Ivanti Patch for Windows® Servers

Installation and Setup Guide



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Date	Version	Description
June 2009	Shavlik NetChk Protect 7.0	Initial release of this document.
August 2009	Shavlik NetChk Protect 7.1	Add asset inventory info, remove support for SQL 2000 as back-end database.
November 2009	Shavlik NetChk Protect 7.2	Add Windows 7 info to system requirements section, update Setup Wizard screen shot.
April 2010	Shavlik NetChk Protect 7.5	Update all areas for version 7.5.
September 2010	Shavlik NetChk Protect 7.6	Update product branding, remove support for Windows NT 4.0, eliminate need to create STExec.
March 2011	Shavlik NetChk Protect 7.8	New system reqs (SQL Server 2008 R2 Express, .NET 4.0, VMware, Win XP SP3 for agents), db maint ref, remove defn import.
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Welcome to Ivanti Patch for Windows® Servers

Welcome to Ivanti Patch for Windows® Servers, a unified IT management platform used for managing and protecting Microsoft-based machines. Ivanti Patch for Windows® Servers provides you with one centralized and common interface that you can use to perform several essential IT management functions.

Patch Management

Ivanti Patch for Windows® Servers' industry-leading patch management function provides the ability to scan all Windows-based machines and VMware ESXi hypervisors in your network and assess the current patch status of those machines. After a scan is performed you can generate reports that provide additional details about the patch "health" of each machine. Ivanti Patch for Windows® Servers can then be used to easily and automatically bring each machine up to date. You simply instruct the program to download and deploy the desired patches to the machines of your choosing. You can even dictate when the deployment will occur and if and when each machine should be restarted. In addition, Ivanti Patch for Windows® Servers can provide e-mail alerts that notify you when patches are available and it can e-mail the results of scans and other information you wish to share with selected users.

The patch management function can be performed with or without agents. This unique blending of agentless and agent-based technologies gives you maximum flexibility while minimizing management overhead.

Asset Inventory

The asset inventory function enables you to track your software and hardware assets. It works by performing scans to detect and categorize the software and hardware contained on your physical and online virtual machines. Detailed information about your software and hardware assets is available immediately following a scan. You also have the ability to create reports that can be used to track your asset inventory over time.

Like the patch management function, the asset inventory function can be performed with or without agents.

Power Management

Note: Power management is only available with Ivanti Patch for Windows® Servers Advanced or as an add-on to Ivanti Patch for Windows® Servers Standard. If you do not have access to this function, contact your sales representative to upgrade your Ivanti Patch for Windows® Servers license.

The power management function enables you to control the power state of the machines in your organization. The primary reasons for using power management are to:

- Prepare your machines for maintenance tasks
- Reduce noise and power consumption
- Reduce operating costs
- Prolong battery life

You can shut down, restart, or awaken machines either immediately or on a scheduled basis. When you perform a scheduled restart you also have the ability to specify what power state to put the machines in: fully powered on, in sleep mode, or in hibernate mode. The power management function can be performed with or without agents.

ITScripts

Note: Portions of the ITScripts function are only available with Ivanti Patch for Windows® Servers Advanced or as an add-on to Ivanti Patch for Windows® Servers Standard. If you do not have full access to this function, contact your sales representative to upgrade your Ivanti Patch for Windows® Servers license.

The ITScripts function enables you to execute PowerShell scripts against the machines and machine groups you have already defined in Ivanti Patch for Windows® Servers. With this scripting feature you can:

- Access all pre-defined scripts provided by Ivanti
- Import custom scripts
- Share your custom scripts with the ITScripts community
- Execute scripts immediately
- Schedule script execution to run at some time in the future
- Execute scripts with or without the Windows PowerShell remoting features
- View the results of all scripts that have been initiated from Ivanti Patch for Windows® Servers

Editions of the Program

Ivanti Patch for Windows® Servers is available within two different product bundles.

- Ivanti Patch for Windows® Servers Standard: This is the basic product offering that includes patch management, asset inventory, and a limited number of scripts for IT management. You can purchase additional keys for separately licensed add-on features.
- Ivanti Patch for Windows® Servers Advanced: This is the full-featured product offering that includes patch management, asset inventory, power management and full ITScript capabilities.

There are several different editions of Ivanti Patch for Windows® Servers. Each edition provides a different level of capabilities. To determine which edition you are running, select **Help > About Ivanti Patch for Windows® Servers** to view program details.

This section provides a synopsis of each available edition.

Ivanti Patch for Windows® Servers, Full Edition

This is the full edition of the program. With Ivanti Patch for Windows® Servers you can scan for missing patches, deploy missing patches, and view the results of these actions. You also have access to all the other features provided by your program license (Ivanti Patch for Windows® Servers Standard or Ivanti Patch for Windows® Servers Advanced).

Ivanti Patch for Windows® Servers, Trial Edition

Ivanti Patch for Windows® Servers is available on a trial basis. This enables you to test all the capabilities of Ivanti Patch for Windows® Servers, but only for 60 days. You are also limited to 50 license seats. When the trial license expires the program will stop refreshing it XML data files and many of the program features will no longer be available.

Ivanti Patch for Windows® Servers, Government Edition

When you purchase the Government Edition of Ivanti Patch for Windows® Servers you will receive a license key that enables you to use the Information Assurance Vulnerability Alert (IAVA) Reporter. The IAVA-specific files are automatically installed when Ivanti Patch for Windows® Servers Standard or Ivanti Patch for Windows® Servers Advanced is installed.

System Requirements

Console

Restrictions:

- A NTFS file system is required on the console machine
- If you install the console on a domain controller that uses LDAP certificate authentication, you may need to configure the server to avoid conflict issues between the SSL certificate and the Ivanti Patch for Windows® Servers program certificate. There is no easy way to configure this on a Windows Server 2003-based domain controller and this combination is not recommended for use as a console.
- If you install the console on two or more machines that share a database, all of the console machines must have unique security identifiers (SIDs) in order to prevent user credential problems. Machines are likely to have the same SIDs if you make a copy of a virtual machine or if you ghost a machine.

Processor:

- Minimum: 2 processor cores 2 GHz or faster
- Recommended: 4 processor cores 2 GHz or faster (for 250 - 1000 seat license)
- High performance: 8 processor cores 2 GHz or faster (for 1000+ seat license)

Memory:

- Minimum: 2 GB of RAM
- Recommended: 4 GB of RAM (for 250 – 1000 seat license)
- High performance: 8 GB of RAM (for 1000+ seat license)

Video:

- 1024 x 768 screen resolution or higher (1280 x 1024 recommended)

Disk Space:

- 100 MB for application
- 2 GB minimum, 10 GB or more recommended for patch repository

Operating System (one of the following):

Note: Ivanti Patch for Windows® Servers supports 64-bit versions of the listed operating systems. 32-bit versions are not supported for the console.

