Agile
Version e6.1

ORACLE

Oracle® Agile Engineering Data Management

Administration Manual for Agile e6.1.1

Part No. E15611-01

September 2009

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Preface

The Oracle documentation set includes Adobe® Acrobat™ PDF files. The Oracle Technology Network (OTN) Web site (http://www.oracle.com/technology/documentation/agile.html) contains the latest versions of the Oracle Agile EDM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Oracle Documentation folder available on your network from which you can access the documentation (PDF) files.

Note	To read the PDF files, you must use the free Adobe Acrobat Reader™ version 7.0 or later. This program can be downloaded from the Adobe Web site (http://www.adobe.com).

Note	Before calling Agile Support about a problem with an Oracle Agile EDM manual, please have the full part number, which is located on the title page.

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Readme

Any last-minute information about Oracle Agile EDM can be found in the Release Notes file on the Oracle Technology Network (OTN) Web site (http://www.oracle.com/technology/documentation/agile_eseries.html)

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Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Chapter 1

Introduction

The Administration Guide describes how to administrate the installed Agile e6.1.1 components.

About Agile e6.1.1 Administration

An Agile e6.1.1 application/environment defines a particular hardware and software configuration that allows Agile e6.1.1 to work with an Oracle database, Oracle Application Server.

Note	We will use the word “application” instead of “environment” in this documentation.

To administrate Agile e6.1.1, you can create and manage Agile e6.1.1 applications. For each created Agile e6.1.1 application, information is stored on the Agile e6.1.1 server that specifies how to connect to the database and locate data and which oracle application server to use.

When installing an Agile e6.1.1 server, the installation program automatically creates a default application which will be configured during the installation, and the application name will be associated with the database.

It is also possible to create additional applications within the same installation, thus it is not necessary to maintain separate installations for different purposes. A single Agile e6.1.1 installation often includes separate applications for various purposes, such as testing (for testing purposes before creating the actual working applications), development, production, and education.

The applications created for an installation can be associated with the same or with different databases (e.g. a multi-environment system, in which development and test environments, and their respective databases, co-exist with a production environment and its database). In general it is recommended to have a separate production infrastructure to avoid risk of loss of production by changing something in e.g. the development environment.

About Agile e6.1.1 Business Services Administration

When creating an Agile e6.1.1 application, the Business Services component will be installed/deployed on your oracle application server for each new application. The Business Services comprises of the Workflow Module.

Overview of the Workflow Module

To include Workflow processes in an Agile e6.1.1 application, optional configuration parameters can be defined for the processes within the overall Agile e6.1.1 application definition. For more information, refer to the chapter Administrate Agile e6.1.1.

Note	For further information on using the Workflow module, refer to the Agile e6.1.1 Online Help > Using Agile e6 > Product Data Management > Workflow.

Make Modification without the Administration Client

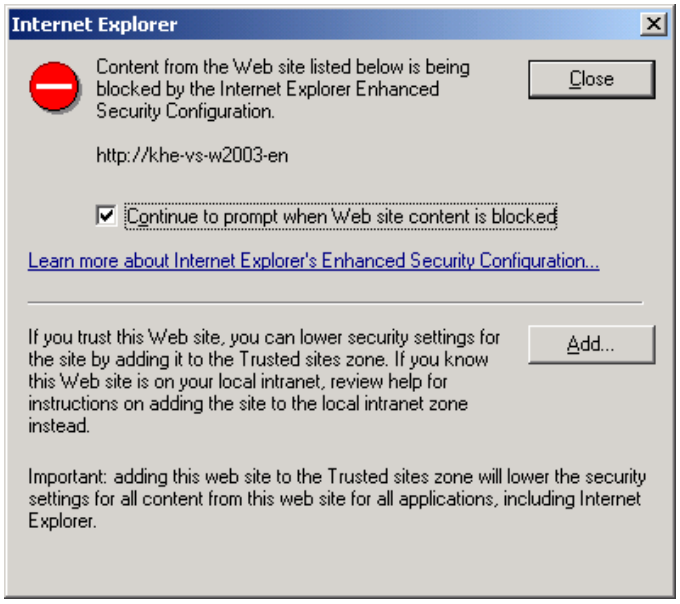
Note	Any file or configuration modification made without the Administration Client will be lost during a patch upgrade, or by changing the application values with the Administration client again.

Chapter 2

Administrate Agile e6.1.1

The Agile e6.1.1 Administration client lets you create, configure, and delete Agile e6.1.1 applications via the web browser. Agile recommends that you use a supported browser (see Prerequisites Guide for Agile e6.1.1) to connect to the Administration client.

Note If the following window opens, you might have to add the Administration client to the trusted web sites in your browser settings:



Administration Client

The Administration client will be installed automatically with the Installer if you install a server component. It can be used to create new or modify existing applications. The Administration client is a web based application and is deployed in an Apache Tomcat servlet container. For detailed information on Apache Tomcat servlet container refer to http://tomcat.apache.org/ . Currently we are using Apache Tomcat v6.0.16.

You can find Apache Tomcat in:

- Windows: %ALLUSERSPROFILE%\agile\installer\6.1\admin
- Unix: $HOME/agile/installer/6.1/admin.

Start the Administration Client

- Windows:

  Start the service "Apache Tomcat AdminClient" and set the startup type to "Automatically".

- Unix:

  Use the standard apache tomcat startup and stop scripts.

  A 32bit Java 5 version has to be used. On most new Unix servers the default java version is a 64bit java.

  1. To set the 32 Bit Java 5 for Tomcat create the file "setenv.sh" in the $HOME/agile/installer/6.1/admin/apache-tomcat/bin directory of tomcat with a line like:

  export JRE_HOME=/usr/local/java/jdk1.5/jre

  2. Tomcat will automatically use this java version which must point to a 32 bit Java.
  3. Start Tomcat with "startup.sh". Stop Tomcat with "shutdown.sh".

  Tomcat will show the used Java version at startup with something like:

  Using JRE_HOME: /usr/local/java/jdk1.5/jre

Change the Password

The Administration client has a default password which has to be changed after the Agile e6.1.1 installation.

- The encrypted password for the admin client can be found in:
  - Windows:

    %ALLUSERSPROFILE%\agile\installer\6.1\admin\apache-tomcat\webapps\AdminClient\metadata\Adminserver_Props.txt
  - Unix:

    $HOME/agile/installer/6.1/admin/apache-tomcat/webapps/AdminClient/metadata/Adminserver_Props.txt.
- To create a new password execute:
  - Windows:

    %ep_root%/axalant/cmd/epkeytool.bat -encryptpwd -pass <password> -keyStore cwallet.sso -keyAlias "C=DE,ST=Baden,L=Karlsruhe,O=Oracle,OU=Agile PLM,CN=PLM"
  - Unix:

    $ep_root/axalant/scripts/epkeytool.sh -encryptpwd -pass <password> -keyStore cwallet.sso -keyAlias "C=DE,ST=Baden,L=Karlsruhe,O=Oracle,OU=Agile PLM,CN=PLM"

The resulting output is your encrypted password. Change the property “password” in the “Adminserver_Props.txt“ file with the newly generated password, and restart the Apache Tomcat process.

Change the Apache Tomcat Configuration

Tomcat is configured with a HTTP connector by default.

Note	Administration client uses port 8030 for the HTTP connector.

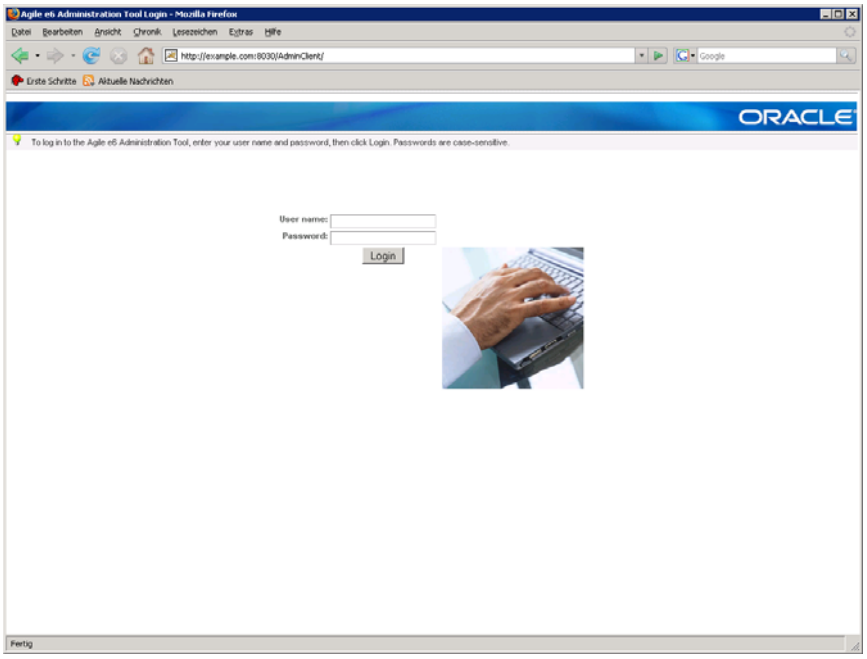
If you want to change this port you have to edit the Apache Tomcat “conf/server.xml” file and restart the Apache Tomcat process. If you want to enable HTTPS for the Administration client please refer to http://tomcat.apache.org/tomcat-6.0-doc/ssl-howto.html for more information.

Administration with the Administration Client

Login/Logout

1. Access the Administration Client via http://<servername>:8030/AdminClient.

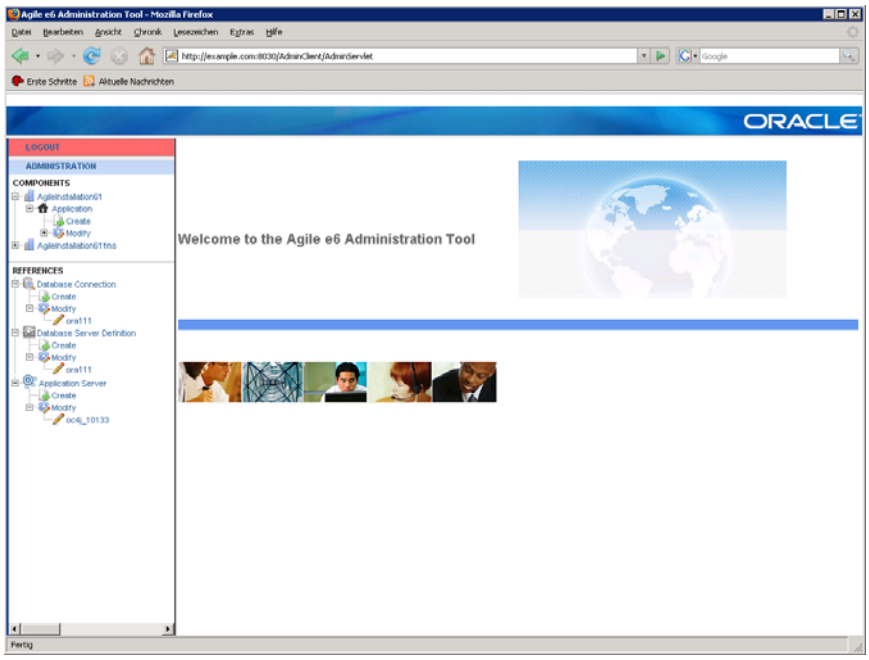
   The login site is opened.



2. Login with the following parameters:

- User: plm
- Password: e.g. “ChangeOnInstall” or your new generated password

  The Welcome site is opened.



The navigation at the left hand side shows under ‘Components’ all available installations that can be configured.

Under ‘References’ the available database clients, databases, and application server can be found.

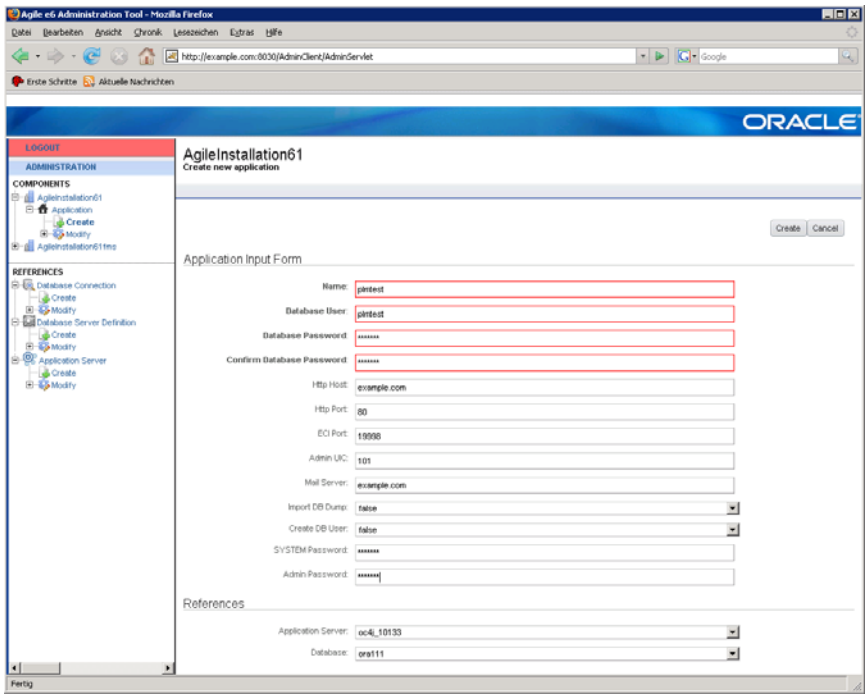
3. To logout click the “Logout” link in the upper left corner.

