

**Oracle® Agile Product Lifecycle Management for
Process**

Install/Upgrade Guide

Release 6.1

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Preface

The *Agile Product Lifecycle Management for Process Install/Upgrade Guide* contains instructions for installing and upgrading Oracle Agile Product Lifecycle Management (PLM) for Process.

This preface contains these topics:

- [Audience](#)
- [Variability of Installations](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

This guide is intended for end users who are responsible for creating and managing information in Agile PLM for Process. Information about administering the system resides in the *Agile Product Lifecycle Management for Process Administrator User Guide*.

Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

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Related Documents

For more information, see the following documents in the Agile PLM for Process Release 6.1 documentation set:

- *Agile Product Lifecycle Management for Process Administrator User Guide*
- *Agile Product Lifecycle Management for Process Global Specification Management User Guide*
- *Agile Product Lifecycle Management for Process Supply Chain Relationship Management User Guide*
- *Agile Product Lifecycle Management for Process Document Reference Library User Guide*
- *Agile Product Lifecycle Management for Process Release Notes*. Up-to-date Release Notes and other documentation are posted on Oracle Technology Network (OTN) at this location:

<http://www.oracle.com/technetwork/documentation/agile-085940.html#plmprocess>

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Installation

This chapter discusses Agile PLM for Process installation and includes the following topics:

- [Installation Requirements](#)
- [Pre-Installation Checklists](#)
- [Installation](#)
- [Post-Installation Checklists](#)

Overview

Installing Agile PLM for Process involves several steps, including:

- Understanding system requirements
- Performing pre-installation tasks (such as setting up the Web application server and database)
- Running the command prompt installation batch files
- Performing post-installation tasks, such as:
 - Configuring the remote container service
 - Performing some base application environment configurations
 - Testing the installation

Note: Some tasks required to complete this installation are technical in nature. Please refer to [Appendix E, "Skill Set Matrix"](#) for a list of skills recommended for completing tasks included in this guide.

Checking for Latest Information and Instructions

Prior to installation please refer to the following URLs for the latest information and instructions:

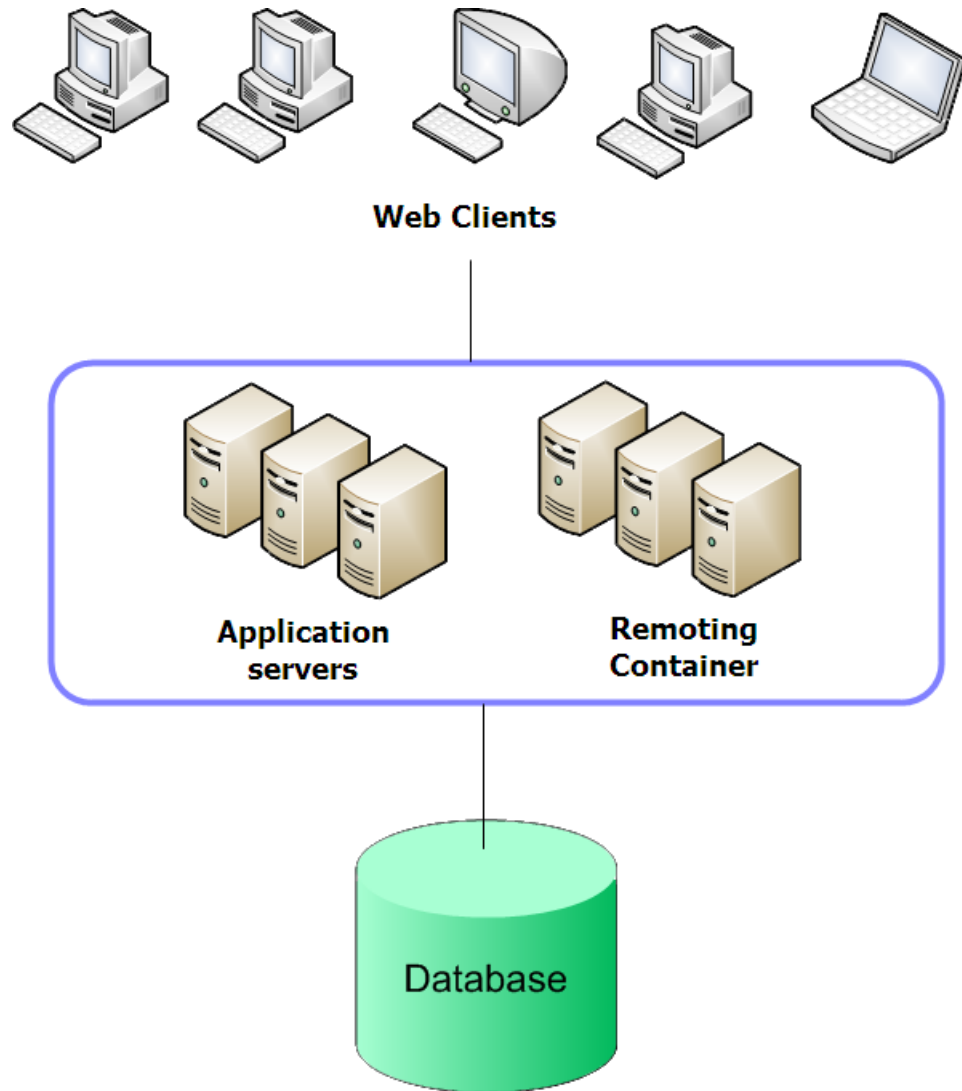
1. Oracle Software Delivery Cloud: <http://edelivery.oracle.com/>. Oracle Software Delivery Cloud provides the latest copy of the core software. Please note the core software does not include all patches and hotfixes.
 - a. Select appropriate language and click **Continue**.
 - b. Complete the export validation requirements form.
 - c. Select "Oracle Agile Applications" as the Product Pack.

- d. Select “Microsoft Windows (32-bit)” as the Platform.
 - e. Click **Go**.
 - f. Search for “Oracle Agile Product Lifecycle Management for Process 6.1.0.0.0 Media Pack” in Results and select link.
 - g. Download the appropriate media packs.
 2. Oracle Support: <https://support.oracle.com>. Oracle Support provides the latest patch releases and hotfixes. To gain access to the latest patches and hotfixes perform the following steps:
 - a. Log into <https://support.oracle.com>. If you do not have a user ID please contact Oracle Support.
 - b. Select a language from the **Language** drop-down, and then click **Sign-In**.
 - c. Go to Patches & Updates.
 - d. Under **Patch Search**, click “Product or Family (Advanced Search)”
 - Product is “Oracle Agile Product Lifecycle Management for Process.”
 - Release is “{The release you are interested in}”, i.e. “Agile PLM for Process 6.1.0.0.0”
 - Platform is “Microsoft Windows (32-bit)”
 - e. Click **Search**. The latest patches and hotfixes will be provided in the search results.
 - f. Download the appropriate patch releases or hotfixes.
3. Oracle Technology Network (OTN):
<http://www.oracle.com/technetwork/indexes/documentation/index.html>. OTN contains documentation for Agile PLM for Process.
 - a. Access
<http://www.oracle.com/technetwork/indexes/documentation/index.html>.
 - b. Under the Oracle Applications section, scroll down to “Other Applications” and select the **Oracle Agile** link. A new window opens.
 - c. Click **Agile PLM for Process Documentation** to see a listing of available documentation.
4. Oracle Mix: <https://mix.oracle.com/groups/16252>. Visit the Prodika Lounge for the latest posts from customers, partners and Oracle’s Product Management regarding the PLM for Process product line.

Installation Requirements

This section discusses Agile PLM for Process installation requirements for the client, application server, and database server. Make sure your systems meet all installation requirements before attempting to install the Agile application suite. In order to properly run, Agile PLM for Process requires a Web client, a Web application server, a remoting container (provided by Agile), and a database server. [Figure 1-1](#) shows the necessary architecture.

Figure 1-1 Agile PLM for Process Physical Architecture



Requirements Overview

Figure 1–2 shows an overview of software requirements.

Figure 1–2 Software requirements matrix

System Software Requirements														
Release	Web Client				Web Application Server				Framework					
	IE 6.0	IE 7.0	IE 8.0	IE 9.0	IIS 6.0 on Microsoft Windows 2003 Server SP2 32-bit	IIS 7.0 on Microsoft Windows™ 2008 Server SP1 32 bit	IIS 7.0 on Microsoft Windows™ 2008 Server SP1 64 bit	IIS 7.5 on Microsoft Windows™ 2008 Server R2 64 bit *	Microsoft .NET Framework 2.0 SP2 or higher	Microsoft .NET Framework 3.5 SP1				
5.2.x	✓	✓			✓				✓					
6.0.0.x	✓	✓	✓		✓	✓	✓	✓	✓					
6.1.0.x		✓	✓	✓	✓	✓	✓	✓		✓				
Multiple browser windows or tabs in a single session is not supported														
* Oracle does not support Oracle 11g DB or client running on Windows 2008 R2														
** Currently only the 32-bit ODP client is supported.														
Release	Database Server						Reporting			Extensibility Pack				
	MS SQL Server™				Oracle**									
	2003, SP1 or higher	2005, SP2 or higher	2008, SP1 or higher	2008 R2	10g Release 2 (10.2.0.4) + ODP.Net Client 11g (11.1.0.6)	11g + ODP.Net Client 11g (11.1.0.6)	11gR2 + ODP.Net Client 11gR2	Microsoft SSRS 2003	Microsoft SSRS 2005	Oracle BI Publisher 10.1.3.4.1	Oracle BI Publisher 11.1.1.5.0	EP 2.3.0	EP 2.4.1	EP 2.5.0
5.2.x	✓	✓						✓	✓			✓		
6.0.0.x		✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	
6.1.0.x		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓

Web Client Requirements

To properly run Agile PLM for Process, web clients must meet the following minimum requirements:

- Internet Explorer 7.0, 8.0, or 9.0
- Adobe Reader 7.0

Warning: When determining server hardware requirements as described below in "[Web Application Server Requirements](#)", "[SQL Server Database Server Requirements](#)", and "[Oracle Database Server Requirements](#)", keep in mind that these are minimum requirements. Your environment should be evaluated to determine the actual hardware requirements. Things to consider are:

- Data volume
 - Application distribution
 - Application usage
 - User load
 - User distribution across applications
 - Network configuration
 - Document storage location
-
-

Web Application Server Requirements

Software Requirements

Agile PLM for Process runs on Windows 2003 Server SP2 (32-bit) and Windows 2008 Server SP1 and R2 (32- and 64-bit). To properly run Agile PLM for Process, use one of the following supported versions for the web application server:

- IIS 6.0 on Microsoft Windows™ 2003 Server SP2
- IIS 7.0 on Microsoft Windows™ 2008 Server SP1
- IIS 7.5 on Microsoft Windows™ 2008 R2
- Microsoft .NET Framework 3.5 SP1

Hardware Requirements

To properly run Agile PLM for Process, the web application server must meet the following minimum requirements:

- Dual CPU Intel Xeon 3.0 GHz and above
- 2 MB L2 cache
- 4 GB RAM

Each application in the Agile application suite can be hosted on one or more web application servers.

Note: We recommend that you use separate application pools if the same web application server is shared across Agile applications.

Typical Production Hardware Requirements

Hardware requirements for a typical production environment are as follows:

- Dual CPU Intel Xeon 3.0 GHz and above with at least 2 cores
- 2 MB L2 cache
- 8 GB RAM

SQL Server Database Server Requirements

Software Requirements

To properly run Agile PLM for Process, use one of the following supported versions for the database server:

- Microsoft SQL Server™ 2005, SP2 or higher
- Microsoft SQL Server™ 2008, SP1 or higher
- Microsoft SQL Server™ 2008 R2

Hardware Requirements

To properly run Agile PLM for Process, the SQL database server must meet the following minimum requirements:

- Dual CPU Intel Xeon 2.0 GHz and above
- 2 MB L2 cache
- 4 GB RAM
- Separate drives for data and log files

Note: The database server can be managed in a clustered environment.

Typical Production Hardware Requirements

Hardware requirements for a typical production environment are as follows:

- Dual CPU Intel Xeon 3.0 GHz and above with at least 4 cores
- 2 MB L2 cache
- 16+ GB RAM

Oracle Database Server Requirements

Software Requirements

To properly run Agile PLM for Process, use the following supported versions for the Oracle database server:

- Oracle Database Server: 10g Release 2 (10.2.0.4), 11g
- Oracle 11g Client + ODP.NET 11.1 (On the IIS server, as described in ["Pre-Installation Environment Configuration"](#) on page 1-10)

Note: Currently only the 32-bit ODP client is supported.

- Operating system supported by the Oracle database. Please note, the 11g client is required whether you implement Oracle DB 10g or 11g.

Hardware Requirements

To properly run Agile PLM for Process, the Oracle database server must meet the following minimum requirements:

- Dual CPU Intel Xeon 2.0 GHz and above
- 2 MB L2 cache
- 4 GB RAM
- Separate drives for data and log files

Typical Production Hardware Requirements

Hardware requirements for a typical production environment are as follows:

- Dual CPU Intel Xeon 3.0 GHz and above with at least 4 cores
- 2 MB L2 cache
- 16+ GB RAM

Remoting Container Requirements

With the Agile application suite, you receive the Agile Remoting Container, a Windows OS-level service. This remoting container can exist on the same Web application server described above, or separately. The following are requirements for the remoting container:

- Microsoft .NET Framework 3.5 SP 1

For more information, refer to the *Agile Product Lifecycle Management for Process Remoting Container Services Guide*.

Scaling Requirements

You will need to scale your system for performance and availability as your system begins to grow due to an increased use of the Agile application suite and a growing number of users and as your business demands change or increase. The following sections provide scalability recommendations.

Scaling for Performance

You will need to scale for performance as the number of users and applications begins to increase over time. In consideration of performance scaling, we recommend the following:

- No more than 250 registered users per processor.
- Organize scaling according to regional user patterns (according to users in similar time zones and geographical regions).
- Once physical Web application server limitations are met, use a load-balanced (logical or actual) solution.

Scaling Beyond Five Core Applications

The following are recommendations for scaling beyond five (5) core Agile applications. Core Agile applications include:

- Global Specification Management (GSM)
- Supply Chain Relationship Management (SCRM)
- New Product Development (NPD)
- eQuestionnaire (eQ)
- Agile applications portal
- Run no more than five (5) core Agile applications on a single Web application server.
- Organize scaling based on an evaluation of utilization patterns (known application characteristics).

Load Balancing As mentioned above, once physical Web application server limitations are met, use a logical load-balanced solution based on application distribution across servers. For example, a logical separation might be organized by application as follows:

GSMAppGroup — Includes GSM and other complimentary applications

NPDAppGroup — Includes NPD and other complimentary applications

Scaling for Availability

You may also need to scale for availability as your business demands begin to change or increase over time.

For application load-balancing, we recommend the following:

- A load balancer (such as f5 BigIP or Cisco CSS11000) that supports the following:
 - Secure Sockets Layer (SSL) protocol
 - Sticky sessions
- A maximum of five core Agile applications per load-balanced node.

Note: A clustered node is an expansion of a logical application separation.

For database, file, and service clustering, we recommend the following:

- A clustered server to support an active or passive database system
- A file cluster (where required)
- Service clustering

Pre-Installation Checklists

This section discusses Web application server-related tasks that an Agile implementer must complete before installing the Agile application suite.

The application is configured out of the box to use Integrated SSPI. This technology is used to ensure the username and password is not stored as clear-text in any configuration files and is only applicable to environments using Microsoft SQL Server. This guide will only refer to settings as they pertain to SSPI. Please refer to the *Agile Product Lifecycle Management for Process Security Configuration Guide* for secure Oracle DB setup and unsecure clear-text method.

Note: The clear-text method should ONLY be used in a non-production environment as your username and password is stored in clear-text in the configuration file.

Pre-Installation Environment Configuration

User Creation

A local or domain application user needs to be created. We will use PLM4P_AppUser for the purposes of this document. PLM4P_AppUser will need access to the following:

- Files
 - Read access to the PRODIKA_HOME directory
 - Read/Write access to the PRODIKA_HOME\logs directory
 - Read/Write access to the PRODIKA_HOME\XDocuments
 - Read/Write access to WebDAV directory for NPD
 - Read/Write access to system temp directory (i.e.. c:\windows\temp)
 - Full control over PRODIKA_HOME\RemotingContainer
- IIS
 - Identity for Application Pool
 - For IIS 6.0, add user to IIS_WPG group
 - For IIS 7.x, add user to IIS_IUSRS group
- Service
 - Execute and Run the Remoting Container Service
- MSSQL Database
 - db_datareader
 - db_datawriter
 - db_executor

Note: XDocuments and WebDAV are configurable settings and may exist elsewhere within your environment. Once installed, please refer to the *Agile Product Lifecycle Management for Process Configuration Guide* for location and details.

Microsoft Application Server Checklist

Before installing the Agile PLM for Process application suite, complete all of the Microsoft IIS related tasks in the following sections:

- [Add Application Server Role](#)
- [Create and Configure IIS Application Pool Settings](#)
- [Create and Configure a Website](#)
- [Enable WebDAV for NPD Applications](#)
- Enable IIS6 or Apache 2.2 for NPD Application

Add Application Server Role

Refer to Microsoft Windows Server documentation for deploying the server role, Application Server (IIS, ASP.NET).

- For Microsoft Windows 2003, install IIS 6.0. Post installation, in IIS Manager, under Web Service Extensions, allow ASP.NET **2.0.50727**.
- For Microsoft Windows 2008, install IIS 7.x. During installation, be sure to select the following options:
 - ASP.NET
 - IIS 6.0 Management Compatibility

Post installation, in IIS Manager, under ISAPI and CGI Restrictions, allow ASP.NET **2.0.50727**.

Create and Configure IIS Application Pool Settings

Application Pool names are for example, and can be renamed if needed.

Create at least two Application Pools called **PLM4P_MAIN** and **PLM4P_GSM** with the following settings modified.

IIS 7.x Setting	IIS 6.0 Setting	Value
Enable 32-Bit Applications	n/a	True
Managed Pipeline Mode	n/a	Classic
Queue Length	Request queue limit	4000
Identity (Custom Account)	Identity (Configurable)	PLM4P_AppUser
Idle Time-Out	n/a	0
Regular Time Interval	Recycle worker process	0 (uncheck)
Ping Enabled	Enable ping	false
Rapid-Fail Protection	Enable rapid-fail protection	false

It is highly recommended that GSM is setup in its own Application Pool. Based on the applications installed and used in your environment, you can set other applications to use their own Application Pools in order to maximize memory allocation and performance.

Note: Identity can be set to `Local System` in non-production environments that are not utilizing Integrated SSPI for the DB connectstring. Please see the *Agile Product Lifecycle Management for Process Security Configuration Guide* for more information.

Create and Configure a Website

Website name defined below is an example and can be renamed if needed.

Create a website called PLM4P with the application pool set to **PLM4P_MAIN** and a Physical path of 'C:\inetpub\wwwroot'. For a production environment, this site will need a valid SSL certificate to protect against data traversing the network in clear-text. Please refer to the *Agile Product Lifecycle Management for Process Security Configuration Guide* for more information, as well as, information on how to setup without SSL for non-production environments.

Enable WebDAV for NPD Applications

If you are installing the Agile PLM4P NPD application, you must enable the WebDAV (Web Distributed Authoring and Versioning) protocol in Microsoft IIS to support in-place editing. Please refer to [Appendix B, "Installing WebDAV"](#) for instructions.

Warning: WebDAV is fundamentally different in IIS7.x and is not a supported platform when using anonymous user. If you are installing the main application on IIS7.x, then you must have a separate web server with IIS6 or Apache 2.2 installed for WebDAV.

Configure Microsoft SQL Server

Refer to Microsoft SQL Server documentation for installation instructions. For information on MS SQL Reporting Server, which can be optionally installed, refer to the *Agile Product Lifecycle Management for Process Configuration Guide*. When installing, ensure the collation designator and sort order are `Latin1_General`.

Oracle Database Server Checklist

- Create the Oracle database server using Oracle Database Configuration Assistant.
- Choose **AL32UTF8** as the database character set and **UTF8** as the database national character set.

Oracle Database Client Checklist

The following Oracle Database Checklist can be used in conjunction with Oracle Database documentation containing installation instructions. Clients should use this checklist or the instructions in "[Configure Microsoft SQL Server](#)" on page 1-12, but not both, as they are separate installation methods. When installing the Oracle client, be sure to:

- Install Oracle 11g Release (11.1.0.6 +) client on the server hosting the application.
- Update the `tnsnames.ora`, located at `%Oracle Client Home%\network\admin\tnsnames.ora`, to include a new data source. This data source should point to the Oracle database that has been set up.
- Build your connection string:


```
"User Id=<user id>;Password=<password>;Data Source=<data source created in step 4>"
```

 where
 - a. User Id = db username
 - b. Password = passwd
 - c. Data Source = The name that you gave your `tnsnames.ora` entry

SSL Checklist

SSL (Secure Sockets Layer) is a protocol from Netscape Communications Corporation that is designed to provide secure communications on the Internet. SSL is not required for an Agile installation but is strongly recommended for production environments.

SSL can be deployed in many ways. Most commonly, SSL will run within IIS or on an intermediary system such as a Reverse Proxy or SSL accelerator.

The Agile application suite can operate in any of these scenarios, but the HTTP scheme must be configured (via `environmentvariables.config`) to generate the desired relative URLs correctly (http vs. https). The default URLs are configured for https.

East Asian Language Support

If you plan to support East Asian languages in Agile Product Lifecycle Management for Process, you must install East Asian language support on the server.

To install East Asian language support on the server:

1. Access the Windows Control Panel dialog box by clicking **Start > Control Panel**.
2. Select **Date, Time, Language, and Regional Options > Regional and Language Options** and click the **Languages** tab.
3. Check the **Install Files for East Asian Languages** box.
4. Click **Apply** and **OK**.

Restoring the SQL Database and Setup Database Accounts

A prepared database is provided as part of your Agile software media from Agile Software. Using Microsoft SQL Server Management Studio, you will need to restore this database onto your local database server. You will also need to make sure that the user responsible for accessing the database has the appropriate account setup and assigned roles.

Option 1: MSSQL Database

Restoring the Database

Refer to Microsoft SQL Server documentation for restoring a database.

The name and location of the database is <media pack>\Database\Certified_DB_<version>.zip

Note: If you do not already have a naming convention, we recommend including the environment name. for example: plm4p_production

Setting Up User Permissions

Refer to Microsoft SQL Server documentation for setting up a user.

Recall and add the user created as part of the pre-installation environment checklist. For example, PLM4P_AppUser. At a minimum, this user must have the following two roles for the plm4p_ database:

- db_datareader
- db_datawriter

Option 2: Oracle Database

To restore the Oracle database:

1. Create an Oracle database user. A SQL script is provided to create the database user and set up user permissions for the application. Run the SQL script createuser.sql using Oracle SQL*Plus.
2. Note that the imp client version has to match exactly the Oracle database server version. The client character set also needs to be set to the server character set. Import the Oracle database dump file certifiedDB_v6100.dmp from the command window:

```
C:> set NLS_LANG=AMERICAN_AMERICA.AL32UTF8
C:> imp <ORCL dbuser>/<ORCL dbpwd>@<datasource> fromuser=<agile> touser=<target
dbuser> file=<dmp file> log=<log file>
```

Installation

The Agile PLM suite is installed through a set of manual configuration steps. Several of the steps are automated with utility batch scripts for a default configuration. The overall process consists of the following steps:

- [Setting up PRODIKA_HOME](#)
- [Installing the Core Application Files](#)
- [Registering Environment Components](#)
- [Setting the Remote Container Service and Application Pool Accounts](#)
- [Installing Individual Media Bundle Application Files](#)
- [Setting Up the Initial IIS Application Pools](#)
- [Register the IIS virtual directories for the installed applications](#)
- [Registering .Net version 2.0 under ASP](#)
- [Installing the Reference Database](#)
- [Installing Language Support for Simplified Chinese, Traditional Chinese, Korean, or French](#)
- [Configuring Applications](#)
- [Installing BI Publisher \(Optional\)](#)
- [Completing Optional Steps](#)
- [Determining a Web Site's Site ID](#)

Installation Process

Setting up PRODIKA_HOME

Note: This step needs to be done only once per Web site instance. If you have multiple instances of the Agile PLM suite running on the same server, you will need to perform this step once per instance.

1. Create a folder (e.g. c:\PLM) into which to install the application. For instructional purposes, this folder will be called PRODIKA_HOME.

Installing the Core Application Files

Note: This step needs to be done only once per PRODIKA_HOME. If you have multiple instances of the Agile PLM suite running on the same server, you will need to perform this step once per instance.

Throughout the instructions below, the place where you extracted the media bundle zip file will be referred to as INSTALLER_HOME.

1. After obtaining the media bundle, extract to a directory on the web application server.

Throughout the instructions below, the place where you extracted the media bundle zip file will be referred to as `INSTALLER_HOME`.

2. Open the containing directory for `INSTALLER_HOME`.
3. Extract **Core.zip** located in `INSTALLER_HOME\PDM` (where `PDM` is the name of the media bundle being installed) to a temporary directory (i.e.; `c:\temp`). This will give you a directory structure like `c:\temp\Apps`, `c:\temp\Config`, etc. This temporary directory will be referred to as `TEMP_HOME`.
4. Copy **FileCompressionHelper.exe** from `INSTALLER_HOME` to `TEMP_HOME`.
5. Open a command prompt and navigate to `TEMP_HOME` (i.e.; `>cd c:\temp`).
6. Run the following:

```
>FileCompressionHelper.exe -d
```

Warning: It is extremely important that you perform the decompression described in step 5 before continuing to install any additional media pack bundle files.

7. When the distribution is complete, move your `TEMP_HOME` contents to `PRODIKA_HOME`.

Registering Environment Components

1. Register event logs. Refer to [Appendix 1, "Event Logs"](#) for a listing of event logs.
 - a. Open a command prompt and navigate to `INSTALLER_HOME\Installer\Tools`.
 - b. Run the following batch file:

```
>SetupEventLogs.bat
```
 - c. You will be asked to verify the addition of each event log to your system event logs. Click **Yes/Ok** through all of the event log additions.
2. Register Component Art and Apoc.
 - a. Open a command prompt and navigate to `INSTALLER_HOME\Installer\Tools`.
 - b. Run the following batch file:

```
>ConfigureRegistry.bat
```
 - c. You will be asked to verify the addition of each registry entry. Click **Yes/Ok** through all of the event log additions.
3. Install the Remoting Container Service.

Note: This step needs to be done only once per `PRODIKA_HOME`. If you have multiple instances of the Agile PLM suite running on the same server, you will need to perform this installation once per instance.

- a. Open a command prompt and navigate to `INSTALLER_HOME\Installer\Tools`.

- b. Stop IIS. From the command prompt type the following:

```
>iisreset /stop
```

- c. Run the following batch file with <PRODIKA_HOME> replaced by your specific PRODIKA_HOME directory:

```
>InstallRemotingContainerService.bat <PRODIKA_HOME>
```

- d. If you are running a 64-bit system, follow these steps to set up the Remoting Container to run as a 32-bit process.

- a. Download the Windows SDK for Windows Server 2008 and .NET Framework 3.5 from <http://www.microsoft.com/download/en/confirmation.aspx?id=24826>

- b. Install the Developer Tools.

- c. Note the installation path for corflags. The default is C:\Program Files\Microsoft SDKs\Windows\v6.1\Bin\. Run the following command:

```
corflags.exe /32bit+ %PRODIKA_HOME%\RemotingContainer\RemotingContainer.exe
```

Setting the Remote Container Service and Application Pool Accounts

The remote container service and application pool are standard Microsoft Windows services, which require user accounts in order to run. During the Agile installation, the service is installed as the Local System account.

To change the account which the service runs under:

1. Select **Start > Administrative Tools > Services**.
2. Locate the RemoteContainerService within the list of services listed in the Services dialog box.
3. Right-click the RemoteContainerService row and select **Properties**.
4. Select the Log On tab.
5. Select the **This account** radio button.
6. Select the PLM4P_AppUser account defined in the Pre-Installation section.

Before installing Agile PLM for Process, make sure that your IT department has created an account for each service for you. Such accounts can be system accounts, local Windows accounts, or domain accounts (active directory). The process for creating a remote container service account and application pool account is a standard approach for creating Windows accounts.

Warning: If utilizing Integrated SSPI in the database connectstring, then the logon account for the remote container service needs to be a user with datareader and datawriter rights for the database.

Installing Individual Media Bundle Application Files

1. Open the containing directory for `INSTALLER_HOME`.
2. Extract the media pack zip file located in `INSTALLER_HOME` to a temporary directory (i.e.; `c:\temp`). This will give you a directory structure like `c:\temp\config`, `c:\temp\FileCompressHelper_CentralDirectory` & `c:\temp\Web`.
3. Confirm media bundle names for the ZIP files, where the name can be one of:
 - `MP1.zip` for the PDM install
 - `MP2.zip` for the FC install
 - `MP3.zip` for the PSC install
 - `MP4.zip` for the NPD install
4. Copy `FileCompressionHelper.exe` from `INSTALLER_HOME` to `TEMP_HOME`.
5. Open a command prompt and navigate to `TEMP_HOME` (i.e.; `>cd c:\Temp`).
6. For all of the media bundles other than the NPD media bundle, run the following utility application:

```
>FileCompressionHelper.exe -d
```
7. When the distribution is complete, move your `TEMP_HOME` contents to `PRODIKA_HOME`.
8. Accept the warning(s) to overwrite the directories that already exist.

Setting Up the Initial IIS Application Pools

We recommend that you run the suite of applications under multiple application pools in order to provide better resource management and security. At a minimum, GSM needs to be in its own app pool, segmented from the rest of the applications.

The utility scripts are designed to place the different applications under the same application pool, or you may run the `SetupVirtualDirectories.bat` file manually giving the values for the specific web applications to segment them as you see fit.

Note: This is a minimum application pool configuration. Depending on usage, it may be necessary to split out other applications into their own application pool.

For a 32-bit .NET application running on a 32-bit OS, application pool memory should not exceed 800 MB. For a 32-bit .NET application running on a 64-bit OS, application pool memory should not exceed 2.3GB.

Keep this in mind when determining how to separate your applications. Some examples of possible applications to separate include NPD, SCRM, and GSMView.

The general process of installing the necessary web applications using the utility scripts is listed below:

1. Open a command prompt and navigate to the directory `INSTALLER_HOME\Installer\Tools`.
2. To install the core Web site virtual directories, choose one of the following options:

- **Option 1, Creating a single app pool**—To install the core Web site virtual directories, type the following where the values <PRODIKA_HOME>, <siteid> and <AppPool> are replaced with the values associated with your specific environment:

```
SetupCoreVirtualDirectories.bat <PRODIKA_HOME> <siteid> <AppPool>
```

- **Option 2, Segmenting the applications into separate application pools**—To manually create the virtual directories needed for the individual applications within the core application bundle, type the following. You will need to repeat this script for each of the different applications within core. Refer to the SetupCoreVirtualDirectories.bat file to determine the applications within core.

```
SetupVirtualDirectories.bat drl <siteid> <PRODIKA_HOME> <AppPool> drl
```

Note: Please refer to the section "[Determining a Web Site's Site ID](#)" on page 1-22 to determine the value for <siteid>.

3. Each media bundle has an associated Setup<MediaBundle>VirtualDirectories.bat batch file where <MediaBundle> is PDM, FC, SupplierCollab or NPD. To install the necessary virtual directories for each installed media bundle, repeat the process outlined in step 2, replacing <Media Bundle> appropriately.

Registering .Net version 2.0 under ASP

1. Open a command prompt and navigate to INSTALLER_HOME\Installer\Tools.
2. Run the following command:

```
>RegisterASP_2_0.bat
```

Installing the Reference Database

There is a reference database that is located under INSTALLER_HOME\Database. Restore this database to your database server by following the instructions outlined under the "[Restoring the SQL Database and Setup Database Accounts](#)" on page 1-13 and "[Setting Up User Permissions](#)" on page 1-14 section earlier in this guide.

Installing Language Support for Simplified Chinese, Traditional Chinese, Korean, or French

As an optional step, customers may apply 6.1.0.0.0 National Language Support (NLS) installation. See [Appendix C, "Installing National Language Support"](#) for instructions.

Configuring Applications

Review the *Agile Product Lifecycle Management for Process Configuration Guide* to apply the configuration changes required for the installation.

Configuring the Oracle Database Connection

To configure the Oracle Database Connection:

1. Change the Database Connection pools as shown below. The ADAPTER_FACTORY needs to have the Oracle specific ADAPTER_FACTORY. The format of the CONNECT_STRING is different from the default SQL Server settings.

```

<ConnectionPools>
  <ProdikaDB configChildKey="key">
    <config key="MAX" value="8"
      configOverrideModifier="IsLocked" />
    <config key="CONNECT_STRING" value="User Id=<ORCL DB
      USER>;Password=<ORCL DB PWD>;Data Source=<DATASOURCE>"
      configAttributeOverrideBehavior="Replace"
      configOverrideModifier="IsLocked" />
    <config key="ADAPTER_FACTORY"
      value="Class:Xeno.Data.Oracle.OracleDbAdapterFactory,DataLib"
      configAttributeOverrideModifier="CanExtend" />
  </ProdikaDB>
  <ReportDB copyOf="ConnectionPools/ProdikaDB">
    <config key="CONNECT_STRING" value="User Id=<ORCL DB
      USER>;Password=<ORCL DB PWD>;Data Source=<DATASOURCE>" />
  </ReportDB>
</ConnectionPools>

```

Note: You should change the connect string in the `environmentvariables.config` file.

2. Add the EQT Service config in the EnvironmentSettings and specify the DBHelper to be Oracle Specific DB Helper as shown below:

```

<Prodika>
  <Services>
    .
    .
    .
    <EmailService configChildKey="name">
      <envvar name="EMAIL_DOMAIN_FILTER" value="<YOUR EMAIL DOMAIN - ex:
        oracle.com" configOverrideModifier="IsLocked" />
      <envvar name="BCC_AUDIT_EMAIL_ADDRESS" value=" "
        configOverrideModifier="IsLocked" />
      <envvar name="SMTP_SERVER" value="<YOUR SMTP ADDRESS>"
        configAttributeOverrideBehavior="Replace"
        configOverrideModifier="IsLocked" />
    </EmailService>
    <EQTService configChildKey="name">
      <envvar name="DBHelper"
        value="Xeno.Prodika.EQT.Execution.OracleDBHelper,EQT" />
    </EQTService>
    <SyndicationService configChildKey="name">
      <envvar name="ErrorNotifyFromAddress" value="#CUSTOMER_FROM@CUSTOMER.COM"
        configElementOverrideModifier="IsLocked"
        configAttributeOverrideModifier="Replace" />
      <envvar name="ErrorNotifyToAddress" value="#CUSTOMER_TO@CUSTOMER.COM"
        configElementOverrideModifier="IsLocked"
        configAttributeOverrideModifier="Replace" />
    </SyndicationService>
    .
    .
    .
  </Services>

```

3. Restart IIS. You can now use the Prodika installation on the Oracle Database.

Configuring Access to the Database

Every server, regardless of its location, will need access to the database:

- For MSSQL, port 1433
- For Oracle DB, port 1521

Configuring Firewall Access

Both Supplier Portal and eQ have applications that reside inside the firewall. Supplier Portal and Supplier eQ use a web service to interact with documents via DRL, and this web service must be accessible through the firewall.

To do this, you must:

- Allow standard port 80 or 443 from Supplier Portal to the DRL web service through your firewall.
- Modify your %PRODIKA_HOME%\config\environmentvariables.config as follows
 - Add Prodika.Server2.URL = http://server.domain.tld *
 - Change Prodika.DRLAttachment.URL = @@VAR:Prodika.Server2.URL@@/drl
 - Change Prodika.DRL.URL = @@VAR:Prodika.Server2.URL@@/drl

* This URL should match the URL configured in the intranet environmentvariables.config.

Installing BI Publisher (Optional)

As an optional step, you can install BI Publisher for Printing and/or Reporting. See [Appendix D, "Installing BI Publisher"](#) for more information.

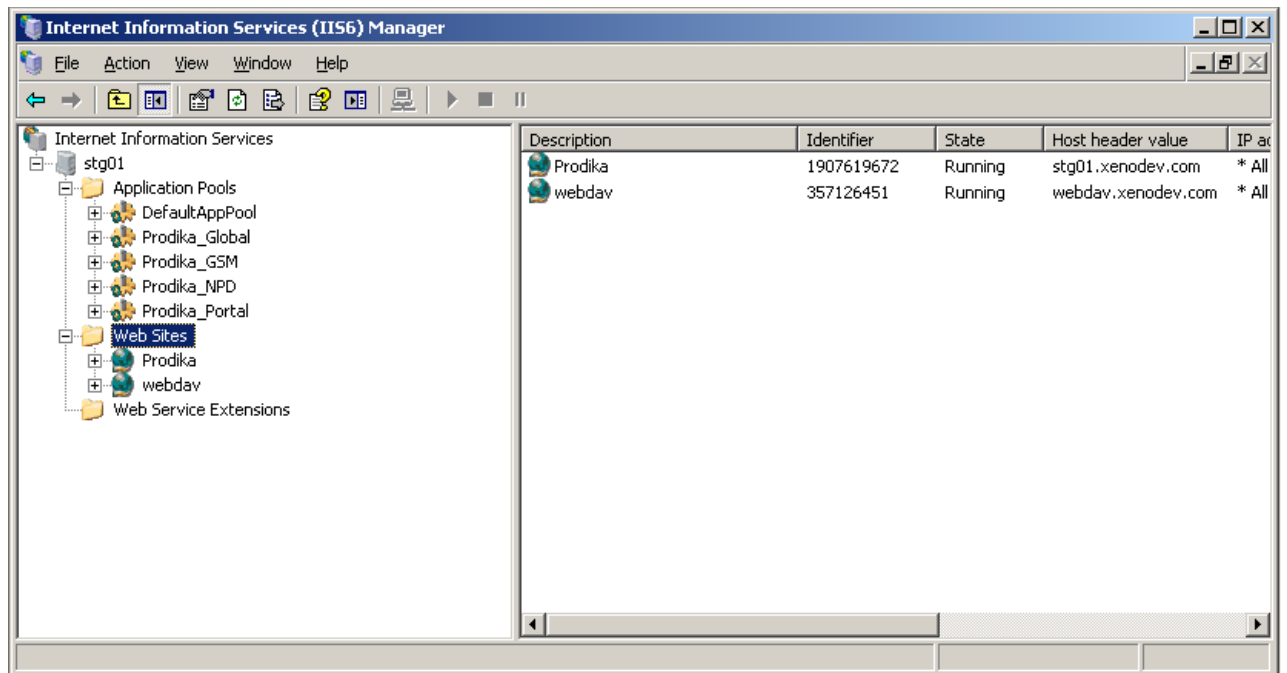
Completing Optional Steps

For the NPD media bundle, create the WebDAV folder. Some parts of the Agile suite use WebDAV to allow in-place editing of certain document types. To allow for this, a setting is available in the <PRODIKA_HOME>/config/Custom/EnvironmentSettings.config file for the WebDAV virtual folder. In cases for which WebDAV is required, create a WebDAV virtual folder and allow the anonymous user to access (read and write) the physical folder location on the hard drive. Refer to [Appendix B, "Installing WebDAV"](#) for instructions.

Determining a Web Site's Site ID

To determine the Site ID for a new Web Site within IIS 6.0:

1. Open IIS Manager via Administrative Tools.
2. Expand <server_name> node in the left pane.
3. Highlight the **Web Sites** node in the left pane.
4. The web sites and their corresponding ID will be listed in the right pane, as [Figure 1-3](#) shows.

Figure 1–3 Web sites and IDs

Post-Installation Checklists

This section discusses tasks that an Agile implementer must complete after installing the Agile application suite.

Setting the IIS Event Viewer Logging

Warning: This step is critical to successfully running the Agile application suite. You must set the Event Viewer logging to "Overwrite events as needed" for System, Security, Application, and all Agile-created event logs.

If an event log is set to **Overwrite events older than 7 days**, then you may run into an issue when a new feature is introduced that uses multiple Warnings, Errors, or Information. The introduction of new event logging can fill up the event log so that no more events can be logged, throwing an exception back to the user of the application. The exception will not go away until the log is set to **Overwrite events as needed** or until the log is cleared manually. For this reason, we suggest setting all event logs to **Overwrite events as needed**.

Warning: You will need to start up every Agile application, which will generate a new event viewer log. Review each event viewer setting to make sure the "Overwrite events as needed" option is selected.

To set the IIS Event Viewer Logging in IIS 6.0:

1. On your desktop, right-click the **My Computer** icon.
2. Click **Manage** from the fly-out menu to display the Computer Management dialog box.
3. In the left pane, click **System Tools > Event Viewer** to display all of the available event viewers.
4. Right-click on each event viewer and select **Properties** to display the Application Properties dialog box.
5. Select the **Overwrite events as needed** option.
6. Click **Apply**, and then click **OK**.

Updating the Version Number in the version.txt File

Modify the version.txt file as follows:

1. In your `Prodika_Home` directory, locate the `version.txt` file.
2. Open the file with a text editor.
3. Edit the first line so that it contains only the following text:
`Version: v6.1.0.0.0`
4. Click **File > Save** to save the change.

Starting the Remote Container Service

To start the remote container service:

1. Right click **My Computer**.
2. Select **Manage** from the context menu. The Computer Management console will open.
3. Expand the **Services and Applications** node.
4. Select the **Services** node.
5. The services will be listed in the main content area.
6. Locate the RemoteContainerService.
7. Right click and select **Start**.
8. Wait a few seconds to verify that it starts and stays running.

Note: For troubleshooting purposes, if the service starts and then stops, check the log file under

<PRODIKA_HOME>\logs\remoteContainer-stdout.log

to determine the root cause.

Note: For additional troubleshooting ONLY, the remote container service can be run from the cmd line as follows:

<PRODIKA_HOME>\remotingcontainer\remotingcontainer
/normal

Microsoft .NET Framework

After installing Microsoft .NET Framework 3.5 SP1, you need make some configuration changes to the machine.config file for performance optimization purposes.

Make the following updates to the machine.config file as follows:

1. Locate and open the machine.config file at:

C:\Windows\Microsoft.NET\Framework\v2.0.50727\Config\machine.config

2. Locate the system.web tag and add the following under it:

```
<pages validateRequest="true" enableEventValidation="false"/>
<processModel enable="true" timeout="Infinite"
idleTimeout="Infinite"
shutdownTimeout="00:00:05" requestLimit="Infinite"
requestQueueLimit="5000" restartQueueLimit="10"
memoryLimit="60" webGarden="False" cpuMask="0xffffffff"
userName="SYSTEM" password="AutoGenerate" logLevel="Errors"
clientConnectedCheck="00:00:05"
comAuthenticationLevel="Connect" comImpersonationLevel="Impersonate"
responseDeadlockInterval="00:03:00"
responseRestartDeadlockInterval="00:03:00" autoConfig="True"
maxWorkerThreads="20" maxIoThreads="20" minWorkerThreads="1"
```

```
minIoThreads="1" serverErrorMessageFile="" pingFrequency="Infinite"
pingTimeout="Infinite" maxAppDomains="2000" />
<machineKey
validationKey="B3B1257C1B375B1190AF16044C40A42739DEDDBA26C2F9DA35B20FC20C3F63B1
1B22C6B92D602EB8886E3D18F9548B84A0B80EBADC575C407ED33F39ACE08389"
decryptionKey="6D53B0178EF6AA0604C1D559B0962228B7449DAFD920113B"
validation="SHA1"/>
```

Note: Sometimes, these tags might exist prior to this step. If these tags are already present, please update them to look as above.

3. Locate forms Attributes in either web.config or web.config.comments. (The xpath to the node is: /configuration/system.web/authentication.)
[@mode='Windows']/forms
4. Change the protection attribute on the forms tag to None.
5. Open Internet Information Server Administrator and right-click on the Web virtual folder and choose **Properties**.
6. Click on the ASP.NET tab to confirm that .NET 2.0 is selected.

Refer to [Appendix A, "Verification Tests"](#) for instructions on performing tests to verify the installation.

This chapter discusses upgrading Agile PLM for Process. Topics in this chapter include:

- [Pre-Upgrade Tasks](#)
- [Upgrade Tasks](#)
- [Web Application Tasks](#)
- [Stopping Services and Backing Up Files](#)
- [Installing Software and Scripts](#)
- [Reconfiguring Settings](#)
- [Restarting Remote Container Service and Web Application Server](#)
- [Verifying the Installation](#)

Pre-Upgrade Tasks

Install 6.0.0.3.36

Note: Before upgrading to 6.1, you must install 6.0.0.3.36.

Install .Net 3.5 SP1

Prior to installing 6.1, you must install .Net 3.5 SP1.

Pre Database Upgrade Procedures

Prior to running the database upgrade using ApplyScripts, you must run the `pre_v61000_upgrade.sql` script. Please note that this file contains sql statements for SQL Server and Oracle. Please only execute the statements that are for the database you are running. This script identifies the following data problems:

1. Verify that there are no 14 digit GLN numbers.

Warning: If you do not resolve the problems identified by the script prior to upgrading, the database change will result in truncation of any GLNs that have more than 13 digits.

2. Verify there are no cases where non-English doubles are stored as a string on elements such as min/max range on breakdowns and alternate packaging units.

Warning: If you do not resolve the problems identified by the script by entering the values using decimals instead of commas prior to upgrading, the values entered in the min/max range and alternate packaging units will be converted by the system to a double and the comma will be ignored. This could cause your data to be misrepresented.

For example, 50,5 will be converted to 505 unless it is changed to 50.5.

3. Check to see if the new ISO codes being added for core nutrients are the same as ISO codes currently being used by the customer.

Warning: If you do not resolve the problems identified by the script by changing the duplicate ISO codes used for UOM's entered in Data Admin in the "Other" category, the system will fail to load.

Determine Database Executor Role

The database user must have the ability to execute stored procedures on the PLM4P database. For an MSSQL database where the user is not `dbowner`, you may need to add a new database role and grant this role to your database user. Please consult your database administrator for any conflicts.

1. Run the following to create the role

```
CREATE ROLE db_executor
GRANT EXECUTE TO db_executor
```

2. Grant this role to your db user (ex. PLM4P_AppUser)

Upgrade Tasks

This chapter discusses the basic steps required to upgrade the Agile application suite to the 6.1 version. The main steps in the upgrade process include:

1. ["Check for Active Web Application Server Sessions"](#) on page 2-4
2. ["Stop the Web Application Server"](#) on page 2-5
3. ["Stop the Remote Container Service"](#) on page 2-5
4. ["Back Up the Previous Database Deployment"](#) on page 2-5
5. ["Back Up the Previous Oracle Database Deployment"](#) on page 2-6
6. ["Install the Agile 6.1 Upgrade Software"](#) on page 2-7
7. ["Update the Version Number in the version.txt File"](#) on page 2-8
8. ["Apply Database Upgrade Scripts"](#) on page 2-9
9. ["Configure the Environment Variables Settings"](#) on page 2-10
10. ["Reconfigure the Application Environment Settings"](#) on page 2-10
11. ["Reconfigure the Customer Settings"](#) on page 2-11
12. Apply extensions, if any
13. ["Restart the Remote Container Service"](#) on page 2-11
14. ["Restart the Web Application Server"](#) on page 2-11
15. ["Verifying the Installation"](#) on page 2-12

Web Application Tasks

Check for Active Web Application Server Sessions

Before bringing down the Web application server, perform two checks to make sure there are no active user sessions on the server.

Note: We recommend that you notify all users in advance that you are performing the upgrade, to give them time to shut down their connections.

Check the Performance System Monitor for Active Sessions

Using Performance System Monitor, check to see how many people currently have active sessions.

1. Select **Start > Run**.
2. In the Run dialog box, type `perfmon` and click **OK** to bring up the Performance dialog box.
3. Select the **System Monitor** option in the left pane to bring up the System Monitor dialog box.
4. In the bottom portion of the System Monitor dialog box, a list of counters is displayed. Right-click in this area and select **Add Counters** from the shortcut menu to display the Add Counters dialog box.
5. Select the **Select Counters from Computer** option and select your Web application server.
6. From the Performance Object drop-down list, select **ASP.NET Apps v2.0.50727**.
7. Select the **Select Counters From List** option and from the associated scrolling list, choose **Sessions Active**, and then click **Add**.
8. Click **Close** to close the Add Counters dialog box.
9. Using the new active sessions counter, you can view the active sessions for the Web application server by selecting its row in the counter list at the bottom of the System Monitor dialog box. In particular, look at the number of active sessions in the Last field. If this number is greater than 2 active sessions, it is likely that users are logged on to the server. Contact the user(s) to have them log off before you shut down the Web application server.
10. You can save the active sessions counter by right-clicking it and selecting **Save As** from the shortcut menu. You may wish to save this counter to your desktop for future use.

Check the Event Viewer for Last Login

Using IIS Computer Management, check the Event Viewer log for Agile to see when the last user login occurred.

1. Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2. Under System Tools, select **Event Viewer**.
3. Locate and double-click the Portal-Prodika log under Event Viewer.

4. Review the log to see when the last user login occurred. If a recent login has occurred, it is likely that a user is still logged on to the server. Contact the user to have them log off before you shut down the Web application server.

Stop the Web Application Server

After you have verified that there are no active sessions on the Web application server, bring the server down as follows:

1. Open a command prompt.
2. Enter the following command to stop the Web application server:

```
C:\Documents and Settings\Administrator>iisreset /stop
```

Stopping Services and Backing Up Files

Stop the Remote Container Service

Using IIS Computer Management, stop the remote container service as follows:

1. Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2. Under Services and Applications, select **Service** to display a list of services in the right pane.
3. Locate the RemoteContainer Service and click it.
4. Select the **Stop the Service** option in the top left-hand portion of the Services pane.

Back Up the Previous Database Deployment

Using SQL Server Enterprise Manager, back up the previous deployment of the database. Be sure to use a meaningful name for the backup for future reference; for example, Agile 5.2.1 - Full Backup.

Note: The database server must be running in order to perform the backup.

1. Open SQL Server Management Studio.
2. In the left pane under Databases, locate the database instance to back up.
3. Right-click the database and select **Tasks > Back Up...** from the shortcut menu.
4. Select the destination for your backup. Select the **Add...** button to the right of the **Back up to:** text area. A dialog box will appear in which you can choose where to store the backup file. After you have chosen a name, click the **OK** button.
5. Click the **OK** button at the bottom of the dialog and the backup process will begin.

Back Up the Previous Oracle Database Deployment

Recovery Manager (RMAN) is the recommended method of backing up your Oracle database and may be accessed via Enterprise Manager.

Note: We recommend you create a full backup of the whole database.

1. Open Enterprise Manager.
2. Configure backup settings.
 - a. Select **Enterprise Manager > Availability > Backup Settings**.
 - b. Set the disk backup location and backup type. Be sure to use a meaningful name for the backup for future reference.
3. Schedule the backup.
 - a. Select **Enterprise Manager > Availability > Schedule Backup**.
 - b. Select either the Oracle-Suggested Backup strategy or your own customized strategy. The Oracle-Suggested Backup strategy makes a one-time whole-database backup. To use the Oracle strategy, for backup type, select **Full Backup**. For Schedule, select **One Time (Immediately)**.
4. Review and submit the backup. The Review screen allows you to review your selections and submit the job.

Installing Software and Scripts

Install the Agile 6.1 Upgrade Software

The upgrade process is a manual process that uses batch files. The number of steps during the upgrade process is determined by the applications that you utilize within your installation.

For each installation, you will need to install the Core package first. This package needs to be installed only once per server instance.

After installing the Core package, depending on your installation, you will install one to four media packs. Each media pack is installed in the same manner outlined below.

Set Up the Installation Environment

Note: This step is common to all media pack installations.

Download the Media Pack installation file for the specific media pack being installed. Unzip the media pack zip archive to a temporary directory (i.e.; c:\INSTALL_HOME). Follow the directions detailed below for Core/Media Pack installation.

Upgrade the Software

Archiving the Previous Installation

The first step in the upgrade process is to manually archive the previous installation, as described below.

1. Move (i.e.; cut) all of the directories other than attachments/XDocuments and logs directories to your designated archive location. We recommend that you name the containing directory as the version that you are upgrading from (i.e.; v5.1.2 - installation, etc.).

Installing the Core Bundle

2. The next step in the upgrade process is installing the Core bundle.

Note: This should be done only once per PRODIKA_HOME, meaning that if you have multiple installations of the Prodika suite of applications running on the same server, you will need to perform this step only once per Prodika installation.

Throughout the instructions below, the place where you extracted the media bundle zip file will be referred to as `INSTALLER_HOME`.

3. Open the containing directory for `INSTALLER_HOME`.
4. Extract `Core.zip` located in `INSTALLER_HOME` to a temporary directory (i.e.; c:\temp). This will give you a directory structure like c:\temp\Apps, c:\temp\Config, etc. - this temporary directory will be referred to as `TEMP_HOME`.
5. Copy `FileCompressionHelper.exe` from `INSTALLER_HOME` to `TEMP_HOME`.
6. Open a command prompt and navigate to `TEMP_HOME` (i.e.; >cd c:\temp)

7. Run the following (it is extremely important that you perform this decompression before moving on to install any additional media pack bundle files):

```
FileCompressionHelper.exe -d
```

8. When the distribution is complete, move the contents of TEMP_HOME to PRODIKA_HOME.

Upgrade the Media Pack Applications

For each media bundle you will follow the same nine step process below. The one exception is with the NPD media bundle installation. With NPD, there is no need to perform step 6.

1. If there are any files remaining in your TEMP_HOME, remove them.
2. Unzip the media pack zip file located in your INSTALLER_HOME directly to TEMP_HOME.
3. Confirm media bundle names for the ZIP files, where the name can be one of :
 - MP1.zip for the PDM install
 - MP2.zip for the FC install
 - MP3.zip for the PSC install
 - MP4.zip for the NPD install
 - MP-ALL.zip which includes all of the media bundles in one zip file
4. Copy FileCompressionHelper.exe from INSTALLER_HOME to TEMP_HOME.
5. Open a command prompt and navigate to TEMP_HOME (i.e.; >cd c:\Temp).
6. Run the following (it is extremely important that you perform this decompression before moving on to install any additional media pack bundle files):

```
FileCompressionHelper.exe -d
```

7. When the distribution is complete, move the contents of TEMP_HOME to PRODIKA_HOME.
8. You will receive a warning that a Web and config directory already exist; accept this to move the contents into these directories.
9. Accept the warning to overwrite the configuration file PRODIKA_HOME\Config\Core\FeatureDeployment\<media pack>-FeatureConfig.config.

Update the Version Number in the version.txt File

Modify the version.txt file as follows:

1. In your Prodika_Home directory, locate the version.txt file.
2. Open the file with a text editor.
3. Change the first line so that it contains only the following text:

```
Version: v6.1.0.0.0
```
4. Click **File > Save** to save the change.

Apply Database Upgrade Scripts

Warning: It is very important that you back up the database as indicated in "[Back Up the Previous Database Deployment](#)" on page 2-5 before upgrading the database. Once the scripts have been applied, there is no way to revert the database to the previous state without a backup.

Note: You must have upgraded to 6.0.0.3.36 prior to upgrading to 6.1.

Applying PKID Migration

This applies to MSSQL customers, only. If you are running Oracle DB, please skip this step.

To improve overall performance of the application, it is required to run the pkid migration utility as part of Agile Product Lifecycle Management for Process Extensibility Pack 2.5. Please refer to the Extensibility Pack for instructions on how to complete this upgrade task.

Run Database Upgrade Script

To run the database upgrade script:

1. Open a command prompt and navigate to the directory where you unzipped the upgrade package.
2. Change directories (cd) to the Installer/ApplyScripts directory.
3. Apply the scripts using the following call to the ApplyScripts.exe utility:

- If running the SQL Server database upgrade:

```
ApplyScripts -c "server=<database_
server>;uid=<user>;password=<password>;database=<database>" -f v6.1.0.xml
```

The upgrade script file is:

v6.1.0.xml—Upgrade from v6.0 to v6.1

- If running the Oracle database upgrade:

```
ApplyScripts -c "user id =<user id>;password=<password>;data source=<data
source>" -dbvendor=orcl -pre ora_cert_fi.p1.sql ora_cert_fi.p2.sql ora_cert_
fi.p3.sql -f v6.1.0-orcl.xml
```

The upgrade script file is:

v6.1.0-orcl.xml—Upgrade from v6.0 to v6.1

4. Confirm that the database upgrade script has been applied successfully when the system prompts you with the following message:

"Complete - with no errors"

Applying Language Packs

For instructions on installing language packs, see ["Installing National Language Support"](#) on page C-1.

Applying BI Publisher

For instructions on installing BI Publisher, see ["Installing BI Publisher"](#) on page D-1.

Reconfiguring Settings

Configure the Environment Variables Settings

Using a text-based editor, open the `environmentvariables.config` file and update the server names and port addresses.

Reconfigure the Username and Password Settings

With the 6.1 release, the DRL web service username and password settings have been removed from `environmentvariables.config` and must now be configured using the Setup Assistant tool. The default username value in the Setup Assistant is **prodikaadmin** so be sure to update this username and password setting to your previous DRL user settings. The DRL user must be a valid, active PLM for Process user.

The SQL Server Reporting Services (SSRS) and the BI Publisher username and password settings have also been removed from `environmentvariables.config` and added to the Setup Assistant tool. If you are using SSRS and/or BI Publisher for Printing and/or Reporting, you must enter these settings into the SetupAssistant tool. These user settings are not Agile PLM for Process users—rather, they are users created through SSRS and BI Publisher.

Note: For further guidance, please refer to the “Environment Variable Settings” section of the *Agile Product Lifecycle Management for Process Configuration Guide*.

Reconfigure the Application Environment Settings

Using a third party diff tool, you will need to reconfigure the `environmentSettings.config` file located in your `Prodika_Home\Config\` directory.

To reconfigure application environment settings:

1. Rename the new `environmentSettings.config` file; change the name to `environmentSettings.config-new`.
2. Make a backup copy of the archived version of the `environmentSettings.config` file (from the archived directory) and copy it into the `Prodika_Home\Config\Custom\` directory.
3. Using the diff tool, compare the `environmentSettings.config-new` file to the archived copy of the `environmentSettings.config` file.
4. When you have completed the file comparison and updates, delete the copy that you made of the archived `environmentSettings.config` file.

5. Rename the `environmentSettings.config-new` file; change the name back to `environmentSettings.config`.

Reconfigure the Customer Settings

Using a diff tool such as WinMerge, you will need to reconfigure the `CustomerSettings.config` file located in your `Prodika_Home\Custom\` directory.

To reconfigure customer settings:

1. Rename the new `CustomerSettings.config` file; change the name to `CustomerSettings.config-new`.
2. Make a backup copy of the archived version of the `CustomerSettings.config` file (from the archived directory) and copy it into the `Prodika_Home\Config\Custom\` directory.
3. Using the diff tool, compare the `CustomerSettings.config-new` file to the archived copy of the `CustomerSettings.config` file.
4. Carefully merge any configuration differences for your particular customer needs.
5. When you have completed the file comparison and updates, delete the copy that you made of the archived `CustomerSettings.config` file.
6. Rename the `CustomerSettings.config-new` file back to `CustomerSettings.config`.

Reconfigure the DRL Web Service Username and Password Settings

With the 6.1 release, the DRL web service settings have been removed from `environmentvariables.config` and must now be configured using the Setup Assistant tool.

Restarting Remote Container Service and Web Application Server

Restart the Remote Container Service

Using IIS Computer Management, restart the remote container service:

1. Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2. Under Services and Applications, select **Service** to display a list of services in the right pane.
3. Locate the RemoteContainer Service and click it.
4. Select the **Start the Service** option in the top left portion of the Services pane.

Restart the Web Application Server

Using a command prompt, restart the IIS Web application server:

1. Open a command prompt.
2. Enter the following command:

```
C:\Documents and Settings\Administrator>iisreset
```

The Web application server restarts.

Verifying the Installation

Log in to the Agile user portal and verify that the installation is functioning correctly. We recommend that you perform a variety of post-installation tests to ensure that all the applications are functioning correctly. For more information, see [Appendix A, "Verification Tests"](#).

Working with Multiple Servers

This chapter provides guidance for working with multiple servers. Topics in this chapter include:

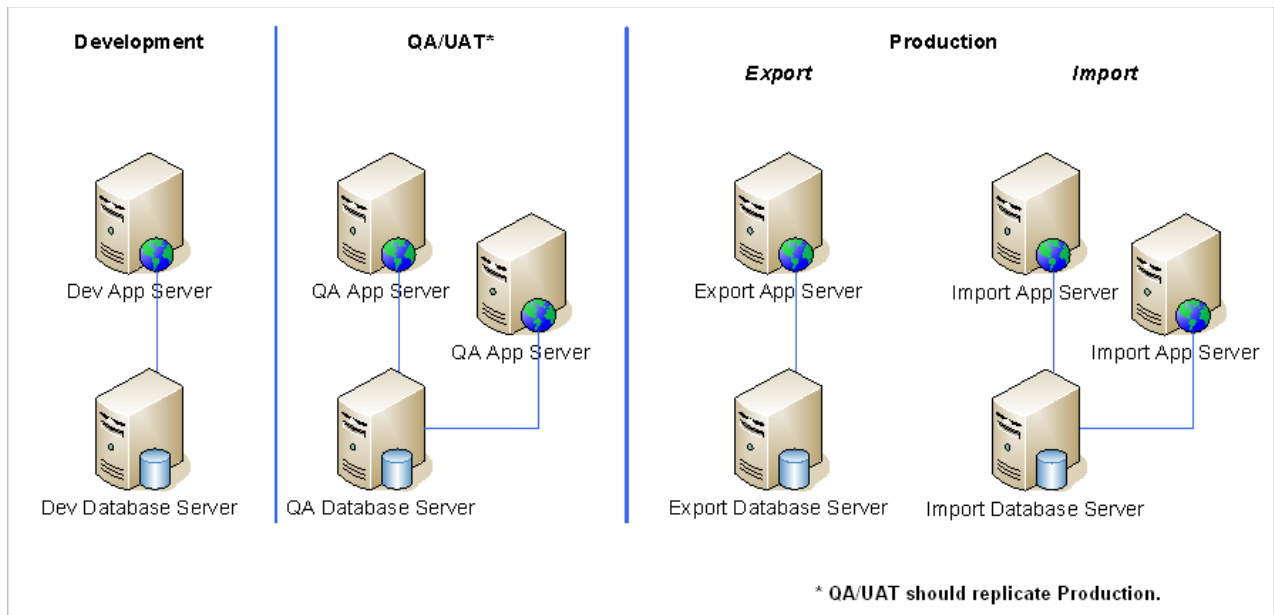
- [Architecture Environment Strategy](#)
- [Topology Example of Production Environment](#)
- [Multiple Server Configuration](#)

Architecture Environment Strategy

A good environment strategy supports the following project/business needs:

- Support the application upgrade process.
- Provide a structured process for migration (development, test, user acceptance) of bug fixes, new features, functionality, and configurations. Specifically focusing on allowing reasonable access to environments during migration.
- Provide a means for preparing/staging data for transfer into a production environment.

[Figure 3–1](#) shows a sample environment.

Figure 3–1 Sample architecture

Verifying Environment Strategy

Use the following questions to help verify your environment strategy:

- What is the path for upgrading the application from version x to version y?
- What is the process for testing production issues? Which environments will be available for testing: Development, QA/UAT, and/or Production?
- Where will end users be trained on the application?
- Where will extensible solutions be developed?
- Where will hot fixes be initially applied? What is the path for migrating hot fixes to production?
- Where will data loading be tested/verified?
- How will multiple tasks be supported?

Also consider the following:

- Migrating from version x to version y and configuring the application to support new functionality.
- Testing new functionality and supporting production configurations and hot fixes.
- If the implementation is split into multiple projects, how will different project teams share environments?

Development

The development environment typically is used as a place to:

- Deploy new releases (first place)
- Develop extensible solutions
- Use for initial test and troubleshooting

- Use for prototyping and discovery
- Make configuration changes, which are then applied in QA

Quality Assurance/User Acceptance Testing

The Quality Assurance (QA)/User Acceptance Testing (UAT) environment typically is deployed to closely match the Production environment, and is used as a place to:

- Include load balancers, etc.
- Formally test configuration changes
- Perform periodic refreshes from the Production environment
- Consider data security/access
- Perform training tasks

Production/Export

The Production/Export environment typically is used as a place to:

- Perform data/user/workflow administrative tasks
- Act as the data staging/acceptance environment
- Complete administrative data changes , then export the changes to other environments

Note: The Production/Export environment must be on same version as import environments.

Production/Import

The Production/Import environment typically is used as a place where:

- The user community interacts with data on a day to day basis.
- Administrative data changes are pushed from the export environment to the import environment
- Configuration changes are pushed from QA

Export/Import

If an environment has applications servers to support the export and import structure, then note the following:

The general business process:

- Admin creates records via the export application.
- Admin exports records via the export application.
- Admin imports record via the import application.

Applications that support the export/import process:

- User Group Manager (UGM)—Users and groups are exported and imported
- Workflow Administration (WFA)—Workflows are exported and imported
- Data Admin (ADMN)—Allergens, additives, extended attributes, and other administrative data are exported and imported

When managing the Export/Import structure the databases must be kept synchronized. If changes are made directly in the import application environment, and the exact changes (including primary keys) are not applied to the export environment as well, the Export/Import relationship is broken.

To reestablish the Export/Import relationship the following steps must be performed:

1. Copy or backup the import database.
2. Restore the import database to the export database.

The relationship is now restored. Make changes to data via the export application and import via the import application.

Imports and Exports are only possible if both environments use the same version.

Example 1—Export v5.2 can push to Import v5.2

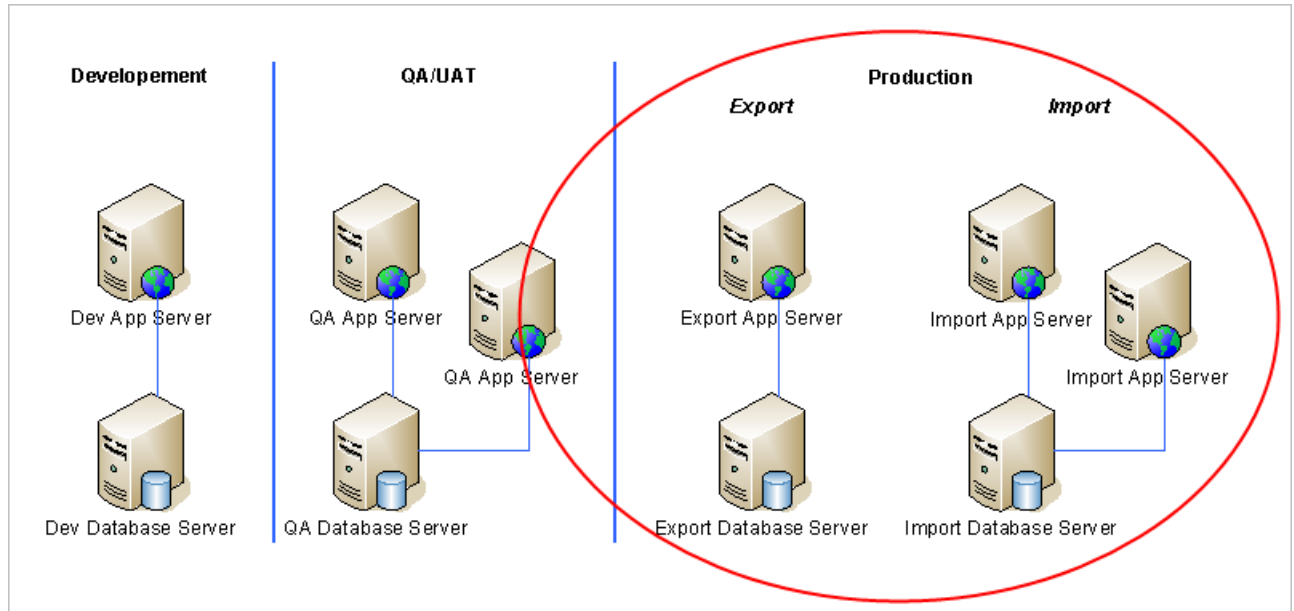
Example 2—Export v5.2 cannot push to Import v5.1.2

These examples demonstrate that users, workflows and administrative data cannot be updated or moved when application versions are different.

Topology Example of Production Environment

Figure 3–2 depicts the hardware/software topology options for a production environment.

Figure 3–2 Topology example, Production environment

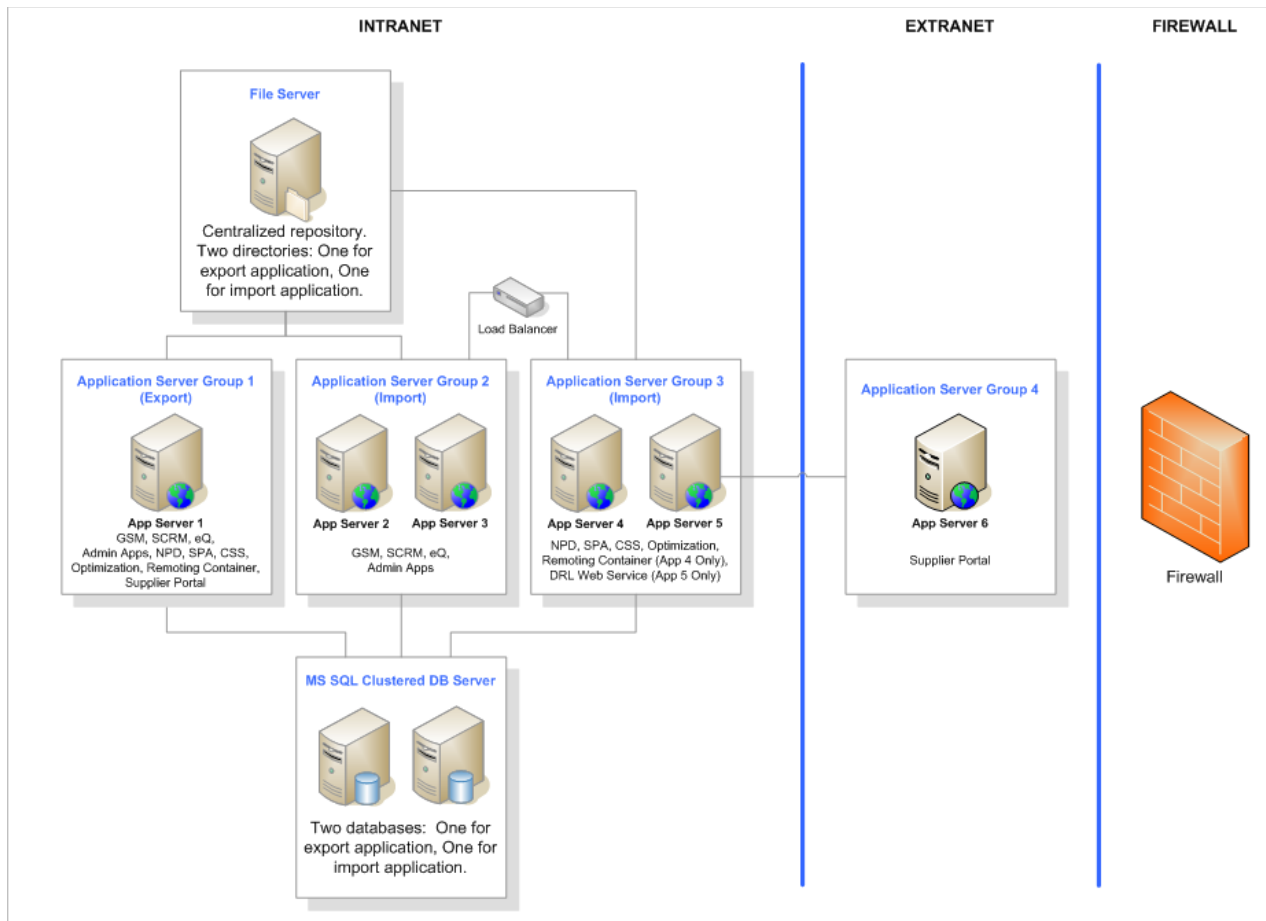


Topology Example A

Example A, shown in Figure 3–3, highlights:

- Database clustering
- Load balancing
- Separate and centralized file server

Figure 3–3 Topology Example A

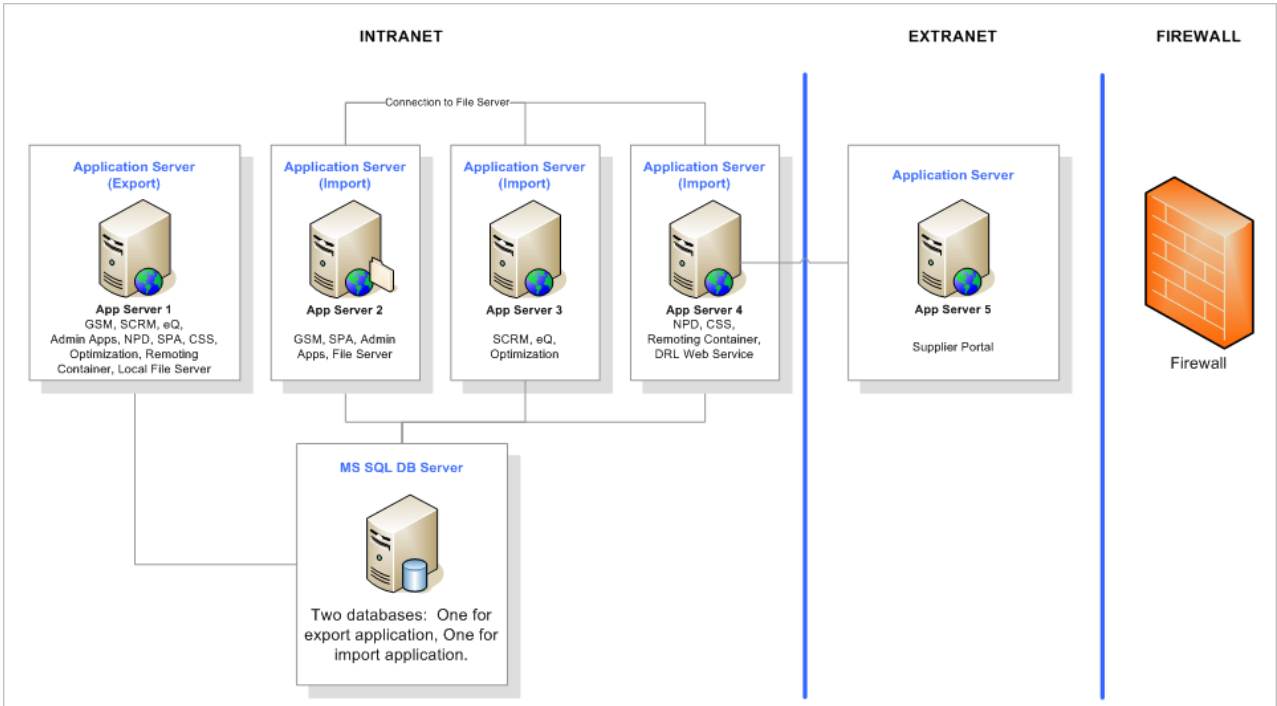


Topology Example B

Topology B example, shown in [Figure 3–4](#), highlights:

- Standard database
- Logically distributed applications
- Centralized file server shared with application server

Figure 3–4 Topology example B



Multiple Server Configuration

Following are the settings for configuring an environment with multiple servers running different application modules. Currently, two scenarios are provided. This includes one for multiple servers with NO reverse proxy, and one for multiple servers with a reverse proxy.

Files Modified

%PRODIKA_HOME%\Config\EnvironmentVariables.config

%PRODIKA_HOME%\Config\Custom\EnvironmentSettings.config

Recommended Scenario

Customer has chosen to use a reverse proxy or hardware load balancer. Application URLs should be configured in `EnvironmentVariables.config` as **Client-Server**, meaning it is the URL the client will see and use in Internet Explorer. Web Service URLs should be configured in `EnvironmentVariables.config` as **Server-Server**, meaning the web service call will NOT be passed to the client.

Table 3–1 Recommended Scenario

Server Name	Friendly URL	App Modules
RPServer001	plm.xenodev.com	n/a
AppServer001	plmapp1.xenodev.com	GSM, SCRM, Portal
AppServer002	plmapp2.xenodev.com	NPD, DRL
AppServer003	plmapp3.xenodev.com	WFA, UGM

Note: The main application URL is `https://plm.xenodev.com`.

SSL Configuration (Optional)

A single SSL certificate will need to be purchased and installed on the reverse proxy or load balancer, corresponding to the main application URL.

App Configuration

The following is an example, only. There are additional application URLs that are not listed below.

1. Open the %PRODIKA_HOME%\Config\EnvironmentVariables.config file:

```
# Server Topology Information

Prodika.Server1.URL = https://plm.xenodev.com
Prodika.Server2.URL=http://plmapp1.xenodev.com
Prodika.SCHEME =https

# Application URL Information

Prodika.GSM.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.GSMInterApp.URL=@@VAR:Prodika.Server2.URL@@/gsm
Prodika.SCRM.URL=@@VAR:Prodika.Server1.URL@@/scrm
```

```

Prodika.NPD.URL=@@VAR:Prodika.Server1.URL@@/npd
Prodika.Portal.URL=@@VAR:Prodika.Server1.URL@@/portal
# DRL Attachment is used for file upload by the WebApp and
WebService
Prodika.DRLService.URL=@@VAR:Prodika.Server2.URL@@/drl
Prodika.DRLAttachment.URL=@@VAR:Prodika.Server1.URL@@/drl
Prodika.DRL.URL=@@VAR:Prodika.Server1.URL@@/drl
Prodika.WFA.URL=@@VAR:Prodika.Server1.URL@@/wfa
Prodika.UGM.URL=@@VAR:Prodika.Server1.URL@@/ugm

```

Result

The application suite is separated on multiple servers. GSM and Portal run on AppServer001, NPD runs on AppServer002, etc. No matter what application is opened, the user will always see <https://plm.xenodev.com/<module>> as the URL in the browser. Web Service calls, as such for GSMInterApp and DRL, will be passed internally, from server to server.

Optional Scenario

Customer does not have or has chosen not to use a reverse proxy or a hardware load balancer. Application URLs should be configured in `EnvironmentVariables.config` as **Client-Server**, meaning it is the URL the client will see and use in Internet Explorer. Web Service URLs should be configured in `EnvironmentVariables.config` as **Server-Server**, meaning the web service call will NOT be passed to the client.

Table 3–2 Optional Scenario

Server Name	Friendly URL	App Modules
AppServer001	plm.xenodev.com	GSM, SCRM, Portal
AppServer002	plmapp2.xenodev.com	NPD, DRL
AppServer003	plmapp3.xenodev.com	WFA, UGM

Note: The main application URL is <https://plm.xenodev.com>.

SSL Configuration (Strongly Recommended for Production Environments)

An SSL certificate will need to be purchased and installed on each application server, corresponding to the friendly URL provided.

App Configuration

The following is an example, only. There are additional application URLs that are not listed below.

1. Open the `%PRODIKA_HOME%\Config\EnvironmentVariables.config` file:

```

# Server Topology Information
Prodika.Server1.URL = https://plm.xenodev.com
Prodika.Server2.URL=https://plmapp2.xenodev.com

```

```
Prodika.Server3.URL=https://plmapp3.xenodev.com
Prodika.SCHEME =https

# Application URL Information
Prodika.GSM.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.GSMInterApp.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.SCRM.URL=@@VAR:Prodika.Server1.URL@@/scrm
Prodika.NPD.URL=@@VAR:Prodika.Server2.URL@@/npd
Prodika.Portal.URL=@@VAR:Prodika.Server1.URL@@/portal
# DRL Attachment is used for file upload by the WebApp and
WebService

Prodika.DRLService.URL=@@VAR:Prodika.Server2.URL@@/drl (see
note)
Prodika.DRLAttachment.URL=@@VAR:Prodika.Server2.URL@@/drl
Prodika.DRL.URL=@@VAR:Prodika.Server2.URL@@/drl
Prodika.WFA.URL=@@VAR:Prodika.Server3.URL@@/wfa
Prodika.UGM.URL=@@VAR:Prodika.Server3.URL@@/ugm
```

Result

The application suite is separated on multiple servers. GSM and Portal run on AppServer001, NPD runs on AppServer002, etc. The user will see the corresponding URL based on the application that is opened. For example, when the user opens GSM, the user will see **<https://plm.xenodev.com/GSM>** as the URL in the browser. Subsequently, when the user opens NPD, the user will see **<https://plmapp2.xenodev.com/NPD>** as the URL in the browser.

Verification Tests

Verification Tests

Perform the following verification tests after installation or upgrade.