- Windows Server 2016 Family, excluding Server Core and Nano Server
- Windows Server 2012 Family R2 Cumulative Update 1 or later, excluding Server Core
- Windows Server 2012 Family, excluding Server Core
- Windows Server 2008 Family R2 SP1 or later, excluding Server Core
- Windows 10 Pro, Enterprise or Education Edition
- Windows 8.1 Cumulative Update 1 or later, excluding Windows RT
- Windows 7 SP1 or later, Professional, Enterprise, or Ultimate Edition

Database:

- Use of a Microsoft SQL Server database [SQL Server 2008 or later]. If you do not have access to a SQL Server database, the option to install either SQL Server 2016 SP1 Express Edition (if it is supported) or SQL Server 2014 Express Edition will be provided during the prerequisite software installation process.
- Size: 1.5 GB

Prerequisite Software:

- Use of Microsoft SQL Server 2008 or later
- Microsoft .NET Framework 4.6.2 or later
- Microsoft Visual C++ Redistributable for Visual Studio 2015
- Windows Management Framework 4.0 (contains Windows PowerShell 4.0, which is required for the ITScripts feature)

  This prerequisite does not apply to Windows 8.1 or later and Windows Server 2012 R2 or later as PowerShell 4.0 is already included with these operating systems.

Windows Account Requirements:

- In order to access the full capabilities of Ivanti Patch for Windows® Servers, you must run under an account with administrator privileges

Configuration Requirements:

- When performing an asset scan of the console machine, Windows Management Instrumentation (WMI) service must be enabled and the protocol allowed to the machine.

Clients (agentless)

Operating Systems (32- and 64-bit version of any of the following):

- Windows XP Professional (can deploy patches to Windows XP Family SP3 or later)
- Windows XP Tablet PC Edition
- Windows XP Embedded
- Windows Server 2003, Enterprise Edition (can deploy patches to W2K3 SP2 or later)
- Windows Server 2003, Standard Edition
- Windows Server 2003, Web Edition
- Windows Server 2003 for Small Business Server
- Windows Server 2003, Datacenter Edition
- Windows Vista, Business Edition
- Windows Vista, Enterprise Edition
- Windows Vista, Ultimate Edition
- Windows 7, Professional Edition
- Windows 7, Enterprise Edition
- Windows 7, Ultimate Edition
- Windows Server 2008, Standard
- Windows Server 2008, Enterprise
- Windows Server 2008, Datacenter
- Windows Server 2008, Standard - Core
- Windows Server 2008, Enterprise - Core
- Windows Server 2008, Datacenter – Core
- Windows Server 2008 R2, Standard
- Windows Server 2008 R2, Enterprise
- Windows Server 2008 R2, Datacenter
- Windows Server 2008 R2, Standard - Core

- Windows Server 2008 R2, Enterprise - Core
- Windows Server 2008 R2, Datacenter – Core
- Windows 8
- Windows 8 Pro
- Windows 8 Enterprise
- Windows 8.1
- Windows 8.1 Enterprise
- Windows Server 2012, Foundation Edition
- Windows Server 2012, Essentials Edition
- Windows Server 2012, Standard Edition
- Windows Server 2012, Datacenter Edition
- Windows Server 2012 R2, Essentials Edition
- Windows Server 2012 R2, Standard Edition
- Windows Server 2012 R2, Datacenter Edition
- Windows 10 Pro
- Windows 10 Enterprise
- Windows 10 Education
- Windows Server 2016, Essentials Edition
- Windows Server 2016, Standard Edition (excluding Server Core and Nano Server)
- Windows Server 2016, Datacenter Edition (excluding Server Core and Nano Server)

Virtual Machines (offline virtual images created by any of the following):

- VMware ESXi 5.0 or later (VMware Tools is required on the virtual machines)
- VMware vCenter (formally VMware VirtualCenter) 5.0 or later (VMware Tools is required on the virtual machines)
- VMware Workstation 9.0 or later
- VMware Player

Configuration Requirements

- Remote Registry service must be running
- Simple File Sharing must be turned off
- Server service must be running
- NetBIOS (TCP 139) or Direct Host (TCP 445) ports must be accessible
- Windows Update service must not be disabled; rather, it must be set to either **Manual** or **Automatic** in order to successfully deploy patches. In addition, the Windows Update setting on each target machine (**Control Panel > System and Security > Windows Update > Change Settings**) should be set to **Never check for updates**.
- Remote Desktop connections must be allowed in order for the console to make an RDP connection with the target machine
- When performing an asset scan, Windows Management Instrumentation (WMI) service must be enabled and the protocol allowed to the machine (TCP port 135).

Products Supported (for patch program):

- See https://www.ivanti.com/en-US/support/supported-products for the current list

Disk Space (for patch program):

- Free space equal to five times the size of the patches being deployed

Supported Languages (for patch program):

- Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Portuguese (Portugal), Russian, Spanish, Swedish, Thai, Turkish

Clients Running Ivanti Patch for Windows® Servers Agent

Note: An NTFS file system is required on the agent machines.

Processor:

- 500 MHz or faster CPU

Memory:

- Minimum: 256 meg RAM
- Recommended: 512 meg RAM or higher

Disk Space:

- 30 MB for Ivanti Patch for Windows® Servers Agent client
- 2 GB or more for patch repository

Operating Systems (any of the following except for home editions):

- Windows Vista Family
- Windows 7 Family
- Windows 8 Family, excluding Windows RT
- Windows 10 Family
- Windows Server 2008 Family
- Windows Server 2008 Family R2
- Windows Server 2012 Family
- Windows Server 2012 Family R2
- Windows Server 2016 Family

Configuration Requirements

- Workstation service must be running

Port Requirements

These are the default port requirements. Several of the port numbers are configurable.

	Inbound Ports (Basic NAT Firewall)									
	TCP 80	**TCP 135**	**TCP 137-139 or TCP 445 (Windows file sharing/directory services)**		**TCP 443**	**TCP 3121**	**TCP 3122**	**TCP 4155**	**TCP 5120**	**TCP 5985**
Client System		X (For asset scans)	X	X				X (For listening agents)	X	X (For WinRM protocol)
Console System						X	X			
Distribution Server	X		X	X	X					

	Outbound Ports (Highly Restricted Network Environment)						
	TCP 80	**TCP 137-139 or TCP 445 (Windows file sharing/directory services)**		**TCP 443**	**TCP 3121**	**TCP 5120**	**UDP 9**
Client System	X (For agents)	X	X	X (For cloud agents)	X (For agents and Deployment Tracker)		
Console System	X	X	X	X (For cloud sync)		X	X (For WoL & error reporting)

Installation

User Account Requirements

- The user performing a new installation must be a member of the db_owner role in order to create the SQL Server database.
- If you are installing the program on a new console but linking to an existing database, your user account must have db_datareader, db_datawriter, STExec, and STCatalogupdate permissions. The easiest way to grant these permissions is to add the user to the db_securityadmin and db_accessAdmin roles.

