**ProSystem _fx_®
Engagement**

Installation Guide

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Wolters Kluwer
CCH

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INSTALLATION

Overview

This guide provides step-by-step instructions for installing the ProSystem *fx* Engagement Administrator and Workpaper Management modules. Also included is information for installing Knowledge Coach. The minimum and recommended system requirements are also provided.

Before you begin, refer to the following documents:

- The *License Agreement* for information and restrictions on installation.
- The *ProSystem fx Engagement Release Bulletin* for new product features.

Two ProSystem *fx* Engagement modules must be installed in order for the application to function. These modules are the Administrator module and the Workpaper Management module.

The Administrator module is an organizational tool designed to provide security and control rights for different staff levels, as well as organize and maintain your office servers and central file rooms.

The Workpaper Management module relies on the Administrator module to provide login information, central storage, and secured access to all your client data.

Knowledge Coach is an audit planning and workflow tool that streamlines audit processes through the use of intelligent engagement tailoring, dynamic linking of risks to audit programs, extensive diagnostics, and automated flow of information across workpapers.

Engagement 7.1 Requirements

The following two tables detail the requirements for the Engagement Administrator and Workpaper Management modules.

Administrator Module

System Requirements	Recommended	Minimum
Microprocessor	64-bit multi-core processor	**32-bit**: Pentium 4 processor, 2 GHz **64-bit**: - Pentium 4 processor, 3.2 GHz, or any multi-core processor - AMD Athlon 64, Intel Pentium 4 with Intel EM 64T support
Supported Operating Systems	- Microsoft Windows Server 2008 (64-bit), SP2 - Microsoft Windows Server 2008 R2, SP2 - Microsoft Windows Server 2012 (64-bit) - Microsoft Windows Server 2012 R2 **Important!** - Microsoft Small Business Server, Windows Server Essentials, and Windows Server Foundation are not supported. - Installing Engagement on a server that is also a Domain Controller is not supported. - Installing Engagement on a server that is also the firm's Exchange Server is not supported. - Linux is supported for workpaper storage only. - Windows 8 Pro and Enterprise Editions are supported. Windows 8 Home Editions are not supported.	- Microsoft Windows Server 2003, SP2 - Windows 7, SP 1 - Windows 8, 32-bit and 64-bit - Windows 8.1 - Windows Vista, SP2
System Memory	4 to 8 GB RAM **Notes**: - Additional memory improves performance and may be required to run additional applications simultaneously. - Memory consumption varies based on usage of Microsoft SQL Server.	**32-bit**: 2 GB RAM **64-bit**: 4 GB RAM
Drive Space	Administrator requires approximately 375 MB of drive space when installed with the CD image files, 500 MB of drive space in the Temp folder, and additional space required for data.	

System Requirements	Recommended	Minimum
Video	Super VGA at 32-bit color quality with a resolution of 1024 x 768.	
	ProSystem *fx* Engagement does not support large fonts.	
Network Environment		
Microsoft	Client for Microsoft Networks and Microsoft TCP/IP.	
Other Software		
SQL	SQL Server 2012 ■ SQL Server 2012 Standard Edition ■ SQL Server 2012 Business Intelligence Edition ■ SQL Server 2012 Enterprise Edition SQL Server 2008 R2 ■ SQL Server 2008 R2 Standard Edition (32-bit and 64-bit) ■ SQL Server 2008 R2 Enterprise Edition (32-bit and 64-bit) ■ SQL Server 2008 R2 Express (32-bit and 64-bit)	SQL Server 2008 ■ SQL Server 2008 Standard Edition (32-bit and 64-bit) ■ SQL Server 2008 Enterprise Edition (32-bit and 64-bit) ■ SQL Server 2008 Express (32-bit and 64-bit)

Notes:

■ ProSystem *fx* Engagement includes installers for SQL Server 2008 R2 Express and SQL Server 2012 Express. If you need to install any of the following editions of SQL Server, see *Appendix A: Installing SQL Server 2008 or 2008 R2* on page 29 and *Appendix B: Installing SQL Server 2012* on page 47:
  ◆ 64-bit editions of SQL Server
  ◆ Standard Editions of SQL Server
  ◆ Enterprise Editions of SQL Server
  ◆ SQL Server 2008

These sections describe how to set up SQL with Engagement manually.

■ Depending on usage, Standard, Business Intelligence, or Enterprise Edition of Microsoft SQL Server may be necessary.

System Requirements	Recommended	Minimum
Data Access Components	The following items are installed automatically with Engagement: - Microsoft Jet Database Engine 4.0 with Service Pack 6 - Soap Toolkit 3.0 - MSXML 4.0, SP 2 parser - SQLXML 3.0, SP 3 - Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.17 - Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.4148 The following items are installed automatically with ProSystem *fx* Engagement: - SQL 2012 CLR (x86 for both 32 and 64-bit), Admin only - SQL Server 2012 Management Objects Service Pack 1 (SMO) (x86 for both 32-bit and 64-bit), Admin only - SQL Native Client 2008 (x86 for 32-bit; x64 for 64-bit) Windows Installer 4.5 is required by SQL Server 2008 Express. Microsoft .NET Framework 4.0 Full is required by Engagement. Adobe Reader 9.0, 10.0, or 11.0. **Note**: Adobe Reader 10 and 11 are supported, but Engagement workpapers must be opened with Reader's Protected Mode turned off. For more information, see *Note Regarding Adobe Reader 9, 10 and 11* on page 11.	
Web Browser	Internet Explorer 8.0 or higher.	
Email	Microsoft Mail, Microsoft Exchange, Internet SMTP/POP3, or other MAPI compliant messaging software to use network or Internet email	None
Other Hardware		
Internal or External DVD drive, if applicable	Any internal or external DVD compatible drive, if applicable for reading the installation media.	

Workpaper Management Module

System Requirements	Recommended	Minimum
Microprocessor	Multi-core processor	**32-bit**: Pentium 4 processor, 2 GHz **64-bit**: - Pentium 4 processor, 3.2 GHz (or any multi-core processor) - AMD Athlon 64, Intel Pentium 4 with Intel EM 64T support
Supported Operating Systems	Microsoft Windows 7, SP 1 Microsoft Windows 8, 32-bit and 64-bit Windows 8.1	Windows Vista, SP2
	Note: Windows 8 Pro and Enterprise Editions are supported. Windows 8 Home Editions are not supported.	
System Memory	**32-bit**: 2 GB RAM **64-bit**: 4 GB RAM	**32-bit**: 2 GB RAM **64-bit**: 4 GB RAM
	Notes: - Additional memory improves performance and may be required to run additional applications simultaneously. - Memory consumption varies based on usage of Microsoft SQL Server.	
Drive Space	Workpaper Management requires approximately 525 MB of drive space, 500 MB of free space for the Temp folder during installation, and additional space required for data.	
Video	Super VGA at 32-bit color quality with a resolution of 1024 x 768. **Note**: ProSystem *fx* Engagement does not support large fonts.	

System Requirements	Recommended	Minimum
	Other Software	
Microsoft Office	- Office 365 - Desktop version - Office 2013 - Office 2010, SP1 **Notes**: - Only Professional editions of Microsoft Office are supported. - Only 32-bit versions are supported. - The Microsoft Office 365 Online version is not supported.	Office 2007, SP3
SQL	- Microsoft SQL Server 2012 Express - Microsoft SQL Server 2008 R2 Express	Microsoft SQL Server 2008 Express
	Note: ProSystem *fx* Engagement includes installers for SQL Server 2008 R2 Express and SQL Server 2012 Express. If you need to install any of the following editions of SQL Server, see *Appendix A: Installing SQL Server 2008 or 2008 R2* on page 29 or *Appendix B: Installing SQL Server 2012* on page 47: 64-bit editions of SQL Server - Standard Editions of SQL Server - Enterprise Editions of SQL Server - SQL Server 2008 These sections describe how to set up SQL with Engagement manually.	
Data Access Components	The following items are installed automatically with ProSystem *fx* Engagement: - Microsoft Jet Database Engine 4.0 with Service Pack 6 - Soap Toolkit 3.0 - MSXML 4.0, SP 2 parser - SQLXML 3.0, SP 3 - SQLXML 4.0, SP 1 will be installed with Workpaper Management and Terminal Services Database - Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.17 - Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.4148 The following items are installed automatically with ProSystem *fx* Engagement: - SQL 2012 CLR (x86 for both 32 and 64-bit), Admin only	

System Requirements	Recommended	Minimum
	▪ SQL Server 2012 Management Objects (SMO) (x86 for both 32-bit and 64-bit), Admin only ▪ SQL Native Client 2008 (x86 for 32-bit; x64 for 64-bit) Windows Installer 4.5 is required by SQL Server 2008 Express. Microsoft .NET Framework 4.0 is required by Workpaper Management and Knowledge Coach. If Office 2013 is installed, the following items are installed automatically: ▪ Visual Studio Tools for the Office System 4.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime, SP 1 ▪ Visual Studio 2005 Tools for Office Second Edition Runtime If Office 2010 is installed, the following items are installed automatically: ▪ Microsoft Office 2010 Primary Interop Assemblies (PIA) ▪ Visual Studio Tools for the Office System 4.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime, SP 1 ▪ Visual Studio 2005 Tools for Office Second Edition Runtime If Office 2007 is installed, the following items are installed automatically: ▪ Microsoft Office 2007 Primary Interop Assemblies (PIA) ▪ Visual Studio Tools for the Office System 4.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime ▪ Visual Studio Tools for the Office System 3.0 Runtime, SP 1 ▪ Visual Studio 2005 Tools for Office Second Edition Runtime Visual Studio Tools for Office (VSTO) is required for Knowledge Coach. Adobe Reader 9.0, 10.0, or 11.0. Note: Adobe Reader 10 and 11 are supported, but Engagement workpapers must be opened with Reader's Protected Mode turned off. For more information, see *Note Regarding Adobe Reader 9, 10 and 11* on page 11.	
Web Browser	Internet Explorer 8.0 or higher.	
Email	Microsoft Mail, Microsoft Exchange, Internet SMTP/POP3, or other MAPI compliant messaging software to use network or Internet email	None

System Requirements	Recommended	Minimum
Other Hardware		
Internal or External DVD drive, if applicable	Any internal or external DVD compatible drive, if applicable for reading the installation media.	

Terminal Services Client Module

System Requirements	Recommended	Minimum
Number of Peak Users	Varies based on hardware; maximum is 20 users per server.	
Processor	64-bit multi-core processor	
Supported Operating Systems	■ Microsoft Windows Server 2008 (64-bit) ■ Microsoft Windows Server 2008 R2, SP2 ■ Microsoft Windows Server 2012 R2	Microsoft Windows Server 2003, SP2
	Important! ■ Microsoft Small Business Server, Windows Server Essentials, and Windows Server Foundation are not supported. ■ Installing Engagement on a server that is also a Domain Controller is not supported. ■ Installing Engagement on a server that is also the firm's Exchange Server is not supported. ■ Linux is supported for workpaper storage only.	
Memory	8 GB RAM or more **Note**: Memory consumption varies based on usage. More memory may be necessary for improved performance.	

System Requirements	Recommended	Minimum
Microsoft Office	- Office 365 - Desktop version - Office 2013 - Office 2010, SP1 **Notes**: - Only Professional editions of Microsoft Office are supported. - Only 32-bit versions are supported. - The Microsoft Office 365 Online version is not supported.	Office 2007, SP3
Citrix		Citrix Presentation Server 4.5 Citrix XenApp 6.5 Feature Pack 2

Terminal Services Database Module

System Requirements	Recommended	Minimum
Processor	64-bit multi-core processor	
Supported Operating Systems	- Microsoft Windows Server 2008 (64-bit) - Microsoft Windows Server 2008 R2, SP2 - Windows Server 2012 R2 **Important!** - Microsoft Small Business Server, Windows Server Essentials, and Windows Server Foundation are not supported. - Installing Engagement on a server that is also a Domain Controller is not supported. - Installing Engagement on a server that is also the firm's Exchange Server is not supported. - Linux is supported for workpaper storage only.	Microsoft Windows Server 2003, SP2
Memory	4 GB RAM or more **Note**: Memory consumption varies based on usage. More memory may be necessary for improved performance.	

System Requirements	Recommended	Minimum
SQL	■ Microsoft SQL Server 2012 (Standard or Enterprise) ■ Microsoft SQL Server 2008 R2 (Standard or Enterprise)	■ Microsoft SQL Server 2012 Express ■ Microsoft SQL Server 2008 R2 Express ■ Microsoft SQL Server 2008 (Standard, Enterprise, or Express)

Additional Requirements for Knowledge Coach

System Requirements	Recommended	Minimum
Supported Operating Systems	■ Windows 8.1 ■ Windows 8, (32-bit and 64-bit) ■ Windows 7, SP1, (Professional, Enterprise, and Ultimate: 32-bit and 64-bit) ■ Windows Vista, SP2 (32-bit and 64-bit) ■ Windows Server 2008, SP2 (32-bit and 64-bit) ■ Windows Server 2012, 64-bit ■ Windows Server 2012 R2 **Important!** Windows 8 Pro and Enterprise Editions are supported. Windows 8 Home Editions are not supported.	
Microsoft Office	Office 2007, SP3; Office 2010, SP1; Office 2013; or Office 365 - Desktop Version **Notes**: ■ Only Professional editions of Microsoft Office are supported. ■ The Microsoft Office 365 Online version is not supported.	

System Requirements	Recommended	Minimum
	- Microsoft SQL Server 2012 Express - Microsoft SQL Server 2008 R2 Express	Microsoft SQL Server 2008 Express

Notes:

- SQL Server 2008 Express has a database limitation with the number of KC titles; therefore, SQL Server 2008 R2 or SQL Server 2012 is recommended.
- ProSystem *fx* Engagement includes installers for SQL Server 2008 R2 Express and SQL Server 2012 Express. If you need to install any of the following editions of SQL Server, see *Appendix A: Installing SQL Server 2008 or 2008 R2* on page 29 or *Appendix B: Installing SQL Server 2012* on page 47:

  - 64-bit editions of SQL Server
  - Standard Editions of SQL Server
  - Enterprise Editions of SQL Server
  - SQL Server 2008

These sections describe how to set up SQL with Engagement manually.

SQL (row label, left column)

Other Software	Visual Studio Tools for Office (VSTO) Microsoft .NET Framework 4.0

Note Regarding Adobe Reader 9, 10 and 11

ProSystem *fx* Engagement 7.1 supports Adobe Reader 9, 10 and 11.

By default, Adobe Reader 10 and 11 open with "Protected Mode" turned on. When a PDF is opened in Reader 10 or 11 from within ProSystem *fx* Engagement, Engagement detects if Protected Mode is turned on. If so, you are asked whether Engagement should turn off Protected Mode.

- If you choose **Yes**, Protected Mode is turned off and the workpaper is opened, allowing you to use ProSystem *fx* Engagement functionality such as tickmark definitions, workpaper notes and workpaper references.
- If you choose **No**, the workpaper will open, but all ProSystem *fx* Engagement functionality will be disabled.

To set Adobe 10 or 11 to always open with Protected Mode turned off, do the following:

1. Open Adobe Reader 10 or 11.
2. Select **Edit/Preferences/General**.
3. Clear the **Enable Protected Mode at startup** option.

4. Click **OK**.
5. Restart Adobe Reader 10 or 11.

Installation Considerations

We recommend that you update your video card driver to the latest driver available and install Microsoft Direct X 9.x or higher.

Deployment Planning

Before installing ProSystem *fx* Engagement, it is important to understand how to properly set up and maintain the environment. The *ProSystem fx Engagement Deployment Planning Guide*, located in the Documents folder of the installation DVD (Install Media), helps administrators and managers identify the key factors that influence the performance, reliability, and functionality of the ProSystem *fx* Engagement application. The *Deployment Planning Guide* can help you make key decisions regarding your necessary hardware capacity, data distribution, Terminal Services, SQL servers, and other issues.

Compressed Drives and/or Partitions

ProSystem *fx* Engagement does not support the storage of workpapers or databases on compressed drives, volumes, or partitions. ProSystem *fx* Engagement uses SQL Server databases, and Microsoft has determined that having SQL Server databases on compressed volumes may cause performance and database recovery issues. Additionally, storing Engagement databases and/or workpapers on compressed volumes may cause installation failures, synchronization issues and data loss.

For Workpaper Management and/or Admin Module/Workpaper Management installations, the ProSystem *fx* Engagement 7.1 installer will now automatically decompress any compressed files found in Admin\Data, WM\Data, TB\Data, or Knowledge Coach\Data folders at the beginning of the upgrade process.

Note: The automatic decompression of compressed files only occurs if there is enough space on the drive to allow for decompression, which is typically a minimum of 100 MB.

Alternatively, any compressed files in a user-specified bin location at the time of upgrade, which are not in the locations previously mentioned, will also be checked. A log file will be written to X:\Pfx Engagement\Common\PfxEngCompressedFiles.log (where X represents the drive where Engagement is installed) listing the name and size of any compressed files found. For all other installs, such as TSDatabase or stand-alone Admin), a log will be written to PfxEngCompressedFiles.log naming any compressed files found. Due to potential size and time constraints, these files will need to be manually decompressed using the ProSystem *fx* Engagement *Detect Compressed Database Utility*.

In addition, the ProSystem *fx* Engagement SQL 2008 R2 Instance Installer or ProSystem *fx* Engagement SQL 2012 Instance Installer will perform the same decompression process described above when updating from SQL 2005 or SQL 2008.

For new installations of Engagement, please refer to the ProSystem *fx* Engagement *Detect Compressed Database Utility* to identify compressed database files prior to installation. Additionally the utility will detect a Microsoft SQL Server start-up parameter that will prevent the SQL upgrade. This utility is located in the Utilities folder on the ProSystem *fx* Engagement installation DVD (Install Media).

For more information on compressed drives, please see the following Microsoft Knowledge Base article ID 231347:

http://support.microsoft.com/kb/231347/en-us.

Technical Considerations

For in-depth networking instructions and technical considerations, please see *Appendix D: Technical Considerations* on page 63.

These appendices cover the following network issues:

- Windows and Linux servers
- LAN, WAN, and VPN topologies
- Port configuration
- Information on SQL services and memory usage
- Communication across networks and subnets
- Static versus dynamic IP addresses on office servers

These appendices also address the following topics in detail:

- ProSystem *fx* Engagement allows users to store their workpapers on a different server than where the binder database is located (Office Server). In these cases, the ProSystem *fx* Engagement Synchronization service needs to be configured to run under an account with rights to the location where the workpapers are being stored. The workpapers can reside on a non-Windows server. For more information, see *Appendix C: Installing Engagement with Active Directory* on page 59.
- Time synchronization plays an important part in ProSystem *fx* Engagement. All servers and workstations running Engagement (in the office and in the field) should maintain time clock synchronization to ensure that you do not lose data and to ensure that the latest changes to data and server are properly synchronized. For more information, see *Time Synchronization* on page 68.
- Changing workstation or server names is not supported after ProSystem *fx* Engagement has been installed. This is due to the installation of SQL. See *Appendix D: Technical Considerations* on page 63.

For additional information or for the latest update on any of these items, please contact ProSystem *fx* Technical Support at 1-800-739-9998.

ProSystem *fx* Engagement Administrator Considerations

The ProSystem *fx* Engagement Administrator module should be installed and configured on a Windows server or a dedicated computer with a Windows operating system, as noted above. If you plan to maintain multiple office servers, the Administrator module should be installed and configured on a Windows server or a dedicated computer for each office. For more information on office servers, please refer to Chapter 3, Engagement Administrator, in the *User Guide*.

Administrator must be installed to a location accessible by all computers running ProSystem *fx* Engagement Workpaper Management. Administrator installation must be performed at the console of the Windows server or the dedicated computer. It cannot be installed by pushing the install from another computer to the Windows server or dedicated computer.

The *ProSystem fx Engagement Deployment Planning Guide*, located in the Documents folder of the installation DVD (Install Media), helps administrators and managers identify the key factors that influence the performance, reliability, and functionality of the ProSystem *fx* Engagement application.

The Administrator Workstation setup allows you to remotely access the Administrator module. The Administrator Workstation can be installed to any workstation that needs to remotely access the Administrator module.

Notes:

- Engagement Administrator should **not** be installed on every computer in your firm.
- Administrative rights are required to install the application to the local machine.

Important! Installing Engagement Administrator on a domain controller, Microsoft Small Business Server, Windows Server Essentials, Windows Server Foundation, or Exchange Server are not supported.

Knowledge Coach Considerations

If Knowledge Coach is licensed, it should be installed on any computer where Workpaper Management or Terminal Services Client is installed and the Knowledge Coach features are desired.

Important! Microsoft Office 2007 or higher must be installed prior to installing Knowledge Coach.

Pre-Installation Checklist

Before beginning the installation, verify that all of the following tasks are completed:

- If you are upgrading to ProSystem *fx* Engagement 7.1 from a prior version, do the following:
    - **Back up the central databases**. Perform a full back up of all central admin and bin databases prior to upgrading. For detailed instructions on using the backup restore utility, see *Appendix E: Database Backup and Restore* on page 71.
    - **Back up the workpapers**. Back up all workpapers before upgrading. To ensure that this backup contains the latest versions of all files, users should synchronize all binders to the Central File Room prior to the backup.

        Note: The Database Backup and Restore utility does not back-up the workpapers. You will need to use your own, third party, utility to back up your workpapers.

    - **Back up templates**. Back up all centrally located templates prior to upgrading to allow for a full rollback if necessary.
    - **Upgrade the main office server**. We recommend that you upgrade the main office server first, then upgrade the workstations in order of priority to begin using the software.

    Important! All machines running Engagement in a network environment must be upgraded to version 7.1 in order for users to access the software. It is not possible to run different versions of Engagement within the same office.

- Close Microsoft Word, Excel, and Outlook.

- We strongly recommend that you close any additional programs.
- Disable virus-checking programs.
- If you are installing on a computer that currently has another application using SQL, stop that instance.

  📝 **Note**: Do not stop instances of SQL Server (PROFXENGAGEMENT).

- When installing ProSystem *fx* Engagement for the first time to a server that is running Microsoft SQL Server 2008, SQL Server 2008 R2, or SQL Server 2012, Enterprise or Standard Edition, we recommend that you use the SQL Server 2008, SQL Server 2008 R2, or SQL Server 2012 Enterprise or Standard Edition instead of SQL Express 2008. This allows ProSystem *fx* Engagement to run optimally.

  ⚠️ **Important!** This is only necessary if you are performing a new installation. If you are upgrading from a prior version of Engagement to 7.0, this step will not be necessary since SQL is already installed.

  If you use the Standard or Enterprise Editions, you must do the following:
  - Configure a named instance of SQL Server for ProSystem *fx* Engagement prior to installation. See *Appendix A: Installing SQL Server 2008 or 2008 R2* on page 29, or *Appendix B: Installing SQL Server 2012* on page 47.
  - Have appropriate licensing on the SQL server.

- Ensure that the operating system, Microsoft Internet Explorer, and Microsoft Office are all installed with the required service packs. See *Engagement 7.1 Requirements* on page 1 for details.
- If you are installing Knowledge Coach, ensure that Microsoft Office 2007 or higher is installed.

Installation Instructions

This section provides standard procedures for installing or upgrading the Engagement Administrator module and Workpaper Management module. It also includes instructions for installing Knowledge Coach.

📝 **Note to Citrix Users**: If you are installing to a Citrix or Windows Terminal Server environment, refer to *Terminal Services Installation* on page 23.

⚠️ **Warning!** Publishing installation Group Policy Objects through Active Directory is not recommended due to possible conflicts among versions (for example, Canadian CCH Engagement Administrator and United States Engagement Workpaper Management on the same workstation).

Installing Engagement for the First Time

To install ProSystem *fx* Engagement for the first time, do the following:

1. Complete all tasks in *Pre-Installation Checklist* on page 14.

   📝 **Note**: Administrative rights are required to install the application to the local machine.

2. Insert the Engagement DVD. If you are installing directly from the downloaded install files, then please follow the instructions provided on that Web site. If autorun is enabled, the *ProSystem fx Engagement Installation* screen displays. If autorun is not enabled, select **Start/Run**. In the *Open* field, enter **X:\launchscreen.exe**, where X represents your DVD drive letter, and click **OK**.
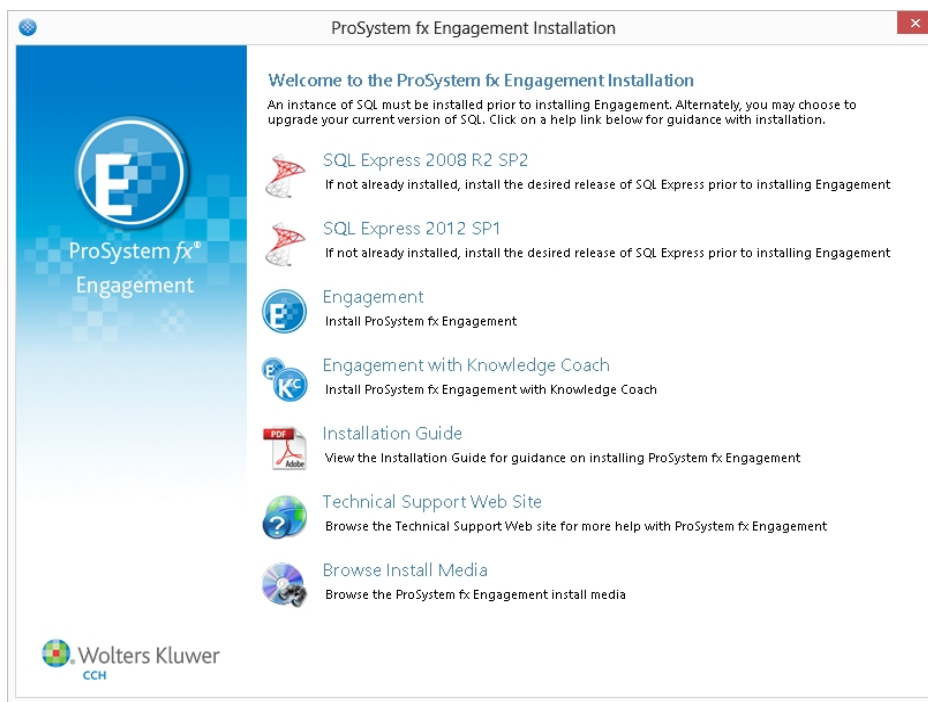
The following options are available from the launch screen:

- **SQL Express 2008 R2 SP2**. Installs the Engagement SQL database instance using SQL Express 2008 R2. This option should be selected only if an Engagement SQL database instance does not already exist and you want to install the 2008 R2 release of SQL Express.

- **SQL Express 2012 SP1**. Installs the Engagement SQL database instance using SQL Express 2012. This option should be selected only if an Engagement SQL database instance does not already exist and you want to install the 2012 release of SQL Express.

- **Engagement**. Installs Engagement. Select this option if you want to install Engagement without also installing Knowledge Coach.

- **Engagement with Knowledge Coach**. Installs Engagement and Knowledge Coach.

- **Installation Guide**. Opens the *ProSystem fx Engagement Installation Guide* PDF.

- **Technical Support Web Site**. Launches the ProSystem *fx* Engagement Support Web site.

◆ **Browse Install Media**. Displays the contents of the install media in Windows Explorer.

📒 **Notes**:

- When launching the installation from the contents of the install media, it is imperative that PfxEngSetup.exe is selected with Windows Vista, Windows 7, Windows 8, Windows 8.1, and Server 2008. PfxEngSetup.exe provides elevated privileges for installations on these operating systems.
- You need Adobe Reader to view the *Installation Guide* or *Release Bulletin*. You also need Adobe Reader to view the *ProSystem fx Engagement User Guide* via **Help/User Guide**. Click **Yes** to continue installing ProSystem *fx* Engagement without Adobe Reader. Click **No** to cancel the installation and install a supported version of Adobe Reader. Adobe Reader 11.0 is included on the Engagement Installation Disk.
- The *Install ProSystem fx Engagement* launch screen uses an .ini file to customize which buttons are displayed. To remove a button from the launch screen, edit the "product.ini" file, which is located at the root of the installation disc. Remove any section from the product.ini file to remove the corresponding button from the launch screen.

3. If an Engagement SQL Instance already exists on the computer, skip to step 7.
   If an Engagement SQL Instance does not already exist on the computer, click **Install SQL Express 2008 R2** or **Install SQL Express 2012** on the launch screen. The *Welcome* screen displays.

   📒 **Note**: Choose only one of the installers. You do not need to install SQL Express 2008 R2 and SQL Express 2012.

4. Click **Next**. The *Ready to Install the Program* page displays.
5. Click **Install**. The *Installing ProSystem fx SQL Instance Installer* dialog displays. When the installation is complete, the InstallShield Wizard Completed dialog displays.
6. Click **Finish**. The *Install ProSystem fx Engagement* launch screen displays.
7. Click **Install Engagement** to install Engagement without Knowledge Coach. Click **Install Engagement with Knowledge Coach** to install both Engagement and Knowledge Coach. The Welcome screen displays.
8. Click **Next**. The *License Agreement* dialog displays.
9. Read the license agreement. If you agree to the terms, select **I accept the terms in the license agreement** and click **Next**.

10. Click **Next**. The *Custom Setup* page displays.
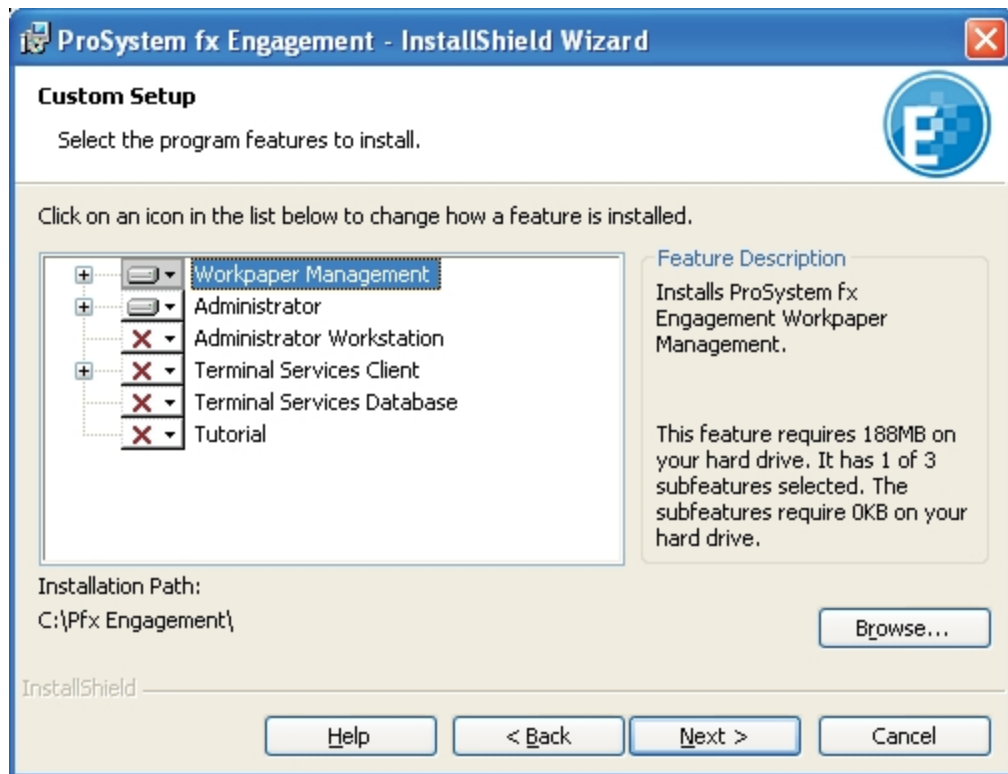
11. Select the module or modules to install. Click the appropriate icon and select **This feature will be installed on local hard drive** to install the module or **This feature, and all subfeatures, will be installed on local hard drive** to install the module and all subfeatures (for example, Engagement CD Image for Administrator, or Templates and Sample Binder for Workpaper Management).

