in the active report drop-down menu, use

```
TYPE=REPORT, ALLOW-NOPRINT={ON|OFF}, $
```

where:

- **ON**
  Displays all NOPRINT fields in the active report menu.

- **OFF**
  Suppresses the display of NOPRINT fields in the active report menu. This is the default value.

**Note:** This setting does not affect fields that are hidden using HIDE=ON syntax. In order to simply hide a field, but make it available for later use in an active report drop-down menu, use HIDE=ON syntax.
How to Show or Hide Individual Active Technologies Report Menu Options

To control individual active report menu options available to the users, use

```
TYPE=REPORT, ALLOW-feature={ON|OFF}, $
```

where:

`feature`

Specifies the feature. Select from:

- `PAGINATION` to enable the use of show record options.
- `FILTER` to enable the use of filtering or highlighting options.
- `FREEZE` to enable the use of freeze column options.
- `CALC` to enable the use of calculation options.
- `HIDE` to enable the use of hide column options.
- `CHART` to enable the use of chart creating options.
- `EXPORT` to enable the use of exporting options.
- `VISUALIZE` to enable the use of graphical visualization options.
- `SORT` to enable the use of sorting options.
- `ROLLUP` to enable the use of rollup table options.
- `PIVOT` to enable the use of pivot table options.
- `COMMENTS` to enable the use of comment options.
- `WINDOW` to enable the use of window type options.
- `RESTORE` to enable the use of restore options.
- `SENDEMAIL` to enable the use of send as e-mail options.
- `SAVECHANGE` to enable the use of save changes options.
- `PRINT` to enable the use of print options.
- `ACCORDION` to enable the use of accordion options.
- `TOOLS` to enable the use of Chart/Rollup Tool, Pivot Tool, and Grid Tool options.

`ON`

Enables the option. ON is the default value for all user-controlled options.
**OFF**

Disables the option.

**Syntax:** How to Completely Hide the Active Technologies Report Menu From the Product

This option applies to active reports with the AHTML output format.

The active report drop-down menu with its drop-down arrow image is always shown by default. To completely hide the menu and arrow from the product, use:

```
TYPE=REPORT, MENU-LOCATION=OFF, $
```

This setting suppresses the display of the entire active report drop-down menu and arrow image. You can display the menu and arrow again by removing the preceding setting from the active report procedure.

**Controlling the Pagination Options**

For active reports, you can:

- Determine the number of rows displayed per page and the styling characteristics of the record status and page navigation bar. For details, see Determining the Number of Rows Per Page and Styling Characteristics on page 329.

- Customize the pagination bar to display the range of records that appear on the current page of the report, instead of displaying the default filtered number of records and total number of records. For example, the pagination bar on the first page of an active report might display the following sample values:

  **1-25 records, Page 1 of 4**

  You can display the range of records that appear on a page by creating a JavaScript file that overwrites the default display. For details, see Displaying the Range of Records on a Page on page 331.

- Suppress the display of the pagination bar. For details, see Suppressing the Display of the Pagination Bar on page 337.

**Determining the Number of Rows Per Page and Styling Characteristics**

This topic describes the syntax for determining the number of rows displayed per page and the styling characteristics of the record status and page navigation bar.
Syntax: **How to Determine the Number of Rows Per Page and Styling Characteristics**

Use the appropriate syntax that follows.

- To control the number of rows displayed per page in the output, use
  
  \[ \text{TYPE=REPORT, LINES-PER-PAGE=\{n\|UNLIMITED\},} \]

  where:

  - \( n \)
    
    Specifies the number of rows displayed on each HTML page. The default value is 20 rows when the LINES-PER-PAGE option is used. Otherwise, the server default value is 57 rows.

  - **UNLIMITED**
    
    Specifies that you want to show all the results on one HTML page.

  You can also issue the command within a request using:

  \[ \text{ON TABLE SET LINES \{n\|UNLIMITED\}} \]

- To control the position, justification, and colors of the record status and page navigation bar, use

  \[ \text{TYPE=REPORT,}\]
  \[ \text{OBJECT=STATUS-AREA, PAGE-LOCATION=\{TOP\|BOTTOM\}, JUSTIFY=\{LEFT|CENTER|RIGHT\},}\]
  \[ \text{COLOR=\textcolor{textcolor}, BACKCOLOR=\textcolor{backcolor}} \]

  where:

  - **STATUS-AREA**
    
    Specifies the object, which is the record status and page navigation bar.

    The record status and page navigation bar show row and page information, where your cursor is positioned, relative to the total number of rows and pages in the report (for example, 10 of 100 records (10.00%), Page 1 of 3).

  - **PAGE-LOCATION**
    
    Specifies the location of the record status and page navigation bar, which is either at the top of the report above the report header, or at the bottom of the report below the report footer. TOP is the default value.

  - **JUSTIFY**
    
    Specifies whether you want the information in the record status and page navigation bar to be centered, left-justified, or right-justified. CENTER is the default value.
**textcolor**

Specifies the text color for the record status and page navigation bar. BLACK is the default value. Valid values can be either a preset color name in single quotes, for example, 'GREEN', or the RGB (red green blue) numeric values, for example, RGB(153 153 153).

**backcolor**

Specifies the background color for the record status and page navigation bar. SILVER is the default value. Valid values can be either a preset color name in single quotes, for example, 'WHITE', or the RGB (red green blue) numeric values, for example, RGB(51 153 102).

The pagination options are not available with the expandable report view option.

**Displaying the Range of Records on a Page**

By default, the strings and parameters used to display the pagination bar are stored in the irpstr.js file. The irpstr.js file is located in the \home\etc directory on the WebFOCUS Reporting Server.

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpcusf.js file in your application folder and add all your custom contents to this JavaScript file. This ensures that there will not be any issues with the different versions of JavaScript used between releases.

**Upgrade requirement:**

If an irpstr.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpcusf.js file. The syntax used in the string section of the JavaScript file remains unchanged in the irpstr.js file. You can verify the syntax with the string section in the irpstr.js file found in the \home\etc directory of the WebFOCUS Reporting Server.

Here is a summary of the steps that you follow.

1. Search for irp*.js files in your ibi\apps folder.
2. Rename the files. Do *not* delete them, as you need the customized contents from these files.
3. In your application folder, create a new, empty text file, and name it irpcusf.js.
4. Copy the pagination bar string *paglinetext* from the irpstr.js file found in the \home\etc directory of the WebFOCUS Reporting Server, and customize the string in the irpcusf.js file.
When a customized JavaScript file exists in an application folder, the default pagination bar strings and parameters are overwritten by the strings and parameters specified in the customized file.

You can have different customized irpcusf.js files for each of your applications. This feature enables you to update the active reports and active dashboards in your existing applications with different pagination bars that meet your specific application needs.

**Procedure:**  How to Display the Range of Records on a Page

1. In your application folder, create a new, empty text file, and name it *irpcusf.js*.

2. Copy the string that you want to customize from the irpstr.js file on the WebFOCUS Reporting Server (\home\etc directory), and paste it into the irpcusf.js file in your application folder.

   **Important:** The application folder must be the same one that contains the active report or active dashboard. For example, from the Projects on localhost area in Developer Studio, create the irpcusf.js file in the Other subfolder of the project folder.

3. Using a text editor, open the *irpstr.js* file from the WebFOCUS Reporting Server (\home\etc directory), and locate the following code:

   ```javascript
   'paglinetext':"<%^%rcs of %trcs records, Page %inds of %pgs%>
   <span id='smsg%tn'></span>"
   ```

4. Copy the preceding code into the irpcusf.js file in your application folder.

5. Replace the preceding code in the irpcusf.js file with this code:

   ```javascript
   'paglinetext':"<%^%frcs-%lrcs records, Page %inds of %pgs%>
   <span id='smsg%tn'></span>"
   ```

6. Save the *irpcusf.js* file, and close the text editor.

7. Run an active report with format AHTML.
The pagination bar is displayed as follows. By default, 57 records are displayed on each page. As a result, the customized pagination bar displays a range of 1-57 records on the first page.

8. To change the default number of records displayed on each page, open the active report in Report Painter or InfoAssist.

9. Follow the steps for the tool that you are using.

- **If you are using Report Painter:**
  - Open the Report Options dialog box, and click the **Format** tab.
  - In the Pagination options section of the dialog box, click the desired value from the Lines per page drop-down list.
In the following image, 10 lines per page have been selected in the Pagination options section of the Report Options dialog box.

- You can also set styling characteristics in the Pagination options section.

- From the Justification drop-down list, click the value for the location of the pagination bar and for the text justification. For example, if you click Bottom Left, as shown in the preceding image, the pagination bar will be located at the bottom of the report, and the text inside the pagination bar will be left-justified. The default value is Top Center.

- From the Text drop-down list, click the desired color for the text inside the pagination bar. The default value is black.

- From the Background drop-down list, click the desired background color for the text in the pagination bar. The default value is silver.
Click OK to close the dialog box.

If you are using InfoAssist:

- With the active report open in InfoAssist, click the Format tab.
- Click the Features group.
- Click the Active Report Options button.
- Under Page Options on the General tab, select the desired value from the Records Per Page drop-down list: All, 10, 20, 30, 40, or 50. Alternatively, you can type a value in the input field. The default value is 57.
- You can also set other characteristics in the Page Information section under Page Options on the General tab.
  - Select Display Page Information to display the pagination bar, or deselect this check box to suppress the display of the pagination bar.
  - Click the button for the desired alignment of the pagination bar (left, center, or right).
  - From the drop-down list, select the desired location for the pagination bar (top row or bottom row).
  - Click OK on the General tab.

10. Run the active report.
The pagination bar now displays 10 records per page, as shown in the following image. Based on the styling characteristics supplied in Report Painter, the pagination bar appears at the bottom of the page, and the text inside the pagination bar is left-justified.
Tip: You can also specify the number of records to display per page when a report is run. Click Show Records from a drop-down menu on the report. In the following image, 5 Records per page is selected.

Suppressing the Display of the Pagination Bar

You can suppress the display of the pagination bar using WebFOCUS StyleSheet code. This feature is available for active reports with format AHTML, FLEX, or APDF.

ON TABLE SET STYLE *
TYPE=REPORT,
    OBJECT=STATUS-AREA,
    PAGE-LOCATION=OFF,
$ ENDSTYLE

Once you suppress the display of the pagination bar, you can no longer navigate to a page after the first page if the number of records in the report exceeds the records (lines) per page that you set.
User-Controlled Options in an Active Technologies Report

The following options can be implemented only from the user menus in the output of an active report. Basic information for each of these options provides a more comprehensive understanding of this type of report.

- Sorting data
  
  If the ALLOW-SORT option is enabled, you can sort columns in either ascending or descending order. For string data types, the sorting is alphabetical. For date data types, the sorting is chronological. When the report view option is tabular, only single column sorts are supported. When the report view option is expandable, an inner sort is also supported.

- Adding visualization graphics to an HTML active report
  
  If the ALLOW-VISUALIZE option is enabled, you can display visualization graphics in a new column inserted into the report to the right of the selected column. Negative values appear with colored bars that extend to the left of center, and positive values appear with colored bars that extend to the right of center.

- Creating charts in an active report
  
  If the ALLOW-CHART option is enabled, you can create charts using roll-up tables. All applied filters are respected, and all calculation methods are available to create aggregation charts. A selected BY sort field and a measure column are required. There is also an option to open charts in separate browser windows.

- Exporting active reports
  
  If the ALLOW-EXPORT option is enabled, you can export all data, or filtered data only. The export method only exports data, not the JavaScript code, which makes exported reports static without the interactive options available in an active report. The export formats supported are: Save as HTML (formatting is preserved), XML export to Excel (formatting is not preserved), and Save as CSV (formatting is not preserved).

- Filtering or highlighting data
  
  If the ALLOW-FILTER option is enabled, you can filter or highlight data. Filtering limits the output to display only data that meets the criteria in the WHERE clause specified with the user menus. Highlighting changes the color of the data in the output based on the criteria in the WHERE clause specified with the user menus.

- Applying global filters to multiple active reports
When multiple active reports are inserted in the same HTML page, you can apply filters on all reports containing a common BY sort field.

**Controlling the Expiration of an Active Technologies Report**

The AREXPIRE parameter enables you to specify when an active report expires and the report output can no longer be displayed.

The syntax is

```
SET AREXPIRE = {yyymmdd|xxxDAYS}
```

where:

**yyymmdd**

Is the expiration date in the format of a two-digit year (yy), two-digit month (mm), and two-digit day (dd). For example, if you want the report to expire after June 30, 2013, specify the value 130630. Note that this is the last valid date on which you can display the report. Starting on July 1, 2013, you can no longer display it.

Use this option to set the expiration date for a report at run time, or to set the expiration date for a saved report.

If you leave the report open in the browser, any user interaction generates a check of the expiration date. The report is disabled if it has expired.

**xxx**

Is the number of days from the current date on which the report expires. Valid values are from 1 to 999.

This option does not apply to a report at run time. Use this option to set the duration of a saved report, that is, the length of time during which you can display the report.

For example, if you want the ability to display the report for three days from the current date of August 1, specify the value 3DAYS. You can display the report on August 1, 2, and 3. Starting on August 4, you can no longer display it.

You can also issue the command within a request using:

```
ON TABLE SET AREXPIRE {yyymmdd|xxxDAYS}
```

**Setting a Password for an Active Technologies Report**

The ARPASSWORD parameter enables you to set a password that is required to view active report output. Prior to opening the report output, the user is prompted to enter a password to unlock the report.
The syntax is

\[\text{SET ARPASSWORD} = \text{password}\]

where:

\textit{password}

Is a character string up to 32 characters in length.

Only standard alphanumeric English characters are allowed in the password for an active report in AHTML format. National Language Support (NLS) characters are not allowed in the password. Any NLS character in the password for an AHTML report makes the password invalid.

The command can also be issued from within a request using:

\[\text{ON TABLE SET ARPASSWORD password}\]

**Displaying Enhanced Images**

The HTMLEMBEDIMG parameter on the SET command enables you to embed an image in an Active Technologies report in HTML.

The syntax is

\[\text{SET HTMLEMBEDIMG} = \{\text{ON|OFF|AUTO}\}\]

where:

\textit{ON}

Embeds the image in an Active Technologies report in HTML using base-64 encoding. When the command is set to ON, the HTML payload size of the Active Technologies report is smaller. This feature is supported by Microsoft Internet Explorer version 8 and higher.

If you are replacing image files for icons used in Active Technologies HTML, the size of each image file is limited to 10 kilobytes (KB). The browser only supports up to 32 KB of encoded images, and base-64 encoding triples the actual image size. JPEG format is preferred, as it compresses the files to the smallest size, but PNG is also supported.

\textit{OFF}

Embeds the image using the Active Technologies image compression engine. Previous versions of an Active Technologies report in HTML used this method.
**AUTO**

Embeds the image using both base-64 encoding and the Active Technologies image compression engine. This is the default value as of WebFOCUS Reporting Server Release 7.7 Version 04. This value supports Microsoft Internet Explorer version 6 and 7 browsers that do not support base-64 encoded images. The HTML payload size of the Active Technologies report increases by default, as the same images are embedded twice in the report.

You can also issue the command from a request using:

```
ON TABLE SET HTMLEMBEDIMG {ON|OFF|AUTO}
```

**Displaying the Heading in a Rollup Table**

When using a rollup table generated from a tabular active report, you can either display the heading that is supplied by Active Technologies, or display a custom heading that you supply in the original tabular report procedure.

**Syntax:**  **How to Display the Heading in a Rollup Table**

Use the following WebFOCUS StyleSheet syntax

```
ON TABLE SET STYLE *
TYPE=REPORT,
ARDEFAULTHEAD={GENERATED|ORIGINAL},$
```

where:

**GENERATED**

In the rollup table, this setting displays the heading that is supplied by Active Technologies, whether or not a custom heading is supplied in the original tabular report procedure.

If you do not supply a custom heading in the original tabular report procedure, and you do not include the ARDEFAULTHEAD attribute in the procedure, ARDEFAULTHEAD defaults to GENERATED.

**ORIGINAL**

If you supply a custom heading in the original tabular report procedure, this setting displays the custom heading in the rollup table. If you do not supply a custom heading in the original tabular report procedure, this setting displays the heading supplied by Active Technologies.
If you supply a custom heading in the original tabular report procedure, but you do not include the ARDEFAULTHEAD attribute in the procedure, the rollup table automatically displays the custom heading, that is, ARDEFAULTHEAD defaults to ORIGINAL. To display the heading supplied by Active Technologies, you must specify ARDEFAULTHEAD=GENERATED.

**Example: Displaying the Heading Supplied by Active Technologies**

Consider the following tabular report procedure:

```
TABLE FILE GGSALES
SUM UNITS DOLLARS BUDDOLLARS
BY REGION
HEADING
"ABC COMPANY CONFIDENTIAL"
ON TABLE PCHOLD FORMAT FLEX
ON TABLE SET STYLE *
.
.
.
ENDSTYLE
END
```

In this example, the procedure contains a custom heading, ABC COMPANY CONFIDENTIAL. ARDEFAULTHEAD is not included in the WebFOCUS StyleSheet code. By default, the tabular report and the rollup table display the custom heading from the tabular report procedure, as shown in the following two images.

The tabular report is:
By default, the rollup table generated from the tabular report is:

![Rollup Table Example](image)

To display the heading supplied by Active Technologies in the rollup table, you must add `ARDEFAULTHEAD=GENERATED` to the tabular report procedure:

```plaintext
TABLE FILE GGSALES
SUM UNITS DOLLARS BUDDOLLARS
BY REGION
HEADING
"ABC COMPANY CONFIDENTIAL"
ON TABLE PCHOLD FORMAT FLEX
ON TABLE SET STYLE *
TYPE=REPORT, ARDEFAULTHEAD=GENERATED, $
ENDSTYLE
END
```

The following is the rollup table generated from the tabular report:

![Rollup Table Output](image)
Setting the ALPHA Background Color of an Active Technologies Report

You can set the ALPHA background color of an active report or chart, and each report or chart object on an active dashboard, so that the color is transparent. The ALPHA background color includes the background color of the data in the report or chart, and alternating background colors. This capability enables you to place an image in the background of a report or chart. For example, you can add a watermark behind a report.

This feature applies to all Active Technologies output formats (AHTML, FLEX, and APDF).

In the remainder of this topic, the terminology active report or report includes active chart.

In the following example, the ALPHA background color of the tabular report on the left of the active dashboard is set so that the color is transparent. The image of the message confidential is placed in the background of the tabular report.

Syntax: How to Set the ALPHA Background Color in a TABLE or GRAPH Request

For a stand-alone active report, use the following WebFOCUS StyleSheet syntax

```
ON {TABLE|GRAPH} SET STYLE *
TYPE=REPORT, ALPHA=alpha,$
TYPE=REPORT, OBJECT=IMAGE, IMAGE=image_file, POSITION=(x y),$ 
```

Creating an Active Technologies Report
where:

\textit{alpha}

\begin{itemize}
\item Is a value from 0 to 100. It controls the transparency of the background color of the report.
\end{itemize}

\textit{image\_file}

\begin{itemize}
\item Is the name of the image file that you want to place in the background of the report. The image may be a watermark. GIF, JPG, and PNG image formats are supported.
\end{itemize}

\textit{x}

\begin{itemize}
\item Is the position of the image from the left edge of the report, in the units of measurement set for the report (for example, inches, centimeters, or points). You can set the units of measurement for a report using the UNITS keyword in your WebFOCUS code or using a graphical tool, such as Report Painter or InfoAssist. For more information, see the applicable reporting language and reporting tools manuals.
\end{itemize}

\textit{y}

\begin{itemize}
\item Is the position of the image from the top edge of the report, in the units of measurement set for the report.
\end{itemize}

The following example sets the ALPHA background color of an active report to 50.

\begin{verbatim}
ON TABLE SET STYLE *
TYPE=REPORT, ALPHA=50, $
TYPE=REPORT, OBJECT=IMAGE, IMAGE=confidential.png, POSITION=(1 1),$
\end{verbatim}

**Syntax:**  \textbf{How to Set the ALPHA Background Color in a COMPOUND Request}

Use the following syntax

\begin{verbatim}
COMPONENT='name_of_report',
\end{verbatim}

\begin{verbatim}
ALPHA=alpha,$
\end{verbatim}

where:

\textit{name\_of\_report}

\begin{itemize}
\item Is the name of the report.
\end{itemize}

\textit{alpha}

\begin{itemize}
\item Is a value from 0 to 100. It controls the transparency of the background color of the report.
\end{itemize}
An example is:

\[
\text{COMPONENT='report1', TEXT='report1', TOC-LEVEL=2, POSITION=(1.250 0.522), DIMENSION=(6.250 5.525), METADATA='Z-INDEX: 100; POSITION: absolute; WIDTH: 6.25in; HEIGHT: 5.525in; TOP: 0.522in; LEFT: 1.25in', ALPHA=50,}
\]

\[
\text{OBJECT=IMAGE, NAME='watermark', IMAGE=confidential.png, POSITION=(2.186 1.454), DIMENSION=(8.150 6.150), METADATA='Z-INDEX: 100; POSITION: absolute; WIDTH: 4.15in; HEIGHT: 3.15in; TOP: 1.454in; LEFT: 2.186in',}
\]

The following two examples show the varying transparency generated from different values of ALPHA. In the first example, the value of ALPHA is 40.

<table>
<thead>
<tr>
<th>Manufacturing Plant</th>
<th>Product Types</th>
<th>Product Name</th>
<th>Order Number</th>
<th>Date Of Order</th>
<th>Line Total</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$66,011.08</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$93,433.19</td>
<td>211</td>
</tr>
<tr>
<td>DAL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$19,807.96</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$60,774.09</td>
<td>211</td>
</tr>
<tr>
<td>LA</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$387.57</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$502.46</td>
<td>1</td>
</tr>
<tr>
<td>ORL</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$54,884.44</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$134,331.71</td>
<td>308</td>
</tr>
<tr>
<td>SEA</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$50,980.24</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$103,566.48</td>
<td>441</td>
</tr>
<tr>
<td>STL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$23,095.33</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$62,893.03</td>
<td>259</td>
</tr>
</tbody>
</table>

In the next example, the value of ALPHA is 60.

<table>
<thead>
<tr>
<th>Manufacturing Plant</th>
<th>Product Types</th>
<th>Product Name</th>
<th>Order Number</th>
<th>Date Of Order</th>
<th>Line Total</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$66,011.08</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74680</td>
<td>2002/01/02</td>
<td>$93,433.19</td>
<td>211</td>
</tr>
<tr>
<td>DAL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$19,807.96</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74300</td>
<td>2002/01/02</td>
<td>$60,774.09</td>
<td>211</td>
</tr>
<tr>
<td>LA</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$387.57</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74410</td>
<td>2002/01/02</td>
<td>$502.46</td>
<td>1</td>
</tr>
<tr>
<td>ORL</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$54,884.44</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Commercial</td>
<td>74710</td>
<td>2002/01/02</td>
<td>$134,331.71</td>
<td>308</td>
</tr>
<tr>
<td>SEA</td>
<td>Analog</td>
<td>110 VHSC Camcorder 20 X</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$50,980.24</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74550</td>
<td>2002/01/02</td>
<td>$103,566.48</td>
<td>441</td>
</tr>
<tr>
<td>STL</td>
<td>Analog</td>
<td>AR2 35MM Camera 8 X</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$23,095.33</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>Digital</td>
<td>ZT Digital PDA - Standard</td>
<td>74670</td>
<td>2002/01/02</td>
<td>$62,893.03</td>
<td>259</td>
</tr>
</tbody>
</table>
Customizing Icons for an Active Technologies Report or Dashboard

Eight sets of icons for Active Technologies are packaged with the product. You can specify the set of icons that will be applied to an active report, chart, or dashboard by adding WebFOCUS code to the report, chart, or dashboard procedure.

