



Infor10 ERP Business (SyteLine)

# Installation Guide

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# Introduction

**NOTE:** After installing all the pieces of your system, you **MUST** apply the latest service pack to ensure everything works properly. See “Install and Apply Service Pack” on page 129 for information on how to download and apply the service packs.

This chapter provides an introduction to the *Infor10 ERP Business (SyteLine) Installation Guide*. It contains the following topics:

- Recommended Hardware
- Recommended Setup
- Online Help
- Infor Tools
- Data Collection Client
- Microsoft Outlook Service Packs
- Uninstalling SyteLine.

## Recommended Hardware

You should have appropriately powerful clients and servers when running SyteLine software. For the most up-to-date list of software and hardware requirements for Infor products, see the *Guide to Technology*. This document also lists typical system administration tasks you should be familiar with before attempting to install and administer Infor products.

## Recommended Setup

There are many pieces to install described in this guide. Depending on your company's needs, you may or may not install every piece described.

The chapters are listed in the order in which the pieces should be installed. The order is determined mainly because one piece may rely on the fact that another piece is already installed. For example, during a client install, you are required to point to the utility server; therefore, you need to set up the utility server prior to installing clients.

**NOTE:** If you have purchased any other product that interfaces with SyteLine, see the installation guides for those products for direction BEFORE installing SyteLine.

## Order of Events

**NOTE:** Before you install SyteLine, check for any Installation Advisories at <http://www.infor365.com>.

For a SyteLine installation, the order of events is as follows:

1. Database Server
2. Utility Server (the utility server includes a web server piece)
3. DMZ Server (if applicable)
4. Client (Click Once, End User or Administrative)
5. Planning Server
6. Web Server (if applicable)
7. Install Latest Service Pack

**NOTE:** After installing all the pieces of your system, you MUST apply the latest service packs to ensure everything works properly. See “Install and Apply Service Pack” on page 129 for information on how to download and apply the service packs.

**NOTE:** The client chapter instructs you to install and apply service packs prior to logging into SyteLine.

## Recommended Machines

We recommend that you set up each of the following pieces on its own machine:

- Database Server
- Utility Server
- Web Server (if used with Data Collection)
- Planning Server

**NOTE:** You can put an end user or administrative client on a machine of its own or on any of the server machines listed above except for the database server.

## Online Help

SyteLine online help gives you instant access to procedures and information about forms and fields. You can access Help from SyteLine forms, from other topics within Help, or from the search (index) function. Select **Help>Contents and Index** from the SyteLine title bar to open the Help, or use the F1 key to get help on any form or field.

## Developer-Level Help

To access the help for developers, select **Help>Customizing Forms**.

## Infor Tools

The development framework includes utilities for creating and editing forms, IDOs, and application events and event handlers. The framework also provides administrative and development utilities for managing a development project and deploying an application.

All these development utilities have their own Help files, accessible from within each utility. To help ensure that the system can locate the appropriate help files for each utility, all these utilities can use the same root URL. Utilities retrieve this common root URL from a file named **MG\_Help.xml**.

The **MG\_Help.xml** file can contain only one value, and that becomes the default common URL for the WinStudio utilities. Initially, the value is null, so to enable the system to use it, you must define the common URL in this file manually.

**MG\_Help.xml** is located in the main toolset folder on the client machine (where the WinStudio and utility executables are located).

When setting up the developer environment, or if this file is overwritten or becomes corrupted, you must manually write the correct URL value into it. To do this:

1. Open **MG\_Help.xml** in any XML editor.

The contents should look similar to this:

```
<CommonSettingsDataSet xmlns="http://tempuri.org/
CommonSettingsDataSet.xsd">
  <CommonHelpSettings>
    <CommonRootHelpURL/>
  </CommonHelpSettings>
</CommonSettingsDataSet>
```

2. Modify the `<CommonRootHelpURL/>` tag to use opening and ending tags with the DNS or IP address of the utility server; for example:

```
<CommonRootHelpURL>serverAddress</CommonRootHelpURL>
```

3. Save and close the **MG\_Help.xml** file.

**.NET Web Service Test Utility** - This utility is found on the utility server. It provides a test client for the .NET Web Service (.NET API). If you install the web server components on your utility server and want to verify that it is installed and configured correctly without writing your own client, you can use this utility. See “Infor .NET Web Service Test Utility” on page 225 for more information about this utility.

**App Metadata Sync** - This utility provides a means of synchronizing and integrating metadata for IDOs and application events from different sources. This metadata comes

primarily from system updates/upgrades and third-party add-on products. This utility is found on the utility server.

**App Metadata Transport** - This utility provides the capability to import application event and IDO metadata from an .xml file to a database. You can also use it to export application event and IDO metadata from a database to an .xml file. This utility is found on the utility server.

**Configuration Manager** - Use the Configuration Manager to create or edit configurations. You can specify the application database, forms database, and templates database to be used by a WinStudio run-time user or by a developer customizing forms. Configuration Manager is found on the utility server and administrative clients.

**Copy User Tables** - If you upgrade from one version of SyteLine 7 or 8 to another version of SyteLine (example - 7.05 to 8.00 or 8.02 to 8.03), you can copy your user and group authorizations to the new version with the Copy User Tables utility so you don't have to set them up again. This utility is found on the utility server.

**DC Background** - The DC Background process extracts the transactions from either the imtrans1 or imtrans2 file, then stores them in error processing files, which are located in the SyteLine database.

**DC File Server** - The EZBuilder File Server, an Intermec utility, receives the transactions from the readers through a serial port connection or a TCP/IP network connection. It then places the reader transactions in the imtrans1 or imtrans2 file.

**FormSync** - Use FormSync to reconcile differences between two copies of the forms database. FormSync is found on the utility server and administrative client machines.

**IDO Runtime Development Server** - This tool allows access the IDO Runtime as a free-standing executable on a local machine rather than as a Windows service on a utility server; view diagnostic information. You need to use this when running a separate Administrative Client (separate from the utility server).

**Log Monitor** provides a single, consolidated view of all activity logged on a utility server. Its log shows information from all parts of the framework, including WinStudio, Infor TaskMan, IDOs, replication, and various services. It is intended to be used as a diagnostic tool by developers and administrators in troubleshooting. Note that information sent to the logs while the Log Monitor program is not running is not stored anywhere.

**Replication Tool** - Use the Replication Management Tool to view, correct, and resubmit inbound and outbound replication errors, and to view the status of sites linked to this site for replication. The Replication Tool is found on the utility server.

**Service Configuration Manager** - Use this program to configure framework services: the application event service, the replication service, and the TaskMan service. The Service Configuration Manager is found on the utility server.

**FormControl** - FormControl is a version-control tool for objects being developed for the presentation layer of an application in WinStudio. FormControl is used to access the forms and global objects stored in the databases associated with a particular implementation of WinStudio. FormControl tracks versions of objects and supports access to a repository of versions and an archive of deleted objects. Implementing FormControl is optional, and this

tool is particularly useful when several developers are working on an application, as it allows one developer to lock a form or global object while working on it, so that other developers cannot work on the same object at the same time.

**Table Utility** - Use the Table Utility to create SQL Server tables with the required columns and triggers or to add these requirements to existing tables. Table Utility is found on the developer client.

## Data Collection Client

If you are a data collection user, you may want to use a Data Collection (DC) Client when you set up your SyteLine system, depending on your specific system and hardware requirements. Your system configuration will depend on several factors, including the number of readers and the data collection environments (RF, serial, or network) used. See your SyteLine consultant for advice for your specific configuration needs.

**NOTE:** We recommend you set up a DC Client machine if you are using TRAKKER Antares store and forward data collection. See the *Intermec Equipment Installation Guide* for more information.

If you are using a Data Collection Client, install the following components on it from the Custom Setup screen:

- Data Collection Web server components
- SyteLine Client components.

**NOTE:** After you install the Data Collection Client, run the Infor ERP SL Configuration Wizard (**Start>Programs>Infor>Setup>Infor ERP SL Configuration Wizard**) to configure the client.

## Uninstalling SyteLine

If you are upgrading your system from one version of SyteLine 7 to SyteLine 8.03 (for example from SyteLine 7.05 to SyteLine 8.03) you **MUST** first uninstall the old version before installing the new version. This is true for all pieces of your system; the database server, utility server, all clients, planning server, and web server components. See Chapter 13, "Uninstalling SyteLine" for uninstall instructions.

## Upgrade Service Pack Minimums

For the version you are upgrading TO, you must apply the latest service pack prior to running the upgrade process. For the version you are coming FROM, you must be at least at the following minimum service pack levels:

- **SyteLine 7.03** - latest service pack
- **SyteLine 7.04** - latest service pack

- **SyteLine 7.05** - latest service pack
- **SyteLine 8.00** - latest service pack
- **SyteLine 8.01** - latest service pack
- **SyteLine 8.02** - latest service pack

See “Upgrading SyteLine” on page 133 for specific instructions on how to upgrade your SyteLine version.

---

# Setting up the Database Server

## 1

The steps in this chapter detail how to set up the database server in a single site environment.

**NOTE:** If you want to set up a multi-site environment, complete the steps in this chapter first and then see the *Multi-Site Implementation Guide*.

## Requirements

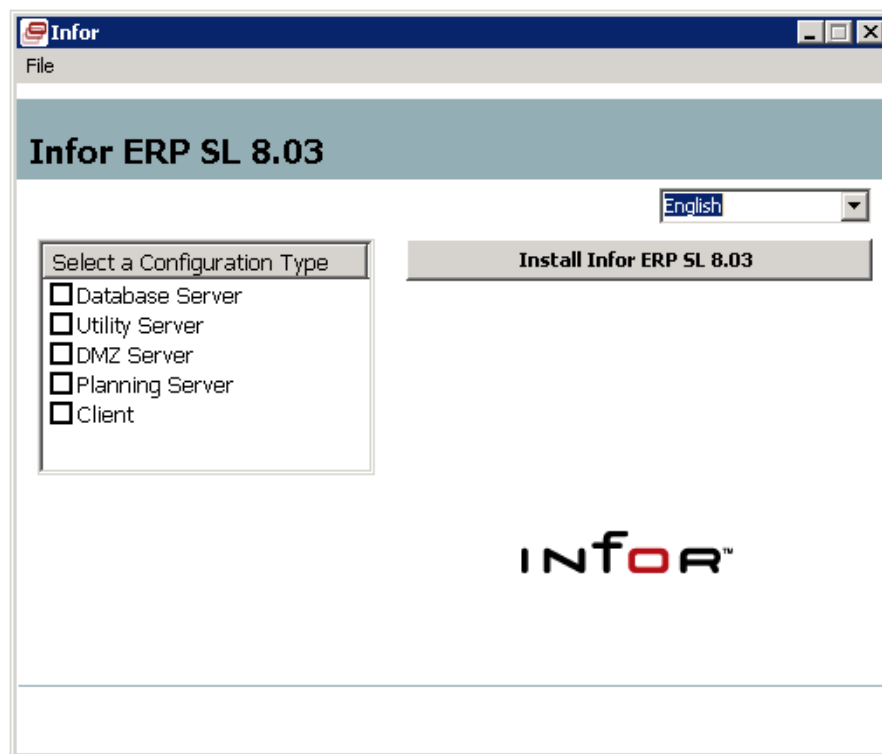
- SQL Server 2008 R2. You MUST install SQL Reporting Services. You MUST install SQL-DMO and SQLSERVER. SQL-DMO and SQLSERVER are NOT part of the normal SQL installation procedure, and you will need to install them manually. Use the internet to find the SQL Server 2005 Backward Compatibility file (SQLServer2005\_BC\_64bit.msi). Download this file and run it on the Database Server and the Utility Server.
- Windows Server 2008 R2. You must install the following Role Services: .NET Framework 4.0, COM+ Network Access, TCP Port Sharing, Windows Process Activation Service Support, HTTP Activation, Message Queuing Activation, TCP Activation, Named Pipes Activation, Distributed Transactions, Incoming Remote Transactions, and Outgoing Remote Transactions.
- You MUST enable Network COM+ and Network DTC Access.
- Ensure that certain SQL Server settings are set on the database server. These settings are set during the install, but if you've copied a database or made some other configurations, you might need to make these changes. These settings can be set either before or after a SyteLine installation. Within SQL Server Management Studio, open the **Properties** dialog box for the server (NOT the database). On the **Connections** page, select the check box for the following items: ANSI warnings, ANSI padding, ANSI nulls, Arithmetic abort, Quoted identifier, xact abort, and concat null yields null; clear the check box for numeric round abort.
- You MUST do the following (refer to [http://msdn.microsoft.com/en-us/library/ms175193\(v=SQL.100\).aspx](http://msdn.microsoft.com/en-us/library/ms175193(v=SQL.100).aspx)):
  1. Before you run the Configuration Wizard to create databases, enable CLR.
  2. Restart the SQL Server after enabling CLR.
  3. Perform this query:

```
sp_configure 'show advanced options', 1;  
GO  
RECONFIGURE;  
GO  
sp_configure 'clr enabled', 1;  
GO  
RECONFIGURE;  
GO
```

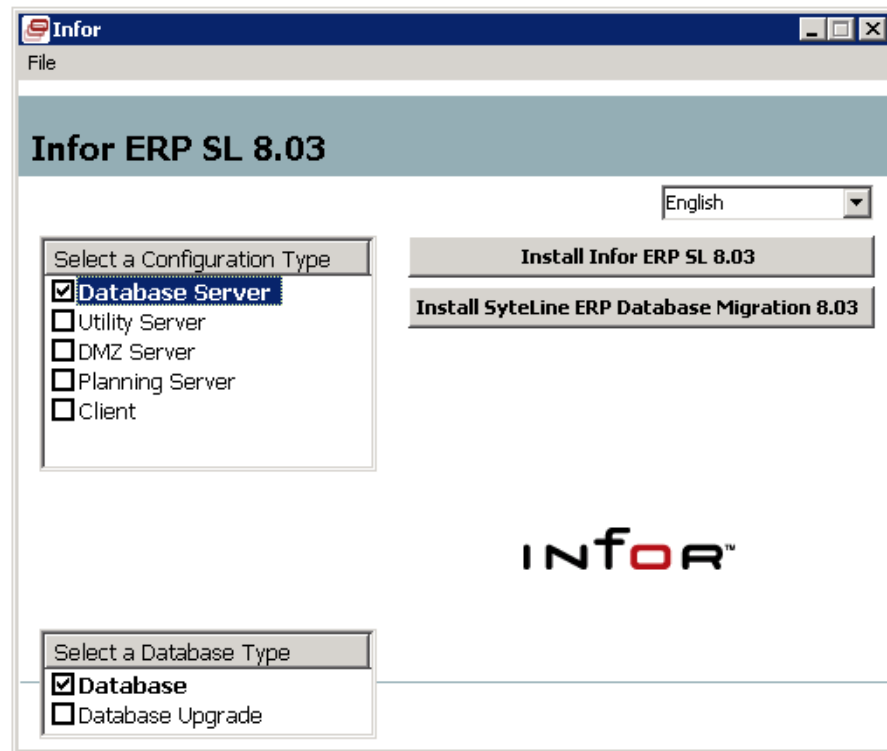
4. Use the SQL Server Configuration Manager utility to stop and restart SQL Server. Do NOT use the Windows Services utility to stop and restart.

## Install Components on the Database Server

1. Download the proper version of the .iso file from the Download Center.
2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.



3. Select **Database Server** as the configuration type. The **Install Database Migration** button is displayed and the **Select a Database Type** check box list is displayed.

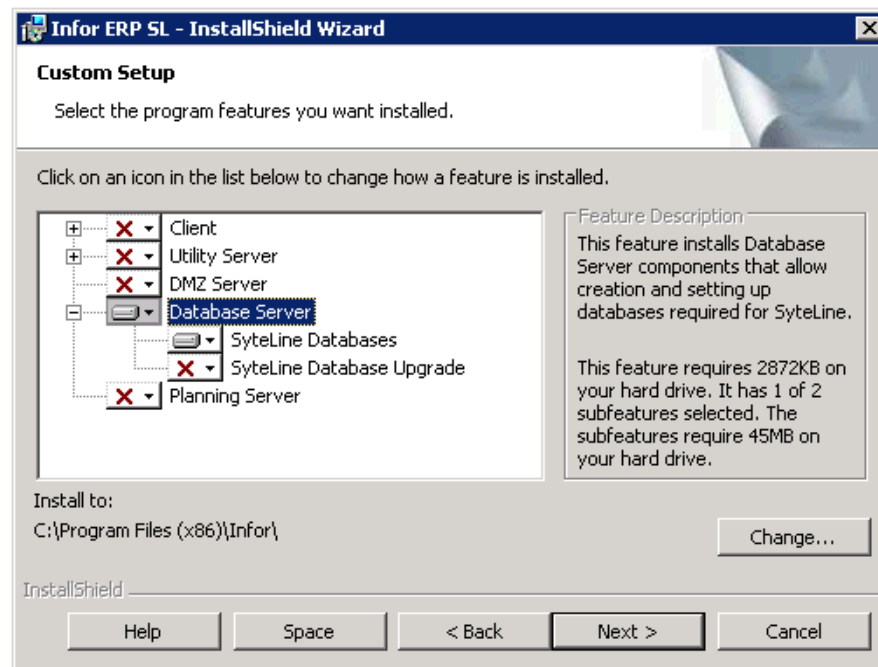


4. From the **Select a Database Type** check box list, select or clear **Database Upgrade**. **Database** must be selected. If you select Database Upgrade, a utility is installed to upgrade your database from a previous version (version 7.00 or greater). It does not upgrade from version 6 or earlier. See Chapter 8, "Upgrading SyteLine" for more information about this utility.
5. Select one of the two button choices on this screen:

**NOTE:** If you click the **Install Database Migration** button, you must do so BEFORE you install SyteLine. Run the Infor ERP SL Configuration Wizard after you have installed both pieces.

- **Install Infor ERP SyteLine** - Click this button to install SyteLine and its databases on the database server.
  - **Install Database Migration** - Click this button to install all the necessary components to convert from an earlier version of SyteLine to SyteLine 8.03. Follow the instructions in the wizard to complete the install. If you are not migrating from an earlier version of SyteLine, do not click this button.
6. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.

7. Click **Next**. The **Custom Setup** screen is displayed.



8. Click **Next**. The **Ready to Install the Program** screen is displayed.

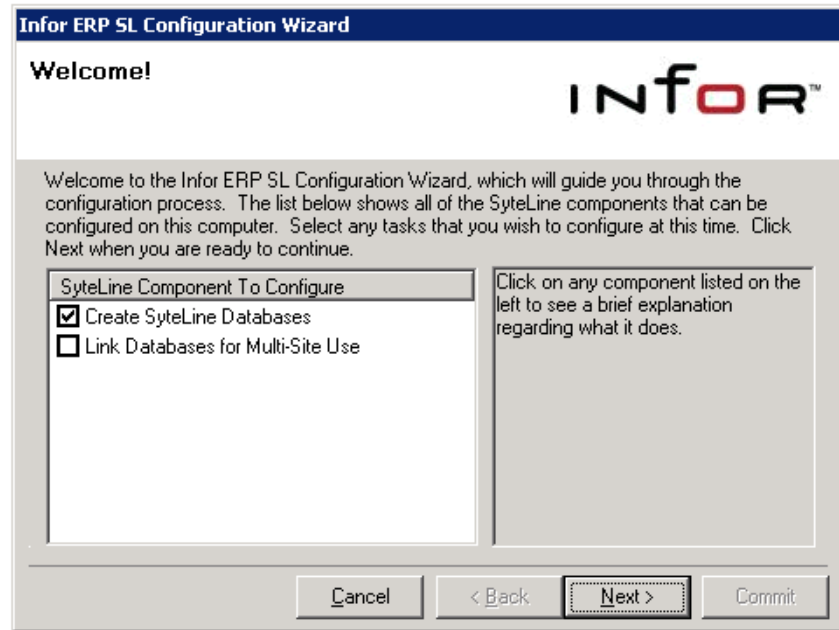
9. Click **Install**.

10. Once the installation process is complete, click **Finish**.

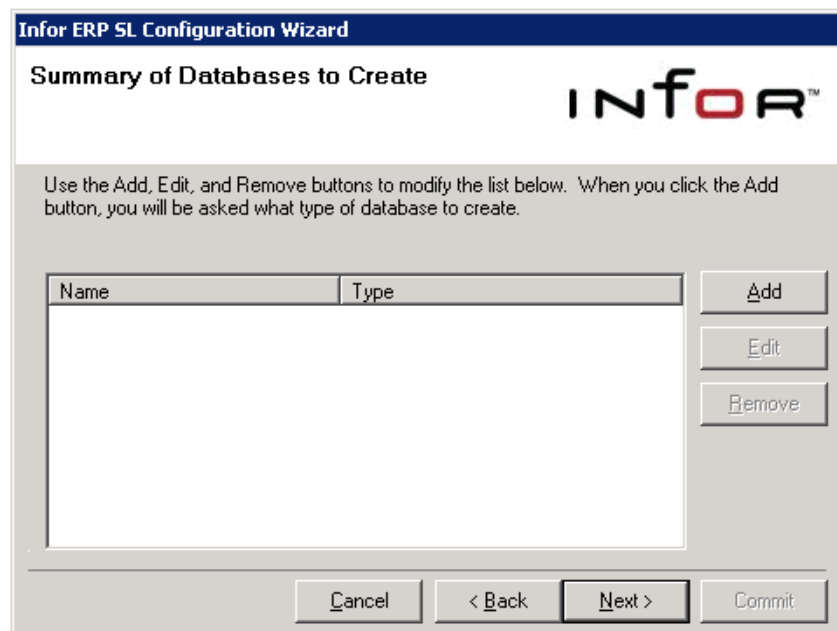
## Configure the Database Server

Once the installation completes, run the **Infor ERP SL Configuration Wizard** to create the database environment.

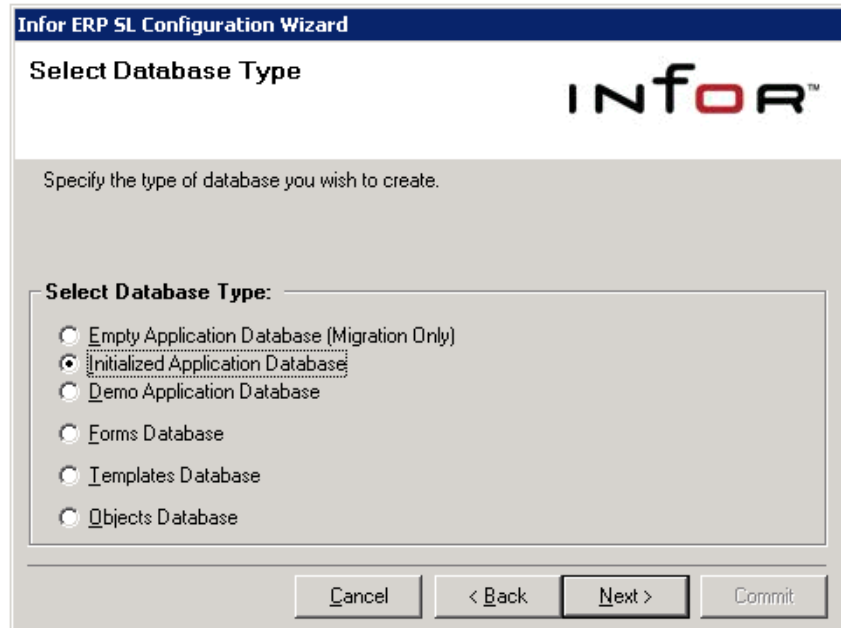
1. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard** to create the application, forms, objects, and templates databases. The **Welcome!** screen is displayed.



2. Select the **Create SyteLine Databases** check box. You would select the **Link Databases for Multi-Site Use** only if you want to link existing databases. For more information about linking databases for multi-site use, see the *Multi-Site Implementation Guide*.
3. Click **Next**. The **Summary of Databases to Create** screen is displayed.



4. Click the **Add** button. The **Select Database Type** screen is displayed.



The image shows a screenshot of the 'Infor ERP SL Configuration Wizard' window. The title bar reads 'Infor ERP SL Configuration Wizard'. The main heading is 'Select Database Type'. Below the heading is the Infor logo. A text prompt says 'Specify the type of database you wish to create.' Below this is a section titled 'Select Database Type:' containing a list of radio button options: 'Empty Application Database (Migration Only)', 'Initialized Application Database' (which is selected), 'Demo Application Database', 'Forms Database', 'Templates Database', and 'Objects Database'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

5. Select the database type you wish to install.

**NOTE:** You MUST install at least one of the application databases, the Forms Database, and the Objects Database for SyteLine to work.

You can only choose one type at a time on this screen. The types are defined as follows:

| Database Type                    | Definition                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Empty Application Database       | Select this option ONLY if you are upgrading from a previous version of SyteLine (any version BEFORE SyteLine 7). If you need to choose this option, see the appropriate conversion chapter (multi-site or single site) in this manual.                                                                                                                                                    |
| Initialized Application Database | Select this option to create a new Infor ERP SyteLine database. This creates an empty database that includes some initialized data (two users, default replication categories, default user groups, etc.) which you then need to populate with data.                                                                                                                                       |
| Demo Application Database        | This database is for demonstration or testing purposes. This option populates the database with demo data so you can test many of Infor ERP SyteLine's functions.                                                                                                                                                                                                                          |
| Forms Database                   | The forms database holds all of the information about each form in Infor ERP SyteLine. For example, components such as text boxes, labels, tabs, radio groups, buttons, and all of the associated properties (such as size, color, validation, events) are kept in the forms database. You can use one forms database with multiple application databases. This database is a requirement. |
| Templates Database               | This database is a central holding place for changed Infor ERP SyteLine default screens. This database is optional.                                                                                                                                                                                                                                                                        |
| Objects Database                 | The objects database stores the IDO metadata. This database is a requirement.                                                                                                                                                                                                                                                                                                              |

For the purposes of this manual, we selected **Demo Application Database** here.

6. Click **Next**. The **Database Name and Location** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Database Name and Location**

Enter the information necessary to connect to this SQL Server along with the name of the new database you wish to create.

SQL Server Name: (local)

SQL Username: sa

SQL Password:

New SQL Database Name: SyteLine\_AppDemo

SQL Data File Path: SyteLine\_AppDemo\_Data.Mdf

SQL Log File Path: SyteLine\_AppDemo\_Log.Ldf

SQL Collation: \*\*Default Collation\*\*

Buttons: Cancel, < Back, Next >, Commit

7. Enter data into or update the following fields:

- **SQL Server Name** - This option is not updateable since databases can only be created on the local server. If you are using SQL clustering, see “SQL Clustering” on page 26.
- **SQL Username** - Enter the SQL user name, which must be "sa".
- **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.
- **New SQL Database Name** - Enter a name for the application database to be created.
- **SQL Data File Path** - Accept the default path or browse to select the location for the application database data file. This field is grayed out for non-application databases.
- **SQL Log File Path** - Accept the default path or browse to select the location for the application database log file. This field is grayed out for non-application databases.
- **SQL Collation** - Select the default SQL Collation. The default value depends on your Windows Version (English, Chinese, Japanese, etc.). Once you set it for a database, it can not be changed. Refer to your SQL documentation for additional information.

8. Click **Next**. The **Set Database Site Parameters** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Set Database Site Parameters**

Specify the enterprise specific information for this Application Database.

Site ID: Demo

Site Name: Demo Site

Site Description: This is the Demo site.

Site Group: Demo

Site Currency: USD: US Dollar

Site Type: Site

Time Zone: (UTC-05:00) Eastern Time (US & C)

Buttons: Cancel, < Back, Next >, Commit

- **Site ID** - Enter the Site ID. The ID is a shorter version of the Site Name (8 characters maximum).
- **Site Name** - Enter the site name for the Application database environment being created.
- **Site Description** - Enter a description for the database environment being created.

- **Site Group** - Enter a group name for the environment being created. The group name should be descriptive of the sites in the group. For example, you might have a group name of "NoAm" for North America if all the sites in that group are in North America.
  - **Site Currency** - Accept the default value of USD or assign the appropriate currency code for the environment being created.
  - **Site Type** - In most cases, accept the default value of Site. Choose Entity if you are setting up an Entity database in a multi-site environment. See the *Multi-Site Implementation Guide* if you want to set up a multi-site environment.
  - **Time Zone** - Select the time zone for the site to which you are installing.
9. Click **Next**. The **Summary of Databases to Create** screen is displayed, this time with the database information filled in.

**Infor ERP SL Configuration Wizard**

**Summary of Databases to Create**

INFOR™

Use the Add, Edit, and Remove buttons to modify the list below. When you click the Add button, you will be asked what type of database to create.

| Name             | Type                      |
|------------------|---------------------------|
| SyteLine_AppDemo | Demo Application Database |

Buttons: Add, Edit, Remove, Cancel, < Back, Next >, Commit

10. Click the **Add** button to add more databases if you need to, or click **Next**.
- NOTE:** You **MUST** have a Forms database, an Objects database, and at least one application database for SyteLine to work. If you haven't added the appropriate databases yet, click the **Add** button on this screen and add them.
11. Once you click **Next**, the **Review Configuration Changes** screen is displayed. Read the information on the screen to ensure it is correct.
12. Click **Commit**.

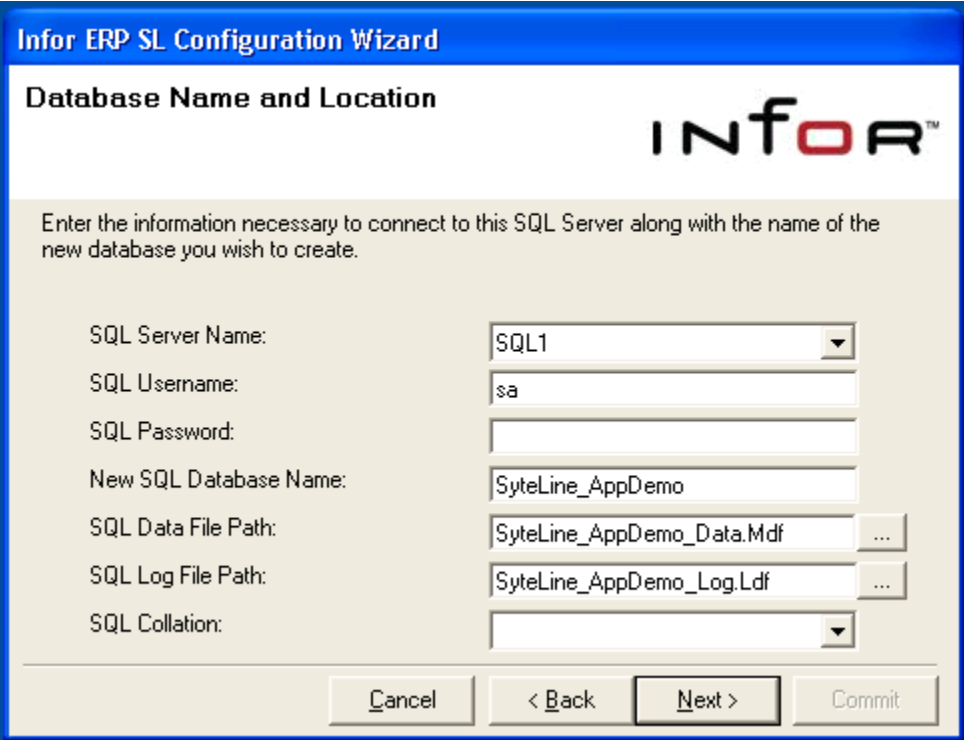
## Development Environment

If you wish to do major customizations to existing forms or if you need to modify backend objects such as stored procedures, you need to create additional databases on the database server. See Chapter 12, "Setting Up a Developer Environment" for information on which databases to create. Use this chapter to help you create them.

## SQL Clustering

You can set up your environment to take advantage of SQL Clustering. Infor does not offer documentation or support to help you walk through this process, as much of it is dependent on your own environment and because the bulk of the setup is done with SQL, not SyteLine.

The only SyteLine requirement is that since the system is not "cluster aware", you must install it on all nodes in the cluster. When you run the Infor ERP SL Configuration Wizard on the database server, enter the SQL instance of the local node in the **SQL Server Name** field on the screen below.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window, specifically the 'Database Name and Location' step. The Infor logo is in the top right. Below the title bar, a message states: 'Enter the information necessary to connect to this SQL Server along with the name of the new database you wish to create.' The form contains the following fields and controls:

| Field Label            | Value / Control                                           |
|------------------------|-----------------------------------------------------------|
| SQL Server Name:       | SQL1 (dropdown menu)                                      |
| SQL Username:          | sa (text input)                                           |
| SQL Password:          | (empty text input)                                        |
| New SQL Database Name: | SyteLine_AppDemo (text input)                             |
| SQL Data File Path:    | SyteLine_AppDemo_Data.Mdf (text input with browse button) |
| SQL Log File Path:     | SyteLine_AppDemo_Log.Ldf (text input with browse button)  |
| SQL Collation:         | (empty dropdown menu)                                     |

At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

## Requirements

- SQL Client Tools are already installed and configured on the utility server. You can install SQL Server, but it is not necessary.
- SQL Server 2008 R2. You MUST install SQL Reporting Services. You MUST install SQL-DMO and SQLSERVER. SQL-DMO and SQLSERVER are NOT part of the normal SQL installation procedure, and you will need to install them manually. Use the internet to find the SQL Server 2005 Backward Compatibility file (SQLServer2005\_BC\_64bit.msi). Download this file and run it on the Database Server and the Utility Server.
- .NET Framework version 4.0.
- Microsoft Message Queuing (MSMQ) is installed.
- Windows Server 2008 R2.
- You must enable Windows Authentication and Basic Authentication in the Internet Information Services (IIS) Manager.
- Install the Application Server role and ALL role services for this role.
- Install the Web Server (IIS) role and all role services for this role EXCEPT for the FTP Publishing Service. You CAN install the FTP Publishing Service if you like; it's just not required.
- If you plan to use the Microsoft Office integration to display SyteLine data in Office products, you MUST give the following directory read and write permissions:

C:\inetpub\wwwroot\ApplicationSearchServiceForOffice

- If you are using Web Rendering (Web Client), you need the following:
  - Windows Server 2008 R2 with IIS7.
  - A supported internet browser. Supported browsers are Internet Explorer 8 and 9, Firefox 7.0.1, Safari 5.1, and Chrome 14.

**NOTE:** If you use Web Rendering with Internet Explorer 8, you must clear the **Display internet sites in Compatibility View** field found on the **Tools > Compatibility View Settings** dialog in Internet Explorer.

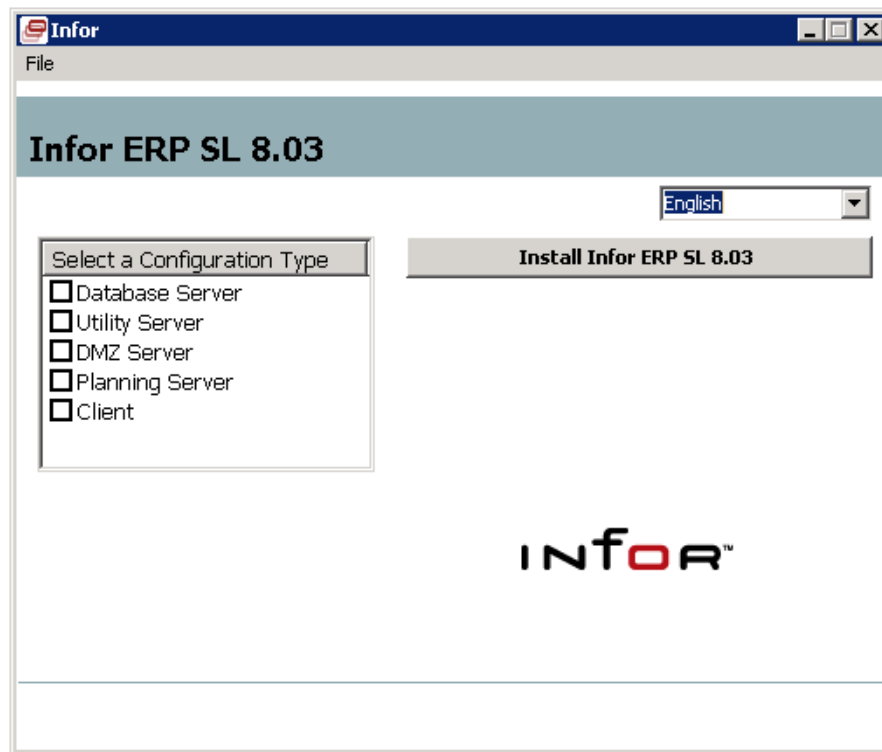
- For Internet Explorer 9, that setting must be enabled.
- If you want to use AD FS to access your Web Client, you must:
  - Set the Load User Profile to **True** under Process Model options in IIS.

- Download and install Windows Identity Foundation version 3.5. See Microsoft's KB974405 for the download and instructions.
- Configure Infor Federation Services (IFS). Details on how to do this are in Chapter 6, "Installing and Applying Service Packs". For additional information, see the *AD FS and IFS Installation Guide* and the *Infor Federation Services Administration Guide*.
- **Microsoft Components** - You must download and install the following components from Microsoft's web site. The version listed is not necessarily the latest version, but it is the required version:
  - Microsoft ASP.NET MVC 2
  - .NET Framework 3.5 Service Pack 1
  - .NET Framework version 4.0.

**NOTE:** After you have installed and configured the utility server, see "Post Installation Setup" on page 60.

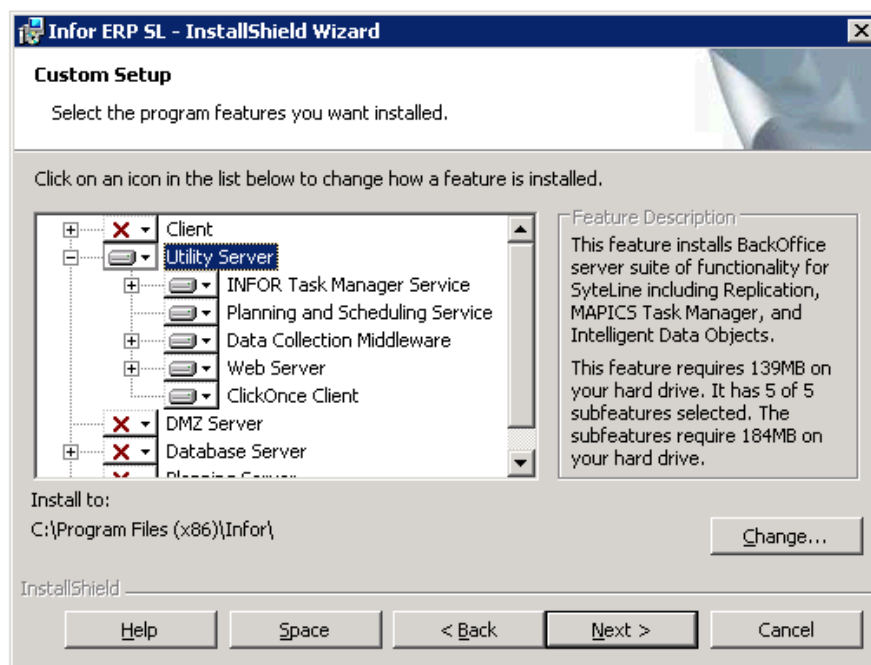
## Install Components on the Utility Server

1. Download the proper version of the .iso file from the Download Center.
2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.



3. Select **Utility Server**.
4. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.

5. Click **Next**. The **Custom Setup** screen is displayed.



6. Expand **Utility Server**. The default selections are shown in the screen shot above. For the purposes of this chapter, we are installing all of the above selected options. Each option is described below. If you choose to deselect any of the options, the steps in this chapter will be different from what you see.

- **Infor TaskManager Service** is a necessary component for SyteLine.
- **Planning and Scheduling Service** is necessary for Infor APS and Infor APS scheduling.
- **Data Collection Middleware** is necessary for data collection.
- **Web Server** is a necessary piece for SyteLine. In a typical installation, the Web Server piece is placed on the Utility Server.
- **ClickOnce Client** is necessary if you want client machines to be thin. For more information about ClickOnce Client and other client setup options, see “Setting Up a Client Workstation” on page 73.

7. Click **Next**. The **Ready to Install the Program** screen is displayed.

8. Click **Install**.

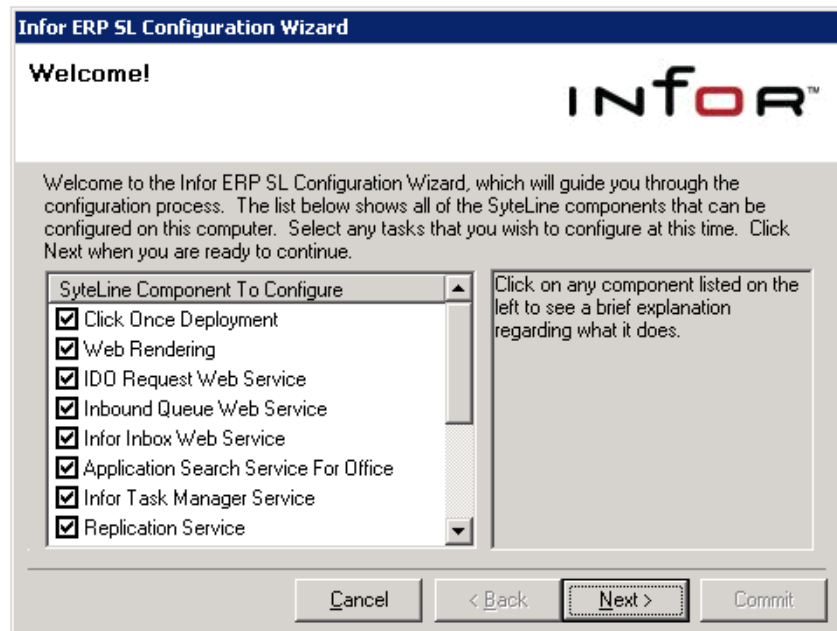
9. Once the installation process is complete, click **Finish**.

10. If the **After Installation** screen exists, click **Next** and then **Finish**.

## Configure the Utility Server

Once the installation completes, run the **Infor ERP SL Configuration Wizard** to configure the utility server. If you choose not to configure a piece as you go through the wizard, leave the screen blank and click **Next**.

11. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**.
12. The **Welcome!** screen is displayed.



13. The instructions in this chapter assume that you have selected all items. If you choose not to install one or more of the above selected components, your install procedure will be a bit different from what is documented here.

**NOTE:** If you plan to set up a separate planning server with all the APS services configured on that machine, do not configure the following components on the utility server: Planning and Scheduling Gateway, Planning and Scheduling Server, and Planning and Scheduling Web. You can configure the Planning and Scheduling Gateway and the Planning and Scheduling Server on the utility server if you then do not configure them on a separate planning server.

| Component                 | Notes                                                                                                                                                                                                                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Click Once Deployment     | Select this component if you want this utility server to act as a ClickOnce Deployment Server. This allows users to attach to this utility server via a web browser to install a client on their computers. This procedure is described in Chapter 4, "Setting Up a Client Workstation." |
| Web Rendering             | Select this component if you want to set up a Web Client.                                                                                                                                                                                                                                |
| IDO Request Web Service   | This service is required for clients that connect to the IDO Runtime Service using HTTP.                                                                                                                                                                                                 |
| Inbound Queue Web Service | This component is necessary for asynchronous replication. It accepts replication requests from sites on other intranets.                                                                                                                                                                 |

| Component                              | Notes                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infor Inbox Web Service                | This Web service allows users to access their system Inbox using a Web interface without having to log on to the system. Users can do anything in the Web version of the Inbox that they can do in the system version. The Infor Inbox Web Service is accessed using the following URL: <a href="http://UtilityServerName/InforInbox/Inbox.aspx">http://UtilityServerName/InforInbox/Inbox.aspx</a>                                                       |
| Application Search Service for Office  | This is used with Microsoft Office integration to display SyteLine data in Office products.<br>Any user that plans to use this integration MUST give read and write permissions to the following directory typically located here (you may have installed it to a different location):<br>C:\inetpub\wwwroot\ApplicationSearchServiceForOffice.<br>See the <i>Microsoft Office Integration User Guide</i> for more information about this search service. |
| Infor Task Manager Service             | The Task Manager (which is different from the Windows Task Manager) is a Windows service that: polls the application database; executes SQL stored procedures; launches applications such as EDI, MRP, and Infor APS.                                                                                                                                                                                                                                     |
| Replication Service                    | This service is used for multi-site environments.                                                                                                                                                                                                                                                                                                                                                                                                         |
| Replication Listener Service           | This service is used for multi-site environments.                                                                                                                                                                                                                                                                                                                                                                                                         |
| Data Collection Web                    | This component allows for interfacing with remote Data Collection devices.                                                                                                                                                                                                                                                                                                                                                                                |
| Planning and Scheduling Gateway        | The Planning and Scheduling Gateway Service periodically runs the Gateway Processor.                                                                                                                                                                                                                                                                                                                                                                      |
| Planning and Scheduling Server         | The Planning and Scheduling Server Service controls the APS Server program, which runs the APS planning function and the Scheduler.                                                                                                                                                                                                                                                                                                                       |
| End-User Client/Administrative Clients | This component puts a client on the Utility Server.                                                                                                                                                                                                                                                                                                                                                                                                       |
| Reporting Services                     | When you select this component, you are prompted for the name of your report server. This is where reports are created. You MUST select this component if you want to create reports.                                                                                                                                                                                                                                                                     |

14. Click **Next**. The **Click Once Directory** screen is displayed.

The screenshot shows the 'Click Once Directory' screen of the Infor ERP SL Configuration Wizard. The title bar reads 'Infor ERP SL Configuration Wizard'. The main heading is 'Click Once Directory' with the Infor logo to the right. Below the heading, a text box contains the instruction: 'Enter the name that will be used to host the SyteLine Click Once Deployment location. Also enter the login information that will be used to set security on the SyteLine Click Once Deployment Virtual Directory.' There are three input fields: 'Virtual Directory Name' (containing 'SLClientDeploy'), 'Service Logon' (empty), and 'Password' (empty). A note at the bottom states: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

15. Enter the following information:

- **Virtual Directory Name** - Accept the default of **SLClientDeploy**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

16. Click **Next**. The **Click Once Application Name** screen is displayed.

The screenshot shows the 'Click Once Application Name' screen of the Infor ERP SL Configuration Wizard. The title bar reads 'Infor ERP SL Configuration Wizard'. The main heading is 'Click Once Application Name' with the Infor logo to the right. Below the heading, a text box contains the instruction: 'Enter the Click Once Application Name you want your users to have and the name of the deployment webserver.' There are two input fields: 'Click Once Application Name' (containing 'SL 8.03 Client') and 'Click Once Webserver Address' (containing 'WebServerName'). Below these are two checkboxes: 'Use Https' (unchecked) and 'Set Remember Config Group Option' (unchecked). A 'Client Deploy URL' label is followed by a text box containing 'http://WebServerName/SLClientDeploy/SyteLine.application'. At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

17. Enter the following information:

- **Click Once Application Name** - The name you enter here will be the name of the shortcut created by the install. It is also the name that is displayed in Add/Remove Programs or Programs and Features if you wish to uninstall or modify the program.
- **Click Once Webserver Address** - This field is for the name of your web server (usually the name of your utility server). Whatever name is entered here is automatically updated in the Client Deploy URL field below.
- **Use Https** - If you select this check box, the Client Deploy URL changes to Https. When this field is cleared, the Client Deploy URL uses Http.
- **Set Remember Config Group Option** - This check box sets the option in the ConfigServerURLs.xml that gets deployed when you install a Click Once Client. WinStudio reads this XML file when it starts. If this check box is selected, the Click Once Client user only sees the configs that are in the Config Group that was used when the click once client was installed. It is a way to limit the user to only see configs that belong to them and not to other users.
- **Client Deploy URL** - You can not edit this field. The web server portion of the URL is changed immediately if you change the name of the web server in the Click Once Webserver Address field above.

18. Click **Next**. The **Web Rendering** screen is displayed.

19. Enter data into or update the following fields:

- **Application Pool** - Enter the application pool. An Application Pool can contain one or more applications and allows you to configure a level of isolation between different Web applications. For example, if you want to isolate all the Web applications running in the same computer, you can do this by creating a separate application pool for every Web application and placing them in their corresponding application pool. Because each application pool runs in its own worker process, errors in one application pool will not affect the applications running in other application pools.

- **Site** - Enter the site name. "Default Web Site" is created when you install IIS. You can use this one or create a different one. The site name is only used for internal configuration of the web site using the IIS Manager tool. The name you specify here will not impact the URL that you will use to access the web site.
- **Application Name** - The Application Name is the name that you use to access the web site. The name you specify here becomes part of the URL used to access the web site. The full URL to access the Web Rendering web site will be in the form of:  
`http://servername/application name/Default.aspx`
- **Timeout (in minutes)** - Accept the default of 30 minutes, or assign a new number.
- **Authentication Type**
  - **Built-In Authentication** - If you choose this option, users are prompted for their normal SyteLine username and password to access the Web Client.
  - **IIS Authentication** - If you choose this option, users are prompted for the username and password that the IIS administrator has configured for them to access the Web Client. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the IIS username to the SyteLine username.
  - **Active Directory Federation Services (ADFS)** - If you choose this option, users are prompted for the Windows Active Directory username and password to access the Web Client. These usernames and passwords are set up by the network administrator. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the Active Directory username to the SyteLine username.
- **Use Remote IDO Runtime** - You must select this check box if you are using a DMZ Server. If not using a DMZ server, do not select this check box. When you select this check box, the Config Server URL field becomes enabled.
- **Config Server URL** - This field is enabled only if the Use Remote IDO Runtime check box is selected. Replace "<WebServer>" with the name of the utility server you want the DMZ server to communicate with.

20. If you chose the Active Directory Federation Services (ADFS) option on the **Web Rendering** screen, the **Web Rendering ADFS Authentication** screen is displayed. If you didn't select that option, skip to step 22.