- ◆ **Workpaper Management**. Workpaper Management should be installed on computers that will be accessed by Engagement staff members.

  📒 **Note**: If you would like to change the installation path, click the Browse button and navigate to the desired location.

  📒 **Note Regarding Knowledge Coach**: If the Install Engagement with Knowledge Coach button was selected on the Launch screen, Knowledge Coach will be selected by default. However, if an unsupported version of Microsoft Office is detected, the option to install Knowledge Coach will not be displayed. Microsoft Office 2007 or higher is required to install ProSystem *fx* Engagement Knowledge Coach.

- ◆ **Administrator**. The Administrator module should be installed on a dedicated computer that is designated as the main office server. Computers with the Workpaper Management module installed need access to this main office server computer.

Notes:

- If you plan to create a secondary office server or servers, install the ProSystem *fx* Engagement Administrator module on a separate dedicated computer. When more than one office server exists, workstations with Workpaper Management installed do not necessarily need a network connection to both office servers. Some can connect to the main office server while others connect to a secondary office server.

- It is not mandatory to have a network connection between the main and secondary office servers. Data can be passed between the two using *Create and Receive Admin Packages*. For more information, see the topics Creating an Admin Package and Receiving an Admin Package in Chapter 3, Engagement Administrator, in the *User Guide*.

  - **Administrator Workstation**. The Administrator Workstation setup allows you to access the Administrator module remotely.

12. If you selected *Administrator* in step 12 (with or without Workpaper Management) the *Administrator Bin Database Path* dialog displays. The system creates the database in the default folder on your local computer unless you click **Browse** and specify a different location.

13. Click **Next**. The *Ready to Install* dialog displays.

    Notes:

    - If you attempt to install conflicting applications, such as Administrator and Administrator Workstation, InstallShield displays a conflict message specifying the conflicting applications. Click **Back** to make the necessary changes.

    - If your system does not meet the requirements for the application you are installing, InstallShield displays a message listing the missing components. Click **Cancel** to install the necessary components. Click **Back** to install a different application. For detailed information about the new bin structure of the Engagement database, see the topic Managing Bins in Chapter 3, Engagement Administrator, in the Engagement*User Guide*.

14. Click **Install**. InstallShield displays the progress screen as the necessary programs and features are installed.

15. If you are installing Administrator, read the information on the *Backup Information* dialog and select **I have read the above warning**, then click **Next**. The *InstallShield Wizard Completed* dialog displays.

16. Click **Finish**, then complete any applicable tasks in the *Post-Installation Checklist* on page 21.

Upgrading an Existing Version of Engagement to Engagement 7.1

To upgrade a previous Engagement version to Engagement 7.1, do the following:

Note: Upgrades are supported for Engagement versions 6.5 and higher.

1. Complete all tasks in the *Pre-Installation Checklist* on page 14.
2. Insert the Engagement DVD. If you are installing directly from the downloaded install files, then please follow the instructions provided on that Web site.

3. If Autorun is enabled, the *Install ProSystem fx Engagement* screen displays.

   If Autorun is not enabled, the *Run* dialog displays. In the *Open* field, enter X:\ProSystem fx Engagement.exe, where X represents your DVD drive letter, and click **OK**. The *Install ProSystem fx Engagement* screen displays.

   > **Notes**:
   >
   > ♦ When upgrading, you do not need to install SQL Server 2008 R2 if you already have SQL Server 2008 Express or higher installed because Engagement is already installed and the Engagement SQL database instance should already exist.
   >
   > ♦ The *Install ProSystem fx Engagement* launch screen uses an .ini file to customize which buttons are displayed. To remove a button from the launch screen, edit the "product.ini" file, which is located at the root of the installation disc. Remove any section from the product.ini file to remove the corresponding button from the launch screen.

4. Click **Install Engagement** to upgrade the currently installed features for the Engagement installation. If the currently installed features include additional features such as Knowledge Coach, these features will be upgraded. This will not give the option to install additional features.
   Click **Install Engagement with Knowledge Coach** to add the Knowledge Coach feature to an installation that does not already have Knowledge Coach installed, or to upgrade an existing installation of Knowledge Coach. If you want Knowledge Coach but are unsure if it is currently installed, select this button. The *Welcome* screen displays.

5. Click **Next**. The *License Agreement* dialog displays.

6. Read the license agreement. If you agree to the terms, select **I accept the terms in the license agreement** and click **Next**.

7. Click **Next**. The *Upgrade to ProSystem fx Engagement 7.1* page displays.

8. If you have read the warning message and have created a backup then select that option and click **Next**. The *Ready to Install* dialog displays.

   > **Note**: If your system does not meet the requirements for the application you are installing, InstallShield displays a message listing the missing components. Click Cancel to install the necessary components. Click **Back** to install a different application. For detailed information about the new bin structure of the Engagement database, see Chapter 3 of the *User Guide*.

9. Click **Install**. InstallShield displays the *Progress* screen as the necessary programs and features are upgraded.

10. If Administrator is being upgraded, read the information on the *Backup Information* dialog, select **I have read the above warning**, and then click **Next**. The *InstallShield Wizard Completed* dialog displays.

11. Click **Finish**, then complete any applicable tasks in the *Post-Installation Checklist* on page 21.

Post-Installation Checklist

After completing the installation, you should perform the following tasks, as applicable:

- If you have upgraded to ProSystem *fx* Engagement 7.1 from a prior version, perform a full back up of all central admin and bin databases after installation. For detailed instructions on using the backup restore utility, see *Appendix E: Database Backup and Restore* on page 71.
- Verify that all administrative users have full access to the Admin Share folder on the office server. This folder, which is created during the installation, is shared by default, but the network administrator needs to ensure that all Engagement administrative users have full rights to that location. For additional information, see *Appendix D: Technical Considerations* on page 63.
- The installation process sets the Engagement folder permissions automatically. These rights are needed for Engagement to function optimally. The installation gives the "Users" group all rights except Full Control. These rights are inherited by all child objects so that all folders and subfolders within Engagement receive these same rights. For additional information, see *Appendix D: Technical Considerations* on page 63.

Altering a Current Install of Engagement

ProSystem *fx* Engagement Program Maintenance allows you to modify, repair, or remove the current installation.

Modifying a Current Install

To add new program features or remove currently installed features, do the following:

1. Close all programs on your computer.
2. Select **Add or Remove Programs** (or **Programs and Features** in Windows 8.1, Windows 8, Windows 7, Windows Vista, Windows Server 2008, Windows Server 2012, and Windows Server 2012 R2) from your computer's Control Panel.

   Note: Some modifications will require elevated privileges. For best results, use the executable on the DVD (Install Media) or ProSystem *fx* Engagement image.

3. Select **ProSystem *fx* Engagement** from the list and click **Change** to open the *Welcome* dialog.

4. Click **Next** to display the *Program Maintenance* dialog.
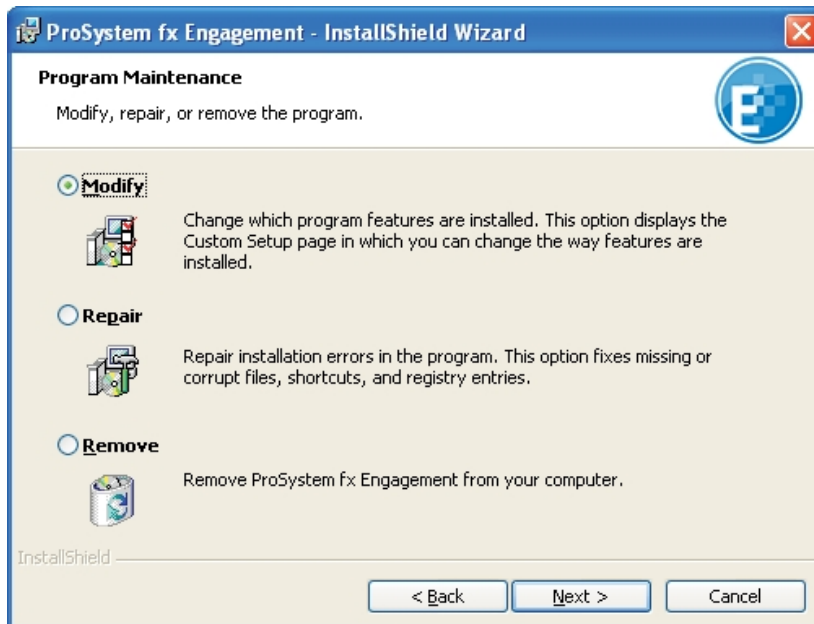
5. Select **Modify** and then click **Next**. The *Custom Setup* dialog displays.
6. Select applications to install and deselect applications to remove. Click the **plus sign** (+), where available, to select individual options to install or remove. The *Custom Setup* dialog displays the amount of space required for installation.
7. Click **Next** to display the *Ready to Modify* dialog.
8. Click **Install** to begin the update process. The *InstallShield Wizard Completed* dialog displays when the process is finished.
9. Click **Finish** to exit the installation.

Repairing a Current Install

To repair program features from a previous installation, do the following:

1. Close all programs on your computer.
2. Select **Add or Remove Programs** (or **Programs and Features** in Windows 8.1, Windows 8, Windows 7, Windows Vista, Windows Server 2008, Windows Server 2012, and Windows Server 2012 R2) from your computer's Control Panel.

   Note: Some repairs will require elevated privileges. For best results, use the executable on the DVD (Install Media) or ProSystem *fx* Engagement image.

3. Select **ProSystem *fx* Engagement** from the list and click **Change** to open the *Welcome* dialog.
4. Click **Next**. The *Program Maintenance* dialog displays.
5. Select **Repair** and then click **Next**. The *Ready to Repair* dialog displays.
6. Click **Install**. The *Installing ProSystem fx Engagement* status bar displays while InstallShield repairs the installation(s). Once the repair process is finished, the *InstallShield Wizard Completed* dialog displays.
7. Click **Finish**.

Removing ProSystem *fx* Engagement

To remove all installed features, do the following:

1. Close all programs on your computer.
2. Select **Add or Remove Programs** (or **Programs and Features** in Windows 8.1, Windows 8, Windows 7, Windows Vista, Windows Server 2008, Windows Server 2012, and Windows Server 2012 R2) from your computer's Control Panel.
3. Select **ProSystem *fx* Engagement** from the list and click **Remove** to display the *Welcome* dialog.
4. Click **Yes** on the confirmation dialog. Windows removes all ProSystem *fx* Engagement applications.

Knowledge Coach Content

For instructions on downloading and installing Knowledge Coach content, please refer to the *Knowledge Coach User Guide* found on the Engagement Help menu.

Terminal Services Installation

The installation of Engagement can vary based on the Terminal Services and Citrix software setup. For this reason, we strongly suggest that you consult with your network administrator prior to installing Engagement.

For detailed information on setting up Terminal Services, see the *ProSystem fx Engagement Deployment Planning Guide* in the Documents folder of the installation DVD (Install Media). We also advise contacting Technical Support prior to installation to address any questions you may encounter with the installation.

⚠️ **Important!**

- The Terminal Services Database and Terminal Services Client should not be installed on the same computer.
- The following instructions outline the preferred steps for installing ProSystem *fx* Engagement Terminal Services Client; however, your configuration may require additional or alternate steps. For additional assistance, please contact Technical Support at 1-800-739-9998.
- Installing Terminal Services on a domain controller, Microsoft Small Business Server, Windows Server Essentials, Windows Server Foundation, or Exchange Server are not supported.

The following section contains instructions for installing the ProSystem *fx* Engagement Terminal Services Client (Workpaper Management for Terminal Services), ProSystem *fx* Engagement Terminal Services Database, and ProSystem *fx* Engagement Administrator Workstation.

Terminal Services Database Installation

This section provides installation instructions for ProSystem *fx* Engagement Terminal Services Database on a Windows Terminal Services enabled server.

Keep the following in mind when installing Terminal Services Database:

- The Terminal Services Database should be installed to a static location that is accessible for all of the load balanced servers. This location should be a dedicated Windows 2003 or 2008 server with enough space to store data being created in the Terminal Services Client module.
- The recommended location is the main office server where the ProSystem *fx* Engagement Administrator is installed. The Terminal Services Database installation must be performed at the server console of the computer it is to reside on.
- For robust environments (for example, more than 40 users), SQL Standard Edition or SQL Enterprise Edition are recommended. For more information on choosing a SQL server, see the *ProSystem fx Engagement Deployment Planning Guide*, located in the Documents folder of your installation DVD (Install Media).

To install Terminal Services Database, do the following:

1. Complete all tasks in the *Pre-Installation Checklist* on page 14.
2. Insert the ProSystem *fx* Engagement DVD. If you are installing directly from the downloaded install files, then please follow the instructions provided on that Web site.
3. Open Control Panel and select **Add/Remove Programs\Add New Programs** on Server 2003 or **Programs and Features** on Server 2008 and 2012.
4. **Browse** to the DVD and then click **Next**. The *Install Program from Floppy Disk or CD-ROM* dialog displays.
5. Click **Next**. The *Run Installation Program* dialog displays.
6. If an Engagement SQL Instance is already installed, skip to step 15.

   If an Engagement SQL Instance is not already installed, do one of the following:
   - Install Microsoft SQL Server 2008 or 2012 Standard or Enterprise edition as explained in *Appendix A: Installing SQL Server 2008 or 2008 R2* on page 29 and *Appendix B: Installing SQL Server 2012* on page 47 and then skip to step 15.
   - Install Microsoft SQL Express 2008 or Microsoft SQL Express 2012, which are included on the Engagement disc. To install SQL Express 2008 or 2012 continue to step 8.

   Note: For optimal performance, we recommend you install Microsoft SQL Server 2008 R2 or 2012, either the Standard, Business Intelligence, or Enterprise edition. For more information and guidance on choosing a SQL edition, see the *ProSystem fx Engagement Deployment Guide* in the Documents folder of your installation DVD (Install Media).

7. Click **Browse** and locate either the **ProSystem fx SQL 2008 R2 Instance Installer.msi** or **ProSystem fx SQL 2012 Instance Installer.msi** (Windows 8.1, Windows 8, Windows 7, Vista, Server 2008, Server 2012, or Windows Server 2012 R2 users locate **ProSystem fx SQL 2008 R2 Instance Installer.exe** or **ProSystem fx SQL 2012 Instance Installer.exe**).

   Note: Choose only one of the installers. You do not need to install both ProSystem *fx* SQL 2008 and ProSystem *fx* SQL 2012.

8. Click **Finish**. The SQL 2008 R2 or SQL 2012 Instance Installer wizard displays.
9. Click **Next**. The *Ready to Install the Program* page displays.

10. Click **Install**. Several status screens display as the SQL Instance is installed.
11. Click **Finish**.
12. Click **CD or Floppy**, and then click **Next**. The *Install Program from Floppy Disk or CD-ROM* dialog displays.
13. Click **Next**. The *Run Installation Program* dialog displays.
14. Click **Browse** and locate the *PfxEngSetup.exe* file.
15. Click **Finish**. The *Welcome* dialog displays.

> 📝 **Note**: You need Adobe Reader to view the *Installation Guide* or *Release Bulletin*. You also need Adobe Reader to view the *ProSystem fx Engagement User Guide* via **Help/User Guide**. Click **Yes** to continue installing ProSystem *fx* Engagement without Adobe Reader. Click **No** to cancel the installation and install a supported version of Adobe Reader. Adobe Reader 11.0 is included on the Engagement Installation Disk.

16. Click **Next**. The *License Agreement* dialog displays.
17. Read the license agreement. If you agree to the terms, select **I accept the terms in the license agreement** and click **Next**.
18. Click **Next**. The *Custom Setup* dialog displays.
19. Select **Terminal Services Database**. Click the **plus sign** (+) to select or deselect subfeatures to install, or choose *This feature, and all subfeatures, will be installed on local hard drive*. Deselect Workpaper Management, which is selected by default.
20. Click **Next**. The *Ready to Install* screen displays.

> 📝 **Notes**:
>
> ◆ If you attempt to install conflicting applications, InstallShield displays a message specifying the conflicting applications. Click **Back** to make the necessary changes.
> ◆ If your system does not meet the requirements for the application you are installing, InstallShield displays the *Requirements* dialog, listing the necessary components. Click **Cancel** to install the necessary components, or click **Back** to change the application to install.

21. Click **Install**. The *Installing ProSystem fx Engagement* status bar displays as InstallShield completes the installation. The *InstallShield Wizard Completed* dialog displays.
22. Click **Finish**, then complete any applicable tasks in the *Post-Installation Checklist* on page 21.

Terminal Services Client Installation

This section provides installation instructions for ProSystem *fx* Engagement Terminal Services Client on a Windows Terminal Services enabled server.

1. Complete all tasks in the *Pre-Installation Checklist* on page 14.
2. Determine that no one is accessing the Terminal Services server.
3. Insert the ProSystem *fx* Engagement DVD. If you are installing directly from the downloaded install files, then please follow the instructions provided on that Web site.
4. Open Control Panel and select **Add/Remove Programs\Add New Programs** on Server 2003 or **Programs and Features** on Server 2008 and 2012.

5. **Browse** to the DVD, and then click **Next**. The *Install Program from Floppy Disk or CD-ROM* dialog displays.

6. Click **Next**. The *Run Installation Program* dialog displays.

7. Click **Browse** and locate the *PfxEngSetup.exe* file.

8. Click **Finish**. The *Welcome* dialog displays.

    Note: You need Adobe Reader to view the *Installation Guide* or *Release Bulletin*. You also need Adobe Reader to view the *ProSystem fx Engagement User Guide* via **Help/User Guide**. Click **Yes** to continue installing ProSystem *fx* Engagement without Adobe Reader. Click **No** to cancel the installation and install a supported version of Adobe Reader. Adobe Reader 11.0 is included on the Engagement Installation Disk.

9. Click **Next**. The *License Agreement* dialog displays.

10. Read the license agreement. If you agree to the terms, select **I accept the terms in the license agreement** and click **Next**.

11. Click **Next**. The *Custom Setup* dialog displays.

12. Select the program feature to install: Terminal Services Client or Administrator Workstation. Click the **plus sign** (+) to select or deselect subfeatures to install, or choose *This feature, and all subfeatures, will be installed on local hard drive*. Deselect Workpaper Management, which is selected by default.

    Note Regarding Knowledge Coach: If an unsupported version of Microsoft Office is detected, the option to install ProSystem *fx* Knowledge Coach will not be displayed. Microsoft Office 2007 or higher is required to install ProSystem *fx* Knowledge Coach.

13. Click **Next** to display the *Terminal Services Database Location* dialog. Enter the name of the server where the database is installed.

14. Click **Next**. The *Ready to Install* screen displays.

    Notes:

    ◆ If you attempt to install conflicting applications, InstallShield displays a message specifying the conflicting applications. Click **Back** to make the necessary changes.

    ◆ If your system does not meet the requirements for the application you are installing, InstallShield displays the *Requirements* dialog, listing the necessary components. Click **Cancel** to install the necessary components, or click **Back** to change the application to install.

15. Click **Install**. The *Installing ProSystem fx Engagement* status bar displays as InstallShield completes the installation. The *InstallShield Wizard Completed* dialog displays.

16. Click **Finish**, then complete any applicable tasks in the *Post-Installation Checklist* on page 21.

Using the ProSystem *fx* Engagement Administrator

From the Windows Start menu, select the program group where you installed the ProSystem *fx* Engagement Administrator. Select **ProSystem *fx* Engagement Administrator**, or double-click the **Administrator** icon on your desktop. The *ProSystem fx Engagement Admin Login* dialog displays.

Initial Login to the Engagement Administrator

Only staff assigned to the Administrator Staff Group can log in to the Administrator. The program provides one default staff member in the Administrator Staff Group. You can modify the password and staff information for the default user, but you cannot change the Login Name or delete this staff member. There is no limit to the number of licensed staff you can assign as administrators.

Note: If you want other workstations to access the Administrator module, install Administrator Workstation to those workstations. See *Installation Instructions* on page 15.

The first time you log in, do the following:

1. Start Engagement Administrator by doing one of the following:
    - Double-click the Engagement Admin icon on your desktop.
    - Select **Start/Programs/ProSystem fx Engagement/ProSystem fx Engagement Admin**.

    The *Engagement Admin Login* displays.
2. In the *Login Name* field, enter **ADMIN**. Leave the *Password* field blank.
3. Click **OK**. The ProSystem *fx* Engagement Administrator program detects that a main office server has not been set up and displays a message that the computer must be configured as an office server before you can log in.
4. Click **Yes**. The *Provide Office Server Information* dialog displays.
5. Enter a label of up to 32 characters for the main office server in the *Label* field. The label is required and is used as the office server's name.
6. The *Server name* field defaults to the name of the computer to which you are logged in.
7. Enter a description for the server of up to 60 characters in the *Description* field. The description is optional.
8. Click **Next**. The *Determine the office server designation* dialog displays.
9. Select **Main office server** to establish this as the main office server.
10. If the Firm has more than one office server and this office server does not have a physical connection with the other office server(s), check the **Disable Admin Synchronization** check box.
11. Click **OK**. The *Firm Properties* dialog displays.
12. Enter the firm information and click **Next**. The *Configure Office Server Summary Report* displays.
13. Do any of the following:
    - Click **Print** to print the summary report.
    - Click **Save As** to save the report as an HTML file.
    - Click **Back** to make changes to your settings.
    - Click **Cancel** to discard your work and exit the *Configure Office Server Wizard*.
    - Click **Finish** to save your settings and open Engagement Administrator.

Once you are in the program, you can change the administrator's password and add more staff to the Admin group, if needed. See *Adding New Staff Members* in Chapter 3 of the *User Guide*.

Important! The ProSystem *fx* Engagement Backup and Restore Utility should be used on a nightly basis. See *Appendix E: Database Backup and Restore* on page 71.

Note: For instructions on creating a secondary server, refer to the section *Setting up the Administrator Environment* in Chapter 3 of the *User Guide*.

INSTALLING SQL SERVER 2008 OR 2008 R2

Installing SQL Server 2008 or 2008 R2

Creating a New SQL 2008 or 2008 R2 32-bit or 64-bit Instance for Engagement

This section provides step-by-step instructions for creating a new SQL 2008 or 2008 R2 32-bit or 64-bit instance for ProSystem *fx* Engagement.

Note: The steps may vary slightly depending on which SQL Server version you are installing.

If you need to create a new instance for SQL 2008 Express 64-bit, please see *Creating a New SQL 2008 Express 64-bit Instance for Engagement* on page 40.

Upgrading SQL 2008 R2

SQL Server 2008 R2 supports upgrade from the following versions of SQL Server:

- SQL Server 2005 SP2 (9.00.3042) or later
- SQL Server 2008 (10.00.1600.22) or later

Note: To find what version of SQL is currently installed, browse the Registry and go to the key: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server\PROFX ENGAGEMENT\MSSQLServer\CurrentVersion.

Recommended Operating Systems

We recommend using Microsoft Windows Server 2008 (64-bit) or Microsoft Windows Server 2008 R2 with SQL Server 2012.

Note: Microsoft does not support SQL Server 2008 on certain Windows versions. For detailed information, please see Microsoft KB 2022909 at the following link: http://support.microsoft.com/kb/2022909

Creating the SQL Server 2008 or 2008 R2 Instance

Note: Please follow each step carefully to ensure that the SQL instance is properly created with all required settings.

1. Insert the SQL Server 2008 or 2008 R2 Installation Disk.
2. Click **Installation**.

3. Select **New SQL Server stand-alone installation or add features to an existing installation**.

4. The *Setup Support Rules* screen displays. Click **OK** to proceed with the installation.
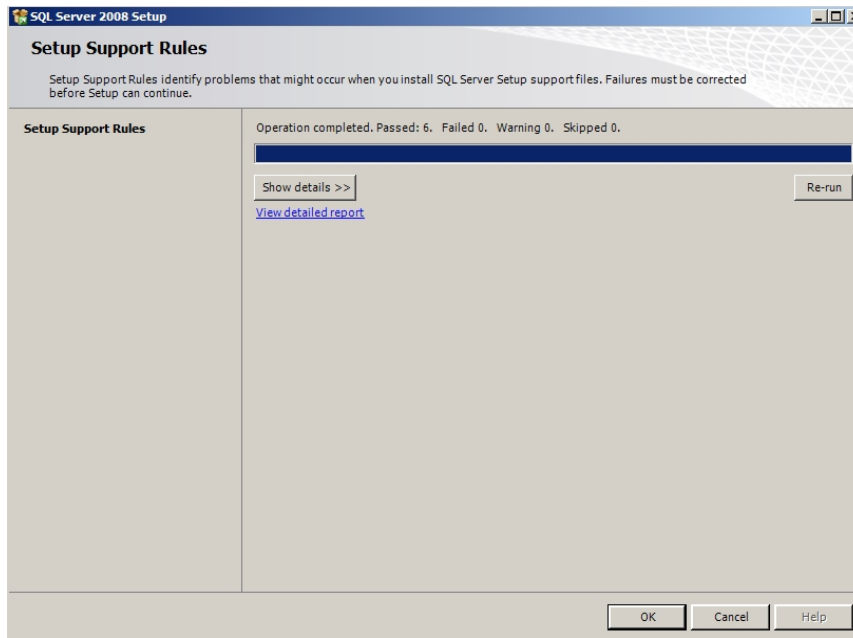
5. The *Product Key* screen displays. Enter the SQL Server product key and click **Next**.
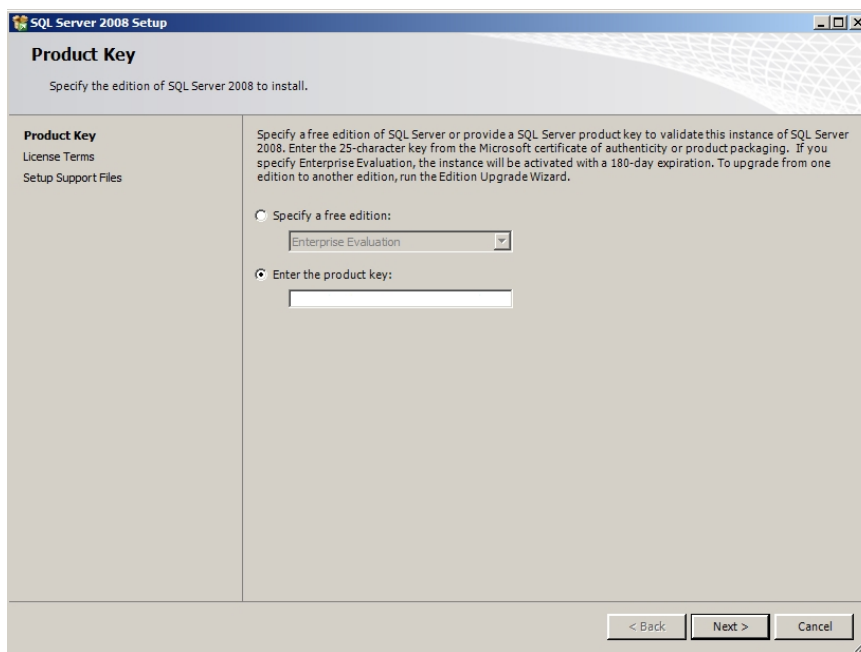
6. Click **I accept the license terms** and click **Next**.
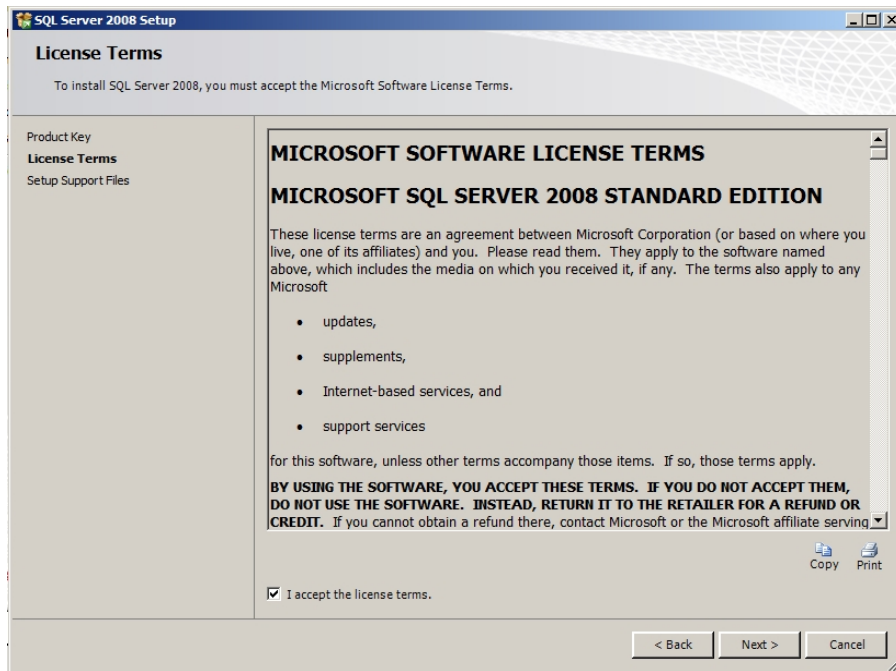
7. Click **Install** on the *Setup Support files* screen.
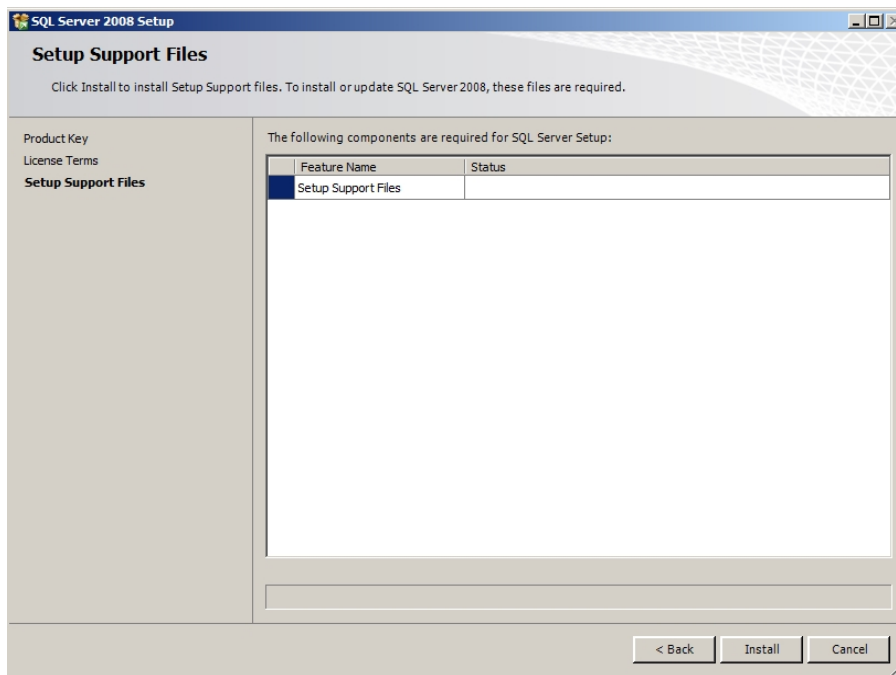
8. Click **Next** on the *Setup Support Rules* screen.
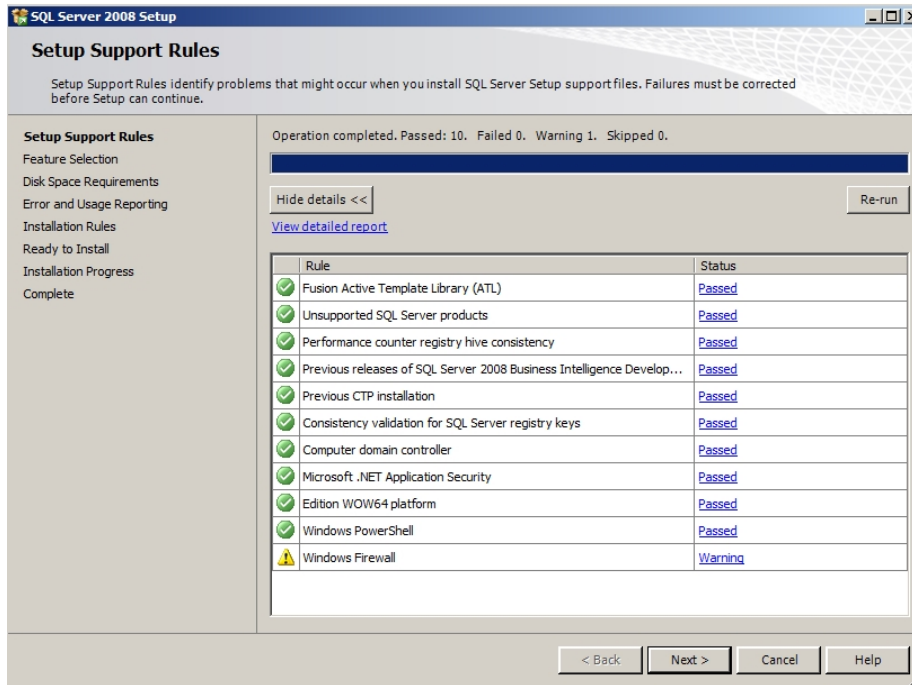
9. Select **Database Engine Services** and **Management Tools** on the *Feature Selection* screen. Click **Next** to continue.

