SAP BusinessObjects Mobile Document Version: 4.0 Support Package 6 - 2013-04-30

Mobile Server Deployment and BlackBerry Client Configuration Guide



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1 About this Guide

1.1 Overview

This guide provides:

- An overview of the SAP BusinessObjects Mobile solution and its capabilities
- Information on how to deploy and configure the Mobile server components
- Information on how to upgrade from the existing Mobile server components
- Information on how to test the Server side deployment
- Information on how to configure the mobile client application supported on BlackBerry device
- Information on how to customize server properties to support different user requirements
- Information on how to set up and manage user rights
- Information on Mobile server security features
- Information on how to set-up and manage user rights
- Information on troubleshooting the SAP BusinessObjects Mobile system

i Note

- For information on configuring Mobile server for client app supported on BlackBerry, see SAP BusinessObjects Mobile Server deployment and Blackberry configuration Guide -Administrator and Report Designer'sGuide latest version, available at *http://help.sap.com/businessobject/product_guides/ boexir4/en/xi4sp5_mobile_user_en.pdf*.
- For information on configuring Mobile server for client app supported on iOS platform, see SAP BusinessObjects Mobile for iOS-Administrator and Report Designer's Guide, available at http://help.sap.com/businessobject/product_guides/boexir4/en/44x_mobiOS_user_en.pdf.
- For information on configuring Mobile server for client app supported on Android platform, see SAP BusinessObjects Mobile for Android-Administrator and Report Designer's Guide, available at http://help.sap.com/businessobject/product_guides/boexir4/en/424_mobiandr_user_en.pdf

1.2 Target Audience

This guide is designed to help the following end users:

- IT administrators who install and configure the Mobile server
- Business Intelligence administrators who perform the following tasks:
 - Plan how Business Intelligence (BI) data and applications are deployed and managed
 - Manage BI documents and folders for mobile users
- IT security managers who perform the following tasks:
 - Guarantee that business intelligence data communicated through the Internet and wireless networks remains secure
 - Manage mobile client access and the security policy of the Mobile server

• E-mail/mobile administrators who configure the BlackBerry Enterprises Server (BES)

2 What has Changed in this Version?

The Mobile server 4.0 SP06 includes following enhancements:

- View Mobile client audit files: Using the Audit log files, you can view the activities performed specifically by Mobile client application.
- Dedicated folder for Mobile server logs: This version delivers a dedicated folder to store Mobile server logs. To debugging Mobile server related errors, access Mobile server logs folder.
- Security Policies feature with Mobile Configuration server (MOBIServer): You can configure Server policies in server.properties file. The server policies configured in the configuration server will be applicable to the clients connecting to any connection via this configuration server.
- Mobile server support on Unix OS: Along with Windows and LINUX operating system, the Mobile server files can also be auto deployed on AIX and Solaris operating system. For more information, see Auto-Deployment of Mobile Server.
- Support for Web Intelligence features: Following are the Web Intelligence features supported by Mobile server:
 - Support for LSI on OpenDoc
 - Support for Hierarchy sections
 - Support for hyperlink color
 - Support to identity the content type through OpenDoc URL
 - Support for multicolumn LOV
 - Support for identifying the user rights for refresh
- Support for smart view feature: This feature enables you to view the latest instance of the document your mobile device using the application.
- Support for confidential category in both personal and Sub-category.
- Support for Czech language support

For more information on how to upgrade your current version of the SAP BusinessObjects XI 3.x to 4.0 SP6, see *Upgrading the Application*.

3 Introducing the SAP BusinessObjects Mobile Solution

3.1 Solution Overview

The SAP BusinessObjects Mobile solution allows users on the move to access and analyze business intelligence data using a mobile device; to help make analytical decisions.



Note: For Dashboard documents to work in SUP environment, a direct connection between the app and the DSWSBOBJ service on the Mobile server is required.

This solution comprises the following three major components:

- SAP BusinessObjects Mobile client
- SAP BusinessObjects Mobile server
- SAP BusinessObjects Business Intelligence (BI) platform

i Note

The above components are part of the SAP BusinessObjects BI platform installer.

Related Links

SAP BusinessObjects Mobile Client [page 8] SAP BusinessObjects Mobile Server [page 8] SAP BusinessObjects Business Intelligence (BI) Platform [page 9]

3.1.1 SAP BusinessObjects Mobile Client

The SAP BusinessObjects Mobile client is an application that has to be downloaded to each mobile device. A specific version of the client application is delivered for each of the following mobile operating platforms:

- BlackBerry For information about how to configure server settings for BlackBerry client application, see the SAP BusinessObjects Mobile Server Deployment and BlackBerry Client Configuration Guide at http://service.sap.com/~sapidb/011000358700001280592012E/xi4sp5_mob_inst_deploy_en.pdf
- iOS For information about how to configure server settings for an iPad client application, see the SAP BusinessObjects Mobile for iOS-Administrator and Report Designer's Guide at http://help.sap.com/businessobject/product_guides/boexir31SP3/en/43_mobiOS_admin_en.pdf
- Android devices This includes Android devices such as smartphones or tablets: For information about how to configure server settings for an Android client application, see the SAP BusinessObjects Mobile for Android-Administrator and Report Designer's Guide at http://service.sap.com/~sapidb/ onloo0358700001037102012E/410_mobiandr_repdesign_en.pdf

The client applications listed above are designed specifically to optimize the display of Business Intelligence (BI) content based on constraints affecting the screen size and the device's operating system.

Using this application, end users can access and interact with the following BI document types:

- SAP BusinessObjects Web Intelligence documents
- SAP BusinessObjects Crystal Report documents
- SAP BusinessObjects Dashboards
- SAP BusinessObjects Analysis Applications

SAP BusinessObjects Mobile works on data infrastructures such as Edge, Wi-Fi and 3G networks.

i Note

SAP BusinessObjects Mobile supports BI reports created using SAP Business Warehouse. Depending on the document type, you can view, analyze, and interact with the data contained in the documents.

Device Types

SAP BusinessObjects Mobile is not guaranteed to work on all mobile devices and operating systems. For a list of supported devices and operating systems, see: *http://service.sap.com/bosap-support*

Related Links

Downloading the SAP BusinessObjects Mobile to Your Device Setting the MIME Types on the Application Server [page 23] Configuring the Client Application

3.1.2 SAP BusinessObjects Mobile Server

SAP BusinessObjects Mobile server is a Web application server. It performs the following functions:

- Receives the requests sent by the SAP BusinessObjects Mobile client and passes them to the SAP BusinessObjects Business Intelligence (BI) platform server.
- Receives the response (for example, a Web Intelligence document or a Crystal Report document) from the SAP BusinessObjects Business Intelligence (BI) platform server and sends it to the SAP BusinessObjects Mobile client.

i Note

The Mobile server can communicate with multiple SAP BusinessObjects Business Intelligence platform Central Management Servers (CMS). You specify the CMS name on the *Connection Settings* screen of the Mobile client application on each device. This means that different devices can connect to different CMS servers based on your deployment. The Mobile server forwards the connection request to the CMS as specified on the device.