**Infor ERP SL Configuration Wizard**

**Web Rendering ADFS Authentication**

Enter the Web Rendering ADFS Authentication information

STS Server Name:

FederationMetadata.Xml Location:

Federation Service URL:

Trust Server URL:

STS Certification Thumbprint:

Application URL:

Buttons: Cancel, < Back, Next >, Commit

21. Enter data into or update the following fields:

- **STS Server Name** - This is the server with AD FS / IFS providing claims-based token management. This name should be fully-qualified and must match what is expected in the SSL web server certificate. This name is case sensitive. This certificate resides on the STS server.
- **FederationMetadata.Xml Location** - This field is automatically populated after you provide the STS Server Name. The syntax is:  
https://STSServerName/FolderLocation/FederationMetadata.xml.
- **Federation Service URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: https://STSServerName/adfs/ls.
- **Trust Server URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: http://STSServerName/adfs/services/trust.
- **STS Certification Thumbprint** - This is the thumbprint property number of the token-signing certificate used within AD FS. You need to copy this number and paste it into this field. To get the number, within AD FS, navigate to **Service>Certificates**. Double-click the token-signing certificate and then select **Thumbprint**. The number that is displayed for thumbprint is the number you need to paste here. When you copy the number, there is a leading space. Delete that space after pasting it into the STS Certification Thumbprint field.

- **Application URL** - Provide the application URL. This name should be fully-qualified and must match what is expected in the SSL web server certificate. The server name part of this URL is case sensitive. This certificate resides on the STS server. Use this syntax: `https://utilityservername/WSWebClient/`

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end.

22. Click **Next**. The **SyteLine IDO Request Web Service** screen is displayed.

**Infor ERP SL Configuration Wizard**

**SyteLine IDO Request Web Service**

Enter the name that will be used to host the SyteLine IDO Request Web Service. Also enter the login information that will be used to set security on the SyteLine IDO Request Web Service Virtual Directory.

Virtual Directory Name:

Service Logon:

Password:

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

23. Enter the following information:
  - **Virtual Directory Name** - Accept the default of **IDORequestService**.
  - **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.

24. Click **Next**. The **Inbound Queue Web Service** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window for the 'Inbound Queue Web Service'. The Infor logo is in the top right. The main text reads: 'Enter the name that will be used to host the SyteLine Inbound Queue Web Service. Also enter the login information that will be used to set security on the SyteLine Inbound Queue Web Service Virtual Directory.' Below this are three input fields: 'Virtual Directory Name' with the value 'InboundQueue', 'Service Logon' with the value 'qa\sa', and 'Password' with masked characters 'XXXXXXXX'. A note at the bottom states: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

25. Enter the following information:

- **Virtual Directory Name** - Accept the default of **InboundQueue**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

26. Click **Next**. The **Infor Inbox Web Service** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window for the 'Infor Inbox Web Service'. The Infor logo is in the top right. The main text reads: 'Enter the name that will be used to host the SyteLine Infor Inbox Web Service. Also enter the login information that will be used to set security on the SyteLine Infor Inbox Web Service Virtual Directory.' Below this are three input fields: 'Virtual Directory Name' with the value 'InforInbox', 'Service Logon' with the value 'qa\sa', and 'Password' with masked characters 'XXXXXXXX'. A note at the bottom states: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

27. Enter the following information:

- **Virtual Directory Name** - Accept the default of **InforInbox**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

28. Click **Next**. The Application Search Service For Office screen is displayed.

The screenshot shows a configuration window titled "Infor ERP SL Configuration Wizard" with a sub-header "Application Search Service For Office" and the Infor logo. The main text instructs the user to enter the name for hosting the service and the login information for security. There are three input fields: "Virtual Directory Name" (containing "ApplicationSearchServiceForOffice"), "Service Logon" (containing "qa\sa"), and "Password" (containing "xxxxxxx"). A note at the bottom states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom right are four buttons: "Cancel", "< Back", "Next >", and "Commit".

29. Enter the following information:

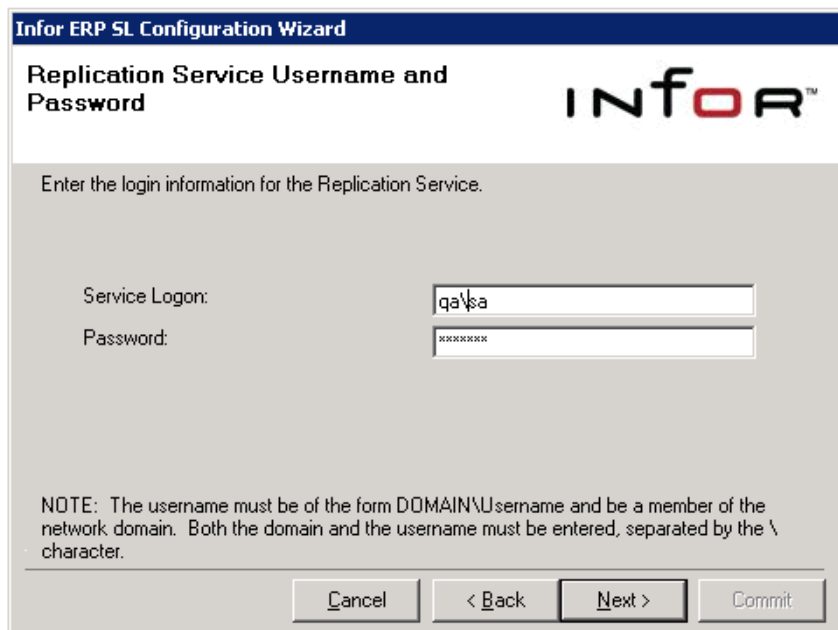
- **Virtual Directory Name** - Accept the default of **ApplicationSearchServiceForOffice**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

30. Click **Next**. The **Infor Task Manager Service Username and Password** screen is displayed.



The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a sub-header "Infor Task Manager Service Username And Password" and the Infor logo. The instruction "Enter the login information for the Infor Task Manager Service." is displayed. There are two input fields: "Service Logon:" containing "qa\sa" and "Password:" containing masked characters. A note states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are buttons for "Cancel", "< Back", "Next >", and "Commit".

31. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
32. Click **Next**. The **Replication Service Username and Password** screen is displayed.



The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a sub-header "Replication Service Username and Password" and the Infor logo. The instruction "Enter the login information for the Replication Service." is displayed. There are two input fields: "Service Logon:" containing "qa\sa" and "Password:" containing masked characters. A note states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are buttons for "Cancel", "< Back", "Next >", and "Commit".

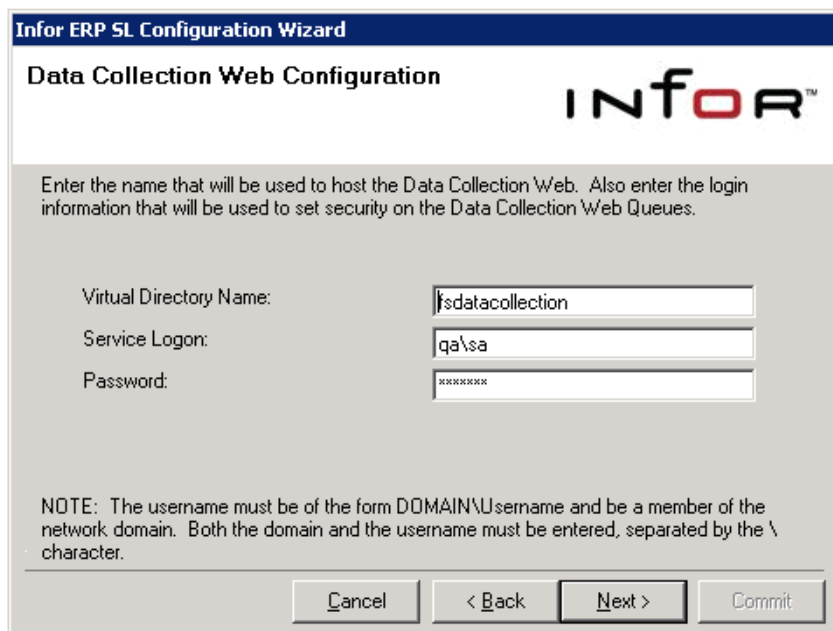
33. Enter the following information:

- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
34. Click **Next**. The **Replication Listener Service Username and Password** screen is displayed.

The screenshot shows a window titled "Infor ERP SL Configuration Wizard". The main heading is "Replication Listener Service Username and Password" with the Infor logo to the right. Below the heading, it says "Enter the login information for the Replication Listener Service." There are two input fields: "Service Logon:" with the text "qa\sa" and "Password:" with masked characters "XXXXXXXX". A note at the bottom states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are four buttons: "Cancel", "< Back", "Next >", and "Commit".

35. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.

36. Click **Next**. The **Data Collection Web Configuration** screen is displayed.



**Infor ERP SL Configuration Wizard**

**Data Collection Web Configuration**

INFOR™

Enter the name that will be used to host the Data Collection Web. Also enter the login information that will be used to set security on the Data Collection Web Queues.

Virtual Directory Name:

Service Logon:

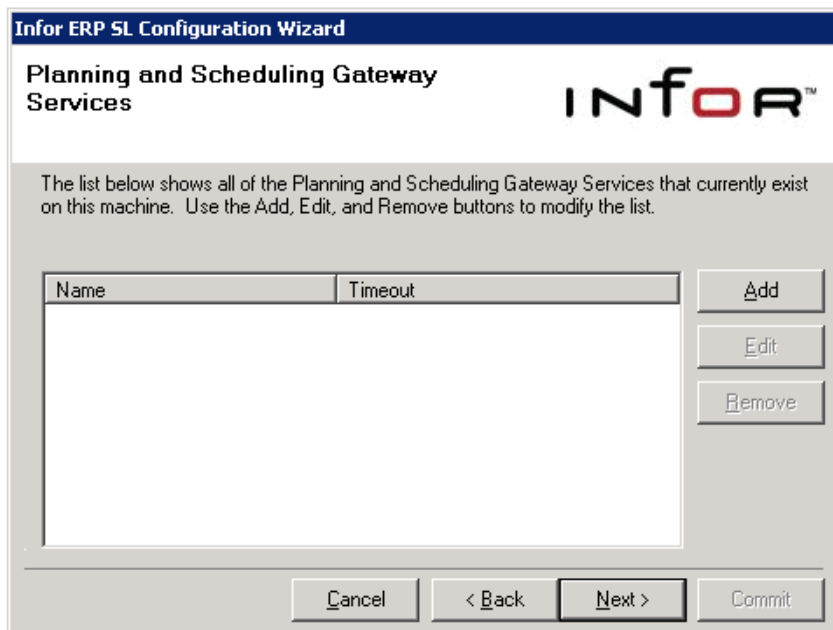
Password:

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

37. Enter the following information:

- **Virtual Directory Name** - Accept the default of **fsdatacollection**.
- **Service Logon** - Enter your logon using the DOMAIN\Username format.
- **Password** - Enter the password for your service logon.

38. Click **Next**. The **Planning and Scheduling Gateway Service** screen is displayed. Setting up this service is necessary if you will be using the Infinite APS or APS planning modes.



**Infor ERP SL Configuration Wizard**

**Planning and Scheduling Gateway Services**

INFOR™

The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.

| Name | Timeout |
|------|---------|
|      |         |

39. Click **Add**. The **Planning and Scheduling Gateway Connection Information** screen is displayed.

The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a subtitle "Planning and Scheduling Gateway Connection Information" and the Infor logo. Below the title bar, a text box instructs the user: "Enter the information needed to connect to the database that this Gateway Service will monitor. Also specify an interval, in seconds, for the gateway to poll the database." The form contains five input fields: "SQL Server Name:" (a dropdown menu), "SQL Username:" (a text box), "SQL Password:" (a text box), "Application Database:" (a dropdown menu), and "Polling Interval:" (a text box containing the value "300"). At the bottom of the window are four buttons: "Cancel", "< Back", "Next >" (which is highlighted with a dashed border), and "Commit".

40. Enter the following information:
- **SQL Server Name** - Choose the SQL server name from the drop down list. This is the machine where your databases reside.
  - **SQL Username** - Enter the SQL username.
  - **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.
  - **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
  - **Polling Interval** - The time delay (in seconds) before the service runs the process that synchronizes the planning database and SyteLine application database. The default interval is 300 seconds.

41. Click **Next**. The **Planning and Scheduling Gateway Service User** screen is displayed.

The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with the subtitle "Planning and Scheduling Gateway Service User". The Infor logo is in the top right. The main text says "Enter the login information for the Planning and Scheduling Gateway." Below this are two input fields: "Service Logon:" and "Password:". A note at the bottom states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are four buttons: "Cancel", "< Back", "Next >", and "Commit".

42. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
43. Click **Next**. The **Planning and Scheduling Gateway Services** screen is displayed with information filled in.

The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with the subtitle "Planning and Scheduling Gateway Services". The Infor logo is in the top right. The main text says "The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list." Below this is a table with two columns: "Name" and "Timeout". The table contains one row: "SyteLine\_AppDemo on" with a timeout of "300". To the right of the table are three buttons: "Add", "Edit", and "Remove". At the bottom are four buttons: "Cancel", "< Back", "Next >", and "Commit".

| Name                | Timeout |
|---------------------|---------|
| SyteLine_AppDemo on | 300     |

44. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar reads 'Infor ERP SL Configuration Wizard'. The main heading is 'Planning and Scheduling Server Services' with the Infor logo to the right. Below the heading, a text box states: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below this text is a table with two columns: 'Name' and 'Port Number'. The table is currently empty. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

45. Click **Add**. The **Planning and Scheduling Server Connection Information** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar reads 'Infor ERP SL Configuration Wizard'. The main heading is 'Planning and Scheduling Server Connection Information' with the Infor logo to the right. Below the heading, a text box states: 'Enter the information needed to connect to the database that this Server Service will monitor. Also specify a port number and a folder for this Server's temporary files.' Below this text are several input fields: 'SQL Server Name:' (a drop-down menu), 'SQL Username:' (a text box), 'SQL Password:' (a text box), 'Application Database:' (a drop-down menu), 'Port Number:' (a text box containing '6000'), and 'Temporary Directory:' (a text box containing 'C:\Temp' with a browse button '...'). At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

46. Enter the following information:

- **SQL Server Name** - Choose the SQL server name from the drop down list.
- **SQL Username** - Enter the SQL username.
- **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.

- **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
- **Port Number** - The port number to use for the service (must be a number from 5000-65000). This must be a different port number than the port on which the planning database is running (you set up the planning database in Chapter 5, "Setting Up the Planning Server").
- **Temp Directory** - The path to a folder where the server service can write temporary files (such as c:\temp). This directory must allow full control by the local administrator user account.

47. Click **Next**. The **Planning and Scheduling Server Service User** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Planning and Scheduling Server Service User**

Enter the login information for the Planning and Scheduling Server.

Service Logon:

Password:

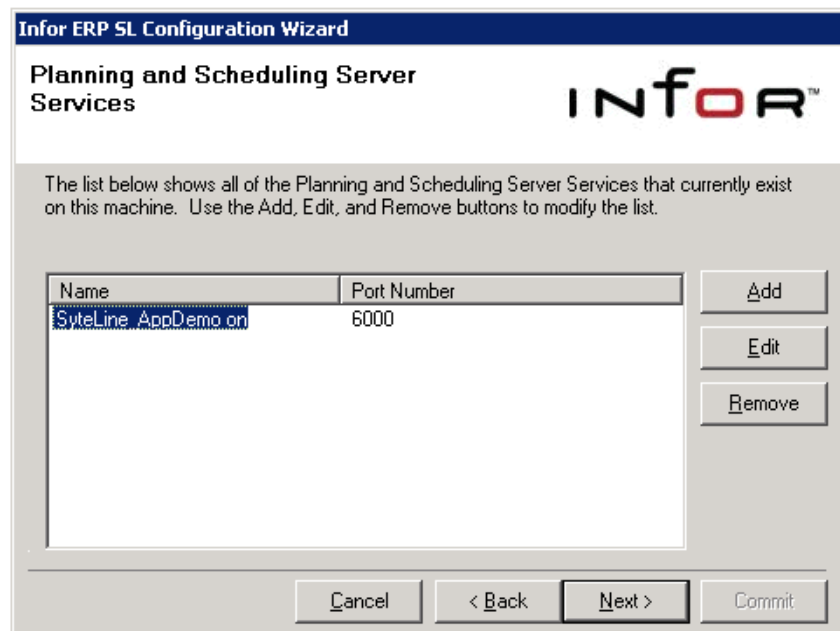
NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

Cancel < Back Next > Commit

48. Enter the following information:

- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

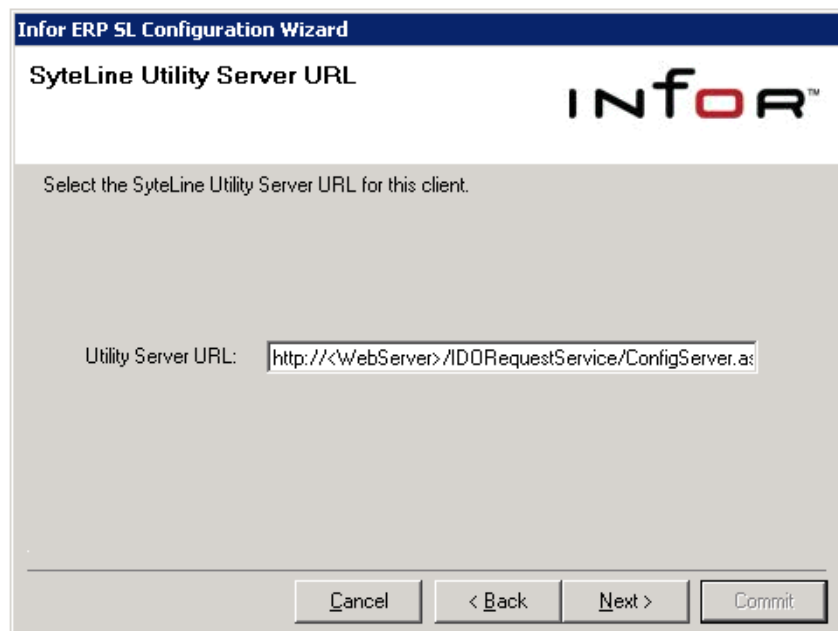
49. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed with information filled in.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. The main title is 'Planning and Scheduling Server Services' with the Infor logo to the right. Below the title, a text box states: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' A table with two columns, 'Name' and 'Port Number', contains one entry: 'SyteLine\_AppDemo on' and '6000'. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

| Name                | Port Number |
|---------------------|-------------|
| SyteLine_AppDemo on | 6000        |

50. Click **Next**. The **SyteLine Utility Server URL** screen is displayed.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. The main title is 'SyteLine Utility Server URL' with the Infor logo to the right. Below the title, a text box states: 'Select the SyteLine Utility Server URL for this client.' A text field labeled 'Utility Server URL:' contains the text 'http://<WebServer>/IDORrequestService/ConfigServer.as'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

51. In the **Utility Server URL** field, replace "<WebServer>" with the name of your utility server.

52. Click **Next**. The **Reports Server Setup** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Report Server Setup**

Enter the location of your report server.

Reports Server URL:

Reports Server Parent Folder:

Reports Directory:

53. Enter the following information:

- In the **Reports Server URL** field, replace "<ReportsServerName>" with the name of your reports server. If one of your server names defaulted in place of "<ReportsServerName>", and it is NOT your reports server, replace that name with the name of your reports server.
- In the **Reports Server Parent Folder** field, either accept the default or provide a new folder name.
- **Report Directory** - Accept the default, or define a different directory. You might create a different directory so that you can upload just one report instead of all of the reports in the default directory.

54. Click **Next**. The **Review Configuration Changes** screen is displayed.

55. Verify that the information is correct, and click **Commit**.

56. When the configuration process is complete, click **Next**.

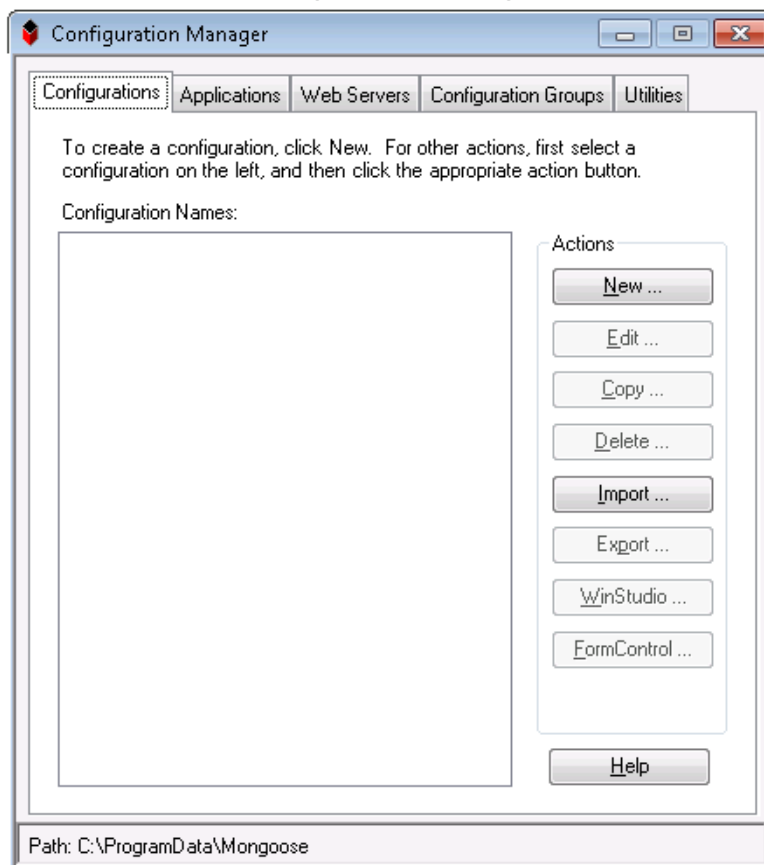
57. The **Additional Configuration** screen is displayed.



58. This screen contains two buttons. Each button opens a separate utility. To learn more about each utility, read each utility's online help.

- **Config Manager** - This button opens the Configuration Manager utility. To complete your utility server set up, you **MUST** use the Configuration Manager. You use this to create different configurations that point to the databases you want to access.
- **Service Config Manager** - This button opens the Service Configuration Manager utility. Use this utility to configure the services included in the toolset.

59. Click the **Config Manager** button on the **Additional Configuration** screen. The **Configuration Manager** utility opens. This utility is also found here - **Start>All Programs>Infor>Tools>Configuration Manager**.



60. Click **New**. The **New Configuration** dialog box is displayed. You must set up a configuration name on the utility server that exactly matches each site name, including case. For example, if the site name is ONT, you must have a configuration named ONT. The runtime application database specified for the ONT configuration must contain the ONT site's data, for example ONT\_app. You can set up additional configurations for each site with different names, for example SL8\_ONT\_Test. Give your configuration a name and click **OK**.

61. The **Edit Configuration** screen is displayed with the Runtime (Client) tab selected.

62. Yellow (or light shading if printing in black and white) has been added to the required fields on this tab just for the purposes of this manual. Notice there are two main sections on this screen, Runtime Application Database and Runtime Forms Database.

- **Runtime Application Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your application database in the previous chapter.
  - **Password** - Enter the password for the username. You provided this password when you created your application database in the previous chapter.
  - **Server** - Enter the name of your database server.

**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the application database you created in the previous chapter.
- **Runtime Forms Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your forms database in the previous chapter.
  - **Password** - Enter the password for the username. You provided this password when you created your forms database in the previous chapter.
  - **Server** - Enter the name of your database server.

**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the forms database you created in the previous chapter.

- **Form Templates Database Name** - If you created a templates database, select it here.

**Application** - Select **SL803**. You can create "applications" with different parameters using the Applications tab on the Configuration Manager.

63. Click the **Objects Metadata** tab.

The screenshot shows the 'Edit Configuration - OH' dialog box with the 'Objects Metadata' tab selected. The dialog has four tabs: 'Runtime (Client)', 'FormControl', 'Objects Metadata', and 'Source Control'. The 'Objects Metadata' tab contains two main sections. The left section, titled 'IDD Objects DB Specification (Required)', contains a text box with instructions: 'The following objects database server and database are used to define views and to designate a server link between the application and objects databases. To designate a different server and database, click the button below.' Below this are two text boxes: 'Server: [Not defined]' and 'Database Name: [Not defined]', followed by a button labeled 'Set Objects DB Specification...'. The right section, titled 'Source Control', contains a checkbox labeled 'Enabled' which is currently unchecked. At the bottom right of the dialog are buttons for 'Help', 'OK', and 'Cancel'.

64. Click the **Set Objects DB Specification** button. The **Set Objects Metadata Server/Database** screen is displayed:

Specify a SQL Server and Database name for the IDO Objects metadata database. A valid User and Password will be required to validate the Objects metadata database.

Note: Pressing 'OK' to accept the Server and Database specified will drop and recreate all Views to the Objects DB in the Application Database. Additionally, if the Server specified is different from the Server of the Application DB, a Linked Server definition will be set up as well.

Database Type:

.NET Provider:

Provider Driver:

User:

Password:

Server:

Database Name:

OK Cancel Help

65. Provide the following information:

**User** - Enter the username. This is the user name you supplied for the objects database in the previous chapter.

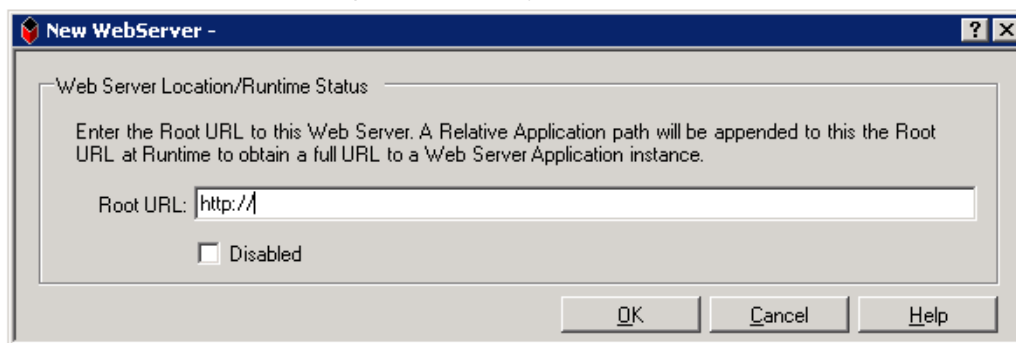
**Password** - Enter the password. This is the password you supplied for the objects database in the previous chapter.

**Server** - Enter the name of your database server.

**Database Name** - Select the name of the objects database you created in the previous chapter.

66. Click **OK** to close the **Set Objects Metadata Server/Database** screen. A success message is displayed. Click **OK**.
67. Click **OK** to close the **Edit Configuration** screen.
68. You are now back to the **Configuration Manager** screen. Click the **Web Servers** tab.
69. Click the **New** button. The **New Web Server** dialog box is displayed.
70. Enter any name into the lone field in this dialog box and click **OK**.

71. The **New Web Server** dialog box is displayed.



72. In the **Root URL** field, enter the name of your web server. In most cases this is the same machine as your utility server. Use the following syntax - `http://webservername`.

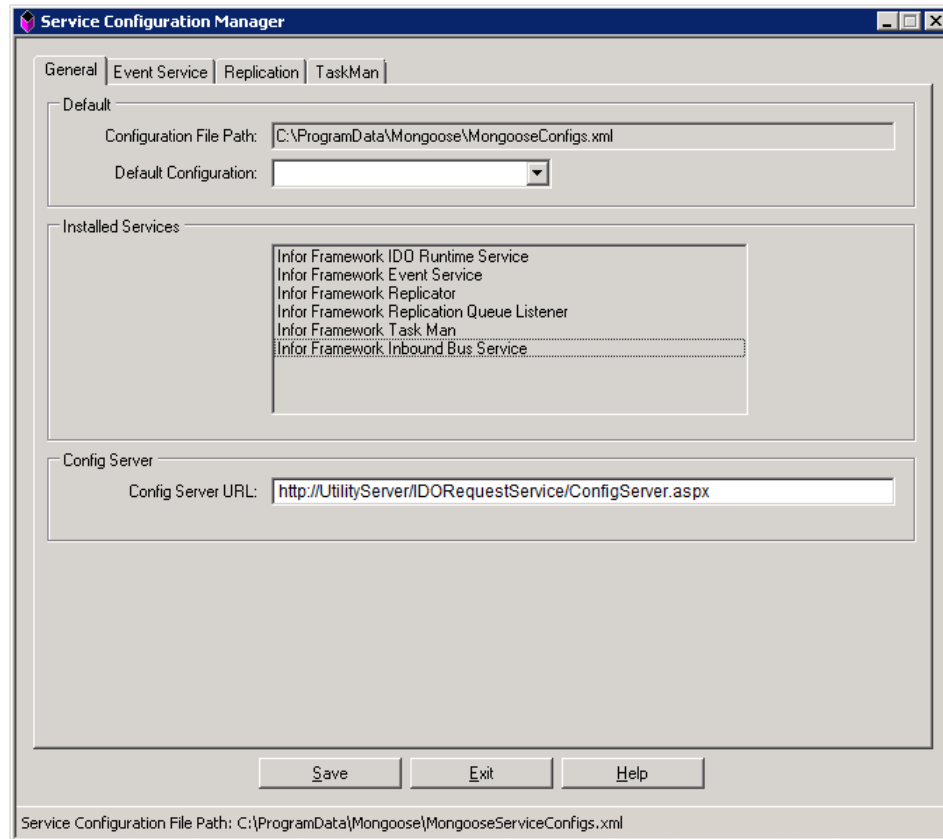
**NOTE:** Do NOT add a DMZ server name in this field.

73. Click **OK**. You can close or minimize the Configuration Manager.

## Update Service Configuration Manager Settings

When you add configurations as you just did with the Configuration Manager, you need to update the Service Configuration Manager utility so that the new configurations will be monitored by services such as TaskMan, Replication, and the Event System.

1. To access this utility, either click the **Service Config Manager** button on the Additional Configuration screen or select **All Programs>Infor>Tools>Service Configuration Manager** from the Start menu on the utility server.



The **General** tab shows what services are installed on this utility server and where to find configuration files. You can also specify a default configuration here, but currently it only applies to the Replication services.

Use the **Config Server URL** field to specify the URL to the configuration server.

This path must be provided in standard URL form, similar to this:

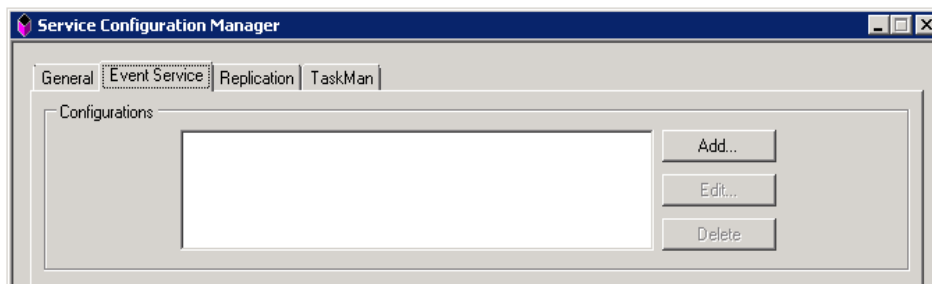
`http://UtilityServer/IDORequestService/ConfigServer.aspx`

where *UtilityServer* is the DNS or IP address of the utility server.

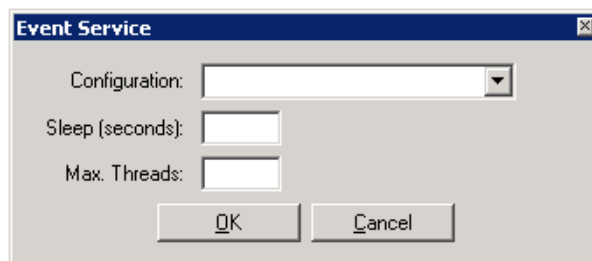
This value must be specified in order for IDO-based reports to run correctly.

## Set Up Monitoring of Events for Various Configurations

Use the **Event Service** tab on the Service Config Monitor to specify each of the configurations you want the Event System to monitor.



1. On the **Event Service** tab, click **Add** to display a dialog box where you can select a configuration and optionally specify sleep time (defaults to 10 seconds) and the maximum number of concurrent events that can run in this configuration (defaults to 5).



**NOTE:** You must set up a configuration name on the utility server that exactly matches each site name, including case. For example, if the site name is ONT, you must have a configuration named ONT.

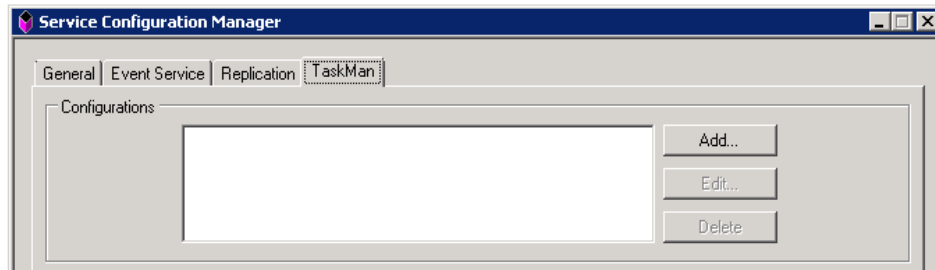
For more information, see the Service Configuration Manager online help.

2. Repeat Step 1 for all configurations you want the Event System to monitor. Usually you will select all configurations for monitoring.
3. Click the **Save** button at the bottom of the window to save your changes. The system will not recognize the changes until you stop and restart the services later in this chapter.

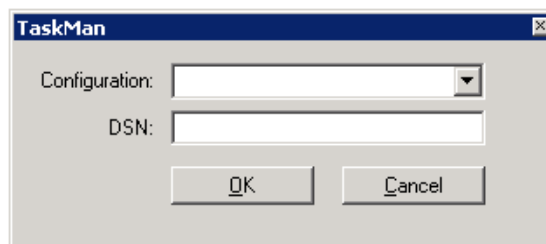
## Set Up TaskMan Monitoring of Configurations

Set up TaskMan to monitor each application database on which users will be executing reports, stored procedures, IDO methods, executables, or other background tasks. Include entity application databases, since financial reports can be run on them.

1. Go to the **TaskMan** tab of the Service Configuration Monitor.



2. Click **Add** to display a dialog box where you can select a configuration and optionally a DSN. (DSNs are only needed for some custom reports created in previous versions. See the Service Configuration Manager online help for more information.)



3. Click **OK**. The configuration is added to the list in the TaskMan tab.
4. Repeat Steps 2 and 3 until you have added all the configurations you want TaskMan to monitor.
5. Click the **Save** button at the bottom of the window to save your changes. The system will not recognize the changes until you stop and restart the services later in this chapter.

**NOTE:** Use the Service Configuration Manager additionally as part of a multi-site environment setup. See the *Multi-Site Implementation Guide* for more information.

## Post Configuration Wizard Steps if Using AD FS and IFS

The information in this section is necessary only if you chose to use AD FS for the Web Client. If you did not choose to use AD FS for the Web Client, skip to “Set Up Online Help” on page 58.

For additional information about installation and set up of AD FS and IFS, see the *AD FS and IFS Installation Guide* and the *Infor Federation Services Administration Guide*. The Administration Guide includes, among other things, how to create an IFS security group to link an application to IFS users. This is optional for SyteLine, not a necessity.

### Create AD FS Relying Party Trust for SyteLine Web Client

Infor Federation Services (IFS) comes with a utility named IFSCONFIGURATION.exe. This is a .NET application using the WS-Discovery protocol to communicate with the IFS Configuration Service. This utility is used to setup both AD FS and IFS correctly with your application's setting. For this tool to work properly, the CA certificate must be imported into the **Trusted Root Certification Authorities** store for the computer account.

1. Run the IFSCONFIG.exe as an administrator on your AD FS/IFS server, and it will start the discovery process. Once it finds your installation of IFS, expand the **Application** tab and enter the Name, Type, URL, Description and Relying Party Identifier. The URL and Relying Party Identifier should be the same; the URL to the Web Client. Ensure three things: (a) https is required; (b) the server name should match what was used in the SSL certificate (it is case-sensitive); and (c) drop the specific page and leave the trailing "/". As an example, what you enter into the URL and Relying Party Identifier fields should follow this syntax: **https://servername/WSWebClient/**
2. Click **Add/Replace**.

### Edit Settings for SyteLine Web Client in AD FS Management Tool

1. In the AD FS Management tool, open **Relying Party Trusts**.
2. Edit the Identifier and Endpoint URL to have the same value. The value should follow this syntax: **https://utilityservername/WSWebClient/**

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 36.

### Edit Infor Federations Services (IFS) Application Settings

1. On the server where you have IFS installed, open IFS.
2. Ensure that the URL and the Relying Party Identifier for the SyteLine application have the same value. The value should follow this syntax: **https://utilityservername/WSWebClient/**
3. The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 36.
4. Ensure the SyteLine application's status is **Active**.
5. Navigate to **Manage > Users**. Ensure there are users with authorization to the SyteLine application.

### SyteLine User Account Settings if Using AD FS

The SyteLine user account has to be matched up with a domain account when using AD FS authentication.

1. In SyteLine, open the **Users** form.
2. Ensure for each user accessing SyteLine via AD FS that the value in the **User ID** field matches the value in the **Workstation Domain/ID** field. Do not enter the domain prefix in the **Workstation Domain/ID** field since this is already known; only the account ID is needed.

The first time a user logs into the SyteLine Web Client via AD FS, there are two sign in screens; a Windows Security screen and then a SyteLine sign in screen. The user can eliminate the need for the second login screen by performing the following steps:

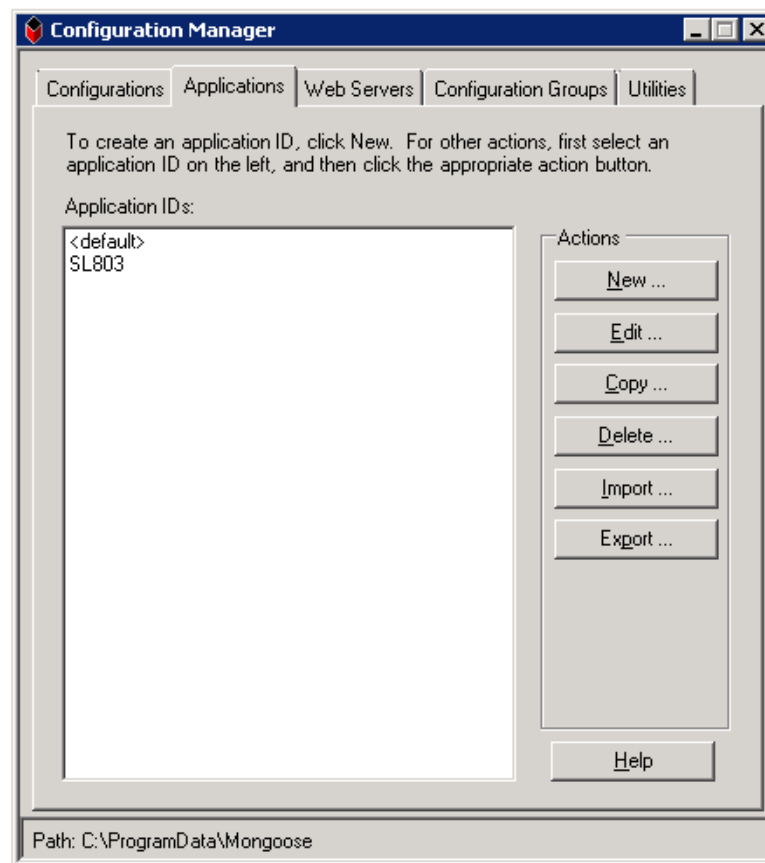
1. On the SyteLine Sign In screen, select the **Use Workstation Login** checkbox.
2. Provide the user name.

3. Leave the **Password** field blank.
4. Select the desired configuration.
5. Click **Sign In**.

## Set Up Online Help

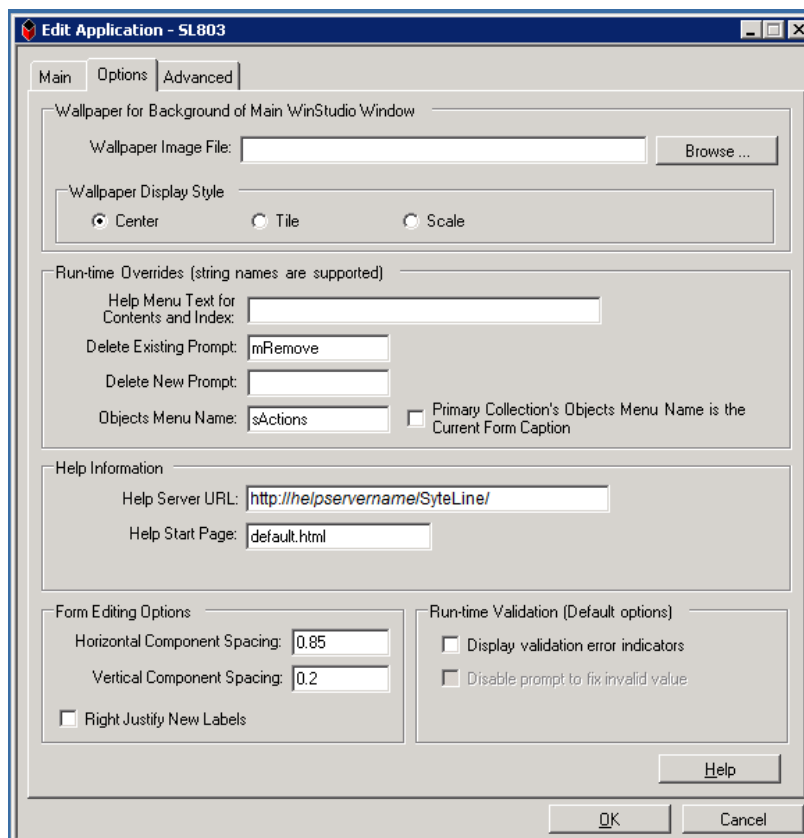
You must provide the name of the machine where you access the online help in order for the help to work.

6. Within **Configuration Manager (Start>All Programs>Infor>Tools>Configuration Manager)**, click the **Applications** tab.



7. Select the **SL803** Application ID and click the **Edit** button.
8. The **Edit Application** window is displayed.

9. Click the **Options** tab.



10. In the **Help Server URL** field, enter the following:  
**http://helpservername/SyteLine/**

The help server name is the name of the machine where the help resides. The help is on the utility server, so in most cases, the client on the utility server should access the help that is on the utility server.

11. In the **Help Start Page** field, enter **default.html**.

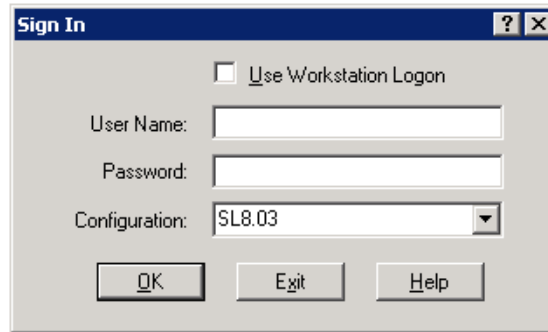
12. Click **OK** to close the **Edit Application** window.

## Test the Client on the Utility Server

**NOTE:** Reboot the utility server before you test the client. This ensures that all necessary Windows services are started.

A client is installed on all utility servers. You should test to see that it works.

1. Select **Start>All Programs>Infor>Infor ERP SL**. The **Sign In** screen is displayed.



2. Enter the following information:
  - **Use Workstation Login** - Select this check box to sign in to the system using your current Windows domain/userID.
  - **User Name** - Enter "**sa**". The "sa" username is used to enter SyteLine initially. This user only allows one session.
  - **Password** - Leave this field blank.
  - **Configuration** - Choose the configuration you created earlier in this chapter.
3. Click **OK**.

## Post Installation Setup

The information in this chapter from here forward details how to set up certain functions that may or may not apply to you. Topics include data collection, sending e-mail attachments, setting up report printing, previewing reports on a web client, and setting up a virtual directory for a Click Once Client.

## Final Data Collection Steps

**NOTE:** The following steps are for Data Collection users only.

### Set up the DC Client Directory and Data Collection Parameters

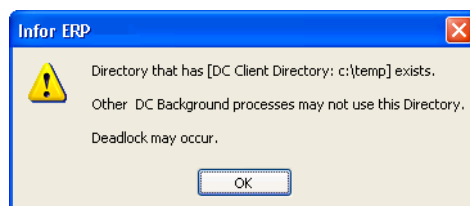
After you have installed data collection components and run the Infor ERP SL Configuration Wizard, you must set up the DC Client Directory, parameters, and background processor on the Data Collection Parameters form.

**NOTE:** We recommend you access the Data Collection Parameters form from the DC Client workstation or on the machine where you will be running the background processor.

Each SyteLine database in a multi-site environment must have a unique DC client directory. To set up the DC Client Directory and Data Collection Parameters:

1. Select the **Background tab** on the Data Collection Parameters form.

2. Enter a path to use as the DC client directory in the **DC Client Directory** field. When you save the record, if the path doesn't exist, the system creates it. If the path already exists, you will be cautioned that the path already exists, and not to use this path for other DC Background process.



3. Set the other parameters on the Data Collection Parameters form, such as polling frequency and auto-post parameters, if required for your implementation.

### Copy DcBackground.bat

During the installation of the Utility Server components, the Data Collection files are installed at **c:\Program Files\Infor\SyteLine\DataCollection\Intermec\DcSfc**. After defining the DC Client Directory, copy DcBackground.bat from the installation path above to the DC Client Directory path.

### Set Up the Background Processor

To set up the data collection background processor:

1. Select the **Background tab** on the Data Collection Parameters form.
2. Set the **Run Data Collection Background Process** field to either Background Task mode or Standalone mode. Consider the amount of data to be processed and your system requirements when deciding which mode to use. See the online help for the **Run Data Collection Background Process** field for more information.
3. If you selected to run the background processor in Background Task mode, you must:
  - Edit the dcbbackground.bat file in the DC Client Directory and change the line:

```
"C:\Program Files\Infor\SyteLine\DataCollection\
InterMec\DcSfc\DcBackground.exe" user=SL_Internal password= config=
SYMDCBKG=ENABLED
```

where:

**user=SL\_Internal** is required.

**password** is the password defined for SL\_Internal (default is blank; you can define this password on the Users form in Infor ERP SyteLine).

**config** is the site name.

**SYMDCBKG=ENABLED** is used to record the start and end of each poll in the collect.err file. Since this will require more disk space, you may want to use this value primarily for troubleshooting. Remove this value if not needed.

For example: **user=SL\_Internal password= config=ohio SYMDCBKG=ENABLED.**

- Open the **Background Task Definitions** form in SyteLine. Select the Dcbbackground task, and in the **Executable Name** field, enter **<dcclientdirectorypath>\dcbbackground.bat**, where **<dcclientdirectorypath>** is the path you defined in the DC Client Directory pathfield.
- 4. If you selected to run the background processor in Standalone mode, set the parameters for the background process shortcut. Right click **Start>Explore All Users**. Select **Start Menu>Programs>Infor>Tools**. Select **DC Background** and right click **Properties**. In the **Target** field, after "C:\Program Files\Infor\SyteLine\DataCollection\InterMec\DcSfc\Dcbbackground.exe", add **user=SL\_Internal password= config=SiteName SYMDCBKG=ENABLED**. Enter the password defined for SL\_Internal (default is blank; you can define this password on the Users form in Infor ERP SyteLine). SiteName is the name of the SyteLine site. Enter SYMDCBKG=ENABLED to record the start and end of each poll in the collect.err file. Since this will require more disk space, you may want to use it primarily for troubleshooting. Remove this value if not needed.
- 5. Start the background processor. See the online help for the Run Data Collection Background Process field for more information on how to do this for the mode selected.

### Run Test Transactions

After you have completed installing SyteLine, you may want to run test data collection transactions. We recommend you clear all auto-post parameters on the **Data Collection Parameters** form and do not use your primary database for testing. You can also use the purge utilities to delete the transactions in error processing instead of posting them.

## Setup a Utility Server to send E-mail Notifications for Reports

1. Perform the following tasks to notify TaskMan to send E-mail attachments:
  - a. Start SyteLine.
  - b. Open the **Sites/Entities** form.
  - c. Click on the row in the grid representing your site.
  - d. Right-click on the Intranet Name field and choose **Details....** The **Intranets** form opens.
  - e. Click on the Reports/TaskMan tab.
  - f. Make sure the **Send E-mail Notification** checkbox is checked.
2. Setup each report where notifications are required:
  - a. Start SyteLine.
  - b. Open the **Background Task Definitions** form.
  - c. Filter on the required task names.
  - d. For each task:
    - Click on **Report Options**.
    - Click on the row for the user and task name.
    - Choose any output format.
    - Set E-mail notification to **Yes**.

- If you want the report attached to the E-mail, set Attach Report to **Yes**.
3. Make sure the user printing the report contains a valid E-mail address:
    - a. Start SyteLine.
    - b. Open the **Users** form.
    - c. Filter on the user name in question.
    - d. Make sure the **E-mail Address** field is filled in and correct.
  4. Print the report.

### Troubleshooting

- Open the **Background Task History** form in SyteLine, filter on the Task Name field and investigate possible errors that TaskMan encountered.
- Open the **Application Event Log** for the operating system (“Event Viewer” in the control panel). Look for errors that TaskMan might have logged.
- If there are still no errors reported, start TaskMan with the “debug nowait” Start parameters. Consult the Application Event Log for debug messages that TaskMan logs.

## Set up Report Printing

1. On the **Intranets** form's Reports\TaskMan tab, specify the following:
  - Intranet name in the Intranet field
  - TaskMan Path = \\utilityservername\Syteline
  - Output
  - Preview
2. On the **Sites\Entities** form, specify the following:
  - Select Site in the Site field
  - Select the Site Name to match the Intranet name you chose in Step 1 above
  - Verify that Database Name field contains correct application database name
  - Verify that Forms Database Name field contains correct forms database.
3. Shut down the Infor Framework IDO Runtime Service, which also shuts down dependent services (for 8.00.10 and above). If you are not yet running 8.00.10 or above, you need to shut down the Infor Framework TaskMan service and the Infor Framework Event service BEFORE shutting down the Infor Framework IDO Runtime service.
4. Restart the services, starting with Infor Framework IDO Runtime Service.