Obtaining the Software

Ivanti Patch for Windows® Servers is available for download from our Web-based download center: https://www.ivanti.com/en-US/resources/downloads. The download center always has the most recent version of Ivanti Patch for Windows® Servers that is available.

Installing the Prerequisites

Automatic Installation

The prerequisites can be automatically installed during the Ivanti Patch for Windows® Servers installation.

Manual Installation

If you prefer to download and install the prerequisites yourself, you may do so using the following URLs. Your operating system may already contain many prerequisites, so only install the prerequisites that you are missing.

SQL Server 2016 SP1 Express Edition

Only required if you don't already have a full or express edition of SQL Server.

https://www.microsoft.com/en-us/sql-server/sql-server-editions-express

.NET Framework 4.6.2

https://www.microsoft.com/en-us/download/details.aspx?id=53345

https://www.microsoft.com/en-us/download/details.aspx?id=53344 (for disconnected environments)

Visual C++ 2015 Redistributable (x64)

https://www.microsoft.com/en-us/download/details.aspx?id=53840

Windows Management Framework 4.0

http://www.microsoft.com/en-us/download/details.aspx?id=40855

SQL Server Pre-Installation Notes

Ivanti Patch for Windows® Servers will store all scan and patch deployment results in an SQL Server database. The SQL Server backend enables real-time collaboration and knowledge management amongst all individuals responsible for performing patch management tasks. Some of the benefits to using the SQL Server database include:

- High performance when scanning either a handful of machines or many machines
- Storage of data on a remote machine
- Ability for multiple Ivanti Patch for Windows® Servers consoles to share templates, comments, reports, and scan results

Before installing Ivanti Patch for Windows® Servers please review the following SQL Server notes:

- Microsoft SQL Server is required.

  If you do not have SQL Server, either Microsoft SQL Server 2016 SP1 Express Edition (if supported) or Microsoft SQL Server 2014 Express Edition will be installed for you on the console machine by the Ivanti Patch for Windows® Servers installation process.

- If you will be using an Express Edition of Microsoft SQL Server, you should consider downloading and installing Microsoft SQL Server Management Studio Express. This free software can be used to perform backups and to manage your database.
- Installation of SQL Express may fail if you have a SQL Native Client previously installed. It is strongly recommended that you uninstall SQL Native Client using **Add or Remove Programs** before running the installation program.
- You must have access to the specified SQL Server. The program will support either Windows authentication or SQL Server authentication to access the specified SQL server. Although administrative access is not required, this account does need permissions to create and populate the product database on the specified SQL Server. In addition, the Ivanti Patch for Windows® Servers console machine background services must be able to access to the SQL Server. All background services run using the LocalSystem account on the console. If you are using Integrated Windows Authentication on a remote server, be sure to use the machine account when defining the console login account on SQL Server.

  Note: For security purposes, Ivanti recommends using Windows authentication where possible. For information on configuring a remote SQL Server to accept Windows authentication credentials from the Ivanti Patch for Windows® Servers console, see SQL Server Post-Installation Notes.

- In order to create the database, the user account you specify during the installation process must be assigned the *db-creator* role.
- If you are using SQL Server on a remote machine, you must configure the server to allow remote connections. This can be done using SQL Server Configuration Manager.
- If you want to use a clustered configuration for redundancy purposes it must be configured prior to installation. You then reference the virtual clustered instance during the installation process. Clustered configurations are not supported with SQL Server Express Editions.

Performing a New Installation

Important! If you are upgrading from a previous version do not perform this procedure. Instead, please see the upgrade guide available on our website:

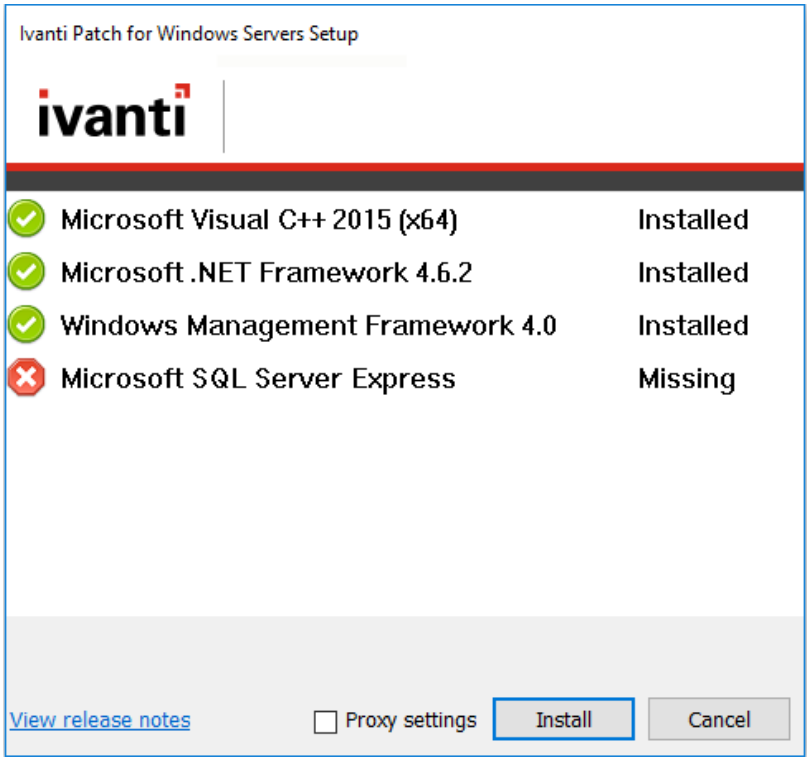
https://www.ivanti.com/en-US/support/product-documentation

Note: If you are installing on a disconnected machine and are missing any of the prerequisite software, you must download the software from a connected machine and then manually install it on the disconnected console before you begin the installation process.

1. Begin the installation by double-clicking the Ivanti Patch for Windows® Servers executable file.

   Note: If you receive a prompt indicating that a reboot is required, click **OK** and the installation process will automatically resume after the reboot.

   If you are missing any prerequisites they are displayed in the **Setup** dialog. If you are not missing any prerequisites you will skip Step 2 – Step 4 and go directly to the **Welcome** dialog in Step 5.



2. If you are required to enter a user name and password each time you launch your browser and browse the Internet, enable the **Proxy settings** check box, click the link, and type the necessary credentials.

   It may be necessary to specify a domain as part of your user name (for example: mydomain\my.name). These settings can be modified later by going to **Tools > Options > Proxy**.

   It also may be necessary to modify your HTTP proxy information after the installation is complete. See **HTTP Proxy Post-installation Notes** for details.

3. Click the **Install** button to install the missing prerequisites.

   A few of the prerequisites require a reboot after they are installed. In this case the installation program will request a system reboot before continuing. The installation program will restart automatically following the reboot.

4. (Conditional) If you were missing any prerequisites that required a reboot, to continue with the installation after the reboot click **Install**.