Note: Management Tools are optional for Engagement. However, they can be used to assist support in certain circumstances.
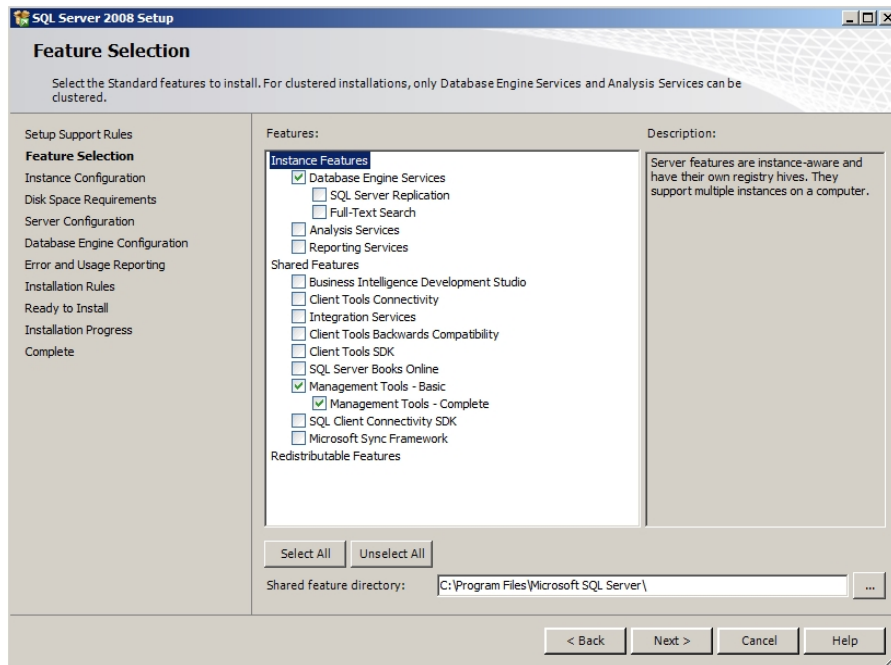
10. Select **Named Instance** and enter "PROFXENGAGEMENT" on the *Instance Configuration* screen. Click **Next** to continue.
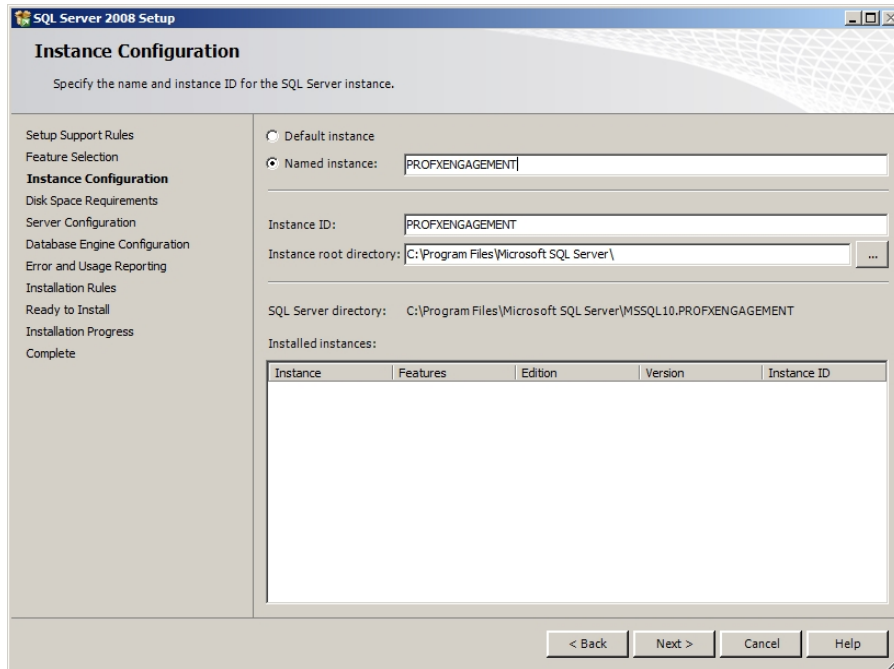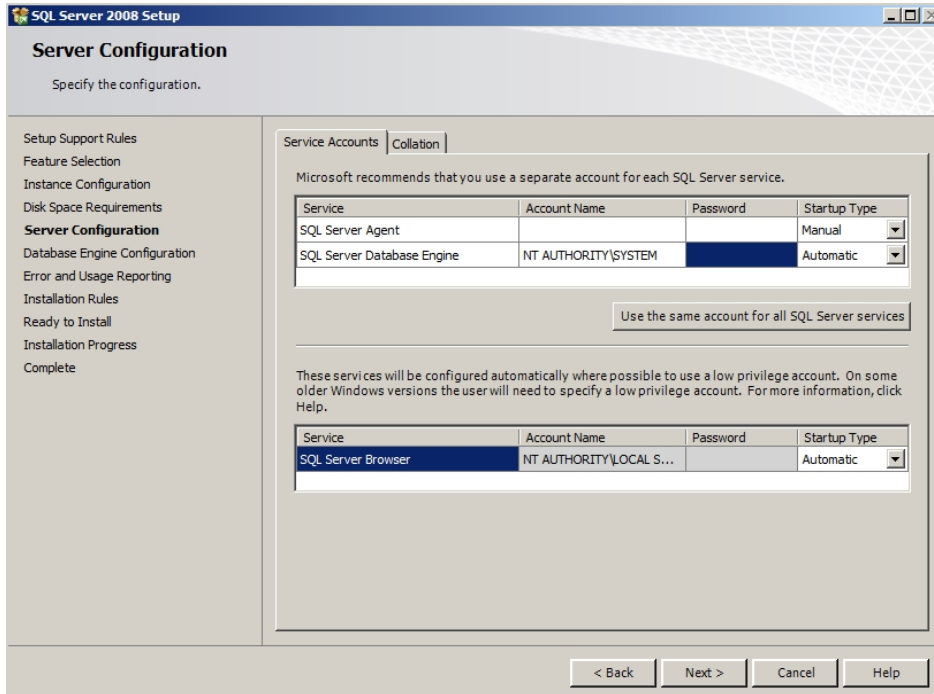
11. The *Disk Space Requirements* screen displays. Click **Next** to continue.
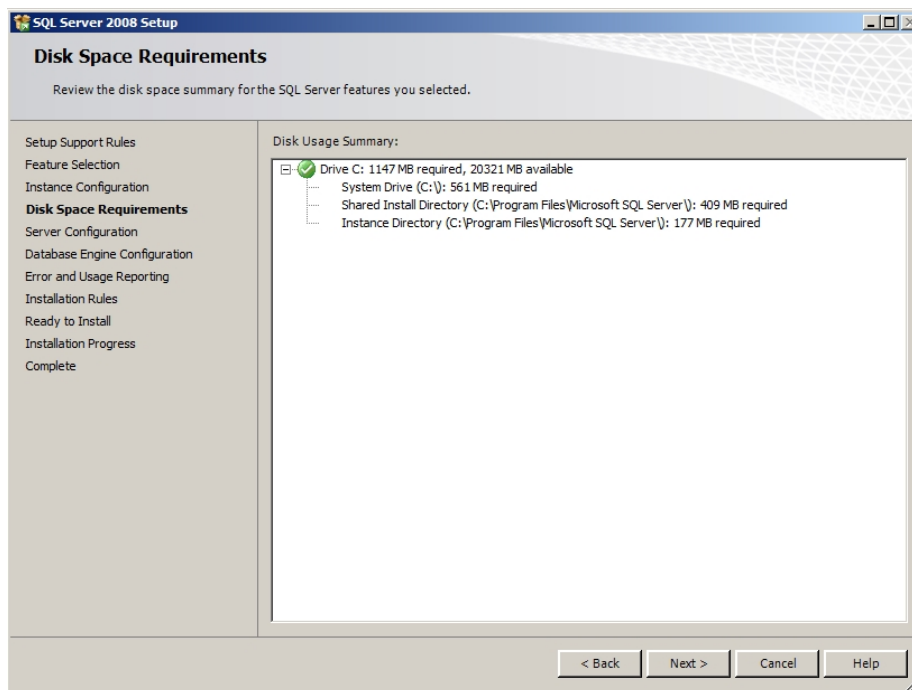
12. On the *Service Accounts* tab of the *Server Configuration* screen, select **Use the same account for all SQL Server services** on the *Authentication Mode* screen. Change the *Account Name* to NT AUTHORITY\SYSTEM for the SQL Server Database Engine. Verify the *Startup Type* is set to **Automatic**. Click **Next** to continue.

Note: The SQL Server Browser Startup Type should also be set to **Automatic**.

13. Leave the default settings on the *Collation* tab and click **Next** to continue. If the default settings for your installation do not match those shown in the screen below, select the settings shown.
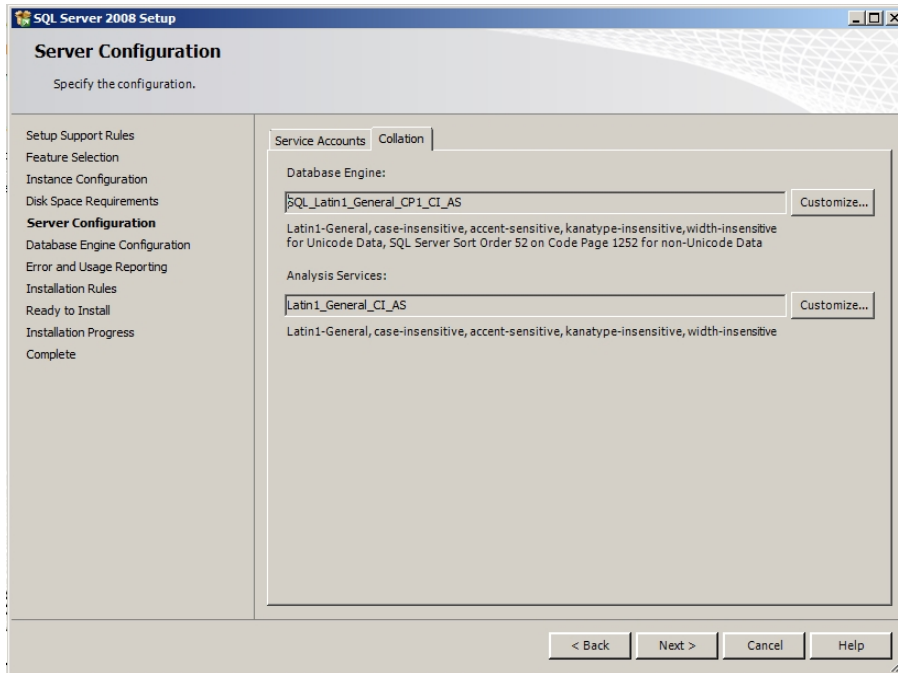
14. Select **Windows authentication mode** on the *Database Engine Configuration* screen. Add an Administrator user account in the *Specify SQL Server administrators* field. Click **Next** to continue.
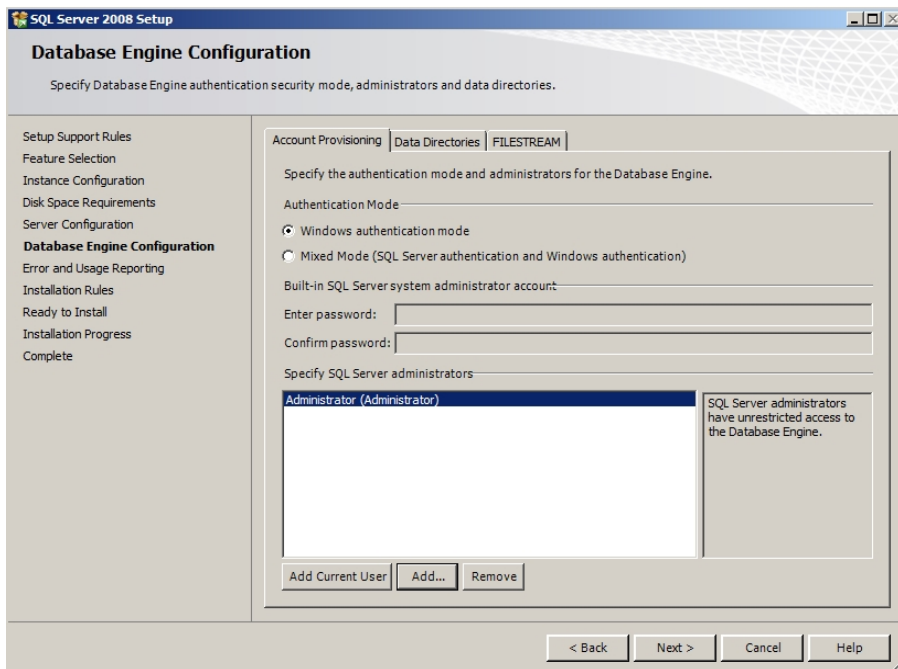
15. The *Error and Usage Reporting* screen displays. Click **Next** to continue.
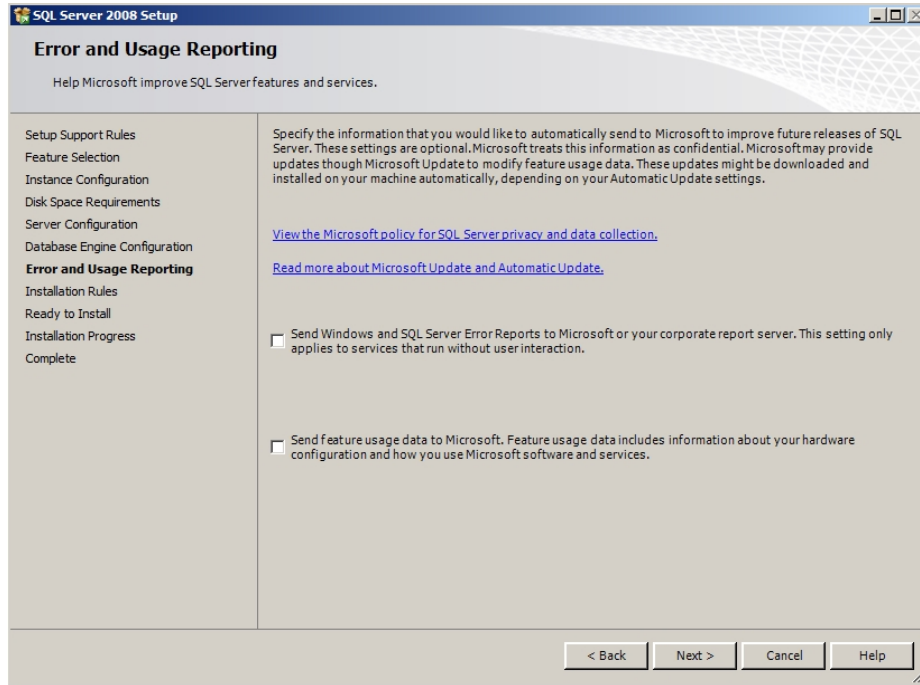
16. The *Installation Rules* screen displays. Click **Next** to continue.
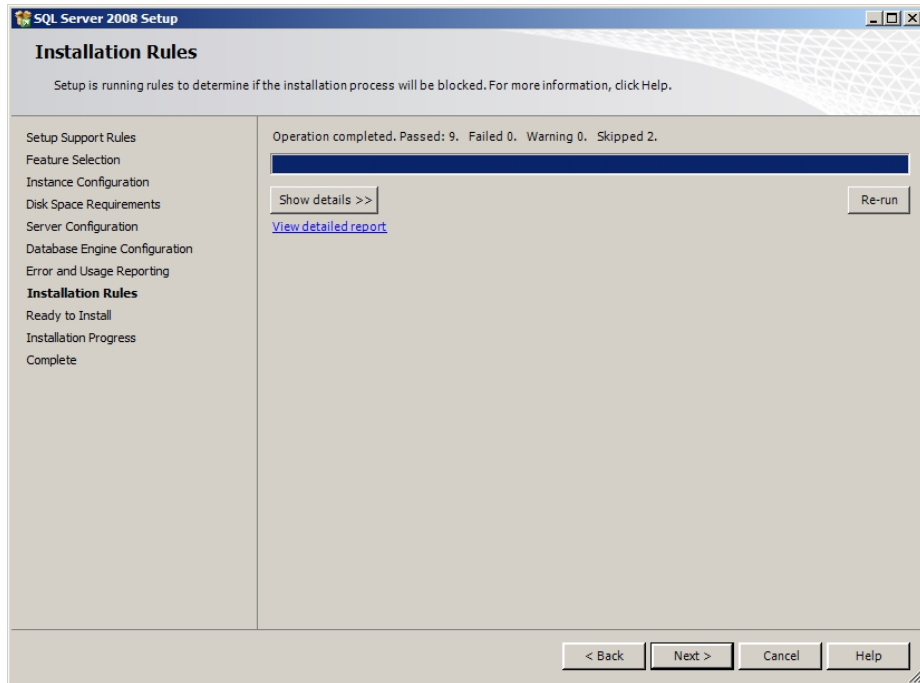
17. Click **Show Details** to see a detailed report of the Installation Rules. Click **Next** to continue.
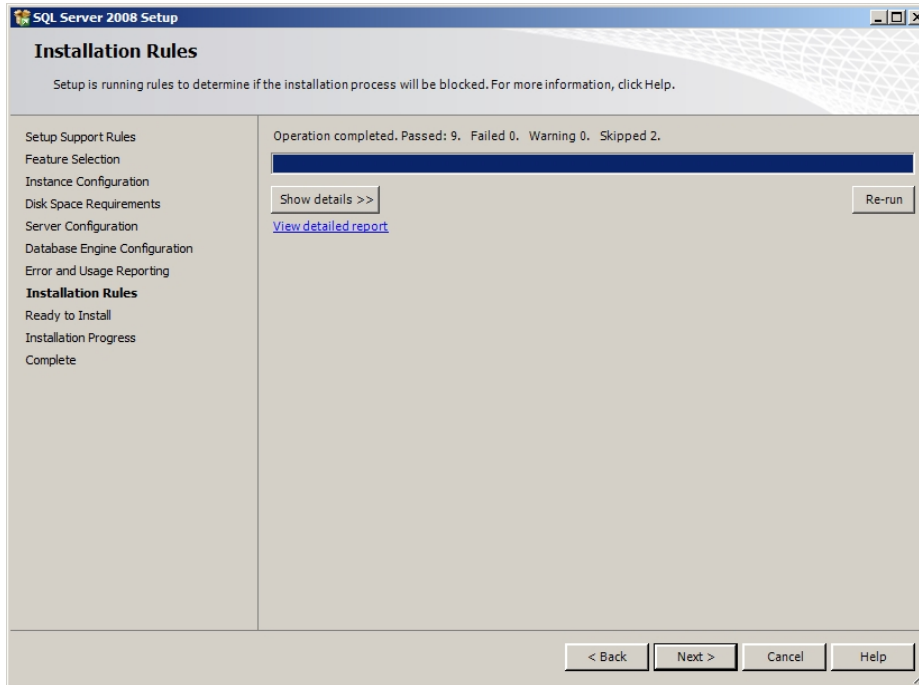
18. The *Ready to Install* screen displays. Verify the SQL Server 2008 or 2008 R2 features to install, and then click **Install** to continue.
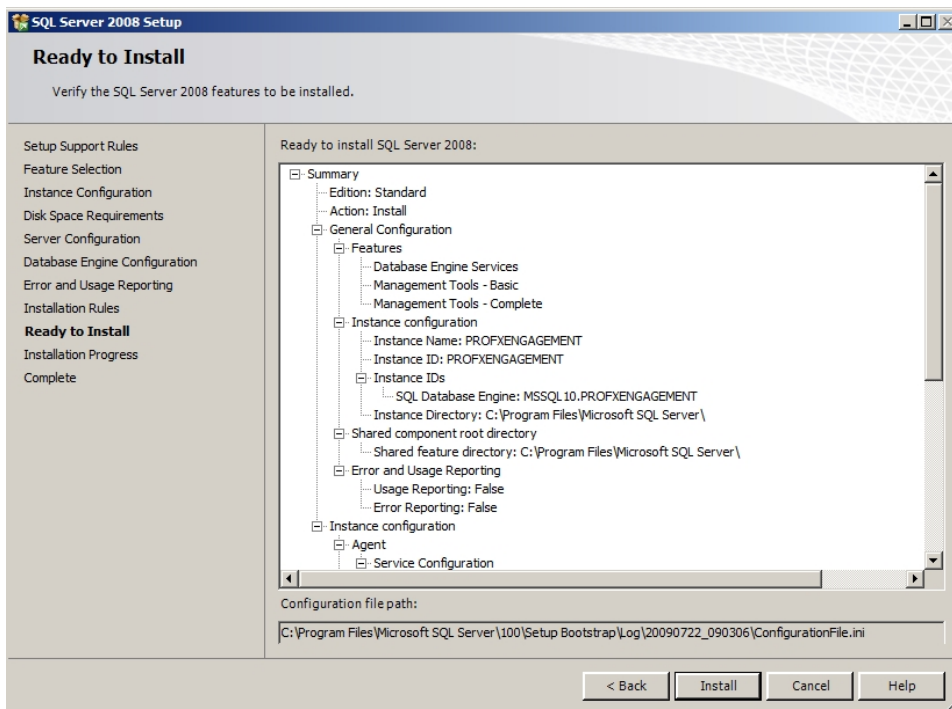
19. The *Installation Progress* screen displays. Click **Next** to continue.

    📋 **Note**: Please be patient; the install process can take a long time to complete.
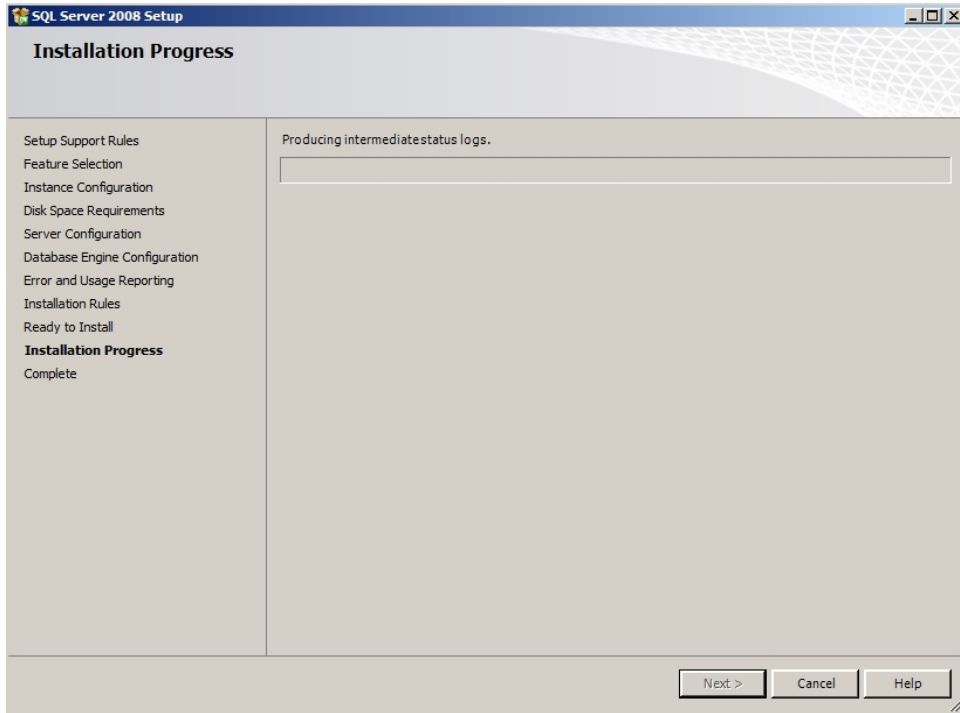
20. The Installation Progress screen will provide a notification when the setup process has completed. Click **Next** to continue.
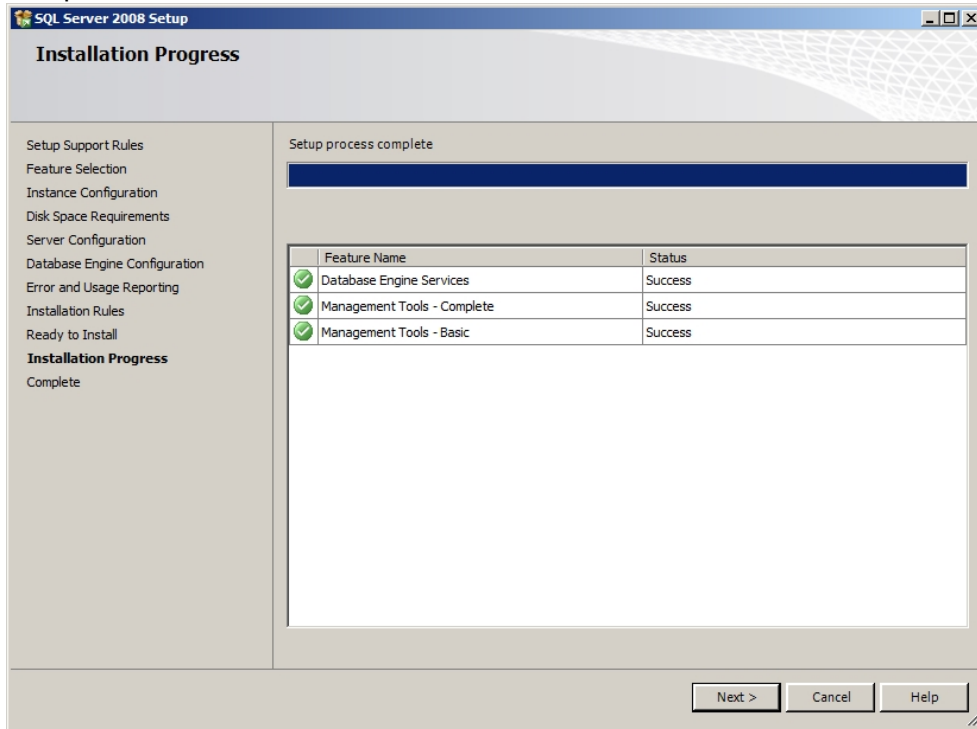
21. The *Complete* screen displays. Click **Close** to finish the installation.
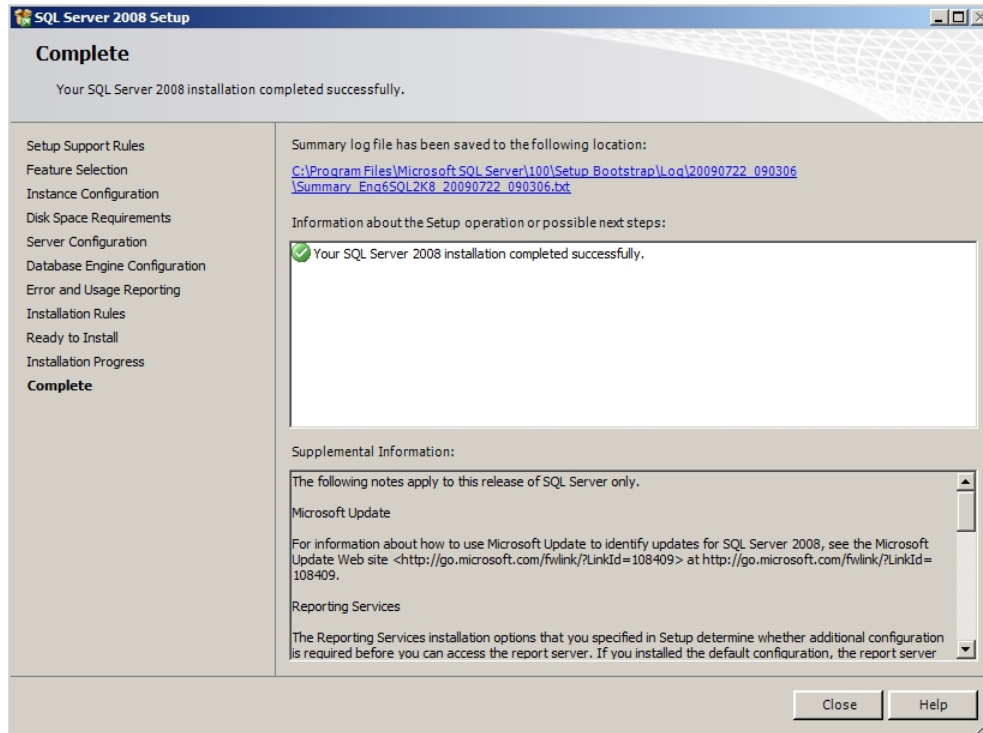
Creating a New SQL 2008 Express 64-bit Instance for Engagement

Though SQL 2008 Express 64-bit is supported, there currently is no installer available to create the ProSystem *fx* Engagement SQL instance. This section provides step-by-step instructions for creating a new SQL 2008 Express 64-bit instance for ProSystem *fx* Engagement.