### Define Your Printers

**NOTE:** When you define the printers, you must be logged in as the same user under which Task Manager is running.

Before you can print reports, you must define, on the utility server, each printer that will be used to print SyteLine reports. See your operating system documentation for more information about defining printers.

Once the printers are defined on the utility server, use the **Printers** and **Report Options** forms to further configure and define them for your users. For more information, see the online help.

## Preview Reports on the Web Client

To be able to preview reports when using Web Rendering (Web Client), perform the following steps:

1. On the utility server, create an IIS virtual directory under Default Web Site called "ReportPreview". This must refer to the folder that contains the "Report" folder.
2. On the Reports/Taskman tab of the **Intranets** form for your configuration, set the "Report URL" field to reference the virtual directory you just created.

## Set up Virtual Directory for Click Once Client

If you plan to use a Click Once Client, you must set up a Virtual Directory in IIS to preview reports on the client.

1. Open IIS Manager.
2. Right click Default Web Site.
3. Select **New>Virtual Directory**. This opens the Virtual Directory Creation Wizard.
4. Give the folder a name (an alias), and designate the directory path C:\Program Files\Infor\SyteLine.
5. Set the Virtual Directory Access Permissions to Read, Write, and Browse.
6. In SyteLine, navigate to the Reports/Taskman tab on the **Intranets** form.
7. In the Report URL field, enter **http://<servername>/<virtualdirectoryname>** where "<servername>" is the name of the Utility Server and "<virtualdirectoryname>" is the name you gave the folder earlier.
8. After saving all changes, restart IIS and the Infor Framework TaskMan service.

The steps in this chapter detail how to set up a DMZ server. The use of a DMZ server is optional.

On the DMZ server, the IDO Request Service and WSWebClient web applications are installed on a machine without the full utility server components (IDORuntime, TaskMan, etc.). You would choose to set up a DMZ server if you do not want to expose your utility server directly to the internet and do not want to place a load balancer or other hardware between the utility server and the internet. Secure Sockets Layer (SSL) should be used to secure communications between the DMZ and utility servers.

### Requirements

- .NET Framework version 4.0.
- You must enable Windows Authentication and Basic Authentication in the Internet Information Services (IIS) Manager.
- Install the Application Server role and ALL role services for this role.
- Install the Web Server (IIS) role and all role services for this role EXCEPT for the FTP Publishing Service. You CAN install the FTP Publishing Service if you like; it's just not required.
- Windows Server 2008 R2 with IIS7.
- A supported internet browser. Supported browsers are Internet Explorer 8 and 9, Firefox 7.0.1, Safari 5.1, and Chrome 14.

**NOTE:** If you use a Web Client with Internet Explorer 8, you must clear the **Display internet sites in Compatibility View** field found on the **Tools>Compatibility View Settings** dialog in Internet Explorer.

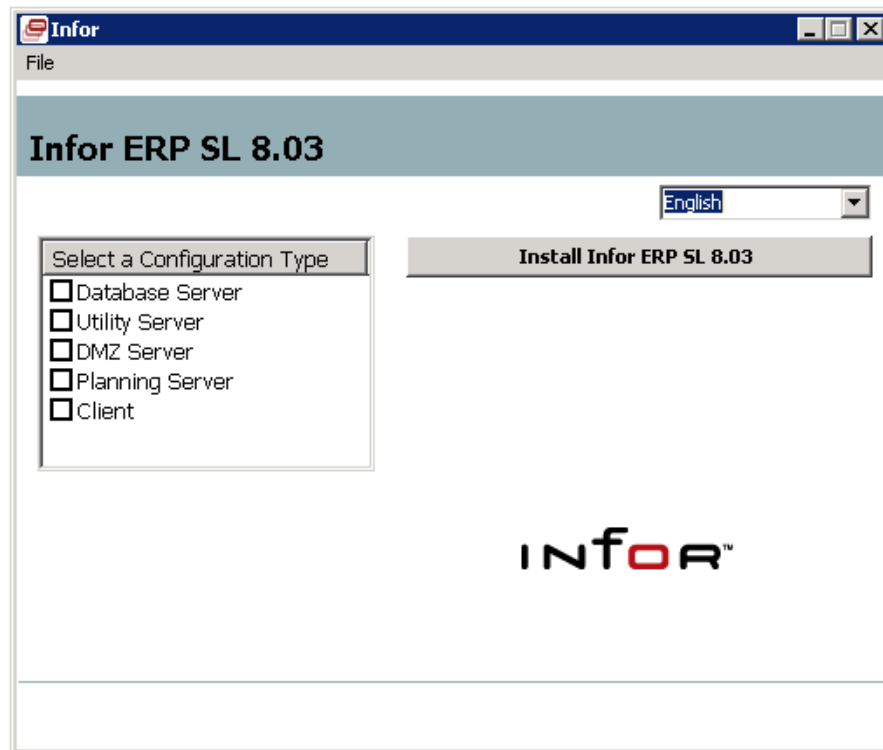
**NOTE:** For Internet Explorer 9, that setting must be enabled.

- If you want to use AD FS to access your Web Client, you must:
  - Set the Load User Profile to **True** under Process Model options in IIS.
  - Download and install Windows Identity Foundation version 3.5. See Microsoft's KB974405 for the download and instructions.
  - Configure Infor Federation Services (IFS). Details on how to do this are in Chapter 6, "Installing and Applying Service Packs". For additional information, see the *AD FS and IFS Installation Guide* and the *Infor Federation Services Administration Guide*.

- **Microsoft Components** - You must download and install the following components from Microsoft's web site. The version listed is not necessarily the latest version, but it is the required version:
  - Microsoft ASP.NET MVC 2
  - .NET Framework 3.5 Service Pack 1
  - .NET Framework version 4.0.

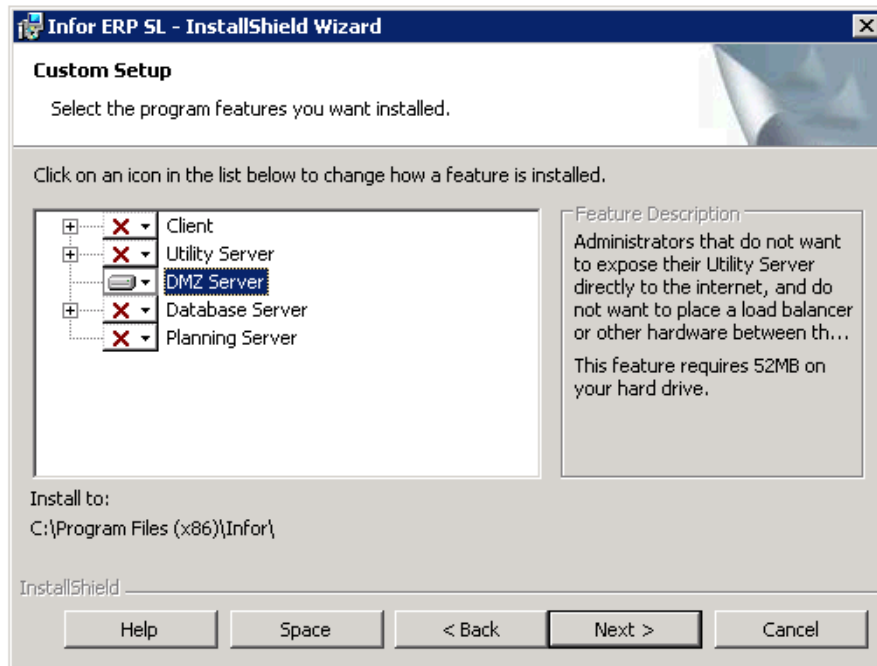
## Install Components on the DMZ Server

1. Download the proper version of the .iso file from the Download Center.
2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.



3. Select **DMZ Server** as the configuration type.
4. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.

5. Click **Next**. The **Custom Setup** screen is displayed.



6. Click **Next**. The **Ready to Install the Program** screen is displayed.

7. Click **Install**.

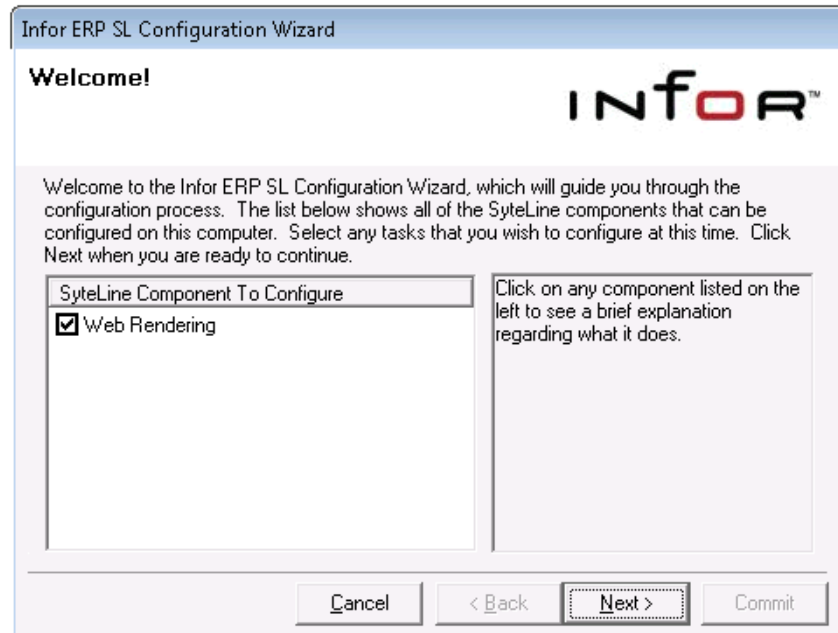
8. Once the installation process is complete, click **Finish**.

## Configure the DMZServer

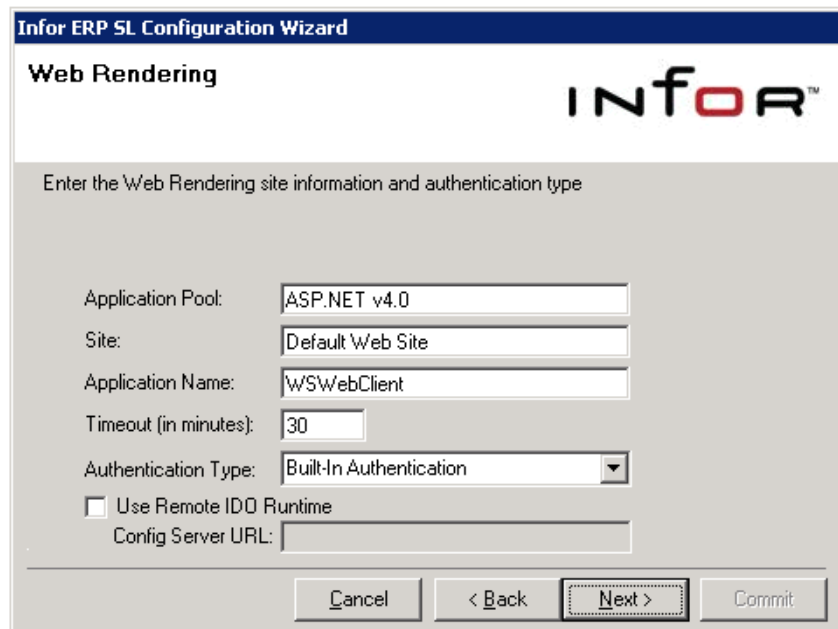
Once the installation completes, run the **Infor ERP SL Configuration Wizard** to configure the DMZ server. If you choose not to configure a piece as you go through the wizard, leave the screen blank and click **Next**.

1. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**.

2. The **Welcome!** screen is displayed.



3. Select the **Web Rendering** check box.
4. Click **Next**. The **Web Rendering** screen is displayed.



5. Enter data into or update the following fields:

- **Application Pool** - Enter the application pool. An Application Pool can contain one or more applications and allows you to configure a level of isolation between different Web applications. For example, if you want to isolate all the Web applications running in the same computer, you can do this by creating a separate application pool for every Web application and placing them in their corresponding application pool. Because each application pool runs in its own worker process, errors in one application pool will not affect the applications running in other application pools.
- **Site** - Enter the site name. "Default Web Site" is created when you install IIS. You can use this one or create a different one. The site name is only used for internal configuration of the web site using the IIS Manager tool. The name you specify here will not impact the URL that you will use to access the web site.
- **Application Name** - The Application Name is the name that you use to access the web site. The name you specify here becomes part of the URL used to access the web site. The full URL to access the Web Rendering web site will be in the form of:  
http://servername/application name/Default.aspx
- **Timeout (in minutes)** - Accept the default of 30 minutes, or assign a new number.
- **Authentication Type**
  - **Built-In Authentication** - If you choose this option, you are prompted for their normal SyteLine username and password to access the Web Client.
  - **IIS Authentication** - If you choose this option, you are prompted for the username and password that the IIS administrator has configured for them to access the Web Client. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the IIS username to the SyteLine username.
  - **Active Directory Federation Services (ADFS)** - If you choose this option, you are prompted for the Windows Active Directory username and password to access the Web Client. These usernames and passwords are set up by the network administrator. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the Active Directory username to the SyteLine username.
- **Use Remote IDO Runtime** - You must select this check box if you are using a DMZ Server. If not using a DMZ server, do not select this check box. When you select this check box, the Config Server URL field becomes enabled.
- **Config Server URL** - This field is enabled only if the Use Remote IDO Runtime check box is selected. Replace "<WebServer>" with the name of the utility server you want the DMZ server to communicate with.

6. If you chose the Active Directory Federation Services (ADFS) option on the **Web Rendering** screen, the **Web Rendering ADFS Authentication** screen is displayed. If you didn't select that option, skip to step 8.

**Infor ERP SL Configuration Wizard**

**Web Rendering ADFS Authentication**

Enter the Web Rendering ADFS Authentication information

STS Server Name:

FederationMetadata.Xml Location:

Federation Service URL:

Trust Server URL:

STS Certification Thumbprint:

Application URL:

Buttons: Cancel, < Back, Next >, Commit

7. Enter data into or update the following fields:

- **STS Server Name** - This is the server with AD FS / IFS providing claims-based token management. This name should be fully-qualified and must match what is expected in the SSL web server certificate. This name is case sensitive. This certificate resides on the STS server.
- **FederationMetadata.Xml Location** - This field is automatically populated after you provide the STS Server Name. The syntax is:  
https://STSServerName/FolderLocation/FederationMetadata.xml.
- **Federation Service URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: https://STSServerName/adfs/ls.
- **Trust Server URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: http://STSServerName/adfs/services/trust.
- **STS Certification Thumbprint** - This is the thumbprint property number of the token-signing certificate used within AD FS. You need to copy this number and paste it into this field. To get the number, within AD FS, navigate to **Service>Certificates**. Double-click the token-signing certificate and then select **Thumbprint**. The number that is displayed for thumbprint is the number you need to paste here. When you copy the number, there is a leading space. Delete that space after pasting it into the STS Certification Thumbprint field.

- **Application URL** - Provide the application URL. This name should be fully-qualified and must match what is expected in the SSL web server certificate. The server name part of this URL is case sensitive. This certificate resides on the STS server. Use this syntax: `https://utilityservername/WSWebClient/`

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end.

8. Click **Next**. The **Review Configuration Changes** screen is displayed. Read the information on the screen to ensure it is correct.
9. Click **Commit**.

## Post Configuration Wizard Steps if Using AD FS and IFS

The information in this section is necessary only if you chose to use AD FS for the Web Client.

For additional information about installation and set up of AD FS and IFS, see the *AD FS and IFS Installation Guide* and the *Infor Federation Services Administration Guide*. The Administration Guide includes, among other things, how to create an IFS security group to link an application to IFS users. This is optional for SyteLine, not a necessity.

### Create AD FS Relying Party Trust for SyteLine Web Client

Infor Federation Services (IFS) comes with a utility named IFSCONFIG.exe. This is a .NET application using the WS-Discovery protocol to communicate with the IFS Configuration Service. This utility is used to setup both AD FS and IFS correctly with your application's setting. For this tool to work properly, the CA certificate must be imported into the **Trusted Root Certification Authorities** store for the computer account.

1. Run the IFSCONFIG.exe as an administrator on your AD FS/IFS server, and it will start the discovery process. Once it finds your installation of IFS, expand the **Application** tab and enter the Name, Type, URL, Description and Relying Party Identifier. The URL and Relying Party Identifier should be the same; the URL to the Web Client. Ensure three things: (a) https is required; (b) the server name should match what was used in the SSL certificate (it is case-sensitive); and (c) drop the specific page and leave the trailing "/". As an example, what you enter into the URL and Relying Party Identifier fields should follow this syntax: `https://servername/WSWebClient/`
2. Click **Add/Replace**.

### Edit Settings for SyteLine Web Client in AD FS Management Tool

1. In the AD FS Management tool, open **Relying Party Trusts**.
2. Edit the Identifier and Endpoint URL to have the same value. The value should follow this syntax: `https://utilityservername/WSWebClient/`

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 71.

## Edit Infor Federations Services (IFS) Application Settings

1. On the server where you have IFS installed, open IFS.
2. Ensure that the URL and the Relying Party Identifier for the SyteLine application have the same value. The value should follow this syntax:  
`https://utilityservername/WSWebClient/`
3. The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 71.
4. Ensure the SyteLine application's status is **Active**.
5. Navigate to **Manage>Users**. Ensure there are users with authorization to the SyteLine application.

## SyteLine User Account Settings if Using AD FS

The SyteLine user account has to be matched up with a domain account when using AD FS authentication.

1. In SyteLine, open the **Users** form.
2. Ensure for each user accessing SyteLine via AD FS that the value in the **User ID** field matches the value in the **Workstation Domain/ID** field. Do not enter the domain prefix in the **Workstation Domain/ID** field since this is already known; only the account ID is needed.

The first time a user logs into the SyteLine Web Client via AD FS, there are two sign in screens; a Windows Security screen and then a SyteLine sign in screen. The user can eliminate the need for the second login screen by performing the following steps:

1. On the SyteLine Sign In screen, select the **Use Workstation Login** checkbox.
2. Provide the user name.
3. Leave the **Password** field blank.
4. Select the desired configuration.
5. Click **Sign In**.

## Requirements

- A client workstation must have a Windows 2003, Windows XP, Windows Vista, Windows 7, Windows Server 2008 R2 operating system.
- SQL Client Tools must be installed on all Administrative Client machines prior to setting up a client.
- If you are using a Web Client (Web Rendering), which became available in version 8.02.10, you should disable pop up blockers in your browser. Pop up blockers prevent the online help from displaying.
- If you set up a Click Once Client or Administrative Client, you must install .NET Framework version 4.0. This MUST be the Extended/Full Version, NOT the Client Profile version that is installed with Windows Update. You must download the Extended/Full Version from Microsoft's Download Center. Search for "Microsoft .NET Framework 4 (Web Installer)".
- An Administrative Client must have Internet Information Services (IIS) and Active Server Pages installed and allowed. You must reboot your machine after installing these pieces for SyteLine to work properly.
- To view report output, at least one of the following software applications must be installed on the client machine:
  - Microsoft Word
  - Microsoft Excel
  - Adobe Acrobat

## Installation Options

There are four options from which to choose when installing to a client machine.

- **Click Once Client** - This option creates the thinnest client possible. In order to install a client in this manner, click once client code must have been installed on the utility server. See Chapter 2, "Setting up the Utility Server" for more information on setting up your utility server to support click once clients.
- **End User Client (Smart Client)** - Minimum files and setup for User Interface to Infor ERP SyteLine. This is a remote client that connects to the session server (usually the Utility Server).

- **Administrative Client** - Some additional tools for system administrators are added. The Utility Server requires an Administrative Client, but you can install it on its own machine if you need to (you would do this for a developer environment).
- **Web Client** - Directions for installing and configuring a Web Client are found in Chapter 2, "Setting up the Utility Server" and also in Chapter 3, "Setting Up the DMZ Server" (if you are setting up a DMZ server). In both cases, you choose the "Web Rendering" component when running the Infor ERP SL Configuration Wizard.

## Configure the Client

After you install one of the End User or Administrative client options, you must configure that client machine with the **Infor ERP SL Configuration Wizard**. You will find the configuration instructions after the installation instructions in this chapter. Installation and configuration must be performed on all client machines.

**NOTE:** After you configure the client, see "Run SyteLine" on page 87 for direction on how to launch SyteLine.

## Install Click Once Client

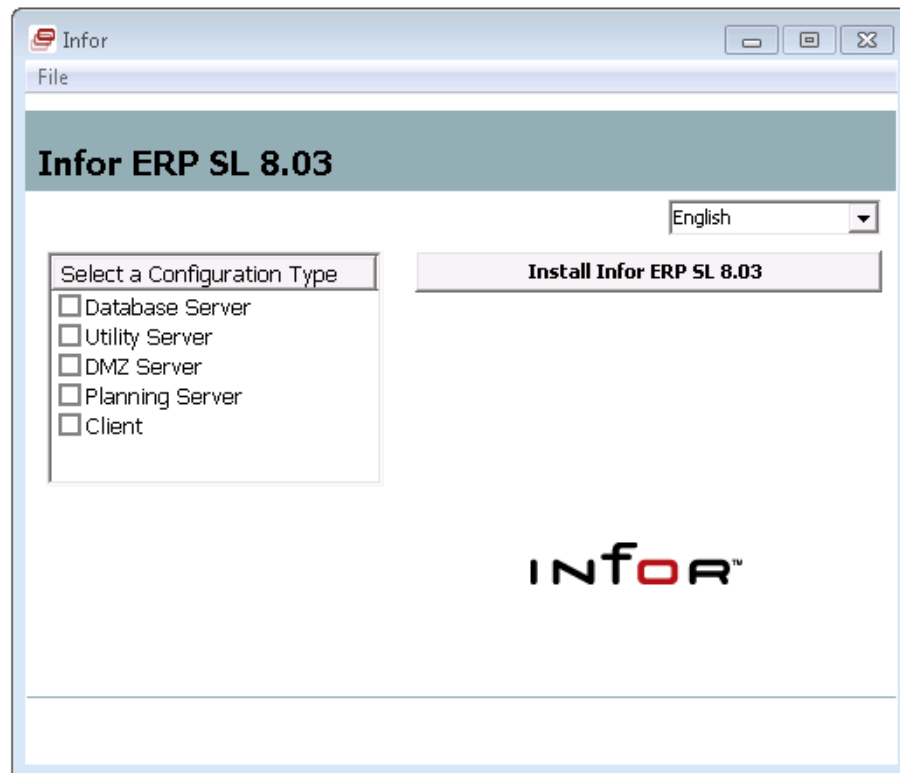
In order to set up a client in this manner, you must have already set up your utility server to serve Click Once clients. Set up this kind of client if you want the clients to be thin.

1. Open a web browser.
2. Go to the following URL - <http://utilityservername/SLClientDeploy/SyteLine.application>
3. A message is displayed asking if you want to install. Click the **Install** button.
4. The SyteLine logon screen is displayed.

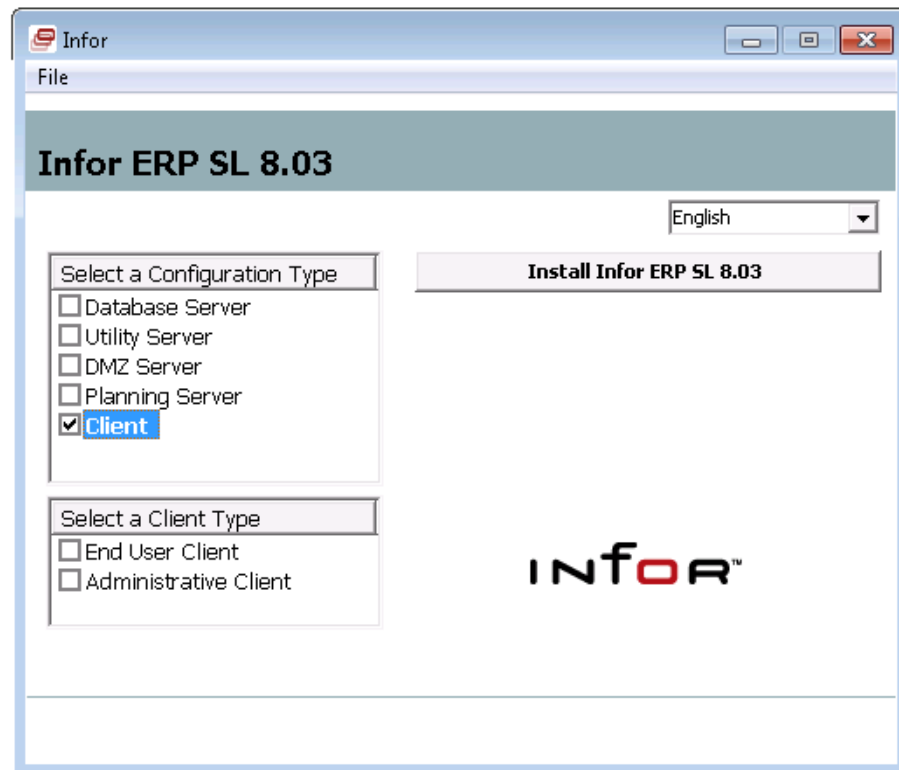
## Install End User Client

1. Download the proper version of the .iso file from the Download Center.

2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed..

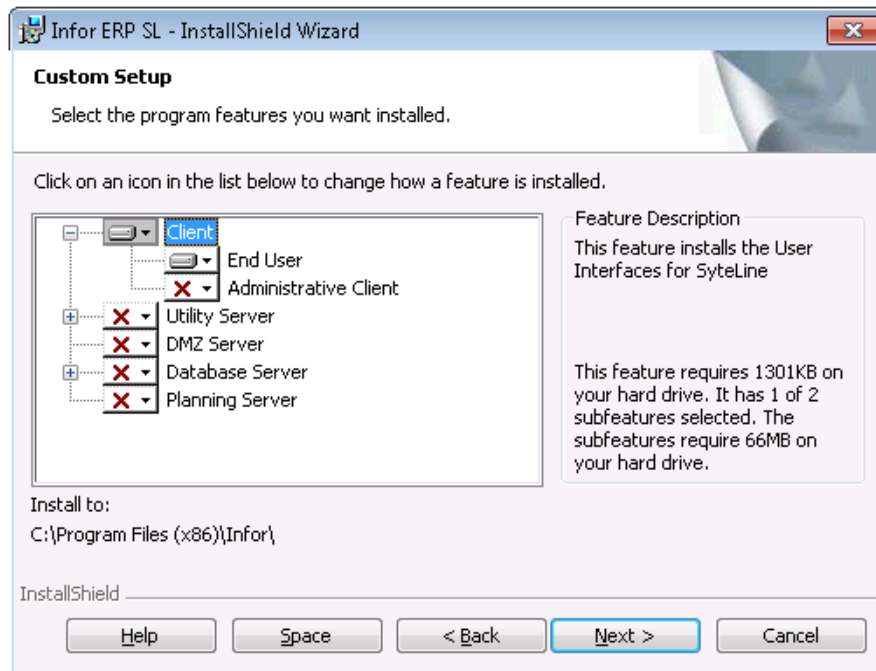


3. Select **Client** as the configuration type. The **Select a Client Type** box is displayed on the screen.



4. Select **End User Client** from the **Select a Client Type** box.
5. Click the **Install Infor ERP SyteLine** button. The **Welcome** screen is displayed.

6. Click **Next**. The **Custom Setup** screen is displayed.



7. Click **Next**. The **Ready to Install the Program** screen is displayed.

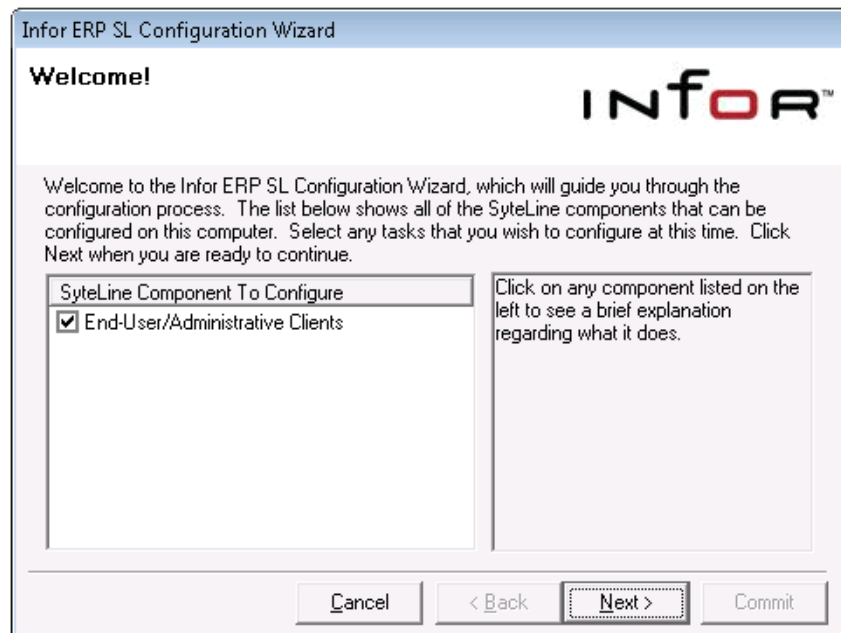
8. Click **Install**.

9. When the installation process is finished, click **Finish** to close the installation screen.

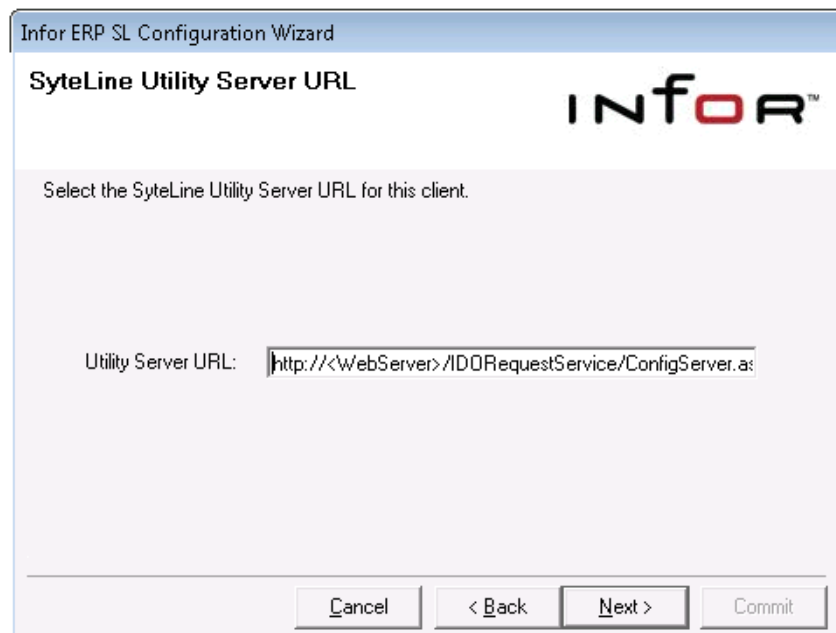
## Configure End User Client

After you finished the install for the End User Client, you must run the **Infor ERP SL Configuration Wizard** to configure the End User Client.

1. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**. The **Welcome!** screen is displayed.



2. Click **Next**. The **SyteLine Utility Server URL** screen is displayed.



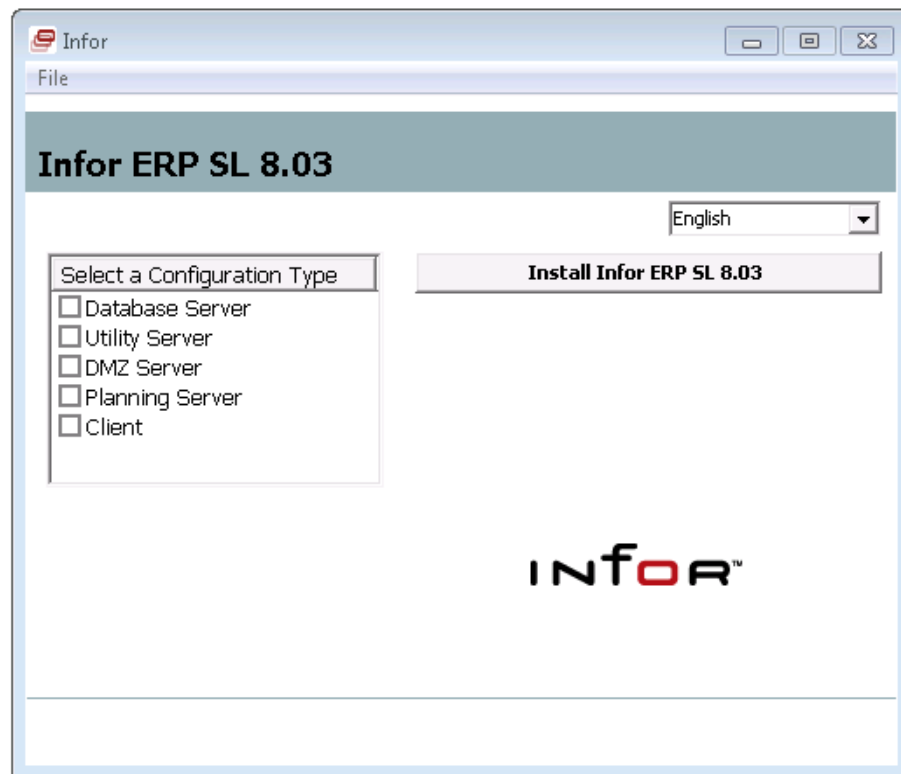
3. Enter the following information:
  - **Utility Server URL** - Replace <WebServer> with the name of your web server (usually the Utility Server).
4. Click **Next**. The **Review Configuration Changes** screen is displayed.
5. Verify that the information is correct, and click **Commit**. The **Configuration Complete** screen is displayed.

6. Click **Finish**.

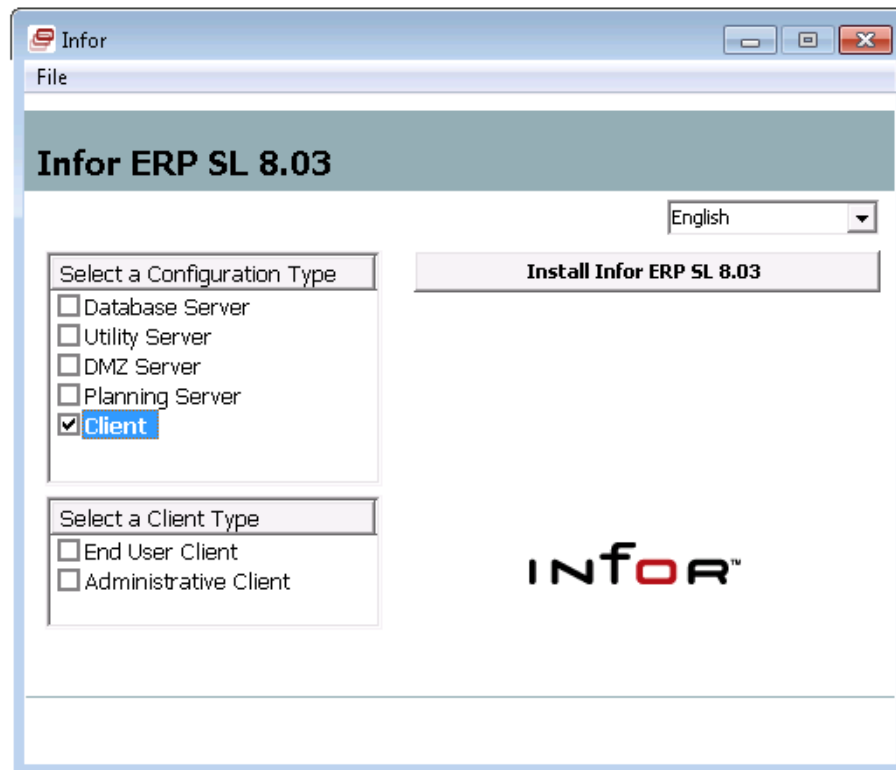
The setup of an End User Client is now complete. Skip to “Apply Any Available Service Packs” on page 87.

## Install Administrative Client

1. Download the proper version of the .iso file from the Download Center.
2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.

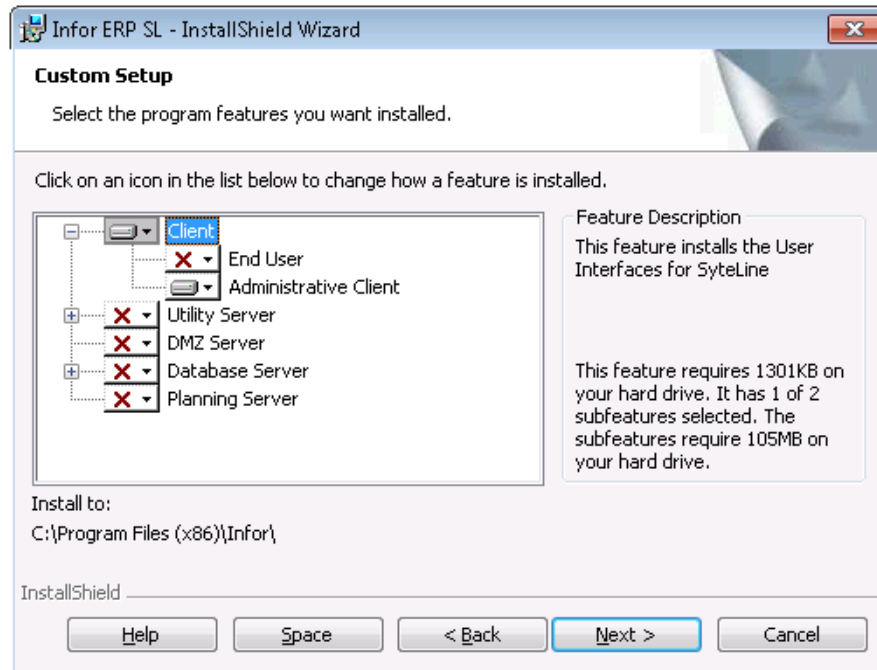


3. Select **Client** as the configuration type. The **Select a Client Type** box is displayed on the screen.



4. Select **Administrative Client** from the **Select a Client Type** box.
5. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.

6. Click **Next**. The **Custom Setup** screen is displayed.



7. Click **Next**. The **Ready to Install the Program** screen is displayed.

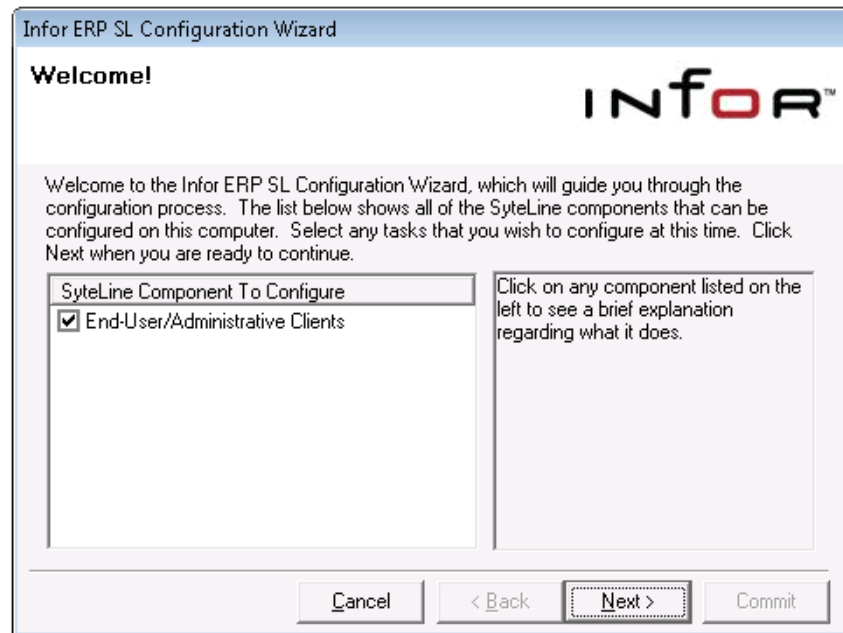
8. Click **Install**.

9. When the installation process is finished, click **Finish** to close the installation screen.

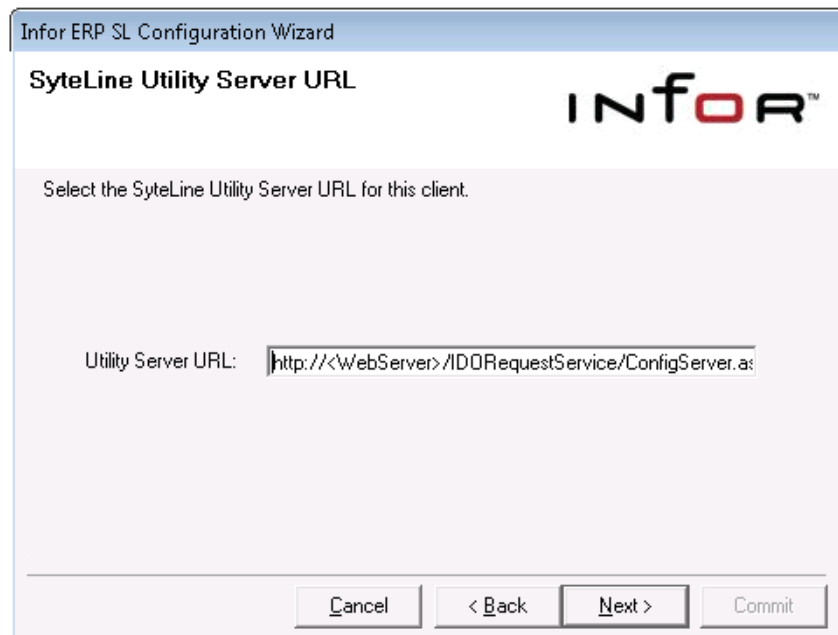
## Configure Administrative Client

After you finished the install for the **Administrative Client**, you must run the **Infor ERP SL Configuration Wizard** to configure the **Administrative Client**.

1. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**. The **Welcome!** screen is displayed.

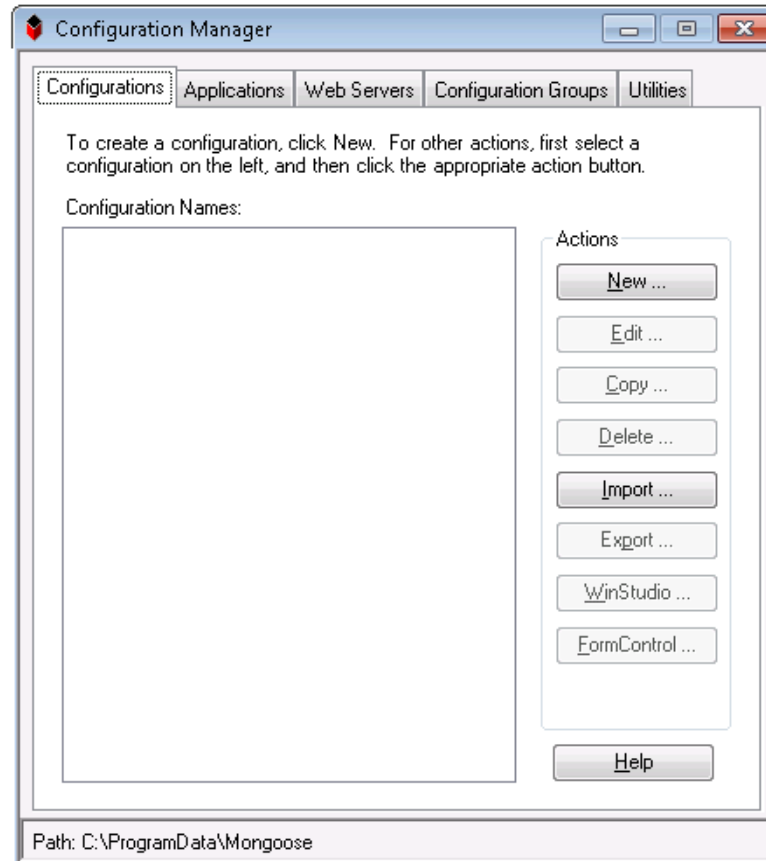


2. Click **Next**. The **SyteLine Utility Server URL** screen is displayed.



3. Enter the following information:
  - **Utility Server URL** - Replace <WebServer> with the name of your web server (usually the Utility Server).
4. Click **Next**. The **Review Configuration Changes** screen is displayed.
5. Verify that the information is correct, and click **Commit**. The **Configuration Complete** screen is displayed.

6. Click **Finish**. You must now create a configuration.
7. Open **Configuration Manager**. Select **Start>All Programs>Infor>Tools>Configuration Manager**.



8. Click **New**. The **New Configuration** dialog box is displayed. Give your configuration a name and click **OK**.

9. The **Edit Configuration** screen is displayed with the Runtime (Client) tab selected.

10. Yellow (or light shading if printing in black and white) has been added to the required fields on this tab just for the purposes of this manual. Notice there are two main sections on this screen, Runtime Application Database and Runtime Forms Database.

- **Runtime Application Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your application database earlier.
  - **Password** - Enter the password for the username. You provided this password when you created your application database earlier.
  - **Server** - Enter the name of your database server.

**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the application database you created earlier.
- **Runtime Forms Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your forms database earlier.
  - **Password** - Enter the password for the username. You provided this password when you created your forms database earlier.
  - **Server** - Enter the name of your database server.

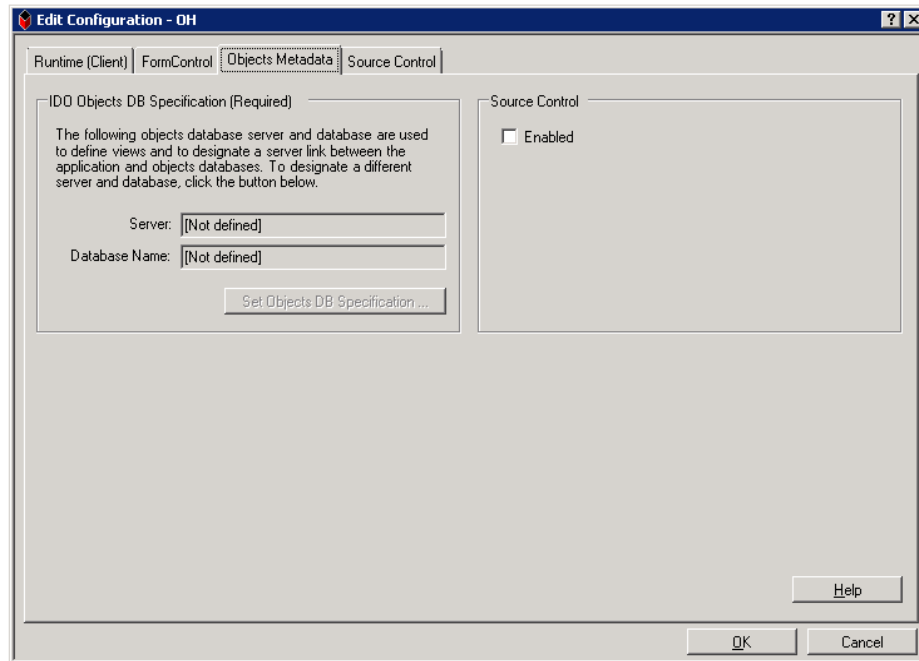
**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the forms database you created earlier.

- **Form Templates Database Name** - If you created a templates database, select it here.

**Application** - Select the default application of **SL803**. You can create "applications" with different parameters using the Applications tab on the Configuration Manager.

11. Click the **Objects Metadata** tab.



12. **Enabled** check box - for objects databases in which IDO objects and metadata must be checked in and out for editing using a source control system, select this check box. If you select this check box, you must also designate a server URL or path on the Source Control tab. Using a source control system is optional.

13. Click the **Set Objects DB Specification** button. The **Set Objects Metadata Server/Database** screen is displayed:

Specify a SQL Server and Database name for the IDO Objects metadata database. A valid User and Password will be required to validate the Objects metadata database.

Note: Pressing 'OK' to accept the Server and Database specified will drop and recreate all Views to the Objects DB in the Application Database. Additionally, if the Server specified is different from the Server of the Application DB, a Linked Server definition will be set up as well.

Database Type:

.NET Provider:

Provider Driver:

User:

Password:

Server:

Database Name:

OK Cancel Help

14. Provide the following information:
- **User** - Enter the username. This is the user name you supplied for the objects database earlier.
  - **Password** - Enter the password. This is the password you supplied for the objects database earlier.
  - **Server** - Enter the name of your database server.
  - **Database Name** - Select the name of the objects database you created earlier.
15. Click **OK** to close the **Set Objects Metadata Server/Database** screen. A success message is displayed. Click **OK**.

**NOTE:** If you just set up an Administrative Client in preparation for creating a developer environment, then you are finished with this chapter.

## Start IDO Runtime Development Server

You must start the IDO Runtime Development Server in order for an administrative client to run.

1. Select **Start>All Programs>Infor>Tools>IDO Runtime Development Server**.
2. You can minimize the **IDO Runtime Development Server** application.

## Apply Any Available Service Packs

Now that you've set up your Database Server, Utility Server, and a client, you are able to log into SyteLine. Before you do so though, you **MUST** install and apply any available service packs. If no service packs are available, you can log into SyteLine. If you need to apply service packs, see Chapter 7, "Installing and Applying Service Packs" for directions on where to get and how to apply service packs.

## Run SyteLine

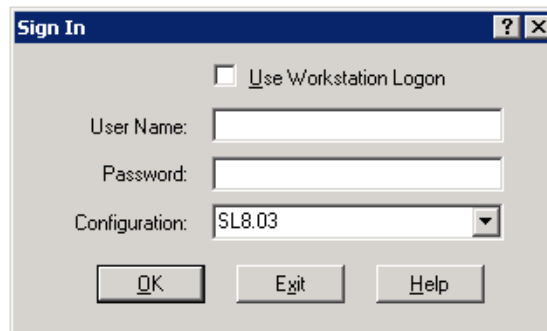
**NOTE:** Critical information is contained in the steps immediately below, especially if you are a multi-site user.