3.1.3 SAP BusinessObjects Business Intelligence (BI) Platform

The SAP BusinessObjects BI platform server projects the data captured from corporate databases and data warehouses as business intelligence documents or reports. It handles all aspects of the document lifecycle, including creation, cataloging, refreshing, content delivery, and reporting interactivity.

The SAP BusinessObjects BI platform server processes requests sent by the SAP BusinessObjects Mobile client through the SAP BusinessObjects Mobile server, and sends back responses (for example, a Web Intelligence document or a Crystal Report document).

i Note

- If you are accessing the portal through a desktop computer, this portal is termed as the *BI launch pad*.
- If you are accessing the portal through a mobile users, this portal is termed as the SAP BusinessObjects Business Intelligence Platform server.

3.2 Capabilities

With SAP BusinessObjects Mobile client application, you can manage your Business Intelligence (BI) documents and data, using a wide range of features and functionality.

- Set up a default document or folder that opens automatically whenever you log into the application
- Refresh reports to retrieve the latest data
- View results using keypad shortcuts
- Navigate to related documents using hyperlinks in reports
- View filtered results by modifying prompt values
- Receive alerts when a specific document is modified, a condition is met, or a schedule is run.
- Perform follow-up actions by clicking report cells to launch SMS, phone calls or e-mail.
- Save documents locally and view them offline, to mitigate network interruptions and minimize communication costs.

- Send links of BI documents by e-mail.
- Search BI documents in the Mobile category.
- Extend the usability for existing groups of mobile users that have secure access to BI content. This supports the mobile device form factor. This includes re-using universes, queries, variables, and report parts.

While viewing Web Intelligence reports, you can also:

- Drill down through results to analyze detailed or summary data.
- Track data changes using customizable highlighting (this feature is set up by the document creator).

3.2.1 Recommendations for Creating Reports

Although SAP BusinessObjects Mobile can display any Web Intelligence document or Crystal report, the user experience is optimized when reports are created specifically for easy reading and navigation on a small screen. You can find best practice information on how to design reports aimed at mobile end users in the *Designing Bl Documents for Mobile Users guide* : "Best Practices for Mobile Document Design" section.

4 Setting Up Mobile Server Connections

4.1 Pre-Installation Checklist

This checklist provides an overview of the steps you need to complete in order to deploy and configure SAP BusinessObjects Mobile. We recommend that you read this checklist before beginning the installation procedure.

- Check that your environment meets all the requirements for this version of the SAP BusinessObjects Mobile. To see a list of the supported platforms, visit our website *http://service.sap.com/bosap-support*
- Install and configure SAP BusinessObjects Business Intelligence platform. For more information, see SAP BusinessObjects Business Intelligence Platform Installation and Configuration Guide.
- Check that the SAP BusinessObjects Enterprise CMS is running.
- Check that your application server is Java-compliant and supported by the latest version of SAP BusinessObjects Business Intelligence Platform.

4.2 Deploying and Configuring the SAP BusinessObjects Server package on Web Application Servers

4.2.1 Apache Tomcat Web Application Server

The SAP BusinessObjects Mobile application is supported on the Tomcat Web application server. To install the Mobile server package on the Tomcat Web application server, perform the following steps:

- 1. Stop the Tomcat Web application server.
- 2. Copy the MobileOTA14.war file from the source location SAP BusinessObjects\Mobile 14\Client, to the SAP BusinessObjects BI platform locations, [Tomcat home directory]\webapps.
- 3. Start Tomcat.
- For the location of MobileBIService.war, and MOBIServer.war refer the section *Auto-deployment of Mobile Server*.
- The SAP BusinessObjects Mobile server can be installed on the same Tomcat Web application server on which other SAP BusinessObjects BI platform Web applications are deployed. It can also be installed on a separate Tomcat Web application server.
- Explicit configuration for the Tomcat Web application server is not required. However, for NetWeaver and WebSphere application servers, you need to perform configuration settings to complete the installation.

4.2.2 SAP NetWeaver Web Application Server

The mobile server package consists of following web applications:

- MobileBIService
- MOBIServer
- MobileOTA14

To deploy Mobile server package on the SAP NetWeaver Web application server, perform the following steps:

1. Edit the SAP_metadata.properties file.

Using a text editor edit SAP_metadata.properties file for each of the three web applications and perform the following steps:

- Access the location: <BOE_Install_Folder>\SAP BusinessObjects Enterprise XI
 4.0\wdeploy\SLDSupport\NWSLD\
- **2.** Set counter and release to version of the product. For example: If you are using 4.0, set counter and release version to 4.0.
- **3.** Set servicelevel to match the current SP level. For example: If you are using SP4, set the servicelevel to 4.
- **4.** Set patchlevel to the current patch level. For example: If you are using Patch 3, set the patch level to 3. If there is no patch applied to this SP level then set it to 0.
- **5.** If you have copied the metadata file from another web application, change the name of this file. The official names for each web application are below:
 - Web Application name and scn values (change both)
 - MobileBIService MOBILEBISERVICE
 - MOBIServer MOBISERVER
 - MobileOTA14 MOBILEOTA14
- 6. Save and exit the file.

i Note

In case any of the folders is missing from the Mobile server package, you can create it using the naming scheme for the web applications shown above and copy the SAP_metadata.properties file from one of the existing folders into this newly created folder.

- 2. Create the SCA files
 - 1. Using the command prompt, open <BOE_Install_Folder>\SAP BusinessObjects Enterprise XI 4.0\wdeploy.
 - 2. Create SCA files using the following commands:
 - wdeploy command : wdeploy.bat sapappsvr73 -DAPP=MobileBIService predeploy
 - wdeploy command : wdeploy.bat sapappsvr73 -DAPP=MobileOTA14 predeploy
 - wdeploy command : wdeploy.bat sapappsvr73 -DAPP=MOBIServer predeploy
- 3. Deploy the mobile SCA files to SAP NetWeaver:
 - 1. MOVE (cut and paste) all the Mobi*.SCA files from <BOE_INSTALL_DIR>/<Enterprise_DIR>/ wdeploy/workdir/sapappsvr73/application/ to the <Install_Drive>:\usr\sap\Trans\EPS \in folder of your SAP NetWeaver host.
 - Deploy the SCA file on SAP NetWeaver using the JSPM tool.
 To deploy the SCA file on SAP NetWeaver using JSPM tool, perform the following steps:
 - **a.** Open the <Install_Drive>:\usr\sap\<AS_ID>\J00\j2ee\JSPM folder to launch Java Support Manager (JSPM) tool.

- b. Run go.bat.
- c. On the Login screen, enter the SAP NW administrator username and password.
- d. Choose Log On.
- e. On the Welcome > Select Package Type screen, select New Software Components.
- f. Choose Next.
- **g.** On the New Software Component > Specify Queue screen, Choose Next.
- h. On the New Software Component > Check Queue screen, Choose Start.

4.2.3 WebSphere Web Application Server

There are two ways to deploy the SAP BusinessObjects server on the WebSphere application server.

- If you have installed the Mobile server package on the same WebSphere web application server, deploy the MobileOTA14.war file manually.
- If you have installed the Mobile server package on the SAP BusinessObjects Enterprise (BI platform) server, use the wdeploy tool to deploy the MobileOTA14.war file automatically.

To deploy the MobileOTA14.war file on the web-tier installation using Wdeploy tool, perform the following steps:

- 1. Copy the MobileOTA14.properties and MobileOTA14.war files from the full or custom installation of the SAP BusinessObjects Mobile to the corresponding folder on the web-tier host. The MobileOTA14.properties file is located there: <BOE_INSTALL_DIR>\SAP BusinessObjects Enterprise XI 4.0\wdeploy\conf\apps.
- 2. Use *Wdeploy* to deploy the MobileOTA14.war file.

For information on how to use the *Wdeploy* tool, refer to *SAP BusinessObjects Enterprise Web Application Deployment Guide.*

4.2.3.1 Deploying SAP BusinessObjects Mobile on WebSphere Application Server

To deploy the SAP BusinessObjects Mobile on WebSphere application server, perform the following steps:

- Copy MobileBIService folder from <BOE_Install_Folder>\SAP BusinessObjects\SAP BusinessObjects Enterprise XI4.0\warfiles\webapps to your system local drive.
- 2. Go to the MobileBIService\WEB-INF\lib folder and perform the following substeps:
 - a) Create a temporary folder *Extracts*.
 - b) Select one Java archive (.jar) file to be kept in the current location. Move (cut and paste) the other .jar files to the *Extracts* folder.

i Note

The .jar files take a long time to deploy due to their large file size. Hence, they are moved to a temporary folder.

3. Create a new war file MobileBIService.war with META-INF and modified WEB-INF.

- 4. Open the administrator console of WebSphere, and perform the following substeps:
 - a) Choose Application > New Application > New Enterprise Application.
 - b) Browse for the new MobileBIService.war file.
 - c) Choose Next.
 - d) Choose Next until the context path page appears.
 - e) Set the Context path as MobileBIService.
 - f) On the Summary Panel, choose Finish.
 - g) Save the deployment.
- 5. Open the *Extracts* folder. Move (copy and paste) the .jar files to the MobileBIService\WEB-INF\lib folder.

4.2.3.2 Launching WebSphere Application Server

To launch WebSphere application server, perform the following steps:

- 1. Open the administrator console of WebSphere.
- 2. Go to Enterprise Applications.
- **3.** Choose *MobileBIService > Manage Modules > Module*.
- 4. Under Update, select Classes loaded with local class loader first (Parent Last).
- 5. Start *MobileBIService.war* from the administrator console.

4.2.4 WebLogic Web Application Server

To deploy the SAP BusinessObjects Mobile on WebLogic application server, perform the following steps:

- 1. Set the <prefer-web-inf-classes> element to true in weblogic.xml file.
- 2. Copy MobileBIService folder from <BOE_Install_Folder>\SAP BusinessObjects\SAP BusinessObjects Enterprise XI4.0\warfiles\webapps to your system local drive.
- 3. Copy the weblogic.xml file configured in step 1 to the ${\tt MobileBIService} \ {\tt WEB-INF}$ folder.
- 4. Create a new war file MobileBIService.war with META-INF and modified WEB-INF.
- 5. Open the administration console of WebLogic and perform the following substeps:
 - a. Choose Deployments > Install.
 - **b.** In the *Path* field, access the location of the newly created MobileBIService.war file.
 - c. Choose MobileBIService.war.
 - d. Choose Next.
 - e. In Choose Install this deployment as an application.
 - f. Choose Next.
 - g. Select the desired deployment targets.
 - h. Choose Next.
 - i. Choose Next.
 - j. Choose Yes, take me to the deployment's configuration screen.

- k. Choose Finish.
- I. Choose Save.

4.2.5 Auto-Deployment of Mobile Server

As of release 4.0 SP06 of the SAP BusinessObjects Mobile server, the "MobileBIService.war" and "MOBIServer.war" files will be auto-deployed.

If you are upgrading from versions BI 4.1, XI 3.x or XI R2 of the SAP BusinessObjects Mobile server, choose the auto-deployment scenario in the existing environment, to complete the installation of 4.0 SP06 on your system.

Windows Operating System

You can choose any of the following scenarios to auto deploy the .war files depending on the mode of the base installation performed on your server: If your base installation was performed in the:

- **Full Installation Mode**: Install the latest patch in the existing environment to auto-deploy the mobile server on the default application server. You find the mobile server web applications in the following locations:
 - In extracted form: <Install_Dir>\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\warfiles\webapps
 - In web archived form: <Install_Dir>\SAP BusinessObjects\SAP BusinessObjects
 Enterprise XI 4.0\wdeploy\workdir\tomcat6\application
- **Custom Installation Mode**: Install the latest patch in the existing environment by choosing "Mobile Servers" and "Web-tier " along with default application server. The mobile server is auto deployed on the default application server.

i Note

If the above mentioned server options are not selected appropriately after the latest patch installation on the existing environment, you need to perform the *Modify* installation on base installation.

• Web-Tier Installation Mode: Install the latest patch in the existing environment you need to perform the Modify installation in the base installation; the mobile servers are auto-deployed on the default application server.

i Note

Mobile servers are auto-deployed after the *Modify installation*, only if the base installation has Web-Tier components.

Linux Operating System

• BOE (<=SP05, XI 3.x, XI R2): Install the latest patch in the existing environment. you need to perform the Modify installation in the base installation; the mobile servers are auto-deployed on the default application server.

i Note

Mobile servers are only auto-deployed after the Modify installation, if the base installation has Web-Tier components.

- BOE 4.0 SP05 : To install 4.0 SP06 Mobile server on your SAP BusinessObjects Enterprise 4.0 SP5 installation, choose from the following scenarios:
 - Mobile server installed: Install the latest patch in the existing environment by choosing "Mobile Servers" and "Web-tier" along with default application server. The mobile server is auto-deployed on the default application server.
 - No Mobile server installed : Install the latest patch in the existing environment you need to perform the Modify installation in the base installation; the mobile servers are auto-deployed on the default application server.

AIX/Solaris Operating System

Install the current patch in the existing environment, you need to perform the modify install on base installation, to get the mobile server auto-deployed.

i Note

Mobile servers gets auto-deployed after the *Modify* install in base installation, only if the base installation is having Web-Tier components.



4.3 Upgrading the Application

Upgrading Mobile Server

To know more about upgrading the SAP BusinessObjects XI R2 and XI 3.x version installed on your Mobile server to SAP BusinessObjects Mobile, see *Auto-Deployment of Mobile Server*.

Upgrading Client Application

To upgrade the SAP BusinessObjects XI R2 and XI 3.x version installed on your mobile device to the SAP BusinessObjects Mobile client application, perform the following steps:

- **1.** Uninstall the client application on your device.
- Download the application on your mobile device.
 For more information, see *Connecting the SAP BusinessObjects Mobile Client*.

i Note

After client application installation, to retrieve the local documents on your device, use Recover Local Store in your application menu.

4.3.1 Migrating from Previous Versions of Mobile

If you are migrating from SAP BusinessObjects Mobile 4.0, XI 3.x, and XI R2 versions installed on your Mobile server, the following features supported on the server remain unchanged.

Alerts

If users have subscribed to alerts while using a previous version of Mobile, those subscriptions remain unchanged when migrating to the later version.