📝 **Note**: Please make sure that you follow each step carefully to ensure that the SQL instance is properly created with all required settings.

1. Download the install package from the Microsoft Web site and launch it.
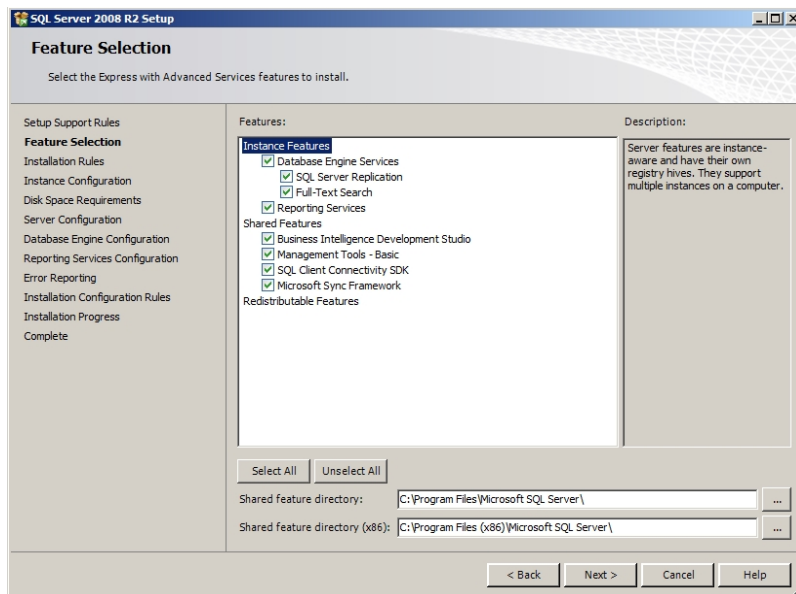2. Click **New Installation or add features to an existing installation**.
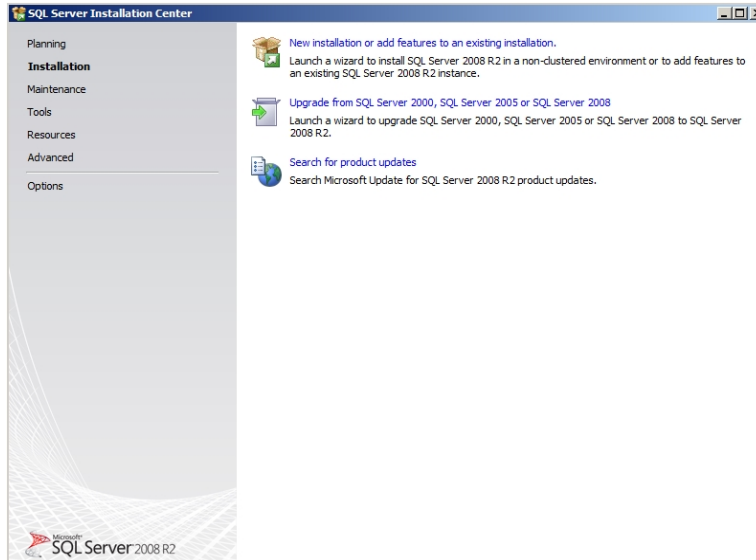
3. Select **I accept the license terms** and click **Next**.
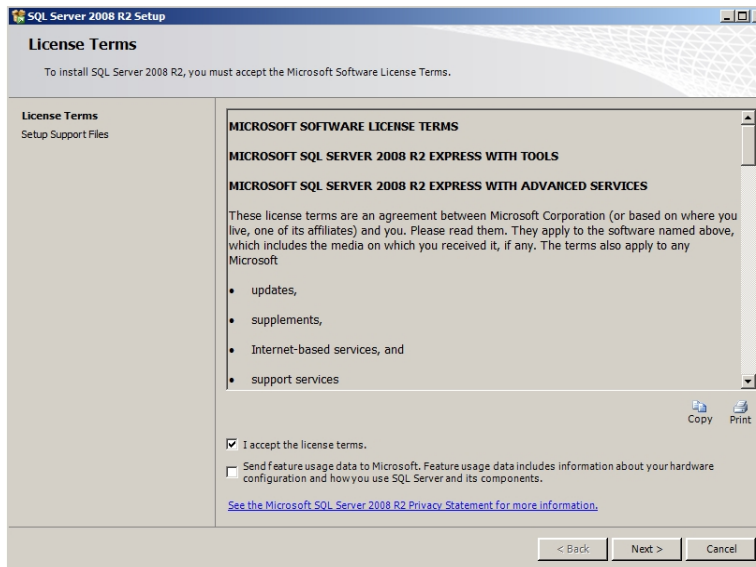
4. The *Setup Support Files* screen displays. Select **Install** to proceed with the installation.
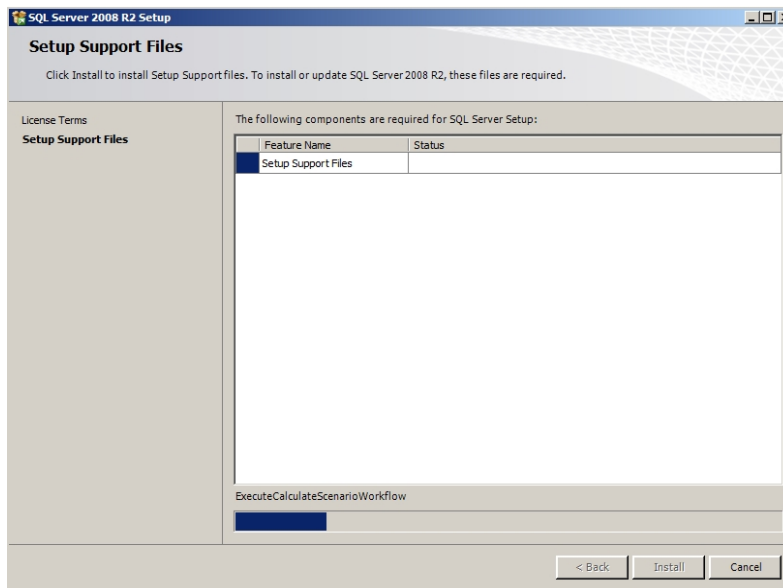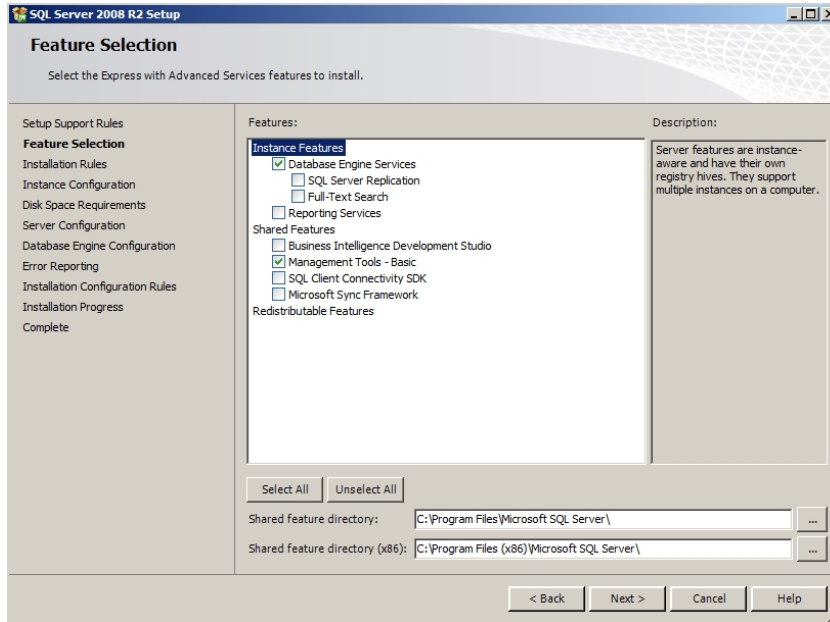

5. The *Feature Selection* screen displays. Click the **Unselect All** button.

6. Choose **Database Engine Services** under *Instance Features and Management Tools – Basic* under *Shared Features*. Click **Next**.

> Note: Management Tools are optional for Engagement. However, they can be used to assist support in certain circumstances.


7. Select **Named Instance** and enter "PROFXENGAGEMENT" on the *Instance Configuration* screen. Click **Next** to continue.
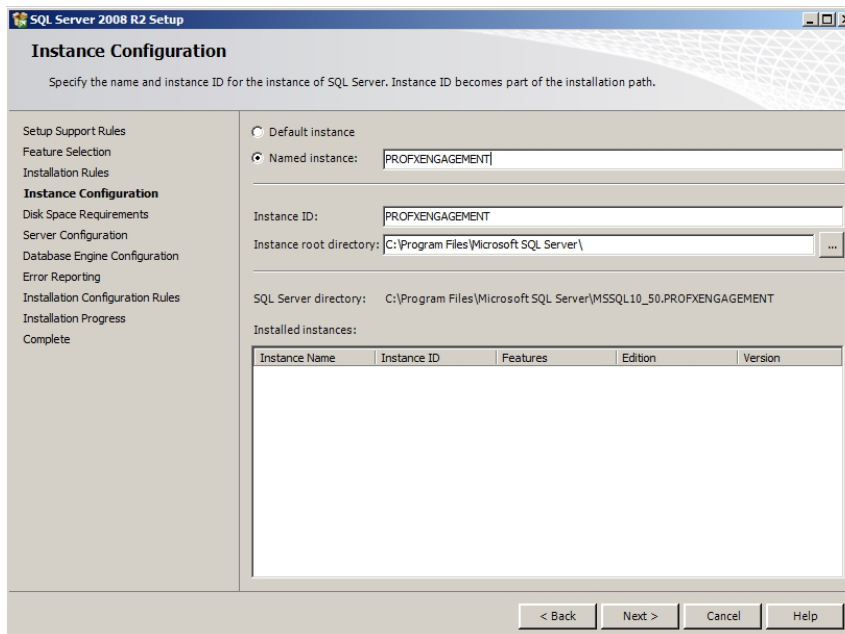

8. On the *Service Accounts* tab of the *Server Configuration* screen, select **Use the same account for all SQL Server services** on the *Authentication Mode* screen. Change the *Account Name* to **NT AUTHORITY\SYSTEM** for the SQL Server Database Engine. Verify the

Startup Type is set to "Automatic" for SQL Server Database Engine and for SQL Server Browser. Click **Next** to continue.
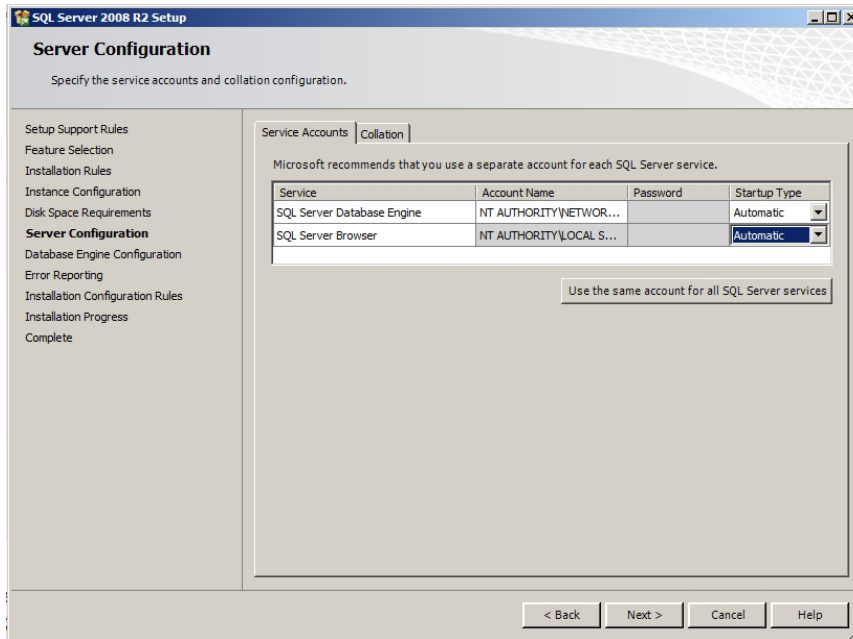

9. Select **Windows authentication mode** on the *Database Engine Configuration* screen. Add an Administrator user account in the *Specify SQL Server administrators* field. Click **Next** to continue.
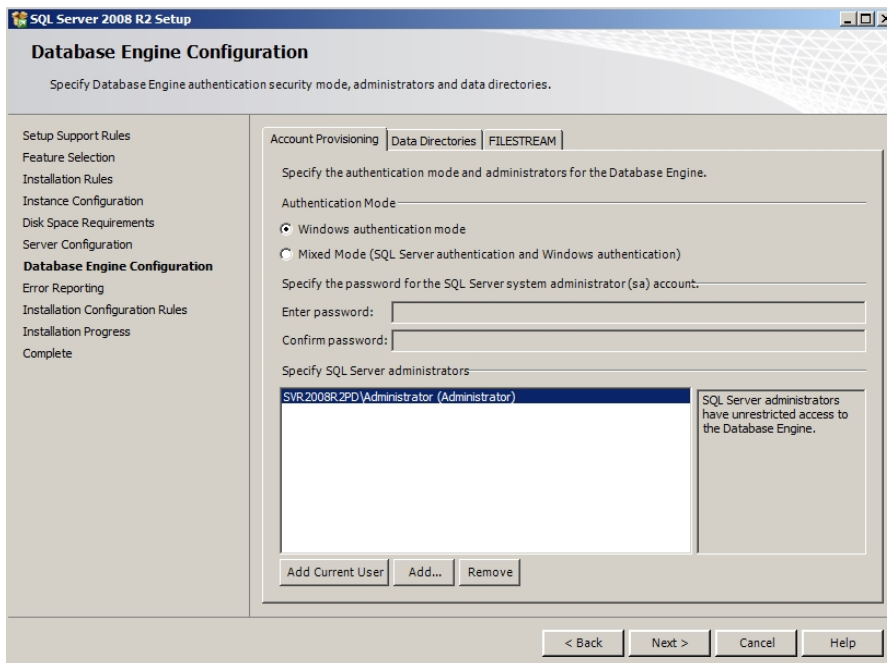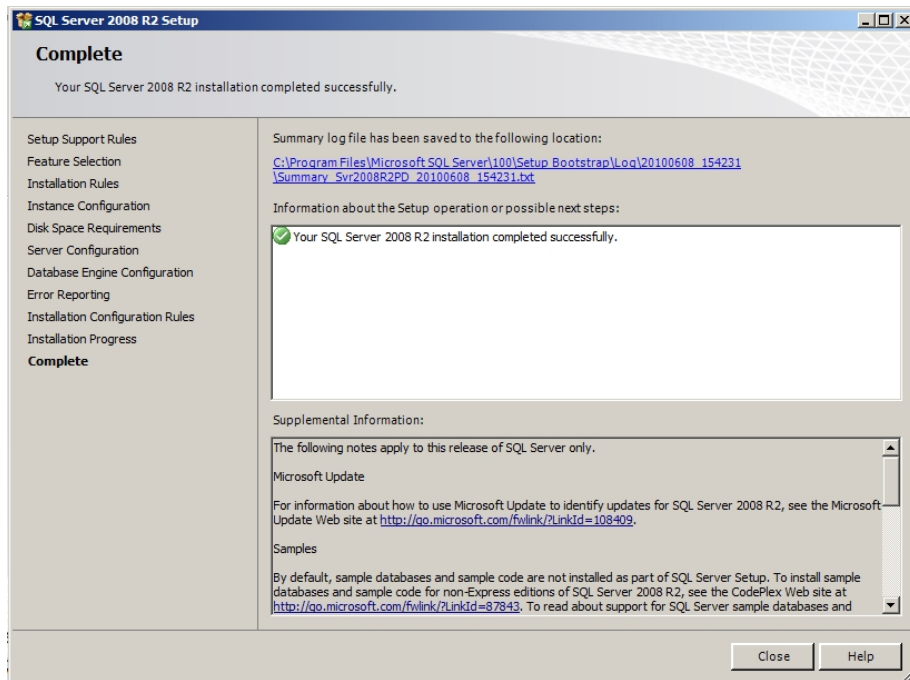
10. The *Error Reporting* screen displays. Click **Next** to continue.
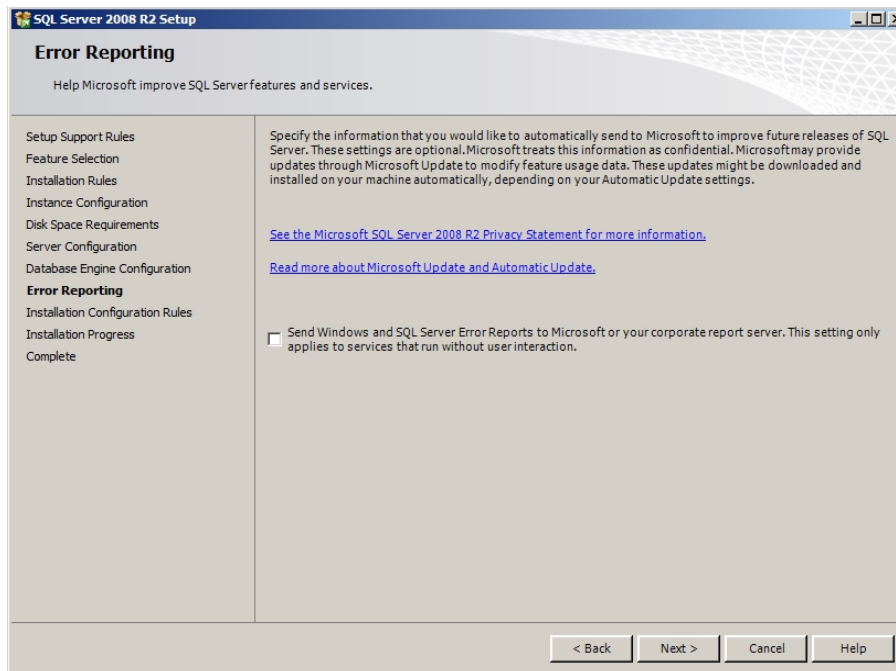
11. The *Installation Progress* screen displays. Please be patient; the install process can take a long time to complete. Click **Next** to continue.
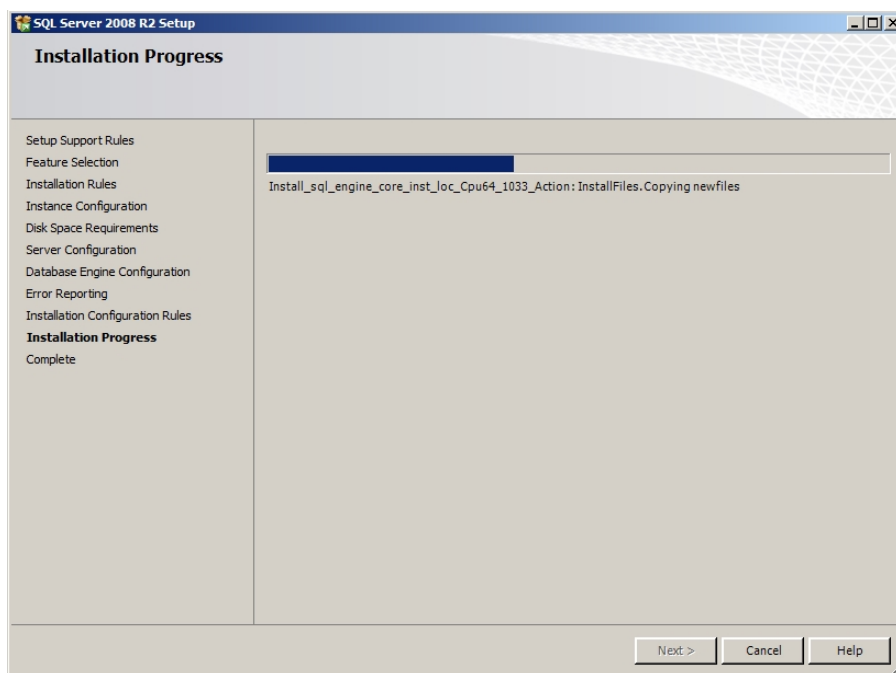
12. The *Complete* screen displays. Click **Close** to finish the installation.

INSTALLING SQL SERVER 2012

Installing SQL Server 2012

Creating a New SQL 2012 32-bit or 64-bit Instance for Engagement

This section provides step-by-step instructions for creating a new SQL 2012 32-bit or 64-bit instance for ProSystem *fx* Engagement.

If you need to create a new instance for SQL 2012 Express 64-bit, please see *Creating a New SQL 2012 Express 64-bit Instance for Engagement* on page 58.

⚠️ **Important!** Configure the SQL Service to use "LocalSystem" (or NT AUTHORITY\SYSTEM) as the start-up account and the SQL Browser to use "Local Service" as the start-up account.

Upgrading SQL 2012

SQL Server 2012 supports an upgrade from the following versions of SQL Server:

- SQL Server 2005 SP4 (9.00.5000.00) or later
- SQL Server 2008 SP2 (10.00.4000.00) or later
- SQL Server 2008 R2 SP1 (10.50.2500.0) or later

📝 **Note**: To find what version of SQL is currently installed, browse the Registry and go to the key: HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQLServer\PROFX ENGAGEMENT\MSSQLServer\CurrentVersion.

Recommended Operating Systems

We recommend using Microsoft Windows Server 2008 (64-bit) or Microsoft Windows Server 2008 R2 with SQL Server 2012.

📝 **Note**: Microsoft does not support SQL Server 2012 on certain Windows versions. For detailed information, please see Microsoft KB 2022909 at the following link: http://support.microsoft.com/kb/2022909.

Creating the SQL Server 2012 Instance

Note: Please follow each step carefully to ensure that the SQL instance is properly created with all required settings.

1. Insert the SQL Server 2012 Installation Disk.
2. Click **Installation**.
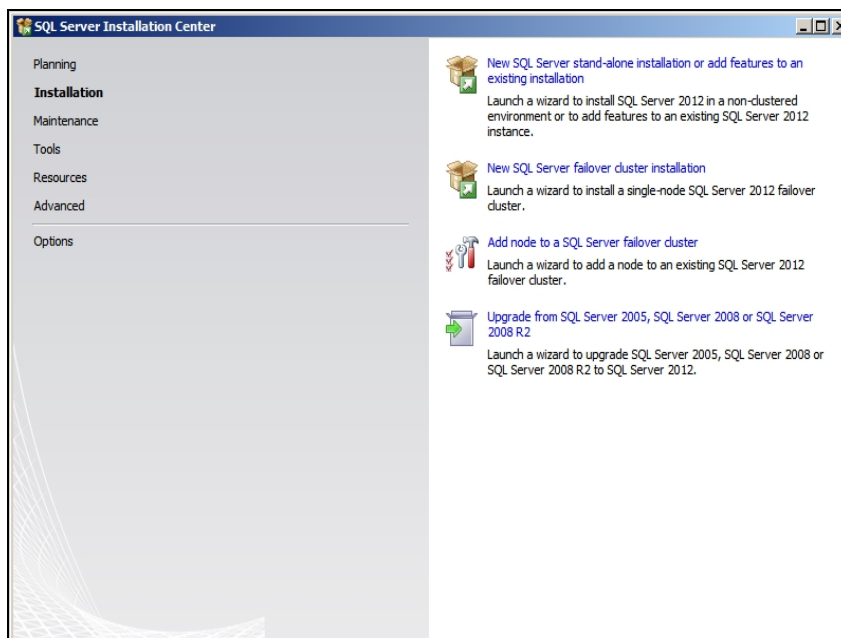
3. Select **New SQL Server stand-alone installation or add features to an existing installation**. The *Setup Support Rules* screen displays.
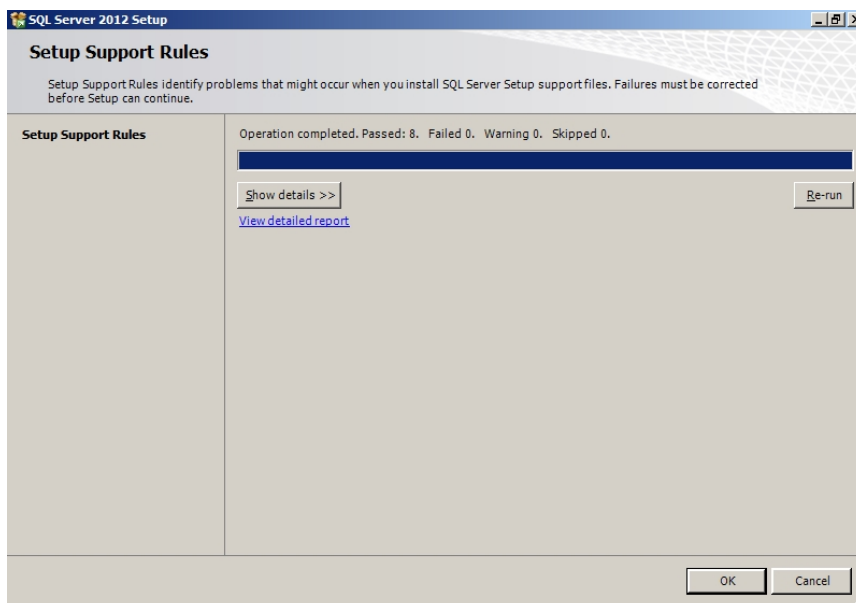
4. Click **OK** to proceed with the installation. The *Product Key* screen displays.
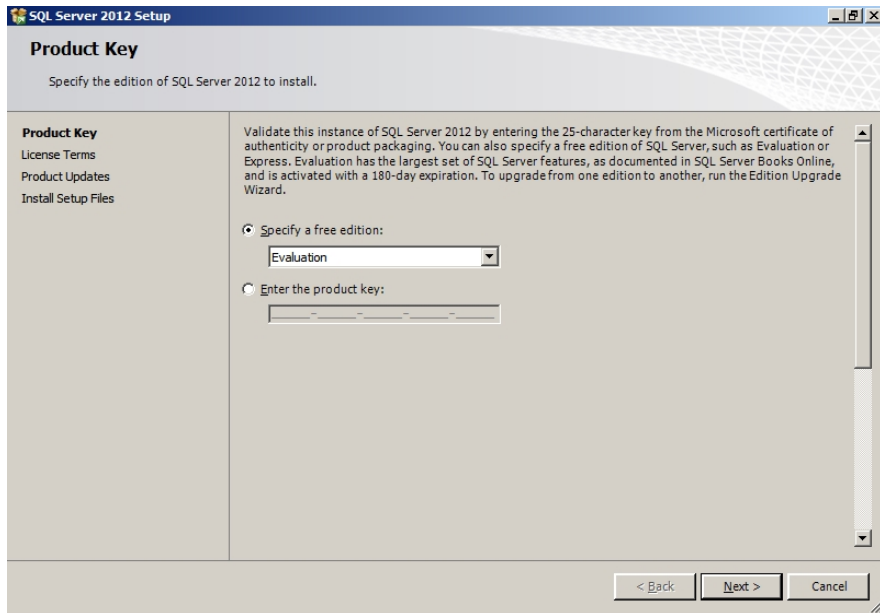
5. Enter the SQL Server product key and click **Next**. The *License Terms* screen displays.
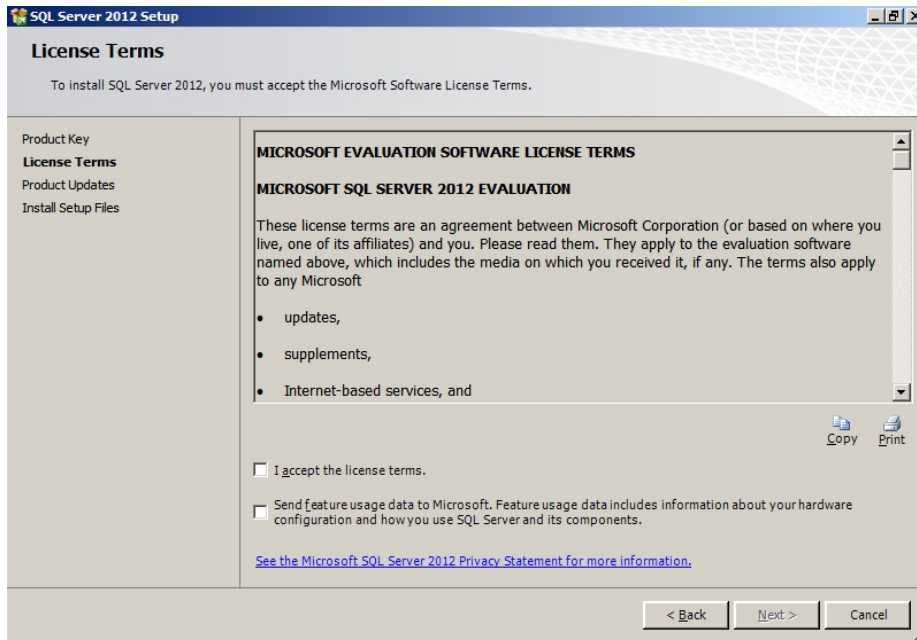
6. Click **I accept the license terms** and click **Next**. The *Install Setup Files* screen displays.
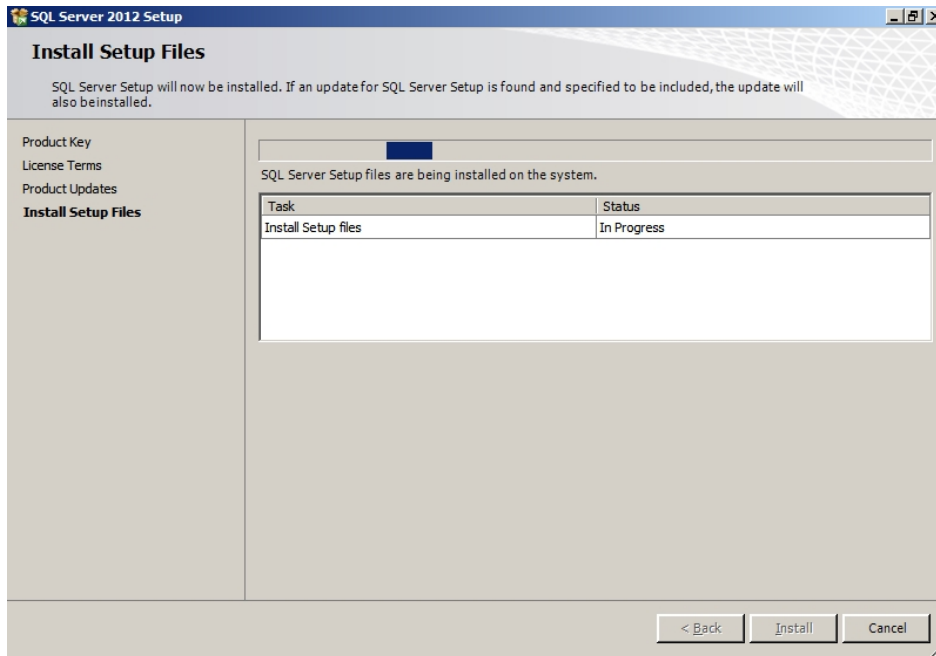
7. Click **Next** on the *Setup Support Rules* screen.
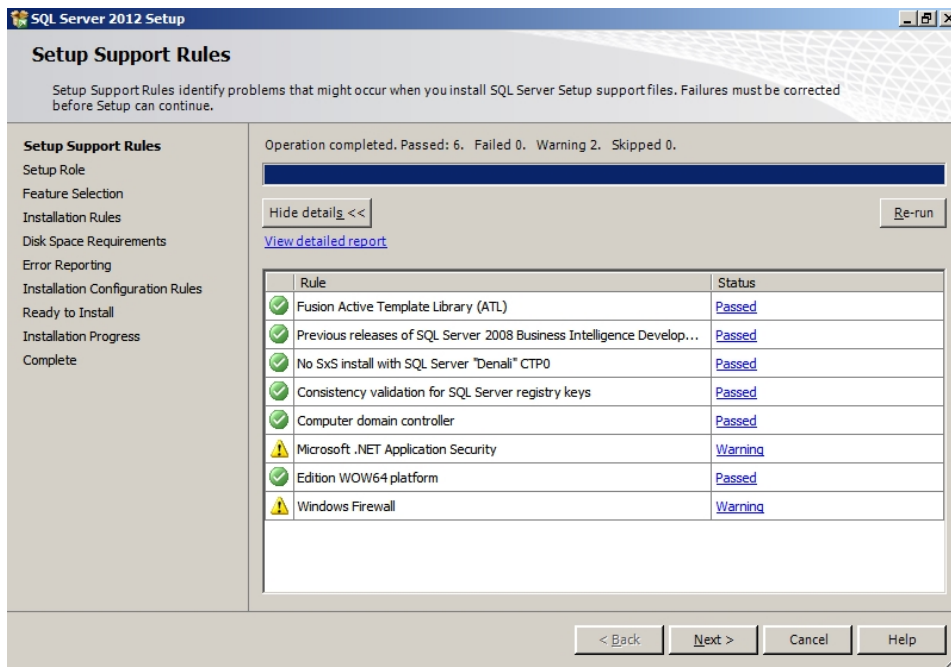
8. Select **SQL Server Feature Installation** on the *Setup Role* screen.
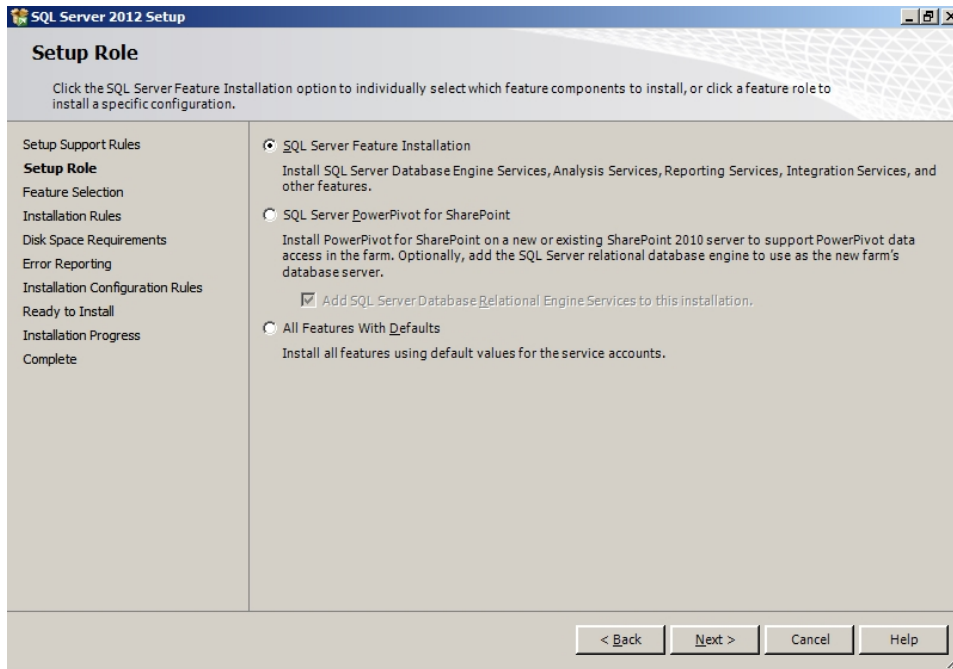
9. Select **Database Engine Services and Management Tools** on the *Feature Selection* screen.
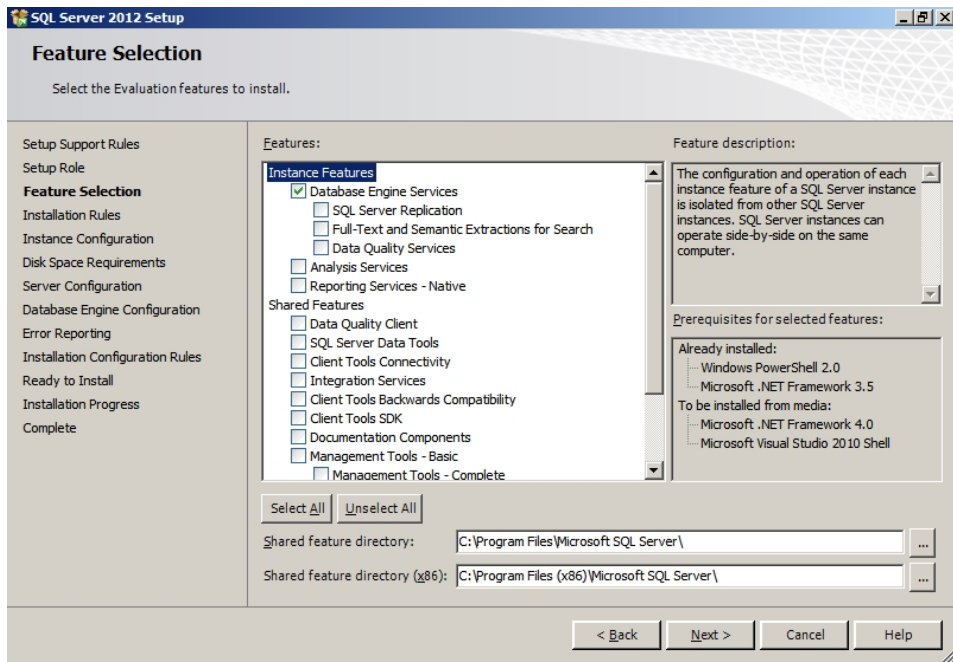
10. Click **Next** to continue.