Once you have set up your client workstation, you should be able to run Infor ERP SyteLine.

1. Choose **Start>All Programs>Infor**.
2. Select the icon for SyteLine.

**NOTE:** When you install an Administrative Client, two icons are placed on the desktop. One is labeled as the Administrative Client. The other icon is not for an Administrative Client and should be deleted.

3. The following **Sign In** screen is displayed:



4. Logon as "sa", and provide the sa password; this is the same password used for your SQL sa. This user allows you to enter SyteLine so that you can set up other users and parameters for your system. The "sa" user is a single session user, so you will not be able to logon from another machine with that user ID if you are still logged on as "sa" somewhere else.
5. Select the appropriate configuration name from the Data Source Config field, and click **OK**. Different configurations point to different databases. SyteLine will open.
6. Open up the **License Management** form and apply your license. See the *Infor10 ERP Business (SyteLine) System Administration Guide* for information about the License Management form and how to apply your license.

7. For sites only (not entities), open the **Order Entry Parameters** form and specify the invoice number length in the Invoice Length field. We recommend that you set this field to the maximum length of 12.

**NOTE:** The invoice number length must be the same for all sites in the system. It must be set at each site.

Once the Invoice Length field is set to a non-null value, the value can never be updated.

After you save the change, the system updates about 50 database tables, so it will take a long time to process.

If you are operating a multi-site system, see the *Multi-Site Implementation Guide* for more information about the invoice number length.

8. You can now set up additional users on the Users form and begin using SyteLine.

**NOTE:** This chapter applies only if you plan to use the Infinite APS or APS Planning modes.

The Planning Server components support the Infor APS Planning activity and Get ATP/CTP functions, which are features associated with the Infinite APS and APS modes. This chapter details how to install the planning server.

## Requirements

- The Planning Server must have SQL Client Tools installed.
- .NET Framework version 4.0.
- Windows Server 2008 R2.
- To run the Planner Manager, you must download and install the Microsoft Visual C++ 2005 Redistributable Package (x86). Even though this is intended for 32-bit machines, you must do this for 64-bit machines. Do NOT use Microsoft's 64-bit version of the package. Use only the following URL:

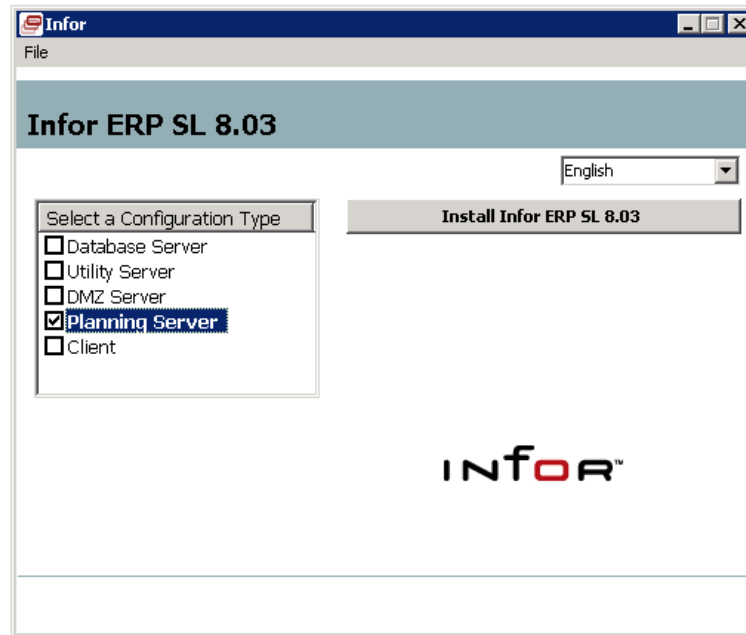
<http://www.microsoft.com/download/en/details.aspx?id=3387>

## Install the Planning Server Components

Follow these steps to install the Planning Server components:

1. Download the proper version of the .iso file from the Download Center.

2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.



3. In the Select a Configuration Type field, select **Utility Server** and **Planning Server**.
4. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.
5. Click **Next**. The **Custom Setup** screen is displayed.
6. Make sure the **Planning Server** component is selected and click **Next**. The **Ready to Install the Program** screen is displayed.
7. Click **Install**.
8. Click **Finish** to complete the installation.
9. If the **After Installation** screen exists, click **Next** and then **Finish**.

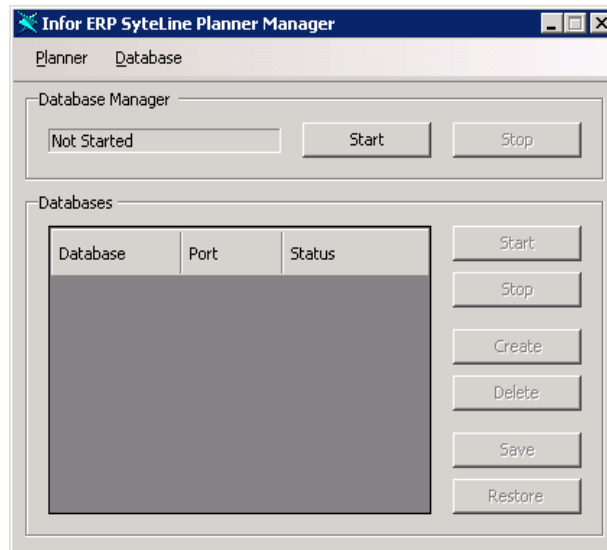
## Creating and Starting Planning Databases

A Planning Database must be installed and running before you can run APS Planning or use the Get ATP/CTP functions. Use the Planner Manager to create and start Planning Databases.

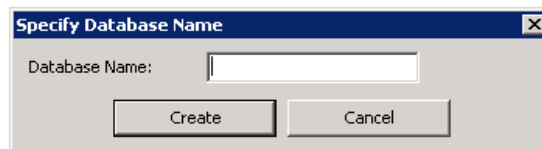
For more information about the Planner Manager commands, see the Planner Manager Online Help.

**NOTE:** Do NOT perform these steps through a Remote Desktop Connection.

1. Start the Planner Manager utility. Select **Start>All Programs>Infor>Tools>Planner Manager** from the Windows Start menu. The **Planner Manager** is displayed.



2. Click the **Start** button in the Database Manager section of the screen to start the Database Manager.
3. Click the **Create** button in the Databases section of the screen to create a new database.

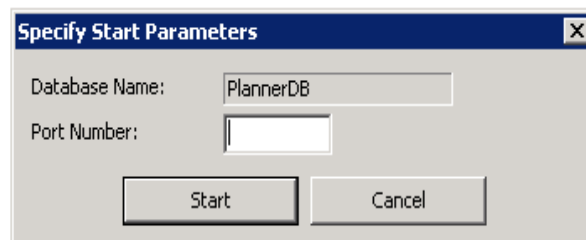


4. Enter a name for the new database and click the **Create** button.

The database name is displayed in the list with the status "Not Started" and a blank server port. You will specify the server port later when you start the database.

**NOTE:** The names of the databases are not case-sensitive, so the Planner Manager does not allow you to create a database called "Demo" if a database called "demo" already exists.

5. Select the new database in the list and click the **Start** button. The **Specify Start Parameters** dialog is displayed.



6. In the Port Number field, enter an unused port number for this database to run on. The system limits this selection to ports between 5000 and 65000, to avoid conflicts with ports already in use.

7. Click the **Start** button to start the database.

## Run the Infor ERP SL Configuration Wizard

You need to run the Configuration Wizard to configure some components placed on this planning server.

1. Select **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**.
2. The **Welcome!** screen is displayed.
3. Select the following components to configure (not all possible components are listed below, only ones that are necessary for this planning server setup):
  - **Planning and Scheduling Gateway**
  - **Planning and Scheduling Server**

**NOTE:** For the purposes of this chapter, all of the above components were selected. If you chose not to select some of the above items, the following steps will be a bit different.

4. Click **Next**. The **Planning and Scheduling Gateway Service** screen is displayed. Setting up this service is necessary if you will be using the Infinite APS or APS planning modes.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with white text. Below the title bar, the window has a white background. On the left, the text 'Planning and Scheduling Gateway Services' is displayed. On the right, the 'INFOR' logo is shown. Below the text, a message states: 'The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below this message is a table with two columns: 'Name' and 'Timeout'. The table is currently empty. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window, there are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

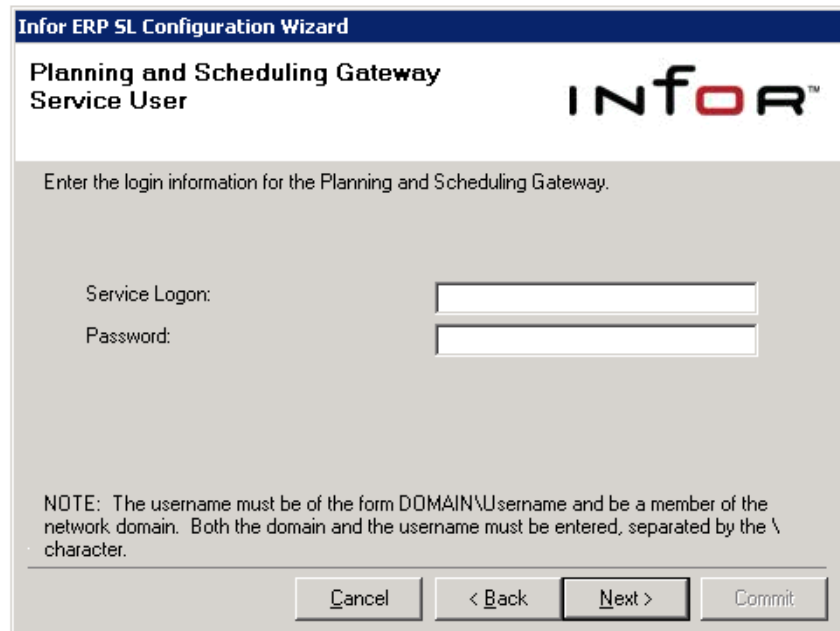
| Name | Timeout |
|------|---------|
|------|---------|

5. Click **Add**. The **Planning and Scheduling Gateway Connection Information** screen is displayed.

The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a sub-header "Planning and Scheduling Gateway Connection Information" and the Infor logo. Below the header, a text box instructs the user: "Enter the information needed to connect to the database that this Gateway Service will monitor. Also specify an interval, in seconds, for the gateway to poll the database." The form contains five input fields: "SQL Server Name" (a dropdown menu), "SQL Username" (a text box), "SQL Password" (a text box), "Application Database" (a dropdown menu), and "Polling Interval" (a text box with the value "300"). At the bottom, there are four buttons: "Cancel", "< Back", "Next >" (which is highlighted with a dashed border), and "Commit".

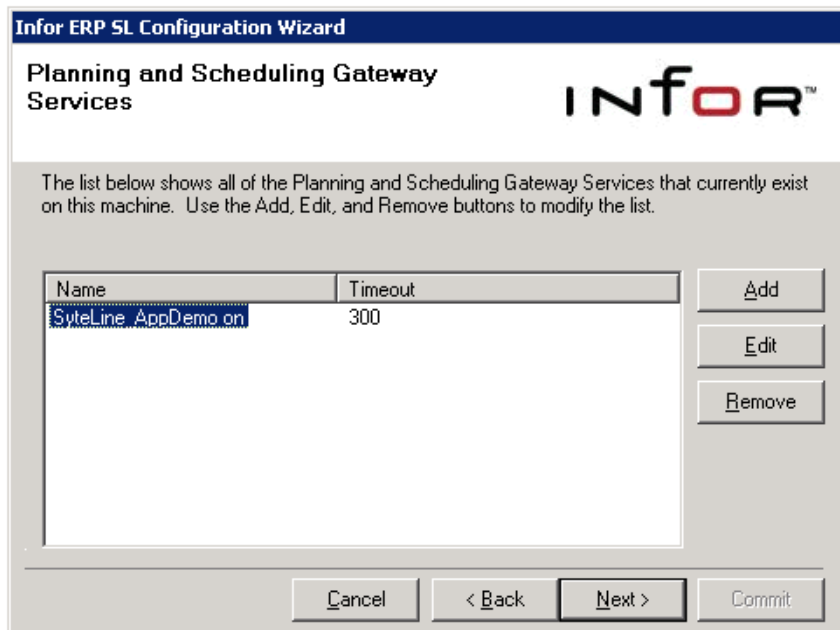
6. Enter the following information:
- **SQL Server Name** - Choose the SQL server name from the drop down list.
  - **SQL Username** - Enter the SQL username.
  - **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.
  - **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
  - **Polling Interval** - The time delay (in seconds) before the service runs the process that synchronizes the planning database and Infor ERP SyteLine application database. The default interval is 300 seconds.

7. Click **Next**. The **Planning and Scheduling Gateway Service User** screen is displayed.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is 'Infor ERP SL Configuration Wizard'. The main title is 'Planning and Scheduling Gateway Service User'. The Infor logo is in the top right. Below the title, it says 'Enter the login information for the Planning and Scheduling Gateway.' There are two input fields: 'Service Logon:' and 'Password:'. Below these fields is a note: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

8. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
9. Click **Next**. The **Planning and Scheduling Gateway Services** screen is displayed again with information filled in.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is 'Infor ERP SL Configuration Wizard'. The main title is 'Planning and Scheduling Gateway Services'. The Infor logo is in the top right. Below the title, it says 'The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' There is a table with two columns: 'Name' and 'Timeout'. The table contains one row: 'SyteLine\_AppDemo on' and '300'. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

| Name                | Timeout |
|---------------------|---------|
| SyteLine_AppDemo on | 300     |

10. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. Below the title bar, the window has a header section with 'Planning and Scheduling Server Services' on the left and the 'INFOR' logo on the right. A text box below the header states: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below this text is a table with two columns: 'Name' and 'Port Number'. The table is currently empty. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

11. Click **Add**. The **Planning and Scheduling Server Connection Information** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. Below the title bar, the window has a header section with 'Planning and Scheduling Server Connection Information' on the left and the 'INFOR' logo on the right. A text box below the header states: 'Enter the information needed to connect to the database that this Server Service will monitor. Also specify a port number and a folder for this Server's temporary files.' Below this text are several input fields: 'SQL Server Name:' (a drop-down menu), 'SQL Username:' (a text box), 'SQL Password:' (a text box), 'Application Database:' (a drop-down menu), 'Port Number:' (a text box containing '6000'), and 'Temporary Directory:' (a text box containing 'C:\Temp' with a browse button '...'). At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

12. Enter the following information:

- **SQL Server Name** - Choose the SQL server name from the drop down list.
- **SQL Username** - Enter the SQL username.
- **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.

- **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
- **Port Number** - The port number to use for the service (must be a number from 5000-65000). This must be a different port number than the port on which the planning database is running (you set up the planning database in Chapter 5, "Setting Up the Planning Server").
- **Temp Directory** - The path to a folder where the server service can write temporary files (such as c:\temp). This directory must allow full control by the local administrator user account.

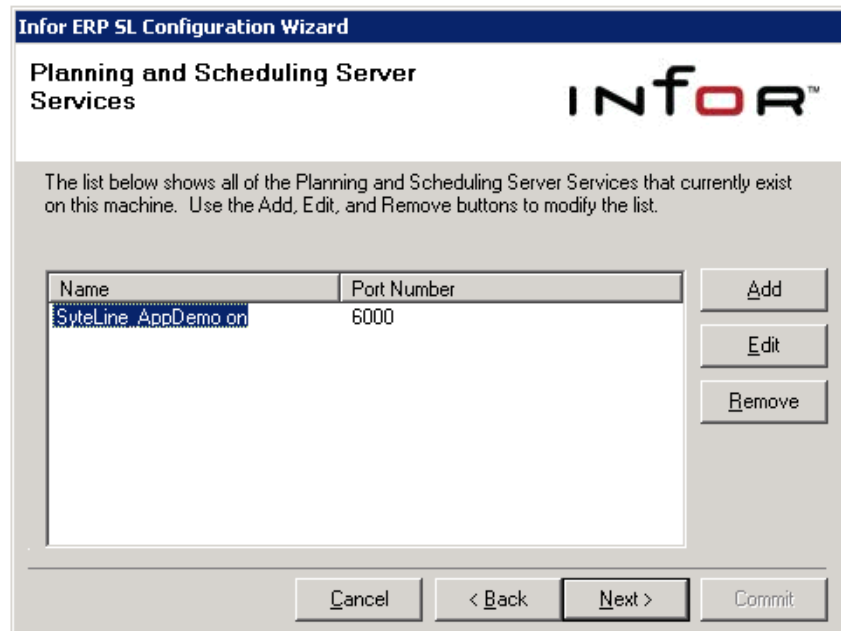
13. Click **Next**. The **Planning and Scheduling Server Service User** screen is displayed.

The screenshot shows a Windows-style dialog box titled "Infor ERP SL Configuration Wizard". The main heading is "Planning and Scheduling Server Service User" with the Infor logo to the right. Below the heading, it says "Enter the login information for the Planning and Scheduling Server." There are two input fields: "Service Logon:" and "Password:". Below these fields is a note: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom, there are four buttons: "Cancel", "< Back", "Next >", and "Commit".

14. Enter the following information:

- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

15. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed with information filled in.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. The main window has a white background. At the top, there's a section titled 'Planning and Scheduling Server Services' with the Infor logo to the right. Below this, a text box says: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below the text is a table with two columns: 'Name' and 'Port Number'. The first row contains 'SyteLine AppDemo on' and '6000'. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

| Name                | Port Number |
|---------------------|-------------|
| SyteLine AppDemo on | 6000        |

16. Click **Next**. The **Review Configuration Changes** screen is displayed.  
17. Verify that the information is correct, and click **Commit**.  
18. When the configuration process is complete, click **Next**.  
19. The **Additional Configuration** screen is displayed.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with the text 'Infor ERP SL Configuration Wizard'. The main window has a white background. At the top, there's a section titled 'Additional Configuration' with the Infor logo to the right. Below this, a text box says: 'You may need to perform additional configuration steps to setup your SyteLine Clients and Background Services. Use the buttons below to select the appropriate utility.' Below the text is a large gray box containing two instructions and two buttons. The first instruction says: 'Click the button below to run the Config Manager program to set up your SyteLine Client Configurations.' Below it is a button labeled 'Config Manager...'. The second instruction says: 'Click the button below to run the Service Config Manager program to set up your SyteLine Utility Server Services.' Below it is a button labeled 'Service Config Manager...'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Finish'.

20. This screen contains two buttons. Both buttons open a separate utility. To learn more about each utility, read each utility's online help. You don't need to use either button on this screen for the planning server. Click **Finish**.

The Web Server components support Web-based data collection and the http/xml and .NET web service interfaces into SyteLine. The http/xml interface is used by WinStudio when configured to connect over the Internet, by the replication system when sites are on different intranets, and by the generic External Financial interface.

**NOTE:** The utility server acts as a web server, so setting up a separate web server is optional.

## Requirements

- SQL Client Tools must be installed and configured on the Web server.
- Microsoft Message Queuing (MSMQ) is installed.
- Active Server Pages and ASP .NET v1.1.4322 must be allowed on your server. You will need to run a script to enable ASP .NET v1.1.4322. See <http://support.microsoft.com/kb/894435> for more information.

## Data Collection Setup

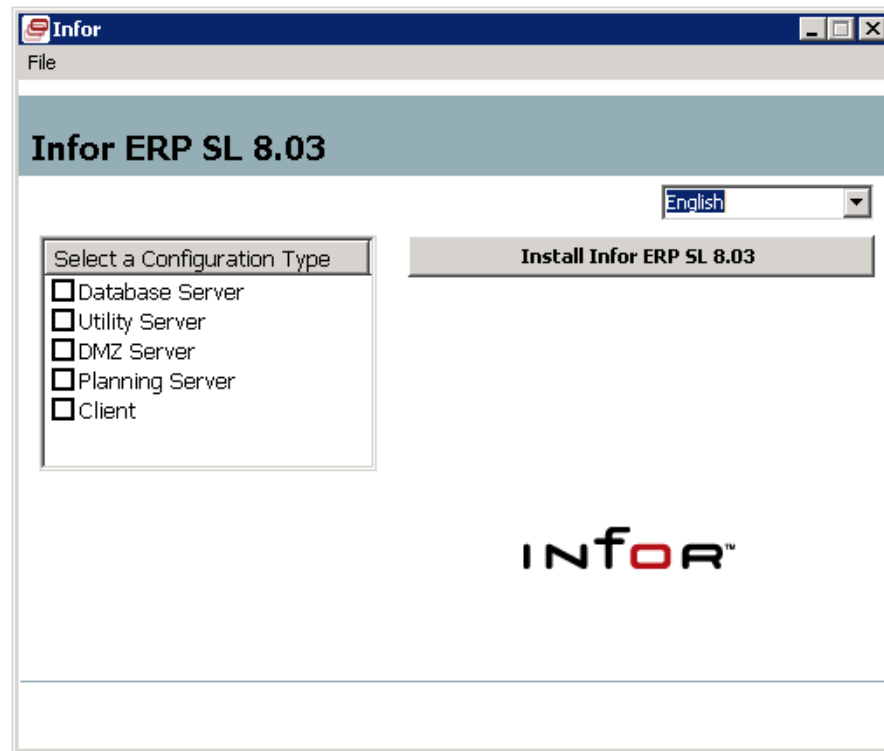
If you are using Web-based data collection, you must follow the steps in this chapter to install and configure the data collection Web server components.

## Install the Web Server Components

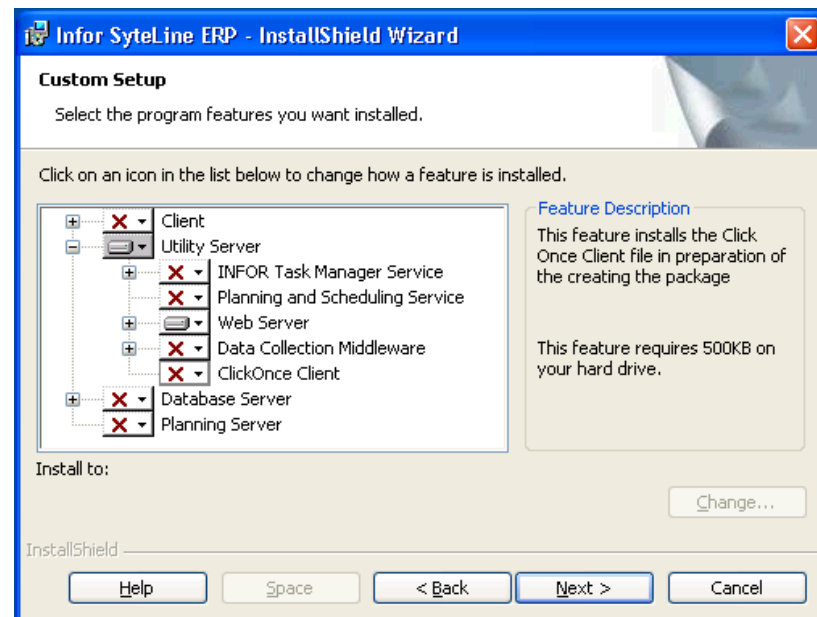
Follow these steps to install the Web Server components:

1. Download the proper version of the .iso file from the Download Center.

2. Find and double click **Setup** that comes as part of the .iso file. The following screen is displayed.



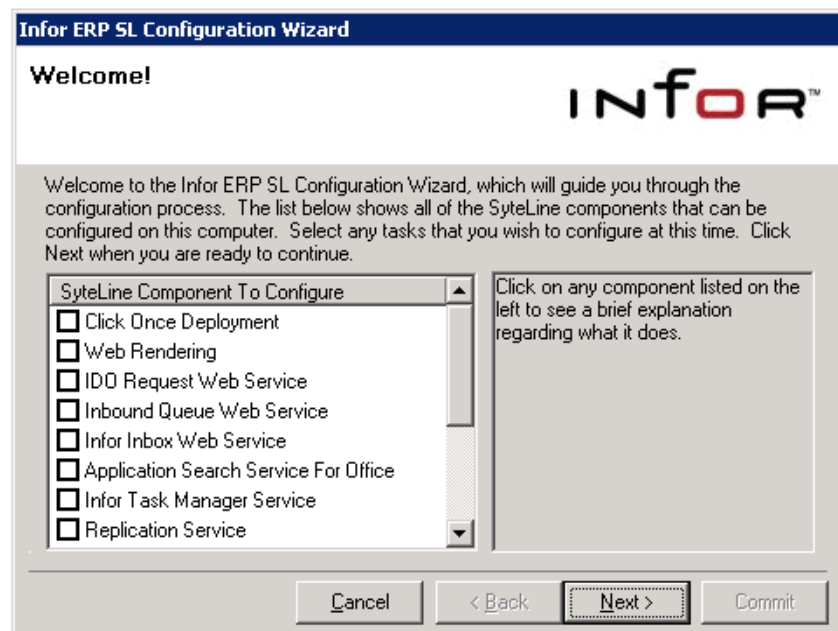
3. In the Select a Configuration Type field, select **Utility Server** (the Utility Server piece contains the web server components).
4. Click the **Install Infor ERP SL** button. The **Welcome** screen is displayed.
5. Click **Next**. The **Custom Setup** screen is displayed.



6. Make sure the **Web Server** components are selected.
7. Click **Next**. The **Ready to Install the Program** screen is displayed.
8. Click **Install** to begin installing the Web Server components.
9. Click **Finish** to complete the installation.

## Configure the Web Server Components

1. Start the Infor ERP SyteLine Configuration Wizard by selecting **Start>All Programs>Infor>Setup>Infor ERP SL Configuration Wizard**. The **Welcome!** screen is displayed.



2. Select the components you wish to configure. For the purposes of this manual, we selected all components (the default).

| Component                 | Notes                                                                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Click Once Deployment     | Add this component if you want this utility server to act as a Click Once Deployment Server. This allows users to attach to this utility server via a web browser to install a client on their computers. This procedure is described in Chapter 4, "Setting Up a Client Workstation." |
| Web Rendering             | Select this component if you want to set up a Web Client.                                                                                                                                                                                                                              |
| IDO Request Web Service   | This service is required for clients that connect to the IDO Runtime Service using HTTP.                                                                                                                                                                                               |
| Inbound Queue Web Service | This component is necessary for asynchronous replication. It accepts replication requests from sites on other intranets.                                                                                                                                                               |

| Component                              | Notes                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infor Inbox Web Service                | This Web service allows users to access their system Inbox using a Web interface without having to log on to the system. Users can do anything in the Web version of the Inbox that they can do in the system version. The Infor Inbox Web Service is accessed using the following URL: <code>http://UtilityServerName/InforInbox/Inbox.aspx</code> |
| Application Search Service for Office  | This service is used with Microsoft Office integration to display SyteLine data in Office products.                                                                                                                                                                                                                                                 |
| Infor Task Manager Service             | The Task Manager (which is different from the Windows Task Manager) is a Windows service that: polls the application database; executes SQL stored procedures; launches applications such as EDI, MRP, and Infor APS.                                                                                                                               |
| Replication Service                    | This service is used for multi-site environments.                                                                                                                                                                                                                                                                                                   |
| Replication Listener Service           | This service is used for multi-site environments.                                                                                                                                                                                                                                                                                                   |
| Data Collection Web                    | This component allows for interfacing with remote Data Collection devices.                                                                                                                                                                                                                                                                          |
| Planning and Scheduling Gateway        | The Planning and Scheduling Gateway Service periodically runs the Gateway Processor.                                                                                                                                                                                                                                                                |
| Planning and Scheduling Server         | The Planning and Scheduling Server Service controls the APS Server program, which runs the APS planning function and the Scheduler.                                                                                                                                                                                                                 |
| End-User Client/Administrative Clients | This component puts a client on the Web Server.                                                                                                                                                                                                                                                                                                     |
| Reporting Services                     | When you select this component, you are prompted for the name of your report server. This is where reports will be created. You MUST select this component if you want to create reports.                                                                                                                                                           |

3. Click **Next**. The **SyteLine Click Once Configuration** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Click Once Directory**

INFOR™

Enter the name that will be used to host the SyteLine Click Once Deployment location. Also enter the login information that will be used to set security on the SyteLine Click Once Deployment Virtual Directory.

Virtual Directory Name:

Service Logon:

Password:

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

4. Enter the following information:

- **Virtual Directory Name** - Accept the default of **SLClientDeploy**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

5. Click **Next**. The **Click Once Application Name** screen is displayed.

6. Enter the following information:

- **Click Once Application Name** - The name you enter here will be the name of the shortcut created by the install. It is also the name that is displayed in Add/Remove Programs or Programs and Features if you wish to uninstall or modify the program.
- **Click Once Webserver Address** - This field is for the name of your web server (usually the name of your utility server). Whatever name is entered here is automatically updated in the Client Deploy URL field below.
- **Use Https** - If you select this check box, the Client Deploy URL changes to Https. When this field is cleared, the Client Deploy URL uses Http. To use this feature, you must perform a couple of steps.
  - A. Implement SSL in IIS. See <http://support.microsoft.com/kb/299875> to help you create a certificate request, submit the certificate request, issue and download a certificate, install the certificate, setup an SSL website, and configure and test the certificate.
  - B. Require Secure Channel (SSL) in IIS for Default Website and SLClientDeploy virtual directory.

- **Set Remember Config Group Option** - This checkbox sets the option in the ConfigServerURLs.xml that gets deployed when you install a Click Once Client. WinStudio reads this XML file when it starts. If this checkbox is selected, the Click Once Client user only sees the configs that are in the Config Group that was used when the click once client was installed. It is a way to limit the user to only see configs that belong to them and not to other users.
- **Client Deploy URL** - You can not edit this field. The web server portion of the URL is changed immediately if you change the name of the web server in the Click Once Webserver Address field above.

7. Click **Next**. The **Web Rendering** screen is displayed.

8. Enter data into or update the following fields:

- **Application Pool** - Enter the application pool. An Application Pool can contain one or more applications and allows you to configure a level of isolation between different Web applications. For example, if you want to isolate all the Web applications running in the same computer, you can do this by creating a separate application pool for every Web application and placing them in their corresponding application pool. Because each application pool runs in its own worker process, errors in one application pool will not affect the applications running in other application pools.
- **Site** - Enter the site name. "Default Web Site" is created when you install IIS. You can use this one or create a different one. The site name is only used for internal configuration of the web site using the IIS Manager tool. The name you specify here will not impact the URL that you will use to access the web site.
- **Application Name** - The Application Name is the name that you use to access the web site. The name you specify here becomes part of the URL used to access the web site. The full URL to access the Web Rendering web site will be in the form of:  
http://servername/application name/Default.aspx
- **Timeout (in minutes)** - Accept the default of 30 minutes, or assign a new number.

- **Authentication Type**
    - **Built-In Authentication** - If you choose this option, you are prompted for their normal SyteLine username and password to access the Web Client.
    - **IIS Authentication** - If you choose this option, you are prompted for the username and password that the IIS administrator has configured for them to access the Web Client. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the IIS username to the SyteLine username.
    - **Active Directory Federation Services (ADFS)** - If you choose this option, you are prompted for the Windows Active Directory username and password to access the Web Client. These usernames and passwords are set up by the network administrator. Use the Workstation Domain/ID field on the **Users** form in SyteLine to map the Active Directory username to the SyteLine username.
  - **Use Remote IDO Runtime** - You must select this check box if you are using a DMZ Server. If not using a DMZ server, do not select this check box. When you select this check box, the Config Server URL field becomes enabled.
  - **Config Server URL** - This field is enabled only if the Use Remote IDO Runtime check box is selected. Replace "<WebServer>" with the name of the utility server you want the DMZ server to communicate with.
9. If you chose the Active Directory Federation Services (ADFS) option on the **Web Rendering** screen, the **Web Rendering ADFS Authentication** screen is displayed. If you didn't select that option, skip to step 11.

**Infor ERP SL Configuration Wizard**

**Web Rendering ADFS Authentication**

Enter the Web Rendering ADFS Authentication information

STS Server Name:

FederationMetadata.Xml Location:

Federation Service URL:

Trust Server URL:

STS Certification Thumbprint:

Application URL:

Buttons:

10. Enter data into or update the following fields:
- **STS Server Name** - This is the server with AD FS / IFS providing claims-based token management. This name should be fully-qualified and must match what is expected in the SSL web server certificate. This name is case sensitive. This certificate resides on the STS server.

- **FederationMetadata.Xml Location** - This field is automatically populated after you provide the STS Server Name. The syntax is:  
https://STSServerName/FolderLocation/FederationMetadata.xml.
- **Federation Service URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: https://STSServerName/adfs/ls.
- **Trust Server URL** - This field is automatically populated after you provide the STS Server Name. The syntax is: http://STSServerName/adfs/services/trust.
- **STS Certification Thumbprint** - This is the thumbprint property number of the token-signing certificate used within AD FS. You need to copy this number and paste it into this field. To get the number, within AD FS, navigate to **Service>Certificates**. Double-click the token-signing certificate and then select **Thumbprint**. The number that is displayed for thumbprint is the number you need to paste here. When you copy the number, there is a leading space. Delete that space after pasting it into the STS Certification Thumbprint field.
- **Application URL** - Provide the application URL. This name should be fully-qualified and must match what is expected in the SSL web server certificate. The server name part of this URL is case sensitive. This certificate resides on the STS server. Use this syntax: https://utilityservername/WSWebClient/

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end.

11. Click **Next**. The **SyteLine IDO Request Web Service** screen is displayed.

**Infor ERP SL Configuration Wizard**

**SyteLine IDO Request Web Service**

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Enter the name that will be used to host the SyteLine IDO Request Web Service. Also enter the login information that will be used to set security on the SyteLine IDO Request Web Service Virtual Directory.

Virtual Directory Name: IDORequestService

Service Logon: qa\sa

Password: xxxxxxxx

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

Cancel < Back Next > Commit

12. Enter the following information:

- **Virtual Directory Name** - Accept the default of **IDORequestService**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

13. Click **Next**. The **Inbound Queue Web Service** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window for the 'Inbound Queue Web Service'. The Infor logo is in the top right. The text reads: 'Enter the name that will be used to host the SyteLine Inbound Queue Web Service. Also enter the login information that will be used to set security on the SyteLine Inbound Queue Web Service Virtual Directory.' Below this are three input fields: 'Virtual Directory Name' with the value 'InboundQueue', 'Service Logon' with the value 'qa\sa', and 'Password' with masked characters. A note at the bottom states: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

14. Enter the following information:

- **Virtual Directory Name** - Accept the default of **InboundQueue**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

15. Click **Next**. The **Infor Inbox Web Service** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window for the 'Infor Inbox Web Service'. The Infor logo is in the top right. The text reads: 'Enter the name that will be used to host the SyteLine Infor Inbox Web Service. Also enter the login information that will be used to set security on the SyteLine Infor Inbox Web Service Virtual Directory.' Below this are three input fields: 'Virtual Directory Name' with the value 'InforInbox', 'Service Logon' with the value 'qa\sa', and 'Password' with masked characters. A note at the bottom states: 'NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.' At the bottom right are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

16. Enter the following information:

- **Virtual Directory Name** - Accept the default of **InforInbox**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

17. Click **Next**. The **Application Search Service For Office** screen is displayed.

The screenshot shows a Windows-style dialog box titled "Infor ERP SL Configuration Wizard". The main heading is "Application Search Service For Office" with the Infor logo to the right. Below the heading, a text box contains the instruction: "Enter the name that will be used to host the Application Search Service For Office. Also enter the login information that will be used to set security on the Application Search Service For Office Virtual Directory." There are three input fields: "Virtual Directory Name:" with the text "ApplicationSearchServiceForOffice", "Service Logon:" with the text "qa\sa", and "Password:" with masked characters "xxxxxx". At the bottom, there is a "NOTE" stating: "The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the very bottom are four buttons: "Cancel", "< Back", "Next >", and "Commit".

18. Enter the following information:

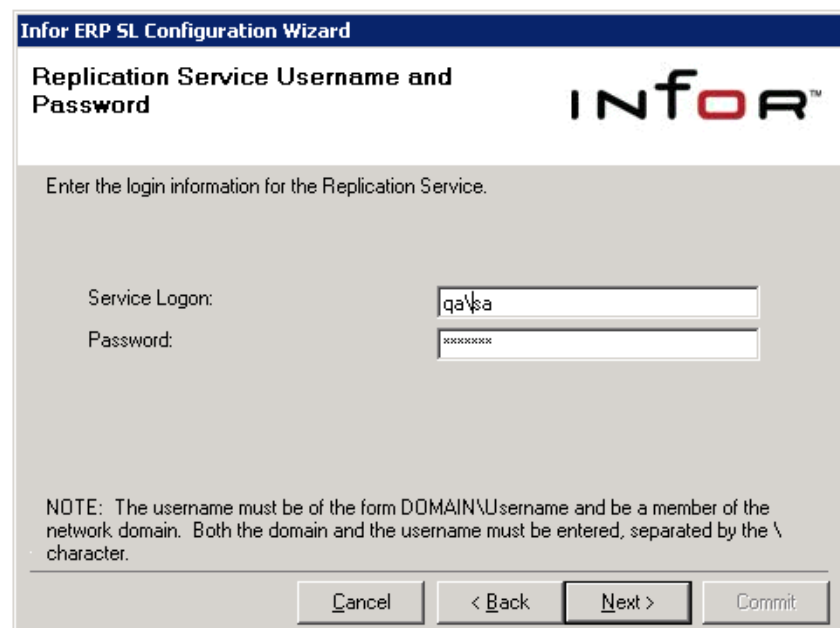
- **Virtual Directory Name** - Accept the default of **ApplicationSearchServiceForOffice**.
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

19. Click **Next**. The **Infor Task Manager Service Username and Password** screen is displayed.



The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a sub-header "Infor Task Manager Service Username And Password" and the Infor logo. The instruction "Enter the login information for the Infor Task Manager Service." is displayed. There are two input fields: "Service Logon:" containing "qa\sa" and "Password:" containing masked characters. A note states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are buttons for "Cancel", "< Back", "Next >", and "Commit".

20. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
21. Click **Next**. The **Replication Service Username and Password** screen is displayed.



The screenshot shows a window titled "Infor ERP SL Configuration Wizard" with a sub-header "Replication Service Username and Password" and the Infor logo. The instruction "Enter the login information for the Replication Service." is displayed. There are two input fields: "Service Logon:" containing "qa\sa" and "Password:" containing masked characters. A note states: "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." At the bottom are buttons for "Cancel", "< Back", "Next >", and "Commit".

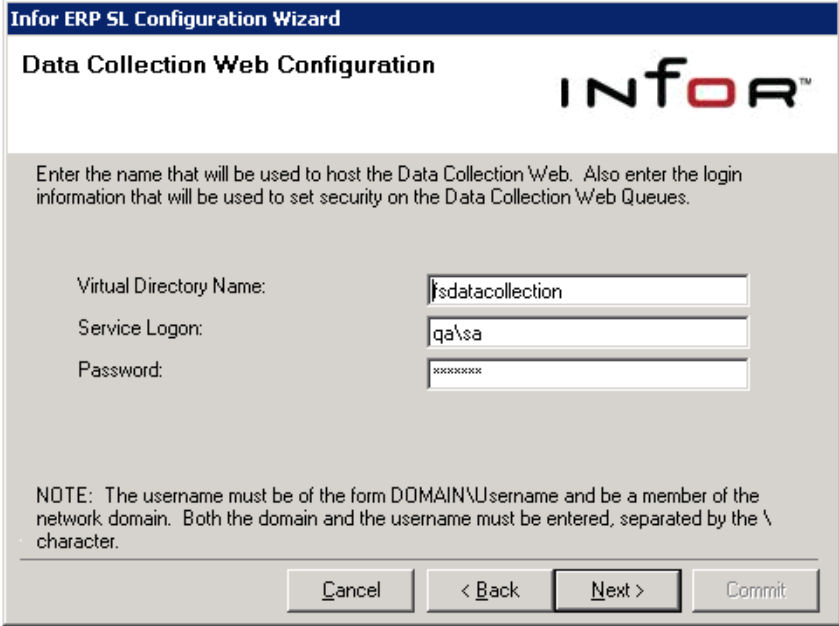
22. Enter the following information:

- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
23. Click **Next**. The **Replication Listener Service Username and Password** screen is displayed.

The screenshot shows a Windows-style dialog box titled "Infor ERP SL Configuration Wizard". The main heading is "Replication Listener Service Username and Password" with the Infor logo to the right. Below the heading, it says "Enter the login information for the Replication Listener Service." There are two input fields: "Service Logon:" with the text "qa\jsa" and "Password:" with masked characters "XXXXXXXX". At the bottom, there is a "NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character." and four buttons: "Cancel", "< Back", "Next >", and "Commit".

24. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.

25. Click **Next**. The **Data Collection Web Configuration** screen is displayed.



**Infor ERP SL Configuration Wizard**

**Data Collection Web Configuration**

INFOR™

Enter the name that will be used to host the Data Collection Web. Also enter the login information that will be used to set security on the Data Collection Web Queues.

Virtual Directory Name:

Service Logon:

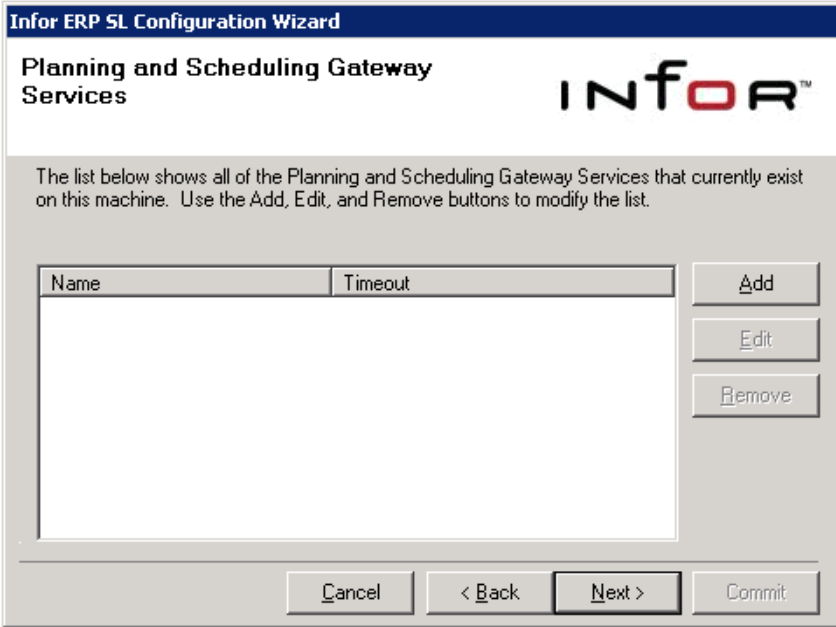
Password:

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

26. Enter the following information:

- **Virtual Directory Name** - Accept the default of **fsdatacollection**.
- **Service Logon** - Enter your logon using the DOMAIN\Username format.
- **Password** - Enter the password for your service logon.

27. Click **Next**. The **Planning and Scheduling Gateway Service** screen is displayed. Setting up this service is necessary if you will be using the Infinite APS or APS planning modes.



**Infor ERP SL Configuration Wizard**

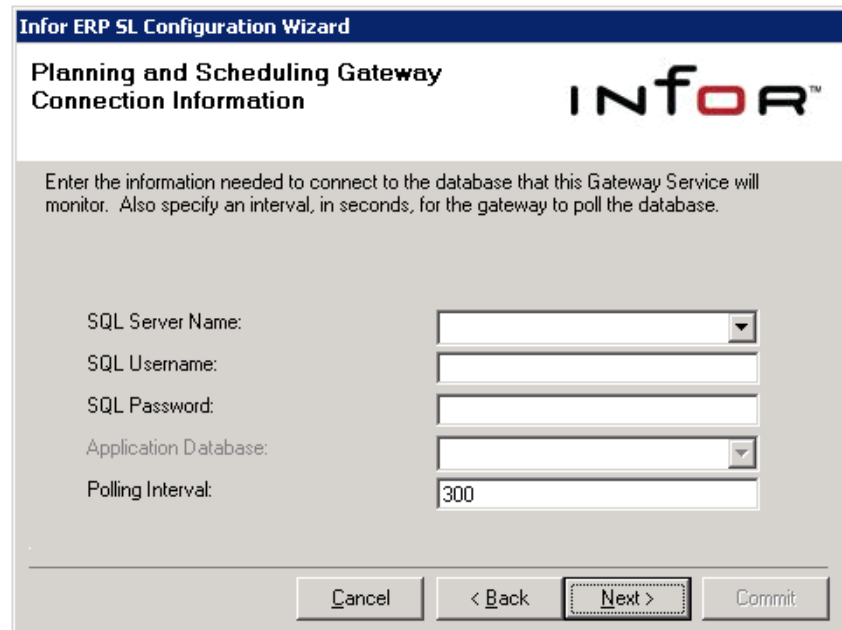
**Planning and Scheduling Gateway Services**

INFOR™

The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.

| Name | Timeout |
|------|---------|
|      |         |

28. Click **Add**. The **Planning and Scheduling Gateway Connection Information** screen is displayed.



The screenshot shows a web-based configuration window titled "Infor ERP SL Configuration Wizard". The main heading is "Planning and Scheduling Gateway Connection Information" with the Infor logo to the right. Below the heading, a text box instructs the user: "Enter the information needed to connect to the database that this Gateway Service will monitor. Also specify an interval, in seconds, for the gateway to poll the database." The form contains five input fields: "SQL Server Name:" (a dropdown menu), "SQL Username:" (a text box), "SQL Password:" (a text box), "Application Database:" (a dropdown menu), and "Polling Interval:" (a text box with the value "300" entered). At the bottom, there are four buttons: "Cancel", "< Back", "Next >" (which is highlighted with a dashed border), and "Commit".

29. Enter the following information:
- **SQL Server Name** - Choose the SQL server name from the drop down list. This is the machine where your databases reside.
  - **SQL Username** - Enter the SQL username.
  - **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.
  - **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
  - **Polling Interval** - The time delay (in seconds) before the service runs the process that synchronizes the planning database and Infor ERP SyteLine application database. The default interval is 300 seconds.

30. Click **Next**. The **Planning and Scheduling Gateway Service User** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Planning and Scheduling Gateway Service User**

Enter the login information for the Planning and Scheduling Gateway.

Service Logon:

Password:

NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

Buttons:

31. Enter the following information:
- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
  - **Password** - Enter the password for the service logon.
32. Click **Next**. The **Planning and Scheduling Gateway Services** screen is displayed with information filled in.

**Infor ERP SL Configuration Wizard**

**Planning and Scheduling Gateway Services**

The list below shows all of the Planning and Scheduling Gateway Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.

| Name                | Timeout |
|---------------------|---------|
| SyteLine_AppDemo on | 300     |

Buttons:

Buttons:

33. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with white text. Below the title bar, the window has a header section with 'Planning and Scheduling Server Services' on the left and the 'INFOR' logo on the right. A text box below the header states: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below this text is a table with two columns: 'Name' and 'Port Number'. The table is currently empty. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

34. Click **Add**. The **Planning and Scheduling Server Connection Information** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is blue with white text. Below the title bar, the window has a header section with 'Planning and Scheduling Server Connection Information' on the left and the 'INFOR' logo on the right. A text box below the header states: 'Enter the information needed to connect to the database that this Server Service will monitor. Also specify a port number and a folder for this Server's temporary files.' Below this text are several input fields: 'SQL Server Name:' (a drop-down menu), 'SQL Username:' (a text box), 'SQL Password:' (a text box), 'Application Database:' (a drop-down menu), 'Port Number:' (a text box containing '6000'), and 'Temporary Directory:' (a text box containing 'C:\Temp' with a browse button '...'). At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

35. Enter the following information:

- **SQL Server Name** - Choose the SQL server name from the drop down list.
- **SQL Username** - Enter the SQL username.
- **SQL Password** - Enter the SQL password. You can NOT use a semicolon in your password.

- **Application Database** - Choose the application database from the drop down list. These are databases on the SQL server.
- **Port Number** - The port number to use for the service (must be a number from 5000-65000). This must be a different port number than the port on which the planning database is running (you set up the planning database in Chapter 5, "Setting Up the Planning Server").
- **Temp Directory** - The path to a folder where the server service can write temporary files (such as c:\temp). This directory must allow full control by the local administrator user account.

36. Click **Next**. The **Planning and Scheduling Server Service User** screen is displayed.

**Infor ERP SL Configuration Wizard**

**Planning and Scheduling Server Service User**

Enter the login information for the Planning and Scheduling Server.

Service Logon:

Password:

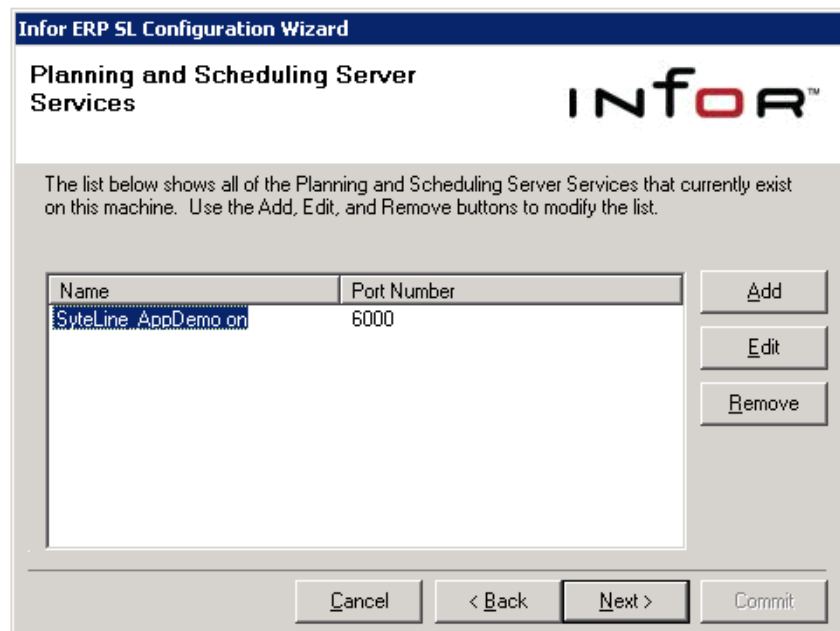
NOTE: The username must be of the form DOMAIN\Username and be a member of the network domain. Both the domain and the username must be entered, separated by the \ character.

Cancel < Back Next > Commit

37. Enter the following information:

- **Service Logon** - Enter the service logon using the DOMAIN\Username format. The name must be a member of the network domain.
- **Password** - Enter the password for the service logon.

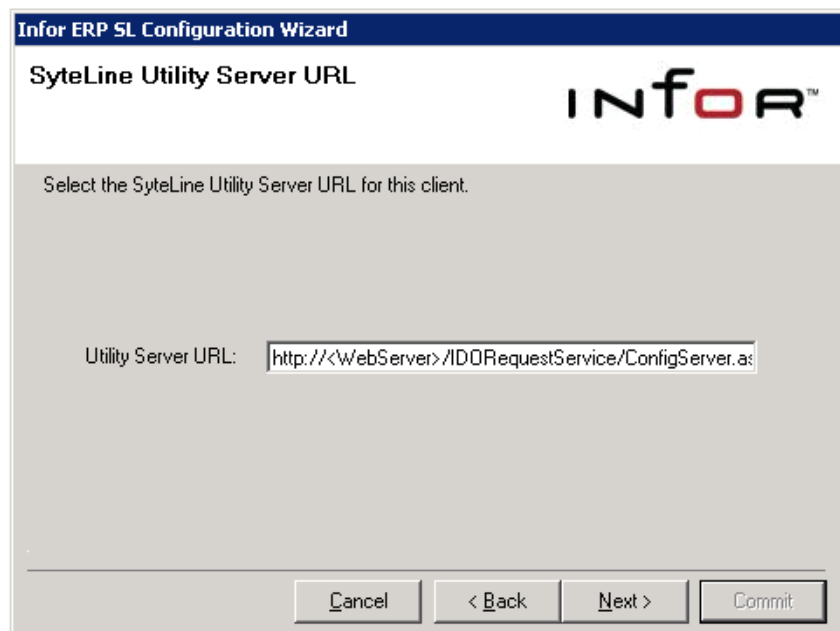
38. Click **Next**. The **Planning and Scheduling Server Services** screen is displayed with information filled in.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is 'Infor ERP SL Configuration Wizard'. The main heading is 'Planning and Scheduling Server Services' with the Infor logo to the right. Below the heading, a text box states: 'The list below shows all of the Planning and Scheduling Server Services that currently exist on this machine. Use the Add, Edit, and Remove buttons to modify the list.' Below this is a table with two columns: 'Name' and 'Port Number'. The table contains one entry: 'SyteLine\_AppDemo on' with port number '6000'. To the right of the table are three buttons: 'Add', 'Edit', and 'Remove'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

| Name                | Port Number |
|---------------------|-------------|
| SyteLine_AppDemo on | 6000        |

39. Click **Next**. The **SyteLine Utility Server URL** screen is displayed.



The screenshot shows the 'Infor ERP SL Configuration Wizard' window. The title bar is 'Infor ERP SL Configuration Wizard'. The main heading is 'SyteLine Utility Server URL' with the Infor logo to the right. Below the heading, a text box states: 'Select the SyteLine Utility Server URL for this client.' Below this is a text field labeled 'Utility Server URL:' containing the text 'http://<WebServer>/IDORequestService/ConfigServer.as'. At the bottom of the window are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

40. In the **Utility Server URL** field, replace "<WebServer>" with the name of your web server.

41. Click **Next**. The **Report Server Setup** screen is displayed.

The screenshot shows the 'Infor ERP SL Configuration Wizard' window with the 'Report Server Setup' tab selected. The Infor logo is in the top right. Below the title bar, it says 'Enter the location of your report server.' There are three text input fields: 'Reports Server URL:' with the value 'http://<ReportsServerName>/ReportServer', 'Reports Server Parent Folder:' with the value 'SyteLineReports', and 'Reports Directory:' with the value 'C:\Program Files (x86)\Infor\SyteLine\Report\Reports'. At the bottom, there are four buttons: 'Cancel', '< Back', 'Next >', and 'Commit'.

42. Enter the following information:

- In the **Reports Server URL** field, replace "<ReportsServerName>" with the name of your reports server.
- In the **Reports Server Parent Folder** field, either accept the default or provide a new folder name.
- **Report Directory** - Accept the default, or define a different directory. You might create a different directory so that you can upload just one report instead of all of the reports in the default directory.

43. Click **Next**. The **Review Configuration Changes** screen is displayed.

44. Verify that the information is correct, and click **Commit**.

45. When the configuration process is complete, click **Next**.

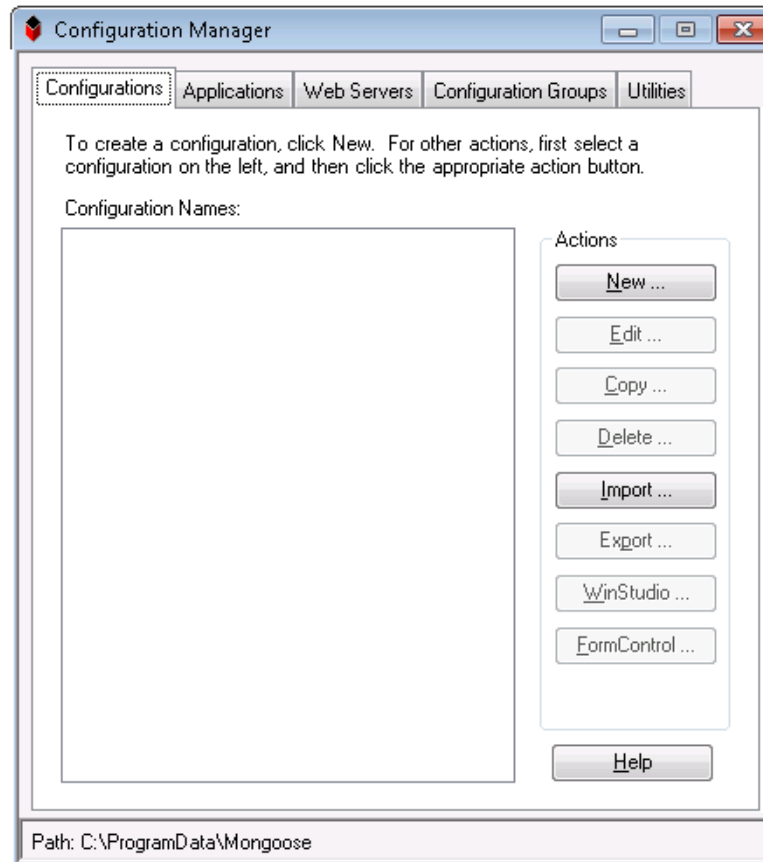
46. The **Additional Configuration** screen is displayed.



47. This screen contains two buttons. Both buttons open a separate utility. To learn more about each utility, read each utility's online help.

- **Config Manager** - This button opens the Configuration Manager utility. To complete your utility server set up, you **MUST** use the Configuration Manager. You use this to create different configurations that point to the databases you want to access.
- **Service Config Manager** - This button opens the Service Configuration Manager utility. Use this utility to configure the services included in the toolset.

48. Click the **Config Manager** button on the **Additional Configuration** screen. The **Configuration Manager** utility opens. This utility is also found here - **Start>All Programs>Infor>Tools>Configuration Manager**.



49. Click **New**. The **New Configuration** dialog box is displayed. Give your configuration a name and click **OK**.

50. The **Edit Configuration** screen is displayed with the Runtime (Client) tab selected.

51. Yellow (or light shading if printing in black and white) has been added to the required fields on this tab just for the purposes of this manual. Notice there are two main sections on this screen, Runtime Application Database and Runtime Forms Database.

- **Runtime Application Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your application database in the previous chapter.
  - **Password** - Enter the password for the username. You provided this password when you created your application database in the previous chapter.
  - **Server** - Enter the name of your database server.

**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the application database you created in the previous chapter.
- **Runtime Forms Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your forms database in the previous chapter.
  - **Password** - Enter the password for the username. You provided this password when you created your forms database in the previous chapter.
  - **Server** - Enter the name of your database server.

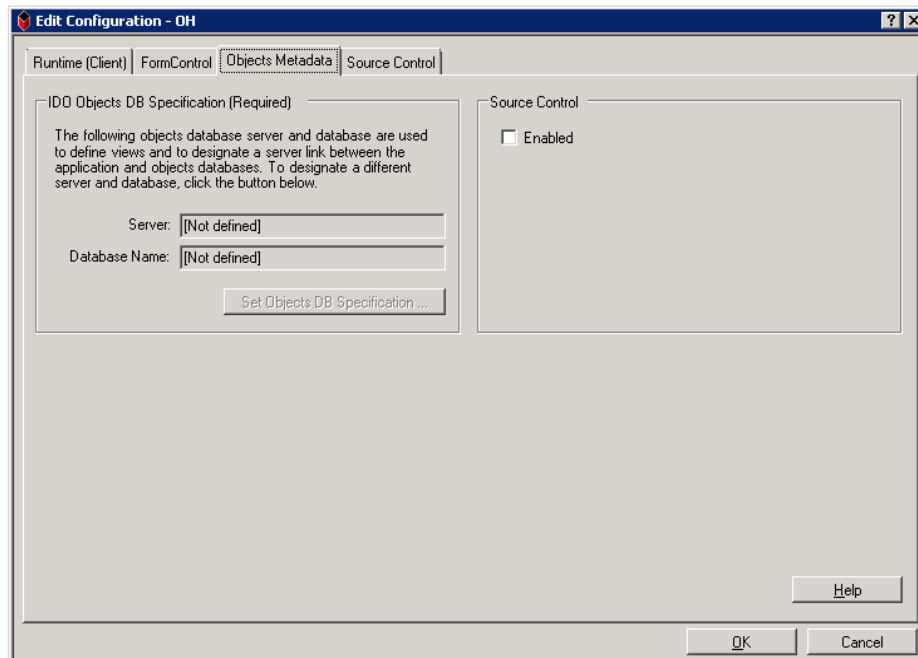
**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the forms database you created in the previous chapter.

- **Form Templates Database Name** - If you created a templates database, select it here.

**Application** - Select the default application of **SL803**. You can create "applications" with different parameters using the Applications tab on the Configuration Manager.

52. Click the **Objects Metadata** tab.



53. Click the **Set Objects DB Specification** button. The **Set Objects Metadata Server/Database** screen is displayed:

**Set Objects Metadata Server/Database**

Specify a SQL Server and Database name for the IDO Objects metadata database. A valid User and Password will be required to validate the Objects metadata database.

Note: Pressing 'OK' to accept the Server and Database specified will drop and recreate all Views to the Objects DB in the Application Database. Additionally, if the Server specified is different from the Server of the Application DB, a Linked Server definition will be set up as well.

Database Type:

.NET Provider:

Provider Driver:

User:

Password:

Server:

Database Name:

54. Provide the following information:

**User** - Enter the username. This is the user name you supplied for the objects database in the previous chapter.

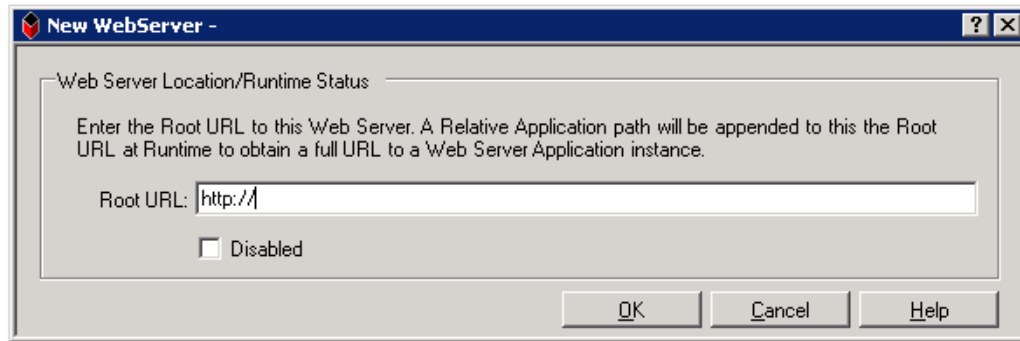
**Password** - Enter the password. This is the password you supplied for the objects database in the previous chapter.

**Server** - Enter the name of your database server.

**Database Name** - Select the name of the objects database you created in the previous chapter.

55. Click **OK** to close the **Set Objects Metadata Server/Database** screen. A success message is displayed. Click **OK**.
56. Click **OK** to close the **Edit Configuration** screen.
57. You are now back to the **Configuration Manager** screen. Click the **Web Servers** tab.
58. Click the **New** button. The **New Web Server** dialog box is displayed.
59. Enter any name into the lone field in this dialog box and click **OK**.

60. The **New Web Server** dialog box is displayed.



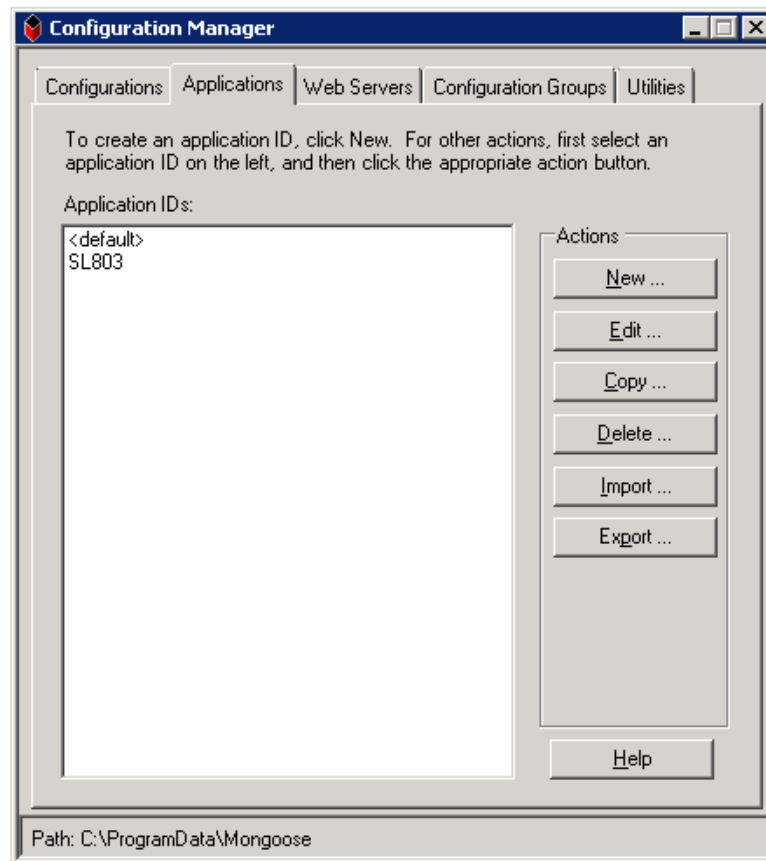
61. In the **Root URL** field, enter the name of your web server. Use the following syntax - `http://webservername`.

62. Click **OK**. You can close or minimize the Configuration Manager.

## Set Up Online Help

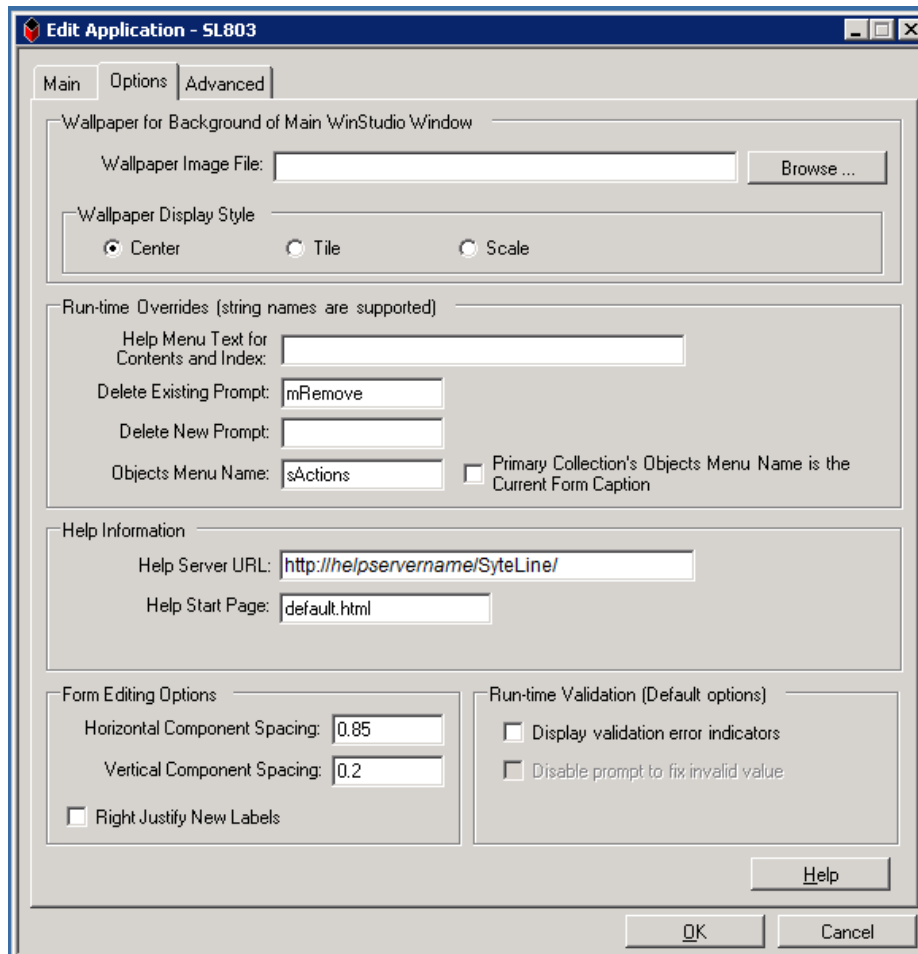
You must provide the name of the machine where you access the online help in order for the help to work.

63. Within **Configuration Manager (Start>All Programs>Infor>Tools>Configuration Manager)**, click the **Applications** tab.



64. Select the **SL803** Application ID and click the **Edit** button.
65. The **Edit Application** window is displayed.

66. Click the **Options** tab.



67. In the **Help Server URL** field, enter the following:  
**http://helpservername/SyteLine/**

The help server name is the name of the machine where the help resides. The help is on the utility server, so in most cases, the client on the utility server should access the help that is on the utility server.

68. In the **Help Start Page** field, enter **default.html**.

69. Click **OK** to close the **Edit Application** window.

## Post Configuration Wizard Steps if Using AD FS and IFS

The information in this section is necessary only if you chose to use AD FS for the Web Client.

For additional information about installation and set up of AD FS and IFS, see the *AD FS and IFS Installation Guide* and the *Infor Federation Services Administration Guide*. The

Administration Guide includes, among other things, how to create an IFS security group to link an application to IFS users. This is optional for SyteLine, not a necessity.

### Create AD FS Relying Party Trust for SyteLine Web Client

Infor Federation Services (IFS) comes with a utility named IFSCONFIGURATION.exe. This is a .NET application using the WS-Discovery protocol to communicate with the IFS Configuration Service. This utility is used to setup both AD FS and IFS correctly with your application's setting. For this tool to work properly, the CA certificate must be imported into the **Trusted Root Certification Authorities** store for the computer account.

1. Run the IFSCONFIGURATION.exe as an administrator on your AD FS/IFS server, and it will start the discovery process. Once it finds your installation of IFS, expand the **Application** tab and enter the Name, Type, URL, Description and Relying Party Identifier. The URL and Relying Party Identifier should be the same; the URL to the Web Client. Ensure three things: (a) https is required; (b) the server name should match what was used in the SSL certificate (it is case-sensitive); and (c) drop the specific page and leave the trailing "/". As an example, what you enter into the URL and Relying Party Identifier fields should follow this syntax: **https://servername/WSWebClient/**
2. Click **Add/Replace**.

### Edit Settings for SyteLine Web Client in AD FS Management Tool

1. In the AD FS Management tool, open **Relying Party Trusts**.
2. Edit the Identifier and Endpoint URL to have the same value. The value should follow this syntax: **https://utilityservername/WSWebClient/**

The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 106.

### Edit Infor Federations Services (IFS) Application Settings

1. On the server where you have IFS installed, open IFS.
2. Ensure that the URL and the Relying Party Identifier for the SyteLine application have the same value. The value should follow this syntax: **https://utilityservername/WSWebClient/**
3. The server name part of this URL is case sensitive, and the URL must have the trailing "/" at the end. It should exactly match what you entered for the Application URL field on page 106.
4. Ensure the SyteLine application's status is **Active**.
5. Navigate to **Manage>Users**. Ensure there are users with authorization to the SyteLine application.

### SyteLine User Account Settings if Using AD FS

The SyteLine user account has to be matched up with a domain account when using AD FS authentication.

1. In SyteLine, open the **Users** form.

2. Ensure for each user accessing SyteLine via AD FS that the value in the **User ID** field matches the value in the **Workstation Domain/ID** field. Do not enter the domain prefix in the **Workstation Domain/ID** field since this is already known; only the account ID is needed.

The first time a user logs into the SyteLine Web Client via AD FS, there are two sign in screens; a Windows Security screen and then a SyteLine sign in screen. The user can eliminate the need for the second login screen by performing the following steps:

1. On the SyteLine Sign In screen, select the **Use Workstation Login** checkbox.
2. Provide the user name.
3. Leave the **Password** field blank.
4. Select the desired configuration.
5. Click **Sign In**.

## Connecting to Web-Based Data Collection

**NOTE:** If you run into connection timeout errors (Server.Execute failed), you may need to increase the connection timeout setting on your web server machine. Within the **Internet Services Manager**, select your **Web Server** in the left pane, then select the DC Web site in the right pane and right-click on it. Select **Properties**. Select the **Web Site** tab. Increase the **Connection Timeout**, and make sure that **HTTP Keep-Alives Enabled** is selected.

Use the name of the data collection virtual directory installed previously in the URL to connect to Web-based data collection from your specific device. For example, enter <http://mywebservername/datacollectionvirtualdirectoryname/login.asp?browser=stylesheetname>, where *stylesheetname* is the name of the specific style sheet used. Enter one of the values below in the URL to use that stylesheet.

The Web-based data collection style sheets are installed on the Web server at C:\INETPUB\wwwroot\fsDataCollection\Web, which contains the following subdirectories.

| Subdirectory | Style Sheet Name | Description                                                                                   |
|--------------|------------------|-----------------------------------------------------------------------------------------------|
| 1620         | 1620             | For TRAKKER 2425 with Intermec dcBrowser.                                                     |
| Wedge        | Wedge            | For a wedge reader running Internet Explorer with barcode data entry.                         |
| Default      | Default          | For a wedge reader running Internet Explorer with barcode data entry and keyboard data entry. |

For instance, use the URL <http://mywebservername/datacollectionvirtualdirectoryname/login.asp?browser=default> to connect with the default style sheet. See “Configuration Groups” on page 128 if you’ve created a configuration group.

You can also create a custom xml menu file for each user. If you do so, you must enter the name of the XML menu file for each user in the Web DC Menu field on the Users form. This

field defaults to \* (asterisk), which uses the standard XML menu file (Menu.xml). This file is installed on the web server at:

C:\inetpub\wwwroot\FSDDataCollection\Web\Wedge\Menu\Menu.xml. See the online help for this field for more information.

You can use any Web-based data collection device that supports Internet Explorer or Intermec dcBrowser. You may need to modify a provided stylesheet or create your own depending on your specific hardware requirements.

**NOTE:** You can view data collection Web pages in your preferred language by selecting that language in Internet Explorer. See Internet Explorer online help for more information on specifying which language to use for displaying web pages.

You may need to close Internet Explorer and then log back into Web data collection to view the preferred language if you changed it while logged in to Web data collection.

Refer to the documentation for your data collection device for more information. See the *Intermec Equipment Installation Guide* (at <http://www.infor.com/inforxtreme>) for more information on using the TRAKKER 2425 with Intermec dc Browser.

## Configuration Groups

If you have used the Configuration Manager (on the Utility Server or Web Server) to create configuration groups, and you want to just see the configurations in a specific group (in this case a group named "DC"), use the URL:

<http://mywebservername/datacollectionvirtualdirectoryname?ConfigGroup=DC>. See the online help (click the **Help** button on the **Configuration Groups** tab of the **Configuration Manager** on the Utility or Web Server) for more information about Configuration Groups.

**NOTE:** All clients (except Click Once clients) must be updated any time the client toolset is changed. To see if the client toolset has changed, refer to the readme file on the **Installation Advisories and Software Patches** web page for the service pack you are applying.

Once you install a service pack, it cannot be uninstalled.

## Requirements

- If you have third-party applications, ensure that they are updated to the proper level. Contact your third-party application provider for that information.
- You can not use Remote Desktop Connection to install and apply service packs. You must install and apply service packs directly on the machine you want to be affected.
- If you installed your system from the CD and not a network location, you will be prompted to place the CD in the machine on which you are applying a service pack. If you did not install SyteLine from the CD, and the location of the files is the same as it was when you installed, you will not be prompted for the CD.

## Terminology

In this section, it is important to note the difference between the words install and apply.

**Install** - Run the service pack executable which launches the InstallShield Wizard. The executable installs files from the service pack.

**Apply** - Run the Infor ERP SL Configuration Wizard AFTER installing the service pack. This needs to be done on all servers and clients EXCEPT the database server and Click Once Clients.

## Install and Apply Service Pack

**NOTE:** Before beginning this process, everyone MUST be logged out of the system.

DO NOT apply the service pack to the forms database. You must use the FormSync utility to apply new form definitions from the service pack to the forms database after you have completed all other steps described in this chapter. FormSync allows you to merge form customizations with fixes and enhancements provided in the service pack. For instructions on using FormSync, see chapter Chapter 9, "Synchronizing Forms

Databases."

You do not have to apply a service pack to an objects database, and the Infor ERP SL Configuration Wizard provides no options to do so. The objects database stays at the base version level permanently. Additionally, the templates database (if you have one) is updated to the new level only if the service pack contains updates to that database; if not, it remains at the previous level.

Service Packs for SyteLine are available from our website at <http://www.infor.com/inforxtreme>.

**NOTE:** After you install the service pack, your task is not complete. You **MUST** run the Infor ERP SL Configuration Wizard as detailed below. If you only install the service pack (run the executable) but do not then run the Infor ERP SL Configuration Wizard, users will not be able to log into the system.

To install and then apply the service pack, perform the following steps:

1. Log everyone out of the system.
2. Download the latest appropriate service pack from our website.

The two executable files are:

- **Migration** - Run this on the database server only if you installed Infor ERP SyteLine Migration components.
- **ERP** - Run this on all servers and clients (except Click Once Clients).

**NOTE:** Clients only need to be updated when the client toolset has changed. To see if the client toolset has changed, refer to the readme file on the **Installation Advisories and Software Patches** web page for the service pack you are applying.

3. Double-click the executable on the appropriate server and/or client.

**NOTE:** Install the service pack on the database server(s) before installing and applying it on any other server or client. This is necessary so that later on when you need to create a new forms database, the forms database you create will be at the proper level.

4. The InstallShield Wizard launches. This part of the process varies depending on which server or client you are on.

**NOTE:** Depending on how your system was installed, you may be prompted here for the **SyteLine CD**.

Follow the prompts until the wizard is complete.

**NOTE:** On the utility server and planning server, you are prompted to reboot after running the service pack. You **MUST** do this. We recommend you also reboot the client machine before continuing.

5. Run the Infor ERP SL Configuration Wizard (from the **Start** menu, navigate to **Infor>Setup>Infor ERP SL Configuration Wizard**) on each client and server (except the database server or a Click Once Client) where a service pack was installed. Accept the defaults (some items will be grayed out) and follow the prompts until the wizard is complete.

**NOTE:** When you install the service pack on the database server, updates are made but NOT to the databases. Databases are updated when you install and then apply the service pack on the utility server.

On the utility server, when you run the Configuration Wizard, you have the option to apply the service pack to individual databases or not. If you are using Master Sites, you **MUST** upgrade those sites first. **DO NOT** apply the service pack to a forms database.

Also, if you have a Click Once Client, you do not have to install and apply the service pack on the client; in this case, on the utility server when you run the Infor ERP SL Configuration Wizard, "Click Once Deployment" is selected by default. This updates everything necessary for Click Once Clients. Users of Click Once Clients do not need to do anything on their machines. The next time they access SyteLine from their machines, they will receive a new version of the client automatically.

6. Reapply your SyteLine license on the License Management form (or just apply it for the first time if you haven't yet applied it). See the *Infor10 ERP Business (SyteLine) System Administration Guide* for information about the License Management form and how to apply your license.

## Synchronize the Forms Database

You must use FormSync to complete the service-pack process on the forms database. For instructions on using FormSync, see Chapter 9, "Synchronizing Forms Databases."



This chapter details how to upgrade from one version of SyteLine 7 or 8 to another version of SyteLine 8 (for example, from SyteLine 7.05 to SyteLine 8.03 OR SyteLine 8.02 to SyteLine 8.03).

This chapter does not contain information on service packs or migrating from a PROGRESS version of SyteLine (versions 5 and 6) to SyteLine 8.03. For that information, see one of the following chapters:

**Service Packs** - See Chapter 7, "Installing and Applying Service Packs".

**Migrating** - See Chapter 10, "Migrating From SyteLine 5 or SyteLine 6 (Single Site)" OR "Migrating From SyteLine 5 or SyteLine 6 (Multi-Site)" on page 173".

**NOTE:** Before you upgrade to a new version, make sure you do not have bad data such as duplicate language codes; otherwise, the upgrade will fail.

Before performing an upgrade, make sure to back up your database. The upgrade process will NOT result in a loss of data.

This chapter does not contain information on how to upgrade from a SyteLine 7 objects database to a SyteLine 8.03 database. If you made customizations to your objects database that you want to keep, you need to follow the procedure on our online support web page. Use solution ID 667616 for this procedure.

We highly recommend that you set up a separate test environment on which to perform the upgrade. The test environment should mirror your live environment. Use the test environment to work out any issues and to time the length of the upgrade. Once the upgrade is complete and tested on the test environment, you can perform the upgrade on your production environment. See "Upgrade SyteLine" on page 135 for detailed instructions on how to perform the upgrade.

When proceeding through the steps in the upgrade, you are referred to other chapters in this installation guide, so it is a good idea to have this guide available in some way. It is highly recommended that you perform an upgrade on a test environment first. This environment should mirror your current production environment; the person performing the upgrade should be very familiar with how to set up a test environment that mirrors your current production environment.

## Requirements

**NOTE:** Line item tables (trnitem, coitem, etc.) in SyteLine 7.04 and later no longer contain a supplementary quantity (suppl\_qty) field. Any information you have stored in this field will be lost. We have provided an improved way to calculate supplementary quantities for European Community SSD reporting:

1. In the Commodity Codes form, enter a supplementary quantity conversion factor for each commodity code where supplementary units are required. This factor is used to automatically convert quantities from the standard unit of measure to the supplementary unit of measure for the commodity.
2. Use the new Supplementary Units Conversion Factor Update Utility to make mass updates to line item records that contain the commodity codes.

For more information on the supplementary units conversion factor, see the online help.

Any replication rules that had the category Bus-Vendor are changed to category ESB.

- **Service Pack Levels** - For the version you are upgrading TO, you must apply the latest service pack prior to running the upgrade process. For the version you are coming FROM, you must be at least at the following minimum service pack levels:
  - **SyteLine 7.03** - Latest service pack. See the website for the latest service pack.
  - **SyteLine 7.04** - Latest service pack. See the website for the latest service pack.
  - **SyteLine 7.05** - Latest service pack. See the website for the latest service pack.
  - **SyteLine 8.00** - Latest service pack. See the website for the latest service pack.
  - **SyteLine 8.01** - Latest service pack. See the website for the latest service pack.
  - **SyteLine 8.02** - Latest service pack. See the website for the latest service pack.
- Post all unposted A/R Payments, A/R Invoices, and Debit and Credit Memos prior to the upgrade.
- Use the **A/P Check Printing/Posting** form and the **A/P Wire Posting** form to post any unposted transactions.
- If you are using a master site, you must unshare the parms\_all and chart\_all tables (if they are shared). You MUST upgrade your master site first. After all sites have been upgraded, you can re-share those tables in your master site.
- Any modifications to stored procedures, triggers, and functions have been made in accordance with the methods described in *Modifying Infor10 ERP Business (SyteLine)*. The chapter "Architectural Guidelines for Customers Modifying SyteLine" provides techniques for reapplying modifications after a version upgrade or application of a service pack. You may also have to reapply modifications to IDO metadata, .asp pages, report .rpt files, background-task definitions, and SQL Server table columns. See "Effects of Service Packs and Upgrades on Customizations and Modifications" in *Modifying Infor10 ERP Business (SyteLine)*.
- Init data has been customized in accordance with the approved method. Init data does not need to be re-installed after upgrade.

- If you are upgrading from a version of SyteLine earlier than 8.01 to version 8.02 or higher, you must delete all background tasks with a status of WAITING and then (if necessary) re-create after upgrading. Delete the WAITING tasks on the Active Background Tasks form.
- Add-on packages must be reinstalled after the upgrade.
- Upgrades to SyteLine and any integrated Infor SOA-enabled application must be performed concurrently because the upgraded versions rely on each other. If SyteLine is integrated to any Infor SOA-enabled application, you **MUST** publish all BODs after the upgrade to the Infor SOA-enabled application is complete.
- Prior to the upgrade, you must disable audit logging on the **Process Defaults** form. Once the upgrade is complete, you can re-enable audit logging on the **Process Defaults** form, which will regenerate all affected triggers.
- If you are using APS and have alternatives defined on the **APS Sites and Alternative Management** form, after you are finished upgrading, save any data and then delete the alternatives. You can then add them back if you wish.

## Upgrade SyteLine

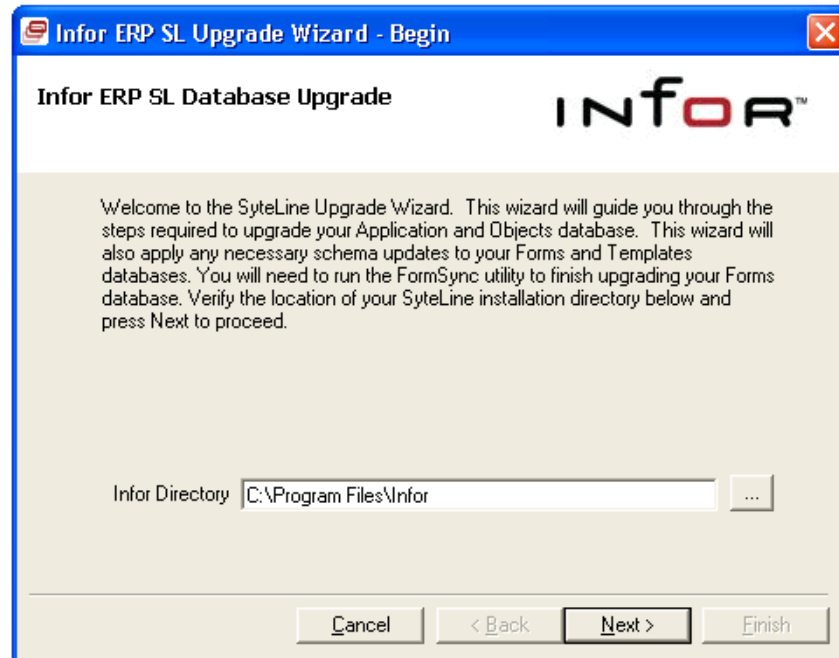
1. Read and understand all the requirements listed above. The requirements and notes earlier in this chapter are very important. Do not proceed with the upgrade before reading and understanding them all.
  2. Back up your SyteLine application databases.
  3. Make sure that all users are logged out of the system.
  4. Uninstall your old version of SyteLine. This is true for all pieces of your system; the database server, utility server, all clients (except for Click Once clients; you do not need to uninstall a Click Once client), planning server, and web server components. See "Uninstalling SyteLine" on page 221 for uninstall instructions.
  5. Install the new SyteLine version (this means a working version that must include the database server piece and the utility server piece at a minimum; we recommend you set up a test environment that mirrors your live environment; see the note earlier in this chapter on page 133). On the database server, make sure to install the database upgrade utility. See Chapter 1, "Setting up the Database Server" for instructions on how to install SyteLine and the database upgrade utility on the database server. Chapter 2, "Setting up the Utility Server" details how to install the utility server piece.
- NOTE:** In SyteLine 8.0 and above, you **MUST** have an Objects database. This database is created during the installation process on the Database Server (when going through the Configuration Wizard).
6. Apply the latest service pack (if one exists) prior to running the upgrade process. The service pack chapter, Chapter 7, "Installing and Applying Service Packs" tells you to re-apply your license. You can wait to do that until after you've completed the upgrade process as in some cases (see note below) you need to apply your license when that process is complete. See the *Infor10 ERP Business (SyteLine) System Administration Guide* for information about the License Management form and how to apply your license.

**NOTE:** Following an upgrade, you **MUST** re-apply your license.

7. From the **Start** menu on the database server navigate to **Infor>Tools>Infor Database Upgrade**.

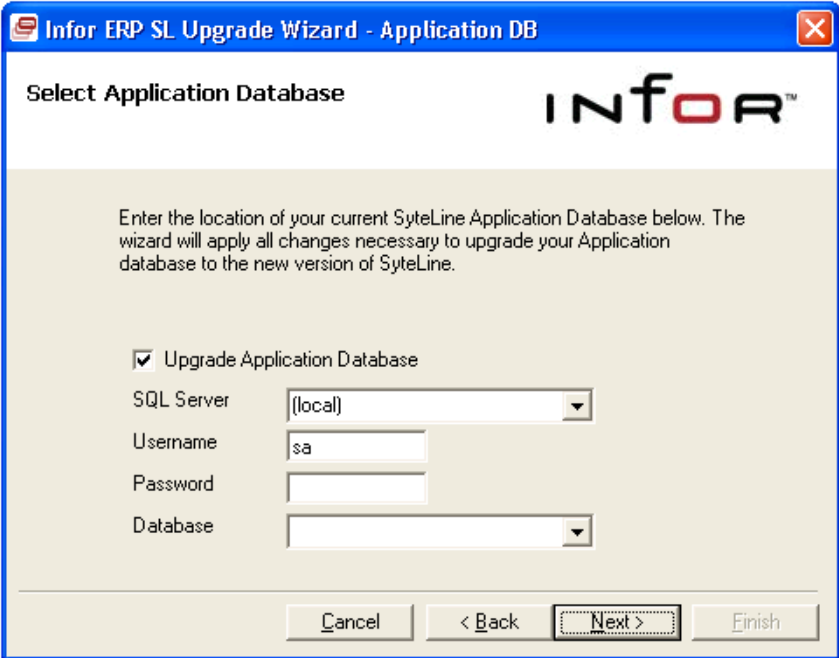
**NOTE:** If this option does not exist, then you didn't install it when you set up the database server with the new version of SyteLine. Go back to Chapter 1, "Setting up the Database Server", and install the database upgrade utility.

8. The **Infor ERP SL Database Upgrade** screen is displayed:



9. The **Infor Directory** field defaults to C:\Program Files\Infor. Accept the default or browse to the correct directory.

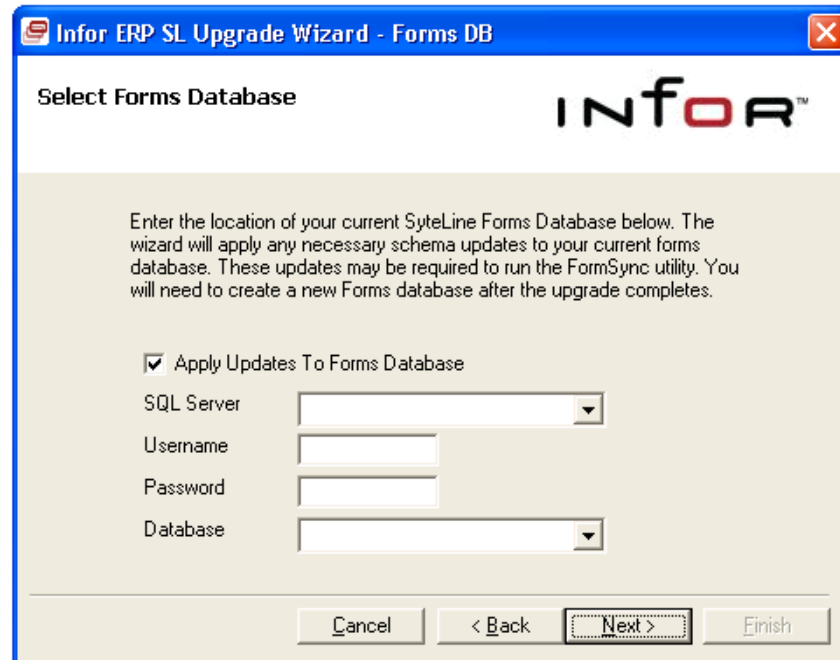
10. Click **Next**. The **Select Application Database** screen is displayed.



11. Fill in the following information:

- **Upgrade Application Database** - Select this checkbox if you want to upgrade a database. Clear the checkbox if you do not want to upgrade a database.
- **SQL Server** - Accept the default of 'local'.
- **Username** - Enter the SQL username; usually 'sa'.
- **Password** - Enter the password for the username.
- **Database** - Select the application database you want to upgrade.

12. Click **Next**. The **Select Forms Database** screen is displayed.



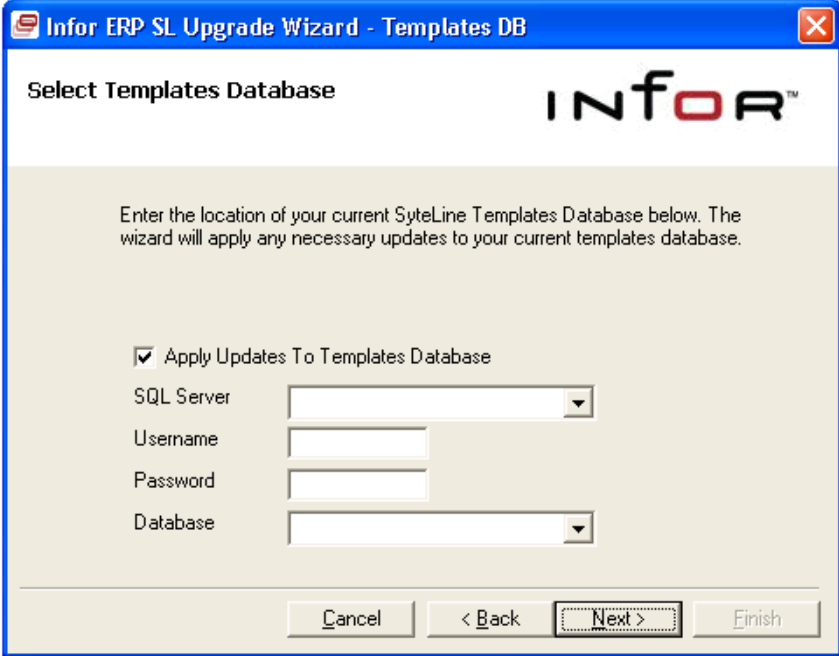
13. Fill in the following information:

- **Apply Updates to Forms Database** - Select this checkbox if you want to apply updates to the forms database. Clear the checkbox if you do not want to apply updates to the forms database..

**NOTE:** Once you apply updates to the forms database, you must use FormSync to complete the upgrade of the database after you have completed all other steps described in this chapter. For instructions on using FormSync, see Chapter 9, "Synchronizing Forms Databases."

- **SQL Server** - Accept the default of 'local'.
- **Username** - Enter the SQL username; usually 'sa'.
- **Password** - Enter the password for the username.
- **Database** - Select the forms database to which you want to apply updates.

14. Click **Next**. The **Select Templates Database** screen is displayed.



15. Fill in the following information:

- **Apply Updates to Templates Database** - Select this checkbox if you want to apply updates to the templates database (you may not have a templates database). Clear the checkbox if you do not want to apply updates to the templates database.
- **SQL Server** - Accept the default of 'local'.
- **Username** - Enter the SQL username; usually 'sa'.
- **Password** - Enter the password for the username.
- **Database** - Select the templates database to which you want to apply updates.

16. Click **Next**. The **Select Objects Database** screen is displayed.

17. Fill in the following information:

- **Apply Updates to Objects Database** - Select this checkbox if you want to apply updates to the objects database. Clear the checkbox if you do not want to apply updates to the objects database.

**NOTE:** If you just created a new objects database on the database server because you are upgrading from version 7.05 and below to version 8.00 or higher (during the database server install procedure) then clear this checkbox. Select this checkbox if you are upgrading from any version of 8 to any other version of 8 (from 8.02 to 8.03 for example). You should also select this checkbox if you had a SyteLine 7.05 or lower Objects database and you made customizations to your objects database that you want to keep. See the **Note** on page 133 for directions on how to do that.

- **SQL Server** - Accept the default of 'local'.
- **Username** - Enter the SQL username; usually 'sa'.
- **Password** - Enter the password for the username.
- **Database** - Select the objects database to which you want to apply updates.

18. Click **Next**. The **Review Changes** screen is displayed.

19. Review the information and click **Commit**.

20. Run the Database Upgrade until you have upgraded all databases you wish to upgrade.

21. When the upgrade is complete, you can view any errors by clicking the **View Logfile** button, and then click **Finish**.

**NOTE:** Once the upgrade is complete, we highly recommend that you check the upgrade log for any errors. A log is created for each database you upgrade and is found in the Logs folder subordinate to the installation directory, typically here - C:\Program Files\Infor\SyteLine\Upgrade\Logs (or you can click the View Logfile button as

mentioned above). The log files are created using the name of the upgraded database as part of the name with the following syntax:

`Upgrade-databasename.log`

You should investigate any error reported in the log. You should fix the errors until none are present in the log before you can consider your database to have upgraded successfully.

## Synchronize the Forms Database

You must use FormSync to complete the upgrade of the forms database. For instructions on using FormSync, see Chapter 9, "Synchronizing Forms Databases."

## Post Upgrade Steps

1. You **MUST** run the **Rebalance Item Qty Allocated to Prod and WIP** utility. This utility is found within SyteLine. Open the utility and click the **Process** button.
2. If you have multiple SyteLine sites or any external applications, open the **Replication Management** form. Click the **Regenerate Replication Triggers** button.
3. You **MUST** use the **Update\_All Tables** form to repopulate tables. Open the **Update\_All Tables** form. Click the **Filter In Place** button to load the collection (all of the \_all tables are selected by default). Click the **Repopulate Tables** button.
4. If you use audit logging, re-enable audit logging on the **Process Defaults** form.
5. Recreate any background tasks that had a status of WAITING that you deleted.

## Troubleshooting

If you have modified the application database schema by adding new constraints or updating table definitions, you will most likely get an error when you run the upgrade. If initialization data has been updated, this could cause an error. We recommend that you run through a pilot upgrade on a test database to address possible issues. If schema or initialization data issues persist, contact your service representative.



You must use the FormSync utility to synchronize your forms database if

- You installed a patch or service pack, or
- You applied a major upgrade to SyteLine (example: you went from SyteLine 8.02 to SyteLine 8.03).

In the synchronization process, FormSync merges customizations with new vendor-level forms from the patch, service pack, or upgrade, and it replaces old vendor-level forms with new vendor-level forms.

Synchronization requires two data configurations, a Source and a Target. The Source configuration contains new form definitions from the patch, service pack, or upgrade. The Target configuration contains your customizations and the old form definitions.

The end result of synchronization is an updated Target forms database, which contains your customizations merged with new form definitions, along with new vendor-level form definitions. This database serves as your new production forms database.

The Source forms database is used only during synchronization. It does not figure in Infor ERP SyteLine operation.

**NOTE:** Synchronization applies only to customizations made with WinStudio edit mode, that is, customizations to forms in the client tier. It does not apply to modifications to IDOs, stored procedures, triggers, or other components of SyteLine.

For more information about synchronization, See Appendix A, "FormSync."

## Requirements

- Before you synchronize a forms database, complete all steps described in Chapter 7, "Installing and Applying Service Packs," or Chapter 8, "Upgrading SyteLine." In particular, be sure that
  - You did NOT apply the service pack to the forms database with the Infor ERP SyteLine Configuration Wizard.
  - You installed the service pack on the forms database server.
  - You upgraded the forms database with the Infor ERP SL Upgrade Wizard.
- Before you use FormSync, you must configure a file-comparison utility. If you have not already configured a utility, see Appendix A, "FormSync," for instructions.

- Replying effectively to FormSync prompts usually requires a detailed understanding of form customizations. See Appendix A, "FormSync."
- FormSync by default deletes all vendor forms in the TARGET configuration forms database and copies them from the SOURCE configuration forms database. The SOURCE configuration forms database must have all third-party products installed before proceeding with a synchronization.

## Synchronize a Forms Database

**NOTE:** If you have multiple forms databases, the procedure described in this section must be completed for each forms database.

### Step 1. Create a Source Forms Database

On the database server, create a Source forms database that incorporates new form definitions from the service pack or upgrade:

1. From the **Start** menu on the forms database server, navigate to **Infor>Setup** and click **Infor ERP SL Configuration Wizard**.
2. Select **Create SyteLine Databases**.
3. Click **Next**.
4. Click **Add**.
5. Select **Forms Database**.
6. On the **Database Name and Location** page, type a **New SQL Database Name** such as *SyteLine\_Forms\_Source*.
7. Click **Next**.
8. Click **Next**, **Commit**, and **Finish**.

### Step 2. Create a Source Configuration

On the utility server, create a Source configuration:

1. Open the **Configuration Manager** utility. From the Windows Start menu, navigate to **Infor>Tools>Configuration Manager**.
2. On the Configurations tab, click **New**.
3. Type a **Configuration Name**, such as *SyteLine\_Synchronization\_Source* and then click **OK**.
4. The **Edit Configuration** screen is displayed.
5. Make sure you are on the **Runtime (Client)** tab.
6. On the database server side of the screen, provide user, password, server, database name, and application information. For more detailed instructions on how to fill out this information or the information in the next step, see Chapter 2, "Setting up the Utility Server".
7. An application database is required in any configuration. The database is not changed in the synchronization process.