- [Global Specification Management Test](#)
- [Printing Test](#)
- [Attachment Test](#)
- [Reporting Test](#)
- [Supply Chain Relationship Management Test](#)
- [Nutrition Surveillance Management Test](#)
- [eQuestionnaire Test](#)
- [New Product Development Test](#)
- [Product Quality Scorecard Test](#)
- [Component Catalog Test](#)
- [Computer Aided Compliance Screening Test](#)
- [Supplier Portal Test](#)
- [User Group Administration Test](#)
- [Workflow Administration Test](#)
- [Manage Core Data Test](#)
- [Manage Data Caches Test](#)

Login Information

In order to perform the recommended Agile verification tests, you will need the user name and password for an Agile user account having access to all Agile applications. The standard username and password that ships with the certified database is:

Username: prodikaadmin

Password: agile

Warning: After first login, you will be prompted to assign a new password.

User access is managed using the User Group Management (UGM) application. For more information on user management, see the *Agile Product Lifecycle Management for Process Administrator User Guide*.

To verify installation:

1. Turn on Agile PLM for Process.
2. Access the Agile application using Internet Explorer. Use the following Fully Qualified Domain Name (FQDN) URL:

`https://server.domain.tld/portal`

Warning: Be sure to use a fully qualified domain name rather than just a servername. Example: `https://app.prodika.com/portal` vs. `https://app/portal`.

3. Type your use name and password, and press the **Enter** key. You will be prompted to change your password.
4. Type a new password in the **Password** field, and again in the **Repeat Password** field, and press the **Enter** key.

Note: The following installation verification tests assume that you have installed the entire Agile application suite. If this is not the case, omit tests for applications that you have not installed.

Warning: You must be assigned the correct Agile roles to perform these installation verification tests. For more information on roles, see the *Agile Product Lifecycle Management for Process Administrator User Guide*.


Global Specification Management Test

Before performing this test, note that specifications, once created, cannot be deleted from GSM. Therefore, creating specifications for verification purposes contributes to the proliferation of meaningless specifications. If specifications already exist in the system, you may wish to skip this test.

The purpose of this test is to verify that GSM is properly functioning.

To perform the GSM test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **GSM > Material Specifications**.
3. Click **Create New**. A new material specification is displayed.
4. Type a specification name in the **Spec Name** field.
5. Complete the Approved for Use In section at the bottom of the page.
6. Click **Save & Close**.
7. From the left navigation panel, select **GSM > Material Specifications**.

8. Conduct a blind search by clicking **Reset** and then **Search** or specify search criteria to retrieve the specification that you just created.
9. In the Search Results table, click the row containing the specification you created. The selected specification is displayed.
10. Click **Workflow**.
11. Type any value in the **Comments** field.
12. Click the move step forward icon (). If additional dialog boxes appear, it confirms that GSM is functioning.

Note: To remove the test data in a production environment, restore your database, restart the Remoting Container, and then restart the application pools. This returns the environment to the default installation state.

Printing Test

The purpose of this test is to verify that the Agile Printing Service is correctly functioning.

To perform the Printing test:

1. Log in to Agile Product Lifecycle Management for Process.
2. From the left navigation panel, select **GSM > Material Specifications**.
3. Search for the specification that you created in "[Global Specification Management Test](#)" on page A-2.
4. Click **Print** in the action menu.
5. In the resulting Print dialog box under Current Specification > Sections, select any check box.
6. Click **Print** again. The specification is rendered in PDF format in a separate window.
7. Close the window once the PDF is successfully displayed and proceed to the next test. If the PDF does not appear, double-click the file `Prodika\Scripts\Installation\ApocEntry.reg` and retry this test.

Attachment Test

The purpose of this test is to verify that the Attachments feature is correctly functioning.

To perform the Attachment test:

1. Navigate to any trade specification in GSM.
2. Select the Supporting Documents tab.
3. Click **Edit** to put the specification in edit mode.
4. Select the Attachments/Procedures link under Supporting Documents.
5. Click **Add New** button.
6. In the **Title** field, type `test`.
7. Click the **Browse...** button, select a file, and then select **Open**.

Note: The size of the selected file must be less than the designated limit.

8. Click the **Upload** button. The first upload may take up to 30 seconds to complete.
9. Click **Done** in the Attachment Detail window.
10. Click **Done** in the Attachment/Procedures window.

Reporting Test

The purpose of this test is to verify that the Prodika Reporting Service is correctly functioning.

To perform the Reporting test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, click **RPT (Reporting)**.
3. Search for the specification that you created in "[Global Specification Management Test](#)" on page A-2.
4. Click **Generate Report**.
5. In the resulting dialog, type a report name in the **Report Name** field and then click **Save**.
6. In the left navigation panel, select **Ad Hoc Reports > Reports Queue**.
7. The resulting Reports Queue should contain an entry for your report. Refresh this view periodically by toggling from Reports Queue to Reporting and back, to see the status of your report update. If the report status fails to update, there is likely a problem with the Reporting Service.
8. When the report status indicates **Complete**, click the hyperlinked name of the report to download the report.

Supply Chain Relationship Management Test

The purpose of this test is to verify that the SCRM application is correctly functioning.

To perform the SCRM test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **SCRM > Company Profiles**.
3. Conduct a blind search and select any company profile from the Search Results table to verify that it is displayed correctly.
4. If the company profile is displayed, click **Cancel** and proceed to the next test.

Nutrition Surveillance Management Test

The purpose of this test is to verify that the NSM application is correctly functioning.

To perform the NSM test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **NSM > Nutrient Analysis**.
3. Click **Create New**.

4. If the Nutrient Analysis template is displayed, click **Cancel** and proceed to the next test.

eQuestionnaire Test

The purpose of this test is to verify the eQ application is correctly functioning.

To perform the eQ test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **eQ > Material Questionnaires**.
3. Click **Create New**.
4. If the eQuestionnaire page is displayed, click **Cancel** and proceed to the next test.

New Product Development Test

The purpose of this test is to verify that the NPD application is correctly functioning.


To perform the NPD test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **NPD > New Product Development > Projects**.
3. Conduct a blind search and select any project from the Search Results table to verify that it is displayed correctly. If so, NPD has passed the test.
4. If no projects are found, click **Create New**.
5. Select a business unit and project type in the resulting dialog box and then click **Done**.
6. If the NPD (Stage 1) template is displayed, click **Cancel** and proceed to the next test.

Product Quality Scorecard Test

The purpose of this test is to verify that the PQS application is correctly functioning.

To perform the PQS test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **PQS > Lot Samples**.
3. Click **Create New**. The Lot Sample page loads.
4. In the **Code Data or Sample ID** field, type any text.
5. Click **Next**. The Select Specification page loads.
6. In the Specification section, click the search icon () next to the **Specification** field. A Specification Search dialog box appears.
7. In the resulting Search dialog box, type criteria to find and select the material specification that you created in "[Global Specification Management Test](#)" on page A-2.
8. If the material specification is displayed, the test has succeeded.
9. Click **Close**, and proceed to the next test.

Component Catalog Test

The purpose of this test is to verify that the Component Catalog service is correctly functioning.

To perform the Component Catalog test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **GSM > Component Catalog**.
3. Conduct a blind search and select any catalog term from the Search Results table.
4. If the catalog term is displayed successfully, click **Cancel** and proceed to the next test.
5. If no catalog terms are found, click **Create New**.
6. Type a name for the catalog term in the **Component Catalog** field.
7. Click **Save & Close**.

Computer Aided Compliance Screening Test

The purpose of this test is to verify that the CACS application is correctly functioning.

To perform the CACS test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **CACS**.
3. Conduct a blind search and select any computer aided compliance screen from the Search Results table to verify that it is displayed correctly.
4. If no computer aided compliance screens are found, click **Create New**.
5. Type a name for the screen in the **Title** field and a description in the **Description** field.
6. Click **Save & Close**.

Supplier Portal Test

The purpose of this test is to verify that the Supplier Portal application is correctly functioning. First, log in to Supplier Portal and create a new registrant request:

To register with Supplier Portal:

1. Access Supplier Portal at <https://server.domain.tld/supplierportal>.
2. Select a **Language**, and on the login page click **click HERE if you have not registered with this site**.
3. Follow the screens, filling out all required data. Once you are done, click **Submit**. You have now submitted a registration request. Make note of your User Name and Password.

To perform the SPA test:

1. Log in to Agile PLM for Process as a Supplier Portal administrator.
2. From the left navigation panel, select **SPA > New Registrations**.
3. The registration request you just submitted should be displayed.

Note: You need to be a supplier portal administrator to log in to SPA. Refer to the Agile PLM for Process Extensibility Pack documentation to find out how to create a supplier portal administrator user. You can find this documentation in the *Agile Product Lifecycle Management for Process Data Administration Toolkit Guide*.

User Group Administration Test

The purpose of this test is to verify that the UGM application is correctly functioning.

To perform the UGM test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **UGM > Groups**.
3. Conduct a blind search and select any group from the Search Results table to verify that it is displayed correctly.

Workflow Administration Test

The purpose of this test is to make sure that the WFA application is correctly functioning.

To perform the WFA test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, click **WFA (Workflow Administration)**.
3. Click **Create New**.
4. If the process template is displayed successfully, click **Cancel** and proceed to the next test.

Manage Core Data Test

The purpose of this test is to verify that the ADMN (Manage Core Data) application is correctly functioning.

To perform the ADMN test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, select **ADMN > GSM Compliance > Additives**.
3. If the additives currently in the system are displayed successfully, click **Cancel** and proceed to the next test.

Manage Data Caches Test

The purpose of this test is to verify that the CACHE application is correctly functioning.

To perform the CACHE test:

1. Log in to Agile PLM for Process.
2. From the left navigation panel, click **CACHE (Manage Data Caches)**.
3. If the Schedule Cache Flush page is displayed successfully, the test has succeeded.

You can now use the scheduled Cache Flush Queue feature to see details for the different applications that been flushed. For more information, refer to the *“Using CACHE to Manage Caches”* chapter of the *Agile Product Lifecycle Management for Process Administrator User Guide*.

B

Installing WebDAV

This appendix contains instructions for installing and configuring WebDAV.

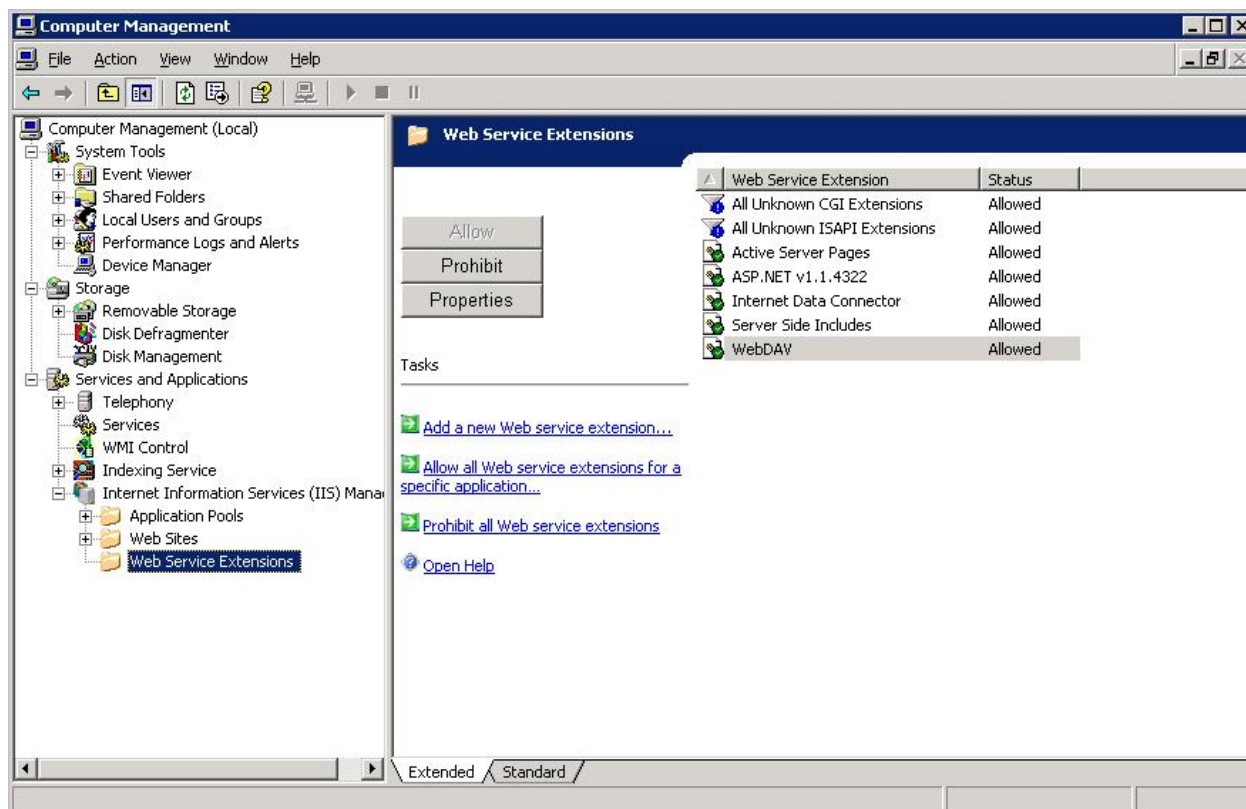
Warning: If you are installing the main application on IIS7.x, then you must have a separate web server with IIS6 or Apache 2.2 installed for WebDAV.

Enabling WebDAV

To make sure that Web Sharing is enabled in IIS:

1. Open the IIS Manager, and then select **Web Service Extensions**.
2. Enable WebDAV if it is not already set to “Allowed,” as [Figure B-1](#) shows below:

Figure B-1 Enabling WebDAV



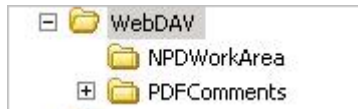
Creating the Directory Structure

To configure WebDAV:

1. Create the directory structure as follows:

```
WebDAV\
  WebDAV\PDFComments
  WebDAV\NPDWorkArea
```

Figure B–2 Directory Structure

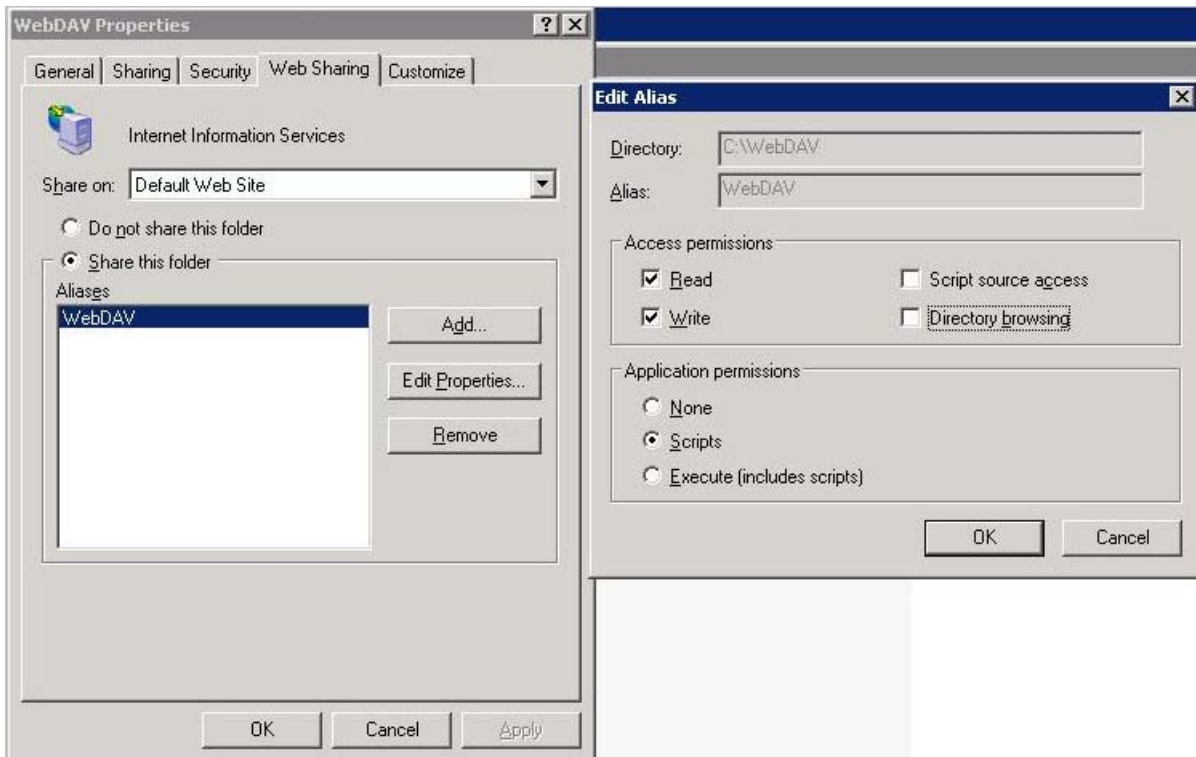


Sharing the WebDAV Directory

To share the WebDAV directory:

1. Right click on the WebDAV Directory and select **Properties**.
2. Select the Web Sharing tab.
3. Share the folder as WebDAV.
4. Click **Edit Properties**.
5. Check **Read**, **Write** and allow **Scripts**, as [Figure B–3](#) shows below.

