Lenovo Upward Integration Modules Unified Service User's Guide

Version 1.6

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Note
Before using this information and the product it supports, read the information in “Notices” on page 25.

Edition notice

This edition applies to version 1.6 of Lenovo Upward Integration Modules Unified Service and to all subsequent releases and modifications until otherwise indicated in new editions. Upward Integration Modules Unified Service is a subcomponent of the following software products.

- Lenovo Upward Integration Modules (UIM) for Microsoft System Center, v5.6
- Lenovo UIM for VMware vSphere, v3.6

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About this publication

This book provides instructions for installing Lenovo Upward Integration Modules Unified Service.

Conventions and terminology

Paragraphs that start with a bold **Note**, **Important**, or **Attention** are notices with specific meanings that highlight key information.

Note: These notices provide important tips, guidance, or advice.

Important: These notices provide information or advice that might help you avoid inconvenient or difficult situations.

Attention: These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

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World Wide Web resources

The following web pages provide resources for understanding, using, and troubleshooting IBM®System x, Lenovo BladeCenter® blade servers, and systems management and systems deployment tools.

IBM Systems Technical support site

Support for IBM Systems and servers

Locate support for Lenovo hardware and systems management and systems deployment software.

IBM website for Microsoft Systems Management Solutions for IBM Servers

Microsoft Systems Management Solutions for IBM Servers

Download Lenovo systems management and systems deployment software.

IBM Systems Management for System x®

IBM Systems Director systems management solutions for System x

This web page provides an overview of IBM Systems Management.

IBM ServerProven® page

IBM ServerProven: Compatibility for hardware, applications, and middleware

Obtain information about hardware compatibility with IBM System x, Lenovo BladeCenter, and Lenovo IntelliStation® hardware.

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Chapter 1. About Lenovo Upward Integration Modules

The Lenovo Upward Integration Modules (UIM) are extensions to Microsoft System Center and VMware vCenter to provide IT administrators with enhanced management capabilities for IBM System x servers, LenovoBladeCenter servers, and IBM Flex System.

The Upward Integration Modules extensions include a set of plug-ins for Microsoft System Center and VMware vCenter standalone applications and service applications.

With Upward Integration Modules, Lenovo expands the management capabilities of Microsoft System Center and VMware vCenter by integrating Lenovo hardware management functionality, providing affordable, basic management of physical and virtual environments to reduce the time and effort required for routine system administration. It provides the discovery, configuration, monitoring, event management, and power monitoring needed to reduce cost and complexity through server consolidation and simplified management.

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Chapter 2. Lenovo Upward Integration Modules Unified Service

The Lenovo Upward Integration Modules Unified Service is the backend component of Lenovo Upward Integration Modules.

The Lenovo Upward Integration Modules Unified Service provides the functionality for Lenovo Upward Integration Modules to access and manage Lenovo servers. It also provides the implementation for the underlying tools, applications, and programming SDKs.

The Lenovo Upward Integration Modules Unified Service needs to be installed and work in conjunction with either Lenovo Upward Integration Modules for Microsoft System Center Operations Manager or Lenovo Upward Integration Modules for VMware vCenter.

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Chapter 3. Licensing

The Lenovo Upward Integration Modules Unified Service is a proprietary product, released under either the IBM International License Agreement for Evaluation of Programs (ILAE) or the IBM International Program License Agreement (IPLA). ILAE allows of 90 days of trial with almost full functions.

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Chapter 4. Hardware and software requirements

Information about supported Lenovo Upward Integration Modules releases, required hardware and software, and suggested requirements for improved performance are described.

Supported Lenovo Upward Integration Modules releases

- Lenovo Upward Integration Modules for Microsoft System Center Operations Manager, v5.6
- Lenovo Upward Integration Modules for VMware vCenter, v3.6

Hardware requirements (minimum)

- Single x86-64 processor/core
- 2 GB RAM
- 20 GB of free hard drive space
- 100 Mbps network card

For improved performance, use:

- Four x86-64 processors/cores
- 8 GB RAM
- 40 GB of free hard drive space
- 10,000 Mbps network card

Software requirements

- Windows Server 2008 x64, 2008 R2, 2012, or 2012 R2
- Microsoft Visual C++ 2010 Redistributable Package - x86 (Seehttp://www.microsoft.com/en-us/download/details.aspx?id=5555)
- Microsoft Visual C++ 2008 SP1 Redistributable Package - x86 (Seehttp://www.microsoft.com/en-us/download/details.aspx?id=5582)
- Microsoft Visual C++ 2010 Redistributable Package - x64 (See http://www.microsoft.com/en-us/download/details.aspx?id=14632)
- Lenovo Upward Integration Modules for Microsoft System Center Operations Manager (SCOM) 2007 R2, 2012, 2012 SP1, 2012 R2 or VMware vCenter, v5.1

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Chapter 5. Installing the Lenovo Unified Service

Information about download sites for Lenovo Upward Integration Modules for Microsoft System Center Operations Manager and Lenovo Upward Integration Modules for VMware vSphere are provided, along with instructions for installing the products.

Before you begin

Because the Lenovo Upward Integration Modules Unified Service installer is a part of Lenovo Upward Integration Modules installers, you do not need to download it separately. Instead, download the installer of either the Lenovo Upward Integration Modules for Microsoft System Center or Lenovo Upward Integration Modules for VMware vCenter.