8. On the forms side of the screen, provide user, password, server, database name information. The name of the forms database is the forms database that you created in "Step 1. Create a Source Forms Database" (our example was *SyteLine\_Forms\_Source*).
9. Click **OK**. Your newly-created configuration should appear in the list of configuration names.

### Step 3. Synchronize the Source and Target Configurations

The Target configuration in the instructions below is any configuration that points to your production forms database, which contains your customizations and old form definitions.

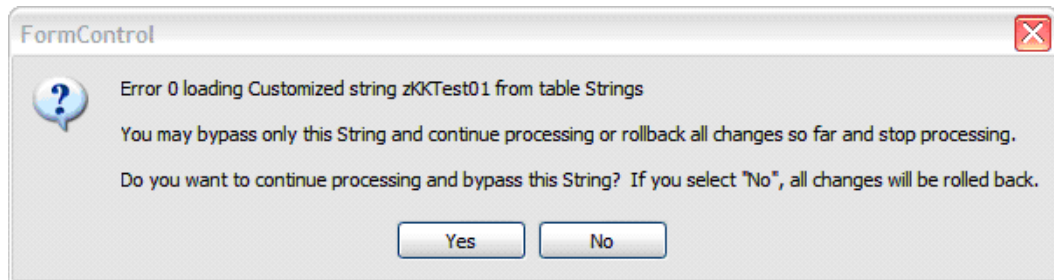
**NOTE:** It is recommended that you set the SQL Server recovery model for the Target forms database to Simple. See your documentation for SQL Server Management Studio for instructions on setting the recovery model.

If the Source and Target forms databases reside on different servers, you must define the server that contains the Source forms database as a linked server in the server that contains the Target forms database. Refer to Microsoft SQL Server documentation for instructions on configuring linked servers.

On the utility server, synchronize the Source and Target configurations with FormSync.

1. Back up your production forms database.
2. From the **Start** menu on the utility server, navigate to **Infor>Tools** and click **FormSync**.
3. In the **Source** list, select the configuration you created in "Step 2. Create a Source Configuration" (our example was *SyteLine\_Synchronizatrion\_Source*).
4. In the **Target** list, select a configuration that points to your production forms database.
5. Click **OK**.
6. Click **Synchronize**.

7. Reply to prompts to keep, remove, or edit customizations. Error messages like the following may appear.



If you bypass an error (click **Yes**), processing continues and the grid on the initial FormSync screen displays the count of bypassed errors as well as an icon indicating there was an error. Otherwise (click **No**) all processing will be rolled back.

Indicating icons are:

| Icon                                                                                | Icon Meaning                                                                                                             |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
|    | Object is ready to process                                                                                               |
|  | Object is being processed                                                                                                |
|  | Processing completed with no errors                                                                                      |
|  | Error occurred, processing continued, and some objects were bypassed.                                                    |
|  | Error occurred, processing continued, and this object was bypassed completely.                                           |
|  | Rollback occurred for all objects.                                                                                       |
|  | Object will not be processed. Dashes are shown instead of numbers if the processing of custom objects is being bypassed. |
|  | Vendor objects are being deleted - only for "base replace status".                                                       |
|  | Vendor objects have been deleted - only for "base replace status".                                                       |

The amount of time required to synchronize customizations depends on

- The number of customizations in the Target
- The speed of the database connection
- Whether Source and Target forms databases are on the same server.

Merging occurs in one transaction. The entire transaction is rolled back if you click **Stop Synchronization**.

#### Step 4. Test the Target Forms Database

Test the results of synchronization. Synchronization is an extension of the customization process, and all merged customizations in the Target configuration should be examined and tested.

See Appendix A, "FormSync," for suggestions on testing.



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# Migrating From SyteLine 5 or SyteLine 6 (Single Site)

10

**NOTE:** If you are migrating a multi-site database, see Migrating From SyteLine 5 or SyteLine 6 (Multi-Site).

When migrating from SyteLine 5 or 6 to SyteLine 8.03, we recommend that you work with your affiliate or professional services consultant. Migrations can be quite complex and time-consuming. You will obtain significant benefit by working with individuals experienced in this process. There are limits to what the Infor Support team can do to assist when migration issues are encountered, due to the variability of the process between customer environments.

The steps in this chapter detail how to migrate from SyteLine 5 or SyteLine 6 on Progress to Infor ERP SyteLine 8.03 on SQL. If you are running a version of SyteLine earlier than SyteLine 5, you need to upgrade to SyteLine 6 before migrating to Infor10 ERP Business (SyteLine) (you could upgrade to SyteLine 5 and migrate from there, but we recommend that you upgrade to SyteLine 6 before migrating to Infor10 ERP Business (SyteLine)).

The steps to upgrade from an earlier version of SyteLine to SyteLine 6 are found in the *Getting Started* manual for SyteLine 6. You can download this manual from Infor's web site at <http://www.infor.com/inforxtreme>.

## Requirements

**NOTE:** In the list of requirements below, there are some paths to programs referenced.

These paths and programs will not exist until AFTER you extract the files in the first step of the conversion procedure. Use the list of requirements only as reference. Do not use this list as your step-by-step procedure. The procedure begins AFTER the list of requirements.

- You must have a working SyteLine 8.03 environment already installed and configured (database server and utility server minimum). See "Setting up the Database Server" on page 17 and "Setting up the Utility Server" on page 27 for installation steps.
- Your computer must have access to the .d files to be unloaded from the source (Progress) database, and access to about the same amount of disk space again (to hold the prepared .d7 files).

- If User Extended Tables (UETs) are used in the SyteLine 5 or SyteLine 6 database, access to the Progress database is required to run the program uet-dump.p to unload the UET schema definitions to a flat file (zUETStruct.d7). If the conversion computer does not have access to Progress, the program can be copied to another appropriate computer and the flat file copied back from there.
- If a Multi-Byte code-page is used in the SyteLine 5 or SyteLine 6 database, access to the Progress database is required to run the program DumpUTF8.p to unload the data in a common format (data/\*.d7w). If the conversion computer does not have access to Progress, the program and its sub-programs ("<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\<verid>\Dump\\*.r") can be copied to another appropriate computer (using the same directory structure) and the data files copied back from there.
- If a Single-Byte code-page is used in the SyteLine 6.01 or later database and faster loading is desired for certain large tables (for example, ledger & matltran), access to the Progress database is required to run the program Dump4bcp.p to unload the data from those tables in a post-converted format (data/SQL/\*.d7b). If the Conversion computer does not have access to Progress, the program and its sub-programs ("<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\Data4bcp\\*.r" and \*.fmt, and "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\<verid>\Dump4bcp\\*.r") can be copied to another appropriate computer (using the same directory structure) and the data files copied back from there.
- SyteLine 8.03 must be installed on this computer. The conversion programs are installed in the installation directory under "\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL". Scripts under "\SyteLine\ApplicationDB\Foreign Keys" (Phase 4) and "\SyteLine\ApplicationDB\Init Data\Empty db" and "\SyteLine\ApplicationDB\Messages" (Final Phase) are also used during the conversion process. See Chapter 1, "Setting up the Database Server for installation instructions.
- You must have installed the SyteLine Database Migration pieces. See Chapter 1, "Setting up the Database Server for installation instructions.
- Enough of SQL Server must be installed in order to have the bcp utility on this computer. SQL Server installation automatically adds the appropriate directory to the system Path.
- On the Server Settings Tab of the SQL Server Properties dialog, two-digit year support must be set to match the Progress -yy setting. For example, If -yy 1930 is used in symixrun.pf and admin.pf, then set to "When a two-digit year is entered, interpret it as a year between: 1930 and 2029." This setting can be adjusted as desired after conversion is complete.
- When unloading data from the source SyteLine database(s), one of the following startup parameter combinations must be used:
  - -d mdy

OR

  - -d ymd -yr4def

In addition, the following startup parameter may not be used, because its output is not recognizable by the implicit SQL conversion algorithm:

  - -d dmy

- These startup parameters can be used in the unloading session without affecting other logged in users, by utilizing a separate parameter-file. To verify the setting, inspect the trailer of an unloaded .d file for the “dateformat” setting; if -yr4def is used, also inspect any non-empty line in a .d for a table that contains a meaningful date field to verify that a 4-digit year is being output.
- Post all unposted A/R Payments, A/R Invoices, and Debit and Credit Memos prior to the conversion.
- Stop the Infor Framework IDO Runtime Service until after migration is completed.

## Migration Steps (Single Site)

Use the following procedure to migrate your single site database. We recommend that you read the entire chapter before you begin. Following the “Post-Migration Tasks” on page 166, the rest of this chapter contains reference material and troubleshooting tips.

### (Optional) Run the String Overstuffing Detection Program

Run the string overstuffing detection program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\overstuff.p) in the source database to detect all character fields with values set longer than the display format.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line in the Progress Query Editor:  
**RUN “<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\overstuff.p”**

The double-quotes in the example above are necessary due to spaces in the path.

4. Press the F2 key.

**NOTE:** Certain fields deliberately overstuffing by SyteLine standard code are accepted as-is into the target database, and others shown below are accepted as-is into the migration database (if Load Obsolete Data is checked) but are obsolete.

| Table.Field         | Display Format | Data Allowed into Migration Database |
|---------------------|----------------|--------------------------------------|
| *-audit.audit-prog  | X(20)          | 50                                   |
| Batchrpt.rpt-name   | X(8)           | 15                                   |
| Frzcost.job         | X(7)           | 30                                   |
| Lasttran.trans-file | X(27)          | 30                                   |
| Lictkn.rsvd3        | X(8)           | 33                                   |
| Msg-lib.msg-fmt     | X(8)           | 300                                  |
| Msg-lib.msg-id      | X(8)           | 40                                   |
| Msg-lib.msg-syntax  | X(30)          | 200                                  |

|                         |       |     |
|-------------------------|-------|-----|
| p-funct.trn-funct       | X(30) | 32  |
| Rf-xref.rf-class        | X(8)  | 30  |
| Rf-xref.description     | X(8)  | 100 |
| Rpt-opt.options         | X(78) | 400 |
| Rpt-opt.rpt-name        | X(8)  | 15  |
| Sys-code.loc-code       | X(8)  | 20  |
| Sys-code.loc-desc       | X(8)  | 60  |
| Sys-code.reserved1      | X(8)  | 12  |
| Sys-code.sym-code       | X(10) | 20  |
| Sys-fld.table-name      | X(20) | 32  |
| Sys-menu.req-module     | X(12) | 18  |
| Tmp-ser.ref-str         | X(25) | 30  |
| User-browse.column-list | X(40) | 150 |
| Usrprint.rpt-name       | X(8)  | 15  |

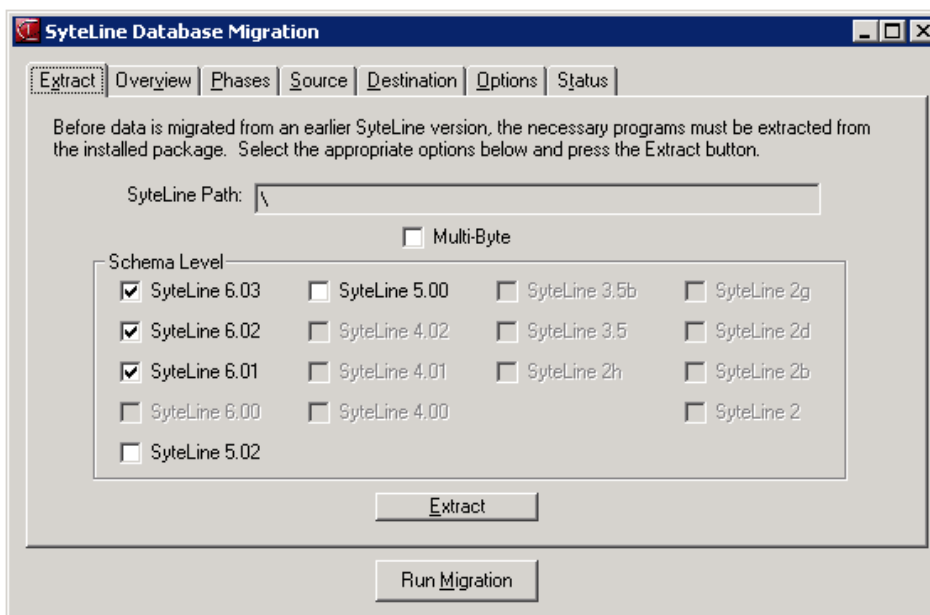
5. Use the output to decide whether to:

- Correct the fields before unloading and save the extraneous data for later use, or
- Correct the fields before unloading and automatically truncate the fields during conversion (if the extraneous data is not needed), or
- Modify the target database structure and conversion scripts to accept longer values, or

A combination of the above methods, per table.

## Start the Database Migration

Select **Start>Programs>Infor>Tools>Infor ERP SL Database Migration** on a computer that has access to the data paths and can connect to the SQL Server where the target databases reside. The following screen is displayed:



When the SyteLine Database Migration screen is displayed, the Extract tab is selected.

1. **SyteLine Path** - The path to the SyteLine folder defaults here.
2. **Multi-Byte** - Select Multi-Byte if your source database uses a multi-byte code-page.
3. **Schema Level** - Choose the schema level of the source database.
4. Click **Extract**.

## (Optional) Run the Numeric Overstuffing Program

Run the numeric overstuffing program (<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\ValPrec.p) in the source database to detect all out-of-range numeric field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<SyteLineInstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\ValPrec.p"**  
 The double-quotes in the example above are necessary due to spaces in the path. ValPrec.p automatically adjusts the PROPATH to find its sub-procedures.
4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### (Optional) Run the Foreign-Key Validation Program

Run the foreign-key validation program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValFK.p) in the source database to detect all invalid links between records.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValFK.p"**

The double-quotes in the example above are necessary due to spaces in the path. ValFK.p automatically adjusts the PROPATH to find its sub-procedures.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Set the fields to the unknown value before unloading, or
  - Create missing master table records to make the links valid, or
  - Delete the records containing invalid values (if the data is old or not needed).

**NOTE:** Phase 4 of the conversion can not be completed until all links are valid.

### (Optional) Run the Null Validation Program

Run the Null validation program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValNull.p) in the source database to detect all invalid (Blank) or (Unknown) field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValNull.p"**

The double-quotes in the example above are necessary due to spaces in the path. ValNull.p automatically adjusts the PROPATH to find its sub-procedure.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### (Optional) Run the Check-Constraint Program

Run the Check-Constraint program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValCk.p) in the source database to detect all remaining invalid field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.

3. Enter the following line:

**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValCk.p"**

The double-quotes in the example above are necessary due to spaces in the path. ValCk.p automatically adjusts the PROPATH to find its sub-procedure.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### (Optional) Run the Out-Of-Range Date-Validation Program

Run the out-of-range date-validation program (<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\olddate.p) in the source database to detect all out-of-range date field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line  
**RUN "<SyteLineInstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\olddate.p"**

The double-quotes in the example above are necessary due to spaces in the path.
4. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### Log Out of SyteLine on All Clients

Make sure everyone is out of the system.

### Shut Down Servers

Shut down your servers.

### Backup Databases

Backup all databases.

### Unload Data from the Database To Be Converted

**NOTE:** Do not unload the databases from within a SyteLine session.

Do not unload the databases by using Progress utilities.

The only supported unload for the SyteLine conversion is from the Administration Menu utility.

**NOTE:** This step involves two options. Read the entire step before proceeding. You only need to run DumpUTF8.p if your database uses a Multi-Byte code-page.

**Option 1** - This process unloads your database into ASCII text files that are read into your new database.

On your existing system, perform the following steps to unload your database(s):

- A. Select **Admin/Run SyteLine** from the Administration screen.
- B. Select **Load/Unload** then **No Integrity** or **Full Integrity**. We suggest Full Integrity.  
If your system is multi-division, you can unload a Global database only by connecting to one of the Division databases.
- C. Select the parameter file of the database to be unloaded.
- D. Login to the database as user **symix**.
- E. Select **Unload Database Files**. The databases referenced by the parameter file are listed. The Main database is highlighted as the default. The first time through, select the Main database. (You might return to this step later.)
- F. The list of all available files is displayed. Press **Enter** to select ALL. An asterisk is placed to the left of the word **ALL**. Press the **F1** key.
- G. When asked for a data path, enter the directory where the unloaded data (.d files) will be placed. Make sure that you have adequate space in the directory and that you have permission to write to the directory.

**NOTE:** If a Scheduling or Audit-Trail database is referenced in the parameter file, repeat steps E-F. A Scheduling database or Audit-trail database should be unloaded to the same directory as its Main database, but only after the Main database has been unloaded.

**NOTE:** The License Manager database does not need to be unloaded.

- H. If your system is multi-division, repeat steps E, F, and G for each of the divisions and the Global database:
  - Each division, including its Main, Scheduling, and Audit-trail databases, should be unloaded to a separate directory. A Scheduling database or Audit-trail database should be unloaded to the same directory as its Main database, but only after the Main database has been unloaded.
  - If another division is referenced by the parameter file of the database being unloaded, it is displayed in the list of databases in Step F.
  - The Global database should also be unloaded to a separate directory.

**Option 2** - If your database uses a Multi-Byte code-page, run the UTF8 unload program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\DumpUTF8.p) instead.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\DumpUTF8.p"**

The double-quotes in the example above are necessary due to spaces in the path. DumpUTF8.p automatically adjusts the PROPATH to find its sub-procedures.

**NOTE:** For SyteLine 6.01 or later databases utilizing a Single-Byte code-page, run the bcp

unload program (<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\Dump4bcp.p) also.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:

**RUN "<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\Dump4bcp.p"**

The double-quotes in the example above are necessary due to spaces in the path. Dump4bcp.p automatically adjusts the PROPATH to find its sub-procedures.

4. Press the F2 key.

Write the output (\*.d7b) to the Prepared Data Path, or copy it there before running Phase 2. Remember to select Fast-Load Large Tables for Phases 2 and 3. The table(s) unloaded in this manner can be excluded from the normal unload performed using the SyteLine Database Utilities, to save time.

If you have multi-database structures (for example, a separate scheduling database), unload all the component databases into the same data path used for the main database.

### Run uet-dump.p. (Only if User Extended Tables are Used)

If User Extended Tables (UETs) are used and the data is to be carried forward to Infor10 ERP Business (SyteLine), run the program uet-dump.p to unload the UET schema definitions to a flat file named zUETStruct.d7.

**NOTE:** You must have access to the Progress database on the conversion computer to be able to run uet-dump.p. If the conversion computer does not have access to the Progress database, copy uet-dump.p to a computer that does, run it there, and then copy the flat file back to the conversion computer.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\uet-dump.p"**
- The double-quotes in the example above are necessary due to spaces in the path. Write the output file (zUETStruct.d7) to the Prepared Data Path, or copy it there before running Phase 7.
4. Press the F2 key.

### Create a Report of User-Defined Field Usage (Optional)

To create a report of User-Defined Fields usage, run userflds.p in the source database to create userflds.txt.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.

3. Enter the following line:

**RUN "<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\userflds.p"**

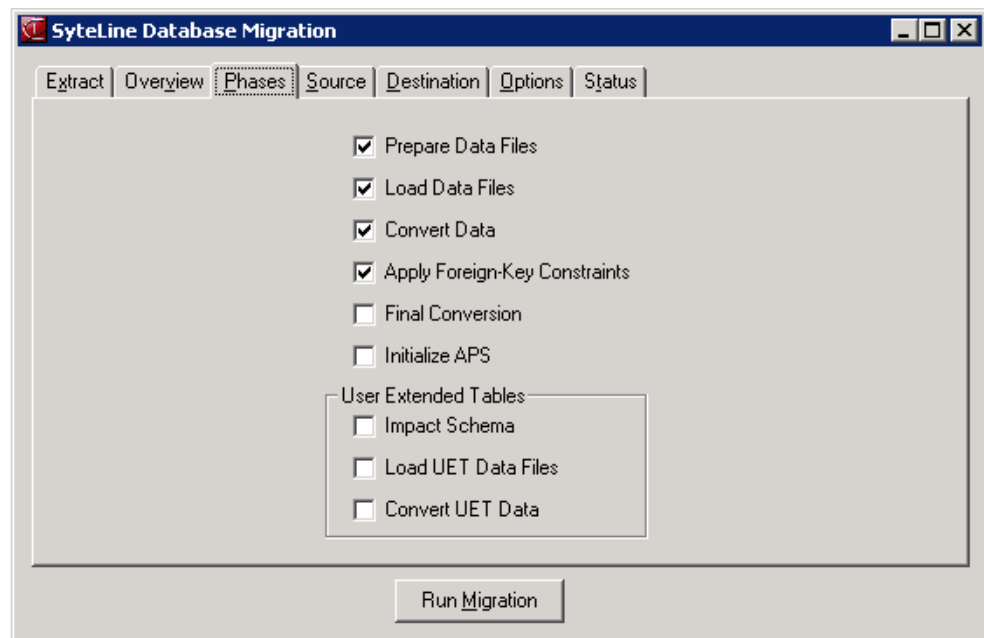
The double-quotes in the example above are necessary due to spaces in the path. This information can be used after conversion to setup the same User-Defined Fields in appropriate SyteLine Forms.

4. Press the F2 key.

## Create a SyteLine Empty Application Database for Each Site

Use the Infor ERP SL Configuration Wizard to create an Infor ERP SyteLine empty application database for each site. See Chapter 1, "Setting up the Database Server" for information on how to use the Infor ERP SL Configuration Wizard.

## Select the Phases to Run on the Phases Tab



1. On the SyteLine Database Migration screen, select the **Phases** Tab.
2. Select the phases you need to run (we recommend that while testing you run each phase separately and clean up any errors before you continue with the next phase; once you're ready to do the final migration, you can select all desired phases and run it); all phases may not be necessary for your company. See immediately below for specific information about each phase, and make sure you understand each one before you run the conversion. After you select the phases, there are still some things to do on other tabs before you click the **Run Migration** button. Once you have completed all the preparatory tasks, you can click the **Run Migration** button, but you won't do that within this step.

## Phases

**NOTE:** Each phase should be completed before beginning the next phase, with the

exception of phase 8, which can be completed anywhere after phase 1 but before phase 9.

Since the schema is stringent with respect to the format of data and cross-references, the entire process usually cannot be run unattended through all phases until a trial conversion has proven that any data inconsistencies have been addressed. We recommend therefore that you run one phase at a time during a trial conversion period.

The types of data problems are outlined in the section titled "Troubleshooting" on page 167.

Conversion occurs in the following 9 phases:

3. **Prepare Data Files** - Each Progress EXPORT-format flat-file (\*.d) is read line-by-line, converted to a SQL-loadable format, and written out to a new flat-file (\*.d7).
4. **Load Data Files** - Each SQL-loadable flat-file (\*.d7) is loaded into a corresponding table in a SQL Conversion database.
5. **Convert Data** - Tables in the SyteLine Application database with known SyteLine 6 roots are populated from appropriate columns in rows in the appropriate table(s) in the migration database. Transformations are carried out for date and logical data-types, and Progress (Unknown) or (Blank) vs. SQL NULL values. Conversions are carried out for table splits and merges. New columns are populated from defaults or from other columns.

After you've converted the data, click the **Compare Converted Record Counts** button on the Options tab. This action compares the record-counts of the tables in the selected range between the Conversion and Application Databases, and reports those which are different. Use this to verify that no tables were inadvertently skipped.

6. **Apply Foreign-Key Constraints** - SQL constraints are loaded to ensure the existence of a record on the lookup end of most foreign-key references.
7. **Final Conversion** - Other conversions are carried out that require all tables to be populated. After Phase 5 is complete, the Application database is ready for login and licensing. You may now modify the data in the UET forms (e.g., remove the "pref-type" class), then logout and continue with Impact Schema. This is a way to purge unwanted extensions, as only the columns present in both the migration database and Application database are converted in Phase 8.
8. **Initialize APS** - APS tables are initialized from Work Center and Bill of Material and Job Routing data.
9. **Impact Schema (for UET)** - Creates columns to store table extensions.
10. **Load UET Data Files** - Each SQL-loadable UET flat-file (x\*.d7) is loaded into a corresponding table in the migration database.
11. **Convert UET Data** - Table extensions are copied from the migration database to the appropriate records in the Application database.

## Make Selections on the Source Tab

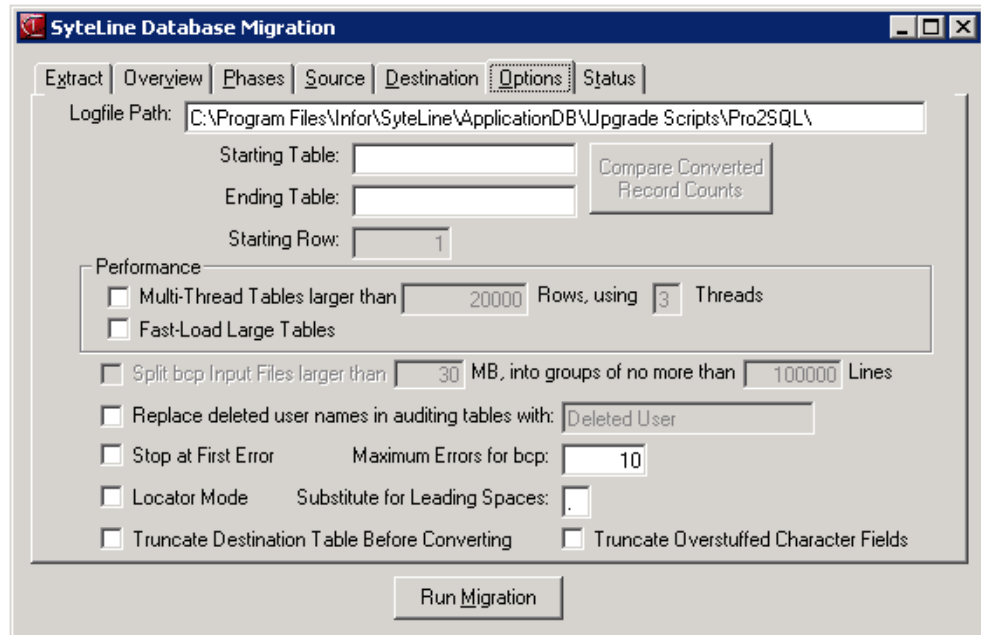
1. **Schema Level** - Choose the Schema Level of the source database. This is the highest level in the drop-down that is before or equal to the version of SyteLine last run against the database from which the data was unloaded.
2. **Multi-Byte** - Select Multi-Byte if the source database uses a Multi-Byte code-page. Phase 1 looks for .d7w files created by DumpUTF8.p and translate them to .d7u files. Phase 2 looks for .d7u files. All data is translated to Unicode during conversion, regardless of the Multi-Byte setting.
3. **Multi-Site** - Do not select Multi-Site. This is selected when the source database is already a member of a multi-site structure.
4. **Multi-Currency** - Select Multi-Currency if the source database had Multi-Currency enabled. Otherwise clear this option and enter a new currency code on the Destination tab.
5. **Data Path** - Enter the Data Path to which the source database was unloaded.
6. **Prepared Data Path** - Enter a new directory into Prepared Data Path, where prepared data files will be stored during conversion. This drive requires available space approaching the total size of the unloaded files located in the Data Path.

## Make Selections on the Destination Tab

The screenshot shows the 'SyteLine Database Migration' application window with the 'Destination' tab selected. The interface includes several input fields and buttons for configuring the migration destination. The 'Migration Database' field has a 'Create' button next to it. The 'Entity Migration Database' and ''symglbl' Migration Database' are dropdown menus. The 'Site/Entity Migration Databases' is a text area. The 'Application Database' is a dropdown menu. The 'Site' and 'Currency' fields are text boxes. A 'Refresh Database Lists' button is located on the right side of the main form area. At the bottom of the window is a 'Run Migration' button.

1. **SQL Server** - Enter the name of the SQL Server on which all databases will reside.
2. **sa Password** - Enter the password for the System Administration user 'sa' on the SQL Server.
3. **Migration Database** - Enter the name of an intermediate migration database to be used during conversion, then click the Create button. Its structure is built during phase 2.
4. **Refresh Database Lists** - Click the Refresh Database Lists button to populate the Application Database drop-down list.
5. **Application Database** - Select the Application Database created in Step .
6. **Site** - Enter the Site identifier for all records in the target database. This value may not be left blank, and you cannot change the value during or after the conversion.
7. **Currency** - If Multi-Currency was not enabled in the source database, enter a Currency code for all records in the target database. This value may not be left blank, and you cannot change the value during or after the conversion.

## Make Selections on the Options tab



1. **Logfile Path** - Enter a Logfile Path where logfiles will be written. The default is the Working Directory of the conversion program.
2. **Starting and Ending Table** - (Optional) Enter Starting and Ending Table to limit processing to a specific range of data. This is a strict range and does not accept wildcards. It can be used to parallel-process portions of certain phases on different computers connected to one SQL Server (ensuring that each phase is completed on all computers before beginning the next phase), or to resume conversion or re-convert individual tables after correcting errors in the source data. For Phase 1, use extensionless .d names. For Phase 2, use SyteLine 6 table names (with hyphens). For Phases 3-4, 7, and 8, use Infor ERP SyteLine table names (with underscores instead of hyphens). For User Extended Tables, specify the extensionless .d name in Phase 1 and the corresponding SyteLine table in other Phases according to the guidelines in the preceding sentence.

When using ranges, note that hyphen sorts lower than (i.e., comes before) "a", and underscore sorts higher than (i.e., comes after) "z". A simple method for starting at the first table after "table" is to specify Starting Table as "table-" (the name of the table followed by a hyphen). This excludes "table" itself but processes any table having a prefix identical to "table" followed by any letter, hyphen, or underscore. A simple method for ending at the last table before "table" is to specify Ending Table as "tabld\_zz" (the name of the table with its last character replaced by the preceding letter or digit followed by underscore and 2 "z"s). Again this excludes "table" itself but processes any table having a prefix near to "table" followed by any letter, hyphen, or underscore and any other letters (because no SyteLine tables contain 2 adjacent underscores). Using these methods, it is not necessary to know the entire list of tables or at which specific table the process is to be started or ended.

Refer to the tables below as examples:

| In Phase 1               |          |
|--------------------------|----------|
| To process:              | Specify: |
| memo-top.d → memo-top.d7 | memo-top |
| prd-item.d → prd-item.d7 | prd-item |
| item.d → item.d7         | item     |
| xitem.d → xitem.d7       | xitem    |

| In Phase 2                    |               |
|-------------------------------|---------------|
| To process:                   | Specify:      |
| memo-top.d7 → [memo-topic]    | memo-topic    |
| prd-item.d7 → [prod-mix-item] | prod-mix-item |
| item.d7 → [item]              | item          |
| xitem.d7 → [ux-item]          | item          |

| In other Phases                 |               |
|---------------------------------|---------------|
| To process:                     | Specify:      |
| [memo-topic] → memo_topic       | memo_topic    |
| [prod-mix-item] → prod_mix_item | prod_mix_item |
| [item] → item                   | item          |
| [ux-item] → item                | item          |

3. **Performance** - On multi-processor computers, use the fields in this section to distribute Phase 3 processing among the CPUs.
  - **Multi-Thread Tables Larger than N Rows** - Check this field and then enter the number of rows a table must have before multi-thread begins.
  - **Threads** - Enter the desired number of simultaneous threads (2-9). A single thread is used for tables having less than or equal to the number of rows designated in the **Multi-Thread Tables Larger than N Rows** field above.

4. **Fast-Load Large Tables** - If Dump4bcp.p was used to unload large tables from the Progress database, this field can be set to load directly from the resulting \*.d7b files into the application database during Phase 2 (bypassing the migration database and eliminating or significantly reducing the Phase 3 processing for these tables). Notes attached to these records are loaded during Phase 3. Initial tables supported by Dump4bcp.p are: ledger & matltran (and its sub-table matltran\_amt) for SyteLine 6.01 or later source databases.
5. **Replace deleted user names in auditing tables with** - Earlier versions of SyteLine allowed deletion of a User record even after some auditing records had been created by that user. This is no longer allowed in SyteLine. Select this option and enter a user name to replace the deleted users' names. You may enter an existing user name from the database being migrated, a new user automatically added for SyteLine (e.g. "sa"), or an entirely new name in which case a new user record will be created. Clear this option to convert the deleted user names as NULLs. This will cause validation errors on some tables, listed below:

| Table      | NULL Allowed |
|------------|--------------|
| Adp_parm   | Yes          |
| Cad_parm   | Yes          |
| Ctc_log    | Yes          |
| Inv_ms_log | Yes          |
| Jobt_mat   | Yes          |
| PoblInchg  | No           |
| Pochange   | No           |
| Pochg      | No           |
| Poitmchg   | No           |
| Proj_ship  | Yes          |
| Proj_wip   | No           |
| Rev_ms_log | No           |

6. **Stop at First Error** - Select Stop at First Error to stop the conversion upon first detection of any error or data anomaly. Clear this option to continue processing the next table(s) and/or Phase(s). In either case, detected errors are logged to the Status tab and written to a logfile.
7. **Maximum Errors for bcp** - Phase 2 uses the bcp (Bulk Copy) utility to import data from flat-files. Bcp performs minimal validation as rows are imported, including checking for proper data-types and lengths. If the number of rows with that fail validation is below a threshold, bcp imports the remaining rows and reports the errors encountered; otherwise bcp imports nothing. Enter the number of data errors for bcp to detect before aborting the import for each table. Use this option if a table is failing validation to help determine which rows contain errors. Increase the value until the remaining rows are imported, then determine which rows are missing from the Migration database.

8. **Locator Mode; Starting Row** - If Phase 3 fails due to a data validation problem, use this option to locate the invalid row and display its converted column values that might be too long or out of range. If this is successful, subsequent errors can be located by setting the Starting Row to the next row and trying again.
9. **Substitute for Leading Spaces** - Enter a single character to Substitute for Leading Spaces in non-formatted character fields. Leading spaces are not allowed in Infor ERP SyteLine, except in alpha-keys (for example, CO number, PO number). To maintain sorting as in the source database, enter a character that sorts before the first character of the lowest-sorting non-space-led field in any field in any table containing leading spaces (exclamation, double-quote, #, \$, %, &, single-quote, (, ), \*, +, comma, -, period, slash; and unless digits are used to start fields, also any digit, colon, semi-colon, <, =, >, question-mark, or @).
10. **Truncate Destination Table Before Converting** - Use this option during Phases 3 and/or 9 to remove all rows from the destination table(s) before converting rows from the Migration database. This is useful in case a previous run failed and left a partial set of rows remaining.
11. **Truncate Overstuffed Character Fields** - Select Truncate Overstuffed Character Fields to automatically truncate all character fields with values in the source database set longer than the display format. The extraneous data remains in the migration database, but no warning is shown. Clear this option to abort loading the entire table when this condition is detected. This allows anomalies to be found without running overstuff.p.

### Click the Run Migration Button

Click the Run Migration button to start processing. The Status tab shows the progress. An alert-box and bell signal completion. At completion, the progress is appended to a file "convert.log" in the Logfile Path.

### Click Run Migration Button for Additional Phases or Table Ranges

Repeat the above steps for additional phases or table ranges, and click the Run Migration button when ready. After Phase 3 is complete, click the Compare Converted Record Counts button on the Options tab to display any tables with mismatched record-counts between the Conversion and Application database. This is helpful to catch any tables that were neglected if incorrect table ranges were used.

Do not run the final conversion phase until all prior phases have completed.

### Perform Post Migration Tasks

After migration is complete, perform the "Post-Migration Tasks" below.

Following the Post Conversion Tasks, the rest of this chapter is reference material and troubleshooting tips.

## Post-Migration Tasks

The following tasks are required after conversion to prepare the application database for use with SyteLine:

1. Open the License Management form and enter your license key. See the *Infor10 ERP Business (SyteLine) System Administration Guide* for information about the License Management form and how to apply your license.
2. Enter password for all user records. Because passwords are stored in an encrypted format, they cannot be brought forward from the source database.
3. Set up form-based, user-, and group-level security. See the *Infor10 ERP Business (SyteLine) System Administration Guide* or the online help for more information on how to set up user authorizations.
4. Unhide and appropriately label any desired User-Defined Fields on Forms' User-Defined tabs.

## Outputs

| Name         | Phase | Directory          | Contents                                                                                                    |
|--------------|-------|--------------------|-------------------------------------------------------------------------------------------------------------|
| Convert.log  | All   | Logfile Path       | Contents of the Status tab                                                                                  |
| Load.log     | 2     | Prepared Data Path | Number of records loaded per table; format is comparable to "un-load.log" from the Database Unload utility. |
| Load2.log    | 3     | Logfile Path       | Number of records converted per table                                                                       |
| Crewsize.log | Final | Logfile Path       | List of records whose non-integral Crew Size was altered                                                    |

## Disk Usage

Plan for the following space requirements:

| Data Store                                 | Estimated Size | Needed Through                                         |
|--------------------------------------------|----------------|--------------------------------------------------------|
| Source database (Progress)                 | X              | Database Utilities Unload (pre Conversion)             |
| Unloaded data files (*.d)                  | 80% of X       | Conversion Phase 1 (Prepare Data Files)                |
| Prepared data files (*.d7)                 | 55% of X       | Conversion Phase 2 (Load Data Files)                   |
| Conversion database (SQL)                  | 150% of X      | Final Conversion (OK to Shrink after Phase 2)          |
| Application database transaction log (SQL) | 35% of X       | Final Conversion (OK to Shrink after Final Conversion) |

|                                       |           |     |
|---------------------------------------|-----------|-----|
| Application database data files (SQL) | 350% of X | --  |
| High-water mark when minimizing       | 535% of X | N/A |
| Total when not minimizing             | 770% of X | N/A |

## Troubleshooting

Following are some common errors that might occur during conversion, with suggested remedies:

| Phase | Error                                                                                                                                          | Where                                 | Remedy                                                                                                                                                                                                                                                                                                               |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2     | String data, right truncation                                                                                                                  | <Prepared Data Path>\ <dump-name.err> | Run overstuff.p in the source database to find overstuffing fields. Correct these in the source database and unload again, or modify the <VerId>/*.tbl file to allow for more data, and use the Truncate option.                                                                                                     |
| 3     | Cannot insert the value NULL into column 'xxx', table 'zzz.dbo.yyy'; column does not allow nulls. INSERT fails.                                | Convert.log                           | Run ValNull.p in the source database to find invalid (Blank) and (Unknown) fields. Correct these in the source database and unload again, or<br>Use SELECT statements in the Conversion database to find offending records. Correct or delete these and re-run Phase 3 for this table.                               |
| 3     | INSERT statement conflicted with COLUMN CHECK constraint 'CK_yyy_xxx'. The conflict occurred in database 'zzz', table 'yyy', column 'xxx'.     | Convert.log                           | Use SELECT statements in the Conversion database to find offending records. Correct or delete these and re-run Phase 3 for this table.                                                                                                                                                                               |
| 4     | ALTER TABLE statement conflicted with COLUMN FOREIGN KEY constraint 'kkk'. The conflict occurred in database 'zzz', table 'yyy', column 'xxx'. | Convert.log                           | Run ValFK.p in the source database to find invalid foreign-key references. Correct these in the source database and unload again, or<br>Use SELECT statements in the Application database to find offending records. Correct or delete these and re-run Phase 4 for this table. See Resolving Foreign-Key Conflicts. |

## Resolving Foreign-Key Conflicts

A Foreign-Key Relationship is a reference in one record to the primary-keys of another record. For example, most G/L Account columns must either be Null or refer to an existing record in the Chart of Accounts table. The SyteLine Application database utilizes SQL

Foreign-Key Constraints to enforce these relationships, thus ensuring referential integrity between tables.

If a reference is incorrect in the source database, a Foreign-Key Conflict is raised during Phase 4. All such conflicts must be resolved before the database is ready for use with SyteLine.

Following is an example of resolving a Foreign-Key Conflict.

The SQL error message for this example is:

```
*** Error occurred during Apply coh.key to SyteLine_App
ALTER TABLE statement conflicted with TABLE FOREIGN KEY
constraint 'cohFk1'. The conflict occurred in database
'SyteLine_App', table 'customer'.
```

The above message has the following information:

- The record containing the incorrect reference is located in the "coh" table (foreign-key table).
- The reference is intended to identify a record in the "customer" table (primary-key table).
- The name of the foreign-key relationship is "cohFk1" (constraint name).
- The relationship is described in the file <InstallDir>\SyteLine\ApplicationDB\Foreign Keys\coh.key.

If the relationship is based on a single key column, its name is also given. This information is also listed in the .key file.

To resolve the conflict, do the following:

5. Determine which columns in the foreign-key table "coh" are meant to refer to which columns in the primary-key table "customer." These are listed in the .key file under the name of the relationship as in the example below:

```
ADD CONSTRAINT cohFk1
    FOREIGN KEY (
        cust_num
    , cust_seq
    ) REFERENCES customer (
        cust_num
    , cust_seq
    )
```

6. Build a T-SQL statement in the Query Analyzer to find incorrect references as in the example below:

```
SELECT co_num, cust_num, cust_seq
FROM coh
WHERE cust_num IS NOT NULL
AND NOT EXISTS (SELECT 1 FROM customer
```

```
WHERE customer.cust_num = coh.cust_num
AND customer.cust_seq = coh.cust_seq)
```

The above statement shows (SELECT) the key column(s) (co\_num) and incorrect references (cust\_num, cust\_seq) from every record in the foreign-key table (coh) whose foreign-keys (coh.cust\_num, coh.cust\_seq) seemingly refer to a record (NOT NULL) but do not identify (NOT EXISTS) a record in the primary-key table (customer).

A grid is displayed that lists the selected columns for each record with an incorrect reference. You now decide how to address each incorrect reference. Choose from among the following 3 options:

- Change the foreign-key columns to refer to an existing primary-key record.

For example:

```
UPDATE coh SET cust_seq = 4 WHERE coh.co_num =
'S000215869'
```

- Add a new primary-key record with primary-keys to match the foreign-keys (not recommended at this point in the process, because SyteLine triggers are disabled and will not provide their normal validation or cascading actions); or
- Change the foreign-key columns to Null.

For example, to affect all incorrect records:

```
UPDATE coh SET cust_num = NULL, cust_seq = NULL
FROM coh
WHERE cust_num IS NOT NULL
AND NOT EXISTS (SELECT 1 FROM customer
WHERE customer.cust_num = coh.cust_num
AND customer.cust_seq = coh.cust_seq)
```

All references are correct for this constraint when the SELECT statement above displays an empty grid.

After all references are correct for all constraints in a .key file, phase 4 can be re-run for the foreign-key table (enter the table name "coh" in both the Starting Table and Ending Table fields).

## Relative Duration

The following table approximates the relative successful completion times of each phase:

| Phase | %  |
|-------|----|
| 1     | 1  |
| 2     | 20 |
| 3     | 65 |
| 4     | 1  |
| 5     | 7  |
| 6     | 6  |

Results may vary and can differ greatly when parallel processes are used.

## Re-entrance

Phases 1-4, 6, and 8 can be re-executed for individual tables or ranges if data inconsistencies are detected and corrected. The following table provides details:

| Phase | Preparation Required Before Re-execution | Details                                                                                                                        |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1     | None                                     | .d7 file will be overwritten by default                                                                                        |
| 2     | None                                     | Table in Conversion database is dropped and re-created by default                                                              |
| 3     | Truncate table in Application database   | Depending on the type of error received during previous execution, data may remain in the table; we do not truncate by default |
| 4     | None                                     | Existing constraints are dropped for each table and re-created by default                                                      |
| 6     | None                                     | Stored Procedure purges all data before recreating it.                                                                         |
| 8     | None                                     | Table in Conversion database is dropped and re-created by default                                                              |

## Parallel Execution

Phases 1-4 can be executed on multiple computers or multiple processes in parallel, to reduce total duration. This is especially useful on multi-processor systems.

1. Start multiple instances of SLConv.exe on 1 or more computers.
2. Enter a unique Logfile Path for each instance; all other options should be identical.
3. Use the Starting Table/Ending Table range option to split the load. Note your largest tables by size of .d and attempt to group these separately (for example, if largest tables are ledger and matltran, then use 4 ranges: a-l, l-m, m-n, n-z).

**NOTE:** Range l-m does not process any tables beginning with "m", because "matlearn" (the first table beginning with "m") sorts higher than "m" in dictionary order. Another way to process the same range is l-l\_zz.

When using parallel execution, follow these guidelines for minimum contention:

| Phase | Guideline                                                                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1     | None                                                                                                                                |
| 2     | None                                                                                                                                |
| 3     | Start first instance; wait until it has finished dropping foreign-keys and loaded user_local table; then start remaining instances. |
| 4     | None                                                                                                                                |

Monitor system load to avoid performance degradation.



---

# Migrating From SyteLine 5 or SyteLine 6 (Multi-Site)

11

**NOTE:** If you are migrating a single site database, see “Migrating From SyteLine 5 or SyteLine 6 (Single Site)” on page 149.

When migrating from SyteLine 5 or 6 to Infor10 ERP Business (SyteLine), we recommend that you work with your affiliate or professional services consultant. Migrations can be quite complex and time-consuming. You will obtain significant benefit by working with individuals experienced in this process. There are limits to what the Infor Support team can do to assist when conversion issues are encountered, due to the variability of the process between customer environments.

The steps in this chapter detail how to convert from SyteLine 5 or SyteLine 6 on Progress to SyteLine 8.03 on SQL. If you are running a version of SyteLine earlier than SyteLine 5, you need to upgrade to SyteLine 6 before converting to SyteLine 8.03 (you could upgrade to SyteLine 5 and convert from there, but we recommend that you upgrade to SyteLine 6 before converting to SyteLine 8.03).

The steps to upgrade from an earlier version of SyteLine to SyteLine 6 are found in the *Getting Started* manual for SyteLine 6. You can download this manual from Infor’s web site at <http://www.infor.com/inforxtreme..> Once there, perform the following steps:

1. Login.
2. Select **SyteLine Menu** from the drop-down menu at the top of the screen.
3. Click **OK**.
4. Click the link for **Product documentation**.
5. Follow the links to the *Getting Started* manual for SyteLine 6.

## Requirements

**NOTE:** In the list of requirements below, there are some paths to programs referenced.

These paths and programs will not exist until AFTER you extract the files in the first step of the conversion procedure. Use the list of requirements only as reference. Do not use this list as your step-by-step procedure. The procedure begins AFTER the list of requirements.

- You must have a working SyteLine 8.03 environment already installed and configured (database server and utility server minimum). See Chapter 1, “Setting up the Database Server and Chapter 2, “Setting up the Utility Server for installation steps.

- Your computer must have access to the .d files to be unloaded from the source (Progress) database, and access to about the same amount of disk space again (to hold the prepared .d7 files).
- If User Extended Tables (UETs) are used in the SyteLine 5 or SyteLine 6 database, access to the Progress database is required to run the program uet-dump.p to unload the UET schema definitions to a flat file (zUETStruct.d7). If the conversion computer does not have access to Progress, the program can be copied to another appropriate computer and the flat file copied back from there.
- SyteLine 8.03 must be installed on this computer. The conversion programs are installed in the installation directory under "\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL". Scripts under "\SyteLine\ApplicationDB\Foreign Keys" (Phase 4) and "\SyteLine\ApplicationDB\Init Data\Empty db" and "\SyteLine\ApplicationDB\Messages" (Final Phase) are also used during the conversion process. See Chapter 1, "Setting up the Database Server for installation instructions.
- You must have installed the SyteLine Database Migration pieces. See Chapter 1, "Setting up the Database Server for installation instructions.
- Enough of SQL Server must be installed in order to have the bcp utility on this computer. SQL Server installation automatically adds the appropriate directory to the system Path.
- On the Server Settings Tab of the SQL Server Properties dialog, two-digit year support must be set to match the Progress -yy setting. For example, If -yy 1930 is used in symixrun.pf and admin.pf, then set to "When a two-digit year is entered, interpret it as a year between: 1930 and 2029." This setting can be adjusted as desired after conversion is complete.
- When unloading data from the source SyteLine database(s), one of the following startup parameter combinations must be used:
  - -d mdyOR
  - -d ymd -yr4def

In addition, the following startup parameter may not be used, because its output is not recognizable by the implicit SQL conversion algorithm:

- -d dmy

These startup parameters can be used in the unloading session without affecting other logged in users, by utilizing a separate parameter-file. To verify the setting, inspect the trailer of an unloaded .d file for the "dateformat" setting; if -yr4def is used, also inspect any non-empty line in a .d for a table that contains a meaningful date field to verify that a 4-digit year is being output.

- Post all unposted A/R Payments, A/R Invoices, and Debit and Credit Memos prior to the conversion.
- Stop the Infor Framework IDO Runtime Service on the utility server until after migration is completed.

## Migration Steps (Multi-Site)

Use the following procedure to migrate your multi-site database to SyteLine 8.03. We recommend that you read the entire chapter before you begin. The procedure is divided up in to several sections, and each section contains a series of steps. Following the “Post-Migration Tasks” on page 202, the rest of this chapter contains reference material and troubleshooting tips.

### (Optional) Run the String Overstuffing Detection Program

Run the overstuffing detection program (<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\overstuff.p) in each site and entity database.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line in the Progress Query Editor:  
**RUN “<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\overstuff.p”**

The quotes in the example above are necessary due to spaces in the path.