5. Read the information on the **Welcome** dialog and then click **Next**.

   The license agreement is displayed. You must agree to the terms of the license agreement in order to install the program.

6. To continue with the installation, click **Next**.

   The **Destination Folder** dialog is displayed.

7. If you want to change the default location of the program, click the browse button and choose a new location.

   Tip: If you want a shortcut icon to be created and placed on your desktop, enable the **Create a shortcut on the desktop** check box.

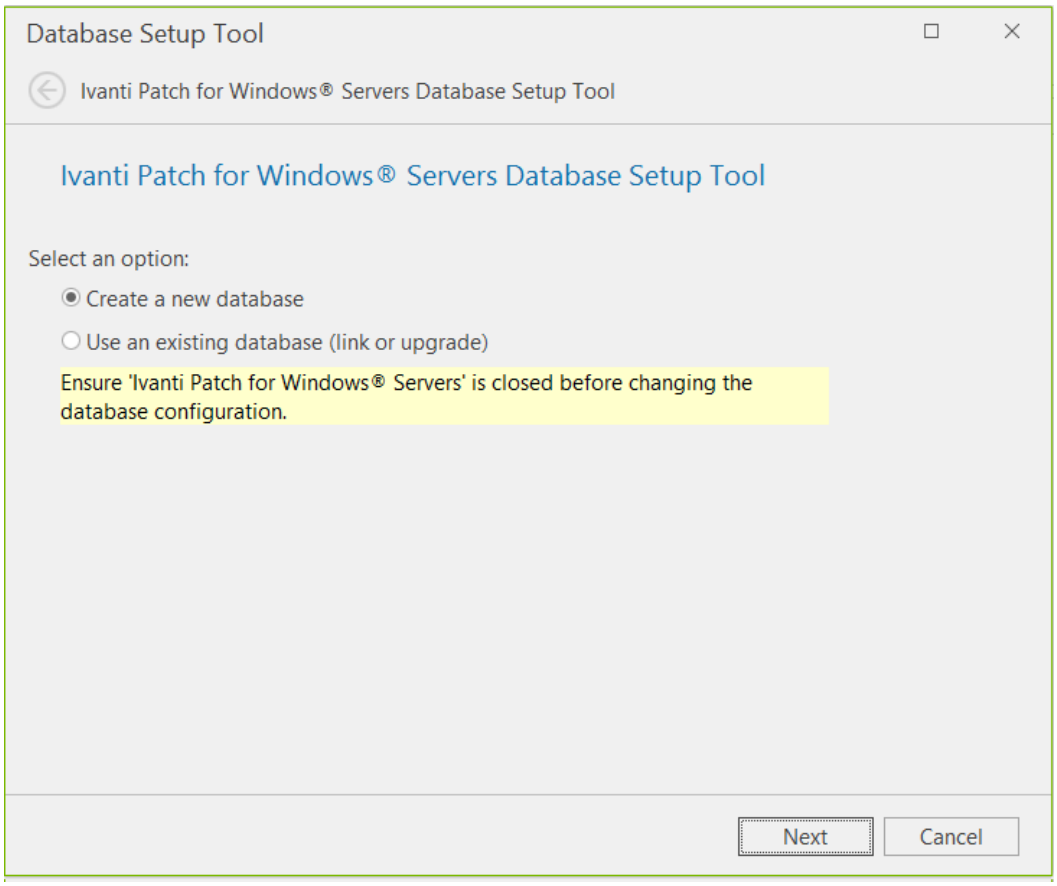
8. Click **Next**.

   The **Product Improvement Program** dialog is displayed. Read the description and decide if you agree to participate in the program. The program enables Ivanti to collect product usage information that will help improve future versions of the product.

   When you are done click **Next**. The **Ready to install** dialog is displayed.

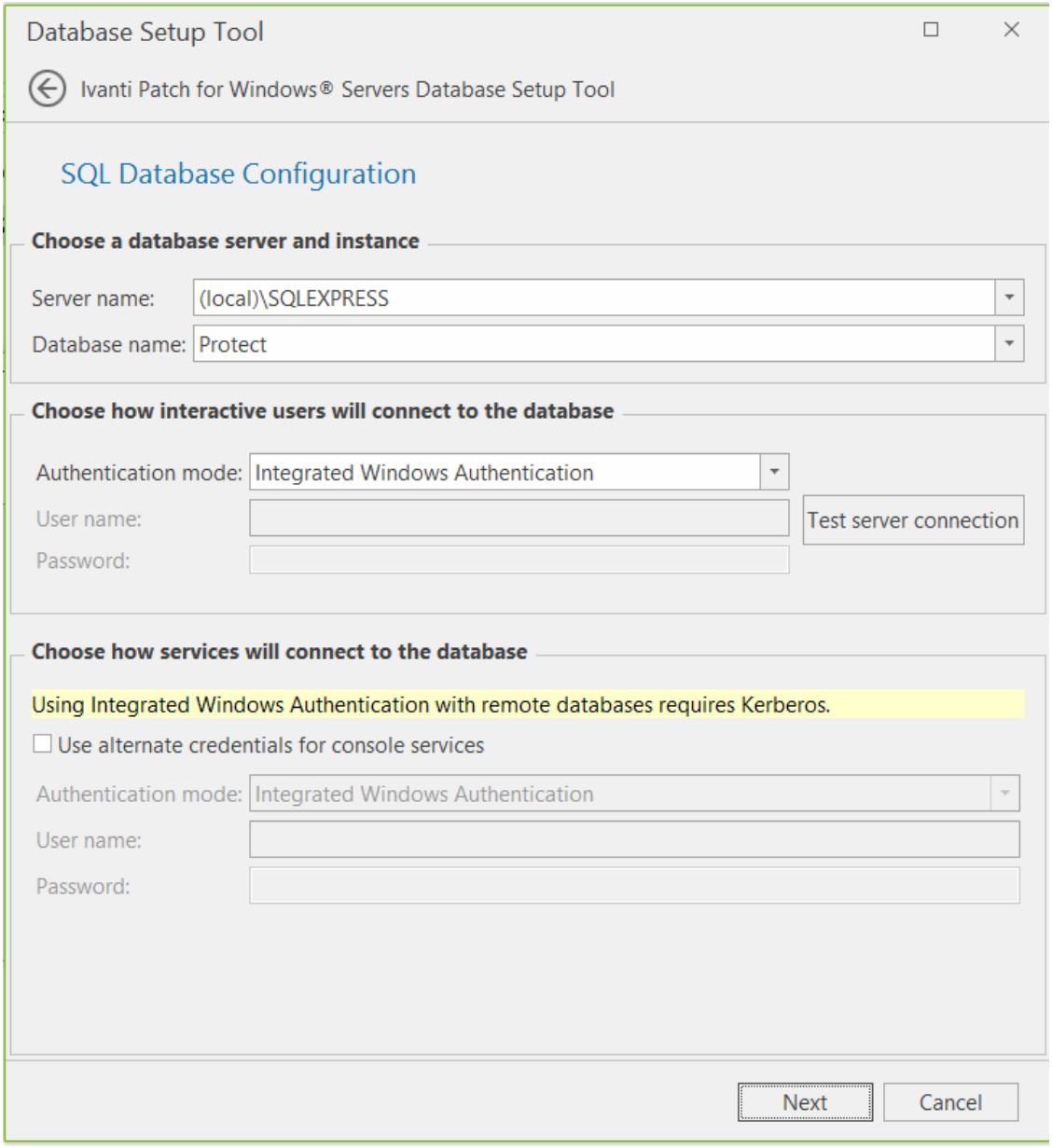
9. To begin the installation click **Install**.