Local Documents

The documents stored locally on your device are deleted from the device when the Mobile client application is removed. To restore local documents to the device, you need to recover them from the SAP BusinessObjects Business Intelligence platform CMS. To do this, proceed as follows:

- On the user's device, log on to the SAP BusinessObjects Mobile application, launch the menu and Choose *Preferences*.
- Launch the menu again and choose *Recover Local Store*. The documents stored in the Mobile Offline Data Store (on the CMS) for this user are restored to the Local Documents folder on the device.
- For mobile reports, if you have defined any specific additional DSNs (ODBC connections) for universes and CR data sources in the previous release, then you must create the DSNs on the SAP BusinessObjects 4.0 machine.

5 Testing the Server-Side Installation

We recommend that you test your connections between the Mobile servers and the SAP BusinessObjects BI platform server before you deploy them on the actual device, by using the BlackBerry device simulator.

5.1 Pre-requisites

- A machine with Sun's Java Runtime Environment (JRE V1.5 or higher). You can download the JRE from Sun's website: *http://java.sun.com/javase/downloads/index.jsp*.
- Download and install the BlackBerry simulator and its E-mail and MDS Services companion simulator version 4.2 or higher from the BlackBerry developers website: http://na.blackberry.com/eng/developers/ resources/simulators.jsp.
- You must install the BlackBerry simulator and its E-mail and MDS Services companion simulator on the same server machine.
- Access the Mobile server and index page of the MobileOTA14 application from the machine where the BlackBerry simulator is installed.

5.2 Verifying Your Installation

To test the server side installation, perform the following steps:

- 1. Launch the Mobile application on the device or simulator. For more information, see *Launching the BlackBerry simulator*.
- **2.** Log onto the SAP BusinessObjects BI platform server (CMS). For more information, see *Logging onto to SAP BusinessObjects client application on simulator*.
- **3.** Browse the documents on the server. For more information, see *Accessing the SAP BusinessObjects documents*.
- **4.** Open a document on the server. For help on troubleshooting, see the *Troubleshooting Information* section of this documentation.

5.2.1 Launching the BlackBerry Simulator

To launch the BlackBerry simulator on your computer, perform the following steps:

1. Start the Mobile Data System (MDS) service by choosing *Start* > *Programs* > *Research in Motion* > *BlackBerry Email and MDS Services Simulators* <version_n> > *MDS*.

i Note

When you start the MDS, you should see the MDS DOS command window. If you do not see the command window, or if it disappears immediately, then your MDS simulator did not start correctly. For more

information on how to overcome this problem, see *Troubleshooting problems encountered while working with simulators*.

You can also verify the status of the MDS connection server by accessing: *http://bes:mds_port* where, bes is the machine name on which MDS is installed.

- **2.** Start the BlackBerry simulator by choosing *Start* >*Programs* > *Research in Motion* > *BlackBerry Smartphone Simulators* <*version_n*> < *version_n*>.
 - i Note
 - If you have deployed the OTA download Web application, launch the BlackBerry browser and then type in the URL of your SAP BusinessObjects Mobile client application download page, select the *BlackBerry Version*, and choose *OK*.
 - If you have not deployed the OTA download Web application, copy all the files in the <BOBJ_INSTALLDIR>\Mobile 14\Client\blackberry directory on your Mobile server into the <Research In MotionInstallDir>\BlackBerry Device Simulators <version_n> \<version_n> (8800-OrangeFR) installation directory of the simulator.

5.2.2 Logging On to the SAP BusinessObjects Client Application on Simulator

To log onto the SAP BusinessObjects Mobile using Mobile client, perform the following steps:

- 1. Choose the SAP BusinessObjects application icon.
- 2. On the login screen, choose *Connection settings* from the menu.
- 3. Enter the following information on the screen Server: http(s)://<mobile-server>:<port>.

i Note

For the Tomcat server: Default port number is 8080 CMS: <machine name/IP of BOE where CMS is running>

- 4. Choose Save.
- 5. Enter the Username and Password that you received after registering .
- 6. Choose *Login* from the menu. Once you have successfully logged in, you will see the following list on the home screen:
 - Local Documents
 - Server Documents
 - Mobile Ready Documents
 - Search

5.2.3 Accessing the SAP BusinessObjects BI Documents

Once you have logged on to the SAP BusinessObjects Mobile application on your mobile device, you can choose between the following categories of documents:

• Local documents: These documents are stored locally on your device. You can synchronize local documents with the online versions of the same documents currently published on the SAP BusinessObjects Enterprise server.

i Note

When you synchronize your mobile device with the SAP BusinessObjects Enterprise server, any local documents that no longer exist on the server are automatically deleted from your device.

For example, if you save a copy of a server document called LocDoc1 to your device and the server version is deleted later, the next time you save a different server document to your device, LocDoc1 is deleted.

- Server documents: These documents are stored on the SAP BusinessObjects Enterprise server. Therefore, they are accessible only in online mode when you are connected to the server.
- *Mobile-ready document:* The user is allowed to view the documents that are available under the Mobile category within the Business enterprise repository.
- Search: SAP BusinessObjects Mobile searches the documents that are categorized as "mobile-ready" and retrieves a list of documents that match the specified search string.

5.3 Configuring the BlackBerry MDS Simulator to Function Behind the Proxy Server

To set up the BlackBerry MDS Simulator to function behind a proxy, the *rimpublic.property* file must be updated with the appropriate proxy information.

Edit the *rimpublic.property* file with the following proxy information:

```
application.handler.http.proxyEnabled=true
application.handler.http.proxyHost=proxy
application.handler.http.proxyPort=8080
```

i Note

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rimpublic.property is located at: <Research In MotionInstallDir>\BlackBerry Email and MDS
Services Simulators #.#.#\MDS\config

Alternatively, you can use the proxyAutoConfig options:

```
application.handler.http.proxyAutoConfig=true
application.handler.http.proxyAutoConfigURL=http://proxy:8083
application.handler.http.proxyAutoConfig.ScriptCacheTime=0
```

6 Creating Pre-defined Server Connections for Client Applications

You can create/add new connections for each Mobile server deployed. Deploying Mobile server installs the server.properties file. You can configure this file based on your requirements to create new server connections.

To create/ add new connections, perform the following steps:

1. Open the server.properties file from the following location: <INST_WEB_APP_SERVER>/MobileBIService/ WEB-INF/config/custom.

i Note

If you do not have "custom" folder available, perform the following steps:

- 1. Create a folder "custom" under <INST_WEB_APP_SERVER>/MobileBIService/WEB-INF/config.
- 2. Copy the properties file from <INST_WEB_APP_SERVER>/MobileBIService/WEB-INF/config/default to the above-created "custom" folder.

i Note

We recommend you to only copy the properties that you want to customize, in "custom" folder.

2. Add the line mobi.policy.policyname=policyvalue.

The server policies are identified by mobi.policy name and policy value. For example,

- mobi.policy.policyname1= Value 1
- mobi.policy.policyname2= Value2

i Note

For information on the policy name and value supported by the client , see respective client Administrator guide.

3. Add the line *mobi.connections*.

The mobile connections in the list are identified by mobil.connections values. For example, mobil.connections=connection1, connection2, connection3, means that three Mobile server connections are configured.

- 4. For each mobile connection, enter a value for its properties. Below is the list of properties:
 - connectionName.DisplayName
 - connectionName.BOBJ_MOBILE_CMS
 - connectionName.BOBJ_MOBILE_URL
 - connectionName.BOBJ_MOBILE_AUTH_METHOD
 - connectionName.BOBJ_MOBILE_CONNECTION_TYPE
- 5. Save the properties file.

This provides you with the flexibility/control to restrict the connection and control the connection behavior.

Using these pre-defined server connections, you can make HTTP calls to MOBIServer. For more information, see *Configuring your device to access the SAP BusinessObjects Business Intelligence platform* in the SAP BusinessObjects Mobile User Guide.

📲 Example

Properties file

#values for connection1 connection

- connection1.DisplayName= *dewdftvoo583q*
- connection1.BOBJ_MOBILE_CMS = 10.208.110.75
- connection1.BOBJ_MOBILE_URL = http://10.208.110.75:8080
- connection1.BOBJ_MOBILE_AUTH_METHOD = secEnterprise, secLDAP, secWinAD, secSAPR3 (any of the one that you want to use)
- connection1.BOBJ_MOBILE_CONNECTION_TYPE = CONNECTION_BES, CONNECTION_WIFI, CONNECTION_BIS, CONNECTION_TCP (the one that you want to use)

#values for connection2 connection

- connection2.DisplayName=*jkhxuichd23h*
- connection2.BOBJ_MOBILE_CMS = 20.123.123.89
- connection2.BOBJ_MOBILE_URL = http://20.123.123.89:8080
- connection2.BOBJ_MOBILE_AUTH_METHOD = secEnterprise, secLDAP, secWinAD, secSAPR3 (any of the one that you want to use)
- connection2.BOBJ_MOBILE_CONNECTION_TYPE = CONNECTION_BES, CONNECTION_WIFI, CONNECTION_BIS, CONNECTION_TCP (the one that you want to use)

7 Configuration Settings for BlackBerry Client Application

7.1 Setting the MIME Types on the Application Server

After you have installed the OTA download Web application and deployed the MobileOTA14.war on the Web application server, before configuring the client application with the BI platform server, you need to add the MIME types for each device type that is used to deploy SAP BusinessObjects Mobile.

The table below lists the MIME types supported by SAP BusinessObjects Mobile for all the device types:

| Extension | МІМЕ |
|-----------|----------------------------------|
| .jad | text/vnd.sun.j2me.app-descriptor |
| .cod | application/vnd.rim.cod |

For information on how to add MIME types to your specific brand of Web application server, see the documentation for your Web application server.

Related Links

Setting MIME types in Apache Tomcat [page 23] Setting MIME types for NetWeaver Server [page 24]

7.1.1 Setting MIME types on Apache Tomcat Server

In Tomcat, you can add MIME type declarations to the end of the <mime-mapping> list of the *TOMCAT_HOME/ conf/web.xml* as follows:

- 1. Stop Tomcat.
- 2. Open \$TOMCAT_HOME/conf/web.xml for editing.
- **3.** Add the following text:

```
<!-- MH Extensions for Mobile Application download -->
<mime-mapping>
<extension>jad</extension>
<mime-type>text/vnd.sun.j2me.app-descriptor</mime-type>
</mime-mapping>
<mime-mapping>
<extension>cod</extension>
<mime-type>application/vnd.rim.cod</mime-type>
</mime-mapping>
```

- 4. Save and close the web.xml file.
- 5. Restart Tomcat.

7.1.2 Setting MIME Types on NetWeaver Server

To resolve the .jad errors that occur when downloading the client to a BlackBerry device, perform the following steps:

- 1. Open SAP Net Weaver Administrator, choose Configuration > Infrastructure > Java System Properties.
- On the Services tab, select HTTP Provider Service.
 On the Extended Details tab, you can see a list of all the service properties.
- **3.** Enter a *New MIME type* in the list that appears as a value for the MIME property. Specify different MIME type entries enclosed in curly brackets. You must specify the file extension first and then the MIME type, separated by a comma. For example, {.html,text/plain}. Different MIME types entries in the list are also separated by commas.
- 4. Enter the *MIME type* {.jad,text/vnd.sun.j2me.app-descriptor}.
- 5. Choose Save Changes.

7.2 Pre-configuring BlackBerry Client Application with Connection Settings Details

You can configure the Mobile client application with connection settings details before deploying the client on the device. This eliminates the need to manually configure connection settings details. This is supported on BlackBerry devices with OS version 4.3.0 or higher.

To preconfigure your Mobile client application with the connection settings details, perform the following steps:

- Locate the MobileXI4BB.jad file in the directory SAP BusinessObjects\Tomcat6\webapps \MobileOTA14\blackberry.
- 2. Open the .jad file with the text editor and edit the values for the attributes. You can exclude any values that are not required.

```
BOBJ_MOBILE_URL: http://<mobile server:port number>
BOBJ_MOBILE_CMS: <cms address>
BOBJ_MOBILE_AUTH_METHOD: <authentication type>
BOBJ_MOBILE_USER_NAME: <enter the username>
BOBJ_MOBILE_USER_PASSWORD: <enter the password>
BOBJ_MOBILE_SAVE_PWD: <enter default value for save password>
```

For example:

```
BOBJ_MOBILE_URL:http://10.208.106.244:8080
BOBJ_MOBILE_CMS: 10.208.106.244
BOBJ_MOBILE_AUTH_METHOD:secWinAD
BOBJ_MOBILE_SAVE_PWD: Yes/No
```

where <authentication type> can be any of the following values: secEnterprise, secWinAD, secLDAP, secSAPR3.

i Note

- Ensure that you delete the Java application server cache.
- If you want to lock the attributes values, then use XXX_LOCKED. Replace <xxx> with the attribute name to make it non-editable. The attribute value can be set to true/false. The default value that is set for the attributes is false.

BOBJ_MOBILE_URL_LOCKED BOBJ_MOBILE_CMS_LOCKED BOBJ_MOBILE_AUTH_METHOD_LOCKED BOBJ_MOBILE_USER_NAME_LOCKED BOBJ_MOBILE_USER_PASSWORD_LOCKED

For example:

BOBJ_MOBILE_URL_LOCKED:True BOBJ_MOBILE_CMS_LOCKED:False

• The following attributes can be set to hide/show. A missing attribute means that the value is set to show.

```
BOBJ_MOBILE_SAVE_PWD_UI
BOBJ_MOBILE_URL_UI
BOBJ_MOBILE_CMS_UI
BOBJ_MOBILE_AUTH_METHOD_UI
BOBJ_MOBILE_UNMASK_PASSWORD_UI
```

For example:

BOBJ_MOBILE_SAVE_PWD_UI:hide BOBJ_MOBILE_URL_UI: show

- 3. Save the file.
- 4. Restart the Java application server.
- Download the Mobile client onto your mobile device. The connection settings details such as Mobile server, CMS name, and authentication type are populated.