Note The Administration client will timeout after 10 minutes, after that you have to login again.

Create/Modify an Application

1. Under <installation name> -> Application click create.

   The Application Input Form is opened.



2. Create a new application with the following parameters:

Application Input Form

Setting	Description
Name	The name of the default application you want to create (former axalantORIGIN)
Database User	The database user you want to use for the application.
Database Password	The password of the database user.
Verify Password	The password entered above has to be repeated for verification.
Http Host	The host where the web client is running (the application server host name).
Http Port	The port where the web client is running (the HTTP(s) port of your application server).
ECI Port	The port where the business service will be configured to “wait” for requests (default: 19998).
Mailserver	If you want to send emails with the business services, define the name of your SMTP mailserver.
Admin UIC	The UIC of an Agile e6.1 user to whom administrative emails should be send to.
Import DB Dump	Select if you want the standard dump to be imported to the above defined database user.
Create DB User	Select if you want the database user to be created automatically.
SYSTEM Password	Password of the System (Administrator) Oracle database user. **Note** You only have to apply a value here if you want to create a new database user and selected that in the field above.

Admin Password	Password of the oracle application server user defined in the referenced application server. (Normally the password of the “oc4jadmin” user.)

References

Note Here you can define which Database and Application server should be used for this application. (Normally these values do not have to be changed.)

Setting	Description
Application Server	The name of the reference of the application server where the components like the business service will be deployed.
Database	The name of the reference of the database you want to use for the application.

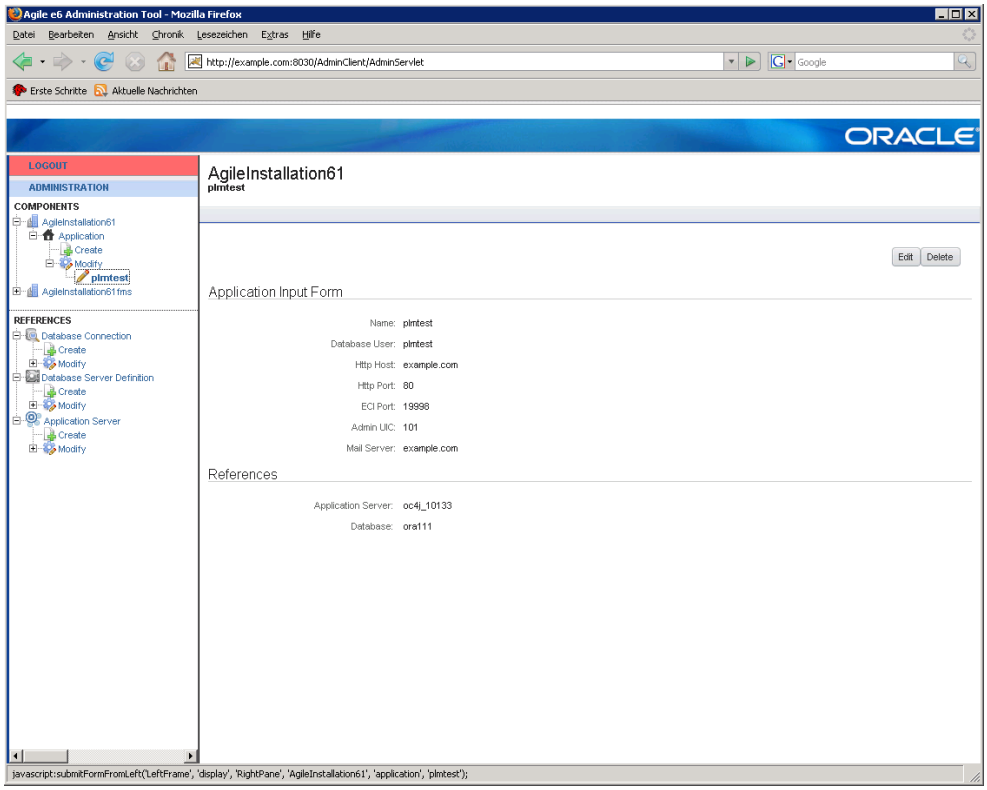
Note Creating a new application can take up to 5 minutes, depending on if a database user will be created and the database dump for the application has to be imported.

3. Click Create.

Update/Delete an Application

1. To update an application click “<application name>” under <installation name> -> Application -> Modify.

   This opens the following site:



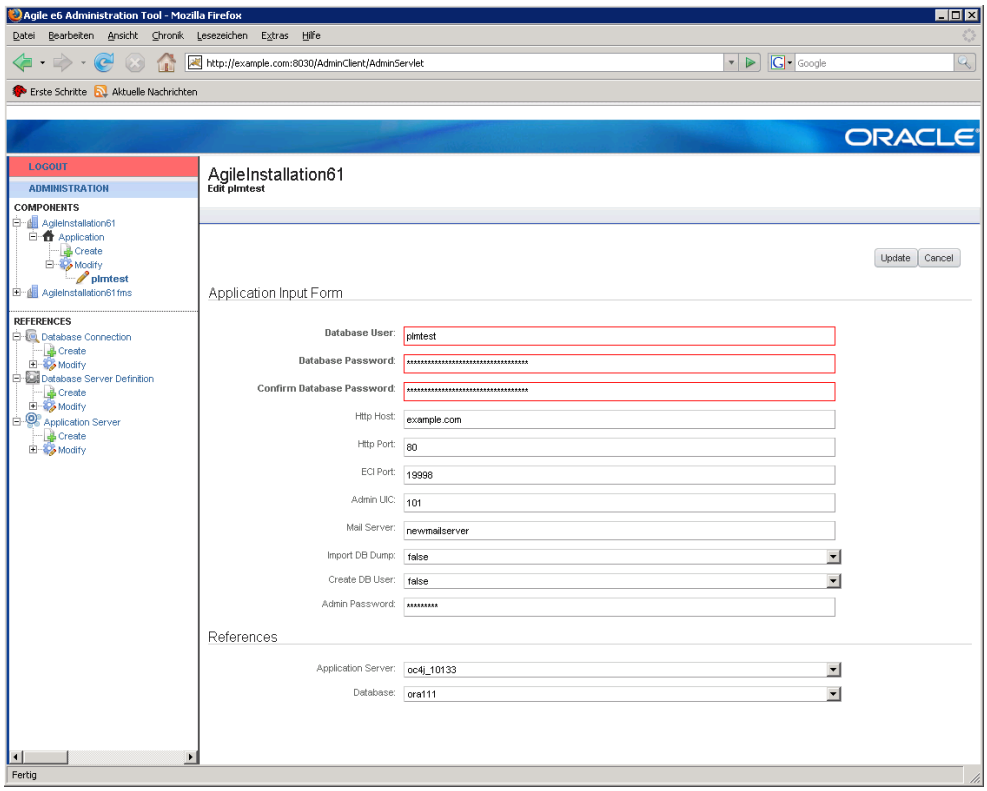
Here you can see the current values of your application.

It is possible to delete the application with the “Delete” Button in the upper left corner.

Note Deleting an application will not remove the business service from the Oracle Application Server, this must be done manually with the Oracle Application Server control web interface. Also, the used database schema remains unchanged.

2. Click the “Edit” Button in the upper left corner to change the values for the application.

   This opens the following site:



In this example the value of the mail server has been changed. To apply the changes, press the “Update” button in the upper right corner. The admin server will delete your current application and create a new one with the new values. Also the business services will be redeployed with the new values. All changes made for the business service directly on the Oracle Application Server are lost.

Note All manual changes of your application which are not applied over the Administration client will be lost.

Note To update a production application that is in use and running is NOT recommended.

Set and Change Initial User Passwords in a New Agile e6.1.1 Application

Note The enhanced security module is enabled in each newly created application (with a new dump) by default. You can only login to this application with the user "manager"!

Perform the following steps:

1. Start a e6.1.1 Client and login to your application with user "manager" with password "manager"
2. For the first login you are asked to set a new password for this user. This will be the password for the future logins.
3. All other users are deactivated and have to be activated y setting a new valid password.

Set the password for user "EDBCUSTO" and all other standard users

1. Open the User List: Manager > Permissions > User > Basic Data
2. Set the password: Refresh > Select "EDBCUSTO" > Context Menu: Set Password

Note At the first login of user "EDBCUSTO" with the initial password the user will be asked to set a new password. This will be the password for the future logins.

Repeat these steps for all newly created, and standard users.

Chapter 3

Managing References

Add a New Database to Use for an Application

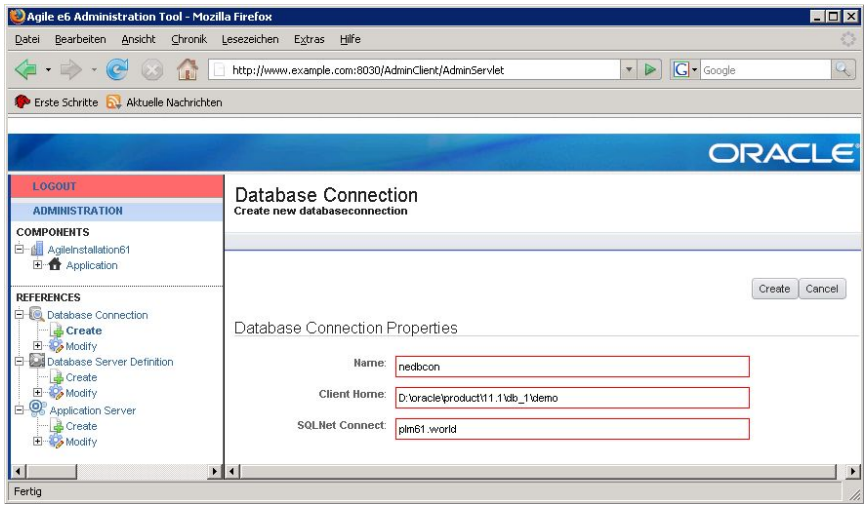
Requirements for a new database:

- Create a new database connection
- Define a new database server

  Will be connected over the previously defined database connection.
- SQLNet has to be configured already and working

1. To define a new database connection, click on “create” under References > Database Connection.

   This opens the following site:

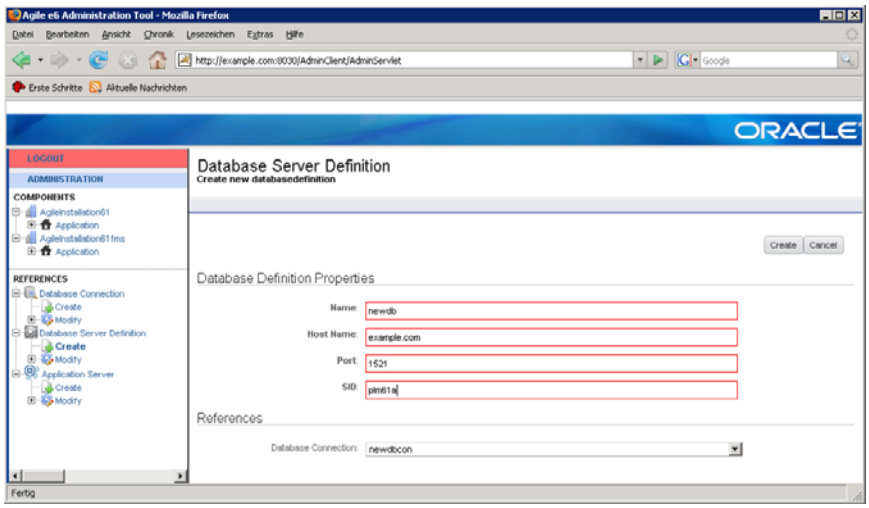


2. Create a new database connection with the following parameters:

Setting	Description
Name	The new name which identifies the connection
Client Home	The Oracle Client Home directory
SQLNet Connect	The SQLNet connect string as defined, e.g. tnsnames.ora

3. Click Create in the upper right corner.
4. To define a new database server click on “create” under References > Database Server Definition.

   This opens the following site:



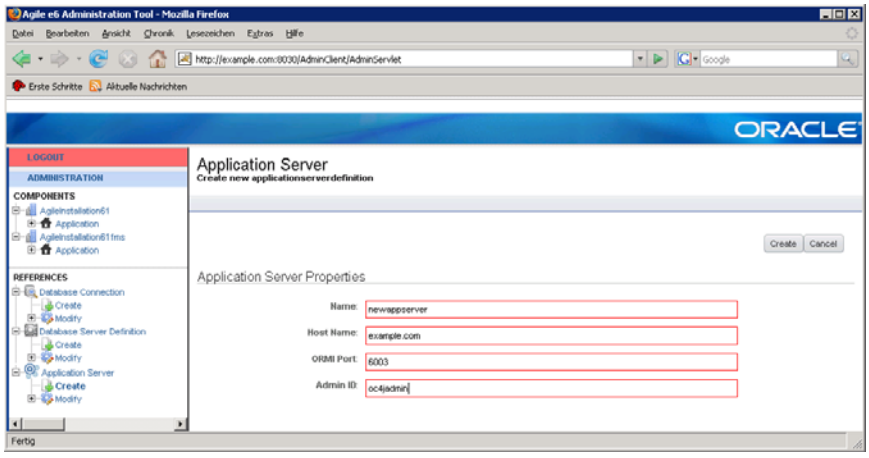
5. Create a new database server with the following parameters:

Setting	Description
Name	The new name which identifies the database definition
Host Name	The host name of your database server.
SID	The SID of the database you want to connect to.
Port	The port where the listener listens on the database server.

6. Click Create in the upper right corner.

Add a New Application Server to Use for an Application

7. To define a new application server click “create” under References > Application Server.



8. Create a new application server with the following parameters:

Setting	Description
Hostname	The hostname of your application server.
ORMI Port	The ORMI port on which the application server can be accessed (6003 is the standard Oracle Application Server port for that).
Admin ID	The username of a user on the application server which is allowed to deploy applications. (Default user is oc4jadmin)

9. Click Create in the upper right corner.

Delete a Reference

1. To delete a reference (Reference Database Connection/Database Server Definition/Application Server) expand the “Modify” node of the corresponding reference and select the name of the reference.
2. Click Delete in the upper left corner.

   This will only delete the reference in the “installation_prop.xml” file if the reference is not in use. If it is in use an error message is displayed.

Note Nothing else will be deleted!

Chapter 4

Advanced Administration Tasks

Agile e6.1.1 and Oracle Application Server

Note In this document, replace <installation_name> with your installation name (e.g. AgileInstallation61).

The Oracle Application Server is mandatory for Agile e6.1.1. After the Agile e6.1.1 installation, the Web Client, Java Client Web Start, PLMAPI (HTTP support), the Web Fileservice have to be available. Additionally, for each created application a Business service has to be available.

To verify this, login to your Oracle Application Server. The following applications have to be available (e.g. http://example.com:7777/em/console/ias/oc4j/applications (your oracle application server name and http port)):

- Java Client Web Start:

  Jacc<installation_name>

- PLMAPI:

  plmapi<installation_name>

- Business Services:

  BusinessService<application name>

- Web Client:

  Agile e6 <installation_name> WebClient webplmenv

- Web Fileservice:

  Agile e6 <installation_name> WebFileservice

The following context roots of these applications (except the Business Service and WebFileservice) have to work.

Note Use your Oracle Application Server name and http port.

- http://example.com:7777/WebClient_<installation_name>_webplmenv/

  Web client start link

- http://example.com:7777/Jacc<installation_name>/jacc.jnlp

  Java client web start

- http://example.com:7777/plmapi<installation_name>/services

  plmapi services page

Further information on Oracle Application Server administration can be found under the Oracle Application Server documentation http://download.oracle.com/docs/cd/B31017_01/index.htm.

Agile e6.1.1 Business Service Administration

Business Services are always installed/deployed if a new application is created with the Administration client. Therefore, the availability of the application server is mandatory.

If you want to perform additional changes to the Workflow module, as described in the Manager Information of the Workflow module online help, you have to edit the configuration file for the Business Services on the Oracle Application Server directly. You can find the "ABS_<application_name>.ini" file at <oracle application server home> \j2ee\home\applications\BusinessService<application_name>\<application_name>Web\WEB-INF\ABS_<application_name>.ini.

The definition of the JDBC database connection can be found in the web module of the Business Service at <oracle application server home> \j2ee\home\applications\BusinessService<application_name>\<application_name>Web\WEB-INF\web.xml.

If manual modifications have been made to these files, the Oracle Application Server application has to be restarted to use the modified values.

Note	Changing values with the Administration Client for an application will overwrite your manual changes!

The Business Services will connect to the defined database user/schema directly after they are started in the Oracle Application Server.

Note	Once this connection was lost due to e.g. a database reboot, dropping the database schema, loss of service, you have to restart the business service inside the Oracle Application Server.
Note	It is also possible to restart the complete Oracle Application Server, but all included services will not be available for that time.

About Agile e6.1.1 Web Client Administration

The e6.1.1 Web client is always installed/deployed if a new Agile e6.1.1 server installation is created. The Web client allows starting all created applications of the installation. The Web client for your installation can be accessed via e.g.

Note	Use your Oracle Application Server name and http port.

http://example.com:7777/WebClient_<installation_name>_webplmenv/

On the file system the WebClient can be found on the Oracle Application Server at <oracle application server home>\j2ee\home\applications\Agile e6 <installation_name> WebClient webplmenv.

Note If you have made modifications to the Web client you have to restart the Oracle Application Server application to use the modified values.

Note It is also possible to restart the complete Oracle Application Server, but all included services will not be available for that time.

About PLMAPI/ HTTP(S) Support

PLMAPI allows the communication to the Agile e6.1.1 application server through firewalls (via http). It is only supported in the java client. For further information on the architecture refer to the 'Architecture Guide for Agile e6.1.1' documentation.

The plmapi is always installed/deployed if a new Agile e6.1.1 server installation is created and can be used for all created applications of the installation. To be able to use the plmapi, it has to be configured in the Java client. To use the plmapi, no changes are necessary in the configuration of the Oracle Application Server.

For further information on how to setup HTTP(S) support in the java client refer to the 'Preferences' document in the "Getting Started" section in the online help, and the Architecture Guide.

Special Batch Installation Tasks

Create an Application in Batch Mode

Note Agile e6.1.1 has to be installed!

1. Change to directory (if not available create the "properties" directory):

- Windows:

  %ALLUSERSPROFILE%\agile\installer\6.1\properties

- Unix:

  ${HOME}/agile/installer/6.1/properties

2. Create the properties file for the application to be created:

```
 # application parameters
plm.application.name=mytest
plm.application.dbpassword=mytest
plm.application.dbuser=mytest
plm.application.dbpoolminsize=4
plm.application.dbpoolmaxsize=10
plm.application.httphost=khe-vidal-eng3
plm.application.httpport=80
plm.application.eciport=19998
plm.application.adminuic=200
plm.application.mailrelay=mymailserver
```

```
# Defines if reference dump will be imported
plm.application.dumpimport=true
# Defines if the schema will be created (system password also has to
be applied for creating a schema)
plm.application.creschema=true
# Defines if the content of an existing schema will be deleted
(Attention: All objects of the defined schema will be lost)?
plm.application.delschemaobj=false
# Database to import as defined in installation_prop.xml (normally no
need to change this)
plm.application.databasedefinition=ora111
plm.oracle.systempwd=ChangeOnInstall
# Application server to deploy as defined in installation_prop.xml
(normally no need to change this)
plm.application.applicationserverdefinition=oc4j_10133
plm.applicationserverdefinition.adminpass=welcome1
```

3. After defining the properties go one directory up and execute:

- Windows:

  setup.cmd application.install -Dplm.installer.setup.prop.file=properties/mytest.properties -Dplm.inst.name=AgileInstallation61 -Dplm.isAdminClient=true

- Unix:

  setup.csh application.install -Dplm.installer.setup.prop.file=properties/mytest.properties -Dplm.inst.name=AgileInstallation61 -Dplm.isAdminClient=true

(Re)Deploy Business Services for an Application in Batch Mode

Redeploying a Business Service causes a recreation of the Business Service ‘ear’ file and the deployment to the application server with the configured values as defined the installation_prop.xml file.

Note Agile e6.1 has to be installed!

1. Change to directory:

- Windows:

  %ALLUSERSPROFILE%\agile\installer\6.1

- Unix:

  ${HOME}/agile/installer/6.1

2. Execute:

- Windows:

  setup.cmd application.businessservices.deploy -Dplm.inst.name=AgileInstallation61 -Dplm.application.name=plmref -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

- Unix.

setup.csh application.businessservices.deploy -Dplm.inst.name=AgileInstallation61 -Dplm.application.name=plmref -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

(Re)Deploy Java Client Web Start ear File in Batch Mode

Redeploying the Java client causes a deployment of the Java client 'ear' file to a specified application server.

Execute:

- Windows:

  setup.cmd javaclientear.install -Dplm.inst.name=AgileInstallation61 -Dplm.applicationserverdefinition.nodename=oc4j_10133 -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

- Unix:

  setup.csh javaclientear.install -Dplm.inst.name=AgileInstallation61 -Dplm.applicationserverdefinition.nodename=oc4j_10133 -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

(Re)Deploy Web Client ear File in Batch Mode

Redeploying the Web client causes a deployment of the Web client 'ear' file to a specified application server.

Execute:

- Windows:

  setup.cmd webpresentationservice.redeploy-Dplm.inst.name=AgileInstallation61 -Dplm.webpresentationservice.nodename=webplmenv -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

- Unix:

  setup.csh webpresentationservice.redeploy-Dplm.inst.name=AgileInstallation61 -Dplm.webpresentationservice.nodename=webplmenv -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

(Re)Deploy plmapi ear File (HTTP Support) in Batch Mode

Redeploying plmapi causes a deployment of the plmapi 'ear' file to a specified application server.

Execute:

- Windows:

  setup.cmd plmapiear.install -Dplm.inst.name=AgileInstallation61 -Dplm.applicationserverdefinition.nodename=oc4j_10133 -Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

- Unix:

  setup.csh plmapiear.install -Dplm.inst.name=AgileInstallation61 -Dplm.applicationserverdefinition.nodename=oc4j_10133 -

Dplm.applicationserverdefinition.adminpass=myapplicationserverpassword

Chapter 5

RAC Support

This section describes the needed modifications to an Agile e6.1 installation including deployed BusinessServices to support a RAC database. It is recommended to do the RAC database setup and e6.1 adaptions with the help of an oracle consultant.

Prerequisites

RAC database is running, Oracle consulting has approved the RAC database installation.

The RAC database is configured on the oracle client side where the e6 server is running. Needed adaptions in tnsnames.ora, sqlnet.ora are available.

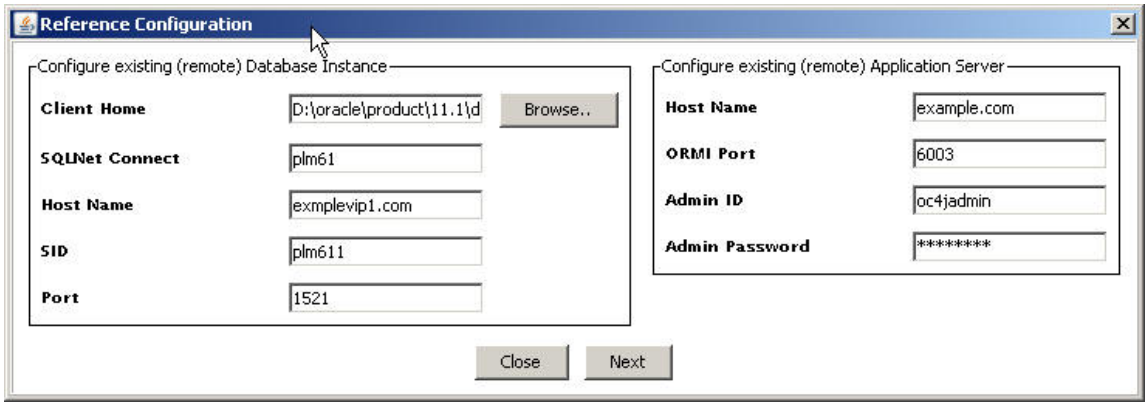
Oracle Application Server is installed and running.

Install e6.1 as described in the installation manual with the following settings.

In the “Installer Components” mask select “Reference to existing Database” and “Reference to existing Application Server”.

In the “Reference Configuration” mask you have to set the following entries:
As “SQLNet Connect” add the entry of your RAC database from tnsnames.ora.
As SID select one SID of an Instance of your RAC database.
As “Host Name” add the virtual hostname of the Instance configured as SID.

The following picture shows an example configuration.



Check your Installation with these settings.

Installation Adaptions

Update SQLNet Connect String used for Business Services

The Business Services are using a data source to connect to the RAC database. The data source definition needs to be changed.

Following steps need to be done:

- Stop oracle application server
- Copy your RAC aware tnsnames.ora, sqlnet.ora of your oracle client installation to <OAS_HOME>\NETWORK\ADMIN\
- Open <OAS_HOME>\j2ee\home\applications\BusinessService<application>\META-INF\data-sources.xml in an editor.
- Replace the URL
  jdbc:oracle:oci:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=examplevip1.com)(PORT=1521))(CONNECT_DATA=(SERVER=DEDICATED)(ORACLE_SID=plm611)))
  with:
  jdbc:oracle:oci:@plm61
  where “plm61” is the SQLNet Connect String from tnsnames.ora which must be “RAC aware”.
- Start oracle application server

Note Every time a new application is created/updated with the admin client or in batch mode you have to replace the URL manually.

Chapter 6

Java Client

Predefined Java Client connection settings

When starting the Agile PLM Client the client following connection settings can be passed

-a <Application Name>

-h <Host Name>

-d <Daemon number>

-p <ECI port>

-u <PLM Username>

Java Client Native Installation Windows example:

- Open properties for the shortcut “Agile e6.1 Java Client.lnk” in “C:\Documents and Settings\All Users\Start Menu\Programs\”
- At the end of the “Target” Attribute add connection setting you want to use e.g.:
  -a plmref -h example.com
- It is also possible to edit the “jacc.cmd” file in “C:\Documents and Settings\All Users\Application Data\Oracle\Agile\EDM“ and to add the setting there. Search the line which ends with “…com.agile.jacc.e6.Jacc %* “ and replace this like e.g.:
  “…com.agile.jacc.e6.Jacc %* -a < Application Name > -h <Host name>…”

Java Client Web Start example:

- Open <oas_home>\j2ee\home\applications\JaccAgileInstallation61\Jacc\jacc.defaults
- Adapt the properties you need:
  jacc.node, jacc.port, jacc.app ..

Java Client DFM side definition

To configure the Java Client to start with a specific DFM side you have several options which are read in the order given here. The first occurrence will set the variable EP_DDM_SITE:

1) Edit the “jacc.cmd” file in “C:\Documents and Settings\All Users\Application Data\Oracle\Agile\EDM“ and to add the setting there. Search the line where “javaw” is executed and add e.g.: -DEP_DDM_SITE="ka”. The line looks then like this:
   “"%JAVA_HOME%\bin\javaw.exe" %VM_OPTS% -Djacc.home="$APPDATA\e61" -DEP_DDM_SITE="mu" ….”
2) Open <oas_home>\j2ee\home\applications\JaccAgileInstallation61\Jacc\jacc.jnlp add the

line<property name="EP_DDM_SITE" value="sitejnlp"/>

3) Add the entry “EP_DDM_SITE=ka” to $APPDATA\Agile\e61\jacc.ini e.g.: “C:\Documents and Settings\<username>\Application Data\Agile\e61\jacc.ini”. The jacc.ini file is available after the first exit of the JavaClient. Do not edit the file while the client is running or your setting will be overwritten.

4) Open <oas_home>\j2ee\home\applications\JaccAgileInstallation61\Jacc\jacc.defaults add add a line: EP_DDM_SITE=ka

5) Set an environment variable “EP_DDM_SITE=ka”

Number 1 does only work for Java Client Native installations,

Number 2 does only work for Java Client Web start installations.

By applying multiple jnlp files on the oracle application server with different site entries it is possible to provide a web start environment for different EP_DDM_SITE’s with one single deployed Java Client.

To verify the current Java Client EP_DDM_SITE setting create a LGV Procedure with the following line:

put(client_env("EP_DDM_SITE"))

and execute the LGV procedure. If the setup is correct you will see the defined site as output in your client message window.

Chapter 7

Secure Environment (HTTP(s) Support)

Prerequisites

Before starting to setup a secure environment make sure your standard installation as described in the installation documentation works without issues.

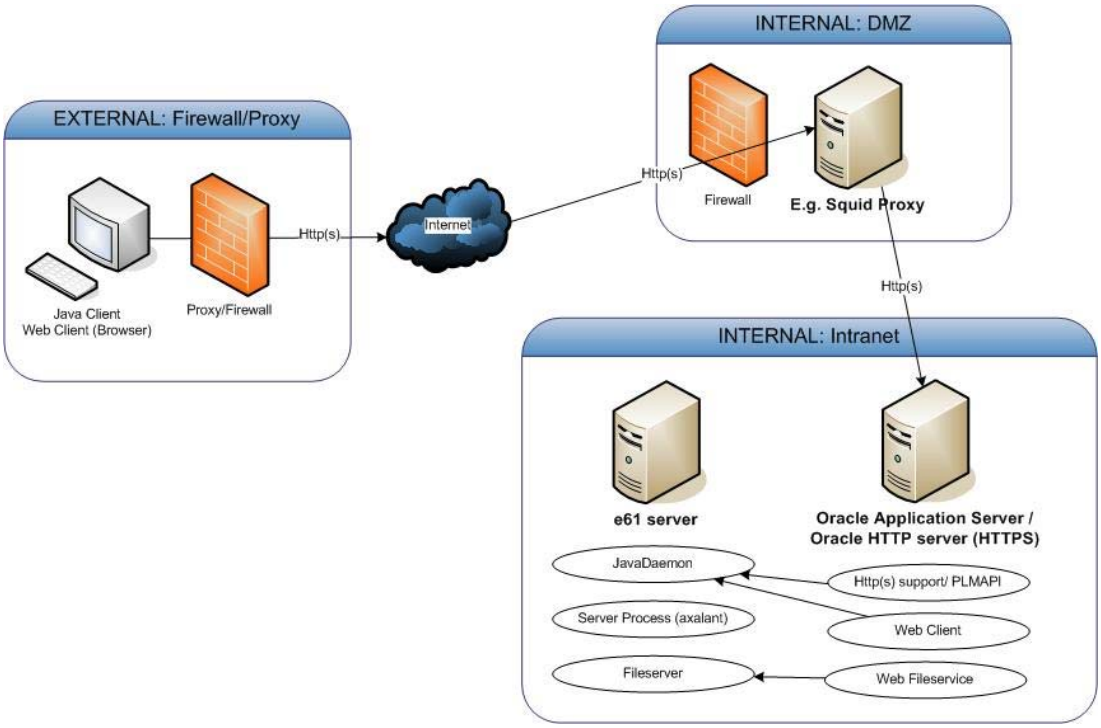
In the secure environment we will just make some modifications to a standard environment. To configure the secure environment you need a certificate from a trusted certificate authority.

Secure External Communication

In Agile e6.1.1 it is possible to setup external access to the Agile e6.1.1 environment with the Java client or a Web Browser using the WebClient. It is possible to setup the complete external communication over internet using the HTTPS protocol.

This section describes how to setup a secure environment for this use case.

External communication means the communication from a Java/Web client over the internet to the Agile e6.1.1 http server which is the Oracle HTTP Server of the Oracle Application Server. Following picture illustrates an example communication.



As you can see in the above picture the Java/Web client connects to the Oracle Application Server over the oracle http server.

In the secure environment the PLMAPI on the Oracle Application Server "receives" all incoming requests from the Java client on the Oracle Application Server.

The Web client on the Oracle Application Server will "receive" all incoming requests from Web Client application in the Web Browser.

You have to adapt the Oracle Application Server (Oracle HTTP Server), the Java client and the WebFileService to use https communication.

Note Setting up the Proxy or other DMZ infrastructure is not part of this document.

Setup https on the Oracle Application Server

By default, the Oracle HTTP Server is configured with SSL and the SSL certificate store, which is located at $ORACLE_HOME\Apache\Apache\conf\ssl.wlt\default\.

The listen parameter in the $ORACLE_HOME\Apache\Apache\conf\ssl.conf file points to the SSL port being used by the Oracle HTTP Server. The default certificate store $ORACLE_HOME\Apache\Apache\conf\ssl.wlt\default\ewallet.p12 is being used by the Oracle HTTP Server. This default certificate store cannot be used for the Agile e6.1.1 environment. For using HTTPS in an Agile e6.1.1 environment you have to get a certificate from a trust center first. Security administrators use Oracle Wallet Manager to manage public key security credentials.

The Oracle Wallet Manager is part of your Oracle 11g database installation. A detailed description of the Oracle Wallet Manager can be found in "Oracle® Database Advanced Security Administrator's Guide 11g Release 1 (11.1)" of your Oracle 11g database documentation.

The following steps provide an overview of the complete wallet creation process and give a short description on how to use the Oracle Wallet Manager (the used values are examples and cannot be used to get trusted certificate from a CA).

1. Start the Oracle Wallet Manager:

- Windows:

  Select Start > Programs > Oracle-HOME_NAME > Integrated Management Tools > Wallet Manager

- UNIX:

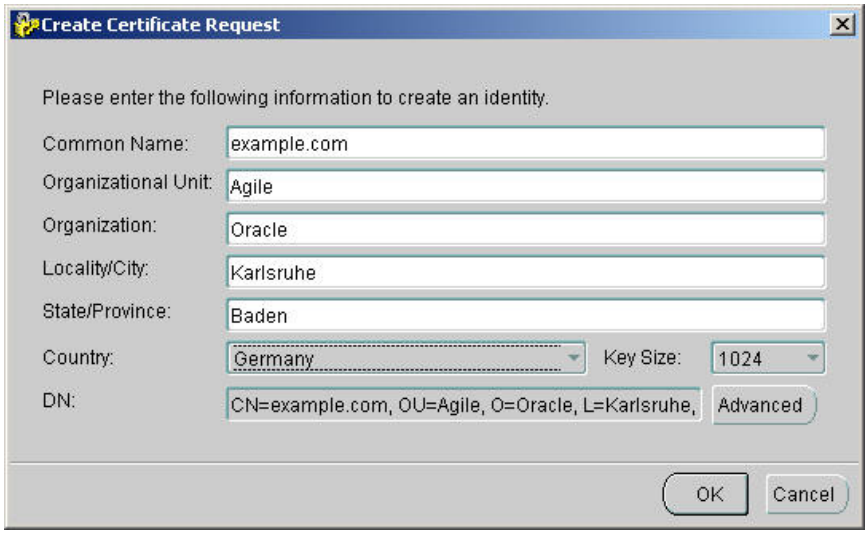
  At the command line as user oracle, enter owm.

2. To create a new wallet select Wallet > New.
3. Enter a password for your wallet and click OK.

Note Keep this password in mind.

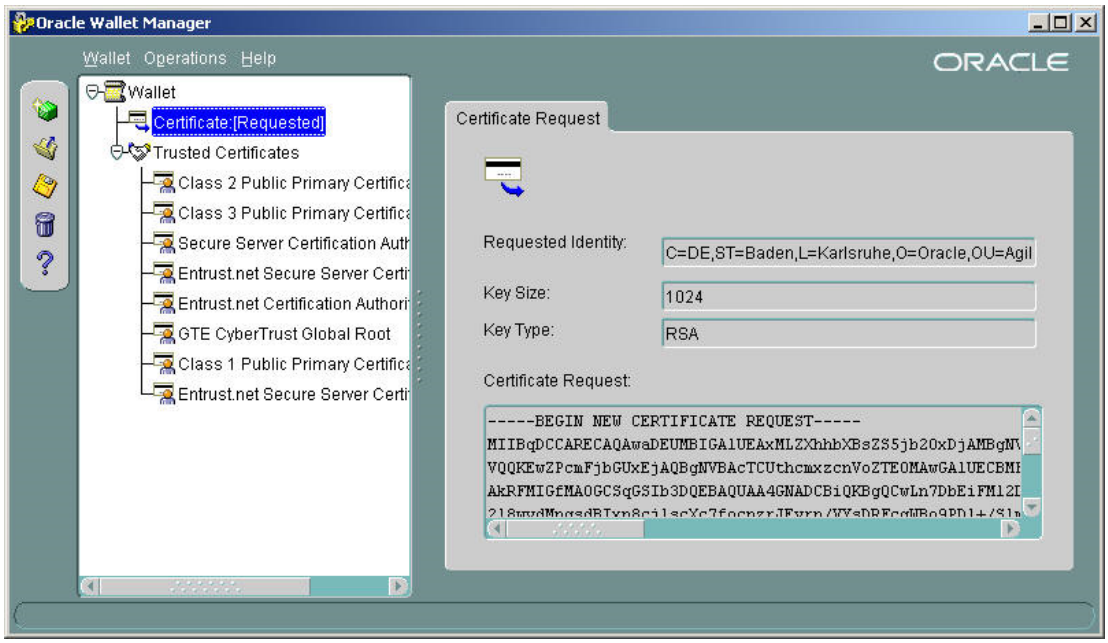
You will be asked if you want to create a certificate request.

4. Click OK. Next, you have to enter your information.

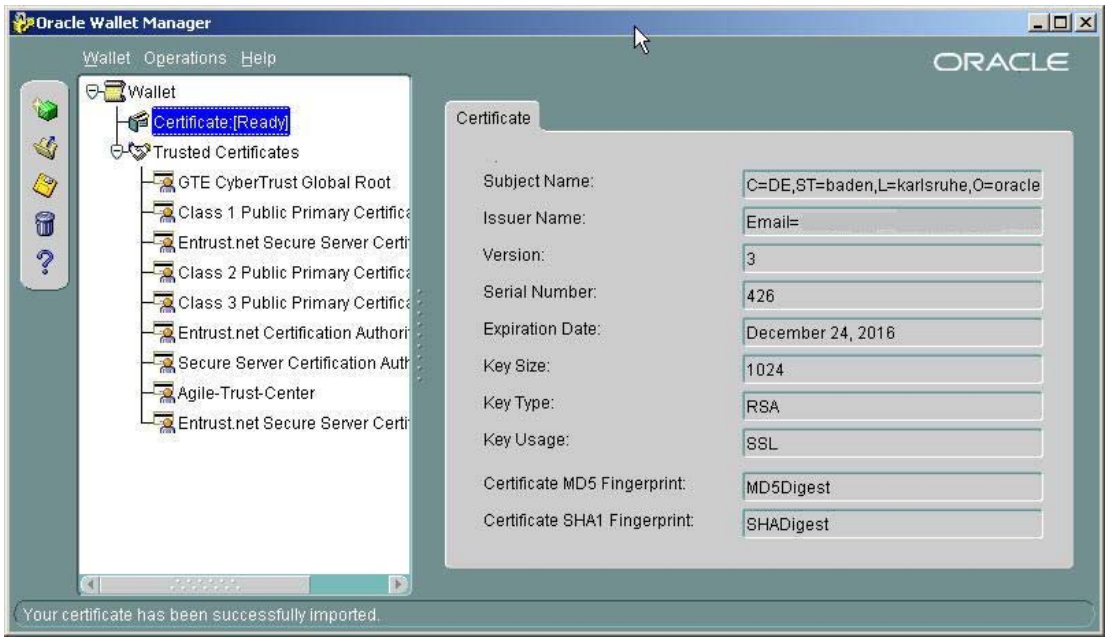


5. Click OK.

Now you have created the certificate request.



6. Save your wallet configuration with Wallet > Save.
7. Send the certificate request to the CA you want to use.
8. After you have received your signed user certificate you can import it into your wallet with Operations > Import User Certificate…



9. Replace the $ORACLE_HOME\Apache\Apache\conf\ssl.wlt\default\ewallet.p12 file with your newly created one and restart your Oracle Application Server.

Test the Configuration.

1. Now, HTTPS is enabled in your Oracle Application Server. To find out which HTTPS port is used execute:

   ```
   $ORACLE_HOME\opmn\bin\opmnctl status -l
   ```

   Normally the HTTPS port should be 4443.

2. Open the following link:

   ```
   https://<fully qualified server name>:4443
   e.g. https://example.com:4443
   ```

   This should now open the web page without security warnings.

3. Check the HTTP support deployment with the following link:

   ```
   https://<fully qualified server name>:4443/plmapi<your installation name>/services
   e.g. https://example.com:4443/plmapiAgileInstallation61/services
   ```

   This shows the PLMAPI Services page.

4. To start Java Client Web Start:

   ```
   https://<fully qualified server name>:4443/Jacc<your installation name>/jacc.jnlp
   e.g. https://example.com:4443/JaccAgileInstallatione61/jacc.jnlp
   ```

   This should start the Java Client webstart.

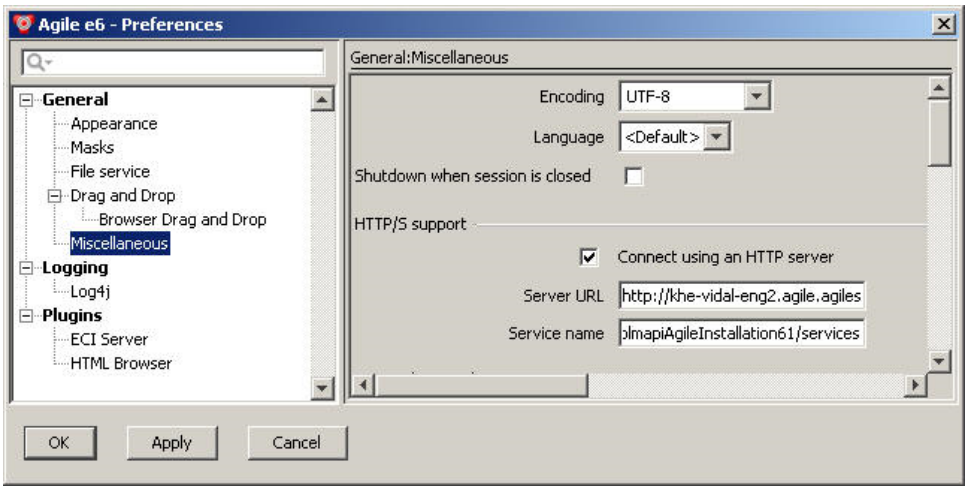
Setup the Java Client

To enable https support in the JavaClient you have to activate/change the HTTP/S support setting.

1. Open the Java client.
2. Open the Preferences mask.
3. Enable the HTTP/S support and change/add the Server URL and Service name to:

   ```
   Server URL: https://<fully qualified server name>:4443
   Service name: plmapi<your installation name>/services
   ```

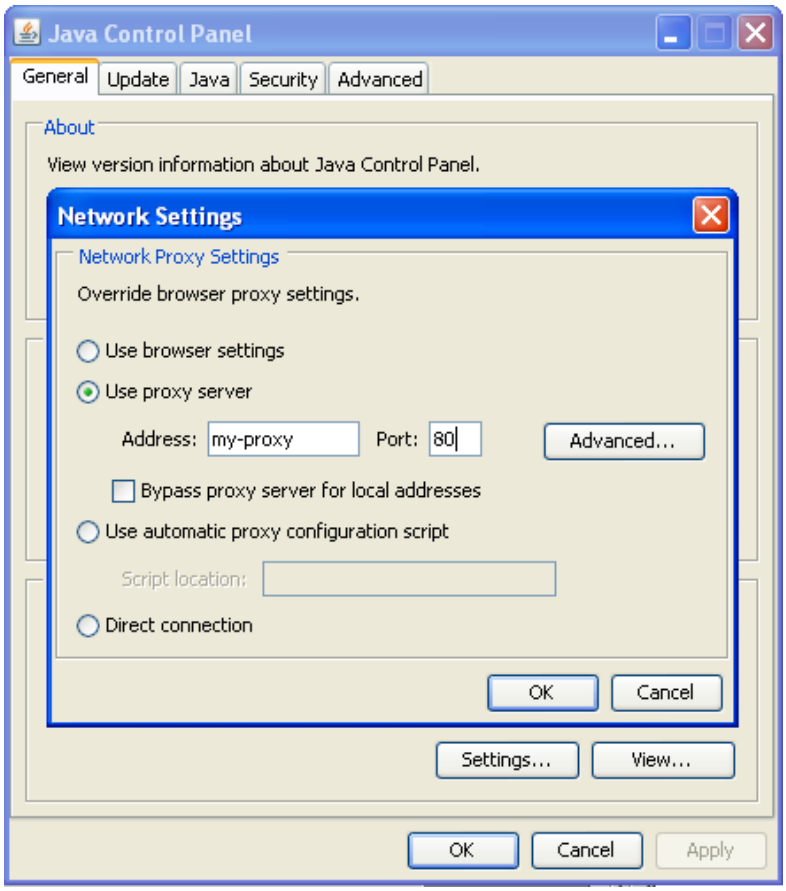
   Following picture shows an example configuration:



Java Client with Proxy

By default the Java client uses the proxy configuration of your java environment. This is configured on the client side in the Java Control Panel (e.g. open MS Windows control panel > Java) on the General Tab open the “Network Settings…”

Note	Depending on your proxy configuration, one of the proxy settings has to be selected.

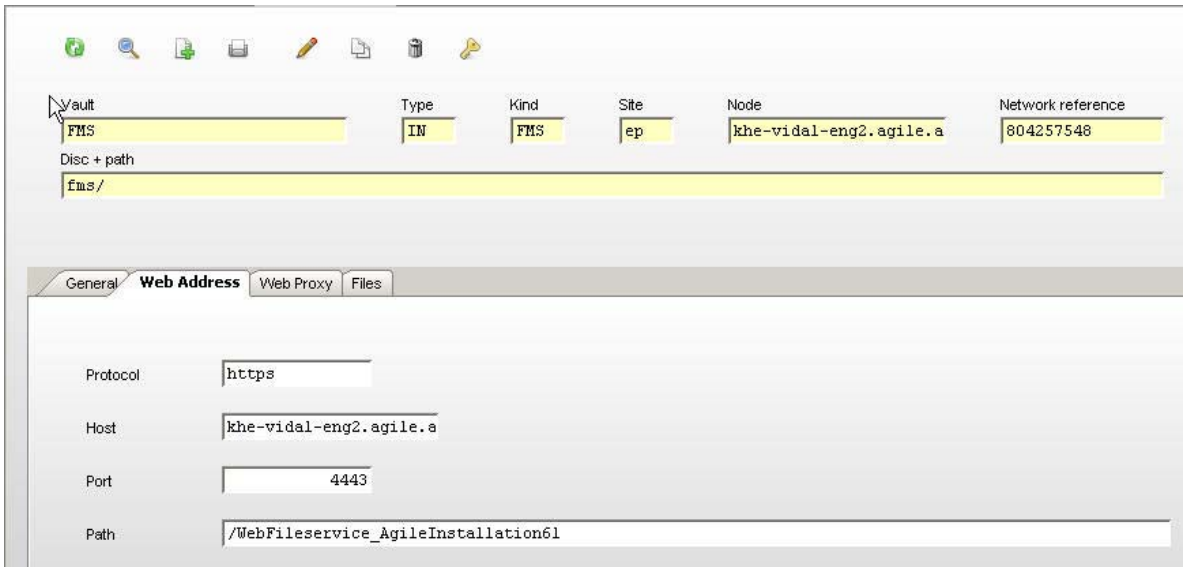


Setup the Web Fileservice

To enable https support for the Web File Service the Web address in the vault configuration has to be changed.

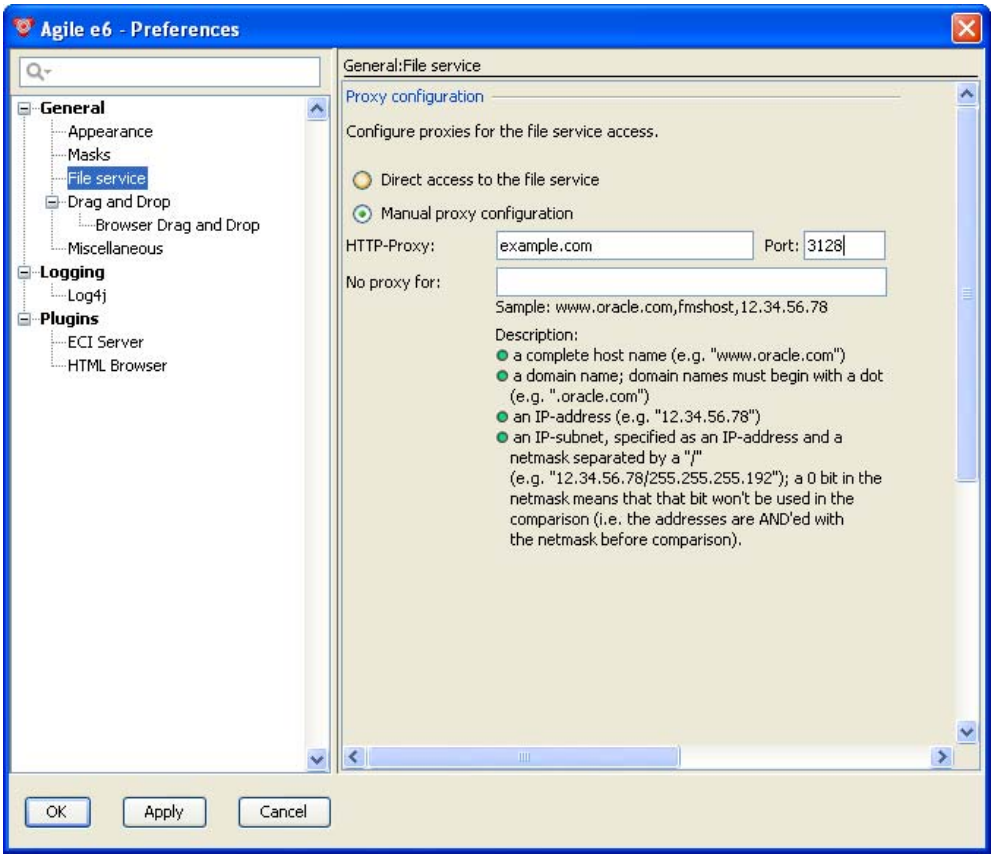
Start the Java client with a manager user and select Manager > File Management > Vaults.

```
Protocol: https
Host: <fully qualified server name>
Port: 4443
Path: /WebFileservice_<your installation name>
```



Web File Service with Proxy

The Web File Service does not use the proxy configuration of your Java environment. The proxy for the Web File Service has to be configured in the Java client preferences.



Setup the WebClient

No configuration changes have to be done if you want to use the Web client with https.

Just use the HTTPS protocol and port in your browser.

The WebFileservice adaptions in the dump also have to be done (see above) to use file checkin/out in the WebClient with https. Proxy configuration will be used from the browser.

Chapter 8

Authentication

LDAP Support

LDAP (Lightweight Directory Access Protocol) is an application protocol for querying and modifying directory services running over TCP/IP.

With Agile e6.1.1, LDAP-based authentication is supported. While a PLM user is logging on to the PLM system (through any supported client), the password of that PLM user is checked against an LDAP repository instead against the password which is normally stored in the PLM database.

The communication between the PLM server and the LDAP repository has to be set up. Every PLM user, as configured in the PLM database, has to exist in the LDAP repository in order to be authenticated upon login.

Note Although LDAP support helps in needing only ONE password for many different systems, this should not be mistaken with automatic Single-Sign-On (SSO) support, which would allow a user to log on automatically without even being asked to provide user login and password!

Prerequisites

- LDAP server (Oracle Internet Directory / MS Active Directory / other LDAP server)
- Oracle LDAP client (part of the Oracle client installation)
- The LDAP user name has to be the same as the PLM user name
  (e.g. LDAP user : cn=TESTUSER ; cn=users ; dc=agile ; dc=com
  PLM user : TESTUSER)

User Authentication via LDAP

A LDAP directory is often used to manage users and organization units in a central environment. The Microsoft Active Directory organizes users and groups within a Windows Domain. Products like the Oracle Internet Directory are able to manage users, groups and organization units in a standard LDAP environment and are compatible with the most other LDAP servers which are based on the LDAP standards.

With Agile e6.1.1 it is possible to authenticate a PLM user by using an LDAP service.

The LDAP for Agile e6.1.1 uses the Base-DN for a direct access path to authenticate the user. LDAP does not support relative search paths.

Setup an LDAP User

To change the authentication mechanism of a user, select the “LDAP” type in the user list of Agile

PLM e6.1.1.

The LDAP system takes care of the password policies (expiration and format).

Note The enhanced security module and the possibility to change the password within PLM are deactivated for LDAP users.

Configuration

The LDAP configuration used by the PLM system is stored in the database as configuration parameters (T_CFG_DAT).

Name	Default Value	Description
EDB-LDAP-HOST	<LDAP-host>	LDAP host name
EDB-LDAP-PORT	-	LDAP service port (=default port depends on encryption mode)
EDB-LDAP-BASEDN	cn=users, dc=agile, dc=com	Base DN of the user group
EDB-LDAP-ENCRYPTION	Yes	LDAP encryption mode (yes=SSL, no=clear text)

Chapter 9

Office Suite - PDF Generator Installation

Note Further information about how to install he Office Suite can be found in the document Installation Manual for Agile e6.1.1 Client on Windows.

One main feature of the Office Suite is the PDF generation from a MS Office file. The Office Suite supports a PDF printer to convert Office documents into PDF files.

The Office Suite PDF Service is a MS Windows Service and does not need any GUI.

Installation

1. Extract the installation package to your installation directory.

   The installation package of the Office Suite PDF Service is located on the package directory and named officesuitepdf.zip.

   In this example the installation path is "C:\Program Files\Agile_e6\Office-Suite-PDF" (the Office-Suite-PDF path is the base path in the package).

   ```
   unzip z:\package\officesuitepdf.zip -d "c:\Program Files\Agile_e6"
   ```

   The installation package contains the following directories:

   ```
   -> PDF Service Root          (C:\Program Files\Agile_e6\Office-Suite-
   PDF)
    -> axalant
       -> cmd                  (scripts directory)
       -> pdf                  (PDF service files)
       -> bin
         -> intel-ms-nt5.0     (binaries like the FMS-Client)
         -> java               (e6.1 Java archives)
    -> ext
       -> bin
         -> intel-ms-nt5.0     (external binaries)
         -> java               (external Java archives)
    -> tmp                     (Logging directory)
   ```

2. Adapt the installation.

   You need to adapt the start-up script to setup the Java-Runtime and the installation path of the Office-Suite PDF Service. The script is located at the …\axalant\cmd sub directory of the installation.

   The pdf.bat script contains the following basic configuration settings:

   ```
   set JAVA_HOME=<JAVA_HOME>
   set ep_root=<ROOT DIRECTORY OF THE OFFICE SUITE PDF SERVICE>
   ```

   Example:

```
set JAVA_HOME=C:\Program Files\Java\jdk1.5.0_16
set ep_root=C:\Program Files\Agile_e6\Office-Suite-PDF
```

3. Adapt the service settings.

   The OfsPdf.properties file is located at the axalant/pdf sub directory of the installation. This file sets the environment variables needed by the Office Suite PDF Service.

   The following properties have to be adapted.

   Note The other properties should not be changed!

```
#
# ECI connection
#
host=<HOSTNAME OF THE ECI DAEMON>
port=<PORT OF THE ECI DAEMON>
env=<PLM APPLICATION ENVIRONMENT>
#
# Directories
#
varenv.DATAVIEW_CROO=<BINARIY DIRECTORY OF THE PDF SERVICE>
varenv.ep_root=<ROOT DIRECTORY OF THE PDF SERVICE>
varenv.axalant_root=<AXALANT DIRECTORY OF THE PDF SERVICE>
varenv.$TMP=<PDF WORK DIRECTORY OF THE PDF SERVICE>
#
# Host names
#
varenv.CLI_HST=<NAME OF THE PDF SERVICE MACHINE>
varenv.CLI_SRV=<NAME OF THE PLM SERVER MACHINE>
#
# PLM Client
#
client1=<PLM USER>,<PASSWORD>,office.pdf.OfsPdf
```

   Example:

```
#
# ECI connection
#
host=khe-plm
port=20001
env=plm_ref
#
# Directories
#
varenv.DATAVIEW_CROO=C:/Program Files/Agile_e6/Office-Suite-
PDF/axalant/bin/intel-ms-nt5.0
varenv.ep_root=C:/Program Files/Agile_e6/Office-Suite-PDF
varenv.axalant_root=C:/Program Files/Agile_e6/Office-Suite-PDF/axalant
```

```
varenv.$TMP=C:/officesuite/PDF_generation
#
# Host names
#
varenv.CLI_HST=pdfsrv
varenv.CLI_SRV=khe-plm
#
# PLM Client
#
client1=DEMOEP_M,not4test,office.pdf.OfsPdf
```

Note The PDF work directory has to be created and entered in the PLM server configuration, PDF Service, and the PDF printer.

Office Suite PDF Service

The Office Suite PDF Service uses the same mechanism as the Java-Daemon to install, remove, start, and stop the service.

It can be either installed as a Windows Service or run as a console application.

Install as Windows Service

Note The PDF Generator can be installed with the Windows Installer tool. After the PDF Generator is installed, an extra service is added to the Services list. Agile PLM Office Suite PDF (Control Panel > Administrative Tools > Services).
The Agile PLM Office Suite PDF Service is a MS Windows Service and does not need any GUI.

The configuration of the Windows Service registration can be found in the pdf_wrapper.conf file which is located in the …\axalant\pdf sub directory of the installation.

```
#*****************************************************************
# Wrapper NT Service Properties
#*****************************************************************
# WARNING - Do not modify any of these properties when an application
#  using this configuration file has been installed as a service.
#  Please uninstall the service before modifying this section.  The
#  service can then be reinstalled.

# Name of the service
wrapper.ntservice.name=Agile PLM Office Suite PDF Service

# Display name of the service
wrapper.ntservice.displayname=Agile PLM Office Suite PDF Service

# Description of the service
wrapper.ntservice.description=PDF Generator for Agile PLM
```

```
# Service dependencies.  Add dependencies as needed starting from 1
wrapper.ntservice.dependency.1=

# Mode in which the service is installed.  AUTO_START or DEMAND_START
wrapper.ntservice.starttype=AUTO_START

# Allow the service to interact with the desktop.
wrapper.ntservice.interactive=false

wrapper.ntservice.account=.\axalantrt
wrapper.ntservice.password=********
```

To install the Office Suite PDF Service as Windows Service use the pdf.bat command script located in the …\axalant\cmd sub directory of the installation.

```
pdf.bat –i
```

Remove the Service

To uninstall the Office Suite PDF Service as Windows Service use the pdf.bat command script located in the …\axalant\cmd sub directory of the installation.

```
pdf.bat –r
```

Run as Console Application

To run the Office Suite PDF Service as console application use the pdf.bat command script located in the …\axalant\cmd sub directory of the installation.

```
pdf.bat –c
```

Configuration

The Office Suite needs some information to access the PDF printer and to exchange the files.

Printer Setup

The PDF printer has to fulfill the following prerequisites:

- Generate PDF file without user interaction (pure batch printing)
- Configurable PDF output folder
- Possibility to create a <PDF-Filename>.log file in the PDF output folder, after PDF file creation.

Note	The PDF Output Folder is the exchange folder between the PDF printer and Agile e6.1.1.
Note	Any folder can be used, but the configuration of the PDF printer has to match the configuration of the Agile PLM Office Suite PDF Service.

Post PDF creation script

Prerequisite for PDF printer is the <PDF-filename>.log file creation (see above) in the PDf output folder. This file is the “Ready” file for the batch client to trigger the PDF file checkin.

If your PDF printer does not create a <PDF-filename>.log file per default, there exists often the possibility to execute an application after printing. This could be used to create the <PDF-filename>.log file. It must be possible to set the filename “<PDF-filename>.log” as a parameter. The following steps describes the general setup of such a mechanism.

1. Create a file “createlog.bat” in the PDF output folder which looks like this:

```
set FILENAME=%~n1
set FILEPATH=%~dp0%
echo Done > %FILEPATH%/%FILENAME%.log
```

2. Configure your PDF printer to execute the Windows cmd shell (e.g.: C:\WINDOWS\system32\cmd.exe) with the following parameters (e.g %f is the filename parameter) :

```
/c C:\officesuite\pdf\createlog.bat %f
```

Setup the PDF Printer

1. To setup the PDF printer (Manager > Office Suite > PDF Printer), select the PDF printer from the printer list.
2. As soon as the PDF printer is selected, the following Office Suite configuration parameters are added to the Office Suite configuration table (System > OfficeSuite > Configuration table):
   - GDM_PDF_BATCH
   - GDM_PDF_DIRECTORY

     The value of this configuration parameter has to be the same as the value for TEMP in the OfsPdf.properties file. Add "*.pdf" at the end of it.
   - GDM_PRINTER
   - GDM_PRINTER_DRIVER
   - GDM_PRINT_PORT

   Note GDM_PRINTER, GDM_PRINT_DRIVER, GDM_PRINT_PORT are set automatically.
3. The value for the Office Suite configuration parameter GDM_ARC_NOD has to be the same as the value for varenv.CLI_HST in the OfsPdf.properties file.
4. In the OfsPdf.properties file the following has to be set as well:
   - host (e.g. plmhost)
   - port (e.g. 20001)
   - env (e.g. plmref)
5. In the OfsPdf.properties file the correct user has to be entered under "client1".
6. Link the PDF Generator to a lifecycle:

The PDF Generator has to be linked to the respective transition states for the STD-DOC lifecycle. The Office Suite provides a LogiView procedure (GdmBatch/Archive) to add a job into the PDF job list. This LogiView procedure is a transition procedure for the usage within the lifecycle of the Office document.

The following transition settings can be used:

Field	With change management	Without change management
From	220	120
State (From)	Approved	In Approval
To	230	230
State (To)	Release	Released
System	X	
For Change Management	X	
Pre-Action	xedbusr_tor_rr_vr	xedbusr_chk_no_obj_ews & xedbusr_tor_rr_vr & sig_cre_sgn
Post-Action	Xedbusr_tor_sa_uv & xchg_prd_unt_poa & GdmBatch/Archiv	Xedbusr_tor_sa_uv & xedbusr_rst_prd(260) & GdmBatch/Archiv

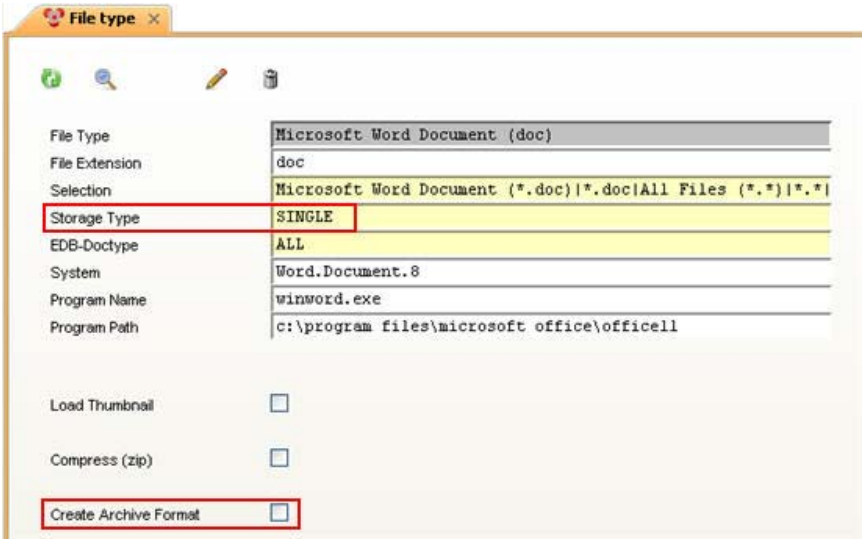
Thus, when an Office Suite document reaches this state, a PDF is created automatically.

7. Add "GdmBatch/Archiv" to the respective states in the Lifecycle mask.

Note After updating the lifecycle states, the client needs to be restarted.

8. For every file type, for which a PDF should be created, the ‘Create Archive Format’ checkbox has to be selected in the File type mask (System > Office Suite > File Types).

Note The PDF generation can only be used for file types of the storage type Single!



Configure the Agile PLM Office Suite PDF Service

The Agile PLM Office Suite PDF Service does require some information about the local environment, e.g. the exchange file between the PDF printer and Agile e6.1.1.

The configuration file of the Agile PLM Office Suite PDF Service has corresponding settings within the Agile e6.1.1 Office Suite configuration (System > Office Suite > Configuration).

The configuration table describes the settings of the configuration file of the Agile PLM Office PDF Service and the configuration settings of the PLM Office Suite configuration.

Office Suite configuration for the PDF service:

Variable	Value	Description
GDM_ARC_NOD	Hostname of the PDF Service machine (e.g. pdfsrv)	Host on which the PDF files are created (PDF batch client)
GDM_PDF_BATCH	RUN	Control parameter of the job 'PDF Generation'
GDM_PDF_DIRECTORY	PDF exchange directory (e.g. C:\officsuite\PDF_generation*.pdf)	Working file of the PDF generator (including absolute path and generic file name)

Runtime

The Agile PLM Office Suite PDF Service can be started via the Windows service manager. The service connects to a PLM server and starts the LogiView procedure GdmBatch/Spooler to process the PDF job list.

Note The service should not be stopped via the Windows Service Manager, because the PLM server may not shut down.

To stop the Agile PLM Office Suite PDF Service, select shutdown in the no-select menu of the PDF job list. This operation sets the Office Suite configuration parameter GDM_PDF_BATCH to STOP. The LogiView procedure GdmBatch/Spooler checks that parameter and shuts down. During the shutdown of the spooler the Office Suite configuration parameter GDM_PDF_BATCH is set to RUN again.

The userexit sets the Office Suite configuration parameter:

Name	Runtime Setting	Shutdown Setting
GDM_PDF_BATH	RUN	STOP

Chapter 10

Setup Online Help

There are two types of online documentation available:

- Online Help for Java Client and Web Client needs to be setup separately.

  Note This Online Help does not provide a full text search.

- Online Help for all Agile e6.1.1 features is available in the Native Windows Client. Because of restrictions caused by the Microsoft HTML Help format, this help is available only on Windows computers running Internet Explorer 6.0 or later.

  Note The Online Help cannot be opened with Mozilla Firefox.

Java and Web Client

To make the Online Help for masks, fields, menus, userexits, etc. available in the Java and Web client, complete the following steps:

1. Change to the following directory: <installation_media>/packages/
2. Extract the file clienthelphtml.zip in a temporary directory. This will create the directory structure ".\axalant\htd\htdocs\axalant\doc_ep\eng".
3. There you can find the file hlp_e6.zip. Extract the file hlp_e6.zip in that directory.

   Note At the moment the zip file is only available in English. Copy the file hlp_e6.zip from the “eng” directory to the “ger” directory and extract it there if the dump language is set to German.

4. Copy the "axalant" folder under the htdocs to a web server of your choice (e.g. to the http server of your Oracle Application Server installation). Copy the axalant folder directly below your document root of your web server.
5. Log in as a manager user (edbcusto, demoep_m).
6. Select System > Other Parameters.
7. In the configuration mask, search for Rubric EDB-HLP and select the folder Configuration parameter.
8. Set the documentation root EDB-HLP-ROOT to: http://<http server name>:<http port>/axalant/

   The program adds /doc_ep/eng/ or /doc_ep/ger/, depending on which language is active, followed by the index file name index.html.

- English: http://<http server name>:<admin http port>/axalant/doc_ep/eng/index.html
- German: http://<http server name>:<admin http port>/axalant/doc_ep/ger/index.html

On UNIX Systems, Agile e6.1.1 starts Mozilla as a default. If the browser is not defined, follow the steps below:

1. Select Manager > External Applications to specify different browsers on different operating systems and client nodes.

   This is where the default browsers for each available UNIX System are defined. (For Microsoft Windows the default system HTML browser is used.)

2. Copy the line for your hardware architecture and insert the hostname and browser name.

Note Make sure that all of the following are true:

- File type is equal to html
- Mode is equal to H (help).
- "-" is a wildcard and means every possible value (like *).

Native Windows Client

The Online Help for the Windows Client is installed together with the client software. No special setup is required.

If you want to use the HTML-based help (Java and Web Client) also in the Windows Client, you need to do the following:

1. Open the Windows client.
2. On the desktop, right click and select Open > System > Defaults.
3. Search for the variable EDB-HLP-TYPE, and change its value from MSH to HTTP to activate the use of the http protocol.

   As this variable is optional, it might not exist. Create the variable EDB-HLP-TYPE with the type String.

4. Proceed as described under Java and Web Client.

   Unzip the file and set the respective defaults.

Chapter 11

Appendix

Environment Configuration Parameters

Each axalant server process has an environment, which is set on startup. An axalant environment consists of environment variables which are set thru shell scripts and additional configuration values read by the axalant server process at startup from xml configuration files. Information about DataView server environment variables can be found in the DTV User's Guide

Startup process on Windows

- Invoking axalant server startup thru DataView Daemon or Java Daemon
- %ep_root%\axalant\cmd\axalant_srv.cmd
  - %ep_root%\axalant\cmd\plm_env.cmd (read for all applications)
  - %ep_root%\axalant\cmd\plm_env_dev.cmd (if exists, read for all applications, not available in standard installation)
  - %ep_root%\axalant\cmd\plm_env_cust.cmd (if exists, read for all applications, not available in standard installation, customers should add their modifications for all applications here)
  - %ep_root%\init\%env_name%.cmd (read for specified application only)
  - %ep_root%\init\%env_name%_cust.cmd (if exists, not available in standard installation, read for specified application only, customers should add their modifications for all applications here)

Startup of axalant server process which reads

- %ep_root%\init\axalant.xml (read for all applications which have defined it in "%ep_root%\init\%env_name%.xml", which is the default)
- %ep_root%\init\%env_name%.xml

Startup process on Unix

- Invoking axalant server startup thru DataView Daemon or Java Daemon
- ${ep_root}\axalant\scripts\axalant_srv
  - ${ep_root}\axalant\scripts\plm_env.sh(read for all applications)
  - ${ep_root}\axalant\scripts\plm_env_dev.sh(if exists, read for all applications, not available in standard installation)
  - ${ep_root}\axalant\scripts\plm_env_cust.sh(if exists, read for all applications, not available in standard installation, customers should add their modifications for all applications here)
  - ${ep_root}\init\${env_name}.sh(read for specified application only)
  - ${ep_root}\init\${env_name}_cust.sh(if exists, not available in standard installation, read for

specified application only, customers should add their modifications for all applications here)

Startup of axalant server process which reads

- ${ep_root}\init\axalant.xml (read for all applications which have defined it in "${ep_root}\init\${env_name}.xml", which is the default)
- ${ep_root}\init\${env_name}.xml

Startup Shell Scripts

This section describes the environment variables which can be modified by the customer. If the environment variable should be set for all applications use "plm_env_cust.<extension>", if the environment variable is application specific then use "%env_name%_cust.<extension>". If the files do not exist they must be created.

Environment Variable	Description	Values	Optional	Example
axalant_tmp	Path to the PLM server log files.	$ep_root/tmp	no	$ep_root/tmp or %ep_root\tmp
axalant_data	Path to the PLM root	$ep_root	not used in code! Maybe obsolete	$ep_root or %ep_root
ORACLE_HOME	Path to the oracle client home directory.	-	no	D:\oracle\product\11.1\db_1
NLS_LANG	National Language Set for the oracle client to use for the axalant server process.	-	no	AMERICAN_AMERICA.WE8MSWIN1252
TNS_ADMIN	Path to the tnsnames.ora for the oracle client to use for the axalant server process.	-	no	%ORACLE_HOME%/network/admin
EP_DEBUG	A comma separated list containing the modules that should generate debug output. Special entries are _all_ to debug all modules, Main for the main routine and 0 to turn of debug output. If debug output is enabled, each e6 process creates an axalant-<hostname>-<pid>.err and .out file to capture stderr and stdout. Be aware that using the value _all_ will have a negative performance	_all_, 0, or a comma separated list of module IDs (as defined in axalant.xml or ebd_mid.h).	Yes	Main,Mod,Epq,Lgv

	impact on the e6 server, and it will generate huge log files.			
EDB_LOGDIR	Directory for the log files created by the EP_DEBUG setting. Default is ${ep_root}/tmp.	Directory with path	Yes	/my/log/dir
EDB_LOGSIZEBUFFER	Buffer size in bytes for stderr output. If 0 is specified, the output will be unbuffered. A value of 0 should only be used if crashes occur and the log buffer is not flushed to disk. Maximum size used is currently 1024, values greater than 1024 are ignored.	0 to 1024	Yes	1024
EDB_TRC_ALL	Deprecated. Use EP_DEBUG with Epq instead.			
EDB_TRC_DEBUG	Deprecated. Use EP_DEBUG with Epq instead.			
PATH	PATH to use for the axalant server process.	-	no	PATH=%ORACLE_HOME%/bin;%PATH%

Startup Configuration Files

In e6.1 the application configuration files are in XML format and can be found in the <ep_root>/init directory (e.g.: <application>.xml and axalant.xml). They replace the former *.edb files in the same directory. Some basic attributes in the application specific <application>.xml file can be modified over the admin client web interface. If you need to change the enhanced attributes the files can be edited manually with an editor.
All changes not performed over the admin client web interface will be lost if you use the admin client web interface again to change the values of the application.

<application>.xml

The following section describes the attributes of the xml nodes that can be defined in the xml file. in a standard installations not all attributes are defined in the xml file and default values are used.

General Node

```
<General SignalFlag="1" ModuleConfig="axalant.xml" TraceConfig=""
UseCommonTraceFile="1"/>
```

Attribute	Description	Values	Optional	Example
SignalFlag	If the entry is 1, e6 catches runtime errors and stops the server process in a controlled manner. For instance, all database connections are disconnected. This might cause hanging server processes and is therefore deactivated by default.	0 or 1	Yes	1
ModuleConfig	Contains the name of the configuration source which is used as the primary source for the e6 module definitions. All modules of this source are registered. From the original configuration source, only the modules entered in [Modules\Custom] will be registered. The module IDs must be unique over all sources.	File name of the primary module source: [X:][path]filename.xml [F:][path]filename.edb If specified without type F or X, the same type as the original source is assumed. If specified without path, ${ep-root}/init is used.	Yes	axalant.xml
TraceConfig	The Path to the C++ trace configuration file.	F:<path to trace config file>	Yes	F:D:\oracle\plm61\axalant\ini\trace.edb
UseCommonTraceFile	If the entry is 1, the PLM server writes all common traces (SQL, C/C++ and LogiView) into the standard server trace.	0 or 1	Yes	1

Database Node

```
<Database Library="epq10c_ora111" Vendor="Oracle" Version="111"
User="yin@melon" Pwd="yin"
      DbBlobLocation="edb_lob"
      ParallelConnect="NO_PARALLEL_CONNECT"
      ParallelConnectTimeout="10"
      DbWuqSP="Static"
      BindMode="All"
```

```
    Wildcards="?%"
    Querymode="MIXED">
</Database>
```

Attribute	Description	Values	Optional	Example
User	The schema name and the sqlnet connect string of the database to which the application should connect to.	e.g. plmref@plm61	n	-
Pwd	The password of the database schema to which the application should connect to. Can encrypted but also cleartext passwords are possible.	e.g.: plmref or encrypted e.g: RSA-PUBLIC-BASE64:JoMHOs.....NpMCDcytN+DJI=	n	-
DbBlobLocation	Tablespace for the database Blob fields	edb_lob		
ParallelConnect	This setting manages the ORACLE database connection behavior when a data record is going to be updated with the function "epqupdpar()". The major use case for this functionality is the number server so that drawing a new number from a number cycle is done in a parallel connection. The concurrency of the requested data modification is vastly improved by enabling a parallel connection. Important: This setting does not influence the standard behavior of any database transaction, it is only important for a very small number of functions explicitly using "epqupdpar()" instead of "epqupd()"	▫ NO_PARALLEL_CONNECT - Update of the data record via **"epqupdpar()"** will be executed within the current transaction. The concurrency of an application transaction is low and this setting should be used only for small installation size and/or small number of statements in a transaction. ▫ PERMANENT_CONNECT - A **permanent** parallel database connection will be opened when an update of a data record via	Y, Default in EPQ: 'NO_PARALLEL_CONNECT' Default in Installation: 'ON_DEMAND_CONNECT'	-

		"epqupdpar()" is requested. This connection will require additional memory resources in favor of a fast response time for an update. The concurrency of an application transaction is high. ▫ ON_DEMAND_CONNECT - A **temporary** parallel database connection will be opened when an update of a data record via **"epqupdpar()"** is requested. This connection will require temporarily additional memory resources and will also take more time for execution due to the time required to open and close a parallel connection. Closing the parallel connection is influenced by the **"ParallelConnectTimeout"**. The concurrency of an application		

		transaction is high. This setting is the best one if the memory resources are very limited.		
ParallelConnectTimeout	Determines when the parallel connection in mode "ON_DEMAND_CONNECT" will be closed after <ParallelConnectTimeout> seconds due to inactivity. After each read-only statement a check occurs when an update in the last parallel connection has happened and if the timeout has been exceeded the parallel connection is closed.	Value in seconds e.g. 10 for 10 seconds inactivity A value of 0 will close immediately the parallel connections after it has been used.	Y, Default in EPQ: 0 Default in Installation: 10	-
DbWuqSP	Defines which algorithm will be used for a "Where Used Query" or "Structure Explosion". There is a "dynamic" version available which created during runtime temporarily a stored procedure which is suited to the requested query for a specific table. The other version uses a stored procedure which is static and part of the standard database dump. This is an internal parameter, please change it only after advised from a support engineer.	▫ Static - Static stored procedure in database dump ▫ Dynamic - Stored procedure which will be created during runtime	Y, Default is: 'Static'	
BindMode	Manages the usage of place holders in the dynamic SQL statements. Using place holders is important to avoid the need to parse SQL statements if many SQL statements have the same structure but different values for variables. Not using place holders will add the parsing time on database server side to the execution time for each	Value is an integer handled as a bit mask, each value is specific for a condition value in a WHERE-clause. The value in a clause is the SQL keyword: ▫ Intervall (between): 1	Y, Default is 31, for Oracle 8 Databases it has been only Equal(2)	Using place holders for all conditions:31 Using place holders only for an Interval and Equal conditions:3

	SQL statement. This is an internal parameter, please change it only after advised from a support engineer.	▫ Equal (=): 2 ▫ Like (like): 4 ▫ Less than or greater than: (<,>):8 ▫ Less equal or greater egual: (<=,>=): 16		
Wildcards	Sets the characters to define the single and the multi wildcard in the database. A single wildcard is a place holder in a query for exactly one character, a multi wildcard is a placeholder for zero to many characters. There are many places in the application to define wildcards, it is important to understand in which order the wildcard definitions are evaluated. Please see here the order of evaluation (first line is also first evaluated): ▫ Configuration parameter (this entry here) **Wildcards** ▫ Command line parameter: **-w** ▫ DataView Defaults SYSTEM parameter: **WILDCARD** ▫ DataView Defaults USER parameter: **WILDCARD** To simplify the wildcard definition it is strongly recommended to use the **WILDCARD** parameter in the DataView defaults only.	Any combination of 2 ANSI characters, special characters are recommended	Y, Default: '?%'	Setting an asterisk for multi wildcard like on a Windows or UNIX shell: '?*'

Querymode	Defines the mode how a query for data will be handled. Queries for exact matches and wildcard matches are distinguished. An exact match is containing no wildcard e.g. 'abcdef' while a wildcard match contains any combination of wildcards e.g. 'a?cd%f'. There are many places in the application to define the query mode, it is important to understand in which order the query mode definitions are evaluated. Please see here the order of evaluation (first line is also first evaluated): ▫ Configuration parameter (this entry here) **Querymode** ▫ Command line parameter: **-q** ▫ DataView Defaults SYSTEM parameter: **QUERYMODE** ▫ DataView Defaults USER parameter: **QUERYMODE** To simplify the query mode definition it is strongly recommended to use the **QUERYMODE** parameter in the DataView defaults only.	▫ **SENSITIVE** - Queries will distinguish upper and lowercase character. This will provide the best database performance. ▫ **INSENSITIVE** - Queries will not distinguish between upper and lower case characters. ▫ **MIXED** - Queries will use 'SENSITIVE' for exact matches and 'INSENSITIVE' for wildcard matches. This provides the best balance between performance and usability of a query	Y, Default in EPQ: 'SENSITIVE' Default in DTV:'MIXED'	A query for 'abc' match in ▫ SENSITIVE: only 'abc' ▫ INSENSITIVE: 'abc', 'Abc', 'ABC', 'aBc', ... ▫ MIXED: for exact matches only 'abc', for wildcard matches 'abc', 'Abc', 'ABC', 'aBc', ...

Security

```
<Security KeyStoreFile="file://D:/oracle/plm61/init/ewallet.p12"
      Wallet="cwallet.sso"
      KeyAlias="C=DE,ST=Baden,L=Karlsruhe,O=Oracle,OU=Agile PLM,CN=PLM"
```

```
      TicketKey="RSA-PUBLIC-
BASE64:D8VyVSBxMfgXcZ8AXhOSZMI6Agh4IVQdU49RgszulDGm+z7dQbSIBYRWbpdfsYgP
s4GmjQL//tVYLdttGvLw6n2uN4/iwLFjGO93PtzGuX7TGqWZQkgXR4pGw7M2KjXMDNN/nIL
9rwlWyRKYLOzHZka1ZMgaopEuwPRmsqoQ2lU=">
   </Security>
```

Attribute	Description	Values	Optional	Example
KeyStoreFile	The location of the Oracle Wallet file used by the PLM server.	file://%ep_root%/init/ewallet.p12	no	file://D:/oracle/plm61/init/ewallet.p12
Wallet	The name of the Oracle Wallet file used by the PLM Java applications.	cwallet.sso	no	Do not change the default value!
KeyAlias	The identification of the PLM server key.	C=DE,ST=Baden,L=Karlsruhe, O=Oracle,OU=Agile PLM,CN=PLM	no	Do not change the default value!
TicketKey	The encrypted key for the ticket module.	RSA-PUBLIC-BASE64:.....	no	Do not change the default value!

IPC Node

```
<IPC AbsEciUrl="eci://www.example.com:19997" SecurityLevel="process"
TicketLifeTime="600"
       Protocol = "1"
       Node = "www.example.com">
   </IPC>
```

Attribute	Description	Values	Optional	Example
AbsEciUrl	The url where the business service can be reached on the oracle application server. The port must match the "Port" entry in the ABS_<env>.ini file on the oracle application server.	eci://www.example.com:19997	-	-
Protocol	(also configurable in the command line) If the configuration file or command line contains both entries and if the command line also contains the resource to be used, e6 is started in ECI Server mode and can be contacted by ECI clients via the specified	<ECI Protocol ID>	Yes	1

	parameters (see ECI Manual).			
Node	The host name of the e6 server when running as an ECI server.	Fully qualified host name	Yes	example1.oracle.com
SecurityLevel	This entry specifies the security level to be used for IPC connections. The default value of connection should be used whenever possible, to ensure that no unauthorized access is possible. Use the other values only if a legacy integration is not capable of passing credentials during an ECI connect. An e6 environment using a value other than connection should be secured by firewalls, so that only the legacy system has remote access to the e6 server.	One of: unrestricted: no authorization required to establish the connection. process: first IPC connection needs to authorize by passing credentials. connection: each IPC connection needs to authorize by passing credentials. [default]	Yes	process
TicketLife Time	The life time value of PLM tickets for multiple ECI connections.	expire value in seconds	Yes	600

Modules Node

```
<Modules>
       <Core>
           <Class Name="Classification" Library="epsrv_edb"
Type="embedded" Startup="immediately"/>
       </Core>
       <Custom>
           <Sample Name="Sample Custom module" Library="sample"/>
       </Custom>
   </Modules>
```

The **Modules** element contains two child elements called **Core** and **Custom**. Each of these child elements may contain any number of module definitions, where the element name is used as Module ID.

The attributes of each element are as follows:

Attribute	Description	Values	Optional	Example
Name	A short description of the module. This is displayed in the library list of e6.	A human readable name	No	Sample Module
Library	The name of the library to be loaded, if possible without path and operating-system-specific suffix	Library name	No	epsrv_sample
Entry	The name of the entry function of the module. This information is provided by the supplier of the respective module. If the entry does not exist, it is derived from the module ID as follows: <mod-id>_Entry	Function name	Yes	Sample_Entry
Startup	Controls the automatic start-up of a module. If the entry does not exist, the module is only loaded, initialized and started on demand.	One of ▫ immediately: Start the module immediately during server startup. ▫ onDemand: Start if a userexit requests the module [default] ▫ disabled: Do not start the module.	Yes	onDemand
Type	Specifies the module type, standard is dynamic.	One of: Static ▫ embedded: Only used for internal e6 modules. ▫ dynamic: Standard value for external modules. [default]	Yes	dynamic

LogFileMgr/CpsVerify Node

```
<LogFileMgr>
       <CpsVerify Mode="append" Prefix="CpsVerify">
       </CpsVerify>
   </LogFileMgr>
```

Attribute	Description	Values	Optional	Example

Mode	Logfile mode. For CpsVerify the value is overwritten by user specific DTV default "CPS_LOG_FIL_MOD". So adapt the DTV default instead of changing value here.	▫ trunc = truncate log message file before writing log messages ▫ append = append log messages to file	yes	Mode="append"
Prefix	Prefix for logfile. Not evaluated yet for CpsVerify, prefix is always set to value "CpsVerify".	CpsVerify	yes	Prefix="CpsVerify"

PLMPresentationServices Node

```
<PLMPresentationServices
Report_Service_URL="http://www.example.com/reporter/report"/>
```

Attribute	Description	Values	Optional	Example
Report_Service_URL	Lightweight reporting URL, generated automatically. URL on the configured oracle application server.	http://www.example.com:7777/reporter/report		

Environment Node

```
Environment>
       <Windows DATAVIEW_TBSP="edb" DATAVIEW_IXSP="edb_idx" ...
DATAVIEW_DUMP="<EP_ROOT>\axalant\dmp" ...>
           <intel-ms-nt5.0/>
       </Windows>
       <Unix ... >
           <ia32-linux-sles10/>
           <rs6000-ibm-aix5.3/>
           <sparc-sun-solaris10/>
           <hppa-hp-hpux11.23/>
           <ia64-hp-hpux11.31/>
       </Unix>
   </Environment>
```

Environment variables for the axalant server process can be set here, or in the startup scripts defined above.

These values will overwrite all previously defined values from e.g. startup scripts.