   Near the end of the installation process the **Database Setup Tool** dialog is displayed.



10. If you have a previously installed Ivanti Patch for Windows® Servers database that you wish to use, select **Use an existing database** and then click **Next**. Otherwise, select **Create a new database** and then click **Next**.

    A dialog similar to the following is displayed:



11. Use the boxes provided to define how users and services will access the SQL Server database.

    Choose a database server and instance

    - **Server name:** You can specify a machine or you can specify a machine and the SQL Server instance running on that machine (for example: *machinename*\SQLExpress). If SQL Server is already installed, this box will be automatically populated with the local SQL Server instance name.
    - **Database name:** Specify the database name you want to use. The default database name is **Protect**.

Choose how interactive users will connect to the database

Specify the credentials you want the program to use when a user performs an action that requires access to the database.

- **Integrated Windows Authentication:** This is the recommended and default option. Ivanti Patch for Windows® Servers will use the credentials of the currently logged on user to connect to the SQL Server database. The **User name** and **Password** boxes will be unavailable.
- **Specific Windows User:** Select this option only if the SQL Server database is on a remote machine. This enables you to provide a specific Windows user name and password combination. This option will have no effect if the database is on the local (console) machine. (See *Supplying Credentials* in the **Ivanti Patch for Windows® Servers Administration Guide** for more information about local machine credentials.) All Ivanti Patch for Windows® Servers users will use the supplied credentials when performing actions that require interaction with the remote SQL Server database.
- **SQL Authentication:** Select this option to enter a specific SQL Server user name and password combination that will be used to log on to the specified SQL Server.

  Caution! If you supply SQL authentication credentials and have not implemented SSL encryption for SQL connections, the credentials will be passed over the network in clear text.
- **Test Server Connection:** To verify that the program can use the supplied interactive user credentials to connect to the SQL Server database, click this button.

Choose how services will connect to the database

Specify the credentials you want the background services to use when making the connection to the database. These are the credentials that the results importer, agent operations, and other services will use to log on to SQL Server and provide status information.

- **Use alternate credentials for console services**:
  - If the SQL Server database is installed on the local machine you will typically ignore this option by **not** enabling this check box. In this case the same credentials and mode of authentication that you specified above for interactive users will be used.
  - You will typically only enable this check box if the SQL Server database is on a remote machine. When the database is on a remote machine you need an account that can authenticate to the database on the remote database server.
- **Authentication method**: Available only if **Use alternate credentials for console services** is enabled.
  - **Integrated Windows Authentication**: Selecting this option means that the machine account will be used to connect to the remote SQL Server. The Kerberos network authentication protocol must be available in order to securely transmit the credentials. The **User name** and **Password** boxes will be unavailable.

    Note: If you choose Integrated Windows Authentication the installation program will attempt to create a SQL Server login for the machine account. If the account creation process fails, see SQL Server Post-Installation Notes on page 21 for instructions on manually configuring a remote SQL Server to accept machine account credentials. Do this after you complete the Ivanti Patch for Windows® Servers installation process but before you start the program.

- **Specific Windows User:** Select this option to enter a specific user name and password combination. Ivanti Patch for Windows® Servers' background services will use these credentials to connect to the SQL Server database. This is a good fallback option if for some reason you have difficulties implementing integrated Windows authentication.
- **SQL Authentication:** Select this option to provide a specific SQL Server user name and password combination for the services to use when logging on to SQL Server.

12. After providing all the required information, click **Next**.

Note: If the installation program detects a problem with any of the specified credentials, an error message will be displayed. This typically indicates that a user account you specified does not exist. Make a correction and try again.

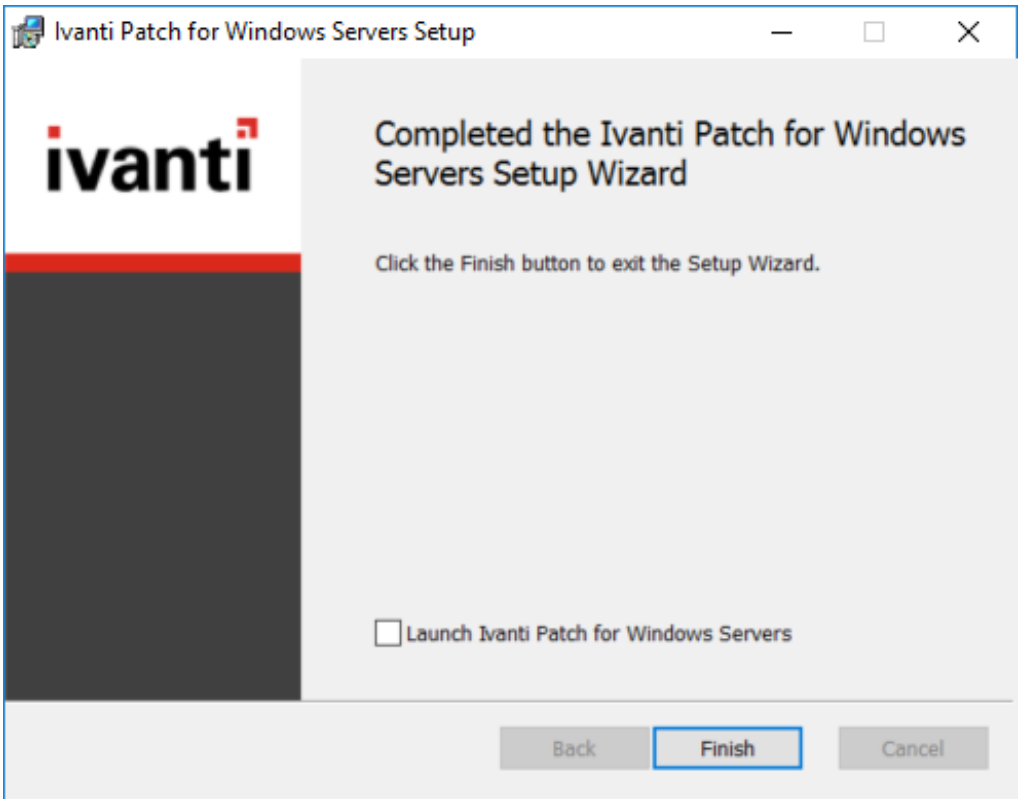
The program will create, link to, or upgrade the database. When the database operation is complete the **Database Installation Complete** dialog is displayed.