In addition to specifying one of the packaged icon sets, you can:

- Create your own set of icons by customizing the combination of packaged icons.
- Create new icons and add your own custom icon set to your application folder.

For details on creating your own custom icon set and applying it to an active report, chart, or dashboard, see Creating a Custom Icon Set for an Active Technologies Report or Dashboard on page 475.

Syntax: How to Customize Icons for an Active Technologies Report or Dashboard

Use one of the following

```
SET ARICONSET={DEFAULT|WHITE|WHITE2|REVERSE|REVERSE2|BLUE|BLUE2|ORIGINAL}
```

or

```
ON TABLE SET ARICONSET
{DEFAULT|WHITE|WHITE2|REVERSE|REVERSE2|BLUE|BLUE2|ORIGINAL}
```

or

```
ON TABLE SET STYLE *
TYPE=REPORT,
ARICONSET={DEFAULT|WHITE|WHITE2|REVERSE|REVERSE2|BLUE|BLUE2|ORIGINAL},$
```

where:

- **DEFAULT**

  Indicates the standard combination of icons. It uses icons in dark blue, except that the active tabular report menu drop-down icon, filter icon, window title bar icons, and pivot icons are in white. This is the default value.

- **Note:** A pivot icon that represents an option that is currently inactive is in gray. An example is the inactive option to move a leftmost column on a pivot table farther to the left. This feature applies to all the icon sets.

- **WHITE**

  Indicates that all the icons are white.
WHITE2
Indicates that all the icons are white, except that the window resize icon is dark blue.

REVERSE
Indicates a reverse combination of icons. It uses icons in white, except that the active tabular report menu drop-down icon, filter icon, window title bar icons, window resize icon, and pivot icons are in dark blue.

REVERSE2
Indicates the same combination of icons as REVERSE, except that the filter icon is white.

BLUE
Indicates that all the icons are dark blue.

BLUE2
Indicates that all the icons are dark blue, except that the filter icon is white.

ORIGINAL
Indicates the original set of Active Technologies multi-colored icons.

For example, the following code

```ON TABLE SET STYLE 
TYPE=REPORT, ARICONSET=WHITE,$
```

is included in the procedure that generates the following chart. All the icons on the chart are white.
Styling an Active Technologies Report or Dashboard Using Cascading Style Sheets

A default set of styles for an active report or dashboard with the AHTML, FLEX, or APDF output format is supplied with the product in a JavaScript file. Using cascading style sheets (CSS), you can define your own custom styles that will be applied to an active report or dashboard. You can then refer to your custom styles by adding WebFOCUS code to the report or dashboard procedure.

To define your own custom styles, do the following:

- Create a JavaScript configuration file named irpcfgu.js in your application folder.
- An original JavaScript configuration file, named irpcfg.js, is packaged with the product. Copy the contents of the style section from the original configuration file (irpcfg.js) into the style section of irpcfgu.js.
- Rename the "default" style section of the irpcfgu.js file. Assign a unique, descriptive name, such as "mystyle".
- Customize the "mystyle" section of the irpcfgu.js file.
- Refer to the "mystyle" section of the irpcfgu.js file from your WebFOCUS procedure.

For details on defining custom styles in the irpcfgu.js file and applying them to an active report or dashboard, see Defining Custom Styles for an Active Technologies Report or Dashboard on page 513.

Syntax: How to Apply Custom Styles to an Active Technologies Report or Dashboard

Use one of the following:

```
SET ARSTYLESET={default | custom_style_name}
```

or

```
ON TABLE SET ARSTYLESET
   {default | custom_style_name}
```

or

```
ON TABLE SET STYLE *
   TYPE=REPORT,
      ARSTYLESET={default | custom_style_name},$
```


where:

**default**

Is the name of the section in the supplied irpcfg.js file that defines the default styles for an active report or dashboard when no style sheet is specified in the report or dashboard procedure. This is the default value.

**custom_style_name**

Is the name of the section in the irpcfgu.js file that contains the custom styles for an active report or dashboard. The name can be up to 48 characters long.

**Usage Notes for WebFOCUS Commands and Features**

The following apply when you use active reports.

**Text Wrapping in a Tabular Active Technologies Report**

Different types of browsers handle text wrapping differently in the cells of a tabular active report when you do not specify an explicit text wrapping option in the report procedure.

For more information on the available text wrapping options, see the *Creating Reports With WebFOCUS Language* manual.

**How a Browser Handles a Hyphen in Tabular Active Technologies Report Data**

When displaying data in a tabular active report, different browsers handle a hyphen (-) in the data in different ways.

For example, assume that the wrap and width are set for a column in a tabular active report that contains the following data:

*Marketing Supervisor (MS01224-1212)*

If the column is not wide enough to accommodate the length of this data:

- Internet Explorer 9 splits the single string (MS01224-1212) into the two strings (MS01224- and 1212) in an attempt to wrap the data.

- Mozilla Firefox keeps the single string (MS01224-1212) as one word and expands the column width to accommodate it.

If there is a space before and after the hyphen, as follows,

*Marketing Supervisor (MS01224 - 1212)*

Mozilla Firefox splits the data to respect the column width.
For more information on the WebFOCUS StyleSheet attributes that affect column wrapping (WRAP and SQUEEZE), see the Creating Reports With WebFOCUS Language manual.

**Unsupported Commands and Features**

The following is a list of commands and features that are not supported for HTML active reports:

- OVER, including Financial Modeling Language (FML)
- PAGE-BREAK
- RECAP
- SKIP-LINE
- HTMLCSS
- Calling an external cascading style sheet (CSS) file to style reports
- BORDER
- OLAP
- GRAPHLOOK, including conditional styling

**Creating an Active Technologies Chart**

You can use standard WebFOCUS GRAPH FILE syntax to create an active chart. In the GRAPH FILE procedure, you can apply one of three output formats to the chart:

- **AHTML.** Generates an HTML version of the chart.
- **FLEX.** Generates an SWF file for the chart that is compatible with Adobe Flash Player.
- **APDF.** Generates an SWF file for the chart that is compatible with Adobe Flash Player, embedded in a PDF file.

The following guidelines apply.

- The output formats (AHTML, FLEX, APDF) support BY syntax in the GRAPH FILE procedure. They do not support ACROSS syntax. Make sure to code your GRAPH FILE procedures using BY.

- The GRAPH FILE syntax works when you are running a COMPOUND request with one of the output formats. For example, a GRAPH FILE request works when used inside a procedure with the code:

```
COMPOUND LAYOUT {PCHOLD|HOLD} FORMAT {AHTML|FLEX|APDF}
```
Creating an Active Technologies Chart

- The active dashboard features work the same way when the COMPONENT is GRAPH FILE with FORMAT AHTML, FLEX, or APDF. Examples of active dashboard features include MERGE=AUTO, the global filter menu, and the chart menu.

- If you do not specify a chart type, the default chart type is BAR.

- When you create an active chart using GRAPH FILE syntax, GRAPH FILE automatically sets the initial chart size to 768 x 480 pixels by default. This feature applies to all chart engines.

Syntax: How to Create an Active Technologies Chart With WebFOCUS Syntax

To create an active chart, use

ON GRAPH {PCHOLD|HOLD|SAVE} FORMAT {AHTML|FLEX|APDF}

where:

PCHOLD

Displays the chart output in a web browser in the format specified. PCHOLD is the default value.

HOLD

Saves the chart output to a temporary file for later use. The output is saved with an associated Master File.

SAVE

Saves the chart output to a file for later use, but the output is not saved with a Master File.

AHTML

Creates an HTML version of the chart.

FLEX

Creates an Adobe Flash Player version of the chart (Adobe Flash file).

APDF

Creates an Adobe Flash Player version of the chart (Adobe Flash file), embedded in a PDF file.
**Example:**  **Creating an Active Technologies Chart in FLEX Format**

The following WebFOCUS code creates an Adobe Flash Player version of an active chart.

The code that controls the chart type (PIE) and the code that controls the output format (FLEX) is shown in bold.

The WebFOCUS StyleSheet code, which follows the code shown in bold, controls the way that the legend is displayed in the output. In this example, the legend is fixed. It appears underneath the chart. For more information on controlling the legend, see *Controlling the Legend of an Active Technologies Chart in FLEX or APDF Format* on page 357.

```webfocus
GRAPH FILE GGSALES
SUM DOLLARS
BY CATEGORY
BY PRODUCT
ON GRAPH SET LOOKGRAPH PIE
ON GRAPH PCHOLD FORMAT FLEX
ON GRAPH SET STYLE *
TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=FLAT,$
ENDSTYLE
END
```

The output is shown in the following image.

![Image of a pie chart showing sales by category and product](image-url)
You can use the icons at the top of the chart as you do for charts that are generated by a graphical tool. For example, you can change the chart type from pie to bar.

The Chart Tool is accessible from the left-most icon at the top of the chart. The Chart Tool allows you to change the columns and switch the chart type.

**Controlling the Chart Type**

You can control the chart type using the WebFOCUS code `ON GRAPH SET LOOKGRAPH`.

**Syntax:**

**How to Control the Chart Type**

To create a vertical bar chart, use

```
ON GRAPH SET LOOKGRAPH BAR
```

where:

**BAR**

Is the default value.

To create a vertical line chart, use:

```
ON GRAPH SET LOOKGRAPH LINE
```

To create a pie chart, use:

```
ON GRAPH SET LOOKGRAPH PIE
```

To create a scatter chart, use:

```
ON GRAPH SET LOOKGRAPH SCATTER
```

**Switching the Chart Engine**

You can use the WebFOCUS StyleSheet `ARGRAPHENGINE` setting to switch the chart engine. You can also add this setting to the `SECTION` declaration of a compound layout report.

The StyleSheet syntax is

```
ARGRAPHENGINE=[JSCHART|FUSION|JSFUSION|DEFAULT|FLEX]
```

where:

**JSCHART**

Is the WebFOCUS HTML5 chart engine in WebFOCUS 8 and higher. This is the default chart engine in InfoAssist and other reporting tools for Active Technologies in WebFOCUS 8 and higher.
Adobe Flash Player 10 or higher is required when you use the WebFOCUS HTML5 chart engine (ARGRAPHENGINE=JSCHART). This requirement applies to active charts for Adobe Flash Player (FLEX output format) and for PDF (APDF output format).

**FUSION**

Uses the Flash chart engine, which works only in connected mode. To render these charts, you must install Adobe Flash Player in the browser. When used with the AHTML output format, these charts automatically switch to the JavaScript fallback charts on browsers that do not support Adobe Flash Player, such as Safari on the iPad.

This is the default chart engine in InfoAssist and other reporting tools for Active Technologies in WebFOCUS Reporting Server Release 7.7 Version 03 and higher.

Information Builders has tested the performance of all available chart engines, that is, the time that it takes for a specific chart engine to run an active chart. The performance of the Fusion chart engine is comparable to that of any other chart engine.

**JSFUSION**

Uses the JavaScript fallback chart engine when the output format is AHTML.

**DEFAULT**

Uses the Active Technologies legacy chart engine, which includes the four default chart types. If you do not set ARGRAPHENGINE in a procedure, the default behavior is ARGRAPHENGINE=DEFAULT.

**FLEX**

Uses the Adobe Flex legacy chart engine when the output format is FLEX or APDF.

**Example: Switching the Chart Engine**

You can add the following syntax to your WebFOCUS StyleSheet when creating a report for Active Technologies to use the JavaScript fallback chart engine when the output format is AHTML.

```
TYPE=REPORT, ARGRAPHENGINE=JSFUSION,$
```

You can add the following syntax to the SECTION declaration of a compound layout report to use the JavaScript fallback chart engine for all reports on an active dashboard.

```
SECTION=section1, LAYOUT=ON, ARGRAPHENGINE=JSFUSION,...
```
Controlling the Legend and Data Tips of an Active Technologies Chart in AHTML Format

You can control the display of the legend and mouse over data tips for an active chart in AHTML format. Using WebFOCUS StyleSheet code, you can either exclude or include the calculation type in the legend and data tips. Examples of the calculation type are Sum, Avg, and Min.

This feature applies only when you are using the Active Technologies legacy chart engine (ARGRAPHENGINE=DEFAULT), which includes the four default chart types. For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see Switching the Chart Engine on page 354.

Syntax: How to Control the Legend and Data Tips of an Active Technologies Chart in AHTML Format

Use the following WebFOCUS StyleSheet syntax

```
ON {TABLE|GRAPH} SET STYLE *
TYPE={REPORT|GRAPH}, ARCHARTAGG={OFF|ON}, $
```

where:

**OFF**

Excludes the calculation type from the chart legend and mouse over data tips. This is the default value.

**ON**

Includes the calculation type in the chart legend and mouse over data tips. The display format is `field_name(calculation_type)`, where `calculation_type` is a value such as Sum, Avg, Min, Max, Count, or Distinct. An example of a legend that includes the calculation type is Dollar Sales(Sum).

Example: Including the Calculation Type in the Legend and Data Tips

In this example, ARGRAPHENGINE=DEFAULT.

The WebFOCUS StyleSheet code

```
ON GRAPH SET STYLE *
TYPE=REPORT, ARCHARTAGG=ON, $
```
includes the calculation type in the legend and mouse over data tips on an active chart, as shown in the following image. In this example, the calculation type is Sum.

Controlling the Legend of an Active Technologies Chart in FLEX or APDF Format

You can control how to display the legend for an active chart in FLEX or APDF format, using WebFOCUS StyleSheet code. The legend can be fixed or collapsible.

- When the legend is fixed, it appears underneath the chart. You cannot hide, collapse, or expand the legend.

- When the legend is collapsible, you can hide it or show it. You can also choose the position of the Legend icon on the chart. Collapsible is the default value for the display of a legend, with the Legend icon positioned at the bottom left of the chart.

A legend always appears on a pie chart. A legend appears on a bar, line, or scatter chart if the chart has more than one Y-axis field.

Syntax: How to Control the Legend of an Active Technologies Chart in FLEX or APDF Format

To display a fixed legend underneath the chart, use:

```
TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=FLAT,$
```
To display a collapsible legend at the position specified, use

```
TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=DOCKING,
POSITION-POINT={BOTTOM-LEFT|BOTTOM-CENTER|BOTTOM-RIGHT},$
```

where:

- **BOTTOM-LEFT**
  - Is the default value.

**Example:** Displaying a Collapsible Legend

The following WebFOCUS StyleSheet code generates a collapsible legend at the bottom-right of an active pie chart in FLEX format.

```
TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=DOCKING,
POSITION-POINT=BOTTOM-RIGHT,$
```

The output is shown in the following image. In the image, the cursor is pointing to the Legend icon at the bottom-right of the chart.
You can:

- Click the up arrow and the down arrow on the scroll bar on the Legend icon to display the complete list of items in the legend.
- Click the right arrow on the Legend icon to hide the legend. When the legend is hidden, the arrow points left.
- Click the left arrow on the Legend icon to show the legend.

**Additional Examples**

The examples in this topic describe the supported chart legend syntax and the output that it generates.

**GRAPH FILE vs. TABLE FILE**

When you run a GRAPH FILE procedure to generate a chart, the output displays the chart toolbar above the chart. The result is the same when you run a TABLE FILE procedure with the initial report view set to a chart, using the following WebFOCUS StyleSheet code:

```
TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=PIE,
```

The chart that is generated runs inside a canvas frame, not inside a window or panel type of frame.

When you run a TABLE FILE procedure and you do not set the initial report view to a chart, WebFOCUS generates an active report that is in grid view. You can create a chart from a drop-down menu on the active report, using the Chart menu option. When you do that, the chart opens up inside a new window or panel type of frame. You can minimize, maximize, or close the window.

**Examples**

- If you do not specify WebFOCUS StyleSheet syntax for a chart legend, by default WebFOCUS sets LEGEND-VIEW to DOCKING, and POSITION-POINT to BOTTOM-LEFT.
The WebFOCUS syntax generates the chart legend, as shown in the following image.

- If LEGEND-VIEW is FLAT, the legend appears underneath the chart and there is no Legend icon. In this scenario, the POSITION-POINT does not apply.

```
TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=FLAT,
```
The WebFOCUS syntax generates the chart legend, as shown in the following image.

![Chart Legend Example]

- If the legend POSITION-POINT is BOTTOM-CENTER, you can expand or collapse the legend below the chart.

  ```
  TYPE=REPORT, OBJECT=LEGEND, LEGEND-VIEW=DOCKING, POSITION-POINT=BOTTOM-CENTER, $
  ```
The WebFOCUS syntax generates the chart legend, as shown in the following image.

If the legend POSITION-POINT is BOTTOM-RIGHT, you can expand or collapse the legend at the bottom-right of the chart.

```plaintext
TYPE=REPORT,OBJECT=LEGEND,LEGEND-VIEW=DOCKING,POSITION-POINT=BOTTOM-RIGHT,$
```
Customizing Chart Colors and Styles for Active Technologies Reports and Dashboards

You can customize chart colors and styles for active reports and active dashboards by creating a JavaScript file to overwrite the default colors and styles used for charts. The customization steps vary, depending on the output format.

- For active reports and active dashboards in HTML:

  By default, the chart colors are stored in the irpstd.js file, located in the WebFOCUS Reporting Server \home\etc directory.

  Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpcusf.js file in your application folder and add all your custom contents to this JavaScript file. This ensures that there will not be any issues with the different versions of JavaScript used between releases.

  Customizing the colorTable RGB color codes in this JavaScript file enables you to edit the series colors of active charts. The irpcusf.js file overwrites the default colors used for charts and applies changes to all chart types in active reports and active dashboards using the HTML output format.
**Upgrade requirement:**

The colorTable has been moved from the irpfnc.js file to the irpstd.js file, starting with WebFOCUS Reporting Server Release 7.7 Version 03.

If an irpfnc.js or irpstd.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpcusf.js file. The colorTable section of the JavaScript file remains unchanged in the irpstd.js file. You can verify the contents with the colorTable section in the irpstd.js file found in the \home\etc directory of the WebFOCUS Reporting Server.

For active reports and active dashboards for Adobe Flash Player and for PDF:

By default, the chart styles are stored in the irpfsty.js file, located in the WebFOCUS Reporting Server \home\etc directory.

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpfustex.js file in your application folder, and add all your custom contents to this JavaScript file. This ensures that there will not be any issues with the different versions of JavaScript used between releases.

Customizing the chart series style sheet section in this JavaScript file enables you to customize the look and feel of charts and gives you full control over styling individual chart types using cascading style sheet syntax. You can apply different sets of colors to Pie, Bar, Line, and Scatter charts as needed. In addition to changing chart series colors, you can customize the labels to display inside or outside the Pie chart, change the legend font colors, and add background colors to Bar, Line, and Scatter charts.

**Upgrade requirement:**

If an irpfsty.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpfustex.js file. All of the styling section of the JavaScript file remains unchanged in the irpfsty.js file. You can verify the contents with the styling section in the irpfsty.js file found in the \home\etc directory of the WebFOCUS Reporting Server.

For all output formats, if these customized JavaScript files exist in your application folder, the default styles are overwritten by the colors and styles specified. You can have different customized JavaScript files in your application folder, enabling you to update the active reports and active dashboards in your existing applications with different styles and color themes to meet your needs.
**Procedure: How to Customize Chart Colors for Active Technologies Reports and Dashboards in HTML**

By creating the irpcusf.js JavaScript file, you can add JavaScript code to customize the colorTable RGB color codes for charts in active reports and active dashboards in HTML.

1. Navigate to your application folder to create the JavaScript file.
   
   This should be the same directory as the location of the active report or active dashboard. For example, from the Projects area of Developer Studio, create a new JavaScript file in the Other subfolder of the project folder.

2. Name the JavaScript file *irpcusf.js* in the File name field and click *Open*.

3. Add the following JavaScript code:

   ```javascript
   colorTable["ibi"]=[[0,121,193],[127,173,220],[84,12,182],[161,161,217],[46,46,171],[105,3,164],[9,184,206]];
   ```

   The numbers represent the array of colors for active chart series using colorTable RGB color codes. Enter the series color of your choice separated by commas, no spaces, and brackets.

4. Save and close the JavaScript file.

   The next time you run an active report or active dashboard, the charts appear with the series colors you selected in the customized JavaScript file.
The following image shows an active dashboard, using the HTML output format, with customized chart colors.

**Procedure:** How to Customize Chart Styles for Active Technologies Reports and Dashboards for Adobe Flash Player and for PDF

By copying the styling section of the irpfsty.js JavaScript file and pasting it into the irpuflex.js file, you can edit JavaScript code to customize the cascading style sheet syntax for charts in active reports and active dashboards for Adobe Flash Player and for PDF.

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpuflex.js file in your application folder, and add all your custom contents to this JavaScript file. This ensures that there will not be any issues with the different versions of JavaScript used between releases.
Upgrade requirement:

If an irpfsty.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpuflex.js file. All of the styling section of the JavaScript file remains unchanged in the irpfsty.js file. You can verify the contents with the styling section in the irpfsty.js file found in the \home\etc directory of the WebFOCUS Reporting Server.

Here are the steps that you follow.

1. Search for irp*.js files in your ibi\apps folder.
2. Rename the files. Do not delete them, as you need the customized style section from these files.
3. In your application folder, create a new, empty text file. Name it irpuflex.js.
4. Copy the styling section of the irpfsty.js file from the WebFOCUS Reporting Server location (\home\etc directory), and paste it into the irpuflex.js file in your application folder. Alternatively, you can copy the styling section of the irpfsty.js file that you renamed in step 2, and paste it into the irpuflex.js file in your application folder.
   
   This should be the same directory as the location of the active report or active dashboard. For example, from the Projects on localhost area in Developer Studio, create the irpuflex.js file in the Other subfolder of the project folder.

5. Open the JavaScript file and apply different sets of colors to Pie, Bar, Line, and Scatter charts.

   **Tip:** Cascading style sheet syntax uses HTML color code or hex values for the colors. For details on each available property, see the Adobe documentation.

6. For Pie Chart styles, you can modify properties for arPieSeries1 of arPieChartStyle.

   Currently, you may only modify the first series in a pie chart of the active report for Adobe Flash Player.

   ```javascript
   .arPieChartStyle {
     chartSeriesStyles: arPieSeries1, arPieSeries2, arPieSeries3;
   }
   .arPieSeries1 {
     fills: #35675B, #A4C366, #FFAC1B, #618466, #E4CDAD, #3f9f3f, #aca52d, #09cf6b, #d4dc7f, #B50CB1;
     color: #408a1c;
     fontWeight: bold;
     labelPosition: outside;
   }
   ```
where:

fills
A single array of colors to specify the individual color for each pie chart wedge.

color
The color of the text used in the chart, including the label.

fontWeight
Sets the text to be in boldface.

labelPosition
Specifies how to display data labels for the pie chart wedges. The default is none. The possible values are:

callout
Displays labels with lines from each label to the associated wedge in two vertical stacks on either side of the Pie Chart. Note this shrinks the size of the Pie chart and labels if necessary to fit them in the space provided.

inside
Displays labels inside the chart.

insideWithCallout
Displays labels inside the pie chart, and converts them to callout labels if labels are shrunk below a legible size.

outside
Displays labels outside the chart.

7. For Bar Chart styles, you can modify each arBarSeries property of arBarChartStyle.
You can add as many series as needed. The number of series specified in the array for arBarChartStyle has to correspond with the number of bar series defined.

```
.arBarChartStyle{
    chartSeriesStyles: arBarSeries1, arBarSeries2, arBarSeries3, arBarSeries4,
    arBarSeries5, arBarSeries6, arBarSeries7, arBarSeries8, arBarSeries9,
    arBarSeries10;
}
.arBarSeries1 {
    fill: #35675B;
}
.arBarSeries2 {
    fill: #A4C366;
}
.arBarSeries3 {
    fill: #FFAC1B;
}
...
```

where:

```
fill
```

Sets the color for each series in a chart.

8. For Line Chart styles, you can modify each arLineSeries property of arLineChartStyle.
You can add as many series as needed. The number of series specified in the array for `arLineChartStyle` has to correspond with the number of line series defined.

```javascript
.arLineChartStyle{
  chartSeriesStyles: arLineSeries1, arLineSeries2, arLineSeries3,
  arLineSeries4, arLineSeries5, arLineSeries6, arLineSeries7,
  arLineSeries8, arLineSeries9, arLineSeries10;
}
.arLineSeries1 {
  form: curve;
  color: #35675B;
  weight: 2;
}
.arLineSeries2{
  color: #A4C366;
  weight: 2;
}
.arLineSeries3 {
  color: #FFAC1B;
  weight: 2;
}
...
}
```

where:

**form**

Sets the line type for the chart. The default is segment. Possible values are:

- **segment**
  
  Draws angled lines to connect each data point in the series.

- **curve**
  
  Draws curves between the data points.

- **horizontal**
  
  Draws a horizontal line on each data point.

- **vertical**
  
  Draws a vertical line on each data point. The length is determined from the y-coordinate of the first point to the y-coordinate of the second point.

- **step**
  
  Draws a horizontal line at the first data point, then a vertical line to the second point, and repeats to create steps for each data point.
reverseStep

Draws a vertical line at the first data point, then a horizontal line to the second point, and repeats to create reverse steps for each data point.

color

Sets the color of the line.

weight

Sets the width of the line in pixels. The default value is 0.

9. For Scatter Chart styles, you can modify each arScatterSeries property of arScatterChartStyle.

You can add as many series as needed. The number of series specified in the array for arScatterChartStyle has to correspond with the number of scatter chart series defined.

```
.arScatterChartStyle{
  chartSeriesStyles: arScatterSeries1, arScatterSeries2, arScatterSeries3,
                   arScatterSeries4, arScatterSeries5, arScatterSeries6, arScatterSeries7,
                   arScatterSeries8, arScatterSeries9, arScatterSeries10;
}
.arScatterSeries1 {
  fill: #35675B;
  radius: 8;
}
.arScatterSeries2 {
  fill: #A4C366;
}
.arScatterSeries3 {
  fill: #FFAC1B;
}
...
```

where:

radius

Sets the radius of the plot point in pixels. The default value is 5 pixels.

10. You can also apply styles to the legend and change the background color of the Bar, Line, and Scatter chart.
For example, the following syntax applies the alternate background color and changes the font color of the legend:

```css
Legend {
  color: #306814;
}
GridLines {
  horizontalAlternateFill: #e8f7e6;
  horizontalFill: #f5fbf1;
}
```

Moreover, when generating an active dashboard for Adobe Flash Player and for PDF, the dashboard is compiled with the native controls, namely, TabNavigator and ComboBox. You can create the style sheet for TabNavigator and ComboBox using cascading style sheet syntax, and apply it to your active dashboard to style the dashboard further.
For example, the following code applies the different colors and font styles to the tabs, pull down menu, and text in the dashboard:

```javascript
TabNavigator {
    backgroundColor: #d8fcb1;
    borderColor: #118822;
    color: #35675b;
    tabStyleName: "myTabs";
    firstTabStyleName: "myTabs";
    lastTabStyleName: "myTabs";
}
.myTabs {
    fillColors: #ffffff, #a6cdb1;
    borderColor: #118822;
    color: #35675b;
    textRollOverColor: #118822;
    themeColor: #35675b;
}
 ComboBox {
    color: #35675b;
    borderColor: #118822;
    iconColor: #35675b;
    selectionColor: #2cd61c;
    textSelectedColor: #254941;
    rollOverColor: #9eefaa;
    textRollOverColor: #075812;
    themeColor: #35675b;
    dropdownStyleName: "myComboBoxDropDowns";
}
.myComboBoxDropDowns {
    borderColor: #118822;
    color: #35675b;
}
 Text {
    color: #35675b;
    fontWeight: bold;
}
```

12. Save and close the JavaScript file.

The next time you run an active report or active dashboard, the charts appear with the colors and styles you selected in the customized JavaScript file.
The following image shows an active dashboard for PDF with fully customized style.

Customizing Advanced Active Technologies Chart Styles

For active reports and dashboards in HTML formats, the advanced JavaScript chart styles are stored in the irpfusc.js file in the \home\etc directory of the WebFOCUS Reporting Server. For active reports and dashboards for Adobe Flash Player, the advanced Flash chart styles are stored in the irpfstd.js file in the \home\etc directory of the WebFOCUS Reporting Server.

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, you must create an irpcusf.js file for active reports and dashboards in HTML formats, and an irpuflex.js file for active reports and dashboards for Adobe Flash Player, in your application folder, and add all their custom contents to these JavaScript files. This ensures that there will not be any issues with the different versions of JavaScript used between releases.

By copying the styling sections from the irpfusc.js file (or the irpfstd.js file) and pasting them into the irpcusf.js file (or the irpuflex.js file) in your application folder and editing the chart style property section for each chart type, you can customize the look and feel of advanced active JavaScript and Flash charts.
Upgrade requirement:

The advanced JavaScript chart style section for active reports and dashboards in HTML formats has been moved from the irpstd.js file to the irpfusc.js file in the \home\etc directory of the WebFOCUS Reporting Server, starting with Release 7.7 Version 04.

If an irpstd.js or irpfstd.js file created prior to WebFOCUS Reporting Server Release 7.7 Version 04 already exists in your application folder, you must remove it and move the custom contents into the irpcusf.js or irpuflex.js file. All of the styling section of the JavaScript file remains unchanged in the irpfusc.js and irpfstd.js files. You can verify the contents with the styling section in the irpfusc.js and irpfstd.js files found in the \home\etc directory of the WebFOCUS Reporting Server.

Here is a summary of the steps that you follow.

1. Search for irp*.js files in your ibi\apps folder.
2. Rename the files. Do not delete them, as you need the customized style section from these files.
3. In your application folder, create a new, empty text file. Name it irpcusf.js for active reports and dashboards in HTML, and irpuflex.js for active reports and dashboards for Adobe Flash Player.

Note: For active reports and dashboards for Adobe Flash Player, the chart styles in the Chart/Rollup Tool dialog box will change dynamically, according to the changes made in the irpuflex.js file.

Both files follow the same style property convention that corresponds to the properties defined in the FusionCharts documentation. For more information on a specific property, see the FusionCharts product documentation, located at http://www.fusioncharts.com/docs/.

For active reports and dashboards in HTML formats, these properties are defined in the fcinfo variable in the irpfusc.js file. For active reports and dashboards for Adobe Flash Player, these properties are defined in the getFCGlobal function in the irpfstd.js file.

Each chart type has its corresponding chartParams name assigned in these functions and all the chart styling properties are defined in each chartParams section of the files. You have full control over styling individual chart types by assigning a different chartParams name to each chart type. For example, you can apply different sets of colors to Pie 2D, Multi-series Column 2D, Multi-series Line 2D, Scatter, or any other advanced chart types as needed. In addition to changing chart series colors, you can customize the labels to display inside or outside the pie chart types, change the default font type or colors used globally, add background color to the chart canvas, change legend color or mouse-over data tip colors, and so on.
Procedure: How to Customize Advanced Active Chart Styles for Active Technologies Reports and Dashboards

1. In your application folder, create a new, empty text file, and name it `irpcusf.js` (or `irpuflex.js`).

2. Copy the styling section of the `irpfusc.js` file (or the `irpfstd.js` file) from the WebFOCUS Reporting Server location (`\home\etc` directory), and paste it into the `irpcusf.js` file (or `irpuflex.js` file) in your application folder. This should be the same directory as the location of the active report or active dashboard.

   For example, from the Projects on localhost area in Developer Studio, create the `irpcusf.js` file (or the `irpuflex.js` file) in the Other subfolder of the project folder.

3. For active reports and dashboards in HTML formats, open the JavaScript file and locate the `fcinfo` variable.

   For active reports and dashboards for Adobe Flash Player, open the JavaScript file and locate the `getFCGlobal` function.

4. In the `fcCategory` section, locate the chart type you need to modify. This is defined in the `swfName` parameter.

5. Locate the corresponding `chartParams` parameter name. The `chartParams` parameter name is defined separately and contains all of the properties used to style each chart type in the `swfName` parameter.

   For example, in order to modify a Pie 2D chart, locate the `Pie2D` value in the `swfName` parameter, as below. The `chartParams` called `pieParams` contains all of the properties you can modify to change the look and feel of the Pie 2D chart.

   In the `irpcusf.js` file:

   ```javascript
   {swfName:'Pie2D', label:'Pie 2D', chartParams: 'pieParams'},
   ```

   In the `irpuflex.js` file:

   ```javascript
   {swfName:'Pie2D', label:this.ibiMsgStr['Pie 2D'],
    chartParams: 'pieParams'},
   ```

   **Note:** It is recommended that you create a new `chartParams` name for the chart types you are modifying because the same `chartParams` name may be assigned to other chart types that you may not need to modify. You can also create one default `chartParams` name and assign it to all chart types to globally apply the same styles.

6. For active reports and dashboards in HTML formats, locate the chart properties section defined in `fcinfo.chartParams_name`. For example, `fcinfo.pieParams`.
For active reports and dashboards for Adobe Flash Player, locate the chart properties section defined in `this.chartParams_name`. For example, `this.pieParams`.

For this Pie 2D chart example, the properties section should look like the following sample code for active reports and dashboards in HTML formats:

```javascript
fcinfo.pieParams = '{'
    "caption": "%caption%",
    "alternateHGridAlpha": "100",
    "alternateHGridColor": "f9f9fa",
    "baseFont": "Arial",
    "baseFontColor": "000000",
    "baseFontSize": "10",
    "bgColor": "e5e5e5, ffffff",
}.
```

For this Pie 2D chart example, the properties section should look like the following sample code for active reports and dashboards for Adobe Flash Player:

```javascript
this.pieParams = [
    {alternateHGridColor: "f9f9fa"},
    {alternateHGridAlpha: "100"},
    {anchorRadius: "3"},
    {anchorBorderThickness: "3"},
    {baseFont: "Arial"},
    {baseFontSize: "10"},
    {baseFontColor: "000000"},
]..
```

The values on the left-hand side correspond to chart element attribute names defined in the FusionCharts documentation, and the default values used in advanced active charts are set on the right-hand side, wrapped in double quotation marks.

7. Copy the entire `fcinfo.pieParams` section (or `this.pieParams` section) into clipboard and paste it under the `pieParams` section.

8. Rename the copied section as `fcinfo.testParams` (or `this.testParams`).

9. In the `fcinfo.fcCategory` section (or `this.fcCategory` section), change the `chartParams` name for the Pie 2D chart to `testParams`.

In the `irpcusf.js` file:

```javascript
{swfName: 'Pie2D', label: 'Pie 2D', chartParams: 'testParams'},
```
In the irpuflex.js file:

```
{swfName:'Pie2D', label:this.ibiMsgStr['Pie 2D'],
 chartParams: 'testParams'},
```

10. For active reports and dashboards for Adobe Flash Player, define the new testParams name as a variable with array type before the getFCGlobal function starts.

```
public var testParams:Array;
```

In the irpcusf.js file, you should now have:

```
fcinfo.fcCategory = [
...
    {category:this.ibiMsgStr['crtpie'],  //Pie Category
    ...
    {swfName:'Pie2D', label:'Pie 2D', chartParams: 'testParams'},
    ...
    isCreated:false}
];
...
fcinfo.testParams = '{
    "caption":"%caption%",
    ...
    "zeroPlaneThickness":"3"},';
In the irpuflex.js file, you should now have:

```javascript
<fx:Script>
  <![CDATA[
  ...
  public var testParams:Array;
  ...
  private function getFCGlobal(): void {
      ...
      this.fcCategory = [
          ...
          {category:this.ibiMsgStr['crtpie'], //Pie Category
            ...
            {swfName:'Pie2D', label:this.ibiMsgStr['Pie 2D'],
              chartParams:
                'testParams'),
              ...
              isCreated:false}
          ];
      }
      ...
      this.testParams = [
          {alternateHGridColor:"f9f9fa"},
          ...
          {zeroPlaneColor:"717171"}
      ]; //end testParams
  } // end getFCGlobal()
]]>
</fx:Script>
```

**Note:** In the preceding examples of code, the ellipses indicate additional lines of code.

If you are modifying the irpuflex.js file for active reports and dashboards for Adobe Flash Player, you are almost ready to customize the styles and run a chart. There is one more editing step to perform in the irpuflex.js file.

11. Locate the following code at the beginning of the irpuflex.js file:

```javascript
public var fcCategory:Array;
public var APDFCategory:Array;
public var defaultParams:Array;
public var pieParams:Array;
public var testParams:Array;
private function getFCGlobal(): void {
```
Replace the preceding code with this code to initialize the custom parameter that you have added:

```javascript
public var testParams:Array;
public function user_init(): void {

12. You can now modify the values assigned for each chart style property in the testParams section, or add or remove each chart style property.

For example, the attributes, such as baseFont, baseFontSize, and baseFontColor, define the generic font properties for all the text used on the chart inside the chart canvas, including data labels, values, and so on.

**baseFont.** Specify the font family name to be used for all the text (data labels, values, and so on) on the chart inside the chart canvas.

**baseFontSize.** Specify the font size to be used for all the text (data labels, values, and so on) on the chart inside the chart canvas using a numeric value between 0 to 72.

**baseFontColor.** Specify the font color to be used for all the text (data labels, values, and so on) on the chart inside the chart canvas using the HTML color code. Do not include the number (#) character when using the HTML color code.

The following font properties set the fonts used for the pie chart label and mouse-over data tip text to be Comic Sans MS in dark red color and size 20:

```javascript
{baseFont:"Comic Sans MS"},
{baseFontSize:"20"},
{baseFontColor:"D70A0A"},
```
13. The chart series colors are defined in the paletteColors property for active reports and dashboards in HTML formats and in the paletteColors property for active reports and dashboards for Adobe Flash Player. In order to change the chart series color, you need to define a set of colors for these properties.

**paletteColors.** Specify a list of HTML color codes separated by commas. Do not include the # character when using the HTML color code. The chart cycles through the list of specified colors.
For example, the following set of eight colors changes the color of pie chart slices into a red color scheme.

```javascript
{paletteColors:"D788A2, E13939, DC4295, A52A2A, FAAFBE, C11B17, FF7157, CC4444"},
```

14. Open the Chart/Rollup Tool dialog box if you have the modified irpuflex.js file for active reports and dashboards for Adobe Flash Player.
Notice the same style changes are reflected for the Pie 2D chart in the Chart/Rollup Tool. Because testParams is assigned only to the Pie 2D chart type in this example, the other charts still retain the default chart styles specified in other chartParams parameters.

15. You can apply the same chartParams name to other chart types to change their styles. For example, change the chartParams name for the Multi-series Column 2D chart as below.

In the irpcusf.js file:

```javascript
{swfName:'MSColumn2D', label:'Multi-series Column 2D',
  chartParams: 'testParams'},
```

In the irpuflex.js file:

```javascript
{swfName:'MSColumn2D', label:this.ibiMsgStr['MSColumn2D'],
  chartParams: 'testParams'},
```
The same red color scheme is now applied to the Multi-series Column 2D chart.

16. You can change the alternating background color of the chart canvas for chart types such as column, bar, line, and area.

In the testParams section, locate the canvasBgColor property, and change its value as follows. If the canvasBgColor property does not exist, you can simply add it.

{canvasBgColor:"FDEEF4"},

For alternating background color, locate the alternateHGridColor property, and change its value as follows. If the alternateHGridColor property does not exist, you can simply add it.

{alternateHGridColor:"FEF7D6"},

Depending on the chart type, different types of properties are available to modify multiple areas of the chart. For more information, see the FusionCharts documentation.
The chart now contains light pink and yellow alternating background color.

Adding or modifying the following properties changes the background colors used in the mouse-over data tip and legend.

```javascript
{legendBgColor : "EBDDE2"},
{toolTipBgColor : "EBDDE2"},
```
Handling a Hidden BY Column on an Active Technologies Chart

The SET ARNOPRINTHIDE command enables you to specify how the server handles a hidden BY column when NOPRINT is used in a GRAPH request.

This command applies when the setting for the chart engine is JSCHART.

Syntax: How to Handle a Hidden BY Column on an Active Technologies Chart

The syntax is

```
SET ARNOPRINTHIDE = {ON | OFF}
```

where:

**ON**

Excludes a hidden BY column (BY column with the NOPRINT option) from the sort processing of an active chart. Data for the hidden BY column is not displayed in the active chart output. This is the default value.

Using this setting with a NOPRINT column produces the same result as using HIDE=ON syntax for the BY column in the procedure, as described in *How to Control the Hide Column Options* on page 327.

The data for a hidden BY column is available for use elsewhere. For example, you can use it to populate the global filter drop-down list or other filter control on an active dashboard.

**OFF**

Includes a hidden BY column (BY column with the NOPRINT option) in the sort processing of an active chart. The chart is sorted by all the hidden BY columns, and data from all the columns is displayed in the active chart output.

Suppressing the Display of the Chart Tool Bar

You can suppress the display of the chart tool bar using WebFOCUS StyleSheet code. This feature is available for active reports that are published in AHTML, FLEX, or APDF format.

Once you suppress the display of the chart tool bar, you can no longer switch the chart type during run time from within the chart window.

Syntax: How to Suppress the Display of the Chart Tool Bar

The syntax is

```
TYPE=REPORT, AR_SHOW_MENUBAR={ON | OFF},
```

where:

**ON**

Displays the chart tool bar. This is the default value.

**OFF**

Suppresses the display of the chart tool bar. For example:

```
ON TABLE SET STYLE *
TYPE=REPORT,
AR_SHOW_MENUBAR=OFF,$
$ ENDSTYLE
```

**Customizing WebFOCUS Graphs for Active Technologies Reports**

The JSCHART graph engine has a set of default properties for charts that are created inside from an Active Report Table (for example, using the Chart Roll Up tool). These properties are in the form of JSON (JavaScript Object Notation) and can be modified by editing file `\home\etc\irptdgc.js` in your 7704 or higher Reporting Server path.

The contents of this file consist of the following:

1. A table of default colors. These are the color definitions for the gridlines, labels, risers, and other chart primitives. They are standard JSON color objects, so you can specify hex value (`#FF0000`), default colormaps (red), or RGB/RGBA values (`rgba(126,188,224,0.7)`).

For example, to change the default color of the legend labels from dark grey (`#333333`) to BLUE, you could change:

```
var TDGDefaultLabelColor = "#333333";
```

to

```
var TDGDefaultLabelColor = 'blue';
```
Before:

![Chart showing sales by country](image)

- 37% for a specific country
- 14% for another country
- 6% for a third country
- 42% for the fourth country

Legend:
- ENGLAND
- FRANCE
- ITALY
- JAPAN
- W GERMANY
2. A table, tdginfo, to control the visibility of chart icons in the Chart Roll Up Chart Picker dialog. In this table, you can change the value of any showInTool entry from true to false to remove that icon from the chart picker.

```javascript
var tdginfo = new Object();

        tdginfo.category = [
            {category:this.ibiMsgStr['crtbar'], //Bar Category
cartList:[
                {base:'bar',name:'bar', label:'Bar',chartProps:
                    'barProps',chartPropsExtra:'hbarSidebySideProps',sampleData:dpdef,
                    showInTool:true,sampleImg:null},
                {base:'bar',name:'bar2', label:'Stacked Bar',chartProps:
                    'barProps',chartPropsExtra:'hbarStackedProps',sampleData:dpdef,
                    showInTool:true,sampleImg:null},
                {base:'bar',name:'bar3', label:'Percent Bar',chartProps:
                    'barProps',chartPropsExtra:'hbarPercentProps',sampleData:dpdef,
                    showInTool:true,sampleImg:null}
            ],
            isCreated:false},
```
For example, to hide the Waterfall chart icon:

Before:

```javascript
```
3. All charts in the Chart Picker define a MAJOR property blob that is common to a family of charts. This is the chartProps entry in the tdgInfo Table. (For example, barProps defines properties for all bar and column charts.) The major blobs are:

a. **barProps.** All Bar and Column charts.
b. **pieProps.** All Pie and Donut charts.
c. **lineProps.** All Line charts.
d. **areaProps.** All Area charts.
e. **scatterProps.** All Scatter charts.
f. **bubbleProps.** All Bubble charts.
g. **otherProps.** All other charts, such as Heatmap.
Here is barProps blob. Try changing introAnimation:enabled property from true to false to disable the growing riser animation effect.

tdginfo.barProps = {
  riserBevel: 'bevel',
  blaProperties: {
    seriesLayout: 'sideBySide',
    orientation: 'vertical'
  },
  dataLabels: {
    visible: false
  },
  introAnimation: {
    enabled: true,
    duration: 1300
  },
  legend: {
    visible: true,
    position: 'bottom',
    markerSize: TDGDefaultMarkerSize,
    labels: {
      font: '8pt Sans-Serif',
      color: TDGDefaultLabelColor
    }
  },
  xaxisOrdinal: {
    majorGrid: {
      ticks: {
        lineStyle: {
          color: TDGDefaultTickColor
        }
      },
      labels: {color: TDGDefaultLabelColor}
    }
  }
}
yaxis: {
  baseLineStyle: {
    width: 1,
    color: TDGDefaultTickColor,
    dash: ''
  },
  majorGrid: {
    lineStyle: {
      color: TDGDefaultGridlineColor
    },
    ticks: {
      visible: false
    },
    aboveRisers: false
  },
  labels: {color: TDGDefaultLabelColor}
  
},
mouseOverIndicator: {
  enabled: true
},
series: [
  {
    series: 'all', marker:{shape: 'square'},
    bevel: 'bevel'
  }
],
ibiColorTable:
[TDGMarkerColor0, TDGMarkerColor1, TDGMarkerColor2, TDGMarkerColor3, TDGMarkerColor4, TDGMarkerColor5, TDGMarkerColor6, TDGMarkerColor7, TDGMarkerColor8, TDGMarkerColor9, TDGMarkerColor10, TDGMarkerColor11, TDGMarkerColor12, TDGMarkerColor13, TDGMarkerColor14, TDGMarkerColor15, TDGMarkerColor16, TDGMarkerColor17]
Here is barProps blob. Try changing introAnimation:enabled property from true to false to disable the growing riser animation effect.

tdginfo.barProps = {
    riserBevel: 'bevel',
    blaProperties:{
        seriesLayout: 'sideBySide',
        orientation: 'vertical'
    },
    dataLabels: {
        visible: false
    },
    introAnimation: {
        enabled: true,
        duration: 1300
    },
    legend: {
        visible: true,
        position: 'bottom',
        markerSize: TDGDefaultMarkerSize,
        labels: {
            font: '8pt Sans-Serif',
            color: TDGDefaultLabelColor
        }
    },
    xaxisOrdinal: {
        majorGrid: {
            ticks: {
                lineStyle: {
                    color: TDGDefaultTickColor
                }
            }
        },
        labels: {color: TDGDefaultLabelColor}
    },
    yaxis: {
        baseLineStyle: {
            width: 1,
            color: TDGDefaultTickColor,
            dash: ''
        }
    }
}
10. Creating Active Technologies Components With WebFOCUS Syntax

```javascript
majorGrid: {
  lineStyle: {
    color: TDGDefaultGridlineColor
  },
  ticks: {
    visible: false
  },
  aboveRisers: false
},
labels: {color: TDGDefaultLabelColor}
},
mouseOverIndicator: {
  enabled: true
},
series: [
  {
    series: 'all', marker: {shape: 'square'},
    bevel: 'bevel'
  }
],
ibiColorTable:
[TDGMarkerColor0, TDGMarkerColor1, TDGMarkerColor2, TDGMarkerColor3, TDGMarkerColor4, TDGMarkerColor5, TDGMarkerColor6, TDGMarkerColor7, TDGMarkerColor8, TDGMarkerColor9, TDGMarkerColor10, TDGMarkerColor11, TDGMarkerColor12, TDGMarkerColor13, TDGMarkerColor14, TDGMarkerColor15, TDGMarkerColor16, TDGMarkerColor17]
};
4. Furthermore, all charts in the chart picker can optionally define an extra blob of properties that applies only to a specific icon. For example, Donut charts have Major Property blob of chartProps: 'pieProps', but each Donut icon has a unique extra blob that defines different themes for the donut graph in the picker:

```javascript
chartPropsExtra: 'tddonutCylinderProps'
chartPropsExtra: 'tddonutDepthProps'
chartPropsExtra: 'tddonutBevelProps'

tdginfo.tddonutCylinderProps = {
  riserBevel: 'cylinder',
  riserShadow:{angle: 345, distance: 8, blur: .2},
  depth: 0,
  pieProperties:{
    holeSize: '40%',
    skew: 35
  }
};
```

![Donut (Cylinder)](image)

```javascript
tdginfo.tddonutDepthProps = {
  riserBevel: '',
  riserShadow:{angle: 345, distance: 8, blur: .2},
  depth: 25,
  pieProperties:{
    holeSize: '40%',
    skew: 35
  }
};
```

![Donut with Depth](image)
tdginfo.tddonutBevelProps = {
  riserBevel: 'bevel',
  riserShadow:{angle: 345, distance: 8, blur: .2},
  depth: 0,
  pieProperties:{
    holeSize: '40%',
    skew: 35
  }
};

Try changing the pieProperties:holeSize parameter from 40% to 15% to create a Donut with a very narrow hole:

pieProperties:{
  holeSize: '15%',
  skew: 35
}

Creating an Active Technologies Dashboard

This topic describes the WebFOCUS syntax used to:

- Position and size components on an active dashboard.
- Size a grid component with respect to its container on an active dashboard.
- Configure active form controls on an active dashboard created in Document Composer or InfoAssist.
Style text objects on an active dashboard created in Document Composer or InfoAssist.

Control the display of the Global Filter icon and dashboard bar on an active dashboard created in Document Composer or InfoAssist.

Positioning and Sizing Components on an Active Technologies Dashboard

An active dashboard for Adobe Flash Player or for PDF uses pixels as the unit of measurement by default, while tools such as Document Composer and InfoAssist use points as the unit of measurement.

Both Document Composer and InfoAssist provide a WebFOCUS setting so that the design-time and run-time positioning and sizing of components correspond to each other. The setting is ACTIVE_UNITS=PTS, which changes the unit of measurement to points. As a result, some components on an existing active dashboard for Adobe Flash Player or for PDF may appear to overlap at design time in Document Composer, while they appear correctly positioned and sized at run time.

In the Document Composer Text Editor, you can view the WebFOCUS source code for the setting. The syntax is

```
ACTIVE_UNITS={PTS|PX}
```

where:

**PTS**

Sets the active unit of measurement to points. In Document Composer and InfoAssist, points are used for the positioning and sizing of components on an active dashboard for Adobe Flash Player or for PDF. With this setting, the components on an active dashboard have the same position and size at run time as they have at design time (WYSIWYG).

**PX**

Sets the active unit of measurement to pixels. By default, pixels are used for the positioning and sizing of components on an active dashboard for Adobe Flash Player or for PDF. With this setting, the components on an active dashboard have a different position and size at run time as they have at design time. This is the default value if no other value is set. It is provided for backward compatibility.

The following is an example of the WebFOCUS code for an active dashboard for Adobe Flash Player, with the ACTIVE_UNITS setting shown in bold.

```
SECTION=section1, LAYOUT=ON, METADATA='0.5^0.5^0.5^0.5^4',
MERGE=OFF, ORIENTATION=PORTRAIT, PAGESIZE=Letter, ACTIVE_UNITS=PTS, $
```
Sizing a Grid Component With Respect to Its Container

You can use the following WebFOCUS StyleSheet setting to contain a grid component inside its container on an active dashboard. You must include this setting in the grid component (that is, in the TABLE FILE procedure for the report) inside an active dashboard that you create using COMPOUND syntax.

The WebFOCUS StyleSheet syntax is

\[ \text{ARREPORTSIZE} = \{ \text{FLOWING} | \text{DIMENSION} \} \]

where:

FLOWING

Specifies that the size of the grid component (the active report) will dynamically change as needed and will override the size settings for the grid component. This is the default value.

**Note:** If values for DIMENSION are set in the TABLE FILE procedure for the report, the output formats FLEX and APDF will respect the size set by these values.

DIMENSION

Specifies that the dimensions (height and width) set for the grid component in the active dashboard will be respected. The size of the grid component will not change dynamically, but the grid will be contained inside the container when used in a COMPOUND active dashboard procedure. If the report does not fit inside the container, scroll bars will be added automatically around the report.

Hiding a Report Object on an Active Technologies Dashboard

You may have the need to hide an active report object on an active dashboard, for example, when you want to display non-data related objects in the first tab of the dashboard and place report and chart objects in the subsequent tabs. You can hide the first report object using HIDDEN=ON syntax in your WebFOCUS code.

The data from the hidden report is still available for use in the global filter or other filter control.
Syntax: How to Hide a Report Object on an Active Technologies Dashboard

HIDDEN={ON|OFF}

where:

ON
Hides the active report object on the active dashboard.

OFF
Displays the active report object on the active dashboard. This is the default value.

Example: Hiding a Report Object on an Active Technologies Dashboard

The following sample COMPONENT declaration in the COMPOUND LAYOUT code hides the entire active report object, component R0, on the active dashboard. You can still use the data from the hidden report in the global filter or other filter control.

COMPONENT=R0, TYPE=REPORT, POSITION=(0 0), HIDDEN=ON,$

Configuring Active Technologies Form Controls With WebFOCUS Syntax

In Document Composer and InfoAssist, you can add one or more active form controls to an active dashboard in order to create complex filter relationships among report and chart components. An active form control is available for an active dashboard in HTML and for an active dashboard for Adobe Flash Player and for PDF.

The following are the types of active form controls that you can use to apply filters to an active dashboard:

- List box
- Drop-down list
- Text input field
- Check box
- Radio button

This topic describes the WebFOCUS code that supports the implementation of the preceding active form controls.
WebFOCUS Code

The syntax for OBJECT within a PAGELAYOUT grouping in a COMPOUND LAYOUT request is

\[
\text{OBJECT=\{LIST|COMBOBOX|TEXTINPUT|CHECKBOX|RADIOBUTTON\}, NAME='object_name', ARDATA\_REPORT='name\_of\_source\_report', ARDATA\_COLUMN='\{column\_name|@@COLUMNS|@@BYS|@@MEASURES\}', ARFILTER\_TARGET='\{target\_report\_name1,target\_report\_name2,...\}', ARFILTER\_CONDITION='\{EQ|NE|LT|LE|GT|GE\}', ARFILTER\_SHOWALL={ON|OFF}, ARFILTER\_PARENT='name\_of\_parent\_object', ARDATA\_FILTERONLY={ON|OFF}, ARFILTER\_MULTIPLE={ON|OFF}, ARFILTER\_ACTIVE={ONLOAD|"alpha_value"|'numeric_value'}, POSITION=(left top), DIMENSION=(width height), SIZE=font\_size, COLOR=font\_color, BACKCOLOR=background\_color, $}
\]

where:

- **OBJECT=\{LIST|COMBOBOX|TEXTINPUT|CHECKBOX|RADIOBUTTON\}**
  - Is the type of active form control. The available values are:
    - **LIST** adds a list box.
    - **COMBOBOX** adds a drop-down list.
    - **TEXTINPUT** adds a text input field. This field is case-sensitive. The value that is typed in the field at run time must match the exact case of the value that is stored in the database.
    - **CHECKBOX** adds a check box.
    - **RADIOBUTTON** adds a radio button.

- **NAME='object\_name'**
  - Is the name of the active form control.

- **ARDATA\_REPORT='name\_of\_source\_report'**
  - Is the name of the source report that contains the data that populates the active form control with selection values from which you choose at run time.
  - This property is required for the LIST, COMBOBOX, CHECKBOX, and RADIOBUTTON controls.
  - This property is optional for the TEXTINPUT control.

- **ARDATA\_COLUMN='\{column\_name|@@COLUMNS|@@BYS|@@MEASURES\}'**
  - Indicates how the selection values are populated. The following are the available options.
    - The **column\_name** is the name of the specific column in the source report that populates the data selection values in the LIST, COMBOBOX, CHECKBOX, and RADIOBUTTON controls.
For the TEXTINPUT control, this property is the column to which the filter condition is applied. There is no initial data value for the TEXTINPUT control at run time. It remains blank until the user supplies a value.

This property is required. The column must exist in both the source report and target report.

The active form controls do not support the use of ACROSS sort columns in active reports or charts. You cannot use ACROSS sort columns to populate the data selection values and apply filters.

- Specifying @@COLUMNS, @@BYS, or @@MEASURES enables you to use a check box control to display a list of column names from a source report. At run time, end users can choose the columns to show or hide in a target report or chart on an active dashboard.
  - @@COLUMNS displays a list of all the columns in the source report.
  - @@BYS displays a list of all the sort columns in the source report, specified using a BY command.
  - @@MEASURES displays a list of all the measure columns in the source report, specified using a PRINT or SUM command.

For more information on using the @@COLUMNS, @@BYS, and @@MEASURES options, see Using an Active Technologies Form Control to Show or Hide Columns in a Report or Chart on page 410.

ARFILTER_TARGET='target_report_name1,target_report_name2,...'

Is the name of the target report or target chart component that is filtered by the active form control. You can specify one or more target report or target chart components. To specify multiple target components, provide a list of report or chart component names, separating each name with a comma (,). This property is required.

ARFILTER_CONDITION='\{EQ|NE|LT|LE|GT|GE\}'

Is the filter condition that is used. The available values are:

- **EQ** is equal to. This is the default value.
- **NE** is not equal to.
- **LT** is less than.
- **LE** is less than or equal to.
- **GT** is greater than.
- **GE** is greater than or equal to.

**ARFILTER_SHOWALL={ON | OFF}**

Specifies whether or not to show the string value "[ALL]" in the list of data selection values for the active form control. The default value is ON, which displays the string value "[ALL]" in the list of data selection values. At run time, selecting this value from the control displays all the data in the report. Set this property to OFF to suppress the string value "[ALL]" in the active form control.

This property is optional for the LIST, COMBOBOX, CHECKBOX, and RADIOBUTTON controls. This property does not apply to the TEXTINPUT control. For the TEXTINPUT control, removing the value supplied in the text input field removes the filter and displays all the values in the target reports and charts.

**ARFILTER_PARENT='name_of_parent_object'**

Is the name of the parent active form control using the NAME property to create a nested (parent/child) filter relationship between active form controls.

This is a user-specified property. There is no default value.

**ARDATA_FILTERONLY={ON | OFF}**

Is a property that is used internally by Developer Studio.

The default value is ON for chained active form controls. The source report for a control can also be a target report for another control that applies a filter to the report. This property allows you to decide whether or not to filter the data in a control populated by a report that is filtered by another control. When this property is set to OFF, all the values for the column in the report are displayed as the data selection values for the control. When this property is set to ON, only the values after a filter has been applied are available as the data selection values.

**ARFILTER_MULTIPLE={ON | OFF}**

Is an optional property for the LIST and CHECKBOX controls. When this property is set to ON, you can select multiple values from a LIST or CHECKBOX control at run time. With a list box, hold down the Shift key to select multiple values in sequence, or hold down the Ctrl key to select multiple values that are not in the order listed at run time. With check boxes, you can simply check or uncheck multiple check boxes at run time.

The default value is OFF.
This property does not apply to the COMBOBOX, RADIOBUTTON, or TEXTINPUT control, because those controls allow only single-value selection at run time.

```
ARFILTER_ACTIVE={ONLOAD|"alpha_value"|"numeric_value"}
```

Is an optional property for an active form control. It sets the default filter value in an active form control and at run time automatically applies the filter to the data in the report and chart objects on an active dashboard.

- **ONLOAD** works as follows.

- In the COMPOUND LAYOUT code for an active form control, ARFILTER_ACTIVE=ONLOAD is not set, and ARFILTER_SHOWALL=OFF.

  When you are using InfoAssist, you can create a report for an active dashboard with an active form control. Deselect the Include All check box (ARFILTER_SHOWALL=OFF) in the Active Dashboard Properties dialog box.

  For example, ARFILTER_SHOWALL=OFF is included in the following code for a drop-down list (COMBOBOX) on an active dashboard. ARFILTER_ACTIVE=ONLOAD is not set.

```
OBJECT=COMBOBOX, NAME='combobox1', POSITION=(2.604 1.042),
  DIMENSION=(2.292 0.229), ARFILTER_NAME='combobox1',
  ARDATA_REPORT='report1', ARDATA_COLUMN='ST',
  ARFILTER_TARGET='report1', ARFILTER_SHOWALL=OFF, $
```
In the output, the drop-down list displays the default value CA (the first value in the list) for the State column. However, on the first execution, the data in the tabular report is not filtered by CA. Instead, the tabular report displays all the data, as shown in the following image.

![Image of dropdown list and tabular report]

**Note on default behavior:**

If ARFILTER_ACTIVE is not explicitly set by default, an active form control on a dashboard does not work as intended at initial run time. On the first execution, all data is returned to the report and chart objects on the dashboard, regardless of the value that is displayed in the active form control. In addition, the report data does not necessarily correspond to the value displayed in the active form control. On subsequent executions, the report data is filtered by the value selected in the active form control.

- In the COMPOUND LAYOUT code for an active form control, ARFILTER_ACTIVE=ONLOAD and ARFILTER_SHOWALL=OFF.

When ARFILTER_ACTIVE=ONLOAD is set, the report data at run time is filtered by the first selection value in the particular active form control that is set.
For example, ARFILTER_ACTIVE=ONLOAD and ARFILTER_SHOWALL=OFF are included in the following code for a drop-down list (COMBOBOX) on an active dashboard:

```
OBJECT=COMBOBOX, NAME='combobox1', POSITION=(2.604 1.042),
  DIMENSION=(2.292 0.229), ARFILTER_NAME='combobox1',
  ARDATA_REPORT='report1', ARDATA_COLUMN='ST',
  ARFILTER_TARGET='report1', ARFILTER_SHOWALL=OFF,
  ARFILTER_ACTIVE=ONLOAD, $
```

In the output, the drop-down list displays the default value CA (the first value in the list) for the State column. The data in the tabular report is filtered by CA, as shown in the following image.

In the COMPOUND LAYOUT code for an active form control, ARFILTER_ACTIVE=""alpha_value"". An alpha_value is the default filter value that you specify for display in an active form control for an alphabetic column. All data in the report and chart objects on the dashboard is automatically filtered at run time, based on the alpha_value.

For example, ARFILTER_ACTIVE="IL" and ARFILTER_SHOWALL=ON are included in the following code for a drop-down list (COMBOBOX) on an active dashboard:

```
OBJECT=COMBOBOX, NAME='combobox1', POSITION=(2.604 1.042),
  DIMENSION=(2.292 0.229), ARFILTER_NAME='combobox1',
  ARDATA_REPORT='report1', ARDATA_COLUMN='ST',
  ARFILTER_TARGET='report1', ARFILTER_SHOWALL=ON,
  ARFILTER_ACTIVE="IL", $
```
In the output, the drop-down list displays the default value IL for the State column. The data in the tabular report is filtered by IL, as shown in the following image.

You can specify more than one default value when ARFILTER_MULTIPLE is set to ON for a list control or check box control.

If you specify more than one alpha_value, use the syntax:

'"alpha_value1","alpha_value2",...'

In the COMPOUND LAYOUT code for an active form control, ARFILTER_ACTIVE='numeric_value'.

A numeric_value is the default filter value that you specify for display in an active form control for a numeric column. All data in the report and chart objects on the dashboard is automatically filtered at run time, based on the numeric_value.

You can specify more than one default value when ARFILTER_MULTIPLE is set to ON for a list control or check box control.

If you specify more than one numeric_value, use the syntax:

'numeric_value1,numeric_value2,...'

POSITION=(left top)

Is the position of the active form control on the active dashboard.

The value left indicates the position of the active form control from the left edge of the active dashboard, in the units of measurement set for the dashboard (for example, inches, centimeters, or points). You can set the units of measurement for a dashboard using the UNITS keyword in your WebFOCUS code or using a graphical tool, such as InfoAssist. For more information, see the applicable reporting language and reporting tools manuals.
- The value *top* indicates the position of the active form control from the top edge of the active dashboard, in the units of measurement set for the dashboard.

**DIMENSION=**(width height)

Is the size of the active form control on the active dashboard.

- The value *width* is the width of the active form control on the active dashboard, in the units of measurement set.

- The value *height* is the height of the active form control on the active dashboard, in the units of measurement set.

**SIZE=**font_size

Is the size of the font used to display the values in the active form control, for example, 12.

**COLOR=**font_color

Is the color of the font used to display the values in the active form control, for example, BLACK.

**BACKCOLOR=**background_color

Is the background color for the active form control. WHITE is the default value. A valid value is either a preset color name in single quotation marks, for example, 'ORANGE', or the RGB (red green blue) numeric values, for example, RGB(255 252 204), which is pale yellow.
Example: Adding a Sample Drop-Down List

The following image shows a partial active dashboard with a single tabular active report and a drop-down list (COMBOBOX). The drop-down list is positioned to the right of the active report. The drop-down list allows you to filter data in the tabular report on the value of the STATE column in the procedure. The data selection value All is provided in the drop-down list. When selected, All displays all the data in the report.

![Century Electronics: Detailed Revenue Report](image)

The WebFOCUS code for the drop-down list is as follows.

```
OBJECT=COMBOBOX, NAME='combobox1',
POSITION=(6.010 2.167), DIMENSION=(1.667 0.208),
ARDATA_REPORT='report1', ARDATA_COLUMN='STATE',
ARFILTER_TARGET='report1', ARFILTER_CONDITION='EQ',
ARFILTER_SHOWALL=ON, $
```

Reference: Usage Notes for Active Technologies Form Controls

The following applies when you are designing an active form control:

Active Technologies do not support the FONT attribute in the syntax for an OBJECT. You cannot change the type of font used to display the values in an active form control.
Using an Active Technologies Form Control to Show or Hide Columns in a Report or Chart

You can use a check box control (OBJECT=CHECKBOX) to display a list of column names from a source report specified in the ARDATA_REPORT property. At run time, end users can check the name of each column that they want to show in a report or chart on an active dashboard, and uncheck the name of each column that they want to hide. All reports and charts that are specified in the ARFILTER_TARGET property and that contain columns from the list are updated with the choice of columns as end users check and uncheck names.

The following is a list of column names in a sample check box control.

When you run an active dashboard for the first time, a NOPRINT or hidden column in a report or chart component on the dashboard is not displayed in the report or chart output. If that report or chart component is the source report for a check box control, the NOPRINT or hidden column is unchecked (deselected) in the corresponding check box by default.

A check box for all other columns in the source report is initially checked (selected) by default.

The list of column names in a check box control uses the field name or title specified in the Master File for the data source. If the source report uses an AS phrase to specify the column title, that title is used in the list.

This feature applies to an active dashboard with the AHTML output format. It does not support the use of ACROSS column names.
**Syntax:** How to Use an Active Technologies Form Control to Show or Hide Columns in a Report or Chart

The syntax is

```plaintext
COMPOUND LAYOUT PCHOLD FORMAT AHTML
.
.
.
OBJECT=CHECKBOX, . . .
ARDATA_REPORT='name_of_source_report',
ARDATA_COLUMN='@@COLUMNS|@@BYS|@@MEASURES',
ARFILTER_TARGET='target_report_name1,target_report_name2,...',
.
.
.
where:

COMPOUND LAYOUT PCHOLD FORMAT AHTML

Indicates the supported output format for an active dashboard. The use of a check box control to show or hide columns in a report is available for a compound layout report with the AHTML output format.

OBJECT=CHECKBOX

Adds a check box control to an active dashboard.

ARDATA_REPORT='name_of_source_report'

Is the name of the source report that contains the column names that populate the check box control on an active dashboard.

This property is required for the check box control as described in this feature.

ARDATA_COLUMN='@@COLUMNS|@@BYS|@@MEASURES'

Indicates which set of column names is included in the check box control on an active dashboard. The available options are:

- @@COLUMNS displays a list of all the columns in the source report.
- @@BYS displays a list of all the sort columns in the source report, specified using a BY command.
- @@MEASURES displays a list of all the measure columns in the source report, specified using a PRINT or SUM command.

This property is required for the check box control as described in this feature.
ARFILTER_TARGET='target_report_name1,target_report_name2,...'

Is the name of the target report or chart that is updated by the choice of column names made in the check box control. You can update multiple reports and charts with the end user choices. To update multiple components, provide a list of component names, separating each name with a comma (,).

This property is required for the check box control as described in this feature.

For more information on OBJECT syntax, see WebFOCUS Code on page 401.

**Example:** Using a Check Box Control to Show or Hide Columns in a Report and Chart

The following sample code creates three check box controls, each with a set of column names used to show or hide columns in a report and chart on an active dashboard.

All three types of check box controls are shown for the purpose of illustration. In a real application, you would typically include the first set only (all columns in the source report), the second set only (all BY columns in the source report), the third set only (all measure columns in the source report), or any combination of these sets.

```webfocus
COMPOUND LAYOUT PCHOLD FORMAT AHTML
UNITS=IN, SHOW_GLOBALFILTER=OFF, $
SECTION=section1, LAYOUT=ON, ORIENTATION=PORTRAIT, PAGESIZE=Letter, $
PAGELAYOUT=1, NAME='Page layout 1', text='Page layout 1', $
COMPONENT='report1', TEXT='report1', POSITION=(0.5 3),
    DIMENSION=(12 2), $
COMPONENT='graph1', TEXT='graph1', POSITION=(0.5 7.5),
    DIMENSION=(12 6), $
OBJECT=CHECKBOX, NAME='object1',COLOR=RGB(53 78 109), FONT='ARIAL',
    ARFILTER_TARGET='report1,graph1', ARDATA_COLUMN='@@COLUMNS',
    ARDATA_REPORT='report1', POSITION=(.5 .5), DIMENSION=(2.5 2), $
OBJECT=CHECKBOX, NAME='object2',COLOR=RGB(53 78 109), FONT='ARIAL',
    ARFILTER_TARGET='report1,graph1', ARDATA_COLUMN='@@BYS',
    ARDATA_REPORT='report1', POSITION=(4.5 .5), DIMENSION=(2 2), $
OBJECT=CHECKBOX, NAME='object3',COLOR=RGB(53 78 109), FONT='ARIAL',
    ARFILTER_TARGET='report1,graph1', ARDATA_COLUMN='@@MEASURES',
    ARDATA_REPORT='report1', POSITION=(7.5 .5), DIMENSION=(2 2), $
END
```
SET COMPONENT='report1'
TABLE FILE CENTURYSALES
SUM LINEPRICE AS 'Revenue'
PROFIT NOPRINT
COSTOFGOODSSOLD
QUANTITY NOPRINT
BY REGION
BY STATE
BY CITY
BY PRODUCTTYPE
BY PRODUCTCATEGORY
WHERE CENTURYSALES.ORDERS.YEAR EQ '2006';
WHERE CENTURYSALES.STORESEG.COUNTRY EQ 'United States';
WHERE CENTURYSALES.STORESEG.REGION EQ 'Middle Atlantic' OR 'Pacific' OR 'South Atlantic' OR 'New England' OR 'East North Central' OR 'West South Central';
WHERE CENTURYSALES.PRODSEG.PRODUCTCATEGORY EQ 'Audio Systems' OR 'DVD' OR 'DVD Camcorders' OR 'Digital Cameras' OR 'Organizers' OR 'TV';
WHERE RECORDLIMIT EQ 200;
ON TABLE SET ARGRAPHENGINE JSCHART
ON TABLE PCHOLD FORMAT AHTML
ON TABLE SET STYLE *
INCLUDE = ENInformationBuilders_Medium1, $
TYPE=REPORT, LINES-PER-PAGE=10, $
TYPE=REPORT, COLUMN=N4, HIDE=ON, $
TYPE=REPORT, COLUMN=N5, HIDE=ON, $
ENDSTYLE
END

SET COMPONENT='graph1'
GRAPH FILE CENTURYSALES
SUM LINEPRICE AS 'Revenue'
PROFIT NOPRINT
COSTOFGOODSSOLD
QUANTITY NOPRINT
BY REGION NOPRINT
BY STATE NOPRINT
BY CITY
BY PRODUCTTYPE
BY PRODUCTCATEGORY
WHERE CENTURYSALES.ORDERS.YEAR EQ '2006';
WHERE CENTURYSALES.STORESEG.COUNTRY EQ 'United States';
WHERE CENTURYSALES.STORESEG REGION EQ 'Middle Atlantic' OR
  'Pacific' OR 'South Atlantic' OR 'New England' OR
  'East North Central' OR 'West South Central';
WHERE CENTURYSALES.PRODSEG.PRODUCTCATEGORY EQ 'Audio Systems'
  OR 'DVD' OR 'DVD Camcorders' OR 'Digital Cameras' OR
  'Organizers' OR 'TV';
WHERE RECORDLIMIT EQ 200;
ON GRAPH SET ARGRAPHENGINE JSCHART
ON GRAPH PCHOLD FORMAT AHTML
ON GRAPH SET LOOKGRAPH VLINE
ON TABLE SET STYLE *
INCLUDE = ENInformationBuilders_Medium1, $
TYPE=REPORT, LINES-PER-PAGE=20, $
TYPE=REPORT, COLUMN=N4, HIDE=ON, $
TYPE=REPORT, COLUMN=N5, HIDE=ON, $
ENDSTYLE
END
COMPOUND END
When you run the compound layout report, the following output is displayed.

On the sample active dashboard:

- The first set of column names is created by the following property:

  \texttt{ARDATA\_COLUMN='@COLUMNS'}

  The name of the source report that contains the column names that populate the check box control is report1:

  \texttt{ARDATA\_REPORT='report1'}
There is a check box for every column in the source report named report1.

- The second set of column names is created by the following property:
  
  \texttt{ARDATA\_COLUMN='@\texttt{BY}S'}
  
  The name of the source report that contains the column names that populate the check box control is report1.

- The third set of column names is created by the following property:
  
  \texttt{ARDATA\_COLUMN='@\texttt{MEASURES}'}
  
  The name of the source report that contains the column names that populate the check box control is report1.

Notice that a check box in the first and third set of column names displays the column title Revenue, as specified by the AS phrase in the source report (SUM LINEPRICE AS 'Revenue').

The check boxes for Product Type, Product Category, PROFIT, and QUANTITY are initially deselected because these columns are hidden in the source report.

\textbf{Note:} Product Type and Product Category are hidden using the HIDE=ON WebFOCUS StyleSheet setting to preserve the column titles specified in the Master File, whereas PROFIT and QUANTITY are NOPRINT columns in the source report, resulting in the display of the actual field names.

You can now make a choice of columns to display in the target report and chart specified in the following property:

\texttt{ARFILTER\_TARGET='report1,\texttt{graph1}'}

For example, to hide the column City in the target report and chart, deselect the check box for City in the full set of column names. The column City is removed from the report and chart on the active dashboard.

To show the column Product Type in the target report and chart, select the check box for Product Type in the full set of column names. The column Product Type is now shown in the report and chart on the active dashboard.
The updated report and chart reflecting your choices are shown in the following image.

Creating a Heading Area With Controls Using the Dashboard Bar

You can create a heading area for an active dashboard by adding a page layout for the dashboard bar (PAGELAYOUT=DASHBOARDBAR). On the page for the dashboard bar, you can insert Active Technologies form controls, reports, and charts that are always displayed above the dashboard tabs.
This feature is available for a compound layout report with the AHTML, FLEX, or APDF output format.

You can create a maximum of one page layout for the dashboard bar. Though you can place multiple components on the full page, we recommend that you avoid large reports and charts. If the page for the dashboard bar contains large reports and charts, it may fill up the entire visible area of the browser or monitor, and the heading area for the dashboard may appear bigger than the dashboard itself. This effect reduces the usability of the dashboard.

**Design Requirements**

To create a heading area for an active dashboard, you must have one report component inside the page layout for the dashboard bar. You can optionally hide this report component. For more information on this feature, see *Hiding a Report Object on an Active Technologies Dashboard* on page 399.

By default, Document Composer generates the syntax for an empty report when you create an active dashboard.

**Syntax:**

**How to Create a Heading Area With Controls Using the Dashboard Bar**

The following syntax shows the PAGELAYOUT definition for DASHBOARDBAR in a section in a compound layout report. It includes a required report component, which in turn can be followed by other components and objects.

For details on the syntax used in Document Composer to create a compound layout report, see the *Creating Reports With WebFOCUS Language* manual.

Use the following syntax

```plaintext
COMPOUND LAYOUT PCHOLD FORMAT output_format
SECTION=section_name, LAYOUT=ON, MERGE={AUTO|OFF},
   ARGRAFENGINE=chart_engine...,$
PAGELAYOUT=DASHBOARDBAR, $
COMPONENT=component_name, TYPE=REPORT, POSITION=(x y),
   HIDDEN={ON|OFF}...,$
  .
  .
  .
END
COMPUND END
```

where:

*output_format*

Is AHTML, FLEX, or APDF.
section_name

Is a unique identifier for the section. It can be up to 16 characters long.

LAYOUT=ON

Specifies that the section uses a complex layout. LAYOUT=ON is the only available option at this time.

MERGE={AUTO|OFF}

Enables you to choose one of two options supported by the Active Technologies output formats. The default value is OFF. For more information on the use of this attribute, see Adding Active Technologies Form Controls and Establishing Relationships on page 289 and Controlling the Display of the Global Filter Icon and Dashboard Bar on page 425.

chart_engine

Is any chart engine, for example, JSCHART.

PAGELAYOUT=DASHBOARDBAR

Must be DASHBOARDBAR.

component_name

Is a unique identifier for the report component that is required inside the page layout. It is the name of a report that appears later in the request. The component name can be up to 16 characters long.

TYPE=REPORT

Is the type of component. REPORT is the only supported value.

x y

Is the (x y) coordinate on the page where the upper-left corner of the component is placed. All coordinates are in current UNITS (the default value is inches), and (0 0) is the upper-left corner of the physical page.

HIDDEN={ON|OFF}

Either hides the active report component on the active dashboard (ON), or displays the active report component on the active dashboard (OFF). The default value is OFF.

Note: In the preceding syntax, ellipses (...) indicate that you can include other valid attributes.
Example: Creating a Heading Area With Controls Using the Dashboard Bar

The following code creates a heading area for an active dashboard.

For details on the syntax used to create the dashboard with a drop-down list (COMBOBOX), see Configuring Active Technologies Form Controls With WebFOCUS Syntax on page 400.

```
COMPOUND LAYOUT PCHOLD FORMAT AHTML
SECTION=S1, LAYOUT=ON, MERGE=OFF, ARGRAPHENGINE=JSCHART,
    ARSTYLESET=bipsilver, ARICONSET=WHITE,$
PAGELAYOUT=DASHBOARDBAR,$
COMPONENT=R0, TYPE=REPORT, POSITION=(3 1), DIMENSION=(3 2),$ 
COMPONENT=G0, TYPE=REPORT, POSITION=(7 1), DIMENSION=(4 3),$ 
OBJECT=STRING, NAME=Text_1, POSITION=(0.2 0.2), TEXT='Regional Sales',
    FONT='ARIAL', SIZE=20, COLOR=RGB(0 72 132), WRAP=OFF,
    DIMENSION=(4.270833 0.71875),$ 
OBJECT=COMBOBOX, NAME='object6', COLOR='blue', SIZE=12, FONT=ARIAL,
    ARFILTER_SHOWALL=OFF, ARFILTER_TARGET='R1,R2,G0',
    ARDATA_COLUMN=REGION, ARDATA_REPORT=R0, ARFILTER_CONDITION=EQ,
    POSITION=(0.2 1), DIMENSION=(2 .5), ARFILTER_ACTIVE=ONLOAD,$
PAGELAYOUT=1, TEXT=layout 1, BACKCOLOR=RGB(0 72 132),$ 
COMPONENT=R1, TYPE=REPORT, POSITION=(.5 .5), DIMENSION=(4.2 4),$ 
PAGELAYOUT=2, TEXT=layout 2, BACKCOLOR='aqua',$ 
COMPONENT=R2, TYPE=REPORT, POSITION=(.5 .5), DIMENSION=(6.3 4),$ 
END

SET COMPONENT=R0
TABLE FILE GGSALES
SUM DOLLARS
BY REGION
ON TABLE SET STYLE *
INCLUDE = ENInformationBuilders_Medium1,$
ENDSTYLE
END
```
When you run the compound layout report, the output that is generated is shown in the images that follow.

The heading area for the active dashboard is at the top of the window. A tabular active report on the dashboard is in the lower half of the window, on a navy background.
The heading area for the active dashboard contains an active chart, a tabular active report, and a drop-down list for filtering the data on the dashboard.

The filter from the drop-down list is applied to the components associated with this active form control, namely, the active chart at the top and the tabular active report in the lower half of the window.
The heading area for the active dashboard remains above all the tabs on the dashboard. As shown in the following image, the filter from the drop-down list in the heading area is also applied to the tabular active report on the second tab of the dashboard to broaden the scope of data analysis.

### Formatting a Text String

Several formatting attributes for a text string (OBJECT=STRING) are supported when you create an active dashboard in Document Composer or InfoAssist. The attributes include:

- **FONT**
- **SIZE**
- **COLOR**

For details on the syntax used for formatting a text string with the preceding attributes, see the information on creating a compound layout report in the *Creating Reports With WebFOCUS Language* manual.
The following apply:

- Currently, Active Technologies do not support the STYLE attribute in the syntax for OBJECT=STRING. This attribute applies styles such as bold or italic.
- The HTML <font.../font> tag with the face, size, and color attributes is no longer supported in the HTML5 specification. Consequently, it is not supported by all the Active Technologies output formats.

**Example:** Supported and Unsupported Syntax

Active Technologies support the following sample syntax:

```
OBJECT=STRING, NAME='text1', TEXT='Regional Sales',
POSITION=(1.115 0.83), MARKUP=ON, WRAP=ON, DIMENSION=(1.688 2.385),
METADATA='Z-INDEX: 1; POSITION: absolute; WIDTH: 1.688in;
WORD-WRAP: break-word; HEIGHT: 2.385in; TOP: 0.83in; LEFT: 1.115in',
FONT='Trebuchet MS', SIZE=20, COLOR='red', $
```

Active Technologies no longer support this sample syntax:

```
OBJECT=STRING, NAME='text1', TEXT='<font face="TREBUCHET MS" size=20
color="red">Regional Sales</font>', POSITION=(0.917 1.063), MARKUP=ON,
DIMENSION=(2.302 0.250), METADATA='', $
```

**Example:** Formatting a Text String

The following text strings are formatted with different attribute values to illustrate the options that are available.

- To display the string Formatting Text, Sample 1, in black, using 10 point Trebuchet MS:
  ```tj
  TEXT='Formatting Text, Sample 1',...FONT='Trebuchet MS',
  COLOR=RGB(0 0 0), SIZE=10,...
  ```

- To display the string Formatting Text, Sample 2, in blue, using 10 point Times New Roman:
  ```tj
  TEXT='Formatting Text, Sample 2',...FONT='Times New Roman',
  COLOR='blue', SIZE=10,...
  ```

- To display the string Formatting Text, Sample 3, in green, using 12 point Trebuchet MS:
  ```tj
  TEXT='Formatting Text, Sample 3',...FONT='Trebuchet MS',
  COLOR='green', SIZE=12,...
  ```

- To display the string Formatting Text, Sample 4, in fuchsia, using 12 point Times New Roman:
  ```tj
  TEXT='Formatting Text, Sample 4',...FONT='Times New Roman',
  COLOR='fuchsia', SIZE=12,...
  ```
To display the string Formatting Text, Sample 5, in black, using 14 point Trebuchet MS:

\[
\text{TEXT='Formatting Text, Sample 5', \ldots \text{FONT='Trebuchet MS'},} \\
\text{\quad \text{COLOR=RGB(0 0 0), \quad \text{SIZE}=14, \ldots}}
\]

The following image shows the preceding text strings in the upper left corner of a sample active dashboard.

Controlling the Display of the Global Filter Icon and Dashboard Bar

The following WebFOCUS syntax controls the display of the Global Filter icon and dashboard bar on an active dashboard.

\[
\text{SHOW_GLOBALFILTER\{ON | OFF\}}
\]

where:

\text{ON}

Displays the Global Filter icon and dashboard bar on an active dashboard. This is the default value.

\text{OFF}

Suppresses the display of the Global Filter icon and dashboard bar on an active dashboard when both of the following apply:

\text{You have not set a coordinated field (MERGE=AUTO) option.}
The dashboard does not have multiple PAGELAYOUTs.

By default, Document Composer and InfoAssist add the following syntax for the output formats AHTML, FLEX, and APDF.

```
SECTION=section1, LAYOUT=ON, SHOW_GLOBALFILTER=OFF,...$
```

Setting the MERGE=AUTO option or having multiple PAGELAYOUTs overwrites the preceding SHOW_GLOBALFILTER=OFF setting and displays the Global Filter icon and dashboard bar.
Active Technologies support many types of active charts. This topic describes the syntax that you can use to create the available types of active charts.

**In this appendix:**
- Chart Type Syntax Introduction
- FLEX Default Flash Chart Type
- AHTML Default JavaScript Chart Type and FLEX and APDF Flash Chart Type for Disconnected Mode
- FLEX Flash Chart Type and AHTML JavaScript Chart Type
- Chart Types Mapped to Default Chart Types
- Additional Active Technologies Chart Types Available With CHART-TYPE Syntax

---

**Chart Type Syntax Introduction**

Depending on the type that you are creating, you can:

- Use REPORT-VIEW syntax to specify that an active report be displayed as an active chart in a TABLE FILE procedure. You can then use CHART-TYPE syntax to specify one of the chart types supported by Active Technologies, including bar, pie, line, and scatter. Additional chart types are available when the output format is FLEX, including doughnut, area, bubble, radar, funnel, and pyramid.

- Use LOOKGRAPH syntax in a GRAPH FILE procedure to generate an available active chart for the AHTML, FLEX, or APDF output format. If there is no corresponding chart type available in Active Technologies, the default bar chart is rendered.

This topic describes the CHART-TYPE syntax and the LOOKGRAPH syntax that you can use to create the available types of active charts.

For the ARGRAPHENGINE and FORMAT settings that generate an active chart, see `ARGRAPHENGINE and FORMAT Settings for Active Technologies Charts` on page 428. For more information on the ARGRAPHENGINE syntax and settings for the chart engine, see `Switching the Chart Engine` on page 354.
### Reference: ARGRAPHENGINE and FORMAT Settings for Active Technologies Charts

<table>
<thead>
<tr>
<th>Active Technologies Chart</th>
<th>Generated By</th>
<th>Applies To</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebFOCUS HTML5 chart engine</td>
<td>ARGRLHENGINE=JSCHART</td>
<td>FORMAT AHTML FORMAT FLEX FORMAT APDF</td>
</tr>
<tr>
<td>Flash chart engine for connected mode</td>
<td>ARGRLHENGINE=FUSION</td>
<td>FORMAT AHTML FORMAT FLEX</td>
</tr>
<tr>
<td>JavaScript fallback chart engine</td>
<td>ARGRLHENGINE=JSFUSION</td>
<td>FORMAT AHTML</td>
</tr>
<tr>
<td>Active Technologies legacy chart engine</td>
<td>ARGRLHENGINE=DEFAULT</td>
<td>FORMAT AHTML FORMAT FLEX FORMAT APDF</td>
</tr>
<tr>
<td>Adobe Flex legacy chart engine</td>
<td>ARGRLHENGINE=FLEX</td>
<td>FORMAT FLEX FORMAT APDF</td>
</tr>
</tbody>
</table>

### FLEX Default Flash Chart Type

#### Bar Chart Types

<table>
<thead>
<tr>
<th>Type</th>
<th>LOOKGRAPH Syntax</th>
<th>CHART-TYPE Syntax</th>
</tr>
</thead>
</table>
| BAR  | **ON GRAPH SET** | TYPE=REPORT,REPORT-
|      | **LOOKGRAPH BAR**| VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,|$ |
|      | **ON GRAPH SET 3D OFF** | TYPE=REPORT,REPORT-
|      |                      | VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,|$ |
| HBAR | **ON GRAPH SET** | TYPE=REPORT,REPORT-
|      | **LOOKGRAPH HBAR**| VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,|$ |
|      | **ON GRAPH SET 3D OFF** | TYPE=REPORT,REPORT-
<p>|      |                      | VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,|$ |</p>
<table>
<thead>
<tr>
<th>Type</th>
<th>LOOKGRAPH Syntax</th>
<th>CHART-TYPE Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>3DBAR</td>
<td>ON GRAPH SET LOOKGRAPH 3DBAR</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET 3D OFF</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,$</td>
</tr>
<tr>
<td>NONE</td>
<td>ON GRAPH SET LOOKGRAPH NONE</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET 3D OFF</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,$</td>
</tr>
<tr>
<td>CUSTOM</td>
<td>ON GRAPH SET LOOKGRAPH CUSTOM</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET 3D OFF</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,$</td>
</tr>
<tr>
<td>HBAR2AX</td>
<td>ON GRAPH SET LOOKGRAPH HBAR2AX</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET 3D OFF</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,$</td>
</tr>
<tr>
<td>HBAR2AXS</td>
<td>ON GRAPH SET LOOKGRAPH HBAR2AXS</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET 3D OFF</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART,CHART-TYPE=MSBar2D,$</td>
</tr>
<tr>
<td>Type</td>
<td>LOOKGRAPH Syntax</td>
<td>CHART-TYPE Syntax</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>STACK</td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>LOOKGRAPH STACK</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>3D OFF</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar2D,$</td>
</tr>
<tr>
<td>HBRSTK1</td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>LOOKGRAPH HBRSTK1</td>
<td>VIEW=FUSIONCHART,CHART-</td>
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<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>3D OFF</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
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<td></td>
<td>TYPE=StackedBar2D,$</td>
</tr>
<tr>
<td>3DSTACK</td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>LOOKGRAPH 3DSTACK</td>
<td>VIEW=FUSIONCHART,CHART-</td>
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<td>TYPE=StackedBar3D,$</td>
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<tr>
<td></td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>3D OFF</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar2D,$</td>
</tr>
<tr>
<td>HBRSTKPC</td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>LOOKGRAPH HBRSTKPC</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>3D OFF</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar2D,$</td>
</tr>
<tr>
<td>HBRSTK2</td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>LOOKGRAPH HBRSTK2</td>
<td>VIEW=FUSIONCHART,CHART-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TYPE=StackedBar3D,$</td>
</tr>
<tr>
<td></td>
<td>ON GRAPH SET</td>
<td>TYPE=REPORT,REPORT-</td>
</tr>
<tr>
<td></td>
<td>3D OFF</td>
<td>VIEW=FUSIONCHART,CHART-</td>
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**Pie Chart Types**

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## Doughnut Chart Types

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## FLEX Default Flash Chart Type

### Doughnut Chart Types

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**Area Chart Types**
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### Scatter Chart Types

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**Bubble Chart Types**
## Radar Chart Types

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#### Funnel Chart Types

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#### Pyramid Chart Types

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#### AHTML Default JavaScript Chart Type and FLEX and APDF Flash Chart Type for Disconnected Mode

**Bar Chart Types**

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## Column Chart Types

**CHART-TYPE Syntax:** \texttt{TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=BAR, $}

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### Pie Chart Types

CHART-TYPE Syntax: `TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=PIE,`

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**CHART-TYPE Syntax:** TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=LINE,$

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### Area Chart Types

**CHART-TYPE Syntax:** `TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=LINE,$`

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### Scatter Chart Types

CHART-TYPE Syntax: `TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=SCATTER, $`

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### Bubble Chart Types

**CHART-TYPE Syntax:** `TYPE=REPORT,REPORT-VIEW=CHART,CHART-TYPE=SCATTER,$`

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## Radar Chart Types

CHART-TYPE Syntax: \texttt{TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=BAR,}$

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## Funnel Chart Types

CHART-TYPE Syntax: \texttt{TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=BAR,}$

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## Pyramid Chart Types

CHART-TYPE Syntax: \texttt{TYPE=REPORT, REPORT-VIEW=CHART, CHART-TYPE=BAR,}$

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## FLEX Flash Chart Type and AHTML JavaScript Chart Type

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### FLEX Flash Chart Type and AHTML JavaScript Chart Type

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**Column Chart Types**

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               | TYPE=StackedColumn3D,$      |
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               |                       | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn2D,$      |
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               |                       | LOOKGRAPH VBRSTKPC       | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn3D,$      |
|        | ON GRAPH SET 3D OFF | TYPE=REPORT,REPORT-
               |                       | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn2D,$      |
| VBRSTK2 | ON GRAPH SET     | TYPE=REPORT,REPORT-
               |                       | LOOKGRAPH VBRSTK2        | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn3D,$      |
|        | ON GRAPH SET 3D OFF | TYPE=REPORT,REPORT-
               |                       | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn2D,$      |
| VBRSTK2S| ON GRAPH SET     | TYPE=REPORT,REPORT-
               |                       | LOOKGRAPH VBRSTK2S       | VIEW=FUSIONCHART,CHART-
               | TYPE=StackedColumn3D,$      |
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               | TYPE=StackedColumn2D,$      |

**Pie Chart Types**

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## A. Chart Type Syntax

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### Doughnut Chart Types

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# FLEX Flash Chart Type and AHTML JavaScript Chart Type

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**Area Chart Types**
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<td>CHART-TYPE Syntax</td>
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**Funnel Chart Types**

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<th>CHART-TYPE Syntax</th>
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</table>

**Pyramid Chart Types**
### Chart Types Mapped to Default Chart Types

The following table lists the chart types that are mapped to the default bar type or to another type when there is no corresponding chart type available in Active Technologies. LOOKGRAPH syntax is used.

<table>
<thead>
<tr>
<th>Type</th>
<th>LOOKGRAPH Syntax</th>
<th>CHART-TYPE Syntax</th>
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<tr>
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</tr>
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### Chart Types Mapped to Default Chart Types

<table>
<thead>
<tr>
<th>Type</th>
<th>LOOKGRAPH Syntax</th>
<th>FLEX Default Flash Chart Mapped To</th>
<th>AHTML Default JavaScript Chart and FLEX and APDF Flash Chart for Disconnected Mode Mapped To</th>
<th>FLEX Flash Chart and AHTML JavaScript Chart Mapped To</th>
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</thead>
<tbody>
<tr>
<td>3DCONE</td>
<td>ON GRAPH SET LOOKGRAPH 3DCONE</td>
<td>BAR</td>
<td>BAR</td>
<td>MSColumn3D</td>
</tr>
<tr>
<td>3DCUBE</td>
<td>ON GRAPH SET LOOKGRAPH 3DCUBE</td>
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<td>MSColumn3D</td>
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<tr>
<td>3DCYLDER</td>
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<td>FLEX Flash Chart and AHTML JavaScript Chart Mapped To</td>
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<tr>
<td>3DGLOBE</td>
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<td>MSArea</td>
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<td>AHTML Default JavaScript Chart and FLEX and APDF Flash Chart for Disconnected Mode Mapped To</td>
<td>FLEX Flash Chart and AHTML JavaScript Chart Mapped To</td>
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<td>MSBar3D</td>
<td>BAR</td>
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<td>MSBar2D</td>
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<td>MSColumn2D</td>
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<td>Scatter</td>
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<td>MSBar2D</td>
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<td>MSColumn2D</td>
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<td>BAR</td>
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<td>MSColumn2D</td>
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<td>AHTML Default JavaScript Chart and FLEX Chart for Disconnected Mode Mapped To</td>
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<td>BAR</td>
<td>BAR</td>
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<td>STOCKHOD</td>
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<td>BAR</td>
<td>BAR</td>
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<td>STOCKHOV</td>
<td>ON GRAPH SET LOOKGRAPH STOCKHOV</td>
<td>BAR</td>
<td>BAR</td>
<td>MSColumn2D</td>
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</table>
### Additional Active Technologies Chart Types Available With CHART-TYPE Syntax

The following table lists additional active chart types that you can generate when running a TABLE FILE procedure, using CHART-TYPE syntax.

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<thead>
<tr>
<th>Chart Name</th>
<th>CHART-TYPE Syntax</th>
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<tbody>
<tr>
<td>Column 3D</td>
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### Chart Type Syntax

<table>
<thead>
<tr>
<th>Chart Name</th>
<th>CHART-TYPE Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scroll Multi-Series Column 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=ScrollColumn2D,$</td>
</tr>
<tr>
<td><img src="image" alt="Scroll Multi-Series Column 2D" /></td>
<td></td>
</tr>
<tr>
<td>Scroll Stacked Column 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=ScrollStackedColumn2D,$</td>
</tr>
<tr>
<td><img src="image" alt="Scroll Stacked Column 2D" /></td>
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</tr>
<tr>
<td>Logarithmic Multi-Series Column 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=LogMSCColumn2D,$</td>
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<tr>
<td><img src="image" alt="Logarithmic Multi-Series Column 2D" /></td>
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</tr>
</tbody>
</table>
### Additional Active Technologies Chart Types Available With CHART-TYPE Syntax

<table>
<thead>
<tr>
<th>Chart Name</th>
<th>CHART-TYPE Syntax</th>
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</thead>
<tbody>
<tr>
<td>Inverse Y-Axis Multi-Series Column 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=InverseMSColumn2D,$</td>
</tr>
<tr>
<td><img src="#" alt="Inverse Y-Axis Multi-Series Column 2D" /></td>
<td></td>
</tr>
<tr>
<td>Bar 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=Bar2D,$</td>
</tr>
<tr>
<td><img src="#" alt="Bar 2D" /></td>
<td></td>
</tr>
<tr>
<td>Line 2D</td>
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<tr>
<td><img src="#" alt="Line 2D" /></td>
<td></td>
</tr>
</tbody>
</table>
### Chart Type Syntax

<table>
<thead>
<tr>
<th>Chart Name</th>
<th>CHART-TYPE Syntax</th>
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</thead>
<tbody>
<tr>
<td>Scroll Multi-Series Line 2D</td>
<td>TYPE=REPORT, REPORT-VIEW=FUSIONCHART, CHART-TYPE=ScrollLine2D, $</td>
</tr>
<tr>
<td>Logarithmic Multi-Series Line</td>
<td>TYPE=REPORT, REPORT-VIEW=FUSIONCHART, CHART-TYPE=LogMSLine, $</td>
</tr>
<tr>
<td>Inverse Y-Axis Multi-Series Line 2D</td>
<td>TYPE=REPORT, REPORT-VIEW=FUSIONCHART, CHART-TYPE=InverseMSLine, $</td>
</tr>
<tr>
<td>Chart Name</td>
<td>CHART-TYPE Syntax</td>
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<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Spline</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=Spline,$</td>
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<tr>
<td></td>
<td><img src="chart.png" alt="Spline Chart" /></td>
</tr>
<tr>
<td>Multi-Series Spline</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=MSSpline,$</td>
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<tr>
<td></td>
<td><img src="chart.png" alt="Multi-Series Spline Chart" /></td>
</tr>
<tr>
<td>Area 2D</td>
<td>TYPE=REPORT,REPORT-VIEW=FUSIONCHART, CHART-TYPE=Area2D,$</td>
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<td></td>
<td><img src="chart.png" alt="Area 2D Chart" /></td>
</tr>
<tr>
<td>Chart Name</td>
<td>CHART-TYPE Syntax</td>
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<tr>
<td>Scroll Multi-Series Area 2D</td>
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<tr>
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<td><img src="image" alt="Spline Area" /></td>
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### Additional Active Technologies Chart Types Available With CHART-TYPE Syntax

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<th>Chart Name</th>
<th>CHART-TYPE Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Series Spline Area</td>
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</tr>
</tbody>
</table>
Creating a Custom Icon Set for an Active Technologies Report or Dashboard

This topic describes the Active Technologies icons supplied with the product, and how to customize them.

In this appendix:

- Overview
- Understanding the Icon Section in the Configuration File
- Customizing the Combination of Icons in a Set
- Using Your Own Icon Image Files
- Icon Set Details

Overview

Starting with WebFOCUS Reporting Server Release 7.7 Version 04, eight sets of icons for Active Technologies are supplied with the product. Information on each icon set is provided in Icon Set Details on page 484.

You can specify the supplied set of icons that you would like to apply to an active report, chart, or dashboard by adding ARICONSET syntax to the WebFOCUS procedure for the report, chart, or dashboard. For details on ARICONSET syntax, see How to Customize Icons for an Active Technologies Report or Dashboard on page 347.

In addition to specifying one of the supplied icon sets using ARICONSET, you can:

- Create your own set of icons by customizing the combination of supplied icons.
- Create new icons and add your own custom set of icons to your application folder in the \ibi\apps\ folder tree.

For either option, you need to define the custom icon set in the icon set section of a file that you create, named irpcfgu.js.

The high-level procedure is as follows:

- Create the irpcfgu.js file in your application folder.
Copy the entire contents of the icon set section from the supplied irpcfg.js file to the irpcfgu.js file. By default, the irpcfg.js file is found in the \ibi\srv77\home\etc\ folder.

The icon set section has eight predefined icon sets, each within its own subsection. Create a new icon set by copying one of the predefined icon sets. The icon set that you copy is the one that you are going to customize.

Rename the icon set that you are going to customize. For example, rename the "default" icon set that you copied to "myicons".

Customize the icon set as desired.

Once you have completed the custom icon set in the irpcfgu.js file, you can call this icon set from your procedure. For example, use the following syntax in the WebFOCUS StyleSheet section

```
TYPE=REPORT, ARICONSET=custom_icon_set_name,$
```

where:

- `custom_icon_set_name` is the name that you gave your custom icon set in the icon set section of the irpcfgu.js file.

The custom icon set will apply to all procedures that specify the name of that set using the preceding ARICONSET syntax in the WebFOCUS StyleSheet, regardless of the output format of the active report, chart, or dashboard. The same custom icon set that you specify in the syntax is reflected in AHTML, FLEX, and APDF output formats.

For details on WebFOCUS StyleSheets, see the Creating Reports With WebFOCUS Language manual.

### Understanding the Icon Section in the Configuration File

In the "iconSets" section of the original irpcfg.js file, the "default" subsection defines the default set of icons used in an active report, chart, or dashboard when no icon set is specified in the WebFOCUS StyleSheet.
The icon set names defined in the original irpcfg.js file correspond to the eight icon set names described in the syntax for ARICONSET in *How to Customize Icons for an Active Technologies Report or Dashboard* on page 347.

```javascript
"iconSets": {
  "default": {
    
  },
  "white": {
    
  },
  "white2": {
    
  },
  "reverse": {
    
  },
  "reverse2": {
    
  },
  "blue": {
    
  },
  "blue2": {
    
  },
  "original": {
    
  }
}
```
Each icon set contains 45 icon property names. Each property name is followed by the icon image file name.

```
"default":{
  "sumIcon":"irdsum.png",
  "pieIcon":"irdpie.png",
  "barIcon":"irdbar.png",
  "lineIcon":"irdline.png",
  "scatterIcon":"irdscatter.png",
  ...
},
```

Each icon property name and icon image file name is described in the icon set tables in *Icon Set Details* on page 484.

**Customizing the Combination of Icons in a Set**

You can easily customize the combination of icons in a set.

**Procedure**:  How to Customize the Combination of Icons in a Set

1. To start, find the "iconSets" section in the original irpcfg.js file.
2. Copy the entire contents of the "iconSets" section into the irpcfgu.js file.

**Important**: Copy the entire "iconSets" section to keep the contents consistent. If you copy only part of the "iconSets" section, other procedures and WebFOCUS StyleSheets that refer to one of the predefined icon sets may produce reports, charts, or dashboards with missing icons.

3. The example in this topic uses the "default" set of icons as the base set. You can copy and use another icon set as the starting point for your customization. For more information on each icon set, refer to the icon set tables in *Icon Set Details* on page 484.
4. Copy the entire "default" subsection.

**Important**: Copy the entire "default" subsection to keep the contents consistent. If you copy only part of the "default" subsection, or part of an individual icon property name or image file name, some icons in the set may not be defined or fully defined. Those icons will not appear in the active report, chart, or dashboard output. A partial icon definition can also cause a JavaScript error at run time.

5. Instead of "default", name the subsection "myicons".
6. Find the icon that you want to use in the `\ibi\srv77\home\etc\` folder.
   You can also refer to the icon images in the tables in *Icon Set Details* on page 484.

7. Find the icon image file name in the "myicons" subsection of the `irpcfgu.js` file.

8. Change the icon image file name in the "myicons" subsection to the name of the image file in the `\ibi\srv77\home\etc\` folder.

**Example:** Changing the Default Bar Chart Icon

This example replaces the default bar chart icon used in the chart tool bar with the original red bar chart icon.

The original red bar chart icon, which is 24 x 24 pixels in size, is supplied with the product. The image file is named `irbar24.jpg`. It resides in the `\ibi\srv77\home\etc\` folder.

In the `irpcfgu.js` file, change the image file name of the "barIcon" property in the "myicons" subsection as follows.

```javascript
{
  "iconSets": {
    "myicons": {
      "sumIcon": "irdsum.png",
      "pieIcon": "irdpie.png",
      "barIcon": "irbar24.jpg",
      ...
    }
  }
}
```
When you run an active chart, the red bar chart icon appears in the chart tool bar, as shown in the following example.

Using Your Own Icon Image Files

Instead of using the supplied icon image files, you can create your own custom icon image files, and substitute them for some or all of the default icons used in the Active Technologies product.

When creating custom icon image files, keep in mind the following requirements:

- PNG, GIF, and JPG image formats are supported.
- To embed an image file in an active report, chart, or dashboard, base-64 encoding is used. Because base-64 encoding triples the actual image size, each image file is limited to 10 kilobytes (KB) in size. Internet Explorer 8 only allows base-64-encoded images of up to 32 KB.
If the image does not need to be transparent, JPG is the preferred format, as it compresses a file to the smallest size.

An image may not appear as clear in an earlier browser, such as Internet Explorer 6 or 7. To allow for the earlier browsers that do not support base-64 encoding, the image is embedded using a custom Active Technologies compression engine instead of base-64 encoding.

**Procedure: How to Use Your Own Icon Image Files**

1. Copy your custom icon image files into your application folder.
2. Find the "iconSets" section in the original irpcfg.js file.
3. Copy the entire contents of the "iconSets" section into the irpcfgu.js file.

**Important:** Copy the entire "iconSets" section to keep the contents consistent. If you copy only part of the "iconSets" section, other procedures and WebFOCUS StyleSheets that refer to one of the predefined icon sets may produce reports, charts, or dashboards with missing icons.

4. The example in this topic uses the "default" set of icons as the base set. You can copy and use another icon set as the starting point for your customization. For more information on each icon set, refer to the icon set tables in Icon Set Details on page 484.

5. Copy the entire "default" subsection.

**Important:** Copy the entire "default" subsection to keep the contents consistent. If you copy only part of the "default" subsection, or part of an individual icon property name or image file name, some icons in the set may not be defined or fully defined. Those icons will not appear in the active report, chart, or dashboard output. A partial icon definition can also cause a JavaScript error at run time.

6. Instead of "default", name the subsection "myicons".
7. Replace the icon image file names currently in the "myicons" subsection with the names of the custom icon image files that you supplied in step 1.
Example: Using a Custom Icon Image File

This example replaces the existing window resize icon, named irdrszwin.png, with a custom red version of the icon. Currently, the custom red version of the icon is not included in the product. For this example, a file named irrszwinred.png was created and placed in the application folder in the \ibi\apps\ folder tree.

Locate the "resizeIcon" property name in the custom "myicons" subsection of the irpcfgu.js file, and rename the icon image file as follows.

```javascript
{
   "iconSets":{
     ...
     "myicons":{
       ...
       "resizeIcon":"irrszwinred.png",
       ...
     },
     ...
   },
   ...
}
```
When you run an active chart, the red window resize icon appears in the lower-right corner of the window, as shown in the following example.

Continue replacing the icon image file names to complete your own custom icon set.
Icon Set Details

This topic contains a table for each of the eight icon sets supplied with the product. For each icon set, the table lists the 45 property names. For each property name, the table indicates the product feature that uses the associated icon and provides the icon image file name. In the last column, the table depicts the icon.

In the depiction of the icons, white icons are supplemented with a blue background color for viewing purposes.

The tables are:

- **Icon Set Name: Default** on page 485
- **Icon Set Name: White** on page 488
- **Icon Set Name: White2** on page 492
- **Icon Set Name: Reverse** on page 496
- **Icon Set Name: Reverse2** on page 499
- **Icon Set Name: Blue** on page 503
- **Icon Set Name: Blue2** on page 506
- **Icon Set Name: Original** on page 509
## Icon Set Name: Default

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid, Chart, Advanced Tools</td>
<td>sumIcon</td>
<td>irdsum.png</td>
<td><img src="https://example.com/irdsum.png" alt="sumIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>pielIcon</td>
<td>irdpie.png</td>
<td><img src="https://example.com/irdpie.png" alt="pielIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>barIcon</td>
<td>irdbar.png</td>
<td><img src="https://example.com/irdbar.png" alt="barIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>linelIcon</td>
<td>irdline.png</td>
<td><img src="https://example.com/irdline.png" alt="linelIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>scatterIcon</td>
<td>irdscattr.png</td>
<td><img src="https://example.com/irdscattr.png" alt="scatterIcon" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>lockIcon</td>
<td>irdlock.png</td>
<td><img src="https://example.com/irdlock.png" alt="lockIcon" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>unlockIcon</td>
<td>irdunlock.png</td>
<td><img src="https://example.com/irdunlock.png" alt="unlockIcon" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageBottomIcon</td>
<td>irdpbot.png</td>
<td><img src="https://example.com/irdpbot.png" alt="pageBottomIcon" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageTopIcon</td>
<td>irdptop.png</td>
<td><img src="https://example.com/irdptop.png" alt="pageTopIcon" /></td>
</tr>
<tr>
<td>Filter, Comment, Advanced Tools</td>
<td>xIcon</td>
<td>irddelete.png</td>
<td><img src="https://example.com/irddelete.png" alt="xIcon" /></td>
</tr>
<tr>
<td>Window</td>
<td>minButtonIcon</td>
<td>irdmin.png</td>
<td><img src="https://example.com/irdmin.png" alt="minButtonIcon" /></td>
</tr>
<tr>
<td>Window</td>
<td>closeButtonIcon</td>
<td>irdclose.png</td>
<td><img src="https://example.com/irdclose.png" alt="closeButtonIcon" /></td>
</tr>
<tr>
<td>Window</td>
<td>maxButtonIcon</td>
<td>irdmaxwin.png</td>
<td><img src="https://example.com/irdmaxwin.png" alt="maxButtonIcon" /></td>
</tr>
<tr>
<td>Chart, Rollup Tool Bars</td>
<td>rollupIcon</td>
<td>irdroll.png</td>
<td><img src="https://example.com/irdroll.png" alt="rollupIcon" /></td>
</tr>
<tr>
<td>Filter</td>
<td>dropArrowIcon</td>
<td>irddrparw.png</td>
<td><img src="https://example.com/irddrparw.png" alt="dropArrowIcon" /></td>
</tr>
</tbody>
</table>
## Icon Set Name: Default

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Grid</td>
<td>downArrowIcon</td>
<td><img src="irdpoparw.png" alt="" /></td>
</tr>
<tr>
<td>17</td>
<td>Window</td>
<td>resizelIcon</td>
<td><img src="irdrszwin.png" alt="" /></td>
</tr>
<tr>
<td>18</td>
<td>Pivot</td>
<td>moveToByIcon</td>
<td><img src="irdpvimg1.png" alt="" /></td>
</tr>
<tr>
<td>19</td>
<td>Pivot</td>
<td>moveToAcrossIcon</td>
<td><img src="irdpvimg2.png" alt="" /></td>
</tr>
<tr>
<td>20</td>
<td>Pivot</td>
<td>moveDownIcon</td>
<td><img src="irdpvimg3.png" alt="" /></td>
</tr>
<tr>
<td>21</td>
<td>Pivot</td>
<td>moveUpIcon</td>
<td><img src="irdpvimg4.png" alt="" /></td>
</tr>
<tr>
<td>22</td>
<td>Pivot</td>
<td>moveRightIcon</td>
<td><img src="irdpvimg5.png" alt="" /></td>
</tr>
<tr>
<td>23</td>
<td>Pivot</td>
<td>moveLeftIcon</td>
<td><img src="irdpvimg6.png" alt="" /></td>
</tr>
<tr>
<td>24</td>
<td>Pivot</td>
<td>deleteIcon</td>
<td><img src="irdpvimg7.png" alt="" /></td>
</tr>
<tr>
<td>25</td>
<td>Pivot</td>
<td>moveToByGrayIcon</td>
<td><img src="irdgvimg1.png" alt="" /></td>
</tr>
<tr>
<td>26</td>
<td>Pivot</td>
<td>moveToAcrossGrayIcon</td>
<td><img src="irdgvimg2.png" alt="" /></td>
</tr>
<tr>
<td>27</td>
<td>Pivot</td>
<td>moveDownGrayIcon</td>
<td><img src="irdgvimg3.png" alt="" /></td>
</tr>
<tr>
<td>28</td>
<td>Pivot</td>
<td>moveUpGrayIcon</td>
<td><img src="irdgvimg4.png" alt="" /></td>
</tr>
<tr>
<td>29</td>
<td>Pivot</td>
<td>moveRightGrayIcon</td>
<td><img src="irdgvimg5.png" alt="" /></td>
</tr>
</tbody>
</table>
## Icon Set Name: Default

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Pivot</td>
<td>moveLeftGrayIcon</td>
<td>irdgvimg6.png</td>
<td></td>
</tr>
<tr>
<td>31 Pivot</td>
<td>deleteGrayIcon</td>
<td>irdgvimg7.png</td>
<td></td>
</tr>
<tr>
<td>32 Report, Dashboard</td>
<td>hourglassIcon</td>
<td>irdhrglss.png</td>
<td></td>
</tr>
<tr>
<td>33 Chart, Rollup, Pivot Tool Bars</td>
<td>menuIcon</td>
<td>irdcpop.png</td>
<td></td>
</tr>
<tr>
<td>34 Grid</td>
<td>addFilterIcon</td>
<td>irbcftita.png</td>
<td></td>
</tr>
<tr>
<td>35 Grid Tool</td>
<td>sortDIcon</td>
<td>irdscd.png</td>
<td></td>
</tr>
<tr>
<td>36 Grid Tool</td>
<td>sortAIcon</td>
<td>irdsca.png</td>
<td></td>
</tr>
<tr>
<td>37 Grid Tool</td>
<td>showColumnIcon</td>
<td>irdp scl.png</td>
<td></td>
</tr>
<tr>
<td>38 Grid Tool</td>
<td>hideColumnIcon</td>
<td>irdp hcl.png</td>
<td></td>
</tr>
<tr>
<td>39 Grid Tool</td>
<td>checkIcon</td>
<td>irdp chk.png</td>
<td></td>
</tr>
<tr>
<td>40 Dashboard Bar</td>
<td>globalFilterIcon</td>
<td>irdfltg.png</td>
<td></td>
</tr>
<tr>
<td>41 Mobile</td>
<td>goFullScreenIcon</td>
<td>irdfull1.png</td>
<td></td>
</tr>
<tr>
<td>42 Mobile</td>
<td>leaveFullScreenIcon</td>
<td>irdfull2.png</td>
<td></td>
</tr>
<tr>
<td>43 Chart Tool Bar</td>
<td>advancedChartIcon</td>
<td>irdadchart.png</td>
<td></td>
</tr>
<tr>
<td>44 Chart Tool Bar</td>
<td>restoreChartIcon</td>
<td>irdinitchart.png</td>
<td></td>
</tr>
<tr>
<td>45 Loading Animation</td>
<td>loadingImg</td>
<td>irloading.gif</td>
<td></td>
</tr>
</tbody>
</table>
## Icon Set Details

### Icon Set Name: White

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid, Chart, Advanced Tools</td>
<td>sumlcon</td>
<td>irwsum.png</td>
<td><img src="image" alt="Σ" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>pielcon</td>
<td>irwpie.png</td>
<td><img src="image" alt="Pie Chart" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>barlcon</td>
<td>irwbar.png</td>
<td><img src="image" alt="Bar Chart" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>linelcon</td>
<td>irwline.png</td>
<td><img src="image" alt="Line Chart" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>scatterlcon</td>
<td>irwscattr.png</td>
<td><img src="image" alt="Scatter Chart" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>locklcon</td>
<td>irwlock.png</td>
<td><img src="image" alt="Lock" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>unlocklcon</td>
<td>irwunlock.png</td>
<td><img src="image" alt="Unlock" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageBottomlcon</td>
<td>irwpbot.png</td>
<td><img src="image" alt="Page Bottom" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageToplcon</td>
<td>irwptop.png</td>
<td><img src="image" alt="Page Top" /></td>
</tr>
<tr>
<td>Filter, Comment, Advanced Tools</td>
<td>xicon</td>
<td>irwdelete.png</td>
<td><img src="image" alt="Delete" /></td>
</tr>
<tr>
<td>Window</td>
<td>minButtonlcon</td>
<td>irwmin.png</td>
<td><img src="image" alt="Minimize" /></td>
</tr>
</tbody>
</table>
## Icon Set Name: White

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Window</td>
<td>closeButtonIcon</td>
<td>irwclose.png</td>
<td><img src="irwclose.png" alt="Close Button Icon" /></td>
</tr>
<tr>
<td>13 Window</td>
<td>maxButtonIcon</td>
<td>irwmaxwin.png</td>
<td><img src="irwmaxwin.png" alt="Max Button Icon" /></td>
</tr>
<tr>
<td>14 Chart, Rollup Tool Bars</td>
<td>rollupIcon</td>
<td>irwroll.png</td>
<td><img src="irwroll.png" alt="Rollup Icon" /></td>
</tr>
<tr>
<td>15 Filter</td>
<td>dropArrowIcon</td>
<td>irwdrparw.png</td>
<td><img src="irwdrparw.png" alt="Drop Arrow Icon" /></td>
</tr>
<tr>
<td>16 Grid</td>
<td>downArrowIcon</td>
<td>irwpoparw.png</td>
<td><img src="irwpoparw.png" alt="Down Arrow Icon" /></td>
</tr>
<tr>
<td>17 Window</td>
<td>resizeIcon</td>
<td>irwrszwin.png</td>
<td><img src="irwrszwin.png" alt="Resize Icon" /></td>
</tr>
<tr>
<td>18 Pivot</td>
<td>moveToBylcon</td>
<td>irwpvim1.png</td>
<td><img src="irwpvim1.png" alt="Move To By Icon" /></td>
</tr>
<tr>
<td>19 Pivot</td>
<td>moveToAcrosslcon</td>
<td>irwpvim2.png</td>
<td><img src="irwpvim2.png" alt="Move To Across Icon" /></td>
</tr>
<tr>
<td>20 Pivot</td>
<td>moveDownlcon</td>
<td>irwpvim3.png</td>
<td><img src="irwpvim3.png" alt="Move Down Icon" /></td>
</tr>
<tr>
<td>21 Pivot</td>
<td>moveUplcon</td>
<td>irwpvim4.png</td>
<td><img src="irwpvim4.png" alt="Move Up Icon" /></td>
</tr>
<tr>
<td>22 Pivot</td>
<td>moveRightlcon</td>
<td>irwpvim5.png</td>
<td><img src="irwpvim5.png" alt="Move Right Icon" /></td>
</tr>
<tr>
<td>Used In</td>
<td>Property Name</td>
<td>Image File Name</td>
<td>Image</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>---------</td>
</tr>
<tr>
<td>23 Pivot</td>
<td>moveLeftIcon</td>
<td>irwpvimg6.png</td>
<td><img src="irwpvimg6.png" alt="Icon" /></td>
</tr>
<tr>
<td>24 Pivot</td>
<td>deleteIcon</td>
<td>irwpvimg7.png</td>
<td><img src="irwpvimg7.png" alt="Icon" /></td>
</tr>
<tr>
<td>25 Pivot</td>
<td>moveToByGrayIcon</td>
<td>irwgvimg1.png</td>
<td><img src="irwgvimg1.png" alt="Icon" /></td>
</tr>
<tr>
<td>26 Pivot</td>
<td>moveToAcrossGrayIcon</td>
<td>irwgvimg2.png</td>
<td><img src="irwgvimg2.png" alt="Icon" /></td>
</tr>
<tr>
<td>27 Pivot</td>
<td>moveDownGrayIcon</td>
<td>irwgvimg3.png</td>
<td><img src="irwgvimg3.png" alt="Icon" /></td>
</tr>
<tr>
<td>28 Pivot</td>
<td>moveUpGrayIcon</td>
<td>irwgvimg4.png</td>
<td><img src="irwgvimg4.png" alt="Icon" /></td>
</tr>
<tr>
<td>29 Pivot</td>
<td>moveRightGrayIcon</td>
<td>irwgvimg5.png</td>
<td><img src="irwgvimg5.png" alt="Icon" /></td>
</tr>
<tr>
<td>30 Pivot</td>
<td>moveLeftGrayIcon</td>
<td>irwgvimg6.png</td>
<td><img src="irwgvimg6.png" alt="Icon" /></td>
</tr>
<tr>
<td>31 Pivot</td>
<td>deleteGrayIcon</td>
<td>irwgvimg7.png</td>
<td><img src="irwgvimg7.png" alt="Icon" /></td>
</tr>
<tr>
<td>32 Report, Dashboard</td>
<td>hourglassIcon</td>
<td>irwhrglss.png</td>
<td><img src="irwhrglss.png" alt="Icon" /></td>
</tr>
<tr>
<td>33 Chart, Rollup, Pivot Tool Bars</td>
<td>menuIcon</td>
<td>irwcpop.png</td>
<td><img src="irwcpop.png" alt="Icon" /></td>
</tr>
<tr>
<td>34 Grid</td>
<td>addFilterIcon</td>
<td>irwcftfa.png</td>
<td><img src="irwcftfa.png" alt="Icon" /></td>
</tr>
<tr>
<td>35 Grid Tool</td>
<td>sortDIcon</td>
<td>irwscd.png</td>
<td><img src="irwscd.png" alt="Icon" /></td>
</tr>
<tr>
<td>36 Grid Tool</td>
<td>sortAIcon</td>
<td>irwsca.png</td>
<td><img src="irwsca.png" alt="Icon" /></td>
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<td>showColumnIcon</td>
<td>irwpscl.png</td>
<td></td>
</tr>
<tr>
<td>38   Grid Tool</td>
<td>hideColumnIcon</td>
<td>irwhcl.png</td>
<td></td>
</tr>
<tr>
<td>39   Grid Tool</td>
<td>checkIcon</td>
<td>irwpchk.png</td>
<td></td>
</tr>
<tr>
<td>40   Dashboard Bar</td>
<td>globalFilterIcon</td>
<td>irwftlg.png</td>
<td></td>
</tr>
<tr>
<td>41   Mobile</td>
<td>goFullscreenIcon</td>
<td>irwfull1.png</td>
<td></td>
</tr>
<tr>
<td>42   Mobile</td>
<td>leaveFullscreenIcon</td>
<td>irwfull2.png</td>
<td></td>
</tr>
<tr>
<td>43   Chart Tool Bar</td>
<td>advancedChartIcon</td>
<td>irwadchart.png</td>
<td></td>
</tr>
<tr>
<td>44   Chart Tool Bar</td>
<td>restoreChartIcon</td>
<td>irwinitchart.png</td>
<td></td>
</tr>
<tr>
<td>45   Loading Animation</td>
<td>loadingImg</td>
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## Icon Set Name: White 2

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<td>sumIcon</td>
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<tr>
<td>Chart Tool Bar</td>
<td>pieIcon</td>
<td>irwpie.png</td>
<td><img src="image" alt="Pie Icon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>barIcon</td>
<td>irwbar.png</td>
<td><img src="image" alt="Bar Icon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>lineIcon</td>
<td>irwline.png</td>
<td><img src="image" alt="Line Icon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>scatterIcon</td>
<td>irwscatter.png</td>
<td><img src="image" alt="Scatter Icon" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>lockIcon</td>
<td>irwlock.png</td>
<td><img src="image" alt="Lock Icon" /></td>
</tr>
<tr>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>unlockIcon</td>
<td>irwunlock.png</td>
<td><img src="image" alt="Unlock Icon" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageBottomIcon</td>
<td>irwpbot.png</td>
<td><img src="image" alt="Page Bottom Icon" /></td>
</tr>
<tr>
<td>Grid Pagination Bar</td>
<td>pageTopIcon</td>
<td>irwptop.png</td>
<td><img src="image" alt="Page Top Icon" /></td>
</tr>
<tr>
<td>Filter, Comment, Advanced Tools</td>
<td>xIcon</td>
<td>irwdelete.png</td>
<td><img src="image" alt="Delete Icon" /></td>
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<tr>
<td>Window</td>
<td>minButtonIcon</td>
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### Icon Set Name: White2

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<tr>
<td>13 Window</td>
<td>maxButtonIcon</td>
<td>irwmaxwin.png</td>
<td><img src="irwmaxwin.png" alt="□" /></td>
</tr>
<tr>
<td>14 Chart, Rollup Tool Bars</td>
<td>rollupIcon</td>
<td>irwroll.png</td>
<td><img src="irwroll.png" alt="▌" /></td>
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<tr>
<td>15 Filter</td>
<td>dropArrowIcon</td>
<td>irwdparw.png</td>
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</tr>
<tr>
<td>16 Grid</td>
<td>downArrowIcon</td>
<td>irwpoparw.png</td>
<td><img src="irwpoparw.png" alt="▼" /></td>
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<tr>
<td>17 Window</td>
<td>resizeIcon</td>
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<td><img src="irbrszwin.png" alt="▌" /></td>
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<td>18 Pivot</td>
<td>moveToByIcon</td>
<td>irwpvimg1.png</td>
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<tr>
<td>21 Pivot</td>
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<tr>
<td>22 Pivot</td>
<td>moveRightIcon</td>
<td>irwpvimg5.png</td>
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</tr>
<tr>
<td>23 Pivot</td>
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<td>irwpvimg6.png</td>
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<tr>
<td>Used In</td>
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<tr>
<td>24 Pivot</td>
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<td>moveToByGrayIcon</td>
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<td>irwgvimg3.png</td>
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<td>sortDIcon</td>
<td>irwscd.png</td>
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## Icon Set Name: White2

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<td>irwpchk.png</td>
<td><img src="https://via.placeholder.com/70" alt="Image" /></td>
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<td>40 Dashboard Bar</td>
<td>globalFilterIcon</td>
<td>irwftg.png</td>
<td><img src="https://via.placeholder.com/70" alt="Image" /></td>
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<td>41 Mobile</td>
<td>goFullscreenIcon</td>
<td>irwfull1.png</td>
<td><img src="https://via.placeholder.com/70" alt="Image" /></td>
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<td>leaveFullscreenIcon</td>
<td>irwfull2.png</td>
<td><img src="https://via.placeholder.com/70" alt="Image" /></td>
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<td>restoreChartIcon</td>
<td>irwinitchart.png</td>
<td><img src="https://via.placeholder.com/70" alt="Image" /></td>
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<td>irloading.gif</td>
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## Icon Set Details

### Icon Set Name: Reverse

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<tbody>
<tr>
<td>Grid, Chart, Advanced Tools</td>
<td>sumIcon</td>
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<tr>
<td>Chart Tool Bar</td>
<td>pieIcon</td>
<td>irrpie.png</td>
<td><img src="pie" alt="นักศึกษา" /></td>
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<tr>
<td>Chart Tool Bar</td>
<td>barIcon</td>
<td>irrbar.png</td>
<td><img src="bar" alt="" /></td>
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<tr>
<td>Chart Tool Bar</td>
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<tr>
<td>Grid Pagination Bar</td>
<td>pageTopIcon</td>
<td>irrptop.png</td>
<td><img src="page" alt="page" /></td>
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<tr>
<td>Filter, Comment, Advanced Tools</td>
<td>xIcon</td>
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<td>minButtonIcon</td>
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### Icon Set Name: Reverse

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<td>moveLeftIcon</td>
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<td>irrgvimg1.png</td>
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### Icon Set Details

**Icon Set Name: Reverse**

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<tr>
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<td>moveUpGrayIcon</td>
<td>irrgvimg4.png</td>
<td>![Up Arrow]</td>
</tr>
<tr>
<td>29 Pivot</td>
<td>moveRightGrayIcon</td>
<td>irrgvimg5.png</td>
<td>![Right Arrow]</td>
</tr>
<tr>
<td>30 Pivot</td>
<td>moveLeftGrayIcon</td>
<td>irrgvimg6.png</td>
<td>![Left Arrow]</td>
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<tr>
<td>31 Pivot</td>
<td>deleteGrayIcon</td>
<td>irrgvimg7.png</td>
<td>![X]</td>
</tr>
<tr>
<td>32 Report, Dashboard</td>
<td>hourglassIcon</td>
<td>irrhrglss.png</td>
<td>![Hourglass]</td>
</tr>
<tr>
<td>33 Chart, Rollup, Pivot Tool Bars</td>
<td>menuIcon</td>
<td>irrcpop.png</td>
<td>![Menu Icon]</td>
</tr>
<tr>
<td>34 Grid</td>
<td>addFilterIcon</td>
<td>irwcftta.png</td>
<td>![Add Filter Icon]</td>
</tr>
<tr>
<td>35 Grid Tool</td>
<td>sortDIcon</td>
<td>irrsd.png</td>
<td>![Sort D icon]</td>
</tr>
<tr>
<td>36 Grid Tool</td>
<td>sortAIcon</td>
<td>irrsca.png</td>
<td>![Sort A icon]</td>
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<tr>
<td>37 Grid Tool</td>
<td>showColumnIcon</td>
<td>irrscl.png</td>
<td>![Show Column Icon]</td>
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<td>38 Grid Tool</td>
<td>hideColumnIcon</td>
<td>irrhcl.png</td>
<td>![Hide Column Icon]</td>
</tr>
<tr>
<td>39 Grid Tool</td>
<td>checkIcon</td>
<td>irrpchk.png</td>
<td>![Check Icon]</td>
</tr>
<tr>
<td>40 Dashboard Bar</td>
<td>globalFilterIcon</td>
<td>irrfiltg.png</td>
<td>![Global Filter Icon]</td>
</tr>
<tr>
<td>41 Mobile</td>
<td>goFullScreenIcon</td>
<td>irrfull1.png</td>
<td>![Go Fullscreen Icon]</td>
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## Icon Set Name: Reverse

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<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
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<tbody>
<tr>
<td>42 Mobile</td>
<td>leaveFullscreenIcon</td>
<td>irrfull2.png</td>
<td>![Image]</td>
</tr>
<tr>
<td>43 Chart Tool Bar</td>
<td>advancedChartIcon</td>
<td>irradchart.png</td>
<td>![Image]</td>
</tr>
<tr>
<td>44 Chart Tool Bar</td>
<td>restoreChartIcon</td>
<td>irrinitchart.png</td>
<td>![Image]</td>
</tr>
<tr>
<td>45 Loading Animation</td>
<td>loadingImg</td>
<td>irloading.gif</td>
<td>![Image]</td>
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## Icon Set Name: Reverse2

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<th>Image File Name</th>
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<td>2 Chart Tool Bar</td>
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<td>![Image]</td>
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<tr>
<td>3 Chart Tool Bar</td>
<td>barlcon</td>
<td>irrbar.png</td>
<td>![Image]</td>
</tr>
<tr>
<td>4 Chart Tool Bar</td>
<td>linelcon</td>
<td>irrline.png</td>
<td>![Image]</td>
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<tr>
<td>5 Chart Tool Bar</td>
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<td>![Image]</td>
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<tr>
<td>6 Chart, Rollup, Pivot Tool Bars</td>
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<td>irrolock.png</td>
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## Icon Set Details

### Icon Set Name: Reverse2

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<td>irrunlock.png</td>
<td><img src="irrunlock.png" alt="Unlock Icon" /></td>
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<tr>
<td>8 Grid Pagination Bar</td>
<td>pageBottomIcon</td>
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<td><img src="irrpbot.png" alt="Page Bottom Icon" /></td>
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## Icon Set Name: Reverse2

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<td>22 Pivot</td>
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<td>irrpvimg5.png</td>
<td>→</td>
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<td>23 Pivot</td>
<td>moveLeftIcon</td>
<td>irrpvimg6.png</td>
<td>←</td>
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<tr>
<td>24 Pivot</td>
<td>deleteIcon</td>
<td>irrpvimg7.png</td>
<td>✗</td>
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<tr>
<td>25 Pivot</td>
<td>moveToByGrayIcon</td>
<td>irrgvim1.png</td>
<td>↵</td>
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<td>moveToAcrossGrayIcon</td>
<td>irrgvim2.png</td>
<td>↵</td>
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<td>↓</td>
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<td>irrgvim4.png</td>
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<td>29 Pivot</td>
<td>moveRightGrayIcon</td>
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### Icon Set Details

#### Icon Set Name: Reverse2

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<td>closeButtonlcon</td>
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<td>sortDIcon</td>
<td>irbscd.png</td>
<td><img src="irbscd.png" alt="sortDIcon" /></td>
</tr>
<tr>
<td>Grid Tool</td>
<td>sortAIcon</td>
<td>irbsca.png</td>
<td><img src="irbsca.png" alt="sortAIcon" /></td>
</tr>
<tr>
<td>Grid Tool</td>
<td>showColumnIcon</td>
<td>irbpscl.png</td>
<td><img src="irbpscl.png" alt="showColumnIcon" /></td>
</tr>
<tr>
<td>Grid Tool</td>
<td>hideColumnIcon</td>
<td>irbphcl.png</td>
<td><img src="irbphcl.png" alt="hideColumnIcon" /></td>
</tr>
<tr>
<td>Grid Tool</td>
<td>checkIcon</td>
<td>irbpchk.png</td>
<td><img src="irbpchk.png" alt="checkIcon" /></td>
</tr>
<tr>
<td>Dashboard Bar</td>
<td>globalFilterIcon</td>
<td>irwfltg.png</td>
<td><img src="irwfltg.png" alt="globalFilterIcon" /></td>
</tr>
<tr>
<td>Mobile</td>
<td>goFullscreenIcon</td>
<td>irbfull1.png</td>
<td><img src="irbfull1.png" alt="goFullscreenIcon" /></td>
</tr>
<tr>
<td>Mobile</td>
<td>leaveFullscreenIcon</td>
<td>irbfull2.png</td>
<td><img src="irbfull2.png" alt="leaveFullscreenIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>advancedChartIcon</td>
<td>irbadchart.png</td>
<td><img src="irbadchart.png" alt="advancedChartIcon" /></td>
</tr>
<tr>
<td>Chart Tool Bar</td>
<td>restoreChartIcon</td>
<td>irbinitchart.png</td>
<td><img src="irbinitchart.png" alt="restoreChartIcon" /></td>
</tr>
</tbody>
</table>
### Icon Set Name: Blue2

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Loading Animation</td>
<td>loadingImg</td>
<td><img src="irloading.gif" alt="loading animation" /></td>
</tr>
</tbody>
</table>

### Icon Set Name: Original

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grid, Chart, Advanced Tools</td>
<td>sumlcon</td>
<td><img src="irsum.jpg" alt="sum icon" /></td>
</tr>
<tr>
<td>2</td>
<td>Chart Tool Bar</td>
<td>pielcon</td>
<td><img src="irpie.jpg" alt="pie icon" /></td>
</tr>
<tr>
<td>3</td>
<td>Chart Tool Bar</td>
<td>barlcon</td>
<td><img src="irbar.jpg" alt="bar icon" /></td>
</tr>
<tr>
<td>4</td>
<td>Chart Tool Bar</td>
<td>linelcon</td>
<td><img src="irline.jpg" alt="line icon" /></td>
</tr>
<tr>
<td>5</td>
<td>Chart Tool Bar</td>
<td>scatterlcon</td>
<td><img src="irscattr.jpg" alt="scatter icon" /></td>
</tr>
<tr>
<td>6</td>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>locklcon</td>
<td><img src="irlock.jpg" alt="lock icon" /></td>
</tr>
<tr>
<td>7</td>
<td>Chart, Rollup, Pivot Tool Bars</td>
<td>unlocklcon</td>
<td><img src="irunlock.jpg" alt="unlock icon" /></td>
</tr>
<tr>
<td>8</td>
<td>Grid Pagination Bar</td>
<td>pageBottomlcon</td>
<td><img src="irpbot.jpg" alt="page bottom icon" /></td>
</tr>
<tr>
<td>9</td>
<td>Grid Pagination Bar</td>
<td>pageToplcon</td>
<td><img src="irptop.jpg" alt="page top icon" /></td>
</tr>
<tr>
<td>10</td>
<td>Filter, Comment, Advanced Tools</td>
<td>xlcon</td>
<td><img src="irdelete.jpg" alt="delete icon" /></td>
</tr>
<tr>
<td>11</td>
<td>Window</td>
<td>minButtonlcon</td>
<td><img src="irmin.jpg" alt="min button icon" /></td>
</tr>
<tr>
<td>Used In</td>
<td>Property Name</td>
<td>Image File Name</td>
<td>Image</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>12 Window</td>
<td>closeButtonIcon</td>
<td>irclose.jpg</td>
<td></td>
</tr>
<tr>
<td>13 Window</td>
<td>maxButtonIcon</td>
<td>irdmaxwin.png</td>
<td></td>
</tr>
<tr>
<td>14 Chart, Rollup Tool Bars</td>
<td>rollupIcon</td>
<td>irroll.jpg</td>
<td></td>
</tr>
<tr>
<td>15 Filter</td>
<td>dropArrowIcon</td>
<td>irdrparw.jpg</td>
<td></td>
</tr>
<tr>
<td>16 Grid</td>
<td>downArrowIcon</td>
<td>irpoparw.jpg</td>
<td></td>
</tr>
<tr>
<td>17 Window</td>
<td>resizeIcon</td>
<td>irrszwin.jpg</td>
<td></td>
</tr>
<tr>
<td>18 Pivot</td>
<td>moveToByIcon</td>
<td>irpvimg1.jpg</td>
<td></td>
</tr>
<tr>
<td>19 Pivot</td>
<td>moveToAcrossIcon</td>
<td>irpvimg2.jpg</td>
<td></td>
</tr>
<tr>
<td>20 Pivot</td>
<td>moveDownIcon</td>
<td>irpvimg3.jpg</td>
<td></td>
</tr>
<tr>
<td>21 Pivot</td>
<td>moveUpIcon</td>
<td>irpvimg4.jpg</td>
<td></td>
</tr>
<tr>
<td>22 Pivot</td>
<td>moveRightIcon</td>
<td>irpvimg5.jpg</td>
<td></td>
</tr>
<tr>
<td>23 Pivot</td>
<td>moveLeftIcon</td>
<td>irpvimg6.jpg</td>
<td></td>
</tr>
<tr>
<td>24 Pivot</td>
<td>deleteIcon</td>
<td>irpvimg7.jpg</td>
<td></td>
</tr>
<tr>
<td>25 Pivot</td>
<td>moveToByGrayIcon</td>
<td>irvgimg1.jpg</td>
<td></td>
</tr>
<tr>
<td>26 Pivot</td>
<td>moveToAcrossGrayIcon</td>
<td>irvgimg2.jpg</td>
<td></td>
</tr>
</tbody>
</table>
## B. Creating a Custom Icon Set for an Active Technologies Report or Dashboard

<table>
<thead>
<tr>
<th>Icon Set Name: Original</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used In</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>29</td>
</tr>
<tr>
<td>30</td>
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<td>39</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>41</td>
</tr>
</tbody>
</table>
## Icon Set Details

### Icon Set Name: Original

<table>
<thead>
<tr>
<th>Used In</th>
<th>Property Name</th>
<th>Image File Name</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 Mobile</td>
<td>leaveFullscreenIcon</td>
<td>irfull2.jpg</td>
<td><img src="irfull2.jpg" alt="Image" /></td>
</tr>
<tr>
<td>43 Chart Tool Bar</td>
<td>advancedChartIcon</td>
<td>irdadchart.png</td>
<td><img src="irdadchart.png" alt="Image" /></td>
</tr>
<tr>
<td>44 Chart Tool Bar</td>
<td>restoreChartIcon</td>
<td>irdinitchart.png</td>
<td><img src="irdinitchart.png" alt="Image" /></td>
</tr>
<tr>
<td>45 Loading Animation</td>
<td>loadingImg</td>
<td>irloading.gif</td>
<td><img src="irloading.gif" alt="Image" /></td>
</tr>
</tbody>
</table>
Defining Custom Styles for an Active Technologies Report or Dashboard

Overview

You can control the styling of certain elements in an Active Technologies report or dashboard using the WebFOCUS StyleSheet feature. In addition, starting with WebFOCUS Reporting Server Release 7.7 Version 04, you can control the styling of all elements using cascading style sheets (CSS) class selectors.

The class selectors use the standard HTML and Flex CSS class attribute. Each is defined with a period (.) in the original irpcfg.js file, which is found in the \ibi\srv77\home\etc\ folder. Note that Adobe Flex components do not support gradient through CSS.

You can specify a particular style for each class, as needed, by defining the style section of a file that you create, named irpcfgu.js.

The procedure is as follows:

- Create the irpcfgu.js file in your application folder.
- Copy the entire style section contents from the original irpcfg.js file to the irpcfgu.js file.
- Rename the style section.
- Customize the style section.

Once you have completed the custom style section in the irpcfgu.js file, you can call this section from your procedure. For example, use the following syntax in the WebFOCUS StyleSheet section:

```
TYPE=REPORT, ARSTYLESET=custom_style_name,$
```
where:

`custom_style_name`

Is the name that you gave the style section in your irpcfgu.js file.

For details on ARSTYLESET syntax, see *How to Apply Custom Styles to an Active Technologies Report or Dashboard* on page 349.

For details on WebFOCUS StyleSheets, see the *Creating Reports With WebFOCUS Language* manual.

**Customizing the Style Section in the Configuration File**

In the "styles" section of the original irpcfg.js file, the "default" section defines the default styles for an active report or dashboard when no style sheet is specified in the report or dashboard procedure.

In the "default" section, the "flex" section defines the default styles for an active report or dashboard for Flash Player or for PDF (FLEX or APDF output format).

In the "default" section, the "html" section defines the default styles for an active report or dashboard for HTML (AHTML output format).

```json
{
    "styles": {
        "default": {
            "flex": {
                
            },
            "html": {
                
            }
        }
    }
}
```

**Procedure: How to Customize the Style Section in the Configuration File**

1. To start, find the "styles" section in the original irpcfg.js file.
2. Copy the entire "default" section underneath.
Important: You must copy the entire "default" section. If you copy only part of the style section or individual class, the default style that is already defined will be lost and an undefined class will be replaced in plain HTML style.

3. Instead of "default", name the section "mystyle".
4. Change the styles for each class as needed.

Active Technologies Classes

This topic describes each Active Technologies class that is available for styling part of an Active Technologies report or dashboard. It contains an example of the implementation of each class.

Interpreting the Information

- For each class, the information labeled Applies To lists the output formats to which the class applies. The APDF output format does not have its own separate style section in the irpcfg.js file. The styles that are set for the FLEX output format are reflected in the APDF output format.

- The Example for a class may show code for that class but no sample output. In those cases, the sample output for the subsequent class reflects the code for the previous class. For example, the sample output for .arWindowBarTitle reflects the code for .arWindowBar.

- In the Example for a class, the colors, font sizes, and font styles that are used are intended to highlight the element to which the style is applied and to illustrate correct syntax. They are not intended to illustrate design skill.

Cascading style sheets (CSS) supports many colors, font sizes, and font styles, including hexadecimal color code values. For details on the available standard CSS properties and values, see the CSS page of the World Wide Web Consortium (http://www.w3.org/Style/CSS/Overview.en.html) and the Adobe Flex 4.5 CSS reference website (http://help.adobe.com/en_US/flex/using/index.html). Note that the Adobe documentation is based on the most recent release, for example, 4.6.
Report Classes

These classes style a tabular active report.

Class: .activeReport

Applies To: AHTML, FLEX, APDF

Description: Defines the overall look of a tabular active report and the Active Technologies elements of the report.

This class can be overwritten by the styles directly set in the TYPE=REPORT section of a WebFOCUS StyleSheet.

Example:

```
".activeReport": [
  "font-family:Georgia, serif;",
  "font-size:16px;"
],
```

![WebFOCUS Active Report](image-url)
Message Classes

These classes style the message text that is displayed for an end user.

**Class:** .arLoadingMessage

**Applies To:** AHTML

**Description:** Defines the font style of the Loading message text for an AHTML report or dashboard.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arLoadingMessage": [
  "font-family:Helvetica;",
  "font-weight:bold;",
  "color:red;",
  "font-size:18pt;"
],
```

![Image of loading message]

Dashboard Classes

These classes style an active dashboard.

**Class:** .arDashboard

**Description:** Currently unused.

**Class:** .arDashboardObject

**Applies To:** AHTML

**Description:** Defines the border around each report and chart object in an active dashboard. There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arDashboardObject": [
  "border:2px solid red;"
],
```

![Dashboard Classes Example](image-url)
Class: .arDashboardMergeDropdown

Applies To: AHTML, FLEX, APDF

Description: Defines the style of the global filter drop-down box in the dashboard bar at the top of an active dashboard when the coordinated option is set.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arDashboardMergeDropdown": [
  "color:green;",
  "font-size:16px;",
  "font-weight:bold;",
  "border:2px solid red;"
],
```

![Image of a dashboard with drop-down menu options and charts showing revenue by state and category.](image-url)
Class: .arDashboardBar

Applies To: AHTML, FLEX, APDF

Description: Defines the overall style of the dashboard bar at the top of an active dashboard. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer®.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arDashboardBar": [
   "font-size:16px;",
   "font-weight:bold;",
   "background-color:red;",
   "color:yellow;"
],
```

For sample output, see .arDashboardBarButtonSelected.

Class: .arDashboardBarButton

Applies To: AHTML, FLEX, APDF

Description: Defines the overall style of the buttons in the dashboard bar when an active dashboard contains multiple pages for the creation of tabs. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arDashboardBarButton": [
   "padding-left:4px;",
   "padding-right:4px;",
   "padding-top:4px;",
   "padding-bottom:4px;",
   "text-align:center;",
   "font-weight:bold;",
   "background-color:green;",
   "color:lime;"
],
```

For sample output, see .arDashboardBarButtonSelected.
Class: .arDashboardBarButtonSelected

Applies To: AHTML, FLEX, APDF

Description: Defines the overall style of the button selected in the dashboard bar when an active dashboard contains multiple pages for the creation of tabs. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arDashboardBarButtonSelected": {
  "padding-left: 4px;",
  "padding-right: 4px;",
  "padding-top: 4px;",
  "padding-bottom: 4px;",
  "text-align: center;",
  "font-weight: bold;",
  "background-color: white;",
  "color: red;"
},
```

---

C. Defining Custom Styles for an Active Technologies Report or Dashboard
**Class:** .arDashboardBarGlobalMobile

**Description:** Currently unused.

**Class:** .arDashboardBarGlobalButton

**Applies To:** AHTML

**Description:** Defines the background color of the global filter icon in the dashboard bar at the top of an active dashboard.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arDashboardBarGlobalButton": [  
  "background-color:red;"
],
```
Grid Classes

These classes style the grid elements of a tabular active report.

**Class:** .arGrid

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the overall look of the grid elements in a tabular active report.

The font type and the size of the grid excluding data reflect the values set in this class. The font type and the size of the data in the grid are controlled by the WebFOCUS Reporting Server outside of Active Technologies when nothing is set in the procedure.

This class can be overwritten by styles set in sections of a WebFOCUS StyleSheet, for example, TYPE=REPORT, TYPE=DATA, and TYPE=TITLE.

**Example:**

```
".arGrid": [
    "font-size:18px;",
    "font-weight:bold;",
    "border:2px solid red;",
    "background-color:yellow;",
    "color:green;"
],
```

![Grid Example](image-url)
**Class:** .arGridBar  

**Applies To:** AHTML, FLEX, APDF  

**Description:** Defines the overall look of the pagination bar in a tabular active report. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

This class can be overwritten by the styles set in the TYPE=REPORT, OBJECT=STATUS-AREA section of a WebFOCUS StyleSheet. The WebFOCUS StyleSheet sets the same style for the grid pagination bar, chart tool bar, and pivot tool bar. To set a different style for each bar, you must use each style class as documented in this topic.

**Example:**

```
".arGridBar": [
    "font-family:Arial,tahoma,verdana;",
    "font-size:18px;",
    "background-color:red;",
    "color:yellow;",
    "border:4px solid green;"
],
```

![Diagram of a tabular active report with pagination bar](image)
Class: .arGridBarCalc

Applies To: AHTML

Description: Defines the styles of the toggle button that appears in the pagination bar of a tabular active report when a column contains a calculation that is applied using Active Technologies calculation options and when the user applies a filter to the report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arGridBarCalc": [
    "background-color:red;",
    "font-size:18px;",
    "color:green;"
],
```

C. Defining Custom Styles for an Active Technologies Report or Dashboard
**Class:** .arGridColumnHeading

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the styles of the column headings in a tabular active report.

This class can be overwritten by the styles set in the TYPE=TITLE section of a WebFOCUS StyleSheet.

**Example:**

```
".arGridColumnHeading": [ 
  "background-color:red;",
  "font-size:16px;",
  "color:yellow;",
  "font-weight:bold;"
],
```

![WebFOCUS active report example](image-url)
**Class:** .arGridAgg  

**Applies To:** AHTML  

**Description:** Defines the styles of the label that appears in a tabular active report when a column contains a calculation that is applied using Active Technologies calculation options.  

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.  

**Example:**  
```
".arGridAgg": [
  "font-size:14px;",
  "font-weight:bold;",
  "color:red;"
],
```

---

C. Defining Custom Styles for an Active Technologies Report or Dashboard
Chart Classes

These classes style an active chart.

**Class:** .arChart

**Applies To:** FLEX, APDF

**Description:** Defines the background style and font for an Adobe Flex chart with the FLEX or APDF output format. This class does not affect the chart style itself. It has no effect on other chart engines, except for the default chart heading area.

**Example:**

```
".arChart": [
  "backgroundColor:red;",
  "contentBackgroundColor:red;",
  "fontSize:16;",
  "color:yellow;"
],
```
Class: .arChartMenuBar

Applies To: AHTML, FLEX, APDF

Description: Defines the overall look of the chart tool bar in an active chart. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

This class can be overwritten by the styles set in the TYPE=REPORT, OBJECT=STATUS-AREA section of a WebFOCUS StyleSheet. The WebFOCUS StyleSheet sets the same style for the grid pagination bar, chart tool bar, and pivot tool bar. To set a different style for each bar, you must use each style class as documented in this topic.

Example:

```
".arChartMenuBar": [
  "background-color:red;",
  "color:yellow;",
  "border:3px solid yellow;"
],
```

![WebFOCUS Active Report](image)
**Class:** .arChartMenuBarContainer

**Applies To:** AHTML

**Description:** Defines the divider lines in the chart tool bar.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arChartMenuBarContainer": {
    "border-right:2px solid red;"
},
```
Pivot Classes

These classes style the Pivot Tool and pivot table.

**Class:** .arPivot

**Description:** Currently unused.
**Class:** .arPivotMenuBar

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the overall look of the pivot tool bar in an active report. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

This class can be overwritten by the styles set in the TYPE=REPORT, OBJECT=STATUS-AREA section of a WebFOCUS StyleSheet. The WebFOCUS StyleSheet sets the same style for the grid pagination bar, chart tool bar, and pivot tool bar. To set a different style for each bar, you must use each style class as documented in this topic.

Currently, there is a known issue with this feature, and the styles set in the .arChartMenuBar class may overwrite this class.

**Example:**

```
".arPivotMenuBar": [
  "font-size:16px;",
  "background-color:red;",
  "color:green;",
  "border:5px solid yellow;"
],
```

![WebFOCUS Active Report Example](image_url)
**Class:** .arPivotMenuBarContainer

**Applies To:** AHTML

**Description:** Defines the divider lines in the pivot tool bar.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arPivotMenuBarContainer": [
   "border-right:3px solid red;"
],
```
**Class:** .arPivotColumnHeading

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the styles of the column headings in a pivot table.

This class can be overwritten by the styles set in the TYPE=TITLE section of a WebFOCUS StyleSheet.

**Example:**

```
".arPivotColumnHeading": [
    "background-color:green;",
    "color:yellow;",
    "font-size:16px;",
    "font-weight:bold;"
],
```
Filter Classes

These classes style the Filter Selection dialog box.

**Class:** .arFilter

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the styles of the Filter Selection dialog box inside the Filter window. There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arFilter":{
  "border:3px solid red;",
  "background-color:yellow;"
},
```
**Class:** .arFilterItem

**Applies To:** AHTML

**Description:** Defines the styles of each filter condition inside the Filter Selection dialog box. There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arFilterItem": [
    "background-color:green;",
    "color:yellow;",
    "font-size:14px;",
    "font-weight:bold;"
],
```

![Filter Selection dialog box](image)
**Class:** .arFilterItemDrowpDown

**Applies To:** AHTML

**Description:** Defines the styles of the drop-down box for the filter condition inside the Filter Selection dialog box.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arFilterItemDrowpDown": [ 
    "background-color:orange;",
    "color:green;",
    "border:3px solid red;"
],
```

**Class:** .arFilterSelectionValues

**Description:** Currently unused.
**Class:** .arFilterButton

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the overall style of the buttons in the Filter Selection dialog box. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arFilterButton": [
  "padding-top:4px;",
  "padding-bottom:4px;",
  "text-align:center;",
  "font-weight:bold;",
  "background-color:red;",
  "color:yellow;"
],
```

![Filter Selection Dialog](image-url)
Prompt Classes

These classes style the buttons in select windows that prompt for information.

**Class:** .arPromptButton

**Applies To:** AHTML

**Description:** Defines the overall style of the buttons in the window that prompts for information for the Save Changes, Send as E-mail, and Add Comment menu options. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arPromptButton":{
  "padding-top:4px;",
  "padding-bottom:4px;",
  "text-align:center;",
  "font-weight:bold;",
  "background-color:green;",
  "color:lime;"
},
```
Window Classes

These classes style select windows.

Class: .arWindow

Description: Currently unused.

Class: .arWindowBar

Applies To: AHTML, FLEX, APDF

Description: Defines the overall color of the window title bar for all pop-up window dialog boxes used in an active report. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arWindowBar": [  
  "background-color:green;",  
  "border:3px solid red;",  
  "color:yellow;"
],
```

For sample output, see .arWindowBarTitle.
**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```

---

**C. Defining Custom Styles for an Active Technologies Report or Dashboard**

---

**Class:** .arWindowBarTitle

**Applies To:** AHTML

**Description:** Defines the overall style of the window title for all pop-up window dialog boxes used in an active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arWindowBarTitle": [
  "font-family: Times New Roman, Times, serif;",
  "padding-left: 4px;",
  "font-weight: bold;",
  "font-size: 14px;"
],
```
Menu Classes

These classes style the drop-down menu of select windows and select drop-down lists.

**Class:** .arMenu

**Applies To:** AHTML, FLEX, APDF

**Description:** Defines the overall look of the drop-down menu in the tabular active report, chart, rollup, and pivot windows. It also defines the drop-down list used in the Filter Selection dialog box. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

This class can be overwritten by the styles set in the TYPE=REPORT, OBJECT=MENU section of a WebFOCUS StyleSheet.

**Example:**

```
".arMenu": [
    "font-family:Impact,sans-serif;",
    "font-size:14px;",
    "background-Color:yellow;",
    "color:red;",
    "text-Align:center;",
    "border:2px solid green;"
],
```

For sample output, see .arMenuHover.
Class: .arMenuHover

Applies To: AHTML

Description: Defines the hover over style of the drop-down menu in the tabular active report, chart, rollup, and pivot windows. It also defines the drop-down list used in the Filter Selection dialog box. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

This class can be overwritten by the styles set in the TYPE=REPORT, OBJECT=MENU section of a WebFOCUS StyleSheet.

Example:

```
".arMenuHover": [   
  "font-family: Tahoma, Geneva, sans-serif;", 
  "background-color: orange;", 
  "color: blue;"
],
```
Tool Classes

These classes style the Grid Tool, Chart/Rollup Tool, and Pivot Tool.

**Class:** .arTool

**Applies To:** AHTML

**Description:** Defines the styles of the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes inside the window for each tool.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arTool": [
  "font-family:Arial,tahoma,verdana;",
  "font-size:16px;",
  "border:3px solid red;",
  "background-color:yellow;"
],
```

**Class:** `.arToolDragBox`  

**Applies To:** AHTML

**Description:** Defines the styles of the mouse over pop-up field name that is displayed when you are dragging a field name in the Grid Tool, Chart/Rollup Tool, or Pivot Tool dialog box.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arToolDragBox": [
  "font-family:Tahoma, Geneva, sans-serif;",
  "border:3px solid red;",
  "background-color:yellow;",
  "color:green;",
  "font-weight:bold;",
  "font-size:14px;"
],
```

---

C. Defining Custom Styles for an Active Technologies Report or Dashboard
**Class**: .arToolColumnBorder

**Applies To**: AHTML

**Description**: Defines the border inside the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes. Note that this border is different from the pop-up window border.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example**:

```
".arToolColumnBorder": [
  "border:3px solid red;"
],
```
**Class:** .arToolColumn

**Applies To:** AHTML

**Description:** Defines the styles for the column section inside the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
    ".arToolColumn": [
        "background-color:yellow;",
        "border:3px solid red;"
    ],
```
Class: .arToolColumnHeading

 Applies To: AHTML

 Description: Defines the styles for the column section heading inside the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes.

 There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

 Example:

 ".arToolColumnHeading": [
   "padding-left: 4px;",
   "padding-right: 4px;",
   "padding-top: 2px;",
   "padding-bottom: 2px;",
   "font-weight: bold;",
   "font-size: 14px;",
   "background-color: green;",
   "color: lime;"
  ],
**Class:** .arToolColumnSelect

**Applies To:** AHTML

**Description:** Defines the background color between the field names in the column section of the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes. If you set the background color for the column section using the .arToolColumn class, set the same background color using this class to remove the white spaces.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arToolColumnSelect": [
    "background-color: yellow;"
],
```
**Class:** .arToolItem

**Applies To:** AHTML

**Description:** Defines the styles for the field names and descriptions inside the column section of the Grid Tool, Chart/Rollup Tool, and Pivot Tool dialog boxes.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arToolItem": [  
  "padding-left:4px;",
  "padding-right:4px;",
  "background-color:yellow;",
  "font-style:italic;",
  "color:green;"
],
```
Class: .arToolItemSeperator

Applies To: AHTML

Description: Defines the style of the field name separator in the Grid Tool.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

".arToolItemSeperator": [
   "background-color:green;",
   "border:3px solid yellow;"
],
**Class:** .arToolMenuBar

**Applies To:** AHTML

**Description:** Defines the look of the chart tool bar in the Chart/Rollup Tool. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

The chart tool bar in the Chart/Rollup Tool appears only when you are using a chart engine available prior to the 7.7.04 release of the WebFOCUS Reporting Server.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arToolMenuBar": [  
  "background-color:yellow;"
]
```
Class: .arToolButton

Applies To: AHTML

Description: Defines the overall style of the buttons in the Grid Tool, Chart/Rollup Tool, and Pivot Tool windows. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arToolButton": [
    "padding-top:4px;",
    "padding-bottom:4px;",
    "text-align:center;",
    "font-style:italic;",
    "font-weight:bold;",
    "background-color:red;",
    "color:yellow;"
],
```
Class: .arToolTab

Applies To: AHTML

Description: Defines the overall style of the tab in the Chart/Rollup Tool when you are using the HTML5 chart engine in the 7.7.04 or higher release of the WebFOCUS Reporting Server. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arToolTab": [  
  "padding-left:4px;",
  "padding-right:4px;",
  "padding-top:4px;",
  "padding-bottom:4px;",
  "text-align:center;",
  "font-size:14px;",
  "font-weight:bold;",
  "background-color:green;",
  "cursor:pointer;",
  "color:yellow;"
],
```

For sample output, see .arToolTabSelected.
Class: .arToolTabSelected

Applies To: AHTML

Description: Defines the overall style of the tab selected in the Chart/Rollup Tool when you are using the HTML5 chart engine in the 7.7.04 or higher release of the WebFOCUS Reporting Server. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arToolTabSelected": {
  "padding-left:4px;",
  "padding-right:4px;",
  "padding-top:4px;",
  "padding-bottom:4px;",
  "border:3px solid green;",
  "text-align:center;",
  "background-color:lime;",
  "color:green;"
},
```
Class: .arToolChartIcon

Applies To: AHTML

Description: Defines the overall display of the chart image in the Charts tab of the Chart/Rollup Tool when you are using the HTML5 chart engine in the 7.7.04 or higher release of the WebFOCUS Reporting Server. You cannot change the chart label font.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arToolChartIcon": [
    "padding:10px;",
    "border:3px solid blue;",
    "border-radius:5px;",
    "-moz-border-radius:5px;",
    "-webkit-border-radius:5px;",
    "background-color:yellow;"
],
```

For sample output, see .arToolChartIconSelected.
Class: \.arToolChartIconSelected

Applies To: AHTML

Description: Defines the overall display of the chart image selected in the Charts tab of the Chart/Rollup Tool when you are using the HTML5 chart engine in the 7.7.04 or higher release of the WebFOCUS Reporting Server. You cannot change the chart label font.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
\".arToolChartIconSelected\":
  \"padding:10px;\",
  \"border:3px solid red;\",
  \"border-radius:5px;\",
  \"-moz-border-radius:5px;\",
  \"-webkit-border-radius:5px;\",
  \"background-color:pink;\"
```

![Active Technologies User's Guide 557](image)
Comment Classes

These classes style comments.

**Class:** `.arCommentCell`

**Applies To:** AHTML

**Description:** Defines the border around the comments when comments are entered and displayed in a tabular active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arCommentCell":{
    "border:3px solid red;",
    "background-color:yellow;"
},
```
Class: .arCommentText

Applies To: AHTML

Description: Defines the font style used to display comments in the Add Comment dialog box and when comments are entered and displayed in a tabular active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arCommentText": [
  "font-family:Courier New,Courier, monospace;",
  "color:red;",
  "font-size:16px;",
  "font-weight:bold;",
  "background-color:yellow;"
],
```

For sample output, see .arCommentDate.
**Class:** .arCommentDate

**Applies To:** AHTML

**Description:** Defines the font style used in the date and time display of the comments in the Add Comment dialog box and when comments are entered and displayed in a tabular active report.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arCommentDate": {
    "font-family:Comic Sans MS, cursive, sans-serif;",
    "color:green;",
    "font-size:14px;",
    "font-style:italic;",
    "background-color:aqua;"
}
```
ByToc Classes

These classes are currently unused.

Class: .arByToc

Description: Currently unused.

Class: .arByTocTitle

Description: Currently unused.

Class: .arByTocItemSelected

Description: Currently unused.

Class: .arByTocItem

Description: Currently unused.

Active Mobile Classes

These classes are currently unused.

Class: .activeMobile

Description: Currently unused.
Mobile Menu Item Classes

These classes style menu items in Active Technologies for mobile web apps.

**Class:** .amMenuItem

**Applies To:** AHTML

**Description:** Defines the font style and position used for the menu in Active Technologies for mobile web apps.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".amMenuItem": [
  "font-family:Comic Sans MS, cursive, sans-serif;",
  "display:block;",
  "padding:8px 2px 8px 2px;",
  "font-size:10px;",
  "font-weight:bold;",
  "font-style:italic;",
  "text-align:left;",
  "color:red;"
],
```

For sample output, see .amButton.

**Class:** .amMenuItemRight

**Applies To:** AHTML

**Description:** Defines the font style and position used for the values displayed on the right of the menu in Active Technologies for mobile web apps.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".amMenuItemRight": [
  "font-family:Verdana, Geneva, sans-serif;",
  "padding:8px 2px 8px 2px;",
  "font-size:16px;",
  "font-weight:normal;",
  "text-align:right;",
  "color:green;"
],
```

For sample output, see .amButton.
Mobile Menu Button Classes

These classes style the buttons used in the menu in Active Technologies for mobile web apps.

**Class**: .amButton

**Applies To**: AHTML

**Description**: Defines the style and position of the buttons used in the menu in Active Technologies for mobile web apps.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example**:

```
".amButton": {
  "vertical-align:middle;",
  "font-family:Times New Roman, Times, serif;",
  "font-size:12px;",
  "font-weight:bold;",
  "background-color:red;",
  "color:pink;",
  "border-radius:5px;",
  "-moz-border-radius:5px;",
  "-webkit-border-radius:5px;",
  "height:32px;",
  "min-width:54px;",
  "border-width:0px 8px 0px 8px;",
  "padding:3;"
},
```

![Example Mobile Menu Button](image-url)
Mobile Tab Classes

These classes style the tabs in Active Technologies for mobile web apps.

**Class:** .arMobileTabSelected

**Applies To:** AHTML

**Description:** Defines the overall style of the tab selected in Active Technologies for mobile web apps. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arMobileTabSelected": [
  "vertical-align:middle;",
  "font-size:10pt;",
  "color:white;",
  "background-color:red;",
  "border-radius:5px 5px 0px 0px;",
  "-moz-border-radius:5px 5px 0px 0px;",
  "-webkit-border-radius:5px 5px 0px 0px;",
  "height:28px;",
  "border-width:4px 4px 4px 0px;"
],
```

For sample output, see .arMobileTab.
**Class:** .arMobileTab

**Applies To:** AHTML

**Description:** Defines the overall style of the tabs used to display multiple objects in Active Technologies for mobile web apps. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

**Example:**

```
".arMobileTab":{
   "vertical-align:middle;",
   "font-size:10pt;",
   "color:green;",
   "background-color:yellow;",
   "border-radius:5px 5px 0px 0px;",
   "-moz-border-radius:5px 5px 0px 0px;",
   "-webkit-border-radius:5px 5px 0 0;",
   "height:28px;",
   "border-width:4px 4px 4px 0px;"
}
```
Class: .arMobileTabBar

Applies To: AHTML

Description: Defines the background color of the tab area in Active Technologies for mobile web apps. The default background color is white. AHTML supports gradient CSS style syntax for most browsers, except for the earlier releases of Internet Explorer.

There is no equivalent option in a WebFOCUS StyleSheet to overwrite this class.

Example:

```
".arMobileTabBar": [  
  "font-family:Helvetica;",
  "background-color:yellow;"
],
```
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