Figure B–3 Properties

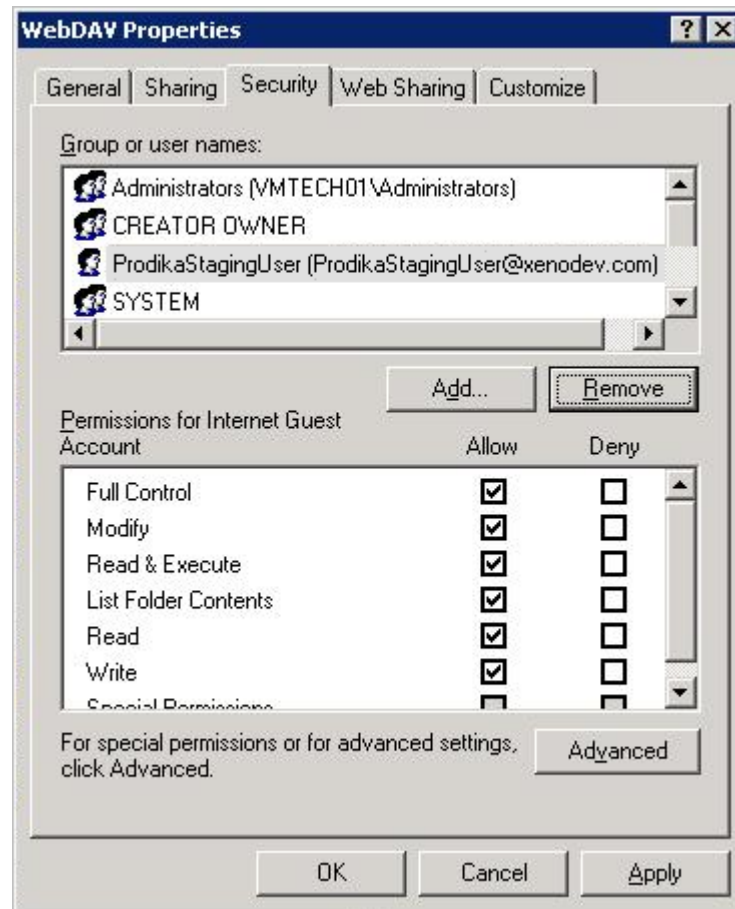


Editing Folder Permissions

To edit folder permissions:

1. Click on the **Security** tab.
2. Give the user that the Application Pool runs as full control, and apply to all sub directories, as [Figure B-4](#) shows below.

Figure B-4 Properties

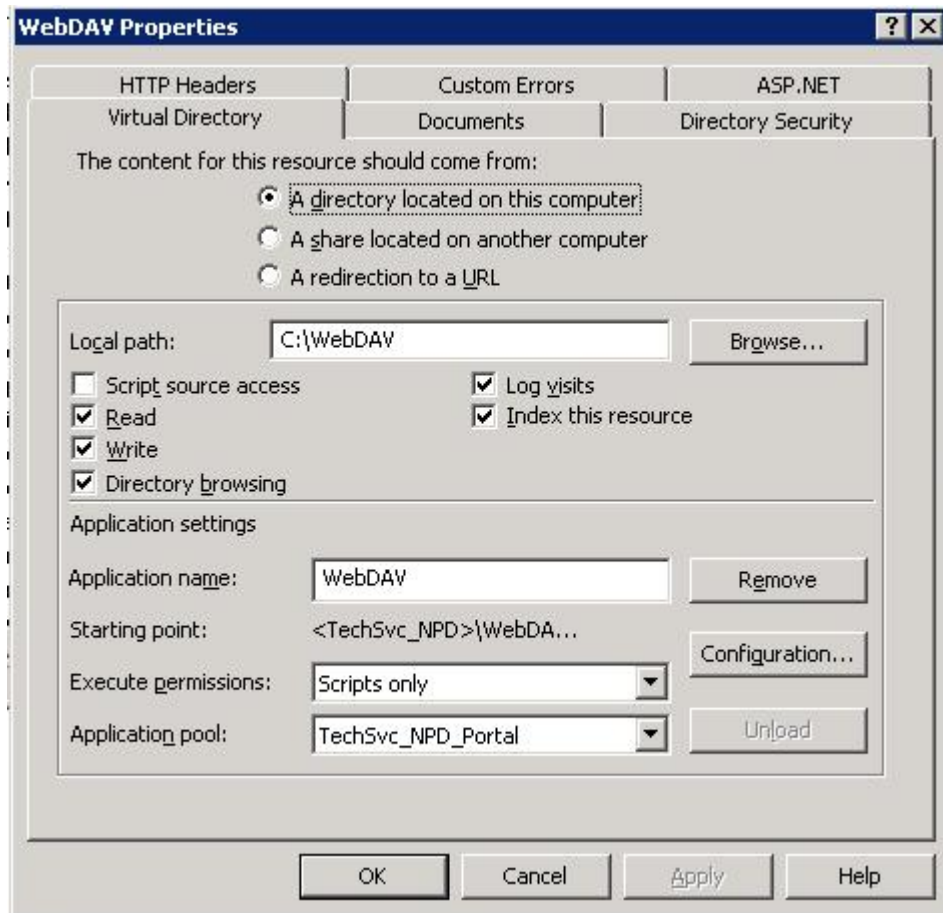


Verifying the IIS Directory Security is Configured Correctly

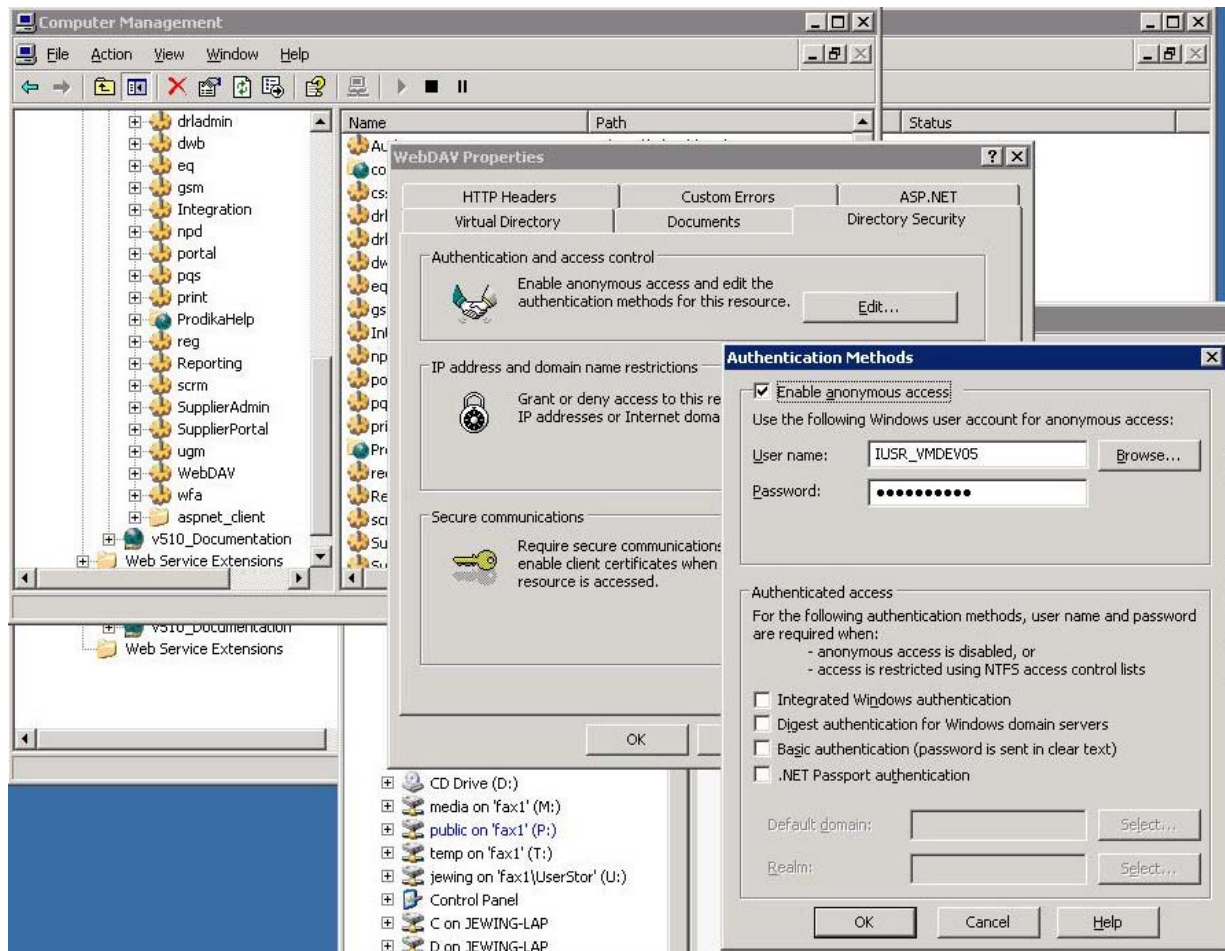
To verify IIS directory security:

1. Locate the WebDAV virtual directory, then right click and select **Properties**.
2. Verify that the directory has Write permission, as [Figure B-5](#) shows.

Figure B-5 Virtual Directory



3. Click the **Directory Security** tab.
4. Select **Edit** under Authentication and access control.
5. Verify that Anonymous access is enabled, as shown in [Figure B-6](#).

Figure B-6 Authentication

Enabling WebDAV in Apache: (Basic Configuration)

To enable WebDAV in Apache:

1. Install Apache 2.2.
2. Uncomment the following lines in `httpd.conf`:

```
LoadModule dav_module modules/mod_dav.so
LoadModule dav_fs_module modules/mod_dav_fs.so
LoadModule dav_lock_module modules/mod_dav_lock.so
Include conf/extra/httpd-dav.conf
```

3. Sample `httpd-dav.conf`:

```
...
DavLockDB "C:/Program Files (x86)/Apache Software
Foundation/Apache2.2/var/DavLock"
Alias /webdav "c:/webdav"
<Directory "c:/webdav">
    Dav On
    Order Allow,Deny
    Allow from all
</Directory>
...
```

4. Create `DavLock` dir based on setting in `httpd-dav.conf`.

Configuring the Application

To configure WebDAV for a single server setup:

1. Edit Environment Settings under
PRODIKA_HOME\custom\config\EnvironmentSettings.config
2. Map the following settings in the config to the appropriate directories/URLS. To test, you can enable directory browsing on the web dav virtual directory.
 - `<config key="PDFWorkArea" value="https://demo.prodika.com/WebDAV/npdworkarea/"; />`
 - `<config key="PDFWorkAreaUNC" value="C:\WebDAV\NPDWorkArea\" />`
 - `<config key="PDFCommentRepository" value="https://demo.prodika.com/WebDAV/PDFComments"; />`
 - `<config key="PDFCommentRepositoryUNC" value="C:\WebDAV\PDFComments\" />`
 - `<config key="OfficeDocWorkArea" value="https://demo.prodika.com/WebDAV/npdworkarea/"; />`
 - `<config key="OfficeDocWorkAreaUNC" value="C:\WebDAV\NPDWorkArea\" />`

Note: If Apache is using a non-standard HTTP port, then you will need to reflect that in your environmentsettings.config file. For example:

`https://demo.prodika.com:8080/webdav/npdworkarea/`

To configure WebDAV for a multiple server setup:

1. Share the web dav directory as webdav on server A resulting in \\<server a>\webdav
2. Set appropriate share and security permissions as follows:

The user running app pool on server B must have RW share and security access to \\<server A>\webdav.
3. Use \\<hostname>\webdav\pdfcomments\ and \\<server A>\webdav\npdworkarea for UNC paths in config on server B.

Installing National Language Support

This appendix contains instructions for installing and configuring National Language Support (NLS).

Installing Language Support for Simplified Chinese, Traditional Chinese, Korean, or French

As an optional installation step, customers may apply 6.1.0.0.0 National Language Support (NLS).

Pre-Upgrade Checklist

1. Archive the previous installation.
2. Back up your current database.
3. Stop the Remoting Container service.
 - a. Open **Services > Start > Administrative Tools > Services**.
 - b. Locate the **RemoteContainerService** service and perform a Stop operation.
4. Stop IIS. From a command prompt, type the following:

```
> iisreset /stop
```

Note: Specific fonts are used when displaying these language characters in the UI as well as when printing. Verify you have the following fonts installed on the server:

Simplified Chinese: **SimSun**

Traditional Chinese: **SimSun**

Korean: **Gulim**

Apply Database Scripts

To apply the 6.1.0.0.0 scripts:

(For SQL Server)

1. Open a command prompt and navigate to the directory where you unzipped the upgrade package.
2. Change directories (cd) to the Installer/ApplyScripts directory.

3. Apply the scripts using the following calls to the ApplyScripts.exe utility:

a. Apply the scripts to load Korean translation:

```
> ApplyScripts -c "server=<database_
server>;uid=<user>;password=<password>;database=<database>" -f 6.1.0.0.0_
Korean_LangPack-oracl.xml
```

b. Apply the scripts to load Simplified Chinese translation:

```
> ApplyScripts -c "server=<database_
server>;uid=<user>;password=<password>;database=<database>" -f 6.1.0.0.0_
Chinese_LangPack-oracl.xml
```

c. Apply the scripts to load Traditional Chinese translation:

```
> ApplyScripts -c "server=<database_
server>;uid=<user>;password=<password>;database=<database>" -f 6.1.0.0.0_
ChineseTW_LangPack-oracl.xml
```

d. Apply the scripts to load French translation:

```
> ApplyScripts -c "server=<database_
server>;uid=<user>;password=<password>;database=<database>" -f 6.1.0.0.0_
French_LangPack-oracl.xml
```

4. After the ApplyScripts call, you can confirm that the database upgrade scripts have been applied successfully when the system prompts you with the following message:

```
"Complete - with no errors"
```

(For Oracle Database)

1. Open a command prompt and navigate to the directory where you unzipped the upgrade package.
2. Change directories (cd) to the Installer/ApplyScripts directory.
3. Apply the scripts using the following calls to the ApplyScripts.exe utility:

a. Apply the scripts to load Korean translation:

```
> ApplyScripts -c "User Id=<user>;Password=<password>;Data
Source=<datasource>" -dbvendor="orcl" -f 6.1.0.0.0_Korean_
LangPack-oracl.xml
```

b. Apply the scripts to load Simplified Chinese translation:

```
> ApplyScripts -c "User Id=<user>;Password=<password>;Data
Source=<datasource>" -dbvendor="orcl" -f 6.1.0.0.0_Chinese_
LangPack-oracl.xml
```

c. Apply the scripts to load Traditional Chinese translation:

```
> ApplyScripts -c "User Id=<user>;Password=<password>;Data
Source=<datasource>" -dbvendor="orcl" -f 6.1.0.0.0_ChineseTW_
LangPack-oracl.xml
```

d. Apply the scripts to load French translation:

```
> ApplyScripts -c "User Id=<user>;Password=<password>;Data
Source=<datasource>" -dbvendor="orcl" -f 6.1.0.0.0_French_
LangPack-oracl.xml
```

4. After the ApplyScripts call, you can confirm that the database upgrade scripts have been applied successfully when the system prompts you with the following message:

"Complete - with no errors"

Post-Upgrade Checklist

1. Start the Remoting Container Service.
 - a. Open **Services > Start > Administrative Tools > Services**.
 - b. Locate the **RemoteContainerService** service and perform a Start operation.
 - c. Verify that the RemotingContainerService started correctly.
2. Start IIS. From a command prompt, type the following:

```
> iisreset /start
```

Installing BI Publisher

This appendix contains instructions for installing and configuring BI Publisher.