13. Click **Next**.

The **Installation Complete** dialog is displayed.

14. Click **Finish**.

The **Completed** dialog is displayed.



15. If you want to start Ivanti Patch for Windows® Servers immediately, enable the **Launch Ivanti Patch for Windows® Servers** check box and then click **Finish**; otherwise, just click **Finish**.

Installation Log Files

If you have an installation question or issue that requires help, please locate the installation log files before contacting the Ivanti Support staff. The installation logs are located in the following directory: **C:\Users*user name*\AppData\Local\Temp**.

There are three installation log files within the directory:

- Main installation log file: ProtectSetup_*date_time*.log
- Prerequisite installation log file: PreSetup*date*.log
- Windows Installer log file: ProtectInstall_*date_time*.log

HTTP Proxy Post-installation Notes

If your location uses an HTTP proxy to access the Internet, please note the following requirements:

- You must enable the **Bypass proxy server for local addresses** check box in the browser's proxy server settings. To access these settings, on the **Tools** menu in Internet Explorer, click **Internet Options**, click the **Connections** tab, and then click **LAN Settings**. Enabling the **Bypass proxy server for local addresses** check box specifies that the proxy server should not be used when the Ivanti Patch for Windows® Servers console connects to a computer on the local network.
- The consoles services will not read or reference any per-user proxy address information. To configure proxy addresses for console services, you must manually modify the **STServiceHost.exe.config** file to include a default proxy XML tag that defines the proxy, bypass local and bypasslist. You do this by adding the following XML beneath the base <configuration> element.

```
<system.net>
 <defaultProxy>
  <bypasslist>
   <add address="127.0.0.1" />
   <add address="::1" />
   <add address="RollupConsoleNameOrIPAddress" />
  </bypasslist>
  <proxy bypassonlocal="True"
proxyaddress="http://ProxyNameOrIP:Port" />
 </defaultProxy>
</system.net>
```

SQL Server Post-Installation Notes

Manually Configuring a Remote SQL Server to Accept Machine Account Credentials

Note: The manual process described here is required only if the automated account creation process failed during product installation.

If you are using Integrated Windows Authentication to access a remote SQL Server, in order for Ivanti Patch for Windows® Servers to interact properly with the server you must configure the server to accept machine account credentials. The best time to do this is immediately after you have installed Ivanti Patch for Windows® Servers but before you actually start the program. You can, however, perform these steps after starting the program. Any scans you may have initiated prior to this that required interaction with a remote SQL Server database probably failed.

This section describes how to configure a remote SQL Server to accept Windows authentication (machine account) credentials from the Ivanti Patch for Windows® Servers console. For security purposes, Ivanti recommends using Windows authentication where possible. Microsoft SQL Server Management Studio is used as the editor in the following examples but you can use a different tool if you prefer.

1. The Ivanti Patch for Windows® Servers console and SQL Server must be joined to the same domain or reside in different domains that have a trusted relationship.

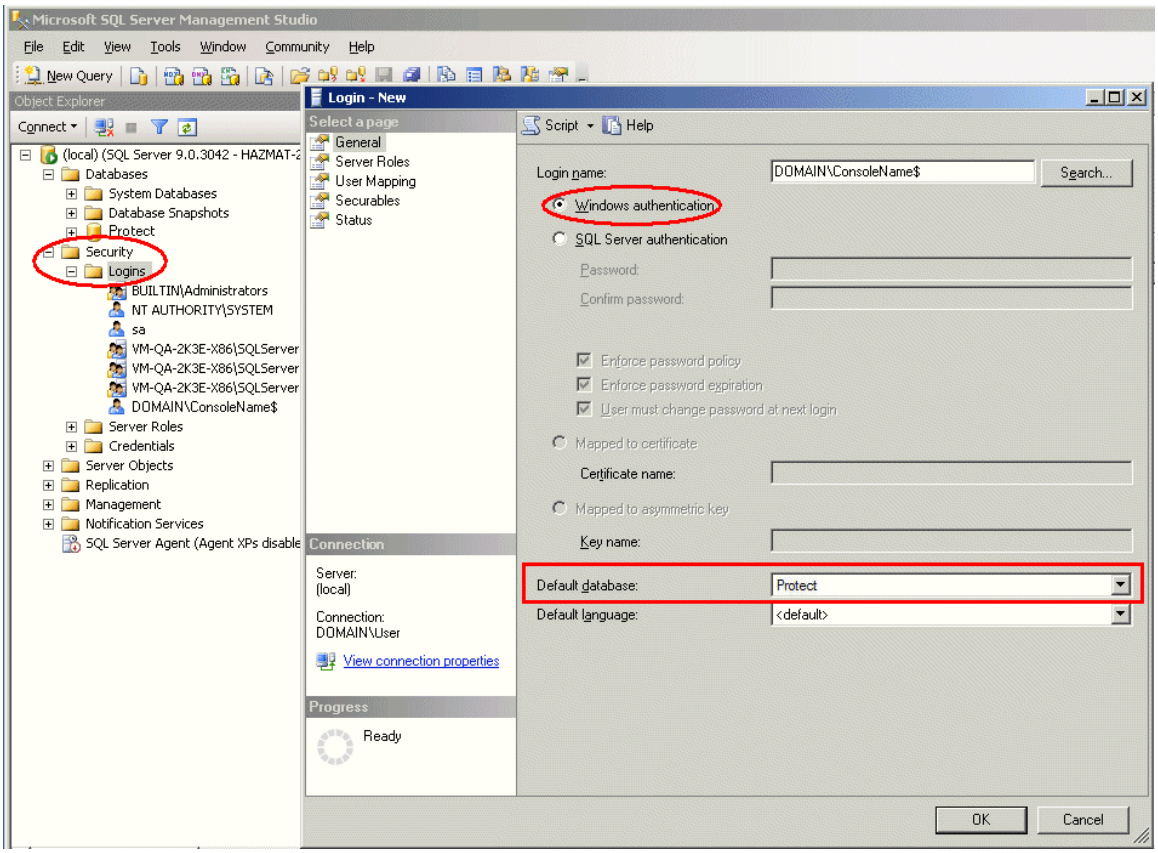
   This is so the console and the server can compare credentials and establish a secure connection.

2. On SQL Server, create a new login account for Ivanti Patch for Windows® Servers to use. (You must have *securityadmin* privileges in order to create an account.)

   To do this: Within the **Security** node, right-click **Logins** and select **New Login**. Type the login name using a SAM-compatible format (domain\machine name). The machine account is your console's machine name and must contain a trailing $.