7.3 Installing Web Intelligence Images for Mobile Reports

The SAP BusinessObjects Mobile server component includes image files designed to be used when authoring Web Intelligence documents targeted at mobile devices. The images include:

- skins -- that provide a model of the screen size of some mobile devices, so you can design Web Intelligence reports to fit specific device constraints.
- icons -- to be used in cells that contain on-report alerters, so that alerters are easier to view via mobile devices

The file names are:

| Filename | Description |
|---|------------------------|
| <skin_blackberry.gif></skin_blackberry.gif> | BlackBerry device skin |
| <skin_nokia.gif></skin_nokia.gif> | Nokia device skin |

| Filename | Description |
|---|---------------------------------|
| <icon_symbolfail.gif></icon_symbolfail.gif> | Fail alerts icon |
| <icon_symbolpass.gif></icon_symbolpass.gif> | Pass alerts icon |
| <icon_symbolwarning.gif></icon_symbolwarning.gif> | Warning alerts icon |
| <icon_trendgreenup.gif></icon_trendgreenup.gif> | Trend up (green) alerts icon |
| <icon_trendreddown.gif></icon_trendreddown.gif> | Trend down (red) alerts icon |
| <icon_trendyellowdown.gif></icon_trendyellowdown.gif> | Trend down (yellow) alerts icon |
| <icon_trendyellowflat.gif></icon_trendyellowflat.gif> | Trend flat (yellow) alerts icon |
| <icon_trendyellowup.gif></icon_trendyellowup.gif> | Trend up (yellow) alerts icon |

i Note

- The images can be any image file downloaded from internet.
- The image files should be placed at the following path, so that they are easily accessible from the Web Intelligence component: <BOBJ_INST_DIR>\SAP BusinessObjects Enterprise XI 4.0\images. If SAP BusinessObjects Mobile is installed on a dedicated server, as SAP BusinessObjects recommends, administrators need to copy these image files from the Mobile server and paste them onto the SAP BusinessObjects Business Intelligence platform server at: <BOBJ_INST_DIR>\SAP BusinessObjects Enterprise XI 4.0\images.

8 Advanced Configurations

8.1 Customizing the mobi.properties File

You can work with all the features of a mobile application (client) with the default settings of the mobi.properties file.

To customize the mobi.properties file, Open the mobi.properties file from the following location: <INST_WEB_APP_SERVER>/MobileBIService/WEB-INF/config/custom.

i Note

If you do not have "custom" folder available, perform the following steps:

- 1. Create a folder "cusotm" under <INST_WEB_APP_SERVER>/MobileBIService/WEB-INF/config.
- 2. Copy the properties file from <INST_WEB_APP_SERVER>/MobileBIService/WEB-INF/config/default to the above-created "custom" folder.

i Note

We recommend you to only copy the properties that you want to customize, in "custom" folder

To enter the values for each property, refer to the table below:

| | Property | Default Values | Description | Possible Values |
|----------|-------------------------------|----------------|--|--|
| #default | default.corporat eCategory | 'Mobile' | Provide a name for a corporate category. Documents assigned to this category are considered to be mobile ready documents. Mobile users can access the BI documents assigned to this category using an SAP BusinessObjects Mobile app on any mobile device (including Blackberry, Windows, Android and iOS). If there is more than one category name, specify the values, separating each with a comma. | Any specific corporate category chosen by the admin. |

| Property | Default Values | Description | Possible Values |
|--|--------------------|--|---|
| | | i Note The value specified here is case- sensitive. | |
| default.personal Category | 'Mobile' | Provide a name for a personal category. Documents assigned to this category are personal to the user and cannot be accessed by other mobile users. If there is more than one category name, specify the values, separating each with a comma. i Note The value specified here is case sensitive. | Any specific personal category chosen by the admin. |
| <pre>default.search.s upportDocumentTy pes</pre> | 'Web Intelligence' | Specify the document types you want to retrieve from the server. For more than one document type, specify the values, separating each with a comma. | Web Intelligence,CrystalRep ort |
| default.imageSiz e | '1048576 bytes' | Specify the maximum size for an image that is displayed in the SAP BI app on mobile device. | Any numeric value |
| default.lov.size .limit | '50' | Specify the maximum display for the List of number values (LOV) in a SAP BI application (client) can prompt. | Any numeric value |

| | Property | Default Values | Description | Possible Values |
|-------|--|----------------|--|--|
| | default.search.r esultsPerPage | '10' | Specify the number of search results to be displayed per page on the mobile device. | Any numeric value |
| | default.search.m axDocuments | '500' | Specify the maximum number of documents to be displayed in search results when performing a search. | Any numeric value |
| | default.search.m axInstanceOfDocu ment | '5' | Specify maximum number of instances of a document to be displayed in search results when performing a search. | Any numeric value |
| | default.document s.cachesize | '5' | Specify the number of documents that can be cached by user per user session | Any numeric value |
| #ipad | <pre>ipad.corporateCa tegory</pre> | 'Mobile' | Provide a name for a corporate category. Documents assigned to this category are specific to the iPad request source. Documents assigned under this category can be accessed only by users of the SAP BusinessObjects Mobile for iOS (SAP BI) application on an iPad device. If there is more than one category name, specify the values, separating each with a comma. i Note • The value specified here | Any specific corporate category chosen by the admin. |

| Property | Default Values | Description | Possible Values |
|--------------------------------------|-----------------------|---|--|
| | | is case- sensitive. If you specify a value, then this value is taken instead of the default.corpora teCategory value. | |
| ipad.personalCat egory | 'Mobile' | Provide a name for a personal category. Documents assigned to this category are user specific. If there is more than one category name, specify the values, separating each with a comma. i Note The value specified here is case sensitive. If you specify a value, then this value is taken instead of the default.persona ICategory value. | Any specific corporate category chosen by the admin. |
| ipad.pagemode | 'true' | This value is for internal use only and must not be modified. | |
| ipad.outputDataT ype | 'convertChartToTable' | This value is for internal use only and must not be modified. | |
| ipad.search.supp ortDocumentTypes | 'Web Intelligence' | Specify the document types you want to retrieve. | Web Intelligence,CrystalRep ort |

| | Property | Default Values | Description | Possible Values |
|----------------|---|-----------------------|--|---------------------------------------|
| #iphone | iphone.corporate Category | 'Mobile' | Reserved for future use. | Mobile |
| | iphone.personalC ategory | 'Mobile' | Reserved for future use. | Mobile |
| | iphone.pagemode | 'true' | This value is for internal use only and must not be modified. | |
| | iphone.outputDat aType | 'convertChartToTable' | This value is for internal use only and must not be modified. | |
| | <pre>iphone.search.su pportDocumentTyp es</pre> | 'Web Intelligence' | Specify the document types you want to retrieve. | Web Intelligence,CrystalRep ort |
| #androidtablet | androidtablet.co rporateCategory | 'Mobile' | Provide a name for a corporate category. Documents assigned to this category are considered to be mobile ready documents. Documents assigned under this category can be accessed by users within your organization. If there is more than one category name, specify the values, separating each with a comma. i Note • The value specified here is case- sensitive. • If you specify a value, then this value is taken instead of the default.corpora | Mobile |