BI Publisher for Printing and Reporting

Oracle Business Intelligence Publisher (BI Publisher) has been integrated with the Printing and Reporting applications. Printing and Reporting have separate configurations settings, and BI Publisher can be configured for Printing, Reporting, or both.

Requirements: Please see [Figure 1–2, "Software requirements matrix"](#) on page 1-4 for supported versions of BI Publisher.

When installing BI Publisher, you will be prompted to enter an administrator username and password for administering the BI Publisher reports. This username and password will also grant access to a BI Publisher web service used by Agile PLM for Process to processes printing and reporting requests. To enter these values into Agile PLM for Process, launch the Setup Assistant tool and enter the username and password for BI Publisher. For more information, refer to the *Agile Product Lifecycle Management for Process Configuration Guide*.

Note that when setting up BI Publisher for Reporting, you will need to set up a database connection to the Agile PLM for Process database. This may involve installing relevant JDBC drivers, setting up the DataSource in BI Publisher, and configuring the connection string and database driver class. Please refer to the Oracle BI Publisher documentation for details.

Note: The BI URL in environment variables has changed if you are using the new version, 11.1.1.x, of OBIEE with release 6.1.

Printing Using BI Publisher

To configure BI Publisher for Printing, you will need to update Agile PLM for Process configuration settings and set up BI Publisher to process the incoming data using BI Publisher's report templates.

Print data is sent to the BI Publisher web service as XML data; the relevant BI Publisher report template takes the incoming XML data and can then transform it using a custom XSL as needed.

To configure Agile PLM for Process:

1. Update the `\config\environmentvariables.config` file:

Key	Value
Prodika.Print.BIPublisherIntegration.EndPoint	<p>For versions 10.1.3.3 and 10.1.3.4:</p> <p><code>http://[hostname]:9704/xmlpserver/services/PublicReportService</code></p> <p>For version 11.1.1.5:</p> <p><code>http://[hostname]:7001/xmlpserver/services/v2/SecurityService http://[hostname]:7001/xmlpserver/services/v2/ReportService</code></p>

Note: Prodika.ReportService.SysUser and SysPassword are now set using the Setup Assistant. Refer to the *Agile Product Lifecycle Management for Process Configuration Guide* for instructions.

2. Update the `\config\Extensions\PrintSettings.config` file. This file contains the print configurations for the various print items, such as specifications, NPD printing, etc. You will need to update this file to use the BIPublisherFORender print manager:
 - a. Open the `\config\Extensions\PrintSettings.config`.
 - b. Update the specification (or other print item) type you want to print to use the BI publisher print manager. You can add the following to an existing entry, or create a new entry:

```
printmanager="BIPublisherFORender" reportPath="Your custom BI Publisher
report path"
```

For example:

```
<PrintTemplate id="Default" library="XSL_FO_LIBRARY"
report="GSM$xlata$.xsl" printmanager="BIPublisherFORender"
reportPath="/ProdikaPrint/ProdikaPrintFO/ProdikaPrintFO.xdo"/>
```

An optional attribute, `reportTemplate`, is used to specify which BI Publisher report Layout to use.

Note that the `reportPath` value should correspond to the report set up in BI Publisher.

To Configure BI Publisher for Printing:

Setting up BI Publisher for Printing involves creating a BI Publisher report, configuring its Data Model to link it to Agile PLM for Process, and setting up the possible layouts. In this section, an example report configuration is presented, but other configurations are possible.

1. Log in to BI Publisher. For 10.1.3.3 and 10.1.3.4:
http://<YourBIServerURL>:9704/xmlpserver/

For 11.1.1.5:
http://<YourBIServerURL>:7001/xmlpserver/
2. In the Reports tab, click the **Shared Folders** link.
3. Create a new folder (ex: ProdikaPrint).
4. In the new folder, click the **Create a new report** link on the left, enter a report name (ex: ProdikaPrintFO) and click the **Create** button.
5. Click the **Edit** link.
6. Click **Parameters**, then click the **New** icon.

Figure D–1 Parameters option, Parameter page

The screenshot shows the BI Publisher web interface. At the top, there are tabs for 'Reports', 'Schedules', and 'Admin'. Below them is a breadcrumb trail: 'Home > Shared Folders > ProdikaPrint > ProdikaPrintFO'. There are two buttons: 'Save' and 'Generate XLIFF'. On the left, a 'Report' menu is open, showing options like 'New', 'Delete', 'Data Model', 'PrintDataModel', 'List of Values', 'Parameters' (which is selected), 'DocKey' (which is also selected), 'Layouts', 'FOTemplate', 'RTFTemplate', and 'Bursting'. The main content area is titled 'Parameter' and has a sub-section 'General Settings'. It contains four fields: 'Identifier' with the value 'DocKey', 'Data Type' with a dropdown menu set to 'String', 'Default Value' which is empty, and 'Parameter Type' with a dropdown menu set to 'Hidden'.

- a. Make entries in the following fields:
 - Identifier**— Enter **DocKey**. This is a required field.
 - Data Type**—Select **String** from the drop-down list. This is a required field.
 - Default Value**—Leave this field blank.
 - Parameter Type**—Select **Hidden** from the drop-down list. This is a required field.
- b. Click **Save**.

7. Click **Data Model**, then click the **New** icon, as shown in [Figure D-2](#).

Figure D-2 *PrintDataModel* option, *Data Set* page

The screenshot shows the 'Data Set' configuration page. On the left, a tree view under 'Report' shows 'Data Model' selected, with 'PrintDataModel' highlighted. The main panel is titled 'Data Set' and contains two sections: 'General Settings' and 'Details'. In 'General Settings', the 'Name' field is 'PrintDataModel' and the 'Type' dropdown is 'HTTP (XML Feed)'. In 'Details', the 'URL' field contains 'http://uspsid01.agh1.agh1.net.com/gsm/PopUps/doc', the 'Method' dropdown is 'GET', and the 'Cache Result' checkbox is unchecked. Below these is a 'Parameters' table with one row: 'id' in the 'Name' column and 'DockKey' in the 'Value (Parameter)' column. There are 'Add' and 'Delete' buttons for the parameters table.

- a. Make entries in the following fields:
 - Name**—Name of the data model. This is a required field.
 - Type**—Select **HTTP (XML Feed)** from the drop-down list. This is a required field.
 - URL**—Enter `http://{application URL}/gsm/PopUps/docstream.aspx` where {application URL} is the address of the application. This is a required field.
 - Method**—Select **GET** from the drop-down list. This is a required field.
- b. Click **Add** to display the Parameters Name and Value fields.
- c. Make the following entries:
 - Name**—The name of the parameter that you created in step a. This is a required field.
 - Value (Parameter)**—Select **DockKey** from the drop-down list. This is a required field.
- d. Click **Save**.

8. Click **Layout** to set up the report layout.

- a. In the Manage Template Files section, upload your XSL template to use. In this scenario, we created and uploaded a simple XSL “pass-through” file called `ReportTemplate.xml`, as such:

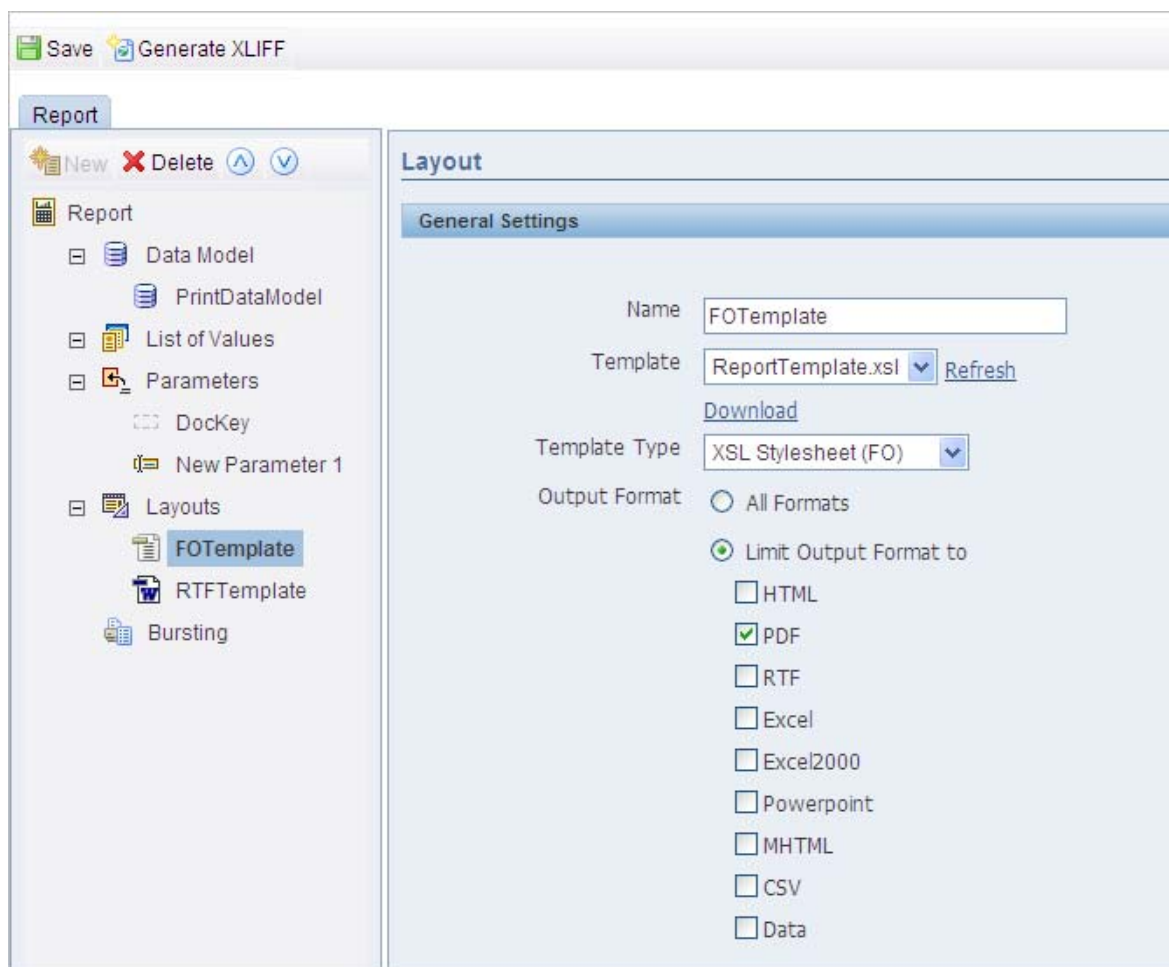
```
<?xml version='1.0'?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match="/">
    <xsl:copy-of select="/" />
  </xsl:template>
</xsl:stylesheet>
```

However, you can easily create your own transformation rules yourself.

- b. Click **New** to create a new report layout, as shown in [Figure D-3](#).

Note: You can create multiple layouts and then declare the desired layout in the `PrintSettings.config` file.

Figure D-3 *Layouts, FOTemplate option, Layout page*



- c. Make the following entries:

Name—The name of the report layout. This is a required field.

Template— Select **XSL Stylesheet (FO)** from the drop-down list. This is a required field.

Template Type— Select the **Limit Output Format to** radio button, and then select the **PDF** checkbox. This is a required field.

- d. Click **Save**.

Your report should now be available for printing. Make sure that the link to the report matches the `reportPath` value in the `PrintSettings.config` file. (While editing the report in BI Publisher, right-click on the **View** link in the top right and select **Copy Shortcut** to get the value).

If your Printing includes any images, such as logos, make sure they are available to BI Publisher, by adding them to the BI publisher directory. The location will depend on the path used.

Reporting Using BI Publisher

The Agile PLM for Process Reporting application allows clients to organize, configure, secure, and launch custom reports. The configuration is managed in the `CustomerReportExtensions.xml` located in the `\Config\Extensions\` directory. Reports and their parameters are presented in PLM for user entry; their values are then passed to custom BI Publisher reports to process the parameters, query data sources, and generate the report.

To use BI Publisher for Reporting, you will need to update Agile PLM for Process configuration settings, set up custom reports in BI Publisher, and update the Agile PLM for Process Reporting configurations accordingly.

For details on configuring custom PLM reports, refer to the *Agile Product Lifecycle Management for Process Custom Report Configuration Guide*.

To Configure Agile PLM for Process:

1. Update the `\config\environmentvariables.config` file:

Key	Value
Prodika.ReportServer.URL	For 10.1.3.3 and 10.1.3.4: <code>http://[hostname]:9704</code>
	For 11.1.1.5: <code>http://[hostname]:7001</code>
Prodika.ReportService.URL	Use one of the following: <code>Prodika.ReportService.OracleBIPublisher10_1_3_3.URL</code> <code>Prodika.ReportService.OracleBIPublisher10_1_3_4.URL</code> <code>Prodika.ReportService.OracleBIPublisher11_1_1_5.URL</code>

Note: Prodika.ReportService.SysUser and SysPassword are now set using the Setup Assistant. Refer to the *Agile Product Lifecycle Management for Process Configuration Guide* for instructions.

2. Update the \config\Extensions\CustomerReportExtensions.xml file to set up the custom reports for the Reporting application. Details can be found in the *Agile Product Lifecycle Management for Process Custom Report Configuration Guide*.

To Configure BI Publisher Reports:

Please refer to Oracle BI Publisher documentation for creating and setting up reports in BI Publisher.

Skill Set Matrix

Skill Set Matrix

Refer to the following matrix for guidance on what skills are recommended for members of your technology team.

Figure E–1 Skill set matrix

Skills Matrix					
Basic Skill Sets	Systems Administrator	SQL Server DBA	Oracle DBA	Extensions	Printing
	IT			Dev	
Windows Server Administration	R				
Implement/Manage IIS 6.0/7.0	R				
Implement/Manage SQL Server DB	O	R			
Implement/Manage Oracle DB	O		R		
T/SQL		O		O	
PL/SQL			O	O	
C#				R	
XML				R	R
XSD					R
[R]equired [O]ptional					

Installation Troubleshooting

This appendix contains a list common issues that may occur after installation.

Troubleshooting Tips

The following list details common issues and suggestions for solving them.

1. How can I compare my recent build with an older build to see if configuration values have changed?

Tip: Use the Config Rollup URL to check the rolled up configuration settings for various applications. The URL is:

`http://<serverName>/<appName>/WebCommon/AdminForms/ConfigRollup.aspx`

2. Clicking upload when adding a DRL attachment causes the window to simply blink.

Tip: Ensure you've waited at least 30 seconds on the first attempt.

Tip: Ensure the machine.config for your .NET version has the machine key entry.

3. Message displayed is "trust relationship could not be established".

Tip: Verify that the Web site your using has a signed certificate.

Tip: If not testing SSL DRL attachments, configure them to use HTTP and ensure the "Prodika.GSMInterApp.URL" property is using HTTP.

4. Message displayed is "The remote certificate is invalid according to the validation procedure."

Tip: Be sure to configure the **DRL.WebServices.Login** and **DRL.WebServices.Password** credentials using the Setup Assistant tool. The user specified should be an Agile PLM for Process user. For more information, refer to the *Agile Product Lifecycle Management for Process Configuration Guide*.

5. NPD edit-in-place documents are read-only.

Tip: The user connecting to the IIS share does not have permissions to the underlying folder on the server. Grant full permissions by assigning the 'Everyone' permission setting on that folder. If that solves the problem, lock down the folder with tighter permissions.

6. The Browser keeps redirecting to incorrect URLs or keeps jumping from HTTPS to HTTP.

Tip: Make sure that the environmentvariables.config file has the right URLs.

Tip: You can only have one HTTPS site on one machine. If you have more than one, it bounces back and forth between the two sites

Tip: Make sure that you are not using HTTPS in the URL to access a http Web site. Using https in your URL will make the Server redirect your request to the default https Web site.

Tip: Conversely, if the environmentvariables.config file is using https to access a http Web site, you would be redirected to the default https Web site incorrectly

7. Navigation to any page in the application results in a blank page after migrating to another version or a new version of .NET is installed.

Tip: The wrong ASP.NET version may be registered with IIS. Run the "aspnet_regiis.exe" utility with the "-r" flag.

8. The rich text dialog box is prompting me with security issues concerning scripts.

Tip: Ensure the page event and request validation are turned off.

9. What is drl.prodika.com?

Tip: Make sure that you have the new URLs and https:.

10. I am prompted to login to every application.

Tip: Is the remoting container running?

Tip: Ensure you are using the trust bridge in "EnvironmentSettings.config".