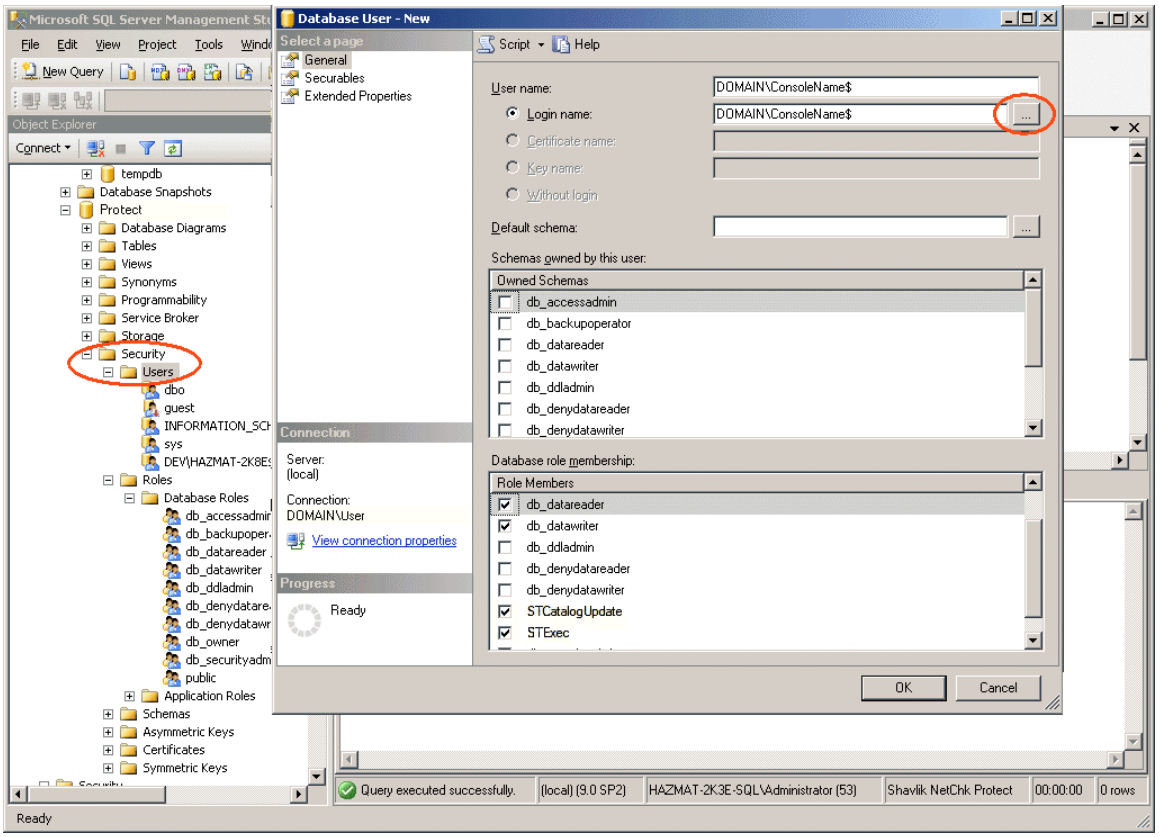
   Note: Do not use the Search option. You must manually type the name because it is a special name.

   Make sure you choose **Windows Authentication** and that the **Default database** box specifies the Ivanti Patch for Windows® Servers database. For example:



3. For your Ivanti Patch for Windows® Servers database, create a new user login using the console machine account.

   Right-click the **Users** folder, select **New User**, browse to find the **Login name**, and then paste the name in the **User name** box. Assign the user the **db_datareader**, **db_datawriter**, **STCatalogUpdate**, and **STExec** roles. For example:



4. Start Ivanti Patch for Windows® Servers.
5. Perform any troubleshooting as necessary.
   - You can use the SQL Server activity monitor to determine if connection attempts are successful when performing a patch scan.
   - If you ran Ivanti Patch for Windows® Servers before creating the SQL Server user account, some services may fail to connect to SQL Server. You should select **Control Panel > Administrative Tools > Services** and try restarting the services.
   - If the connection attempts are failing you can view the messages in the SQL Server logs to determine why the failures are occurring.

Allowing Other Users Access to the Program

Note: This section also applies if you are using the role-based administration feature.

If you wish to allow other users access to the program, you may need to configure SQL Server so that the users have the necessary database permissions. Specifically, when using Windows integrated authentication, users without administrative rights on the database machine must be granted read and write permission to all tables and views. They must also be granted execute permission to all stored procedures in the Ivanti Patch for Windows® Servers application database. They may not otherwise be able to start Ivanti Patch for Windows® Servers.

One way to grant these permissions is to assign your users the *db_owner* role. For security reasons, however, this may not be the best solution. A safer alternative is to grant execute permission at the database level. You do this by assigning the users in question to the STExec role.

Performing Periodic Maintenance on the Database

Ivanti Patch for Windows® Servers provides the ability to perform periodic maintenance on the database by automatically removing old scans, rebuilding index files, and performing backups. See *Database Maintenance* in the Help file for details.

Getting Started

Starting Ivanti Patch for Windows® Servers

Note: In order to access the full capabilities of Ivanti Patch for Windows® Servers, you must run under a Windows account with administrator privileges.

You can start Ivanti Patch for Windows® Servers two ways:

- Tap or double-click the Ivanti Patch for Windows® Servers icon on your desktop
- Select **Start > Ivanti Patch for Windows® Servers > Ivanti Patch for Windows® Servers**

The home page is displayed.

Activating Ivanti Patch for Windows® Servers

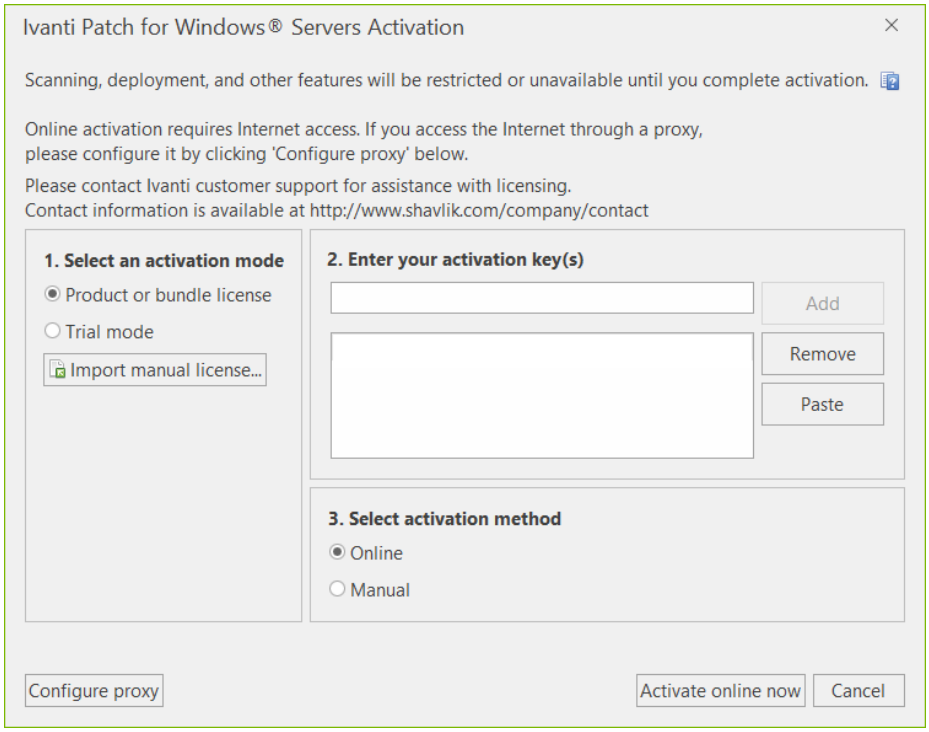
Until you activate Ivanti Patch for Windows® Servers you are very limited in the actions you are allowed to perform. You activate the program by entering one or more activation keys. To activate Ivanti Patch for Windows® Servers:

1. If you have an electronic copy of your license key(s) copy it to your computer's clipboard.

   Your license key is typically sent to you in an e-mail from Ivanti when you purchase the product.