| | Property | Default Values | Description | Possible Values |
|---------------|---|-----------------------|---|------------------|
| | | | teCategory value. | |
| | androidtablet.pe rsonalCategory | 'Mobile' | Provide a name for a personal category. Documents assigned to this category are user specific. If there is more than one category name, specify the values, separating each with a comma. | Mobile |
| | | | Note The value specified here is case sensitive. If you specify a value, then this value is taken instead of the default.persona ICategory value. | |
| | androidtablet.pa gemode | 'true' | This value is for internal use only and must not be modified. | |
| | androidtablet.ou tputDataType | 'convertChartToTable' | This value is for internal use only and must not be modified. | |
| | androidtablet.se arch.supportDocu mentTypes | 'Web Intelligence' | Specify the document types you want to retrieve. | Web Intelligence |
| #androidphone | androidphone.cor porateCategory | 'Mobile' | Reserved for future use. | Mobile |
| | androidphone.per sonalCategory | 'Mobile' | Reserved for future use. | Mobile |

| | Property | Default Values | Description | Possible Values |
|-----------------------|--|-----------------------|---|------------------|
| | androidphone.pag emode | 'true' | This value is for internal use only and must not be modified. | |
| | androidphone.out putDataType | 'convertChartToTable' | This value is for internal use only and must not be modified. | |
| | androidphone.sea rch.supportDocum entTypes | 'Web Intelligence' | Specify the document types you want to retrieve. | Web Intelligence |
| #blackberry mobile | bbphone.pagemode | 'false' | This value is for internal use only and must not be modified. | |
| | bbphone.outputDa taType | 'XML' | This value is for internal use only and must not be modified. | |
| #blackberry Tablet | bbtablet.pagemod | 'false' | This value is for internal use only and must not be modified. | |
| | bbtablet.outputD ataType | 'XML' | This value is for internal use only and must not be modified. | |
| #blackberry Tablet | bbtablet.pagemod e | 'false' | This value is for internal use only and must not be modified. | |
| | bbtablet.outputD ataType | 'XML' | This value is for internal use only and must not be modified. | |

9 Administrative and Security Rights

9.1 Managing Document Access and Other Rights for Mobile Users

Administrators can set up security rights for mobile users and groups on the SAP BusinessObjects Business Intelligence Platform Central Management Console (CMC), using the standard SAP BusinessObjects Business Intelligence platform security rules.

i Note

For complete information on configuring rights, see the SAP BusinessObjects Business Intelligence Platform Administrator's Guide.

Mobile Rights for Users and Groups

To set the rights for the user or groups, perform the following steps:

- 1. Log in to the Central Management Console application.
- 2. Under Manage category, choose Applications.
- **3.** Select SAP BusinessObjects Mobile from the list and click on Manage user security icon. The User Security: SAP BusinessObjects Mobile popup appears.
- 4. Select Add Principles.

The Add Principles popup appears.

- 5. To assign appropriate rights, choose Users or Groups.
- 6. Select Add and assign security and perform following substeps:
 - **a.** In the Access level tab, choose the access levels.

i Note

The minimum access level you are required to assign is View.

- In the Advanced tab, Select Add/ Remove Rights. The Add/Remove rights popup appears.
- **c.** You can set grant or deny rights for each listed application right. SAP BusinessObjects Mobile supports the following application rights for selected users and groups:

| Right | Description |
|--|--|
| Log on to SAP BusinessObjects Mobile application | Permits you to log on to SAP BusinessObjects Business Intelligence platform (using the Mobile application) and view documents. |
| Subscribe to document alerts | Permits you to subscribe to document/recurring alerts. |

| Right | Description |
|--------------------------------------|--|
| | i Note If you were previously granted the "Subscribe to document alerts" right and access is currently denied, you will still continue to receive subscribed alerts. You must explicitly unsubscribe from alerts if you do not want to receive them. |
| | i Note To subscribe to document alerts (or recurring instances) for schedules, a user must have "Full Control" security access for the "System Events" folder under "Events" in the Central Management Console (CMC). |
| Save documents locally to device | Permits you to save documents on the Mobile device. i Note If you saved documents on the device when you were granted the "Save documents locally to device" right, the documents still exist on the device even if you are currently not authorized to save. However, these documents are not synced during the synchronization process. |
| Send documents on device as an email | Permits you to send reports by e-mail. |

d. Select Ok.

By default, users belonging to the administrators group have full access rights and all other users are only granted the "Log on to SAP BusinessObjects Mobile application" right unless these rights are explicitly denied.

The Mobile application rights did not exist in XI R2 and XI 3.x releases. Hence, if you are upgrading or migrating from an XI R2 or XI 3.x system to a 4.0 system, rights for users and groups need to be configured in the 4.0 system.

Authentication

SAP BusinessObjects Mobile supports the following authentication methods:

- Enterprise
- Windows AD
- LDAP
- SAP R/3

9.2 Mobile Category and Document Access

We recommend that your Enterprise administrator creates a category in the BI Launch pad named *Mobile* under corporate categories, and assigns mobile-related documents to this category. If the administrator groups all mobile documents under the same category, then mobile users only access the content designed for mobile consumption through the *Home* page. This reduces the number of clicks required to access documents at each login.

As an administrator, you can deny or grant specific groups in the Mobile deployment access to the documents and sub-categories within the Mobile category.

9.3 Working with CORBA SSL Enabled CMS

If your SAP BusinessObjects Business Intelligence platform CMS is configured to use CORBA SSL, then additional configuration is required to enable the Web application servers (WAS) to work with CORBA SSL.

Add the following entry to the Java options of any Web application server:

```
-Dbusinessobjects.orb.oci.protocol=ssl -DcertDir=d:\ssl
-DtrustedCert=cacert.der
-DsslCert=clientcert.der
-DsslKey=client.key
-Dpassphrase=passphrase.txt
```

The following table shows the descriptions that correspond to these examples:

| Example | Description |
|---|--|
| <dcertdir=d:\ssl></dcertdir=d:\ssl> | The directory to store all the certificates and keys. |
| <dtrustedcert=cacert.der></dtrustedcert=cacert.der> | Trusted certificate file. If specifying more than one, separate with semicolons. |
| <dsslcert=clientcert.der></dsslcert=clientcert.der> | Certificate used by the SDK. |
| <dsslkey=client.key></dsslkey=client.key> | Private key of the SDK certificate. |
| <dpassphrase=passphrase.txt></dpassphrase=passphrase.txt> | The file that stores the passphrase for the private key. |

For information about configuring servers for SSL, see SAP BusinessObjects Business Intelligence Platform Administrator's Guide .

10 Auditing

Auditing enables you to keep a record of significant events on SAP BusinessObjects Business Intelligence platform servers and applications, giving you a picture of what information is being accessed, how it is being accessed and changed, and who is performing these operations. This information is recorded in a database called the Auditing Data Store (ADS). Once the data is in the ADS, you can design custom reports to suit your needs.

For information on the list of auditing events and details, the auditing database and schema, and to understand how auditing works, see Auditing chapter of the SAP BusinessObjects Business Intelligence Platform Administrator's Guide.