4. Press the F2 key.

**NOTE:** Certain fields deliberately overstuffing by SyteLine standard code are accepted as-is into the target database, and others shown below are accepted as-is into the migration database (if Load Obsolete Data is checked) but are obsolete.

| Table.Field         | Display Format | Data Allowed into Migration Database |
|---------------------|----------------|--------------------------------------|
| *-audit.audit-prog  | X(20)          | 50                                   |
| Batchrpt.rpt-name   | X(8)           | 15                                   |
| Frzcost.job         | X(7)           | 30                                   |
| Lasttran.trans-file | X(27)          | 30                                   |
| Licktkn.rsvd3       | X(8)           | 33                                   |
| Msg-lib.msg-fmt     | X(8)           | 300                                  |
| Msg-lib.msg-id      | X(8)           | 40                                   |
| Msg-lib.msg-syntax  | X(30)          | 200                                  |
| p-funct.trn-funct   | X(30)          | 32                                   |
| Rf-xref.rf-class    | X(8)           | 30                                   |
| Rf-xref.description | X(8)           | 100                                  |
| Rpt-opt.options     | X(78)          | 400                                  |
| Rpt-opt.rpt-name    | X(8)           | 15                                   |
| Sys-code.loc-code   | X(8)           | 20                                   |

|                         |       |     |
|-------------------------|-------|-----|
| Sys-code.loc-desc       | X(8)  | 60  |
| Sys-code.reserved1      | X(8)  | 12  |
| Sys-code.sym-code       | X(10) | 20  |
| Sys-fld.table-name      | X(20) | 32  |
| Sys-menu.req-module     | X(12) | 18  |
| Tmp-ser.ref-str         | X(25) | 30  |
| User-browse.column-list | X(40) | 150 |
| Usrprint.rpt-name       | X(8)  | 15  |

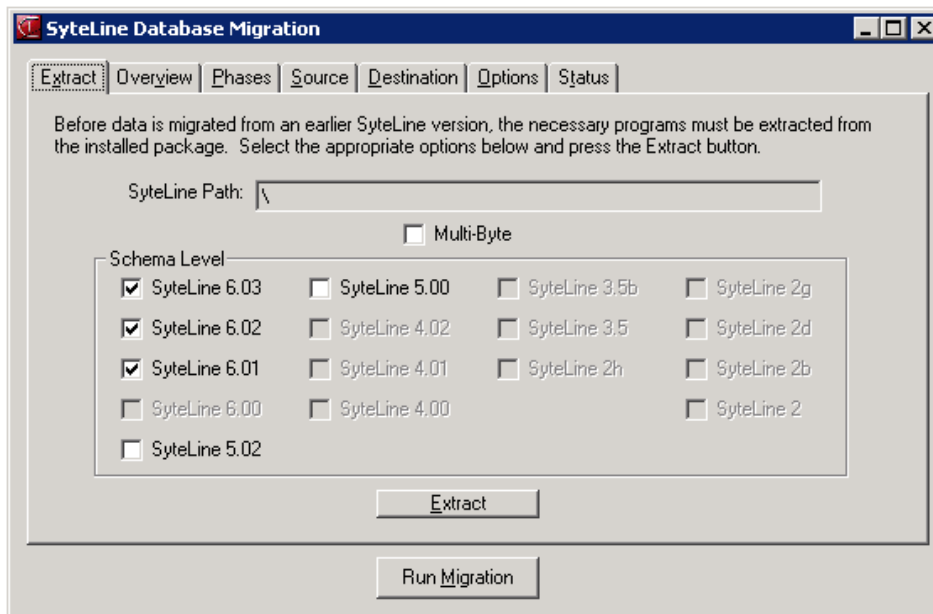
5. Use the output to decide whether to:

- Correct the fields before unloading and save the extraneous data for later use, or
- Correct the fields before unloading and automatically truncate the fields during conversion (if the extraneous data is not needed), or
- Modify the target database structure and conversion scripts to accept longer values, or

A combination of the above methods, per table.

## Start the Database Migration

Select **Start>Programs>Infor>Tools>Infor ERP SL Database Migration** on a computer that has access to the data paths and can connect to the SQL Server where the target databases reside. The following screen is displayed:



When the SyteLine Database Migration screen is displayed, the Extract tab is selected.

1. **SyteLine Path** - The path to the SyteLine folder defaults here.

2. **Multi-Byte** - Select Multi-Byte if your source database uses a multi-byte code-page.
3. **Schema Level** - Choose the schema level of the source database.
4. Click **Extract**.

#### (Optional) Run the Numeric Overstuffing Program

Run the numeric overstuffing program (<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\ValPrec.p) in the source database to detect all out-of-range numeric field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<SyteLineInstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\ValPrec.p"**

The double-quotes in the example above are necessary due to spaces in the path. ValPrec.p automatically adjusts the PROPATH to find its sub-procedures.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

#### (Optional) Run the Foreign-Key Validation Program

Run the foreign-key validation program (<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValFK.p) in each site and entity database to detect all invalid links between records.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValFK.p"**

The quotes in the example above are necessary due to spaces in the path. ValFK.p automatically adjusts the PROPATH to find its sub-procedures.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Set the fields to the unknown value before unloading, or
  - Create missing master table records to make the links valid, or
  - Delete the records containing invalid values (if the data is old or not needed).

**NOTE:** Phase 4 of the conversion can not be completed until all links are valid.

### (Optional) Run the Null Validation Program

Run the Null validation program (<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValNull.p) in each site and entity database to detect all invalid (Blank) or (Unknown) field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValNull.p"**

The quotes in the example above are necessary due to spaces in the path. ValNull.p automatically adjusts the PROPATH to find its sub-procedure.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### (Optional) Run the Check-Constraint Program

Run the Check-Constraint program (<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValCk.p) in the source database to detect all remaining invalid field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:  
**RUN "<InstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\ValCk.p"**

The double-quotes in the example above are necessary due to spaces in the path. ValCk.p automatically adjusts the PROPATH to find its sub-procedure.

4. Press the F2 key.
5. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### (Optional) Run the Out-Of-Range Date-Validation Program

Run the out-of-range date-validation program (<InstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\olddate.p) in the source database to detect all out-of-range date field values.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line  
**RUN "<SyteLineInstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\olddate.p"**

The double-quotes in the example above are necessary due to spaces in the path.

4. Use the output to decide whether to:
  - Set the fields to valid values before unloading, or
  - Delete the records containing invalid values (if the data is old or not needed).

### Log out of SyteLine on all clients

Make sure everyone is out of the system.

### Shut Down Servers

Shut down your servers.

### Backup Databases

Backup all databases.

### Unload Data from the Database To Be Converted

**NOTE:** Do not unload the databases from within a SyteLine session.

Do not unload the databases by using Progress utilities.

The only supported unload for the SL7 conversion is from the SyteLine Administration Menu utility.

**NOTE:** This step involves two options. Read the entire step before proceeding. You only need to run DumpUTF8.p if your database uses a Multi-Byte code-page.

**Option 1** - This process unloads your database into ASCII text files that are read into your new database.

On your existing system, perform the following steps to unload your database(s):

- A. Select **Admin/Run SyteLine** from the Administration screen.
- B. Select **Load/Unload** then **No Integrity** or **Full Integrity**. We suggest Full Integrity.  
If your system is multi-division, you can unload a Global database only by connecting to one of the Division databases.
- C. Select the parameter file of the database to be unloaded.
- D. Login to the database as user **symix**.
- E. Select **Unload Database Files**. The databases referenced by the parameter file are listed. The Main database is highlighted as the default. The first time through, select the Main database. (You might return to this step later.)
- F. The list of all available files is displayed. Press **Enter** to select ALL. An asterisk is placed to the left of the word **ALL**. Press the **F1** key.
- G. When asked for a data path, enter the directory where the unloaded data (.d files) will be placed. Make sure that you have adequate space in the directory and that you have permission to write to the directory.

**NOTE:** If a Scheduling or Audit-Trail database is referenced in the parameter file, repeat steps E-F. A Scheduling database or Audit-trail database should be unloaded to the

same directory as its Main database, but only after the Main database has been unloaded.

**NOTE:** The License Manager database does not need to be unloaded.

H. If your system is multi-division, repeat steps E, F, and G for each of the divisions and the Global database:

- Each division, including its Main, Scheduling, and Audit-trail databases, should be unloaded to a separate directory. A Scheduling database or Audit-trail database should be unloaded to the same directory as its Main database, but only after the Main database has been unloaded.
- If another division is referenced by the parameter file of the database being unloaded, it is displayed in the list of databases in Step F.
- The Global database should also be unloaded to a separate directory.

**Option 2** - If your database uses a Multi-Byte code-page, run the UTF8 unload program (<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\DumpUTF8.p) instead.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:

**RUN "<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\DumpUTF8.p"**

The quotes in the example above are necessary due to spaces in the path. DumpUTF8.p automatically adjusts the PROPATH to find its sub-procedures.

If you have multi-database structures (for example, a separate scheduling database), unload all the component databases into the same data path used for the main database.

**NOTE:** Due to a constraint in the Database Utilities, if Shared Customer Master is enabled in any sites, you must login to one of those sites to unload the "custa-audit" table. Also, if Shared Vendor Master is enabled in any sites, you must login to one of those sites to unload the "venda-audit" table. In some circumstances, these tables are not available for selection when logged into an Entity database.

### Run uet-dump.p. (Only if User Extended Tables are Used)

If User Extended Tables (UETs) are used and the data is to be carried forward to SyteLine, run the program uet-dump.p to unload the UET schema definitions to a flat file named zUETStruct.d7.

**NOTE:** You must have access to the Progress database on the conversion computer to be able to run uet-dump.p. If the conversion computer does not have access to the Progress database, copy uet-dump.p to a computer that does, run it there, and then copy the flat file back to the conversion computer.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.

3. Enter the following line:

**RUN "<InforInstallDir>\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\uet-dump.p"**

The quotes in the example above are necessary due to spaces in the path. Write the output file (zUETStruct.d7) to the Prepared Data Path, or copy it there before running Phase 7.

4. Press the F2 key.

### Create a Report of User-Defined Field Usage (Optional)

To create a report of User-Defined Fields usage, run userflds.p in the source database to create userflds.txt.

1. Log in to SyteLine.
2. Launch the Progress Query Editor.
3. Enter the following line:

**RUN "<InforInstallDir>\ApplicationDB\Upgrade Scripts\Pro2SQL\userflds.p"**

The quotes in the example above are necessary due to spaces in the path. This information can be used after conversion to setup the same User-Defined Fields in appropriate forms.

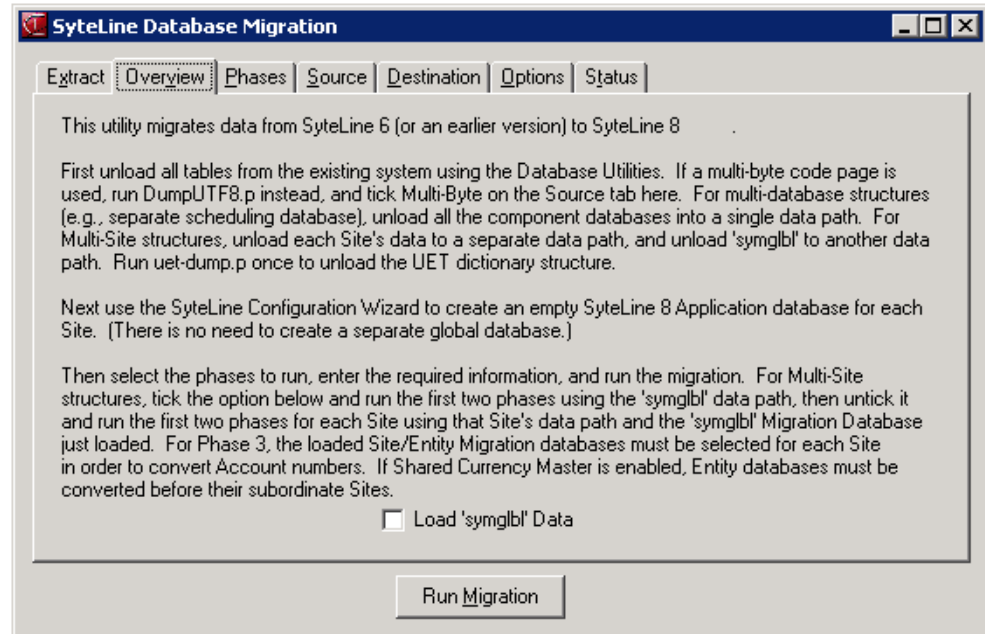
4. Press the F2 key.

### Create a SyteLine Empty Application Database for Each Site

Use the Infor ERP SL Configuration Wizard to create an empty application database for each site. See Chapter 1, "Setting up the Database Server" for information on how to use the Infor ERP SL Configuration Wizard.

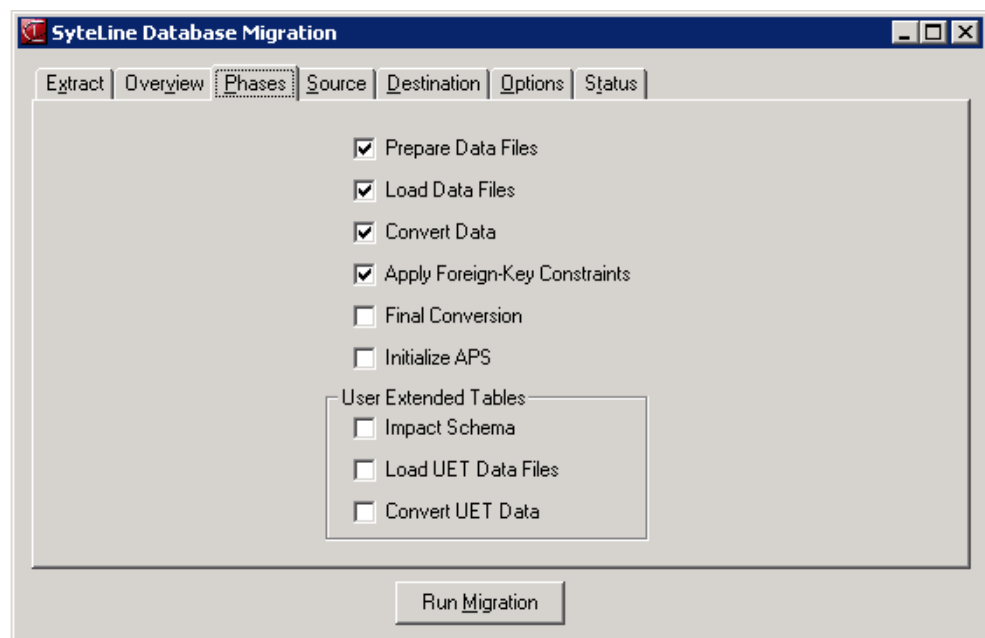
## Load Data From Global Database

Make Selection on the Overview Tab



1. On the SyteLine Database Migration screen, click the **Overview** tab
2. Select **Load 'symglbl' Data**.

Select the Phases to Run on the Phases Tab



1. Select the Phases tab.

2. Select the phases to run (either Phase 1 or Phase 2, or both). You can run phases 3-9 only after 1-2 have been run and after you clear the **Load 'symgbl'** Data field on the Overview tab.

There are nine phases on this tab, defined as the following:

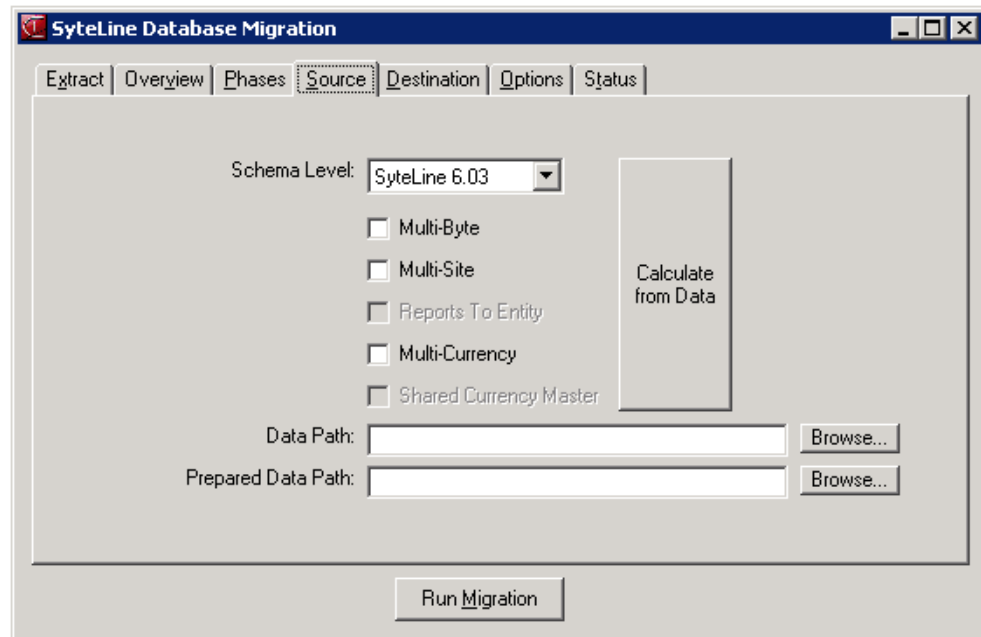
**NOTE:** Not all the phases can be run at this point in the procedure. Please read the detail for each phase below for ones with special instructions.

- **Phase 1, Prepare Data Files** - Each Progress EXPORT-format flat-file (\*.d) is read line-by-line, converted to a SQL-loadable format, and written out to a new flat-file (\*.d7). Run this phase and phase 2 before the other phases.
- **Phase 2, Load Data Files** - Each SQL-loadable flat-file (\*.d7) is loaded into a corresponding table in a SQL Conversion database. Run this phase and phase 1 before the other phases.
- **Phase 3, Convert Data** - Tables in the SyteLine Application database with known SyteLine 6 roots are populated from appropriate columns in rows in the appropriate table(s) in the migration database. Transformations are carried out for date and logical data-types, and Progress (Unknown) or (Blank) vs. SQL NULL values. Conversions are carried out for table splits and merges. New columns are populated from defaults or from other columns.
- **Phase 4, Apply Foreign-Key Constraints** - SQL Constraints are loaded to ensure the existence of a record on the lookup end of most foreign-key references.
- **Phase 5, Final Conversion** - In this phase, other conversions are carried out that require all tables to be populated.

After Phase 5 is complete, the Application database is ready for login and licensing. At this point, you may modify the data in the UET forms (e.g., remove the "pref-type" class), then logout and continue with Impact Schema. This is a way to purge unwanted extensions, as only the columns present in both the migration database and Application database will be converted in Phase 8.

- **Phase 6, Initialize APS** - APS tables are initialized from Work Center and Bill of Material and Job Routing data. Run this phase only AFTER the latest SyteLine service pack has been installed.
- **Phase 7, Impact Schema (User Extended Tables)** - This phase creates columns to store table extensions. Run this phase only AFTER the latest SyteLine service pack has been installed.
- **Phase 8, Load UET Data Files** - Each SQL-loadable UET flat-file (x\*.d7) is loaded into a corresponding table in the migration database. Run this phase only AFTER the latest SyteLine service pack has been installed.
- **Phase 9, Convert UET Data** - Table extensions are copied from the migration database to the appropriate records in the Application database. Run this phase only AFTER the latest SyteLine service pack has been installed.

## Make Selections on the Source Tab



Make selections in the following fields:

1. **Schema Level** - Choose the schema level of the source database.
2. **Multi-Byte** - Select Multi-Byte if the source database uses a Multi-Byte code-page. Phase 1 looks for .d7w files created by DumpUTF8.p and translates them to .d7u files. Phase 2 looks for .d7u files. All data is translated to Unicode during conversion, regardless of the Multi-Byte setting.
3. **Data Path** - Enter the data path to which the 'symglbl' database was unloaded.
4. **Prepared Data Path** - Enter a new directory into Prepared Data Path, where prepared data files are stored during conversion. This drive requires available space approaching the total size of the unloaded files located in the data path.

## Make Selections on the Destination Tab

The screenshot shows the 'SyteLine Database Migration' window with the 'Destination' tab selected. The window contains several input fields and buttons for configuring the migration destination.

| Field                            | Value            | Action                 |
|----------------------------------|------------------|------------------------|
| SQL Server:                      |                  |                        |
| sa Password:                     |                  |                        |
| Migration Database:              | SyteLine_AppConv | Create                 |
| Entity Migration Database:       |                  |                        |
| 'symglbl' Migration Database:    |                  |                        |
| Site/Entity Migration Databases: |                  | Refresh Database Lists |
| Application Database:            |                  |                        |
| Site:                            |                  |                        |
| Currency:                        |                  |                        |
| Run Migration                    |                  |                        |

Make selections in the following fields:

**NOTE:** You must migrate Symglbl and all Sites and Entities through Phases 1 & 2, before beginning Phase 3 for any Sites or Entities.

1. **SQL Server** - Enter the name of the SQL Server on which all databases will reside.
2. **sa Password** - Enter the password for the System Administration user 'sa' on the SQL Server.
3. **Migration Database** - Enter the name of an intermediate 'symglbl' migration database to be used during migration, and click the **Create** button. Its structure is built during Phase 2.

**NOTE:** Do not name Migration Databases using a prefixed or suffixed version of the string "SyteLine\_AppConv". For example, instead of name "SyteLine\_AppConvABC" or "ABC\_SyteLine\_AppConv", use name "ABC\_AppConv".

## Make Selections on the Options tab

1. **Logfile Path** - Enter a Logfile Path where logfiles will be written.
2. **Starting and Ending Table** - (Optional) Enter Starting and Ending Table to limit processing to a specific range of data. If you leave these fields blank, all tables are processed.
3. **Stop at First Error** - Select Stop at First Error to stop the migration upon first detection of any error or data anomaly.

## Click the Run Migration Button

Click the **Run Migration** button to start processing. The Status tab shows the progress. An alert-box and bell signal completion. At completion, the progress is appended to a file "convert.log" in the Logfile Path.

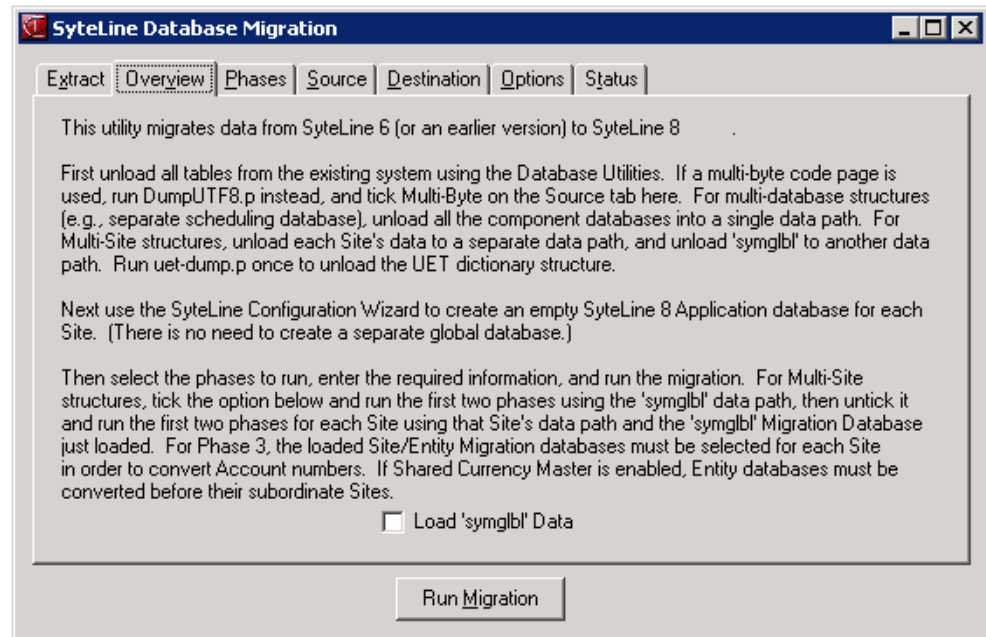
## Repeat Previous 6 Steps if Necessary

Repeat for an additional Phase or Table ranges.

## Load Data From Entity Database(s)

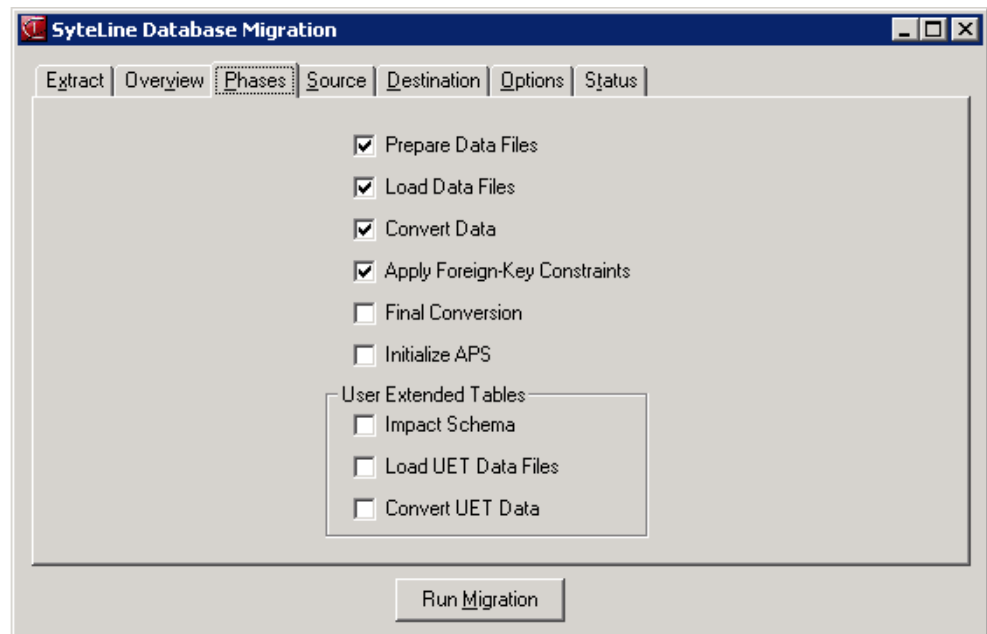
Entities that share their Currency Master with subordinate Sites or Entities must be loaded first, at least through Phase 2, so the subordinate Sites and Entities can read the appropriate records from the parent Entity's migration database.

## Make Selection on the Overview Tab



On the Overview tab, clear **Load 'symglbl' Data**.

## Select the Phases to Run on the Phases Tab



Select the phases to run. Do not run Phase 5 (Final Conversion) until phases 1-4 have completed.

## Make Selections on the Source Tab

The screenshot shows the 'SyteLine Database Migration' application window. The 'Source' tab is active, displaying configuration options for the source database. The 'Schema Level' is set to 'SyteLine 6.03'. There are five checkboxes: 'Multi-Byte', 'Multi-Site', 'Reports To Entity', 'Multi-Currency', and 'Shared Currency Master'. A 'Calculate from Data' button is positioned to the right of these checkboxes. Below the checkboxes are two text input fields: 'Data Path' and 'Prepared Data Path', each followed by a 'Browse...' button. At the bottom center of the window is a 'Run Migration' button.

1. **Schema Level** - Choose the schema level of your source database.
2. **Multi-Byte** - Select Multi-Byte if the source database uses a Multi-Byte code-page. Phase 1 looks for .d7w files created by DumpUTF8.p and translates them to .d7u files. Phase 2 looks for .d7u files. All data is translated to Unicode during conversion, regardless of the Multi-Byte setting.
3. **Multi-Site** - Select Multi-Site. When you select this field, the Reports To Entity field becomes active.
4. **Reports To Entity** - Select this field if this Entity reports to a higher-level Entity in the hierarchy.
5. **Multi-Currency** - Select Multi-Currency if the source database had multi-currency enabled. If not, clear this field and enter a new currency code on the Destination tab.
6. **Shared Currency Master** - Select Shared Currency Master if this Entity shared the Currency master data from a higher-level Entity or from the global database.
7. **Data Path** - Enter the data path to which the entity database was unloaded.
8. **Prepared Data Path** - Enter a new directory into Prepared Data Path, where prepared data files will be stored during conversion. This drive requires available space approaching the total size of the unloaded files located in the data path.

## Make Selections on the Destination Tab

The screenshot shows the 'SyteLine Database Migration' application window with the 'Destination' tab selected. The window contains several input fields and buttons for configuring the migration destination. The fields are: SQL Server, sa Password, Migration Database (with a 'Create' button), Entity Migration Database (dropdown), 'symglbl' Migration Database (dropdown), Site/Entity Migration Databases (text area), Application Database (dropdown), Site, and Currency. A 'Refresh Database Lists' button is located on the right side of the main form area. A 'Run Migration' button is at the bottom center.

1. **SQL Server** - Enter the name of the SQL Server on which all databases will reside.
2. **sa Password** - Enter the password for the System Administration user 'sa' on the SQL Server.
3. **Migration Database** - Enter the name of an intermediate migration database to be used during migration, and click the Create button. Its structure is built during Phase 2.
4. **Refresh Database Lists** - Click the Refresh Database Lists button to populate the Entity Migration Database, 'symglbl' Migration Database, and Application Database drop-downs.
5. **'symglbl' Migration Database** - Select the 'symglbl' migration database that was loaded earlier.
6. **Site/Entity Migration Databases** - Specify all (other) Site and Entity Migration Databases that were loaded during Phase 2.
7. **Application Database** - Select the application database for this Entity that was created in Step .
8. **Entity Migration Database** - If Reports To Entity and Shared Currency Master are checked on the Source tab, select the Entity Migration Database that was loaded earlier at least through Phase 3, corresponding to this Site's direct parent or "Reports To" Entity.
9. **Currency** - If multi-currency was not enabled in the source database, enter a currency code for all records in the target database. This value may not be left blank, and you cannot change the value during or after the conversion.

## Make Selections on the Options tab

The screenshot shows the 'SyteLine Database Migration' window with the 'Options' tab selected. The window has a title bar with standard Windows controls. Below the title bar is a tabbed interface with tabs for 'Extract', 'Overview', 'Phases', 'Source', 'Destination', 'Options', and 'Status'. The 'Options' tab is active, displaying various configuration fields and checkboxes. The 'Logfile Path' field is set to 'C:\Program Files\Infor\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\'. There are fields for 'Starting Table', 'Ending Table', and 'Starting Row' (set to 1). A 'Compare Converted Record Counts' button is located to the right of these fields. The 'Performance' section contains several checkboxes: 'Multi-Thread Tables larger than 20000 Rows, using 3 Threads' (checked), 'Fast-Load Large Tables' (unchecked), 'Split bcp Input Files larger than 30 MB, into groups of no more than 100000 Lines' (checked), 'Replace deleted user names in auditing tables with: Deleted User' (checked), 'Stop at First Error' (unchecked), 'Locator Mode' (unchecked), 'Substitute for Leading Spaces: .' (checked), 'Truncate Destination Table Before Converting' (unchecked), and 'Truncate Overstuffed Character Fields' (unchecked). A 'Run Migration' button is at the bottom right.

**SyteLine Database Migration**

Extract | Overview | Phases | Source | Destination | **Options** | Status

Logfile Path: C:\Program Files\Infor\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\

Starting Table:

Ending Table:

Starting Row:

Compare Converted Record Counts

**Performance**

☒ Multi-Thread Tables larger than  Rows, using  Threads

☐ Fast-Load Large Tables

☒ Split bcp Input Files larger than  MB, into groups of no more than  Lines

☒ Replace deleted user names in auditing tables with:

☐ Stop at First Error Maximum Errors for bcp:

☐ Locator Mode Substitute for Leading Spaces:

☐ Truncate Destination Table Before Converting ☐ Truncate Overstuffed Character Fields

Run Migration

1. **Logfile Path** - Enter a Logfile Path where logfiles will be written. The default is the Working Directory of the conversion program.

- 2. Starting and Ending Table - (Optional)** Enter Starting and Ending Table to limit processing to a specific range of data. This is a strict range and does not accept wildcards. It can be used to parallel-process portions of certain phases on different computers connected to one SQL Server (ensuring that each phase is completed on all computers before beginning the next phase), or to resume conversion or re-convert individual tables after correcting errors in the source data. For Phase 1, use extensionless .d names. For Phase 2, use SyteLine 6 table names (with hyphens). For Phases 3-4, 7, and 8, use SyteLine 8.03 table names (with underscores instead of hyphens). For User Extended Tables, specify the extensionless .d name in Phase 1 and the corresponding SyteLine table in other Phases according to the guidelines in the preceding sentence.

When using ranges, note that hyphen sorts lower than (i.e., comes before) “a”, and underscore sorts higher than (i.e., comes after) “z”. A simple method for starting at the first table after “table” is to specify Starting Table as “table-” (the name of the table followed by a hyphen). This excludes “table” itself but processes any table having a prefix identical to “table” followed by any letter, hyphen, or underscore. A simple method for ending at the last table before “table” is to specify Ending Table as “tabld\_zz” (the name of the table with its last character replaced by the preceding letter or digit followed by underscore and 2 “z”s). Again this excludes “table” itself but processes any table having a prefix near to “table” followed by any letter, hyphen, or underscore and any other letters (because no SyteLine tables contain 2 adjacent underscores). Using these methods, it is not necessary to know the entire list of tables or at which specific table the process is to be started or ended.

Refer to the tables below as examples:

| In Phase 1               |          |
|--------------------------|----------|
| To process:              | Specify: |
| memo-top.d → memo-top.d7 | memo-top |
| prd-item.d → prd-item.d7 | prd-item |
| item.d → item.d7         | item     |
| xitem.d → xitem.d7       | xitem    |

| In Phase 2                    |               |
|-------------------------------|---------------|
| To process:                   | Specify:      |
| memo-top.d7 → [memo-topic]    | memo-topic    |
| prd-item.d7 → [prod-mix-item] | prod-mix-item |
| item.d7 → [item]              | item          |
| xitem.d7 → [ux-item]          | item          |

| In other Phases                 |               |
|---------------------------------|---------------|
| To process:                     | Specify:      |
| [memo-topic] → memo_topic       | memo_topic    |
| [prod-mix-item] → prod_mix_item | prod_mix_item |
| [item] → item                   | item          |
| [ux-item] → item                | item          |

3. **Performance** - On multi-processor computers, use the fields in this section to distribute Phase 3 processing among the CPUs.
  - **Multi-Thread Tables Larger than N Rows** - Check this field and then enter the number of rows a table must have before multi-thread begins.
  - **Threads** - Enter the desired number of simultaneous threads (2-9). A single thread is used for tables having less than or equal to the number of rows designated in the **Multi-Thread Tables Larger than N Rows** field above.
4. **Fast-Load Large Tables** - If Dump4bcp.p was used to unload large tables from the Progress database, this field can be set to load directly from the resulting \*.d7b files into the application database during Phase 2 (bypassing the conversion database and eliminating or significantly reducing the Phase 3 processing for these tables). Notes attached to these records are loaded during Phase 3. Initial tables supported by Dump4bcp.p are: ledger & matltran (and its sub-table matltran\_amt) for SyteLine 6.01 or later source databases.

5. **Replace deleted user names in auditing tables with** - Earlier versions of SyteLine allowed deletion of a User record even after some auditing records had been created by that user. This is no longer allowed in SyteLine. Select this option and enter a user name to replace the deleted users' names. You may enter an existing user name from the database being migrated, a new user automatically added for SyteLine 8.03 (e.g. "sa"), or an entirely new name in which case a new user record will be created. Clear this option to convert the deleted user names as NULLs. This will cause validation errors on some tables, listed below:

| Table      | NULL Allowed |
|------------|--------------|
| Adp_parm   | Yes          |
| Cad_parm   | Yes          |
| Ctc_log    | Yes          |
| Inv_ms_log | Yes          |
| Jobt_mat   | Yes          |
| PoblInchg  | No           |
| Pochange   | No           |
| Pochg      | No           |
| Poitmchg   | No           |
| Proj_ship  | Yes          |
| Proj_wip   | No           |
| Rev_ms_log | No           |

6. **Stop at First Error** - Select Stop at First Error to stop the conversion upon first detection of any error or data anomaly. Clear this option to continue processing the next table(s) and/or Phase(s). In either case, detected errors are logged to the Status tab and written to a logfile.
7. **Maximum Errors for bcp** - Phase 2 uses the bcp (Bulk Copy) utility to import data from flat-files. Bcp performs minimal validation as rows are imported, including checking for proper data-types and lengths. If the number of rows with that fail validation is below a threshold, bcp imports the remaining rows and reports the errors encountered; otherwise bcp imports nothing. Enter the number of data errors for bcp to detect before aborting the import for each table. Use this option if a table is failing validation to help determine which rows contain errors. Increase the value until the remaining rows are imported, then determine which rows are missing from the Migration database.
8. **Locator Mode; Starting Row** - If Phase 3 fails due to a data validation problem, use this option to locate the invalid row and display its converted column values that might be too long or out of range. If this is successful, subsequent errors can be located by setting the Starting Row to the next row and trying again.

9. **Substitute for Leading Spaces** - Enter a single character to Substitute for Leading Spaces in non-formatted character fields. Leading spaces are not allowed in Infor10 ERP Business (SyteLine), except in alpha-keys (for example, CO number, PO number). To maintain sorting as in the source database, enter a character that sorts before the first character of the lowest-sorting non-space-led field in any field in any table containing leading spaces (exclamation, double-quote, #, \$, %, &, single-quote, (, ), \*, +, comma, -, period, slash; and unless digits are used to start fields, also any digit, colon, semi-colon, <, =, >, question-mark, or @).
10. **Truncate Destination Table Before Converting** - Use this option during Phases 3 and/or 9 to remove all rows from the destination table(s) before converting rows from the Migration database. This is useful in case a previous run failed and left a partial set of rows remaining.
11. **Truncate Overstuffed Character Fields** - Select Truncate Overstuffed Character Fields to automatically truncate all character fields with values in the source database set longer than the display format. The extraneous data remains in the migration database, but no warning is shown. Clear this option to abort loading the entire table when this condition is detected. This allows anomalies to be found without running overstuff.p.

#### Click the Run Migration Button

Click the **Run Migration** button to start processing. The Status tab shows the progress. An alert-box and bell signal completion. At completion, the progress is appended to a file "convert.log" in the Logfile Path.

#### Repeat Previous 5 Steps if Necessary

Repeat for additional Phases or Table ranges. The Final Conversion phase should not be run until all prior Phases have completed.

#### Perform Post Conversion Tasks

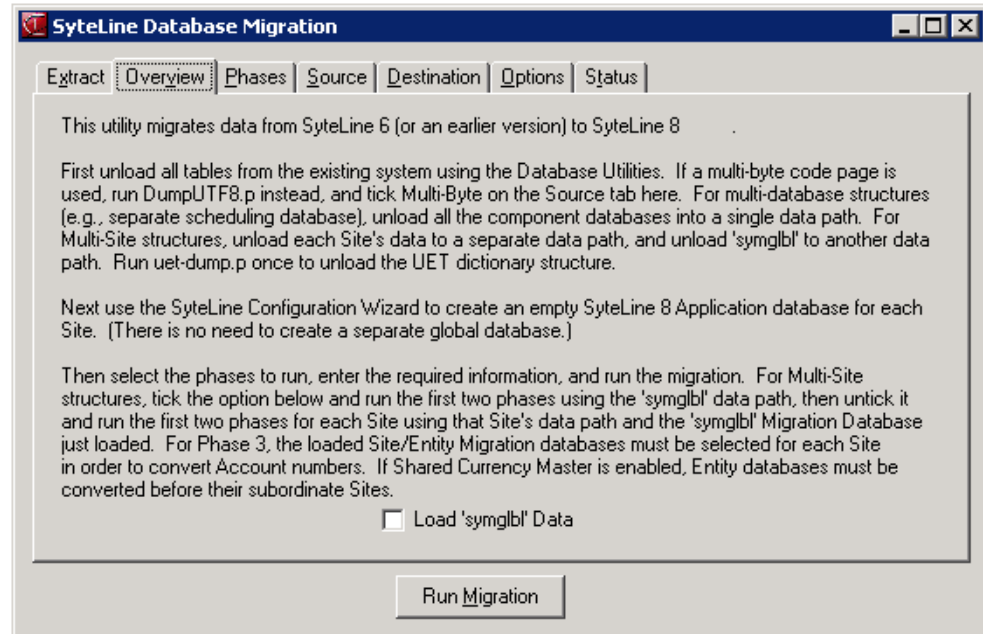
After conversion is complete, perform the "Post-Migration Tasks" on page 202.

#### Repeat for additional Entity database(s)

Repeat the above Load Data From Entity Database(s) steps for any additional entity databases.

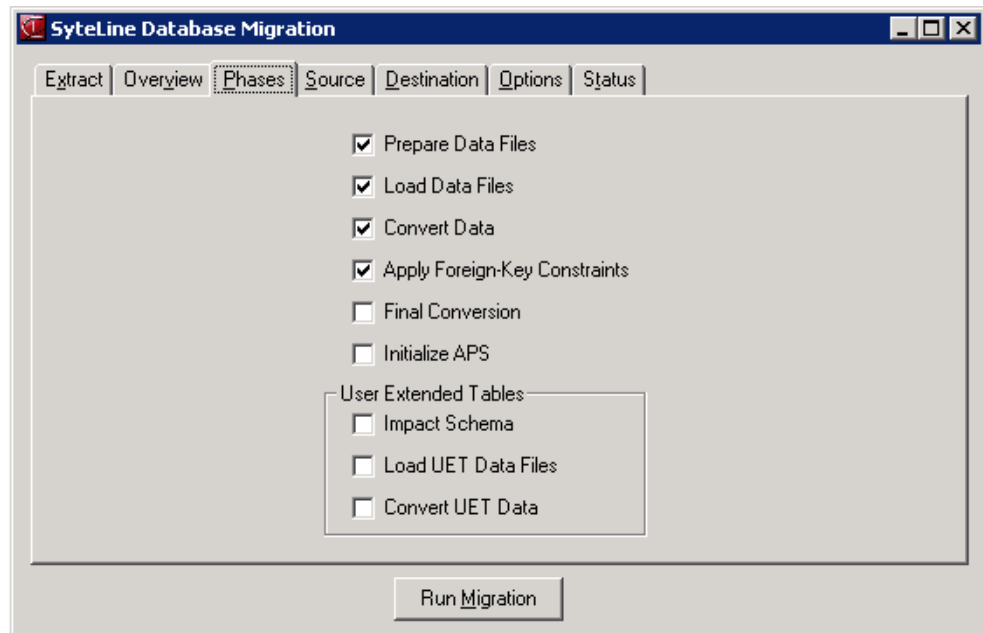
## Load the Data From Site Database(s)

Make Selection on the Overview Tab



On the Overview tab, clear **Load 'symglbl' Data**.

Make Selections on the Phases Tab



Select the phases to run. Do not run Phase 5 (Final Conversion) until phases 1-4 have completed.

## Make Selections on the Source Tab

The screenshot shows the 'SyteLine Database Migration' application window. The 'Source' tab is active, displaying configuration options for the source database. The 'Schema Level' dropdown is set to 'SyteLine 6.03'. Five checkboxes are listed: 'Multi-Byte', 'Multi-Site', 'Reports To Entity', 'Multi-Currency', and 'Shared Currency Master'. A 'Calculate from Data' button is positioned to the right of these checkboxes. Below the checkboxes are two text input fields: 'Data Path' and 'Prepared Data Path', each followed by a 'Browse...' button. A 'Run Migration' button is located at the bottom center of the window.

1. **Schema Level** - Choose the schema level of your source database.
2. **Multi-Byte** - Select Multi-Byte if the source database uses a Multi-Byte code-page. Phase 1 looks for .d7w files created by DumpUTF8.p and translates them to .d7u files. Phase 2 looks for .d7u files. All data is translated to Unicode during conversion.
3. **Multi-Site** - Select Multi-Site. The Reports To Entity becomes active.
4. **Reports To Entity** - Select Reports To Entity if this site reports to a higher level entity in the hierarchy.
5. **Multi-Currency** - Select Multi-Currency if the source database had multi-currency enabled. If not, clear this field and enter a new currency code on the Destination tab.
6. **Shared Currency Master** - Select Shared Currency Master if this site shared the currency master data from a higher-level entity or from the global database.
7. **Data Path** - Enter the data path to which the entity database was unloaded.
8. **Prepared Data Path** - Enter a new directory into Prepared Data Path, where prepared data files will be stored during conversion. This drive requires available space approaching the total size of the unloaded files located in the data path.

## Make Selections on the Destination Tab

The screenshot shows the 'SyteLine Database Migration' application window with the 'Destination' tab selected. The interface includes several input fields and buttons for configuring the migration destination. The 'Migration Database' field has a 'Create' button next to it. The 'Entity Migration Database' and ''symglbl' Migration Database' are dropdown menus. The 'Site/Entity Migration Databases' is a text area. The 'Application Database' is a dropdown menu. The 'Site' and 'Currency' fields are text boxes. A 'Refresh Database Lists' button is located on the right side of the main form area. At the bottom of the window is a 'Run Migration' button.

1. **SQL Server** - Enter the name of the SQL Server on which all databases will reside.
2. **sa Password** - Enter the password for the System Administration user 'sa' on the SQL Server.
3. **Migration Database** - Enter the name of an intermediate migration database to be used during conversion, and click the Create button. Its structure is built during Phase 2.
4. **Refresh Database Lists** - Click the Refresh Database Lists button to populate the Entity migration database, 'symglbl' migration database, and Application Database drop-downs.
5. **Entity Migration Database** - If Reports To Entity and Shared Currency Master are checked on the Source tab, select the entity migration database that was loaded earlier, corresponding to this site's direct parent or "Reports To" Entity.
6. **'symglbl' Migration Database** - Choose the 'symglbl' migration database loaded earlier.
7. **Site/Entity Migration Databases** - Specify all (other) Site and Entity Migration Databases that were loaded during Phase 2.
8. **Application Database** - Select the Application Database for this entity.
9. **Currency** - If multi-currency was not enabled in the source database, enter a currency code for all records in the target database. This value may not be left blank, and you cannot change the value during or after the conversion.

## Make Selections on the Options tab

The screenshot shows the 'SyteLine Database Migration' window with the 'Options' tab selected. The window has a title bar and a menu bar with 'Extract', 'Overview', 'Phases', 'Source', 'Destination', 'Options', and 'Status'. The 'Options' tab contains the following fields and controls:

- Logfile Path:** A text box containing 'C:\Program Files\Infor\SyteLine\ApplicationDB\Upgrade Scripts\Pro2SQL\'.
- Starting Table:** An empty text box.
- Ending Table:** An empty text box.
- Starting Row:** A text box containing '1'.
- Compare Converted Record Counts:** A button.
- Performance section:**
  - ☐ Multi-Thread Tables larger than  Rows, using  Threads
  - ☐ Fast-Load Large Tables
  - ☐ Split bcp Input Files larger than  MB, into groups of no more than  Lines
  - ☐ Replace deleted user names in auditing tables with:
  - ☐ Stop at First Error      Maximum Errors for bcp:
  - ☐ Locator Mode      Substitute for Leading Spaces:
  - ☐ Truncate Destination Table Before Converting      ☐ Truncate Overstuffed Character Fields
- Run Migration:** A button at the bottom.

1. **Logfile Path** - Enter a Logfile Path where logfiles will be written. The default is the Working Directory of the conversion program.

- 2. Starting and Ending Table - (Optional)** Enter Starting and Ending Table to limit processing to a specific range of data. This is a strict range and does not accept wildcards. It can be used to parallel-process portions of certain phases on different computers connected to one SQL Server (ensuring that each phase is completed on all computers before beginning the next phase), or to resume conversion or re-convert individual tables after correcting errors in the source data. For Phase 1, use extensionless .d names. For Phase 2, use SyteLine 6 table names (with hyphens). For Phases 3-4, 7, and 8, use SyteLine table names (with underscores instead of hyphens). For User Extended Tables, specify the extensionless .d name in Phase 1 and the corresponding SyteLine table in other Phases according to the guidelines in the preceding sentence.

When using ranges, note that hyphen sorts lower than (i.e., comes before) “a”, and underscore sorts higher than (i.e., comes after) “z”. A simple method for starting at the first table after “table” is to specify Starting Table as “table-” (the name of the table followed by a hyphen). This excludes “table” itself but processes any table having a prefix identical to “table” followed by any letter, hyphen, or underscore. A simple method for ending at the last table before “table” is to specify Ending Table as “tabld\_zz” (the name of the table with its last character replaced by the preceding letter or digit followed by underscore and 2 “z”s). Again this excludes “table” itself but processes any table having a prefix near to “table” followed by any letter, hyphen, or underscore and any other letters (because no SyteLine tables contain 2 adjacent underscores). Using these methods, it is not necessary to know the entire list of tables or at which specific table the process is to be started or ended.

Refer to the tables below as examples:

| In Phase 1               |          |
|--------------------------|----------|
| To process:              | Specify: |
| memo-top.d → memo-top.d7 | memo-top |
| prd-item.d → prd-item.d7 | prd-item |
| item.d → item.d7         | item     |
| xitem.d → xitem.d7       | xitem    |

| In Phase 2                    |               |
|-------------------------------|---------------|
| To process:                   | Specify:      |
| memo-top.d7 → [memo-topic]    | memo-topic    |
| prd-item.d7 → [prod-mix-item] | prod-mix-item |
| item.d7 → [item]              | item          |
| xitem.d7 → [ux-item]          | item          |

| In other Phases                 |               |
|---------------------------------|---------------|
| To process:                     | Specify:      |
| [memo-topic] → memo_topic       | memo_topic    |
| [prod-mix-item] → prod_mix_item | prod_mix_item |
| [item] → item                   | item          |
| [ux-item] → item                | item          |

3. **Performance** - On multi-processor computers, use the fields in this section to distribute Phase 3 processing among the CPUs.
  - **Multi-Thread Tables Larger than N Rows** - Check this field and then enter the number of rows a table must have before multi-thread begins.
  - **Threads** - Enter the desired number of simultaneous threads (2-9). A single thread is used for tables having less than or equal to the number of rows designated in the **Multi-Thread Tables Larger than N Rows** field above.
4. **Fast-Load Large Tables** - If Dump4bcp.p was used to unload large tables from the Progress database, this field can be set to load directly from the resulting \*.d7b files into the application database during Phase 2 (bypassing the migration database and eliminating or significantly reducing the Phase 3 processing for these tables). Notes attached to these records are loaded during Phase 3. Initial tables supported by Dump4bcp.p are: ledger & matltran (and its sub-table matltran\_amt) for SyteLine 6.01 or later source databases.