2. From the Ivanti Patch for Windows® Servers menu select **Help > Enter/refresh license key**.

   The **Activation** dialog appears.



3. (Optional) If you didn't copy the key into your computer's clipboard until after you launched this dialog, click **Paste**.

   You can also manually type your activation key if you prefer.

4. (Optional) If your organization uses a proxy server, click **Configure proxy** and provide the credentials necessary for the activation process to reach the activation server.

   Tip: If you are required to enter a user name and password each time you launch your browser and access the Internet, it typically means you are using a proxy server.

If You Have an Internet Connection

1. Select an activation mode.
   - **Product or bundle license:** Selecting this option enables you to specify one or more activation keys. If you receive multiple keys be sure to paste them all in the **Enter your activation key(s)** box. Each key represents a different edition (Standard, Advanced), license seat count (workstation, server), or expiration date. The keys are additive so the resulting product license will be a compilation of all features and seat counts provided by the individual keys.
   - **Trial mode:** Enables you to test all the capabilities of Ivanti Patch for Windows® Servers, but only for 60 days. You are also limited to 50 license seats. When the trial license expires the program will stop refreshing its data files and many of the program features will no longer be available.
   - **Import manual license:** Enables you to import a license that was generated by the Shavlik portal. This is used only by console machines that are not connected to an external network. See the following section for more details.
2. Verify that your activation key(s) is specified in the **Enter your activation key(s)** box.

   If not, copy your key(s) to your computer's clipboard and then click **Paste**.
3. Select **Online activation**.
4. Click **Activate online now**.

   If the activation is successful, the message **Patch for Windows® Servers product activation successfully completed** is displayed near the bottom of the dialog.
5. Click **Close**.

If You Do Not Have an Internet Connection (Disconnected Network Mode)

Note: This procedure will not work if you are at a secure site that does not allow files to be transferred out of the secure environment. For this case, see the section below titled *If You are Activating from Within a Secure Disconnected Network*.

1. Select an activation mode (either **Product or bundle license** or **Trial mode**).
2. Paste or type your key(s) into the **Enter your activation key(s)** box.
3. Select **Manual** activation.
4. Click **Create request**.

   Two files are generated and saved to the desktop of your console computer: an XML file named **LicenseInfo.xml** and a text file named **DisconnectedLicenseInfo.txt**. The XML file is used in this procedure; the text file can be ignored.
5. Move the XML activation request file to a computer that has an Internet connection.
6. On the Internet-connected computer, open a browser and go to https://license.shavlik.com/OfflineActivation.
7. Upload the **LicenseInfo.xml** activation request file.

   The web portal will process the license information and generate a license file.
8. Download the processed license file and move it to the console computer.
9. Within Ivanti Patch for Windows® Servers, select **Help > Enter/refresh license key**.
10. On the Ivanti Patch for Windows® Servers **Activation** dialog click **Import manual license**.
11. Go to the location of the processed license file and then click **Open**.

    Ivanti Patch for Windows® Servers will process the file and the program will be activated.

If You are Activating from Within a Secure Disconnected Network

Use this activation procedure if you are at a secure site that does not allow files to be transferred out of the secure environment.

1. Select an activation mode (either **Product or bundle license** or **Trial mode**).
2. Paste or type your key into the **Enter your activation key(s)** box.
3. Select **Manual** activation.
4. Click **Create request**.

   Two files are generated and saved to the desktop of your console computer: an XML file named **LicenseInfo.xml** and a text file named **DisconnectedLicenseInfo.txt**. The text file is used in this procedure; the XML file can be ignored.
5. Open the **DisconnectedLicenseInfo.txt** file and carefully copy the information contained in it to a piece of paper.
6. On an Internet-connected computer, open a browser and go to https://license.shavlik.com/OfflineActivation.
7. Manually enter the activation request data and then click **Submit**.

   The web portal will process the data and generate a license file.
8. Download the processed license file and move it to the console computer.

9. Within Ivanti Patch for Windows® Servers, select **Help > Enter/refresh license key**.
10. On the Ivanti Patch for Windows® Servers **Activation** dialog click **Import manual license**.
11. Go to the location of the processed license file and then click **Open**.

    Ivanti Patch for Windows® Servers will process the file and the program will be activated.

Your Next Steps

After you have successfully installed and activated Ivanti Patch for Windows® Servers you can immediately begin using all areas of the program. For the best experience, however, your suggested next steps are:

- Create machine groups: Machine groups are used to logically organize and track the machines in your organization. They are also by Ivanti Patch for Windows® Servers to perform a number of different actions. For more information, in the online Help system see **Quick Start > Setup > Using Machine Groups**.
- Define and assign credentials: A credential consists of a user name and password pair. They are used to access remote machines, perform scans, and push any necessary files. For more information, in the online Help system see **Quick Start > Setup > Supplying and Managing Credentials**.
- (Optional) Configure your distribution servers. A distribution server is used to distribute XML data, scan engines, patches, and service packs to agents and to machines on remote sites. Using one or more distribution server can help reduce network traffic and speed program operations. For more information, in the online Help system see **Administration > Using Distribution Servers**.
- If you are a non-English user, a localized version of the Help system is available if you have an Internet connection. Select **Tools > Options > Display** and in the **View help topics** box choose **On the web**.

How Licenses are Tracked

When a patch deployment is performed, Ivanti Patch for Windows® Servers records the machine name in the database if it does not already exist. From there, the number of remaining seats available for deployment is reduced by one for each target. If you elect to use Ivanti Patch for Windows® Servers Agent, each agent machine is allocated a license and also counts against the total number of license seats available. If the same machine is managed in both an agentless and agent-based manner, that machine is counted only once. Similarly, when scanning virtual machines, a machine is counted only once even if it is scanned both in online (powered on) mode and offline (powered off) mode.

You can easily find out how many license seats have been used by choosing **Help > About Ivanti Patch for Windows® Servers**. For example:

