# SAP Business One How-to Guide





### PUBLIC

# How to Develop Your Own Dashboards for SAP Business One

**Release Family 8.8** 

**Applicable Release:** 

SAP Business One 8.81

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### Table of Contents

Dashboards	3
Glossary	3
Getting Ready to Create Dashboards	5
Software Prerequisites	5
Connectivity Options for Dashboards	6
Developing and Publishing Dashboards for SAP Business One	8
Creating and Modifying Queries	8
Building and Testing the Visualization	9
Creating the Dashboard Package	13
Modifying the default.html File	14
Dashboard Folder and Dashboard Package	16
Copyrights, Trademarks, and Disclaimers	19



# Dashboards

This document describes how to create dashboards for SAP Business One using SAP Crystal Dashboard Design 2008, formerly known as Xcelsius Engage 2008. This document is relevant for SAP Business One 8.81. For more information on the components and software required to create dashboards, see <u>Software Prerequisites</u>.

Dashboards are a visualization element of the cockpit that is delivered as part of SAP Business One. Dashboards present transactional data from the SAP Business One database in easy-to-understand visualizations that use graphical elements such as bar charts or pie charts.

SAP delivers predefined dashboards for financials, sales, and service areas. Partners and customers can use these dashboards as delivered. In addition, you can change SAP-defined dashboards, use an SAP-defined dashboard as a template, or create dashboards from scratch.

# 1 Recommendation

Before you change SAP-defined dashboards or begin to design and develop your own dashboards, review the following documents and resources:

- Xcelsius 2008 User Guide
- Xcelsius 2008 Installation Guide

These two documents are available at <u>http://help.sap.com</u>. Under *What's New*, click *Update: SAP BusinessObjects Solution Portfolio Knowledge Center*. At the top of the window, from the first dropdown list showing *all products* as the selection criterion, select *Xcelsius*. Access the following documentation as stated:

- SAP Business One UI Design Guidelines for Dashboards by following the link at <u>http://service.sap.com/smb/sbo/innovations</u>
- Crystal Reports, Dashboard and Presentation Design (Xcelsius) and Interactive Analysis forum on SAP Developer Network at http://forums.sdn.sap.com/category.jspa?categoryID=54
- Xcelsius 2008 video tutorials at <u>http://www.youtube.com/Xcelsius2008</u>
- Xcelsius 2008 General Best Practices Guide at <u>http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/a084a11c-6564-2b10-79ac-cc1eb3f017ac</u>

Term	Description
component	Chart, map, art, and other visualization element of SAP Crystal Dashboard Design
dashboard	A type of widget that displays data in a cockpit
dashboard package	Zip file that contains one or more folders and an info.xml file that provides information about the package and dashboards. The info.xml file also includes all dashboard queries.
folder	Container in a dashboard package that holds a dashboard definition file (Adobe Flash file [SWF]) and an HTML file
query	Predefined SQL query against data tables in an SAP Business One company database

# Glossary



Term	Description
visualization	Set of components in SAP Crystal Dashboard Design that display data in a dashboard
widget	Reusable element of a graphical user interface that displays an information arrangement and provides standardized data manipulation

### See also:

For information about cockpits in SAP Business One, see the online help for SAP Business One. For information about using dashboards and maintaining dashboards, see *Working with Dashboards in the Integration Component* in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sbocustomer/documentation</u>.



# **Getting Ready to Create Dashboards**

SAP Business One 8.81 includes predefined dashboards in the areas of finance, sales, and services, which partners and customers can modify or use as templates. In addition to these dashboards, you can create industry- and company-specific dashboards to meet your needs.

# **Software Prerequisites**

To enable the creation of dashboards, the SAP Business One key user or administrator must ensure that the following software has been installed with the appropriate configuration and settings.

What	Purpose	For More Information
SAP Business One 8.81	Provides company database for queries; storage of dashboard definitions. Supports integration component, cockpits, and dashboards. By default, one company database is specified during installation. To use dashboards in another company, you must configure this company in the integration component.	"Add a New Company Database" in <i>B1i Service Package Xcelsius.</i> To access this document, choose <i>Start</i> $\rightarrow$ <i>All Programs</i> $\rightarrow$ <i>Integration solution for SAP</i> <i>Business One</i> $\rightarrow$ <i>Integration</i> <i>framework</i> , and then choose <i>Scenarios</i> $\rightarrow$ <i>Scenario Package</i> <i>Control</i> $\rightarrow$ <i>Report.</i> Within the <i>Selection Criteria</i> area, in the <i>Report</i> dropdown list, select <i>Scenario List</i> , and in the <i>Status</i> dropdown list, select <i>All.</i> Choose the <i>Report</i> button, and then select the <i>Docu</i> button after the <i>sap.</i> <i>Xcelsius</i> scenario to view the documentation.
Integration component	Provides services to deploy dashboard packages available in the SAP Business One company database. Provides services to process queries, retrieve data from SAP Business One using queries, and return data to map to spreadsheet cells. Supports the viewing of dashboards at runtime.	For the latest information, see SAP Note <u>1477984</u> . <i>Administrator's Guide for SAP</i> <i>Business One 8.81</i> in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sboc</u> <u>ustomer/documentation</u> <i>B1i Service Package Xcelsius</i> (To access this document, see the path in the row above.)
Cockpit and dashboard settings at the company level in SAP Business One	Enable development, testing, and use of dashboards.	Working with Dashboards in the Integration Component in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sboc</u> <u>ustomer/documentation</u>



What	Purpose	For More Information
SAP Crystal Dashboard Design 2008, departmental edition or personal edition (formerly Xcelsius Engage 2008), including Data Manager Note Adobe Flash Player with Active X is installed when you install SAP Crystal Dashboard Design. Recommendation Because SAP dashboards use multiple connections (on average 10 live XML data connections and 2 fscommand data connections), you should install the departmental edition. The personal edition allows only 2 live data connections to external sources, which makes it more difficult to work with SAP dashboards.	Provides functionality to develop visualizations (dashboards) using charts. Enables you to manage and configure connectivity options with Data Manager (see <u>Connectivity Options for</u> <u>Dashboards</u> ). Runs the SWF file format in which visualizations are saved. SWF is the vector-based graphics format designed to run in Adobe Flash Player.	Xcelsius 2008 Installation Guide at http://help.sap.com. Under What's New, click Update: SAP BusinessObjects Solution Portfolio Knowledge Center. At the top of the window, from the first dropdown list showing all products as the selection criterion, select Xcelsius.
Microsoft Excel 2003 or 2007	Supports spreadsheets that hold results of data queries.	Xcelsius 2008 User Guide at http://help.sap.com. Under What's New, click Update: SAP BusinessObjects Solution Portfolio Knowledge Center. At the top of the window, from the first dropdown list showing all products as the selection criterion, select Xcelsius.

# **Connectivity Options for Dashboards**

Data Manager in SAP Crystal Dashboard Design provides a central location where you can manage and configure the following external connectivity options:

- Flash variables
- SAP Crystal Reports data consumer
- XML data connection
- Web service connection

Dashboards in SAP Business One use only XML data connections. An XML data connection connects to an external source through HTTP or HTTPS. When added to a dashboard, a connection can send live data to an external source to request specific information.



SAP-defined dashboards use an average of 10 live XML data connections and 2  $\tt fscommand$  data connections.

To access Data Manager, from the SAP Crystal Dashboard Design main menu choose  $Data \rightarrow Connections$ . Alternatively, you can click an XLF file, which opens SAP Crystal Dashboard Design. For information about configuring XML data connections, see:

- Building and Testing the Visualization
- "To configure XML Data connections" in the online help for SAP Crystal Dashboard Design

### See also:

For additional documentation about operations, choose  $Start \rightarrow All Programs \rightarrow Integration solution$ for SAP Business One  $\rightarrow$  Integration framework, and then choose Help  $\rightarrow$  Ref 04 – Operations.

For information about dashboard services in the integration component, see B1i Service Package Xcelsius. To access this document, choose  $Start \rightarrow All Programs \rightarrow Integration solution for SAP$ Business One  $\rightarrow$  Integration framework, and then choose Scenarios  $\rightarrow$  Scenario Package Control  $\rightarrow$  Report. Within the Selection Criteria area, in the Report dropdown list, select Scenario List, and in the Status dropdown list, select All. Choose the Report button, and then select the Docu button after the sap. Xcelsius scenario to view the documentation.



# Developing and Publishing Dashboards for SAP Business One

### Prerequisites

Before you start creating or modifying dashboards for SAP Business One, do the following:

- Review the documents listed in the recommendation note in <u>Dashboards</u>.
- Ensure that your software landscape meets the requirements listed in <u>Getting Ready to Create</u> <u>Dashboards</u>.

If you are modifying an SAP-defined dashboard or using an SAP-defined dashboard as a template, export the dashboard package from SAP Business One. For information about exporting dashboard packages, see *Working with Dashboards in the Integration Component* in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sbocustomer/documentation</u>.



For SAP-defined dashboards, SAP does not provide the source code (XLF file generated by SAP Crystal Dashboard Design) in the dashboard package. The source code file is available in the SAP Business One software download area at http://service.sap.com/sbo-swcenter.

In the software download area, from the navigation tree on the left, choose SAP Business One Products  $\rightarrow$  Updates  $\rightarrow$  SAP Business One 8.8  $\rightarrow$  SAP Business One 8.81  $\rightarrow$  Comprised Software Component Versions  $\rightarrow$  B1 8.8 Integration Component (no longer in maintenance)  $\rightarrow$  # OS independent. The file, named Sample Code for SAP Crystal Dashboard - SAP B1 8.8, contains the sample code of the three SAP-defined dashboards.

### Procedures

To create or modify a dashboard and make it available to users, you need to do the following:

- 1. <u>Create or modify queries</u> in SAP Business One.
- 2. Build and test the visualization in SAP Crystal Dashboard Design.
- 3. <u>Manually create the dashboard package</u>.
- 4. Import the dashboard package into your production SAP Business One environment (see *Working with Dashboards in the Integration Component* in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sbocustomer/documentation</u>).

# **Creating and Modifying Queries**

Charts in dashboards display transactional data retrieved by queries from an SAP Business One company database. To define and update queries in SAP Business One to run against the company database, use the same tools that you use when creating queries for SAP Business One reports: *Query Generator, Query Wizard, and Query Manager.* 



- Create a separate query category for each dashboard with the following naming convention: <PackageID>\_<DashboardID>.
- Use indexes to access the database.
- Use as few SQL statements as possible.
- Use one function call with stored procedures instead of multiple single calls.



SQL query statements are stored in the SAP Business One company database. If the identifier does not start with bli\_, the SQL statement is stored in the OUQR table in the SAP Business One company database.

# **Note**

In SAP Business One 8.8 PL12, one query could be shared by different dashboards. However, SAP Business One 8.81 does not support linking a query to more than one dashboard. In SAP Business One 8.81, if you try to import a dashboard package that contains dashboards using shared queries, you receive the following error message: *A query cannot be linked to more than one dashboard. Ensure that it is linked to one dashboard only.* 

For example, query "SAP\_DASHBOARD\_001\_DAB001\_QUERY" is shared by DAB001 and DAB002.

```
<Dashboard code="DAB001" name="Service Call" note="The Service
Call Status Dashboard">
  <Query category="SAP DASHBOARD 001 DAB001 QUERY" name="Queues"</pre>
```

```
<guery Category="SAP_DAShbOARD_001_DAb001_QUER1" fiame="Queue
/>
```

```
<Query category="SAP_DASHBOARD_001_DAB001_QUERY"
name="IncomingCallsToday" />
```

```
</Dashboard>
```

```
<Dashboard code="DAB002" name="Customer Aging" note="SAP Customer
Aging" status="I">
```

```
<Query category="SAP_DASHBOARD_001_DAB001_QUERY" name="Queues"
/>
```

### See also:

For information about creating queries, see the online help for SAP Business One.

For more information about queries in the integration component, see B1i Service Package Xcelsius. To access this document, choose  $Start \rightarrow All Programs \rightarrow Integration solution for SAP Business One \rightarrow Integration framework, and then choose Scenarios \rightarrow Scenario Package Control \rightarrow Report. Within the Selection Criteria area, in the Report dropdown list, select Scenario List, and in the Status dropdown list, select All. Choose the Report button, and then select the Docu button after the sap. Xcelsius scenario to view the documentation.$ 

# **Building and Testing the Visualization**

### Prerequisites

You have created queries in SAP Business One.

You have reviewed the relevant documentation for SAP Crystal Dashboard Design. For a list of documents, see the recommendation note in <u>Dashboards</u>.

# Note

If you want to modify an SAP-defined dashboard or use an SAP-defined dashboard as a template, you need the XLF file, which is not provided in the dashboard package. For more information, see the note in <u>Developing and Publishing Dashboards for SAP</u> <u>Business One</u>.

### Procedure



- 1. To create a visualization using SAP Crystal Dashboard Design, you have to add spreadsheet data to support your visualization. There are three ways to do this:
  - Import a spreadsheet from Microsoft Excel.
  - Copy and paste cells from a Microsoft Excel file or an SAP Crystal Dashboard Design embedded spreadsheet.
  - o Manually enter information into the embedded spreadsheet.

You can add, modify, and delete data in the embedded spreadsheet. If you have linked cells to components, the components automatically update when you change the data in linked cells.

- 2. Select the data sources linked to the components. In this step, you assign one or more cells from your embedded spreadsheet to one or more SAP Crystal Dashboard Design components.
- 3. Make the data connection to B1i with Data Manager by specifying the runtime URL, which is a relative URL. Map the following parameters to B1i: send query category, query name, and query parameters.

# 1 Recommendation

To switch from runtime to design time and use the preview functionality during the design of a dashboard, you have to use the absolute URL. To simplify the switch between design time and runtime, specify both the absolute URL and the relative URL in two separate cells.

a. Absolute URL – used for design time:

```
cprotocol>://<ipaddress>:<port>/BliXcellerator/exec/ipo/vP.001sap
0004.in_HCSX/com.sap.bli.vplatform.runtime/INB_HT_CALL_SYNC_XPT/I
NB_HT_CALL_SYNC_XPT.ipo/proc?bpm.pltype=xml&bpm.encoding=utf-8
```

👏 Example

http://10.58.0.190:8080/BliXcellerator/exec/ipo/vP.001sap000
4.in\_HCSX/com.sap.bli.vplatform.runtime/INB\_HT\_CALL\_SYNC\_XPT
/INB\_HT\_CALL\_SYNC\_XPT.ipo/proc?bpm.pltype=xml&bpm.encoding=u
tf-8

- b. Relative URL used for runtime: proc
- 4. Decide whether to use the data cache mechanism for the dashboards.

By default, the data cache mechanism is enabled for dashboards designed for SAP Business One 8.81. To bypass the data cache mechanism and enable real time data refresh, add a parameter to the end of the absolute or relative URL: **?realtime=true**.

For more information about the data cache mechanism, see "Scheduling a Daily Data Refresh" in *Working with Dashboards in the Integration Component* in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sbocustomer/documentation.</u>

- 5. To display the last data refresh time stamp in the dashboard, at the end of the URL, specify a parameter: **?action=GetLastRefresh**.
- 6. To enable a dashboard to detect the current SAP Business One language and display user interface strings in that language, do the following:
  - a. At the end of the absolute URL or relative URL, add a parameter: **?action=GetLanguage**.
  - b. Use the Microsoft Excel lookup function to replace UI strings at runtime.



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7. To enable a user to access master data or documents in SAP Business One from a dashboard, add a link button in a dashboard using an Adobe Flash fscommand.

 $\texttt{fscommand}\ \texttt{has}\ \texttt{the}\ \texttt{following}\ \texttt{structure:}\ \texttt{fscommand}\ (\texttt{``command''}\ ,\ \texttt{``parameters''}\ )$ 

To configure an fscommand connection, do the following:

- a. In the Name field, specify a name for the connection.
- b. In the *Command* field, specify a command or click the *Cell Selector* button and choose a command in the spreadsheet.
- c. In the *Parameter* field, enter a parameter value for the command or click the *Cell Selector* button and choose a command in the spreadsheet.

SAP Crystal Dashboard Design calls a Visual Basic script, which calls a Java script. The Java script invokes the SAP Business One link button. For more information about these two scripts, see step 3 in <u>Modifying the default.html File</u>.



For more information about  ${\tt fscommand},$  see the Adobe Flash support

at http://www.adobe.com/support/flash/action\_scripts/actionscript\_dictionary/actionscript\_diction ary372.html.

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- 8. To make sure your visualization functions according to your specifications, test your visualization as many times as you need.
  - a. To preview the visualization in SAP Crystal Dashboard Design, do one of the following:
    - Toggle between the design view and preview by choosing *File* → *Preview* or the *Preview* button.
    - View the visualization in your default Web browser by choosing File → Export → Preview.

A dialog box form appears in which you identify the company to which you want to connect and against which to run queries.

b. To identify the company, specify a username and a password for the company.

The Username value must be in the form of <language\company user\company database>; for example, en-US\manager\OEC Computers.

## Note

The language must be in the format xx-XX. Use one of the following language-country pairs: cs-CZ, da-DK, de-DE, el-GR, en-CY, en-GB, en-US, en-SG, es-AR, es-CO, es-ES, es-PA, fi-FI, fr-FR, he-IL, hu-HU, it-IT, ja-JP, ko-KR, nl-NL, no-NO, pl-PL, pt-BR, pt-PT, ru-RU, sk-SK, sr-YU, sv-SE, zh-CN, zh-TW).

### Result

SAP Crystal Dashboard Design creates the XLF source file. The XLF file contains the visualization information and the associated embedded spreadsheet file.

### CAUTION

After testing and before creating a dashboard package, replace the absolute URL with the relative URL.

You can now create the dashboard package.



# **Creating the Dashboard Package**

Once you are satisfied with the results of your visualizations, they are ready to be published. To publish dashboards in SAP Business One, you create the dashboard package zip file that contains the following items:

- Dashboard folders that contain HTML files and Adobe Flash (SWF) files
- Info.xml file that contains nodes, descriptors, and attributes for the package, dashboards, and queries

### Prerequisite

You have replaced the absolute URL with the relative URL.

### Procedure

- 1. To create the SWF and HTML files that are needed for publication, do one of the following:
  - Export the visualization from SAP Crystal Dashboard Design as an HTML file. The Adobe Flash (SWF) file is generated automatically. To enable the visualization to run in SAP Business One, you have to edit the HTML file. For more information, see <u>Modifying</u> the default.html File.
  - Export the visualization from SAP Crystal Dashboard Design as Adobe Flash (SWF) and then create the HTML file.

Recommendation

Use the first option.

2. Create or modify the HTML file.



After you complete step 1, you can follow this procedure to manually package the dashboards. Another option is to automatically package the dashboards by using the SAP Business One Dashboard Packaging Tool.

Download the tool from: <u>http://www.sdn.sap.com/irj/sdn/businessone?rid=/library/uuid/601ca48d-67a8-2d10-ebb1-8d1b968059b2</u>.

3. Create the folder structure, including the info.xml file.

For information about the info.xml file, see <u>Example: Dashboard Folder and Dashboard</u> <u>Package</u>.

- 4. Create the zip file.
- 5. Manually create the folder structure, including the info.xml file.

For information about the info.xml file, see Example: Dashboard Folder and Dashboard Package.

6. Create the zip file.

#### Result

The dashboard package zip file contains one or more dashboard folders and an info.xml file with nodes, descriptors, and attributes for the package, dashboards, and queries.

The resulting SWF file can be executed locally with the stand-alone Adobe Flash player, opened in a browser, used as part of a Web site, or imported into a number of different programs.

For more thorough user testing, import the dashboard package into a separate test system running SAP Business One with the integration component. After testing, export the package from the test to the productive SAP Business One company. For more information about importing and exporting dashboards, see *Working with Dashboards in the Integration Component* in the documentation area of SAP Business One Customer Portal at <u>http://service.sap.com/smb/sbocustomer/documentation</u>.



### Modifying the default.html File

As described in the <u>Creating the Dashboard Package</u> section, you created the files that are needed for publication by exporting the visualization from SAP Crystal Dashboard Design as an HTML file. The Adobe Flash (SWF) file is generated automatically.

The following shows an excerpt from the default.html file.

```
<OBJECT classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"
codebase="http://fpdownload.adobe.com/pub/shockwave/cabs/flash/swflash
.cab#version=9,0,0,0"
WIDTH="620" HEIGHT="460" id="myMovieName">
<PARAM NAME="movie" VALUE="default.swf">
<PARAM NAME="quality" VALUE="high">
<PARAM NAME="bgcolor" VALUE="#FFFFFF">
<PARAM NAME="play" VALUE="true">
<PARAM NAME="loop" VALUE="true">
<PARAM NAME=bgcolor VALUE="#FFFFFF">
<EMBED src="default.swf" quality=high bgcolor=#FFFFFF WIDTH="620"</pre>
HEIGHT="460"
NAME="myMovieName" ALIGN="" TYPE="application/x-shockwave-flash"
play="true" loop="true"
PLUGINSPAGE="http://www.adobe.com/shockwave/download/index.cgi?Pl_Prod
_Version=ShockwaveFlash">
</EMBED>
< /OBJECT>
```

To enable the visualization to run in SAP Business One, you have to edit the default.html file in a text editor such as Notepad.

For <PARAM NAME="movie", modify VALUE by adding a package name (p), dashboard name (d), and Adobe Flash file name (f), as shown in the following example:</li>

Example: VALUE="proc?p=SAP\_DASHBOARD\_001&d=DAB003&f=default.swf">

2. For <EMBED, modify src by adding the same information as in step 1, as shown in the following example:

Example: <EMBED src="proc?p=SAP\_DASHBOARD\_001&d=DAB003&f=default.swf"

3. To support different browsers for the fscommand (see step 5 in <u>Building and Testing the</u> <u>Visualization</u>), you create and add two scripts: a Java script and a Visual Basic script. You can add the scripts anywhere in the default.html file.

```
a. Java Script: Change the command to the name you defined in SAP Crystal Dashboard
Design. In the following example, bllink_OCRD is the fscommand defined in SAP
Crystal Dashboard Design; OCRD is the name of the object with which you want to link;
args is the primary key passed from fscommand.
<SCRIPT LANGUAGE="javascript">
function myMovieName_DoFSCommand(command,args)
{
    if (command == "bllink_OCRD")
    {
        window.external.bllink("OCRD", args);
    }
    else if (command == "bllink_OITM")
    {
        window.external.bllink("OITM", args);
    }
}
```



```
}
}
</SCRIPT>
b. Visual Basic script:
<SCRIPT LANGUAGE="VBScript">
Sub myMovieName_FSCommand(ByVal command, ByVal args)
call myMovieName_DoFSCommand(command, args)
end sub
</SCRIPT>
```

### Result

You can now create the dashboard folder and package.

# **Q** Note

The example below is an excerpt from the default.html file. For both <code>codebase</code> and <code>PLUGINSPAGE</code>, <code>http</code> is removed at the beginning of the parameter. This enables the dashboard to be deployed without modification in both the HTTP and HTTPS environments.

```
<OBJECT classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"</pre>
codebase="//fpdownload.adobe.com/pub/shockwave/cabs/flash/swflash
.cab#version=9,0,0,0"
WIDTH="620" HEIGHT="460" id="myMovieName">
<PARAM NAME="movie"
VALUE="proc?p=SAP_DASHBOARD_001&d=DAB003&f=default.swf">
<PARAM NAME="quality" VALUE="high">
<PARAM NAME="bgcolor" VALUE="#FFFFFF">
<PARAM NAME="play" VALUE="true">
<PARAM NAME="loop" VALUE="true">
<PARAM NAME=bgcolor VALUE="#FFFFFF">
<EMBED src="proc?p=SAP_DASHBOARD_001&d=DAB003&f=default.swf"</pre>
quality=high bgcolor=#FFFFF WIDTH="620" HEIGHT="460"
NAME="myMovieName" ALIGN="" TYPE="application/x-shockwave-flash"
play="true" loop="true"
PLUGINSPAGE="//www.adobe.com/shockwave/download/index.cgi?P1_Prod
_Version=ShockwaveFlash">
</EMBED>
</OBJECT>
```

### See also:

For more information about scripts that make HTML pages interactive, see <u>http://www.w3.org/TR/REC-html40/interact/scripts.html#h-18.2.1</u>.



## **Dashboard Folder and Dashboard Package**

A dashboard folder, shown below, contains an HMTL file and an SWF file. A dashboard folder must contain a default.html file, which displays the dashboard to users.

🚝 package.zip - WinRAR				
File Commands Tools	Favorites Option	ns H		
Add Extract To	Test View			
💽 🚺 🎥 package.zip\DAB002 - ZIP archive,				
Name 🛧	Si	ze		
Contraction of the second seco	1,4 777,4	26 53		

A dashboard package, shown below, is a zip file that contains one or more dashboard folders and a configuration file (the info.xml file).

## 1 Recommendation

Export the SAP-defined dashboard package and use the SAP-defined default.html and info.xml files as templates for your own dashboards.

🔚 package.zip - WinRAR				
File Commands Tools Fav	orites Options			
Add Extract To Te	st View			
📔 🔝 📄 package.zip - ZI	P archive, unpacke			
Name 🔂	Size			
Name 🗘	Size			
Name <b>1</b>	Size			
Name 🗘	Size			
Name <b>1</b> DAB001 DAB002 DAB003	Size			
Name <b>1</b> DAB001 DAB002 DAB003 help	Size			

#### Example: info.xml Structure

```
<?xml version="1.0" encoding="utf-8" ?>
<Package>
<Code>SAP_DASHBOARD_001</Code>
<Name>SAP Dashboard Package 1</Name>
<Description>SAP Dashboard Package 1</Description>
<Author>SAP</Author>
<Version>1.0</Version>
<DashboardGroup>
```



```
<Dashboard code="DAB001" name="Service Call" note="The Service Call Status</pre>
    Dashboard">
    <Query category="SAP_DASHBOARD_001_DAB001_QUERY" name="Queues" />
    <Query category="SAP_DASHBOARD_001_DAB001_QUERY"
    name="IncomingCallsToday" />
  </Dashboard>
<Dashboard code="DAB002" name="Customer Aging" note="SAP Customer Aging"</pre>
    status="I">
    <Query category="SAP_DASHBOARD_001_DAB002_QUERY" name="MainCurrency"</pre>
    />
    <Query category="SAP_DASHBOARD_001_DAB002_QUERY" name="AgeTotalToday"</pre>
    />
    <Query category="SAP_DASHBOARD_001_DAB002_QUERY"</pre>
   name="FutureRemitToday" />
    <Query category="SAP_DASHBOARD_001_DAB002_QUERY" name="BPRevenueMonth"</pre>
    />
  </Dashboard>
</DashboardGroup>
<UserQueryGroup>
  <Query category="SAP_DASHBOARD_001_DAB001_QUERY" name="Queues">SELECT
    QueueID, Descript FROM OQUE WHERE Inactive='N' ORDER BY
    Descript</Query>
  <Ouery category="SAP DASHBOARD 001 DAB001 OUERY"</pre>
   name="IncomingCallsToday">SELECT . . . . </Query>
  <Query category="SAP_DASHBOARD_001_DAB002_QUERY"
   name="MainCurrency">SELECT MainCurncy FROM OADM</Query>
  <Query category="SAP_DASHBOARD_001_DAB002_QUERY" name="AgeTotalToday">
    SELECT . . . . </Query>
  </UserQueryGroup>
  </Package>
```

The info.xml file contains the following information:

Node	Description	Validation
<package></package>	Top node	
<code> <name> <description> <author> <version></version></author></description></name></code>	Descriptors of a dashboard package	<ul> <li>Code:</li> <li>Cannot start with SAP_</li> <li>Must be a valid file name</li> <li>Cannot contain the following characters: V : * ? \ " &lt; &gt;  </li> <li>Must be 32 characters or less</li> <li>Name must be 100 characters or less.</li> <li>Version must be 13 characters or less.</li> </ul>
<dashboard group=""></dashboard>	Group node	



Node	Description	Validation
<dashboard></dashboard>	Attributes of a dashboard code name note status	<ul> <li>code</li> <li>Is the folder name for a dashboard in the package</li> <li>Must be a valid file name</li> <li>Cannot contain the following characters: \/ : * ? \" &lt;&gt;  </li> <li>Must be 32 characters or less</li> <li>name must be 100 characters or less.</li> <li>status can have one of two values:</li> <li>A for active</li> <li>I for inactive</li> </ul>
<userquerygroup></userquerygroup>	Query strings	Every query used by a dashboard must be defined in the <userquerygroup> node with a <query> subnode.</query></userquerygroup>
<query> subnode</query>	Query used by the dashboard Attributes of a query: category name SELECT statement	The pair of attributes for a query, category and name, identify the <query>. The combination of these two attributes must be unique for the info.xml.</query>



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