   Note: Management Tools are optional for Engagement. However, they can be used to assist support in certain circumstances.

11. Click **Next** on the *Installation Rules* page.
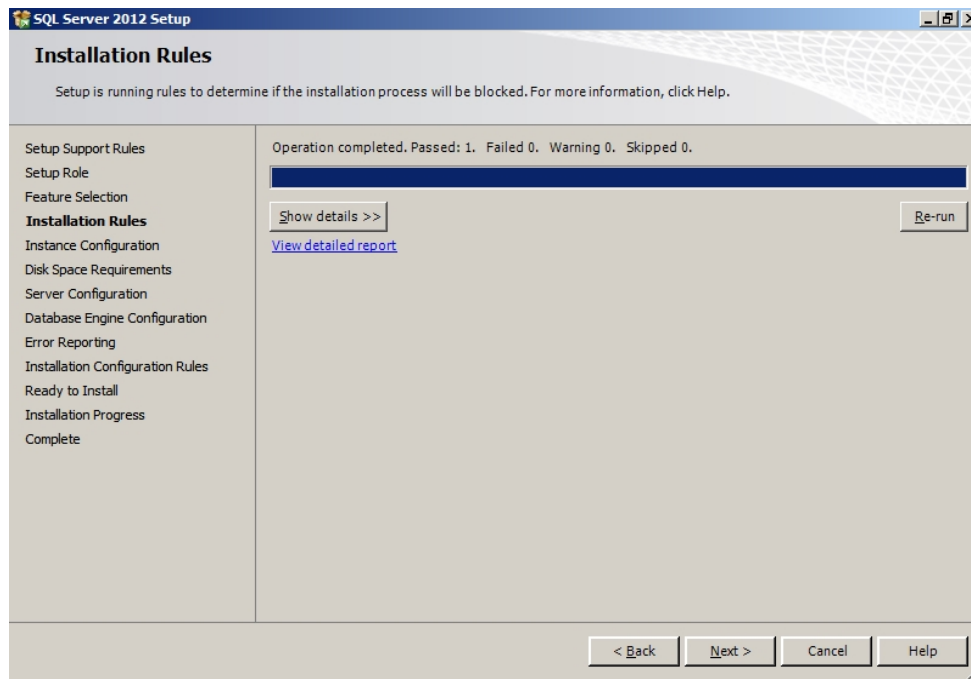
12. Select **Named Instance** and enter "PROFXENGAGEMENT" on the *Instance Configuration* screen.
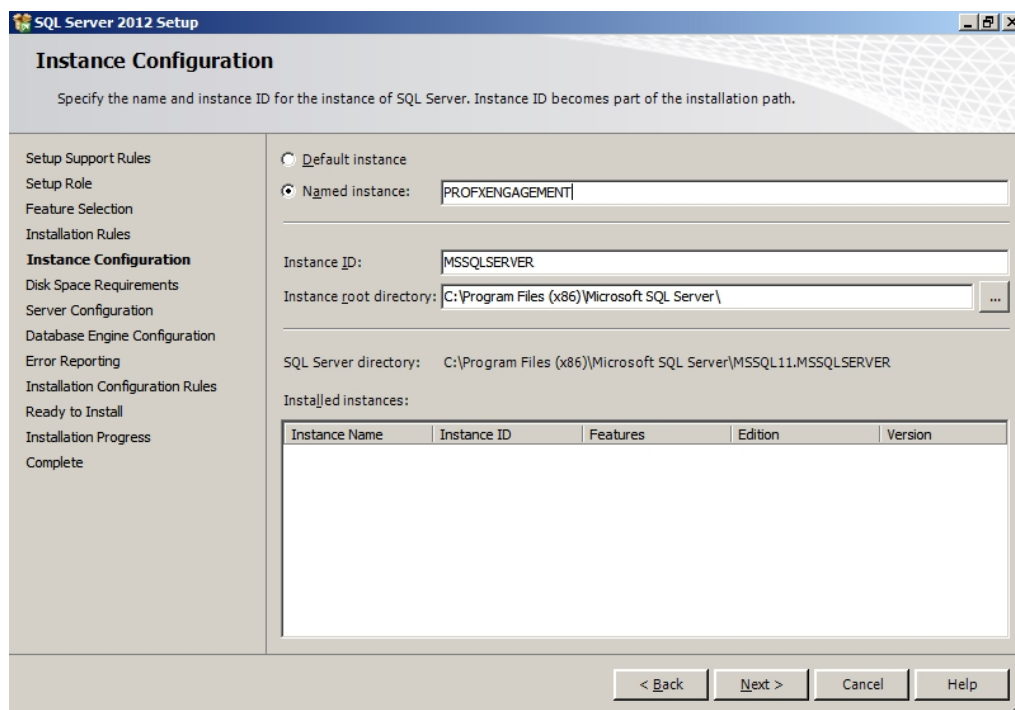
13. Click **Next** to continue. The *Disk Space Requirements* screen displays.
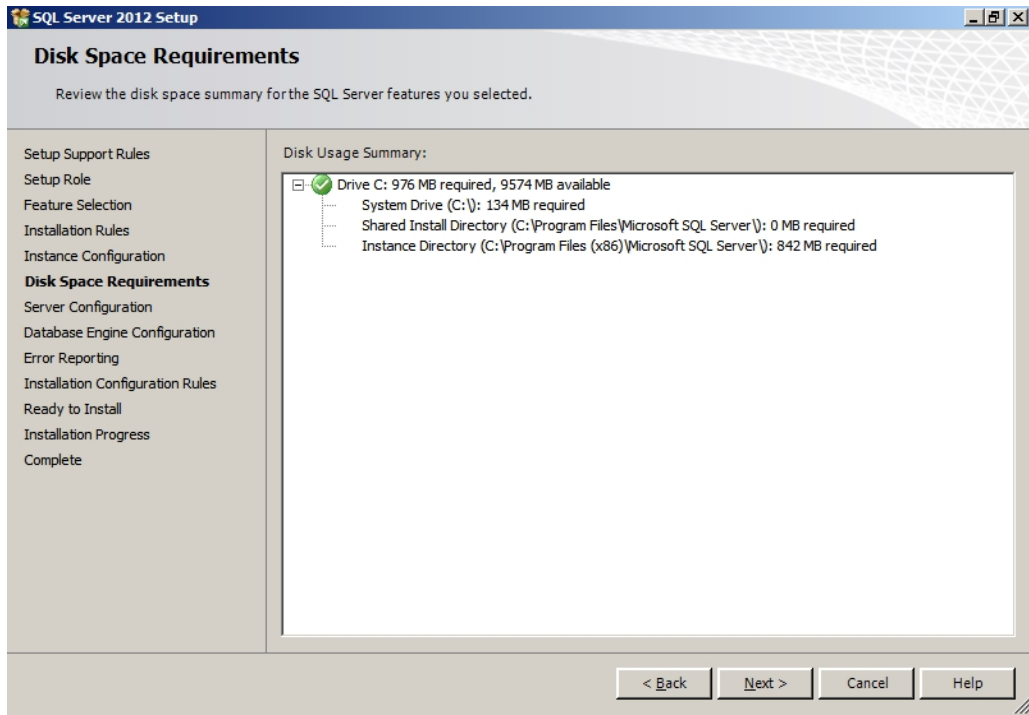
14. Click **Next** to continue.

15. On the *Service Accounts* tab of the *Server Configuration* screen, verify the **SQL Server Database Engine** *Startup Type* is set to **Automatic**.
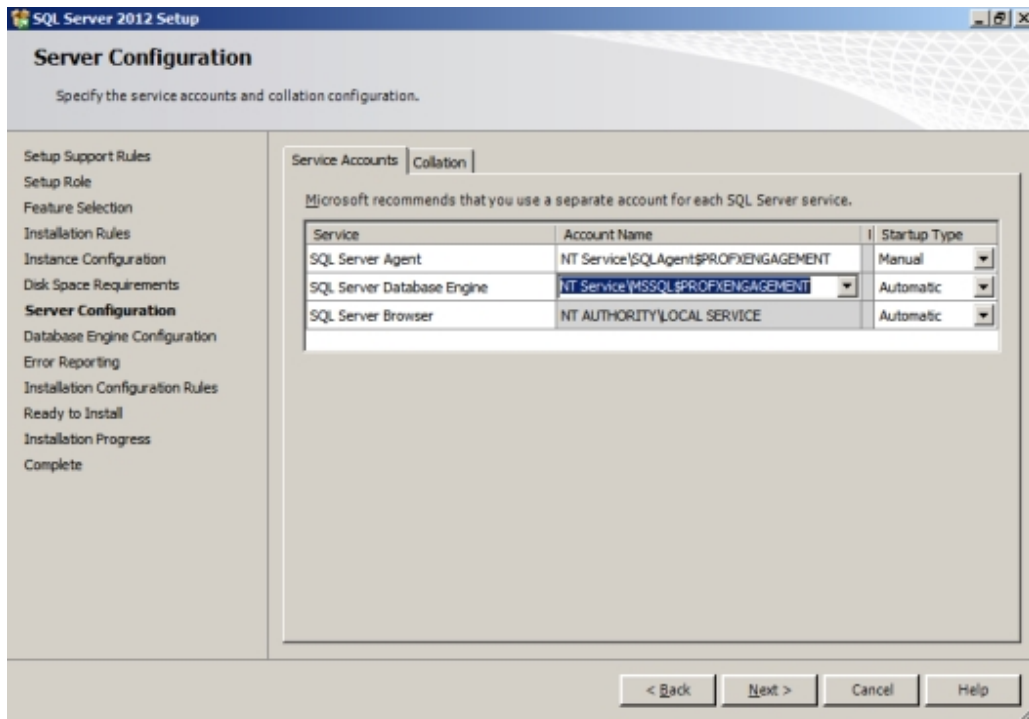
16. Leave the default settings on the *Collation* tab. If the default settings for your installation do not match those shown in the screen below, update your settings.
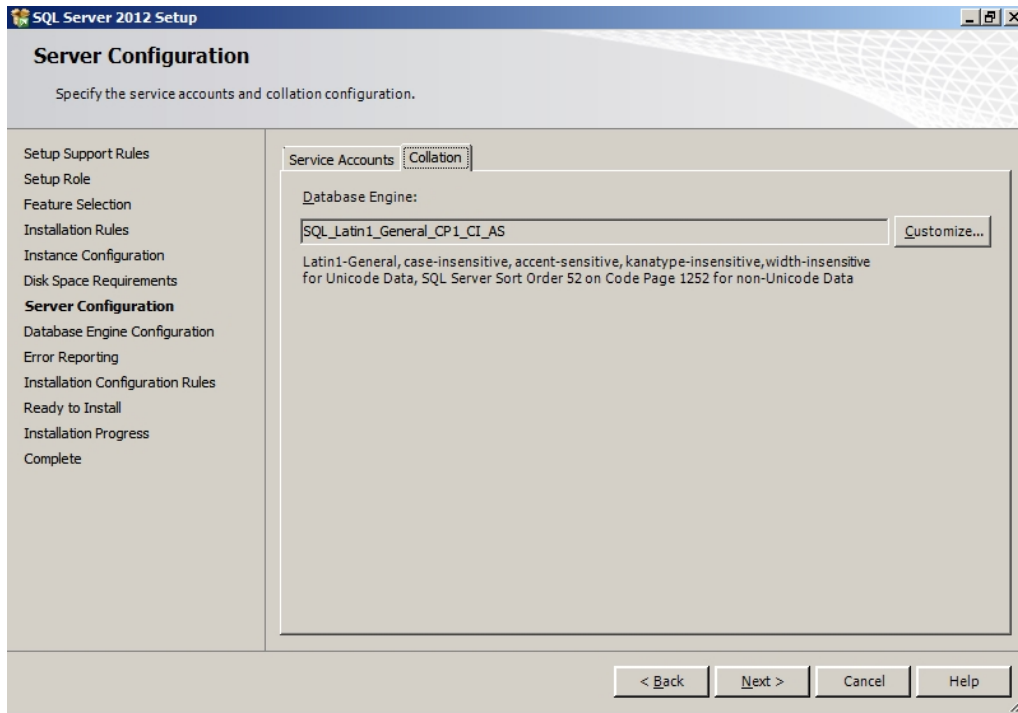
17. Click **Next** to continue.

18. Select **Windows authentication mode** on the *Database Engine Configuration* screen.
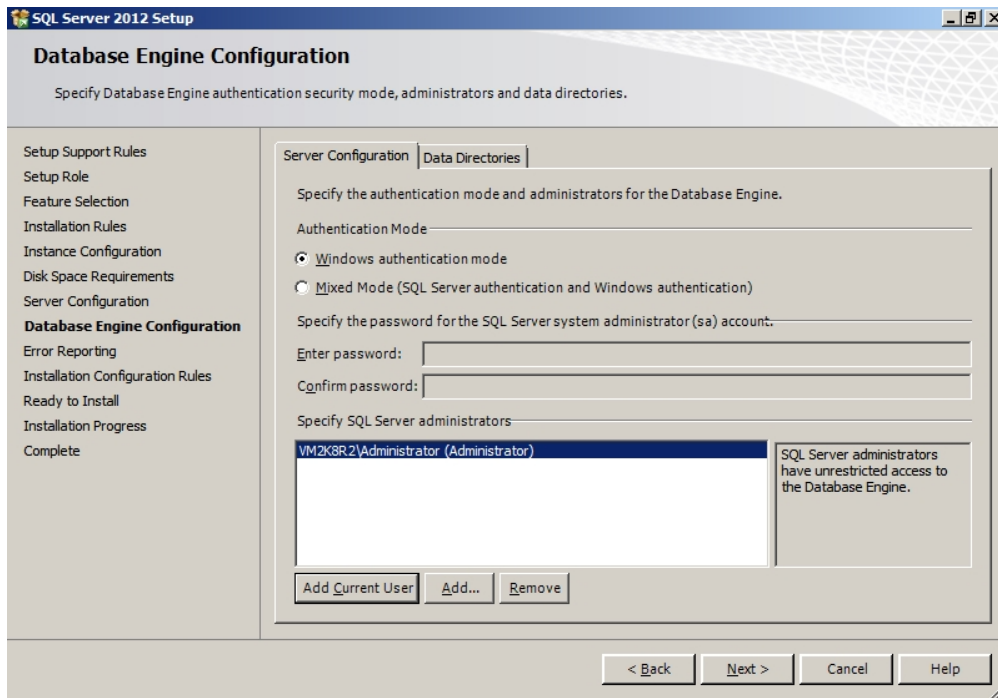
19. Add an Administrator user account in the *Specify SQL Server administrators* field.
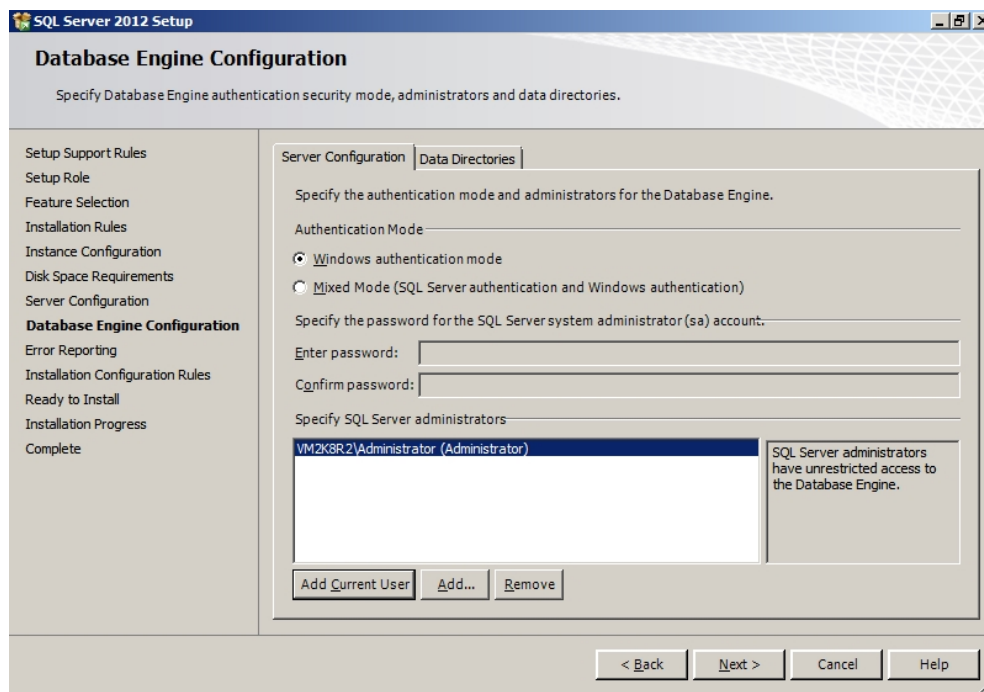
20. Click **Next** to continue.The *Error and Usage Reporting* screen displays.
21. Click **Next** to continue. The *Installation Configuration Rules* screen displays.

22. Click **Show Details** to see a detailed report of the Installation Rules.

23. Click **Next** to continue. The *Ready to Install* screen displays.

24. Verify the SQL Server 2012 features to install, and then click **Install** to continue. The *Installation Progress* screen displays.

25. Click **Next** to continue.

> 🗒️ **Note**: Please be patient; the install process can take a long time to complete. The Installation Progress screen will provide a notification when the setup process has completed.

26. Click **Next** to continue. The *Complete* screen displays.
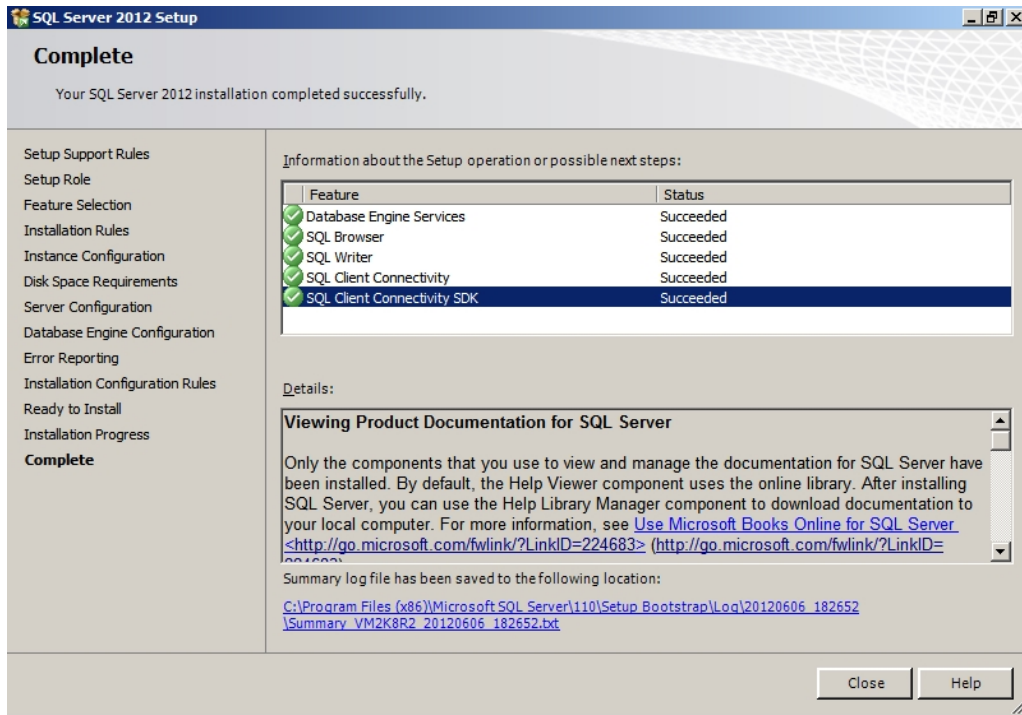
27. Click **Close** to finish the installation.

> 🗒️ **Note**: After installation completes, you will need to go into the SQL Server Configuration Manager and enable TCP/IP for the instance and restart the service. It is disabled by default.

Install SQL 2012 Express Instance Installer or Upgrade from SQL 2008 or SQL 2005 32-bit Express Instance Installer

1. Launch SQL2012ExpressInstanceInstaller.exe. SQLEXPR_x86_ENU.exe must be in the same folder.
2. Click **Install or Upgrade SQL PROFXENGAGEMENT instance** after all requirements are met
3. Click **Run**.

> 🗒️ **Note**: Please be patient; the install process can take a long time to complete.

Creating a New SQL 2012 Express 64-bit Instance for Engagement

Though SQL 2012 Express 64-bit is supported, there currently is no installer available to create the ProSystem *fx* Engagement SQL instance. This section provides step-by-step instructions for creating a new SQL 2012 Express 64-bit instance for ProSystem *fx* Engagement.

Note: Please make sure that you follow each step carefully to ensure that the SQL instance is properly created with all required settings.

1. Download the install package from the Microsoft Web site and launch it.
2. Click **New Installation** or add features to an existing installation.
3. Select **I accept the license terms** and click **Next**. The *Setup Support Files* screen displays.
4. Select **Install to proceed with the installation**. The *Feature Selection* screen displays.
5. Click **Unselect All**.
6. Choose **Database Engine Services** under *Instance Features and Management Tools – Basic under Shared Features*.
7. Click **Next**.

   Note: Management Tools are optional for Engagement. However, they can be used to assist support in certain circumstances.

8. Select **Named Instance** and enter "PROFXENGAGEMENT" on the Instance Configuration screen.
9. Click **Next** to continue.
10. On the *Service Accounts* tab of the *Server Configuration* screen, select **Use the same account for all SQL Server services** on the *Authentication Mode* screen.
11. Change the *Account Name* to **NT AUTHORITY\SYSTEM** for the SQL Server Database Engine. Verify the Startup Type is set to "Automatic" for SQL Server Database Engine and for SQL Server Browser.
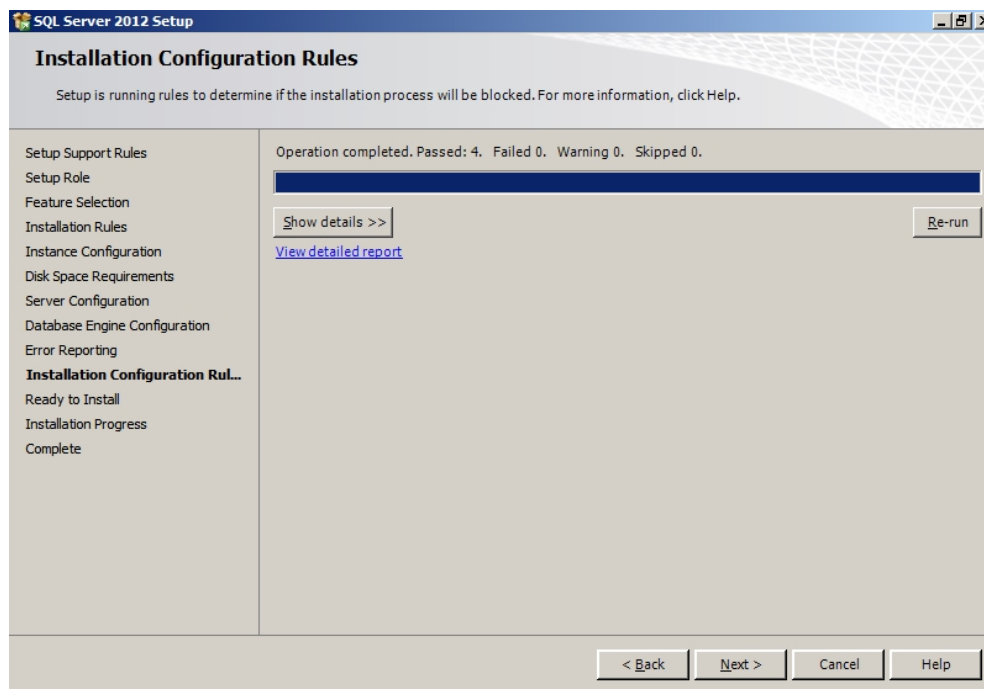12. Click **Next** to continue.
13. Select **Windows authentication mode** on the *Database Engine Configuration* screen.
14. Add an Administrator user account in the *Specify SQL Server administrators* field.
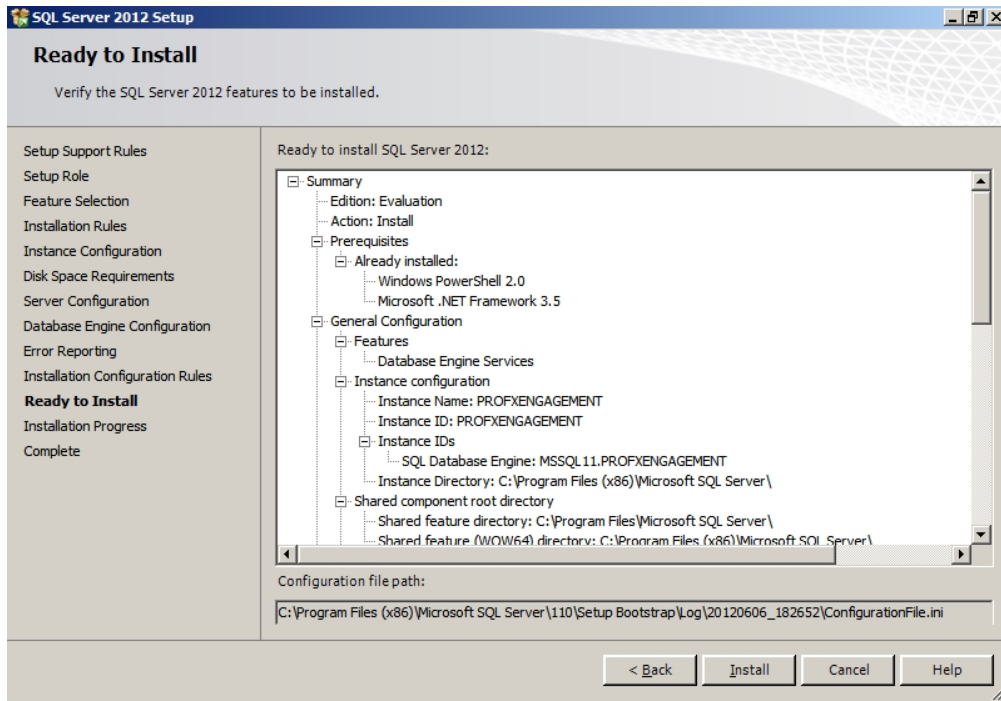15. Click **Next** to continue. The *Error Reporting* screen displays.
16. Click **Next** to continue. The *Installation Progress* screen displays. Please be patient; the install process can take a long time to complete.
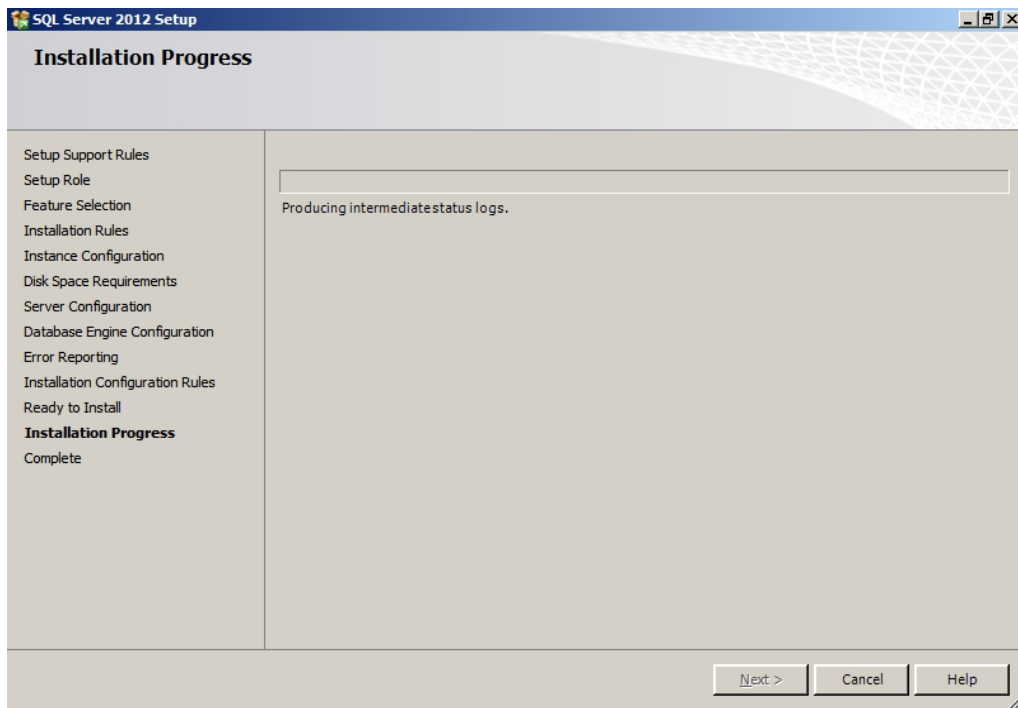17. Click **Next** to continue. The *Complete* screen displays.
18. Click **Close** to finish the installation.

Appendix C

INSTALLING ENGAGEMENT WITH ACTIVE DIRECTORY

Installing Engagement with Active Directory

A Microsoft Windows Server, with Microsoft Active Directory, may be used to push ProSystem *fx* Engagement across multiple computers. ProSystem *fx* Engagement version 6.5 and higher are supported when upgrading the program.

Requirements

Before starting, please make sure that all computers to which Engagement will be deployed meet the following requirements and have the following components installed:

- Machines must meet the minimum requirements for ProSystem *fx* Engagement installation. See *Engagement 7.1 Requirements* on page 1.
- A SQL Server 2008 R2 or SQL Server 2012 Express instance must be installed prior to installing ProSystem *fx* Engagement.

   Note: For machines that have a prior version of Engagement installed (version 6.5 or higher), there is no need to install a SQL Server instance again if SQL 2008 or higher is installed, because those machines already have the Engagement SQL database instance.

- The following applications must be manually installed before a push of the 7.1 Workpaper Management module from Active Directory:
   - .Net Framework 4.0 Full
   - SQL Server 2008 Native Client (32- or 64-bit) if SQL Server 2012 is installed. Visual Studio Tools for Office Runtime 4.0 (VSTOR) (32 bit version for 32-bit OS and 64-bit version for 64-bit OS)
   - Visual Studio 2005 Tools for Office Second Edition Runtime
   - Visual Studio Tools for the Office System Runtime version 3.0
   - Visual Studio Tools for the Office System 3.0 Runtime Service Pack 1
   - Visual Studio Tools for Office Runtime 4.0 (VSTOR) (32-bit version for 32-bit OS and 64-bit version for 64-bit OS)
   - SQLXML 3.0, SP 3
   - SQLXML 4.0, SP 1

- Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.17
- Microsoft Visual C++ 2008 Redistributable x86 9.0.30729.4148
- If Office 2007 is installed, then install the following:
  - Microsoft Office 2007 Primary Interop Assemblies (PIA)
- If Office 2010 is installed, then install the following:
  - Microsoft Office 2010 Primary Interop Assemblies (PIA)
- If Office 2013 is installed, then the following are required by ProSystem *fx* Engagement:
  - Visual Studio Tools for the Office System Runtime version 3.0
  - Visual Studio Tools for the Office System 3.0 Runtime Service Pack 1
- Knowledge Coach requirements:
  - Microsoft Windows Vista with Service Pack 2
  - Microsoft Windows Server 2008 with Service Pack 2
  - Microsoft Office 2007
    - Microsoft Office 2007 Primary Interop Assemblies (PIA)
    - Visual Studio 2005 Tools for Office Second Edition Runtime
    - Visual Studio Tools for the Office System Runtime version 3.0
    - Visual Studio Tools for the Office System 3.0 Runtime Service Pack 1
    - Visual Studio Tools for Office Runtime 4.0 (VSTOR) (32-bit version for 32-bit OS and 64-bit version for 64-bit OS)

    Note: These components may be installed from the Applications\KC folder on the installation DVD (Install Media). However, they may not be pushed to machines.

Note: It is not possible to use the push installation to modify an existing installation to include the newly released Knowledge Coach components. Please contact Technical Support for the appropriate MSI transform file if you have a need to push the Knowledge Coach installation.

⚠️ **Important!**

- Deployment of ProSystem *fx* Engagement using Active Directory is supported for all international versions (United States, Canada, and Australia).
- ProSystem *fx* Engagement supports SQL Server 2008 Express, 2008 R2 Express, and 2012 Express. However, due to limitations of the Microsoft SQL Express instance installers, it is not possible to use Active Directory to push the installation of the SQL Express instance.

Pushing ProSystem *fx* Engagement

Once all of the above requirements have been met, follow the instructions below to push ProSystem *fx* Engagement across computers in a network using Active Directory.

1. After verifying that the SQL Server 2008 Express, SQL Server 2008 R2 Express, or SQL Server 2012 Express instance has been installed, open the Group Policy created for the Express installation.

2. In the Group Policy Object Editor under Computer Configuration, expand the Software Settings folder by clicking on the + icon. Under the Software Settings folder, right-click on Software installation and select **New/Package**.

3. Browse to the location of the *ProSystem fx Engagement.msi* package that was copied to the server's local drive.

   Note: When browsing to the location of the installation package, you must use a UNC path.

4. Select the file and click **Open**.

5. On the next screen select **Assigned** if it is not already selected.

6. Wait a few seconds until the *ProSystem fx Engagement.msi* package displays under Software Installation. The Engagement package has now been assigned to all the computers that were selected earlier.

   Wait a few minutes and then reboot all computers that were selected for installation. ProSystem *fx* Engagement will be installed automatically on these machines at start-up; a screen will display showing the message "Installing managed software ProSystem *fx* Engagement." On Vista operating systems, "Please Wait" will display while the application is being installed.

   If you have a previous version of Engagement installed on any of these computers and you are upgrading, all Engagement modules will be upgraded simultaneously. In addition, SQL databases will be converted by the Engagement upgrade installation. Converting Trial Balances is a separate process. Please see the ProSystem *fx* Engagement *Conversion Guide* for additional details.

   If no prior version of Engagement exists on a computer, then ONLY the SQL Express 2005 instance and Engagement Workpaper Management module (including Trial Balance) will be installed.

Including Knowledge Coach in Push

Note: Copy the .msi package from the root of the DVD (Install Media) and any .mst files from the DVD\Utilities\KCTransform folder to the same location. They should be in a shared folder with Domain Computers that have full control in the Active Directory.

To add or remove modifications for an application package from Active Directory:

1. Open Group Policy Software Installation.

2. In the console tree, right-click **Software installation**, point to **New**, and then click **Package**.

3. In the Open dialog box, click the **Windows Installer package (.msi)**, and then click **Open**.

4. In the Deploy Software dialog box, click **Advanced**, and then click **OK**.

5. In the Properties dialog box for the package, click the **Modifications** tab.

6. Do any of the following:
    - To add modifications, click **Add**. In the Open dialog box, browse to the transform file (.mst), and then click **Open**.
    - To remove modifications, on the Modifications tab, click the modification that you want to remove, and then click **Remove**. Repeat this step until you have removed each modification that you do not want.
    - When you are sure that the modifications are configured the way you want them, click **OK**.

⚠ **Important!** Do not click OK until you have finished configuring the modifications. When you click OK, the package is assigned or published immediately. If the modifications are not properly configured, you will have to uninstall the package or upgrade the package with a correctly configured version.

📝 **Note**: To complete this procedure, you must be logged on as a member of the Domain Administrators security group, the Enterprise Administrators security group, or the Group Policy Creator Owners security group.

Appendix D

TECHNICAL CONSIDERATIONS

General Program Information

Computer Names

ProSystem *fx* Engagement relies on the NetBIOS computer name for most of the internal program communications.

- NetBIOS requires computer names to be a maximum of 15 characters.
- It is strongly recommended you do not rename your computer, for any reason, after installing the SQL instance for ProSystem *fx* Engagement.
    - Doing so may cause serious issues in the program.
    - If you have renamed or modified the computer name after Engagement is installed and are experiencing issues, contact Technical Support at 1-800-739-9998.
- Due to possible data loss and installation issues and serious issues with the program, imaging machines with Engagement and the SQL instance for Engagement already installed is not supported.

TCP/IP

ProSystem *fx* Engagement and SQL rely on TCP/IP for network and system connections.

- Internet Protocol Version 4 (IPv4) is supported.
- Internet Protocol Version 6 (IPv6) is supported.

Note: Server and client machines must have a common version of the Internet Protocol available in order to communicate. They both must have either IPv4 or IPv6 or both versions selected.

Services

ProSystem *fx* Engagement uses four services for communication between the local file rooms and the office servers as well as between the office servers. The services are as follows:

- SQL Server (PROFXENGAGEMENT)
- PFXEngDesktopService

- PFXSYNPFTService
- P2EWinService

Note: PfxPDFConvertService.exe is also running in the background and is started at the startup of the machine. This executable handles ProSystem *fx* Engagement PDF printing.

SQL

This service is the SQL data engine that is used to drive the ProSystem *fx* Engagement database. SQL runs as a service, "SQL Server (PROFXENGAGEMENT)," using a Local System account that requires full security rights. In ProSystem *fx* Engagement this service will transfer data from workstation database to server database, server database to server database and workstation database to workstation database over TCP/IP.

If for any reason the SQL Server (PROFXENGAGEMENT) service is not running, both the Administrator and Client modules will stop working and the users will be instructed to close the program. By default this service will start up when the computer starts and remain on until it is either manually stopped or the computer is shut down.

The SQL Server (PROFXENGAGEMENT) service is a memory intensive service that will utilize as much memory as is available to complete the requests it receives. The memory will be released back to the system as the computer needs the memory for another process. We recommend that you reboot your workstation daily in order to free up any memory that is being accessed but not used. Installing additional memory may also improve performance.

For servers where the Admin module is installed, we recommend that you develop a schedule where you restart the SQL Server (PROFXENGAGEMENT) service so it will release the memory.

PFXEngDesktopService.exe

This is the service that ProSystem *fx* Engagement uses to initiate a refresh of the remote Workpaper Management or Administrator module. This service interacts with the desktop of the workstation or server it is running on. Because the service interacts with the desktop, the service runs under the system account and cannot be changed without rendering the service ineffective.

PFXSYNPFTService.exe

This service is used to copy or move the workpapers from the LFR to the CFR, from CFR to CFR or from LFR to LFR. This service runs under the system account by default but can be changed as needed. If you store your workpapers on a location other than the server where the Administrator Module is installed, you will need to change the user account to a user that has access to that location.

For more information, please see the Workpaper Location User Rights section.

P2EWinService.exe

This service is used to copy workpapers from CCH Axcess Portal to ProSystem *fx* Engagement.

Ports

ProSystem *fx* Engagement transfers data over the following ports:

- SQL Server (PROFXENGAGEMENT) – TCP port 2029; UDP port 1434
- PFXSYNPFTService - TCP port 6735
- PFXEngDesktopService - TCP port 6736
- PfxConfigUtility – UDP port 6737
- P2EWinService - TCP ports 943 and 4530
- SharedFileRoom (on Vista) – TCP port 445

These ports are configured on the server and workstations during installation. However, if you are connecting over a VPN or through a firewall, or another device such as a router, you will need to ensure that these ports are opened in order for the program to work correctly.

Other SQL Applications

If you are installing ProSystem *fx* Engagement on a computer which currently has an application using SQL as its database engine, you must stop the SQL service before installing ProSystem *fx* Engagement. When upgrading or reinstalling ProSystem *fx* Engagement, stop all other SQL services before upgrading but leave the SQL Server (PROFXENGAGEMENT) service running.

⚠️ **Important!** Failure to do this may cause one or both of the applications to fail.

Installation in a Non-Windows Environment (Linux)

ProSystem *fx* Engagement utilizes the Microsoft SQL database architecture; however, Engagement is compatible with Non-Windows networks, including Linux, with one additional requirement: the SQL database engine application and database files must reside on a Windows computer and must be visible to the Non-Windows network. All workpapers, (Central File Rooms), may be stored on the Non-Windows file server.

There are a few specific steps which need to take place in order to ensure proper communication between the local file rooms and the available central file rooms. The following procedures will assist you in the setup process:

Requirement

The SQL database engine requires a computer with a Windows-based operating system (Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows Vista, Windows 7, Windows 8, or Windows 8.1). The computer must meet the minimum requirements set forth in the User Guide or posted on the Engagement Support Web site. This computer will be used to house the Engagement office server and SQL databases.

Procedures

1. Read the installation instructions in this document.
2. On the Non-Windows server, you will need to create a folder that will store the central file room workpapers.
3. Install ProSystem *fx* Engagement Administrator to the Windows computer defined above.

4. Log in and set up this machine as an office server.

5. Follow the steps defined below under Workpaper Location User Rights to set up the synchronization service to run as needed for this configuration.

6. Create a central file room. When selecting the *Location of central file room workpapers*, browse to the folder created on the Non-Windows server in Step 2.

7. On a separate workstation, install ProSystem *fx* Engagement Workpaper Management module.

8. Log in to the Workpaper Management module and follow the prompts as they appear.

9. Once you have successfully logged in, test the above by synchronizing a binder to/from a central file room on the Non-Windows server.

Other Information

User Rights

The installation process sets the Engagement folder permissions automatically. These rights are needed for Engagement to function optimally. The installation gives the "Users" group all rights except Full Control. These rights are inherited by all child objects so that all folders and subfolders within Engagement receive these same rights.

Admin Share Folder

For logging purposes, the Administrator module writes to x:\Pfx Engagement\Admin\Admin Share. Please note that the program will still work (Administrator actions may still be performed) even if the system cannot write to the log files. For logging and troubleshooting purposes, we strongly recommend that Admin users be given rights to this folder, which will allow the system to properly log all Administrator actions.

Domain Controllers

Due to issues with Admin Synch failures and transferring Transition Binder Packages between Office Servers, we do not support installing the ProSystem *fx* Engagement Administrator module on a Domain Controller. Additionally, installing the Engagement Administrator module on a Domain Controller puts the server into the role of being a database and file server. If the Domain Controller goes down, the Admin module and central file rooms will not be available. Our recommendation is to use a separate server for the Admin Module.

Note: Microsoft does not recommend installing SQL Server on a Domain Controller. See the following:

- http://msdn.microsoft.com/en-us/library/ms143506.aspx#DC_Support
- http://msdn.microsoft.com/en-us/library/ms144228(v=sql.100).aspx
- http://msdn.microsoft.com/en-us/library/ms144228(v=sql.105).aspx

Macro Security Settings Requirements for Excel and Word Addins

If the Very High macro security setting is selected in Excel or Word, the macros required for the Engagement addins will not function. We recommend setting the macro security to a setting that is lower than Very High.

Workpaper Location User Rights

ProSystem *fx* Engagement utilizes a service to transfer the workpapers from the LFR to the CFR that does not require the user to have rights to the CFR location.

The service is called PFXSYNPFTService.exe, referred to as the Pfx sync service. The Pfx sync service works by emulating File Transfer Protocol (FTP) and therefore only requires that the service itself have rights to the destination location. By default, the service runs under the Local System Account, which has full access to the local computer. However, if the workpaper location of the CFR is stored on another machine, the service will need to be configured to run under a user account that has Full Control rights to the destination location of the workpapers folder.

The first step in this process is to create a user on each server that has rights to all Engagement-related directories and folders. Once you have a user on each server you will need to make the following modification on the office server (the server where the database files are located):

1. Open Administrative Tools from the Control Panel and select **Services**.
2. Once Services is open, find the PFXSYNPFTService listed in the *Name* column.
3. Right click on the Service and select **Stop**.
4. Right click on the Service and select **Properties**.
5. Click on the **Log On** tab.
6. Select the **This Account** radio button and then click **Browse**.
7. A dialog will appear that will allow you to browse for a user. Select the user you previously created for this process.
8. Once you have selected the user and clicked **OK**, you will return to the Log On screen.
9. Click **Apply**. You will be prompted that the user has been granted Login privileges.
10. Click **OK**.
11. Click **OK** to close the *Properties* dialog.
12. Right click on the Service and select **Start**.

Workpaper Location User Rights for Shared File Room

The Shared File Room is an alternate way of using Engagement, where users are allowed to directly access the Local File Room of another user. Using this method, one machine is designated as the "Host" of the Shared File Room, while all other users are designated as "Remote" users. The Host and Remote users are allowed to access the Host Local File Room, and can open binders and workpapers from this shared location.

The Engagement Shared File Room is completely dependent on Windows file sharing to function. Therefore, it is important that the Host user have proper rights to share folders on the Workstation. This requires at least Power User rights on the machine.

The Windows file share requires remote users to authenticate to the Host machine. Local user account will need to be added to the Host machine to allow the remote users to access the Shared File Room.

Please see the ProSystem *fx* Engagement *Shared File Room Guide* available for download from the ProSystem *fx* Engagement Web site for details on this feature.

Note: The Shared File Room is not supported with Knowledge Coach.

Time Synchronization

Time synchronization is an integral part of ProSystem *fx* Engagement. Time synchronization is used to ensure that the latest changes in your binders are processed correctly during synchronization. Ensuring that servers and workstations running Engagement are synchronized for time will help ensure that you do not lose data and that the latest changes to the data and the server are kept.

To ensure time synchronization, ProSystem *fx* Engagement encourages you to utilize LAN based time synchronization software.

⚠️ **Important!** Time synchronization needs to take place on the network. Tools such as the "NET TIME" command allow you choose a computer on the network to synchronize your clock with. We DO NOT recommend having your users synch with time servers on the internet as each server could possibly be several seconds off.

Citrix/Terminal Services - Shared File Room

Due to file locking issues with Shared File Room, we do not support having two users log into the same WM profile (using the same login ID) at the same time via Citrix or Terminal Services.

ISA (Internet Security and Acceleration) Server Connection Settings

Synchronization failures occurring on large binders may be caused by the number of connections the ISA server allows per client. It may be necessary to remove the per client connection limit in order to successfully synchronize these binders. In the *Connection Limit* dialog, the "Limit the number of connections" setting should be unchecked.

Microsoft Windows Vista, Windows 7, Windows 8, Windows 8.1, Server 2008, Server 2008 R2, Server 2012, and Windows Server 2012 R2 Support

The Microsoft Windows Vista , Windows 7, Windows 8, and Windows 8.1 Operating Systems are supported. Only Enterprise, Business, and Ultimate Editions are supported for use with ProSystem *fx* Engagement.

These Operating Systems add new security features, including User Account Control (UAC) and BitLocker. Engagement will install and function with the UAC feature turned on. The installation process requires a system administrator, which is also required with all other operating systems currently supported by Engagement. BitLocker encryption is supported when used with Engagement.

Notes:

- BitLocker is only available on Vista, Windows 7 Enterprise and Ultimate Editions, Windows 8 Pro and Enterprise Editions, Windows 8.1, Server 2008 and Server 2012.
- It is not recommended that ProSystem *fx* Engagement be installed to the x:\Program File directory due to the restricted rights access to that location imposed by Windows Vista. Windows Users with restricted rights may experience problems using Engagement if the application is installed to the Program Files directory.
- User Account Control (UAC) is also included with Windows Server 2008, Windows Server 2012, and Windows Server 2012 R2.
- Windows Server 2008 R2, Windows Server 2012, and Windows Server 2012 R2 are supported.

ProSystem *fx* Engagement Database Backup & Restore Utility

For instructions on using the ProSystem *fx* Engagement Database Backup & Restore Utility, refer to *Appendix E: Database Backup and Restore* on page 71.

Third Party Backup and Restore Processes

If you are currently using a third party backup software to back up the Engagement databases, you will not be able to restore a single binder to the central file room. The ProSystem *fx* Engagement Database Backup & Restore Utility allows the restoration of a single binder or an entire central file room. For additional information, refer to *Appendix E: Database Backup and Restore* on page 71.

If you are using the differential backup option in the ProSystem *fx* Engagement Database Backup & Restore Utility, when full backups are performed on a database using a third-party backup software, the differential backup will be impacted. Any databases that were backed up using the third-party software will then also be backed up in full as part of the differential backup, which will increase the size of the differential backup file.

If you choose to use a third party backup and restore process, there may be some additional requirements that need to be considered. Refer to the "Frequently Asked Questions" section on the Support Web site or call Technical Support at 1-800-739-9998.

Name Resolution - Connecting to Engagement

ProSystem *fx* Engagement uses SQL as the database engine. SQL connects from the desktops to the server using the TCP/IP protocol. Engagement is utilizing SQL browsing to enable the client to see the server or to enable one server to see another. When you first launch ProSystem *fx* Engagement Workpaper Management you are asked to select an office server to connect to. A list of servers is made available to you to choose from. However, in some cases, depending on the network type and setup you may not see the server that you are looking for. This can also happen when you are trying to connect to another Workpaper Management install when in field mode.

The primary cause of this is the network not being able to resolve the NetBIOS name of the workstations and servers across networks. These networks include Virtual LANs, Subnets or WANs.

The four methods listed below may be used to alleviate this issue:

- Setting up a DNS server (preferred)
- Creating and using HOSTS and LMHOSTS files
- Setting up a WINS server
- Using the Pfx Configuration Utility

For further details on the methods listed above, obtain the Microsoft documentation necessary, or contact your system administrator for assistance.

Microsoft Word and Gridlines with OLE Links

Microsoft has confirmed there is an issue with MS Word when printing the gridlines in Word (*.docx) for a linked Excel Object. The gridlines do not print properly with subsequent printing. In order to work around this issue, you can open the Excel file and go to the Page Layout tab. In the Sheet Options group, uncheck the View option for Gridlines. Alternatively, if the file is saved in the .doc file format, the issue will not present itself. For more information, please refer to http://support.microsoft.com/kb/2616546.

Support

If you need more information or further assistance with any of the items above, please contact Technical Support at 1-800-739-9998.

Appendix E

DATABASE BACKUP AND RESTORE

Database Backup and Restore

Overview

ProSystem *fx* Engagement utilizes the SQL database engine.

This utility has been created to aid administrators in the backup and restore process for the ProSystem *fx* Engagement CentralAdmin, Trial Balance, Knowledge Coach, and bin databases. Please note that the SQL databases used for Engagement may not be backed up using your standard backup procedures. Because direct access to the databases is required, you must either use this utility to back up the database files, or use a SQL Agent available from your third party backup software vendor.

This utility is designed for backup and restore of the CentralAdmin database, TB databases, KC databases and all bin databases for a single main or secondary office server. This utility will need to be run separately on each Office Server in your ProSystem *fx* Engagement environment.

⚠️ **Important!**

- To restore a single deleted binder to a Central File Room you must use the ProSystem *fx* Engagement Database Backup & Restore Utility. Your third party backup and restore software is unable to restore a single binder that has been deleted from the Central File Room.
- It is imperative that the firm's backup processes be tested to ensure proper backups are taken and that they can be restored. The backup processes should be tested upon the initial setup and periodically to ensure that the backup can be restored in the event of a failure.

📝 **Note**: In the event that a Trial Balance or Knowledge Coach Workpaper needs to be restored, use the option to restore a single binder. The workpapers folder for the binder will also need to be restored.

The Database Backup & Restore Utility is also the best tool to assist you in migrating the ProSystem *fx* Engagement Administrator module from one server to another.

Backup Considerations

This utility will create a single backup file that contains the backup of all office server databases. If you installed ProSystem *fx* Engagement to the default installation path, the database files that will be backed up are located in the following directories: x:\Pfx Engagement\Admin\Data, x:\Pfx Engagement\Knowledge Coach\Data, and x:\Pfx Engagement\TB\Data.

Note: Due to including the TB and KC databases in the backup process, the storage space for the databases and the time to complete the backup have increased. The .bak files created by the backup may be twice the size of those in prior versions of Engagement. The time required to complete the process could also be twice as long.

If a failure occurs while backing up a specific database and the database cannot be backed up, that database will be skipped and this information will be reported in a log file. The log file will be located in the same directory as the BackupRestoreUtil.exe with the default name of FAILED - LogFileForBRMMDDYYYY – HH MM SS. The backup process will continue after such a failure occurs to ensure the remaining databases are properly backed up. If a failure occurs with a specific database during a backup, please contact Engagement Customer Support at 1-800-739-9998 for assistance.

Consider the information in the following sections when performing database backup.

Additional Files to Be Backed Up

To ensure a complete backup, the files in the following folders will need to be backed up separately using your current backup methods. The files stored in these folders are not included in the backup that is generated by the ProSystem *fx* Engagement Database Backup & Restore Utility.

- Workpapers folder
- Admin Packages folder
- Archive folder
- Transition Binder Packages folder

Important! It is imperative that the workpaper backup and the SQL database backup are completed together and that no changes occur to either during the backup.

Back Up the Database Backup File

In addition to backing up the folders listed above with your current backup methods, be sure to also back up the database backup (.bak) file. If you choose to store your backup files on the server where the Admin module is installed, the backup files should be kept on a different drive. In addition, if you are performing differential backups as part of your backup strategy, you should be sure to backup both the differential database backup file as well as the full database backup file that was the base for the differential backup.

Disable Synchronization

We highly recommend you disable admin and binder synchronization before beginning the backup process to ensure that the databases and workpapers contain identical information. During the time of the backup process, synchronization will not be allowed. Users attempting to synchronize during this time will receive an error.

Close ProSystem *fx* Engagement Administrator

To run the Database Backup & Restore Utility, you must first close ProSystem *fx* Engagement Administrator.

Differential Backups

If performing full backups nightly is time consuming, and the files are taking up too much space, then you may optionally choose to perform differential backups. A differential backup is based on the latest full backup of the data, which is also known as the base of the differential or differential base.

A differential backup contains only the data that has changed since the differential base. Typically, differential backups that are taken fairly soon after the base backup are smaller and faster to crease than the full backup. Usually a differential base is used by several successive differential backups.

Over time, as a database is updated, the amount of data that is included in the differential backup increases. This makes the backup slower to create and to restore. Eventually, another full backup must be created to provide a new differential base for another series of differential backups. At restore time, you will need both the full backup file and the latest differential backup file.

Notes:

- When a database reaches 2.5 GB in size, a new database is created. If a new database is created after the full backup, then a full backup of this database will be completed as part of the differential database backup until the next full backup of all databases using the utility.
- When a full backup is performed on a database using a third party backup software after the full backup has been completed using the ProSystem *fx* Engagement Database Backup & Restore Utility, then a full backup of this database will also be completed as part of the utility's differential backup until the next full backup of all databases using the utility.

Running the Backup Utility (User Interface)

To run the Backup Utility in the user interface, do the following:

1. Launch the Database Backup & Restore Wizard by doing one of the following:
   - Select **Start/Programs/ProSystem *fx* Engagement/Utilities/ProSystem *fx* Engagement Database Backup & Restore Utility**.
   - In Windows Explorer, browse to the x:\Pfx Engagement\Admin\Utilities\Backup Restore folder and double-click **BackupRestoreUtil.exe**.

2. Click **Next** on the Welcome dialog.
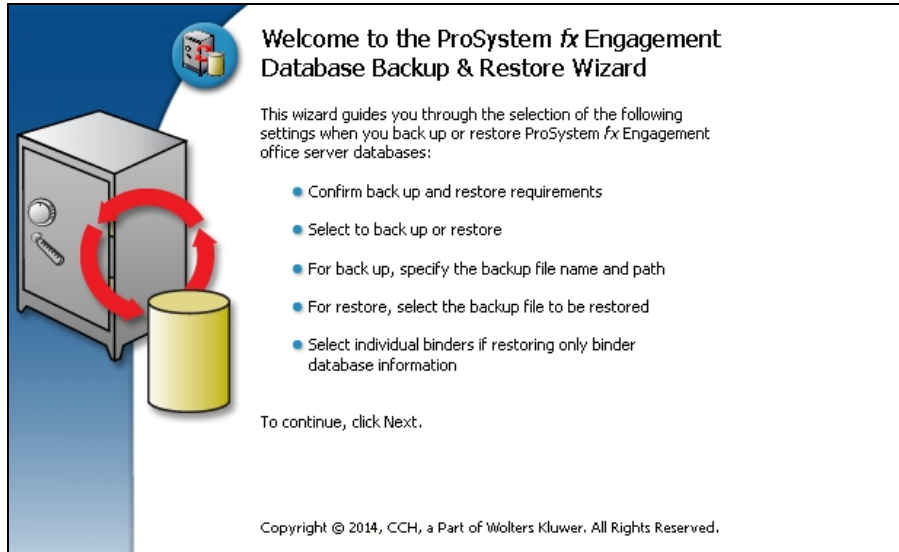
3. After you have read and understand the information regarding backup, check the box and click **Next**.
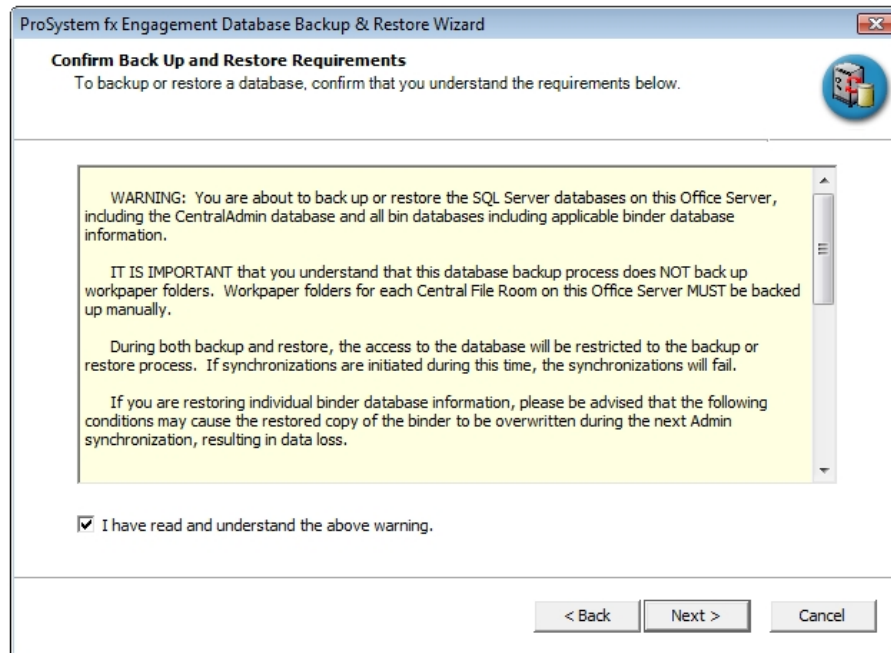
4. Select **Backup**.

> Note: If you have already completed a full backup and now want to perform a differential backup, select **Backup** and check the **Differential** box.


5. Provide the location where the files are to be stored by clicking **Browse**. The selected location must be on a local drive/directory or a mapped network drive. If you select a mapped network drive, the user account under which the SQL Server service is running must have credentials to write to that mapped network location.
6. Click **Next**.

7. Review the backup settings and click **Back Up** to begin the backup process.
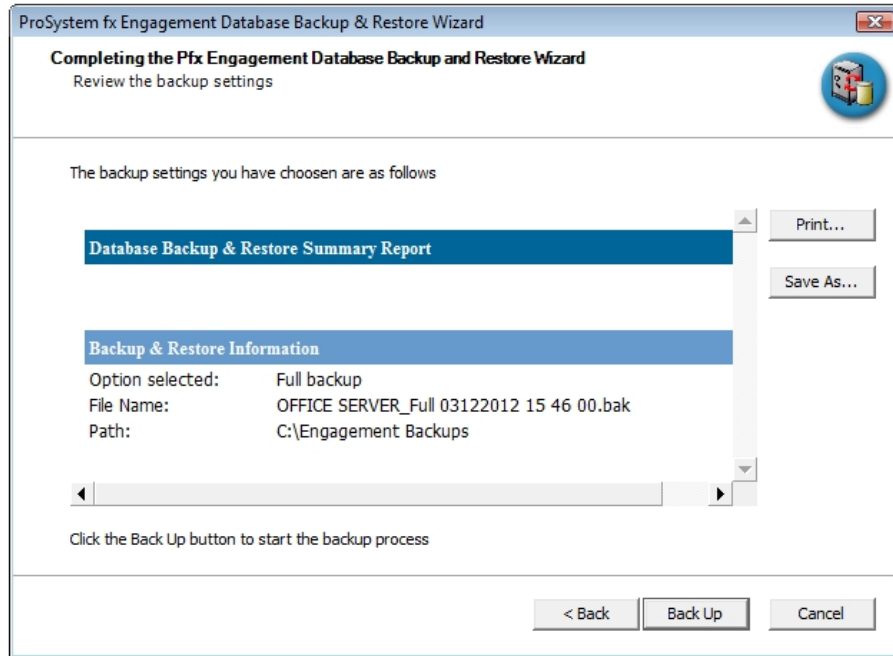
A progress indicator page will display to show you the progress of the backup.
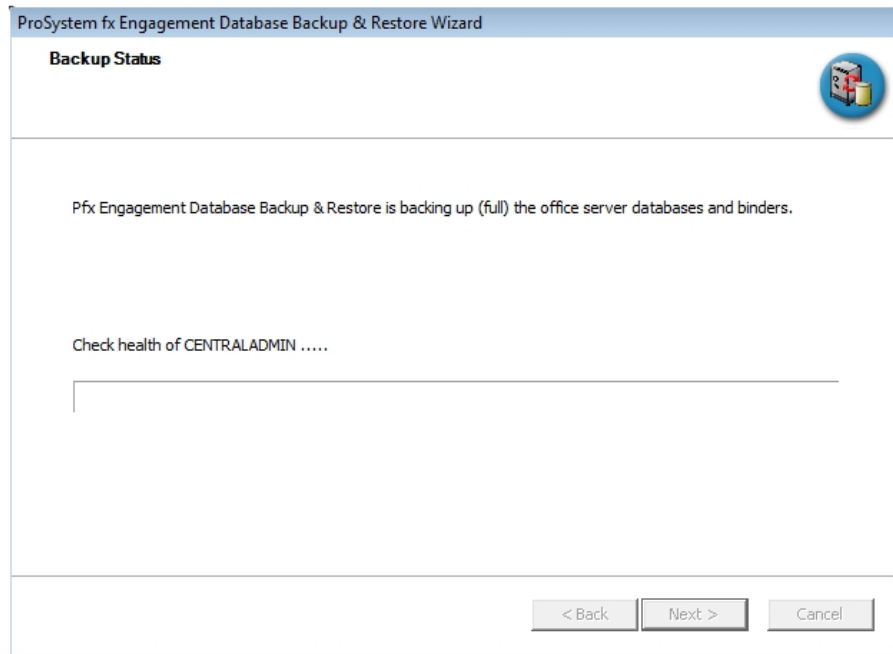
Once complete, the *Completing the Pfx Engagement Database Backup and Restore Wizard* page will display the number of databases that were successfully backed up and the number that failed to be backed up.

8. Click **View Log** to view a log detailing the backup information for each database.

9. Click **Finish** to exit the wizard.
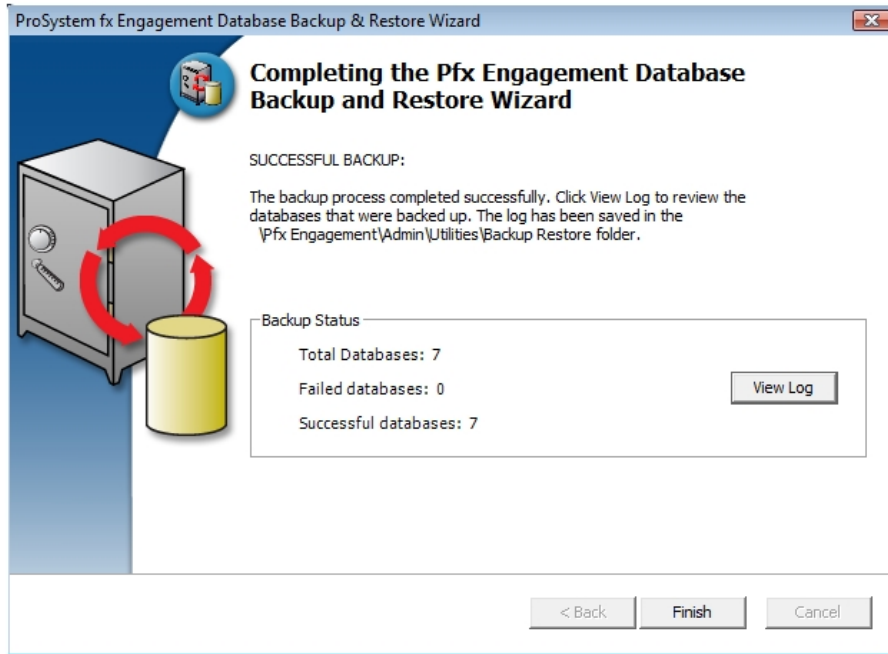
 Notes:

- ◆ At the end of the process, only one .bak file will be created. This single file will contain the backups for all of the Office Server databases. The default name for the backup file is Office Server Name_Full MMDDYYYY HH MM SS.bak.
- ◆ If your backup strategy includes differential backups, remember that you will need two backup files to restore the data: the differential backup file you want to restore and the full backup file that was the base for the differential backup.
- ◆ If a new bin is created as part of the bin maintenance in Engagement, after the latest full backup, when the differential backup is performed, the new database will be backed up in full as part of that backup.
- ◆ If one or more databases are backed in full using a third-party tool after the latest full backup completed with the utility, then those databases will be backed up in full as part of the differential backup performed by the utility.

Running the Backup Utility (Task Scheduler)

The following instructions assume you have agreed to the warning in step 3 above in the User Interface section.

📝 **Note**: The following instructions are for Server 2008. Other supported operating systems have similar task scheduling options.

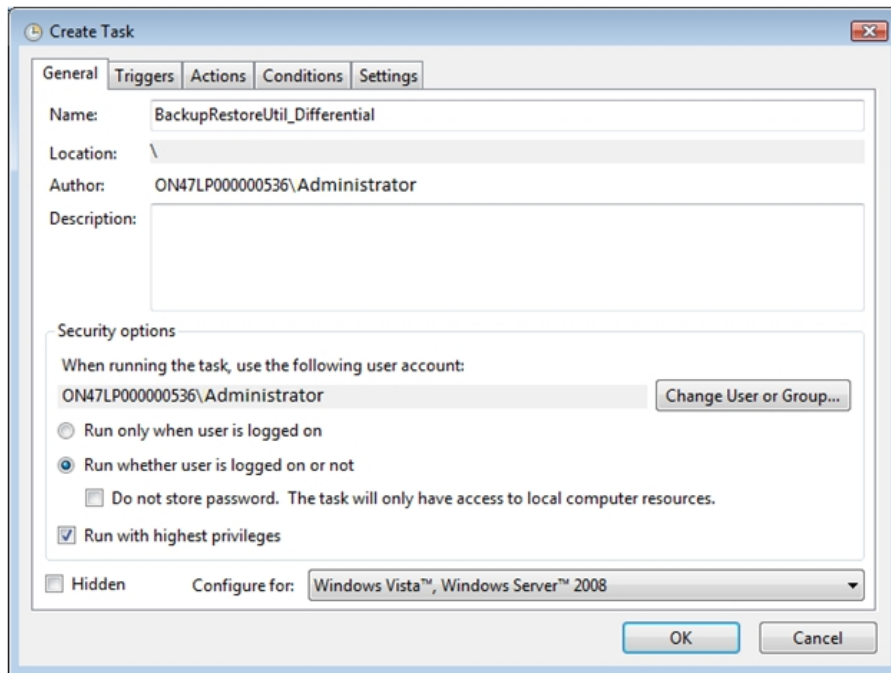To run the Backup Utility using Task Scheduler, do the following:

1. Open Task Scheduler.
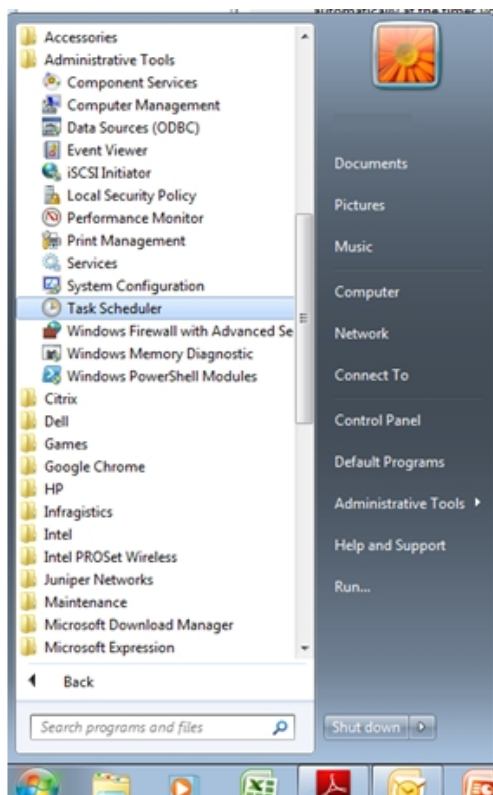
2. Select **Create Task**.
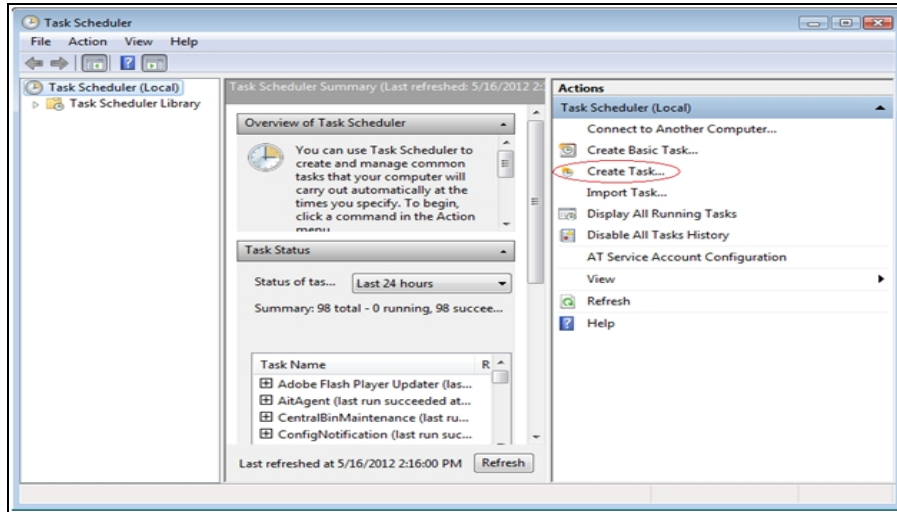
Note: If you will be running differential backups, you should set up two scheduled tasks: one for the full backup, and another for the differential backup. When setting up the task for the differential backup, steps 5 and 7 will differ slightly.

3. Create a task named BackupRestoreUtil on the *General* tab of the Create Task Wizard screen.
   a. Verify that the task is set to run as an Administrator of the server.
   b. Choose Run whether user is logged on or not.

c. Choose Run with highest privileges.
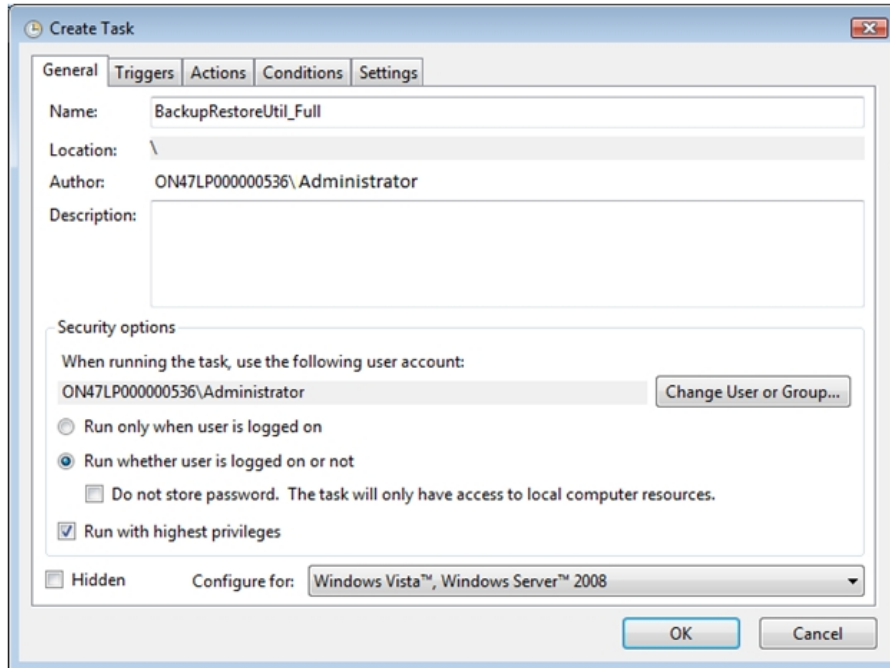
4. Go to the *Triggers* tab and click **New**.
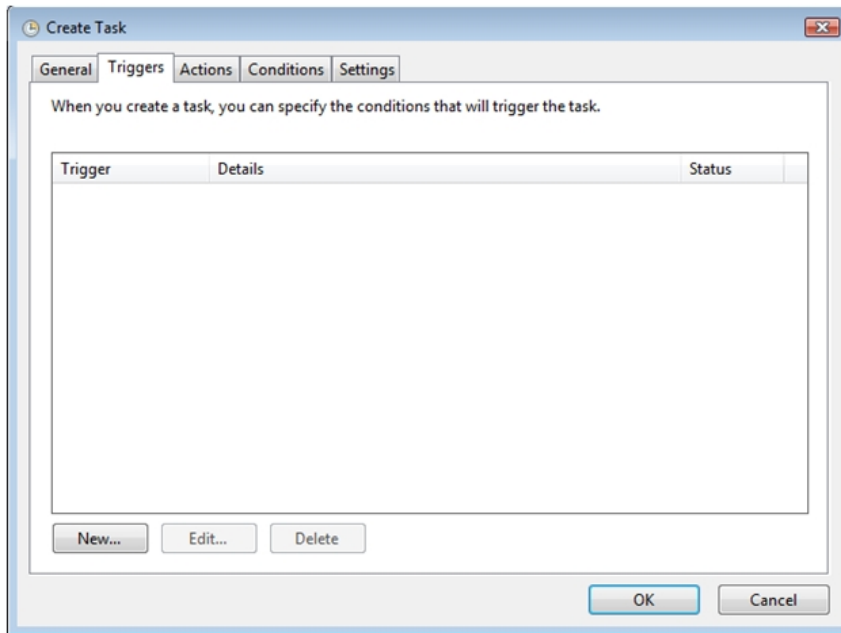
5. On the *New Trigger* screen, set the desired schedule for the backup task to run and click **OK**.

📒 **Note**: If you will be running differential backups, the settings for the trigger should be a little different for the full backup task and the differential backup task.

6. Select the *Actions* tab and click **New**.

7. On the *New Action* screen, verify the Action is set to **Start a program**.
   a. Click **Browse** and navigate to x:\Pfx Engagement\ADMIN\Utilities\Backup Restore\BackupRestoreUtil.exe (where x represents the drive where the program is installed).

      🗒️ **Notes**:

      ◆ If the save location for the backup files is to be on a different machine, the path to the share must be a UNC path.
      ◆ Also, the SQL Server (PROFXENGAGEMENT) service must be set to run as an account that has full control rights to the shared location.

   b. In the *Add arguments (optional)* field, add the /f switch and the path information for the desired location to save the backup files. The path should include quotation marks if there are any spaces in the name.
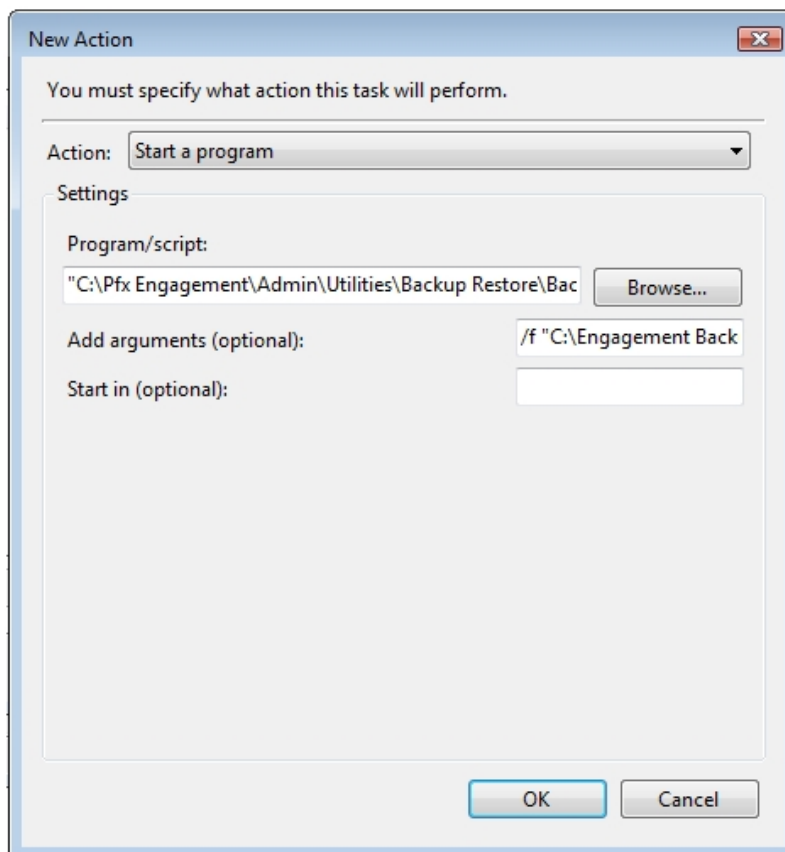
- The command line parameter /f must be entered in lowercase. Using an uppercase F will result in an incomplete backup.
- If you are using the Task Scheduler for a **differential** backup, you should add the /d switch and path information for the desired location to save the backup files in the *Add arguments (optional)* field instead of /f.
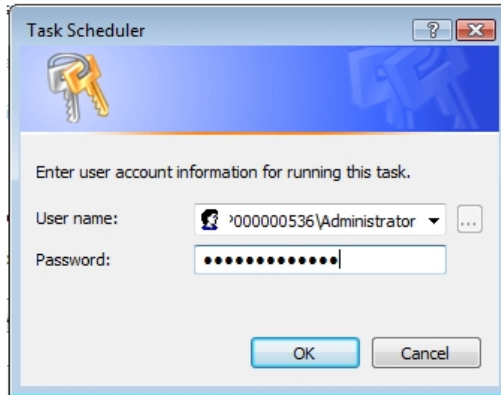- The path should include quotation marks (" ") if there are any spaces in the name.
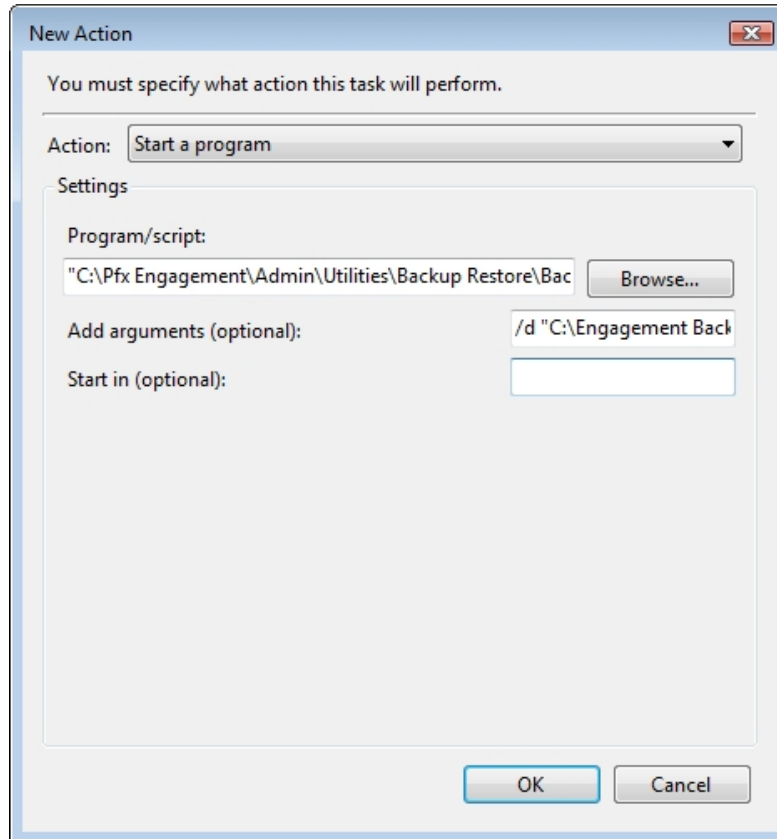
c. Click **OK** to save the information.

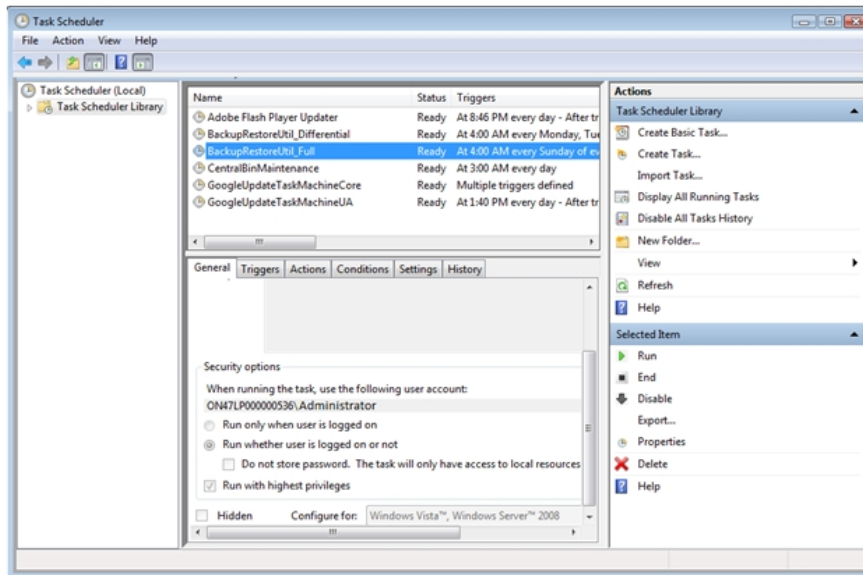8. Verify that the settings on the *Conditions* and *Settings* tabs are set to meet your needs.
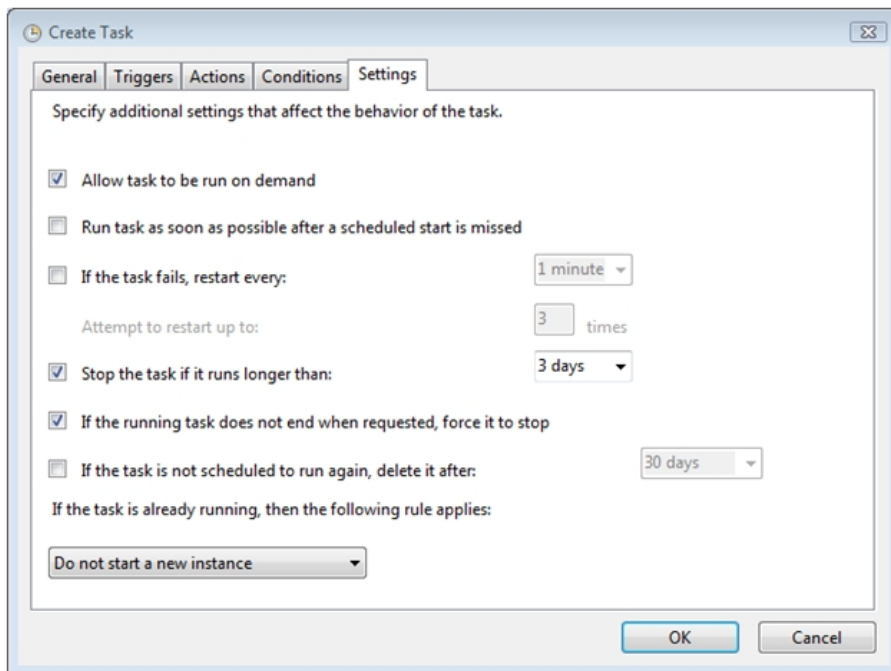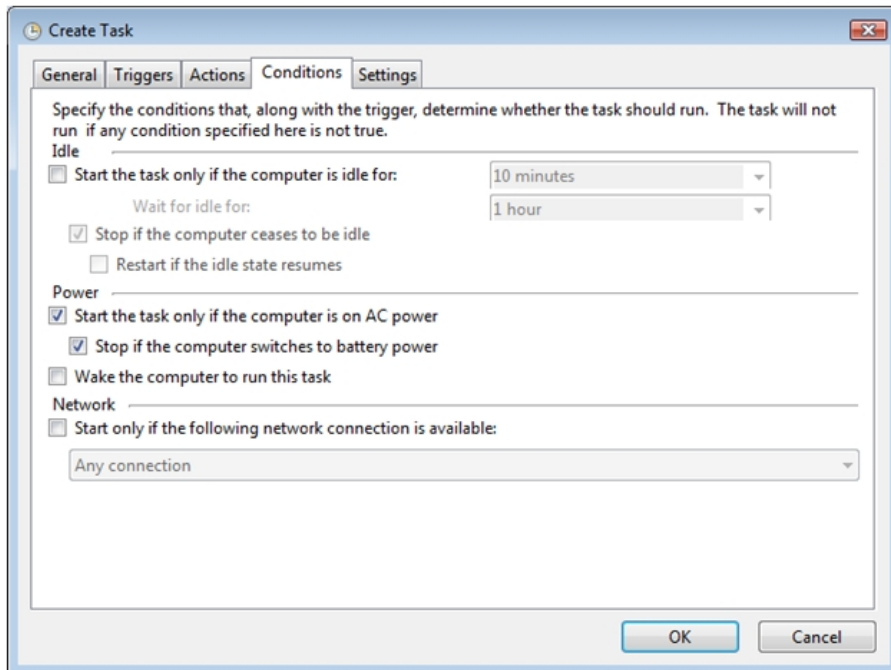
9. Click **OK** to save the information.

10. Provide the credentials for the account that the scheduled task is to run as.

11. The BackupRestoreUtil will appear listed in the Task Scheduler Library.

Restore Considerations

Restore is a critical part of the disaster recovery process. Due to the nature of the application and the fact that the application document control relies on the database to ensure workpaper integrity, very specific restore procedures must be followed.

Notes:

- While the restore process can be performed on your own, we strongly recommend you contact Engagement Customer Support at 1-800-739-9998 before attempting to restore any data.
- When backing up to a network location, a user with rights to both the local computer and the network location must start the SQL instance.

If a failure occurs while restoring a specific database or binder, that database/binder will be skipped and this information will be reported in a log file. The log file will be located in the same directory as the BackupRestoreUtil.exe with the default name of LogFileForBRMMDDYYYY – HH MM SS.txt.

The restore process will continue after such a failure occurs to ensure the remaining databases or binders are properly restored. Should a failure occur with a specific database or binder during the restore process, please contact Engagement Customer Support at 1-800-739-9998 for assistance.

The following should also be considered when restoring databases or binders:

Additional Files to Be Restored

This utility will restore the office server bin databases and the CentralAdmin database contained within the selected backup file. If selected, the utility can restore individual binder database information only. It will NOT restore the central file room workpapers or other files that were backed up separately. Those files must be restored separately.

To ensure a complete restore, the files in the following folders will need to be restored separately using your current restore methods. The files stored in these folders are not included in the backup that is generated by the ProSystem *fx* Engagement Database Backup & Restore Utility.

- Workpapers folder
- Admin Packages folder
- Archive folder
- Transition Binder Packages folder

⚠️ **Important!** It is imperative that the workpapers and SQL databases are restored and completed together and that no changes occur to either during the restore. When restoring individual binder database information, do not restore the workpapers for all binders in the database. Restore only the workpapers for the individual binder database information being restored.

Disable Synchronization

We highly recommend you disable admin and binder synchronization before beginning the restore process. During the time of the restore process, synchronization will not be allowed. Users attempting to synchronize during this time will receive an error.

Review Administrative Changes Since Last Backup

When restoring from backup, be aware that administrative changes may have occurred since this backup took place. If any of the following changes occurred since this backup, please contact Engagement Customer Support at 1-800-739-9998 for assistance.

- Create or delete central file room
- Add, remove or reassign licenses
- Change workpaper location
- Workpapers checked in/out
- Add or remove staff members
- New binders synchronized to central file rooms

Close ProSystem *fx* Engagement Administrator

To run the Database Backup & Restore Utility, you must first close ProSystem *fx* Engagement Administrator.
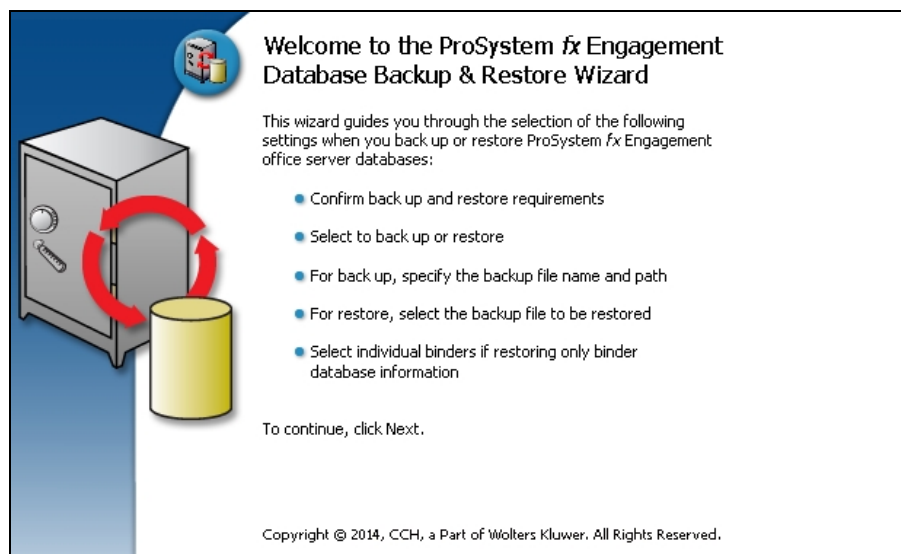
Restoring from a Differential Backup File

If you have chosen to perform differential backups as part of your backup strategy, you will need two backup files at restore time: the differential backup file that you want to restore and the full backup file that was the base for the selected differential backup (or the differential base).

# Running the Restore Utility (Restore All Office Server Databases)

To restore all office server databases, do the following:

1. Launch the Database Backup & Restore Wizard by doing one of the following:
   - Select **Start/Programs/ProSystem *fx* Engagement/ProSystem *fx* Engagement Database Backup & Restore Utility**.
   - In Windows Explorer, browse to the x:\Pfx Engagement\Admin\Utilities\Backup Restore folder and double-click **BackupRestoreUtil.exe**.
2. Click **Next** on the Welcome page.

Welcome to the ProSystem *fx* Engagement
Database Backup & Restore Wizard

This wizard guides you through the selection of the following settings when you back up or restore ProSystem *fx* Engagement office server databases:

- Confirm back up and restore requirements
- Select to back up or restore
- For back up, specify the backup file name and path
- For restore, select the backup file to be restored
- Select individual binders if restoring only binder database information

To continue, click Next.

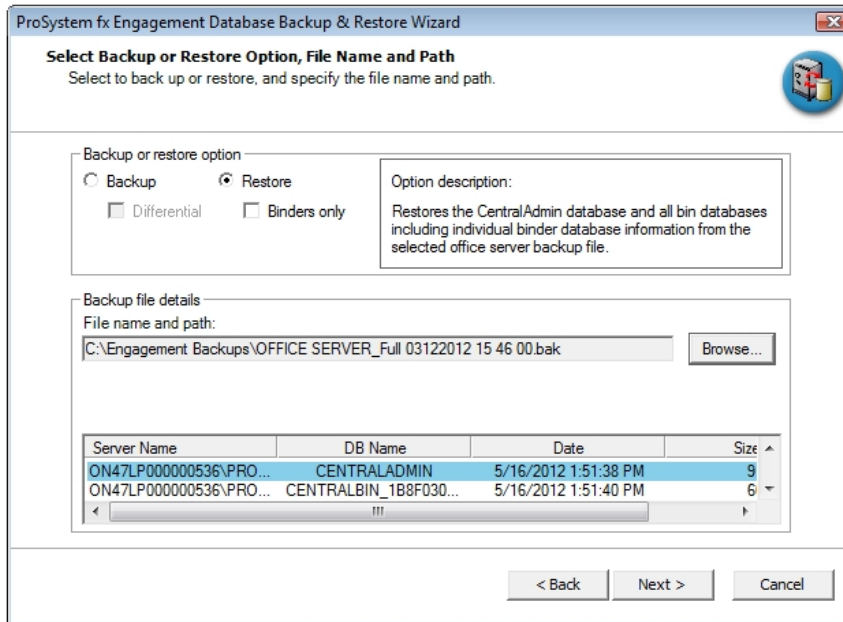Copyright © 2014, CCH, a Part of Wolters Kluwer. All Rights Reserved.

3. After you have read and understand the information regarding restore, check the box and click **Next**.
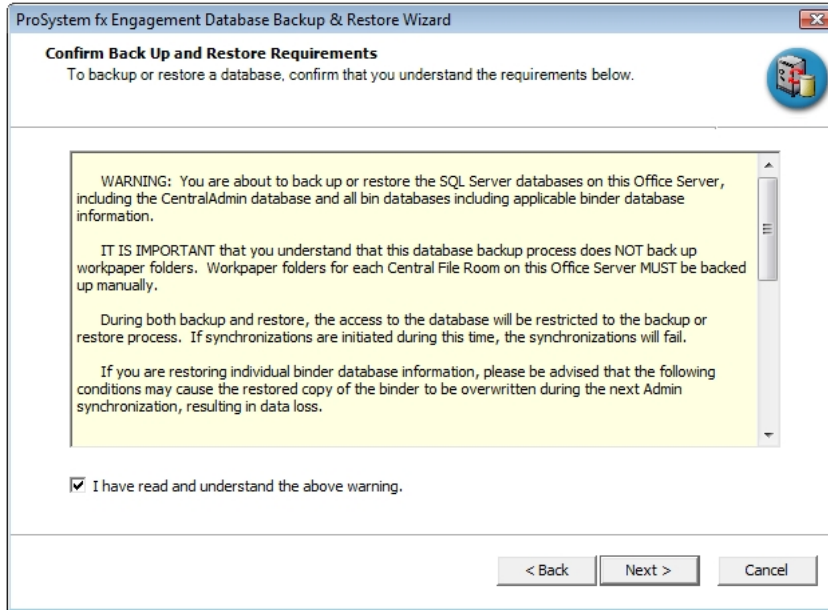
4. Select **Restore**. Browse for the backup file [.bak] to be restored. The Office Server databases within the selected backup file will display in the list.

Note: If the backup file selected is a differential backup, then you will also have to select the full backup file that was the base for the selected differential backup. A second text field and *Browse* button will be displayed allowing you to browse for the full backup file [.bak].
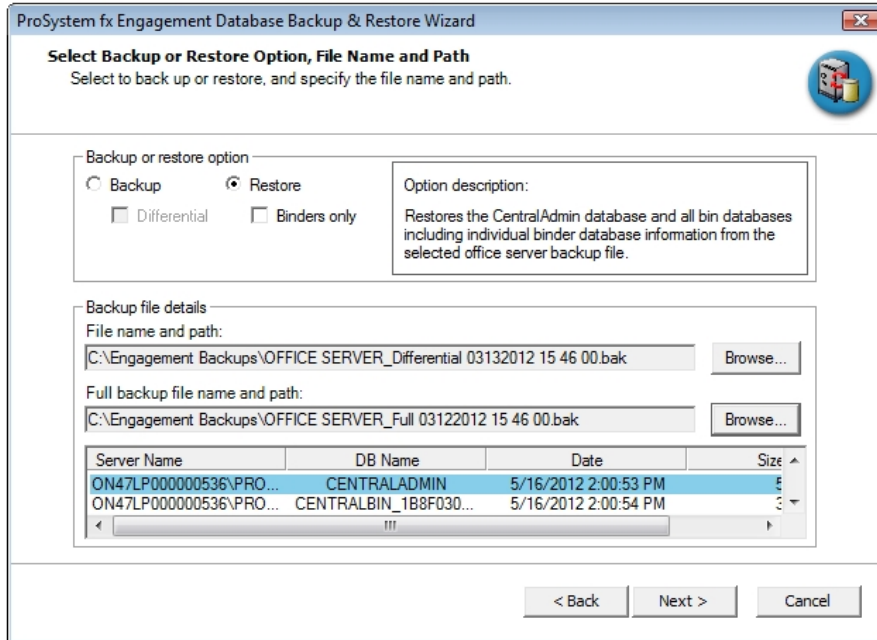
5. Click **Next**.
6. Review the restore settings and click **Restore**.
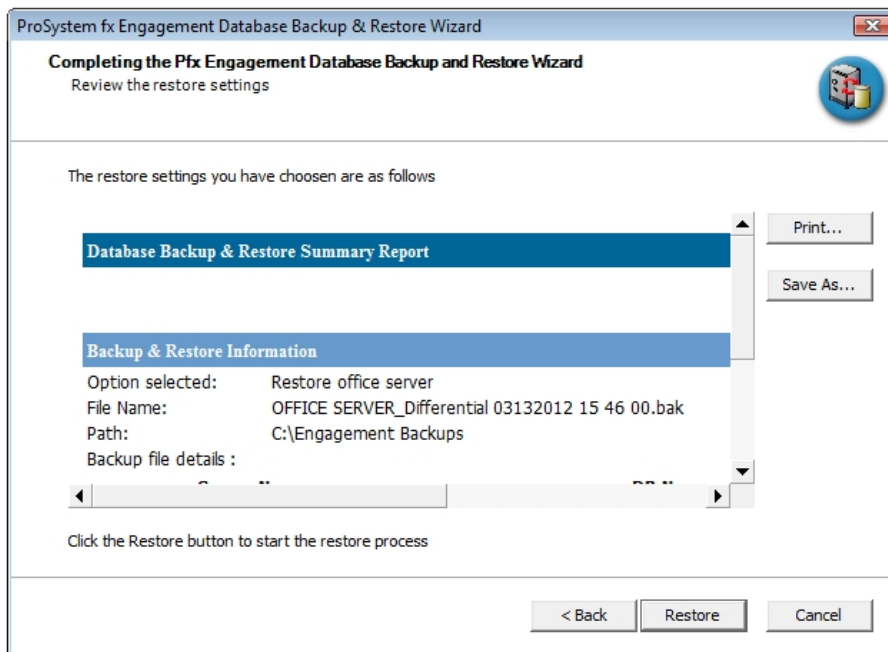
A progress indicator page displays the progress of the restore.
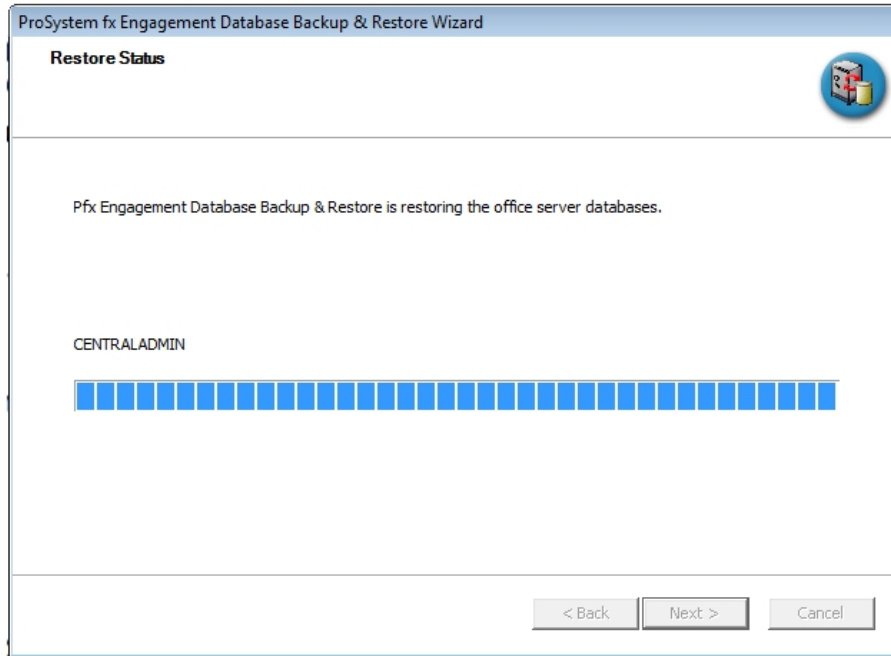
Once complete, the Database Backup & Restore Wizard Complete page will display the number of databases that were successfully restored and the number that failed to be restored.

7. Click **View Log** to view a log detailing the restore information for each database.

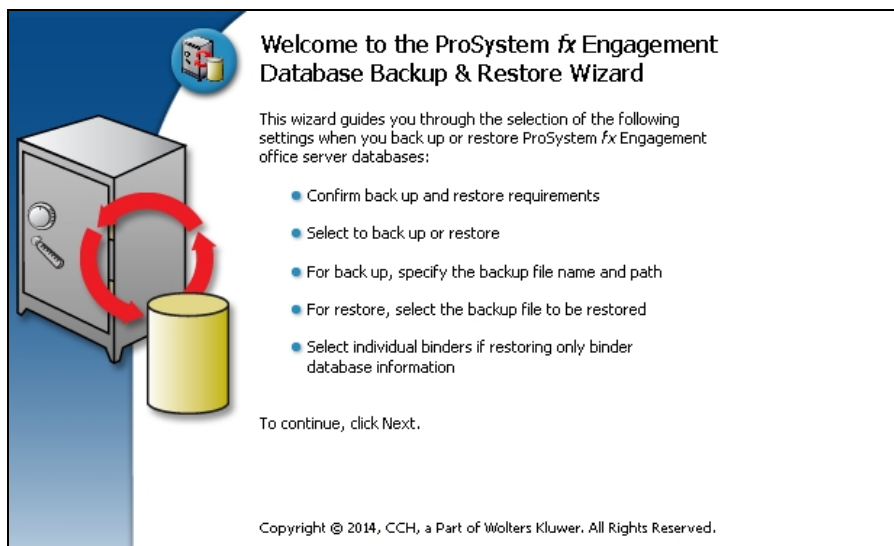8. Click **Finish** to exit the wizard.
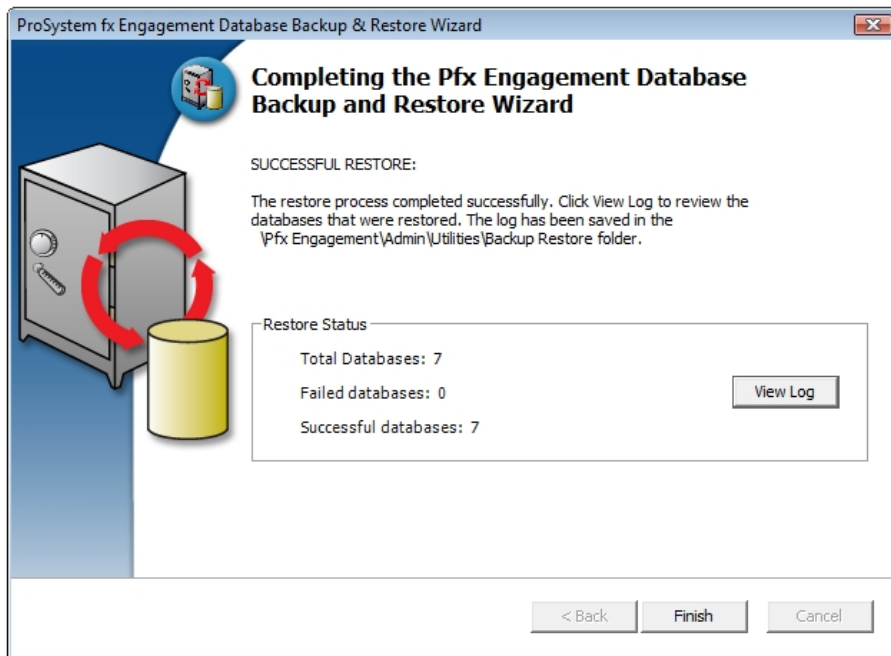
Running the Restore Utility (Restore Individual Binder Database Information)
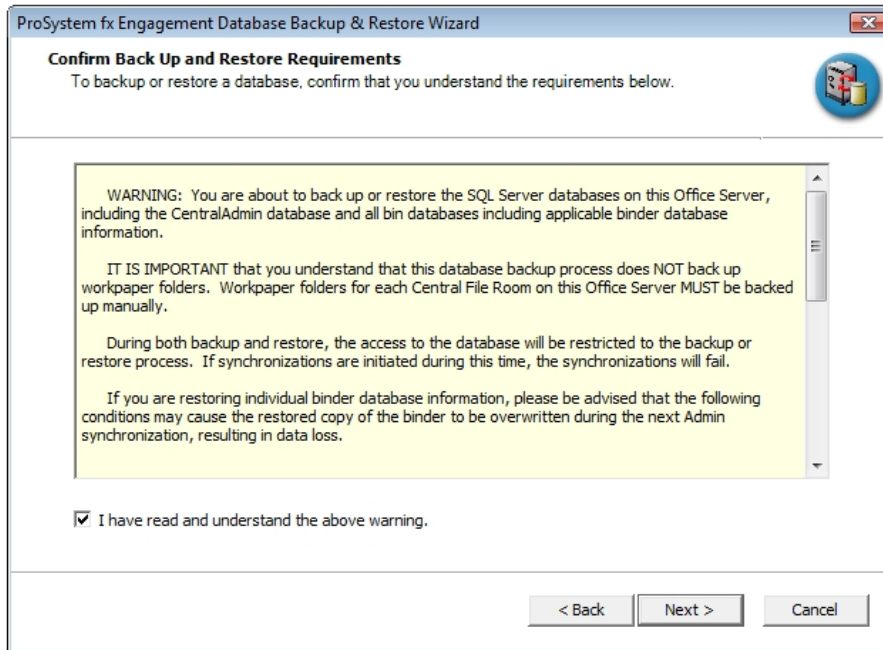
To restore individual binder database information, do the following:

Note: Due to the number of databases now included with Engagement, the restoration process for individual binders can take a long time to complete.

1. Launch the Database Backup & Restore Wizard by doing one of the following:
   - Select **Start/Programs/ProSystem _fx_ Engagement/ProSystem _fx_ Engagement Database Backup & Restore Utility**.
   - In Windows Explorer, browse to the x:\Pfx Engagement\Admin\Utilities\Backup Restore folder and double-click **BackupRestoreUtil.exe**.
2. Click **Next** on the Welcome page.

Welcome to the ProSystem _fx_ Engagement Database Backup & Restore Wizard

This wizard guides you through the selection of the following settings when you back up or restore ProSystem _fx_ Engagement office server databases:

- Confirm back up and restore requirements
- Select to back up or restore
- For back up, specify the backup file name and path
- For restore, select the backup file to be restored
- Select individual binders if restoring only binder database information

To continue, click Next.

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3. After you have read and understand the information regarding restore, check the box and click **Next**.


4. Select **Restore** and check the **Binders only** box.
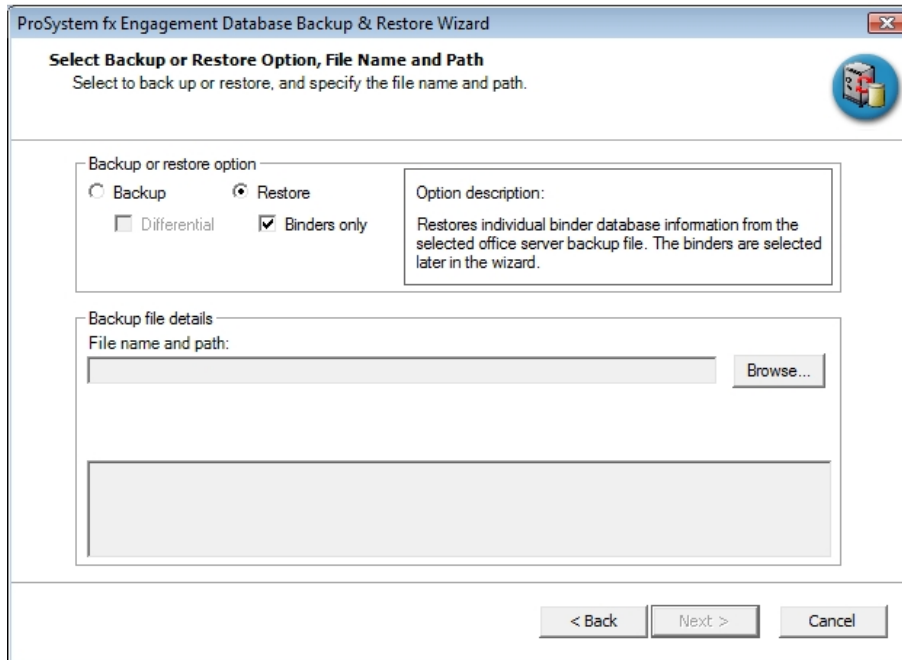
5. Browse for the backup file [.bak] from which to restore the binder database information. The Office Server databases within the selected backup file will display in the list.

   Note: If the backup file selected is a differential backup, then you will also have to select the full backup file that was the base for the selected differential backup. A second text field and *Browse* button will be displayed allowing you to browse for the full backup file [.bak].

6. Click **Next**.

7. Highlight the individual binder to be restored. To select multiple binders to restore, use the Ctrl or Shift key while highlighting the binders, or click the **Select All** button.
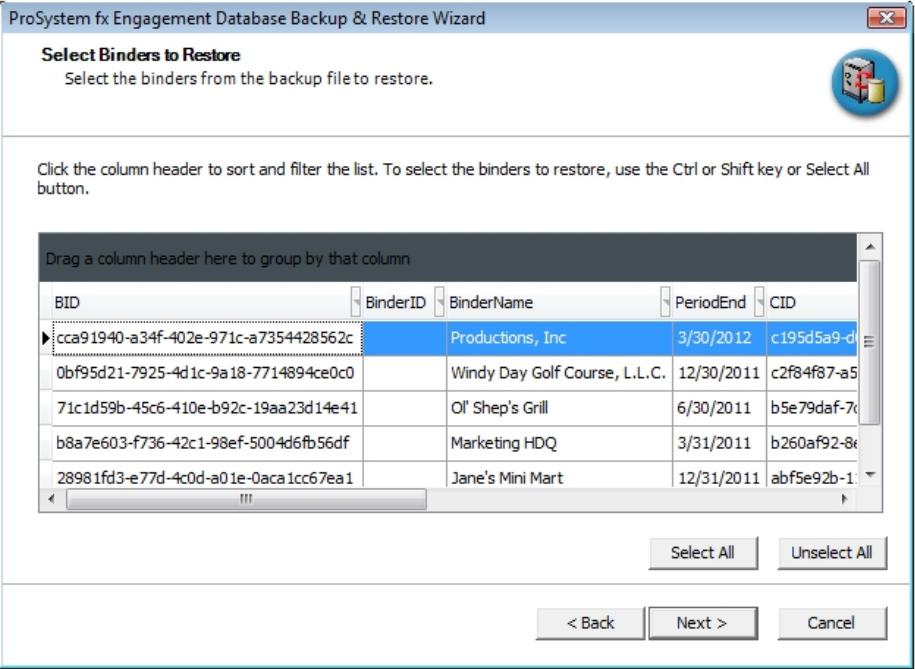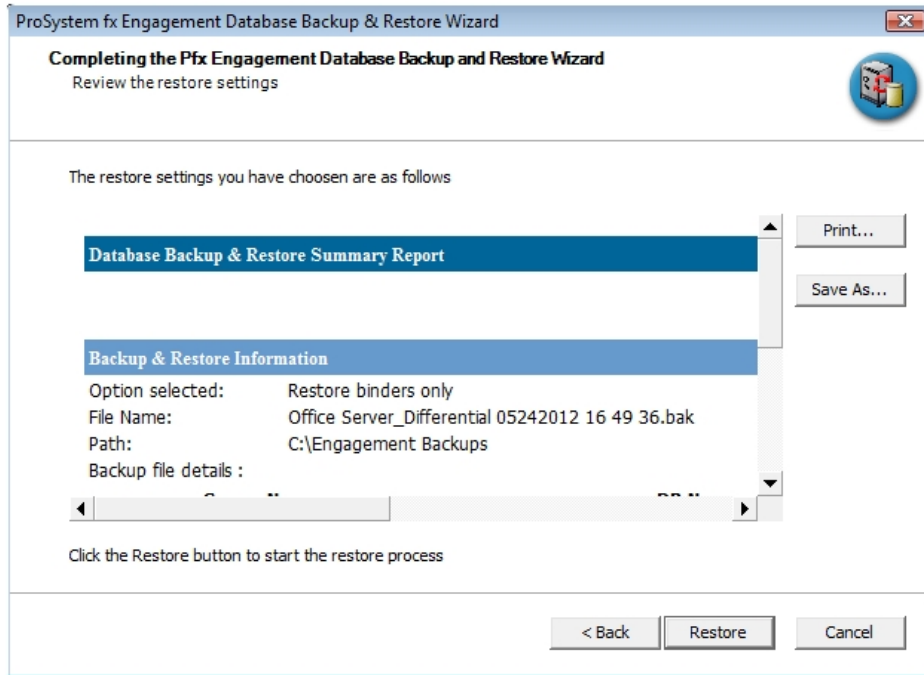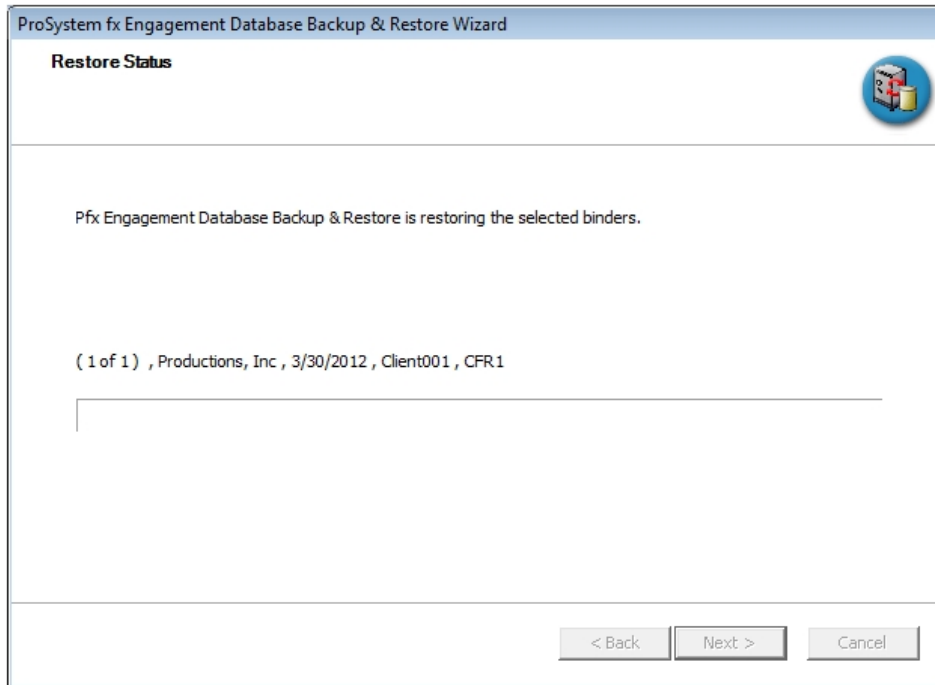
8. Click **Next**.

9. Review the restore settings and click **Restore**.

A progress indicator page displays the progress of the restore.

Once complete, the *Completing the Pfx Engagement Database Backup and Restore Wizard* page will display the number of binders where the database information was successfully restored and the number that failed to be restored.

10. Click **View Log** to view a log detailing the restore information for each binder.

11. Click **Finish** to exit the wizard.