10.1 Auditing Events

SAP BusinessObjects Mobile obey the following auditing events supported at SAP BusinessObjects Enterprise server based on the settings of the Business Intelligence artifacts:

| Event | Description |
|----------|--|
| View | This event is triggered when Mobile users attempt to view a BI document in the Mobile client |
| Refresh | This event is triggered when Mobile users attempt to refresh a BI document in the client. |
| Prompt | This event is triggered when Mobile users attempt to select value for a promptin the client. |
| Retrieve | This event is triggered when Mobile users attempt to retrieve a BI document from CMS |
| Logon | This event is triggered whenMobile users attempt to logon to the client application. |
| Logout | This event is triggered whenMobile users attempt to logout of the client application. |

However, you can identify the events specific to the Mobile application by querying the ADS using the Application_Type_Name = "SAP BusinessObjects Mobile parameter".

10.2 Creating Custom Auditing Reports

Auditing reports help you identify, troubleshoot, and detect underlying system errors.

You need to build an auditing universe by using the auditing database. You can use the SAP Crystal Reports or SAP BusinessObjects Web Intelligence to create custom auditing reports for user and system actions.



SQL for generating report for Mobile application 'View' event

```
Use BOE140_Audit
Go
SELECT a.event_type_id,a.event_type_name,c.event_detail_type_id,
c.event_detail_type_name,b.event_id,d.event_detail_value
FROM
ads_event_type_str a,
ads_event_b,
ads_event_detail_type_str c,
ads_event_detail_d,
ads_application_type_str e
WHERE
a.event_type_id = b.event_type_id and
c.event_detail_type_id = d.event_detail_type_id and
b.event_id = d.event_id and
e. application_type_name = 'SAP BusinessObjects Mobile' and
a.Language ='SOURCE' and
c.Language ='SOURCE' and
```

i Note

a.event_type_id =1002

When generating a Save event report, use a.event type id=1088.

11 Troubleshooting Information

11.1 Logging and Tracking Mobile Server Errors

The main types of server errors that you need to capture in your deployment are:

- SAP BusinessObjects Business Intelligence platform errors, reported directly to the Mobile client. For more information, see *Error Messages Explained* guide.
- Mobile server errors:

Generic errors Authentication errors such as invalid credentials, session errors Networking errors such as Remote site unreachable, Cannot resolve the address, Local database access errors, Connection to the application server lost HTTPS errors

11.1.1 Defining the Log Level

The procedure enables the Mobile application to record information on the execution of the application. This log information helps you to identify issues if the application fails or encounters a problem.

To set log levels for the Mobile server component.

- You need to create three environment variables
 - BO_TRACE_LOGDIR: Specifies the path to the folder where logs are generated.
 - BO_TRACE_CONFIGFILE: Specifies the path to BO_trace.ini
 - BO_TRACE_CONFIGDIR: Specifies the path to the folder where BO_trace.ini is located.
- BO_trace.ini is the configuration file in which multiple log levels can be set. There are different log level types: XL, L, M, XS, and S.BO_trace.ini should have atleast 4 parameters.

The following table describes the logging level importance in decreasing order of verbosity:

| Logging Level Importance | Description |
|--------------------------|---|
| << (FINE) | Logs the detailed information (generally used for debugging purposes) |
| <= (CONFIG) | Logs server configuration information |
| == (INFO) | Logs general information about the state of the server and client |
| >= (WARNING) | Logs warning messages |
| >> (ERROR) | Logs information if something unexpected happens that can cause an error or cause the application to stop functioning correctly |

To set the log level, perform the following steps:

1. Open the BO_Trace.ini file for editing.

2. Set the required logging level importance for each unit.

For detailed information on how to configure server tracing through the BO.trace.ini filer, see how to configure server tracing through the BO.trace.ini file section in *http://help.sap.com/businessobject/product_guides/boexir31SP3/en/xi31_sp3_bip_admin_en.pdf.*

i Note

If you do not set the importance for any units, then the default importance that you set for the global parameter is applied to these units.

Sample BO_trace.ini

```
active = false;
importance = m;
alert = true;
severity = 'E';
```

11.1.2 Viewing Build Numbers

After installing the Mobile server and the client, you can access the build number of the Mobile application for both the server and client. The build number enables you to identify which version of the Mobile application you have installed. It is also useful for troubleshooting any Mobile server and client problems.

You can access the build number of the Mobile server from the log files of the log level DEBUG. These are located in the *MANIFEST* file, which is located in the *MobileBIService.war* file.

To view the build number of the Mobile client application you can either:

- 1. Look at the splash screen when you start the Mobile client application on the device.
- 2. Open the device menu and choose Preferences About 2.

11.2 Standard Troubleshooting Tips

The following questions can help you analyze and resolve the errors captured in your server and device logs.

Identifying the component causing the error

Is the error caused by:

• A server-specific or client- specific issue?

- An installation or deployment issue?
- A login issue?
- An execution issue?

Verifying platform pre-requisites and connectivity

Some areas to check when troubleshooting:

- Is the device supported/compatible?
- Can the device browser access the Internet?
- Can the device access the BES/MDS?
- Is the server OS/JDK version/database supported?

11.3 Problems Encountered While Working with the Simulator

Troubleshooting frequently encountered problems while working with simulators

| Problems | Solution |
|--|---|
| Unable to connect to any URLs from the Simulator | Check if the MDS service is started. |
| The BlackBerry MDS service did not start correctly | Check whether the "Java_Home" and "PATH" environment variables are set correctly. See also the BlackBerry FAQs: http://www.blackberry.com/knowledgecenterpublic/ livelink.exe fetch/ 2000/348583/796557/800738/800792/801079/ Support _Mobile_Data_Service_Simulator_does_not_launch.html? nodeid=800979 |
| JVM 104 error on the Simulator | To eliminate JVM errors, add the following parameters to the BAT file of the Simulator: |
| | /ignore-error=104 /app- param=JvmNoBreakOnThrowable |
| | For example, the Bold simulator BAT file ("9000.bat") is located at: <research in="" motioninstalldir=""> \BlackBerry Smartphone Simulators 4.6.0\4.6.0.150 (9000)</research> |

11.4 Network Unavailable Errors

Mobile devices that connect to SAP BusinessObjects Mobile need to be configured for Internet access. Ensure that all devices in your deployment can connect to the Internet, so that they can access the Mobile server.

If TCP and APN settings are not correctly configured on the device, the user might receive *Open-tunnel failure* or *Network unavailable errors*. To resolve these errors configure the device for Internet access. These can also be caused by:

| Cause | Resolution |
|--|---|
| Incorrect network configuration for device | Check the data subscription Check the carrier settings (TCP) Check the IT policy Check the application rights (can use HTTP and socket connection) |
| Incorrect connection settings | Mobile server name Mobile port number CMS name |
| Device cannot connect to the Mobile server | Device cannot connect to the BES BES cannot connect to the Mobile Server Mobile Server cannot connect to the SAP BusinessObjects Business Intelligence platform Server Device cannot connect to the internet or to the proxy server (if your deployment includes a proxy server) The proxy server cannot connect to the Mobile Server (if your deployment includes a proxy server) The Mobile Server cannot connect to the SAP BusinessObjects Business Intelligence platform Server |

11.5 HTTPS Errors

For information on HTTPS errors, follow the W3C RFC link *http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html#sec10*.

i Note

Each Web application server has its own HTTPS error codes. To troubleshoot these problems, see your Web Server documentation.

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