5. **Replace deleted user names in auditing tables with** - Some earlier versions of SyteLine allowed deletion of a User record even after some auditing records had been created by that user. This is not allowed in SyteLine 8.03. Select this option and enter a user name to replace the deleted users' names. You may enter an existing user name from the database being migrated, a new user automatically added for SyteLine 8.03 (e.g. "sa"), or an entirely new name in which case a new user record will be created. Clear this option to convert the deleted user names as NULLs. This will cause validation errors on some tables, listed below:

| Table      | NULL Allowed |
|------------|--------------|
| Adp_parm   | Yes          |
| Cad_parm   | Yes          |
| Ctc_log    | Yes          |
| Inv_ms_log | Yes          |
| Jobt_mat   | Yes          |
| PoblInchg  | No           |
| Pochange   | No           |
| Pochg      | No           |
| Poitmchg   | No           |
| Proj_ship  | Yes          |
| Proj_wip   | No           |
| Rev_ms_log | No           |

6. **Stop at First Error** - Select Stop at First Error to stop the conversion upon first detection of any error or data anomaly. Clear this option to continue processing the next table(s) and/or Phase(s). In either case, detected errors are logged to the Status tab and written to a logfile.
7. **Maximum Errors for bcp** - Phase 2 uses the bcp (Bulk Copy) utility to import data from flat-files. Bcp performs minimal validation as rows are imported, including checking for proper data-types and lengths. If the number of rows with that fail validation is below a threshold, bcp imports the remaining rows and reports the errors encountered; otherwise bcp imports nothing. Enter the number of data errors for bcp to detect before aborting the import for each table. Use this option if a table is failing validation to help determine which rows contain errors. Increase the value until the remaining rows are imported, then determine which rows are missing from the Migration database.
8. **Locator Mode; Starting Row** - If Phase 3 fails due to a data validation problem, use this option to locate the invalid row and display its converted column values that might be too long or out of range. If this is successful, subsequent errors can be located by setting the Starting Row to the next row and trying again.

9. **Substitute for Leading Spaces** - Enter a single character to Substitute for Leading Spaces in non-formatted character fields. Leading spaces are not allowed in Infor10 ERP Business (SyteLine), except in alpha-keys (for example, CO number, PO number). To maintain sorting as in the source database, enter a character that sorts before the first character of the lowest-sorting non-space-led field in any field in any table containing leading spaces (exclamation, double-quote, #, \$, %, &, single-quote, (,), \*, +, comma, -, period, slash; and unless digits are used to start fields, also any digit, colon, semi-colon, <, =, >, question-mark, or @).
10. **Truncate Destination Table Before Converting** - Use this option during Phases 3 and/or 9 to remove all rows from the destination table(s) before converting rows from the Migration database. This is useful in case a previous run failed and left a partial set of rows remaining.
11. **Truncate Overstuffed Character Fields** - Select Truncate Overstuffed Character Fields to automatically truncate all character fields with values in the source database set longer than the display format. The extraneous data remains in the migration database, but no warning is shown. Clear this option to abort loading the entire table when this condition is detected. This allows anomalies to be found without running overstuff.p.

### Click the Run Migration Button

Click the **Run Migration** button to start processing. The Status tab shows the progress. An alert-box and bell signal completion. At completion, the progress is appended to a file "convert.log" in the Logfile Path.

### Click Run Migration Button for Additional Phases or Table Ranges

Repeat the Load the Data From Site Database(s) steps for additional phases or table ranges, and click the Run Migration button when ready. Do not run the final conversion phase until all prior phases have completed.

### Perform Post Migration Tasks

After conversion is complete, perform the "Post-Migration Tasks" on page 202

### Repeat Load the Data From Site Database(s) steps for Additional Site Databases

Repeat the Load the Data From Site Database(s) steps for additional site databases.

The steps for performing conversion are now complete. Following the Post Conversion Tasks, the rest of this chapter is reference material and troubleshooting tips.

## Post-Migration Tasks

The following tasks are required after conversion to prepare the application database for use with SyteLine 8.03:

1. Open the License Management form and enter your license key. See the *Infor ERP SyteLine System Administration Guide* for information about the License Management form and how to apply your license.
2. Enter password for all user records. Because passwords are stored in an encrypted format, they cannot be brought forward from the source database.
3. Set up form-based, user-, and group-level security. See the *Infor10 ERP Business (SyteLine) System Administration Guide* or the online help for more information on how to set up user authorizations.
4. Unhide and appropriately label any desired User-Defined Fields on Forms' User-Defined tabs.

## Outputs

| Name         | Phase | Directory          | Contents                                                                                                    |
|--------------|-------|--------------------|-------------------------------------------------------------------------------------------------------------|
| Convert.log  | All   | Logfile Path       | Contents of the Status tab                                                                                  |
| Load.log     | 2     | Prepared Data Path | Number of records loaded per table; format is comparable to "un-load.log" from the Database Unload utility. |
| Load2.log    | 3     | Logfile Path       | Number of records converted per table                                                                       |
| Crewsize.log | Final | Logfile Path       | List of records whose non-integral Crew Size was altered                                                    |

## Disk Usage

Plan for the following space requirements:

| Data Store                                 | Estimated Size | Needed Through                                         |
|--------------------------------------------|----------------|--------------------------------------------------------|
| Source database (Progress)                 | X              | Database Utilities Unload (pre Conversion)             |
| Unloaded data files (*.d)                  | 80% of X       | Conversion Phase 1 (Prepare Data Files)                |
| Prepared data files (*.d7)                 | 55% of X       | Conversion Phase 2 (Load Data Files)                   |
| Conversion database (SQL)                  | 150% of X      | Final Conversion (OK to Shrink after Phase 2)          |
| Application database transaction log (SQL) | 35% of X       | Final Conversion (OK to Shrink after Final Conversion) |
| Application database data files (SQL)      | 350% of X      | --                                                     |
| High-water mark when minimizing            | 535% of X      | N/A                                                    |
| Total when not minimizing                  | 770% of X      | N/A                                                    |

## Troubleshooting

Following are some common errors that might occur during conversion, with suggested remedies:

| Phase | Error                                                                                                                                          | Where                                 | Remedy                                                                                                                                                                                                                                                                                                               |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2     | String data, right truncation                                                                                                                  | <Prepared Data Path>\ <dump-name.err> | Run overstuff.p in the source database to find overstuffed fields. Correct these in the source database and unload again, or modify the <VerId>/*.tbl file to allow for more data, and use the Truncate option.                                                                                                      |
| 3     | Cannot insert the value NULL into column 'xxx', table 'zzz.dbo.yyy'; column does not allow nulls. INSERT fails.                                | Convert.log                           | Run ValNull.p in the source database to find invalid (Blank) and (Unknown) fields. Correct these in the source database and unload again, or<br>Use SELECT statements in the Conversion database to find offending records. Correct or delete these and re-run Phase 3 for this table.                               |
| 3     | INSERT statement conflicted with COLUMN CHECK constraint 'CK_yyy_xxx'. The conflict occurred in database 'zzz', table 'yyy', column 'xxx'.     | Convert.log                           | Use SELECT statements in the Conversion database to find offending records. Correct or delete these and re-run Phase 3 for this table.                                                                                                                                                                               |
| 4     | ALTER TABLE statement conflicted with COLUMN FOREIGN KEY constraint 'kkk'. The conflict occurred in database 'zzz', table 'yyy', column 'xxx'. | Convert.log                           | Run ValFK.p in the source database to find invalid foreign-key references. Correct these in the source database and unload again, or<br>Use SELECT statements in the Application database to find offending records. Correct or delete these and re-run Phase 4 for this table. See Resolving Foreign-Key Conflicts. |

## Resolving Foreign-Key Conflicts

A Foreign-Key Relationship is a reference in one record to the primary-keys of another record. For example, most G/L Account columns must either be Null or refer to an existing record in the Chart of Accounts table. The Application database utilizes SQL Foreign-Key Constraints to enforce these relationships, thus ensuring referential integrity between tables.

If a reference is incorrect in the source database, a Foreign-Key Conflict is raised during Phase 4. All such conflicts must be resolved before the database is ready for use with SyteLine 8.03.

Following is an example of resolving a Foreign-Key Conflict.

The SQL error message for this example is:

```
*** Error occurred during Apply coh.key to SyteLine_App

ALTER TABLE statement conflicted with TABLE FOREIGN KEY constraint
'cohFk1'. The conflict occurred in database 'SyteLine_App', table
'customer'.
```

The above message has the following information:

- The record containing the incorrect reference is located in the "coh" table (foreign-key table).
- The reference is intended to identify a record in the "customer" table (primary-key table).
- The name of the foreign-key relationship is "cohFk1" (constraint name).
- The relationship is described in the file <InforInstallDir>\SyteLine\ApplicationDB\Foreign Keys\coh.key.

If the relationship is based on a single key column, its name is also given. This information is also listed in the .key file.

To resolve the conflict, do the following:

1. Determine which columns in the foreign-key table "coh" are meant to refer to which columns in the primary-key table "customer." These are listed in the .key file under the name of the relationship as in the example below:

```
ADD CONSTRAINT cohFk1

    FOREIGN KEY (
        cust_num
    , cust_seq
    ) REFERENCES customer (
        cust_num
    , cust_seq
    )
```

2. Build a T-SQL statement in the Query Analyzer to find incorrect references as in the example below:

```
SELECT co_num, cust_num, cust_seq
FROM coh
WHERE cust_num IS NOT NULL
AND NOT EXISTS(SELECT 1 FROM customer
WHERE customer.cust_num = coh.cust_num
```

```
AND customer.cust_seq = coh.cust_seq)
```

The above statement shows (SELECT) the key column(s) (co\_num) and incorrect references (cust\_num, cust\_seq) from every record in the foreign-key table (coh) whose foreign-keys (coh.cust\_num, coh.cust\_seq) seemingly refer to a record (NOT NULL) but do not identify (NOT EXISTS) a record in the primary-key table (customer).

A grid is displayed that lists the selected columns for each record with an incorrect reference. You now decide how to address each incorrect reference. Choose from among the following 3 options:

- Change the foreign-key columns to refer to an existing primary-key record.

For example:

```
UPDATE coh SET cust_seq = 4 WHERE coh.co_num =  
'S000215869'
```

- Add a new primary-key record with primary-keys to match the foreign-keys (not recommended at this point in the process, because SyteLine triggers are disabled and will not provide their normal validation or cascading actions); or
- Change the foreign-key columns to Null.

For example, to affect all incorrect records:

```
UPDATE coh SET cust_num = NULL, cust_seq = NULL  
FROM coh  
WHERE cust_num IS NOT NULL  
AND NOT EXISTS (SELECT 1 FROM customer  
WHERE customer.cust_num = coh.cust_num  
AND customer.cust_seq = coh.cust_seq)
```

All references are correct for this constraint when the SELECT statement above displays an empty grid.

After all references are correct for all constraints in a .key file, phase 4 can be re-run for the foreign-key table (enter the table name "coh" in both the Starting Table and Ending Table fields).

## Relative Duration

The following table approximates the relative successful completion times of each phase:

| Phase | %  |
|-------|----|
| 1     | 1  |
| 2     | 20 |
| 3     | 65 |
| 4     | 1  |
| 5     | 7  |
| 6     | 6  |

Results may vary and can differ greatly when parallel processes are used.

## Re-entrance

Phases 1-4, 6, and 8 can be re-executed for individual tables or ranges if data inconsistencies are detected and corrected. The following table provides details:

| Phase | Preparation Required Before Re-execution | Details                                                                                                                        |
|-------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1     | None                                     | .d7 file will be overwritten by default                                                                                        |
| 2     | None                                     | Table in Conversion database is dropped and re-created by default                                                              |
| 3     | Truncate table in Application database   | Depending on the type of error received during previous execution, data may remain in the table; we do not truncate by default |
| 4     | None                                     | Existing constraints are dropped for each table and re-created by default                                                      |
| 6     | None                                     | Stored Procedure purges all data before recreating it.                                                                         |
| 8     | None                                     | Table in Conversion database is dropped and re-created by default                                                              |

## Parallel Execution

Phases 1-4 can be executed on multiple computers or multiple processes in parallel, to reduce total duration. This is especially useful on multi-processor systems.

1. Start multiple instances of SLConv.exe on 1 or more computers.
2. Enter a unique Logfile Path for each instance; all other options should be identical.
3. Use the Starting Table/Ending Table range option to split the load. Note your largest tables by size of .d and attempt to group these separately (for example, if largest tables are ledger and matltran, then use 4 ranges: a-l, l-m, m-n, n-z).

**NOTE:** Range l-m does not process any tables beginning with "m", because "matlearn" (the first table beginning with "m") sorts higher than "m" in dictionary order. Another way to process the same range is l-l\_zz.

When using parallel execution, follow these guidelines for minimum contention:

| Phase | Guideline                                                                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1     | None                                                                                                                                |
| 2     | None                                                                                                                                |
| 3     | Start first instance; wait until it has finished dropping foreign-keys and loaded user_local table; then start remaining instances. |
| 4     | None                                                                                                                                |

Monitor system load to avoid performance degradation.

**NOTE:** In order to get access to the forms you'll need for development work, you must have purchased the SyteLineDev license module.

If you need to set up a developer environment, you should do so AFTER you have already created a database server and utility server. The steps in this chapter assume that you are creating an Administrative Client on its own machine. If you want to do development work from the Administrative Client on the utility server, you can.

## Requirements

- .NET Framework version 2.0 complete with the 3.5 service pack 1 update.
- .NET Framework version 4.0.
- Internet Information Services (IIS) and Active Server Pages must be installed and allowed. You must reboot your machine after installing these pieces for SyteLine to work properly.
- A client workstation (in this case an Administrative Client) must have a Windows 2003, Windows XP, Windows Vista, Windows 7, or Windows Server 2008 R2 operating system.
- Microsoft Visual Studio 2010 or Visual Studio 2010 express is required if you want to create IDO extension class assemblies or debug form scripts. You must set your project's target framework to .NET Framework 4.0. This is done in Visual Studio's project's properties.
- IDO Custom Assembly projects must be:
  - upgraded to VisualStudio 2010/.NET 4.0
  - updated to reference the new framework assemblies (IDOProtocol.dll, IDOCore.dll, MGShared.dll, WSEnums.dll and WSFormServerProtocol.dll)
  - rebuilt and re-imported into each objects database

## Remove Dependency on the IDO Runtime Service

In a standard SyteLine installation, the Infor Framework services (TaskMan, EventService, Replicator, ReplQListener, and InboundBus) are dependent on the Infor Framework IDO Runtime service. That is, when the IDO Runtime service stops, the other services must also stop; and the IDO Runtime service must be started before the other services can start.

In a development environment, you may be running the IDO Runtime Development Server instead of the IDO Runtime service. In this case, you do not want the starting/stopping of Infor Framework services to be dependent on the IDO Runtime service. To remove the dependency, uninstall the services and then reinstall them using the .NET InstallUtil utility with the /MGDevMode option.

To uninstall the services, run these commands:

```
Dotnetpath\InstallUtil -u SyteLinepath\TaskMan.exe
```

```
Dotnetpath\InstallUtil -u SyteLinepath\EventService.exe
```

```
Dotnetpath\InstallUtil -u SyteLinepath\ReplQLListener.exe
```

```
Dotnetpath\InstallUtil -u SyteLinepath\Replicator.exe
```

```
Dotnetpath\InstallUtil -u SyteLinepath\InboundBus.exe
```

Where

*Dotnetpath* is the path to the .NET runtime, usually

C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727 and *SyteLinepath* is the path to the Framework utilities, usually C:\Program Files\Infor\SyteLine.

To reinstall the services without the dependency, run these commands:

```
Dotnetpath\InstallUtil /MGDevMode SyteLinepath\TaskMan.exe
```

```
Dotnetpath\InstallUtil /MGDevMode SyteLinepath\EventService.exe
```

```
Dotnetpath\InstallUtil /MGDevMode SyteLinepath\ReplQLListener.exe
```

```
Dotnetpath\InstallUtil /MGDevMode SyteLinepath\Replicator.exe
```

```
Dotnetpath\InstallUtil /MGDevMode SyteLinepath\InboundBus.exe
```

Later, when you are finished with development mode, you can uninstall the services again and reinstall them without the /MGDevMode option in order to restore the default dependency.

## Create Databases for use in Your Developer Environment

To keep your development work completely separate from a live production environment, you need to create at least one application database, one forms database, and one objects database on the database server. See Chapter 1, “Setting up the Database Server for instructions on how to create and configure databases and then return here.

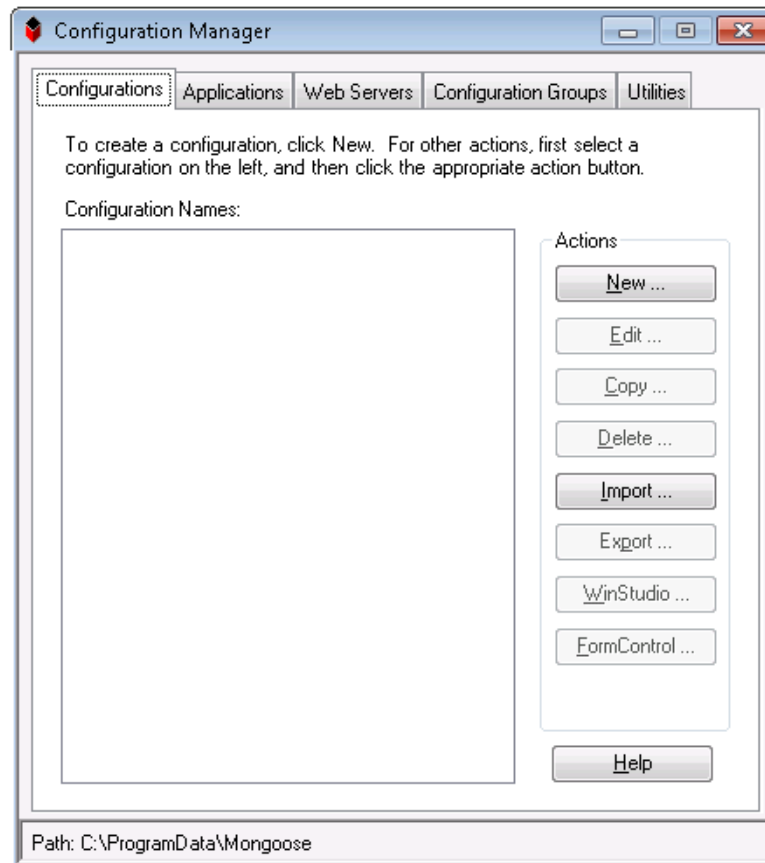
## Install an Administrative Client

Follow the steps in “Install Administrative Client” on page 79 to install and configure an administrative client on your developer machine and then return here.

## Use Configuration Manager

The install process for an administrative client puts down a few extra files that aren't found on an end-user client. One of these that you must use is the Configuration Manager utility. For more specific information about the options in this utility, see the Configuration Manager online help (click the Help button from any tab or screen in the utility).

1. Open **Configuration Manager**. Select **Start>All Programs>Infor>Tools>Configuration Manager**.



2. Click **New**. The **New Configuration** dialog box is displayed. Give your configuration a name and click **OK**.

3. The **Edit Configuration** screen is displayed with the Runtime (Client) tab selected.

4. Yellow (or light shading if printing in black and white) has been added to the required fields on this tab just for the purposes of this manual. Notice there are two main sections on this screen, Runtime Application Database and Runtime Forms Database.

- **Runtime Application Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your application database earlier.
  - **Password** - Enter the password for the username. You provided this password when you created your application database earlier.
  - **Server** - Enter the name of your database server.

**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the application database you created earlier.
- **Runtime Forms Database** - In this section, provide the following information:
  - **User** - Enter the username. You provided this username when you created your forms database earlier.
  - **Password** - Enter the password for the username. You provided this password when you created your forms database earlier.
  - **Server** - Enter the name of your database server.

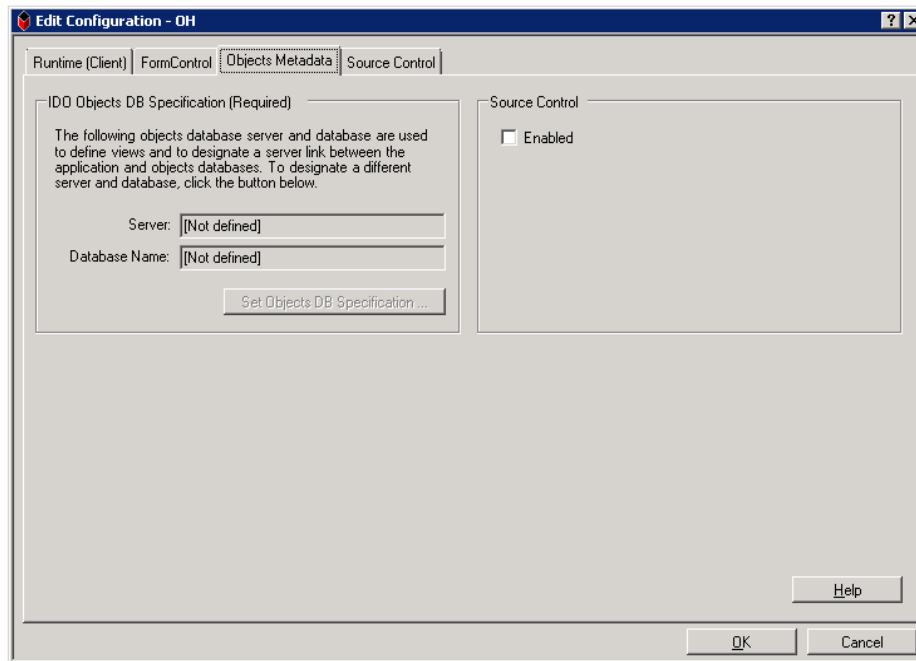
**NOTE:** You can test your entries and your connection to the database server by clicking the Test User button. You will receive a success message if all is well.

- **Database Name** - Select the name of the forms database you created earlier.

- **Form Templates Database Name** - If you created a templates database, select it here.

**Application** - Select the default application of **SL803**. You can create "applications" with different parameters using the Applications tab on the Configuration Manager.

5. Click the **Objects Metadata** tab.



6. **Enabled** check box - for objects databases in which IDO objects and metadata must be checked in and out for editing using a source control system, select this check box. If you select this check box, you must also designate a server URL or path on the Source Control tab. Using a source control system is optional.

7. Click the **Set Objects DB Specification** button. The **Set Objects Metadata Server/Database** screen is displayed:

8. Provide the following information:
- **User** - Enter the username. This is the user name you supplied for the objects database earlier.
  - **Password** - Enter the password. This is the password you supplied for the objects database earlier.
  - **Server** - Enter the name of your database server.
  - **Database Name** - Select the name of the objects database you created earlier.
9. Click **OK** to close the **Set Objects Metadata Server/Database** screen. A success message is displayed. Click **OK**.
10. If you don't plan to use a source control system or FormControl, you are finished with this section. Click **OK** to close the **Edit Configuration** screen.

## Source Control Systems

Using a source control system is optional. The steps in this section assume you are going to use a source control system.

1. Select the **Enabled** check box on the Objects Metadata tab.
2. Click the **Source Control** tab.
3. Select the source control system you wish to use. The options are:

- Visual SourceSafe
- Team Foundation Server
- Subversion

4. Provide the following information:

- **Server URL or Path** - The information in this field specifies the path to the shared directory on the server that contains the source control systems. This path must use the following format:

**For VSS:** `\\databaseServer\directory\subdirectory\...\srcsafe.ini`

where:

- *databaseServer* is the name of the server on which the source control system resides.
- *directory* is the root directory for the source control system.
- *subdirectory\...* represents any number of subdirectories required to reach the location of the VSS srcsafe.ini file for the project.

**For TFS:** `http://databaseServer:port/TFSroot/.../defaultCollection`

where:

- *databaseServer* is the DNS or IP address of the server on which the TFS databases reside.
- *port* is the port number through which the TFS server is to be accessed.
- *TFSroot/...* is root directory in which the TFS source control system is installed and any subdirectories required to get to the default collection.
- *defaultCollection* is the name of the Team Project Collection.

**For SVN:** `http://URLtoSVNserver`

where *URLtoSVNserver* is the URL to the SVN server.

To specify a server and shared directory for any of these, you can either type the path or click the Browse button. If you are using VSS or Subversion, open the **Users** form in SyteLine and specify the login user ID and password for the user on the Source Control tab.

5. If you don't plan to use FormControl, you are finished with this section. Click **OK** to close the **Edit Configuration** screen.

## FormControl

Using FormControl is optional. The steps in this section assume you are going to use FormControl. For more detailed information about FormControl and the items on this tab, see the online help for the Configuration Manager utility.

1. Select the **Enabled** check box on the Objects Metadata tab.
2. Note that there are two major sections on the FormControl tab, Master Forms Database and Archive Forms Database.

- **Master Forms Database** - This group box specifies the forms and form templates databases that FormControl should access for the forms to be created or edited.
- **Archive Forms Database** - A database used by FormControl during the development of a WinStudio application. FormControl uses an archive forms database and an archive templates database to store definitions of forms and form-related objects that have been deleted from the FormControl production databases.

## Master Forms Database

3. Provide the following information:

- **Database Type** - Accept the default of MSS.
- **.NET Provider** - Accept the default of MSS.
- **Provider Driver** - Accept the default of Best Fit.
- **User** - Enter the user ID to log into the database.
- **Password** - Enter the password associated with the user ID.
- **Server** - Specify the database server on which the forms to be created or edited are located.
- **Misc. Connection Info** - This field provides for an optional verbatim string to be added to the connection string. The SqlConnection class of ADO.NET, for instance, supports various additional connection options which could be specified here.
- **Query Timeout** - Enter the amount of time, in seconds, that the system is to wait for a response from the database server before generating a timeout error. A zero (0) in this field means that the system is to wait indefinitely.
- **Database Name** - Select from the list the name of a forms database that already exists on the server.
- **Form Templates Database Name** - Select from the list the name of a form templates database that already exists on the server.
- **Location Name** - This field is used for synchronizing forms between distributed development sites. This field refers to a specific runtime forms database. This location name is stored in a table in the runtime form templates database. In other words, it follows those runtime forms and form templates databases around, regardless of what configuration references them.

Whenever a FormControl action is executed (check-out, check-in, get, and so forth), a record is created in the FormManTranLog table that resides in the master form templates database. One of the columns in that record is the Location Name. If you choose to run FormControl synchronization (which requires a special synchronization configuration file named FormControl.xml), the synchronization process uses these location names to know which other runtime sites to which to synchronize the data.

If no location name is specified here, FormControl simply defaults the location name to Local. If FormControl is used only for actions involving one pair of master and runtime databases, then this location name has no particular significance.

## Archive Forms Database

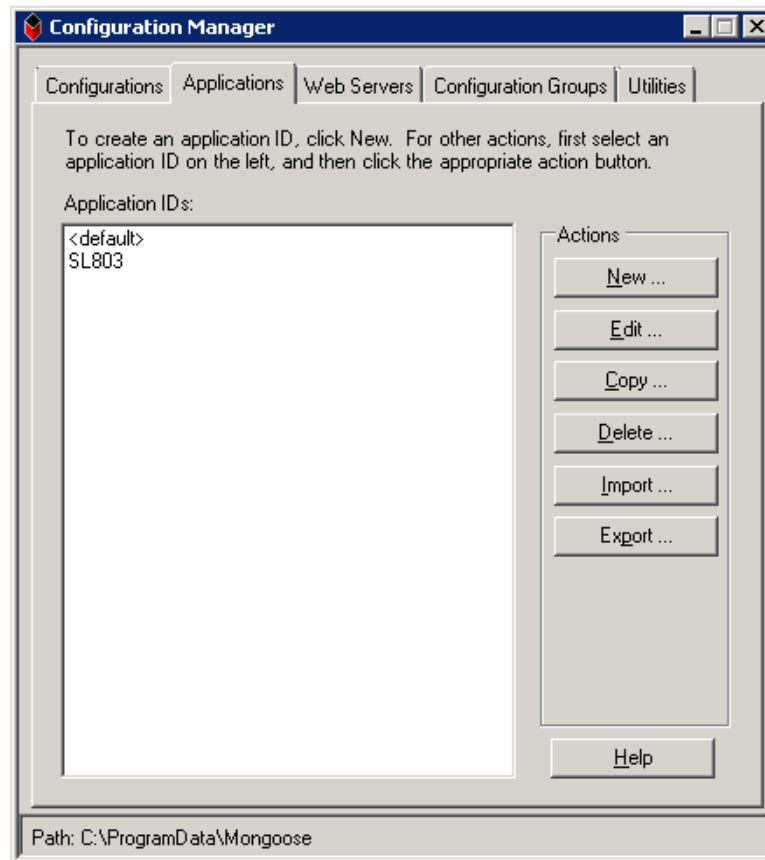
4. Provide the following information:

- **Database Type** - Accept the default of MSS.
- **.NET Provider** - Accept the default of MSS.
- **Provider Driver** - Accept the default of Best Fit.
- **User** - Enter the user ID to log into the database.
- **Password** - Enter the password associated with the user ID.
- **Server** - Specify the database server on which the archive forms database is located.
- **Misc. Connection Info** - This field provides for an optional verbatim string to be added to the connection string. The SqlConnection class of ADO.NET, for instance, supports various additional connection options which could be specified here.
- **Query Timeout** - Enter the amount of time, in seconds, that the system is to wait for a response from the database server before generating a timeout error. A zero (0) in this field means that the system is to wait indefinitely.
- **Database Name** - Select from the list the name of an archive database for forms that already exists on the server.
- **Form Templates Database Name** - Select from the list the name of an archive database for form templates that already exists on the server.
- **Enabled** - If a source control system is being used for file management of the database files, select this check box.

## Set Up Online Help

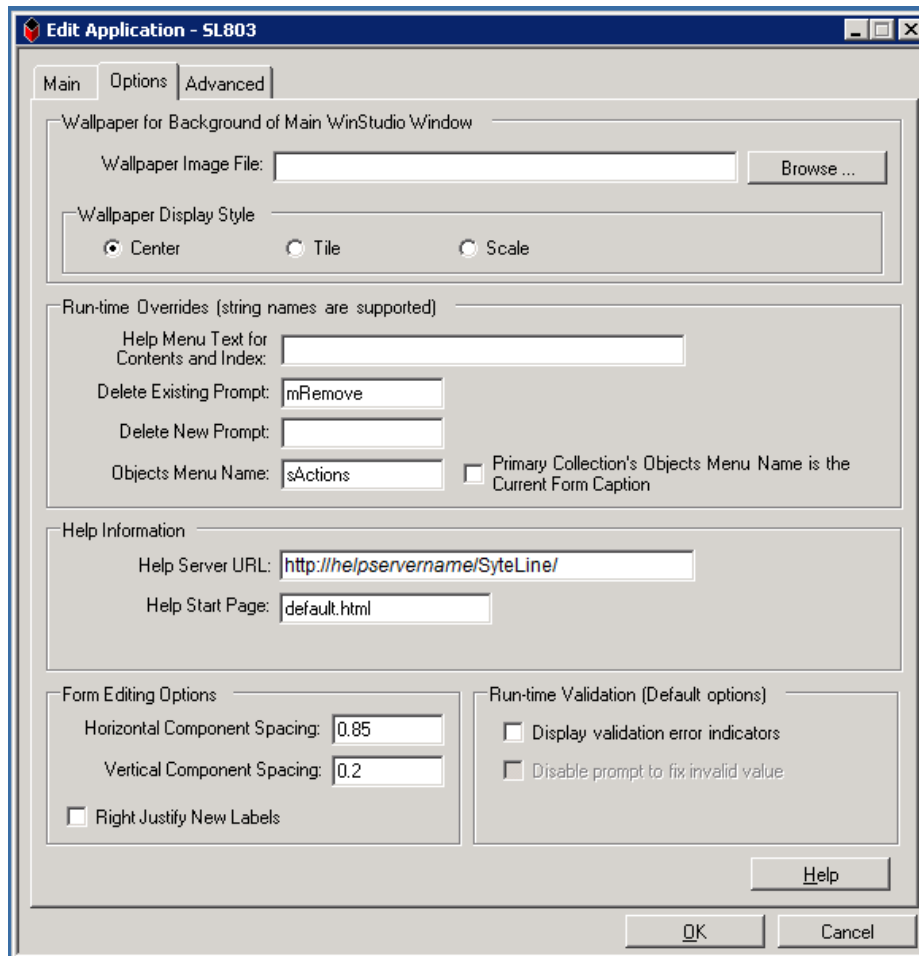
You must provide the name of the machine where you access the online help in order for the help to work.

5. Open **Configuration Manager**. Select **Start>All Programs>Infor>Tools>Configuration Manager**, and then click the **Applications** tab.



6. Select the **SL803** Application ID and click the **Edit** button.
7. The **Edit Application** window is displayed.

8. Click the **Options** tab.



9. In the **Help Server URL** field, enter the following:  
**http://helpservername/SyteLine/**

The help server name is the name of the machine where the help resides. When setting up an administrative client, you can either put the name of the administrative client machine there, OR the name of the utility server. The help is in both places. If the help on the utility server will be updated frequently or customized, you might want to use that computer name.

10. In the **Help Start Page** field, enter **default.html**.

11. Click **OK** to close the **Edit Application** window.

## Start IDO Runtime Development Server

You must start the IDO Runtime Development Server in order for an administrative client to run.

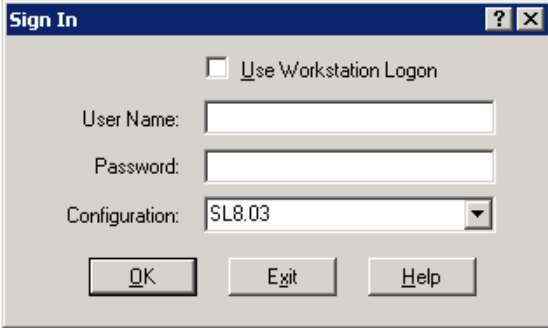
1. Select **Start>All Programs>Infor>Tools>IDO Runtime Development Server**.

2. You can minimize the **IDO Runtime Development Server** application.

## Run SyteLine

You can now run SyteLine.

1. Select **Start>All Programs>Infor>Infor ERP SL**.
2. The **Logon** screen is displayed.

A screenshot of a 'Sign In' dialog box. The dialog has a title bar with a question mark and a close button. Inside, there is a checkbox labeled 'Use Workstation Logon' which is unchecked. Below this are three input fields: 'User Name:', 'Password:', and 'Configuration:'. The 'Configuration:' field is a dropdown menu showing 'SL8.03'. At the bottom are three buttons: 'OK', 'Exit', and 'Help'.

3. Provide the following information:
  - **User Name** - This is the SyteLine username. If you've not yet licensed your database, use "sa".
  - **Password** - This is the password associated with the user name.
  - **Configuration** - Select the development configuration you created earlier.

## License Your Developer Database

Open up the **License Management** form and apply your license. See the *Infor10 ERP Business (SyteLine) System Administration Guide* for information about the License Management form and how to apply your license.

If you have a version of SyteLine and want to upgrade to another version (for example, from SyteLine 7.05 to SyteLine 8.03), you **MUST** uninstall the old version before installing the new version. This is true for all pieces of your system; all servers and clients (except for a Click Once client; you do not need to uninstall a Click Once client).

Uninstalling **DOES NOT** remove databases.

**NOTE:** When going through the uninstall wizard, follow all the prompts you are given, including any requests to reboot your machine.

1. Make sure all users are logged out of the system.
2. Make a backup of all databases.
3. At the server or client machine of your choice, go to **Add/Remove Programs** (or **Programs and Features** depending on the version of your O/S). You can uninstall in any order.
4. Select the SyteLine piece you want to uninstall and click the **Change** button.
5. Navigate through the wizard until you get the option to **Modify**, **Repair**, or **Remove**.
6. Select **Remove** and click **Next**.
7. Click **Next**.
8. At the **Remove the Program** screen, click **Remove**. The uninstall process may take several minutes.
9. When the uninstall process is complete, click **Finish**.



## Requirements

- If faxing PDF documents, you can not use Adobe Reader X. You must use Adobe Reader version 7, 8, or 9 or Foxit Reader.
- Before installing the Infor Framework Fax Service, ensure that your operating system is correctly configured to fax files. See your operating system documentation for more information.

## Set up Fax Capability

In a default installation, SyteLine uses the Fax capability built into the Windows operating system. Windows Fax runs on the Infor TaskMan machine under the control of TaskMan. For configuration instructions, see "Configuring Windows Fax" in the online help.

To set up a fax server separate from the TaskMan machine, you can use Infor Framework Fax Service. Fax Service runs on the fax server as a system service, monitoring a fax directory on the TaskMan machine. The service uses the Fax capability in the operating system on the fax server, just as TaskMan uses the capability on the TaskMan machine in the default installation.

1. During the SyteLine installation, the following fax directory was created:

```
\\<TaskMan_server>\<TaskMan_directory>\Report\Fax
```

Share this fax directory with the fax server machine; make sure to give the read/write privilege to the service account of Infor Framework Fax Service running at a remote server.

2. In the fax directory, open the **FaxService.exe.Config** file in a text editor.
3. Add the path to your fax directory in the following location:

```
<applicationSettings>
  <Mongoose.FaxService.Properties.Settings>
    <setting name="<TaskMan_server>\<TaskMan_directory>\Report\Fax" seri-
      alizeAs="Xml">
      <value>
        <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-in-
          stance"
```

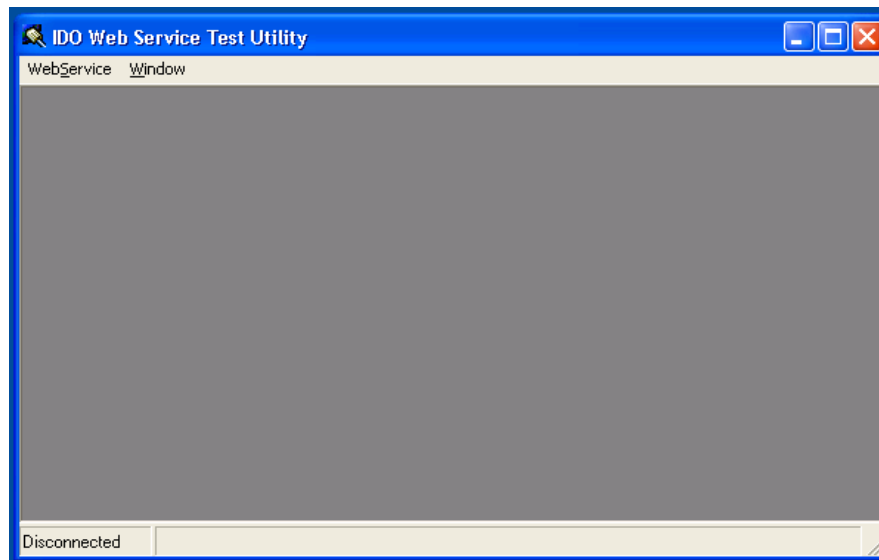
```
xmlns:xsd="http://www.w3.org/2001/XMLSchema" />
```

4. Configure the fax service on the **Intranets** form. See the online help for more information.

This utility provides a test client for the .NET Web Service (.NET API). If you install the web server components on your utility server and want to verify that it is installed and configured correctly without writing your own client, you can use this utility. You can test logging in and loading a collection (query).

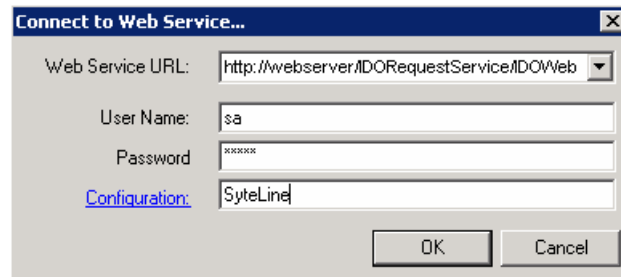
### Starting the Utility

From the utility server machine's Start menu, select **Start>All Programs>Infor>Tools>.NET Web Service Test Utility**. The following window displays:



## Connecting (Logging In) to the Web Service

You can connect to the web service by selecting **Connect...** from the WebService menu. The following dialog displays:



The "Connect to Web Service..." dialog box contains the following fields and controls:

- Web Service URL:** A dropdown menu showing "http://webserver/IDORequestService/IDOWeb".
- User Name:** A text box containing "sa".
- Password:** A text box containing "xxxxxx".
- Configuration:** A text box containing "SyteLine" with a blue "Configuration:" link to its left.
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Enter this information:

| Field           | Description                                                                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Web Service URL | Enter a URL that points to the web service, in the format <code>http://webserver/IDORequestService/IDOWebService.asmx</code> where <i>webserver</i> is the local host (the name of the utility server where the utility is installed). |
| User Name       | Enter the name of a user who has access to the configuration.                                                                                                                                                                          |
| Password        | Enter the user's password.                                                                                                                                                                                                             |
| Configuration   | Click on the <a href="#">Configuration</a> link to select from a list of configurations available for this web server, or enter an existing configuration name.                                                                        |

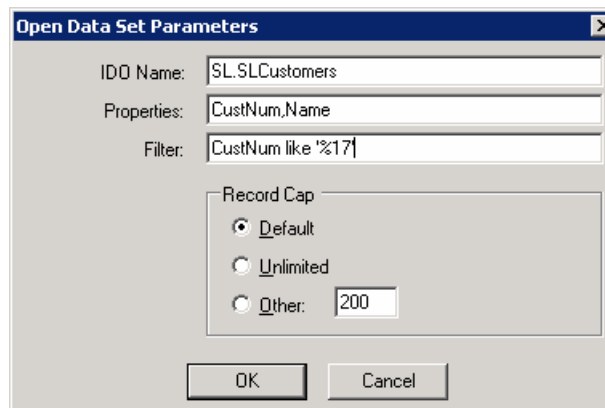
When you have successfully connected to the web service, the status bar at the bottom of the utility window will look like this:



The status bar shows a "Connected" label followed by the URL "http://webserver/IDORequestService/IDOWebService.asmx".

## Loading a Data Set

After you log in, you can select "Open DataSet..." from the WebService menu. This brings up the Open Data Set Parameters dialog:



The "Open Data Set Parameters" dialog box contains the following fields and controls:

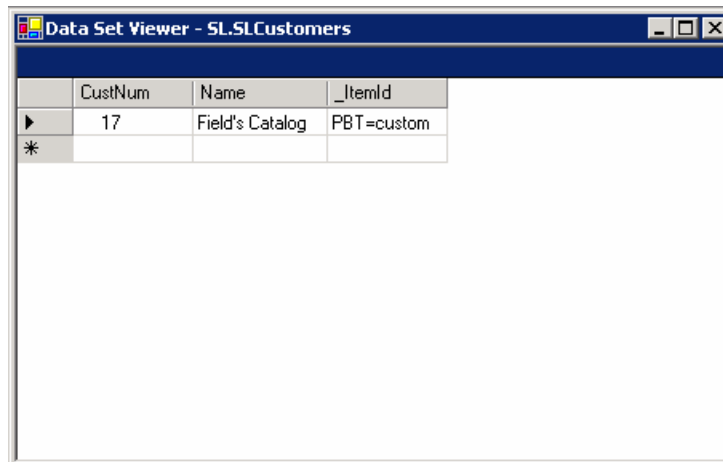
- IDO Name:** A text box containing "SL.SLCustomers".
- Properties:** A text box containing "CustNum,Name".
- Filter:** A text box containing "CustNum like '%17'".
- Record Cap:** A group box containing three radio buttons:
  - ☒ **Default**
  - ☐ **Unlimited**
  - ☐ **Other:** followed by a text box containing "200".
- Buttons:** "OK" and "Cancel" buttons at the bottom.

Enter the following information to specify the data set you want to load:

| Field      | Description                                                                                                           |
|------------|-----------------------------------------------------------------------------------------------------------------------|
| IDO Name   | SyteLine IDO name, for example <b>SL.SLCustomers</b>                                                                  |
| Properties | A comma-delimited list of property names to include in the data set, for example <b>CustNum, Name</b>                 |
| Filter     | Optional filter, for example <b>CustNum like 'XYZ%'</b>                                                               |
| Record Cap | Default: use the default record cap (currently 200)<br><br>Unlimited: no cap<br><br>Other: Enter a user-specified cap |

## Viewing Results

Click **OK** to view the resulting data set. For example:



|   | CustNum | Name            | _ItemId    |
|---|---------|-----------------|------------|
| ▶ | 17      | Field's Catalog | PBT=custom |
| * |         |                 |            |



This appendix gives supplementary information about form synchronization.

For a detailed description of the synchronization process, see the document *About Form Synchronization* on the support site.

For information about using FormSync, see the online help for FormSync.

## Basic and Major Customizations

Synchronization may require a detailed understanding of WinStudio development. The degree of development experience required of the user depends on the level of customization in a forms database.

- **Basic Customizations** - If customized versions contain only those changes allowed to users with Basic editing permission, FormSync automatically handles all customizations. Experience with form development in WinStudio is not required. By default, FormSync retains Basic customizations without prompting the user about whether to keep or remove each customization. Basic editing permission is assigned to users in the **Users** form. Basic customizations are listed below.
- **Major Customizations** - If customized versions contain changes other than Basic customizations, the FormSync user should be prepared to reply to prompts pertaining to specific attributes of forms and global objects. Interpreting prompts, testing results, and manually changing merged forms all require an understanding of form development in WinStudio. Users should also be familiar with a site's development plan and policies.

### Basic Customizations to Forms

| Attribute  | Description                                              |
|------------|----------------------------------------------------------|
| Caption    | The title of a form displayed in the title bar           |
| Dimensions | The height, width, and position (top and left) of a form |

### Basic Customizations to Components

| Attribute     | Description                                                   |
|---------------|---------------------------------------------------------------|
| Caption       | The label of a component                                      |
| Default Value | The default value of a component                              |
| Dimensions    | The height, width, and position (top and left) of a component |
| Hidden        | A component is not displayed on the form                      |
| Read-only     | A component's data is displayed but cannot be changed         |

| Attribute       | Description                                                                                       |
|-----------------|---------------------------------------------------------------------------------------------------|
| No Clear on New | When a new record is inserted, the current value of the previously selected record is retained    |
| Default on Copy | When a record is copied, the default value of a component is copied rather than its current value |
| Uppercase       | Characters entered in a component are converted to capital letters                                |

## Default Synchronization and Alternatives to Default Synchronization

The default settings for synchronization are recommended in this guide because many customizations are merged automatically, thus reducing editing time after synchronization. With default settings, customized versions of forms in the Target configuration are merged with new vendor-level versions from the Source configuration. Old vendor-level versions of forms in the Target are then replaced by new vendor-level versions from the Source.

### Remove Customizations

An alternative to merging customizations is removal of customizations from the Target configuration. After removing customizations, FormSync replaces vendor-level versions of forms in the Target with new vendor-level versions from the Source.

You can remove customizations selectively from the Target and update the Target with new versions from the Source.

**NOTE:** The result of removing all customizations is the same as the result of replacing your Target forms database with a new forms database.

See Help for FormSync, "Replace Base-Level Versions and Remove Customizations," for instructions.

### Retain Customizations

You can retain all or some customizations in the Target configuration and update vendor-level versions of forms in the Target with new vendor-level versions from the Source. Customizations are unchanged and not merged with new attributes from the Source.

**NOTE:** This procedure is generally not recommended because retained customizations override new vendor-level versions copied from the Source configuration.

Enhancements and fixes in the new versions in the Target are not available to users running customized forms in which customizations were retained and not merged.

See Help for FormSync, "Replace Base-Level Versions and Leave Customizations Unchanged," for instructions.

## Test for Form Customizations

To determine whether your site contains form customizations, follow these steps:

1. From the **Start** menu on the utility server, navigate to **Infor>Tools** and click **FormSync**.
2. Select any **Source** configuration.
3. Select a **Target** configuration that points to your production forms database.
4. Click **OK**.
5. On the **Tools** menu, click **Utilities**.
6. On the **Filter** tab, select **Target** in the **Configuration** box.
7. Click **Refresh**.
8. View the results in the **Custom Objects** grid.

Each customized form or global object is represented by a row in the grid. If the Target forms database contains no customizations, the grid is empty.

## Configure a File-Comparison Utility

You must configure a file-comparison utility with FormSync before you perform a synchronization. You can configure various third-party utilities, such as

- **WinDiff**, available from Microsoft with the Platform SDK
- **WinMerge**, an Open Source differencing tool (<http://winmerge.org/>)
- **BeyondCompare**, from Scooter Software (<http://www.scootersoftware.com/>)

Steps for configuring a file-comparison utility:

1. From the **Start** menu, navigate to **Infor >Tools** and click **FormSync**.
2. Select any **Source** and **Target** configurations.
3. Click **OK**.
4. On the **Tools** menu, click **Configure Comparison Utility**.
5. Type the **Name** of a file-comparison utility.
6. In the **Exe File** column,
  - Type the path and file name of the executable file for a file-comparison utility, or
  - Click in the column, click the browse button, and select an executable file.
7. To set the utility as the default, click in the **Default** column, then click **Set**.
8. Click the **Close** button.

## Test an Upgraded Target Forms Database

Because synchronization is an extension of the customization process, you must examine and test merged customizations in the Target configuration. Merging customizations with a new version of SyteLine does not guarantee that the upgraded customizations are fully

functional.

In a few cases, testing is not required:

- If all customizations in the Target configuration are of the Basic type, testing is not required. Few SyteLine installations are in this category.
- If you removed all customizations, testing is not required.

It is recommended that you set up a test environment separate from your production environment. The test environment must be parallel to the updated production environment, with forms accessing the updated IDOs, updated application database, and other updated components of SyteLine. If there are few major customizations and you are confident that the customizations can be safely tested, a separate test environment may not be needed.

Plan to test:

- Customized forms in which you retained a customization in response to a synchronization prompt.
- Forms that you created, including copies of vendor-level versions of forms saved under a new name. Synchronization does not update forms or global objects whose names are not names of vendor-level versions.
- Forms that use a customized global object that you retained in response to a synchronization prompt.

Consider dependencies within a form and within the system. An upgrade can modify:

- An IDO or other resource on which the customized object is dependent
- A vendor-level version of a form or global object on which the customized object is dependent
- A vendor-level version of a form or global object that depends on the vendor-level version of the customized object

Effects of such changes are not transparent, and they have to be considered in your test plan.

When there is a change in component type (for example, from radio button to toolbar button), you may have to adjust the size and position of the component.

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