- Download the latest version of Lenovo Upward Integration Modules for Microsoft System Center Operations Manager from the Upward Integration Modules download page at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=LNVO-MANAGE
- Download the latest version of the Lenovo Upward Integration Modules for VMware vSphere from the Upward Integration Modules download page at http://www.ibm.com/support/entry/portal/docdisplay?lndocid=LNVO-VMWARE

Procedure

The installation process starts automatically during the installation of Lenovo Upward Integration Modules for Microsoft System Center Operations Manager or Lenovo Upward Integration Modules for VMware vSphere.

1. On the Welcome to the InstallShield Wizard for Lenovo Upward Integration Modules Unified Service window, click **Next**.

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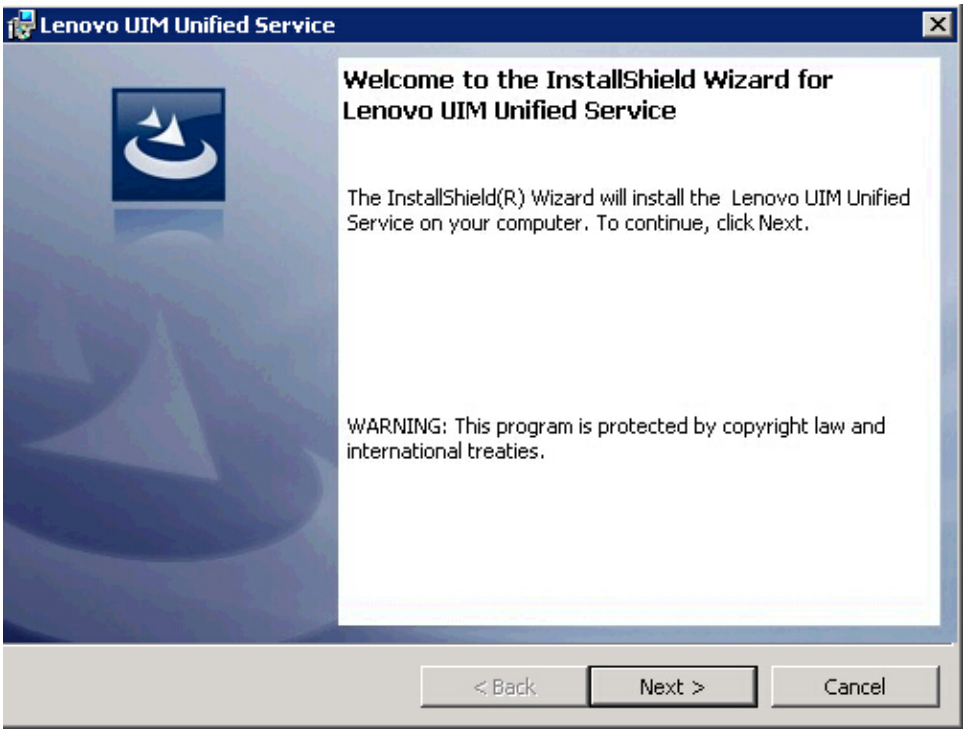
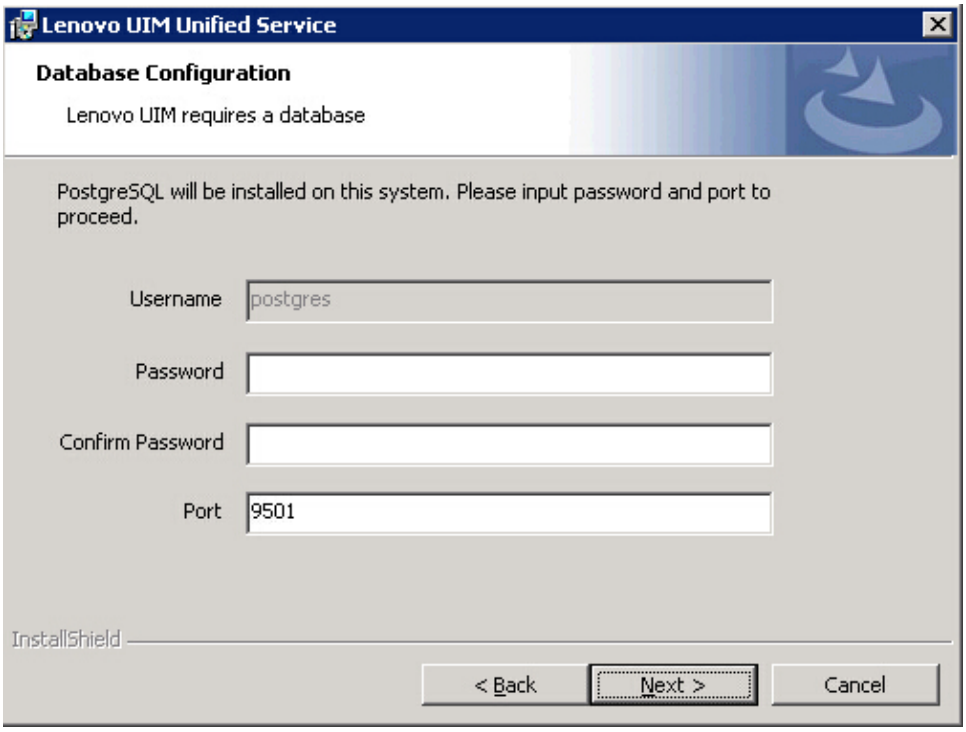
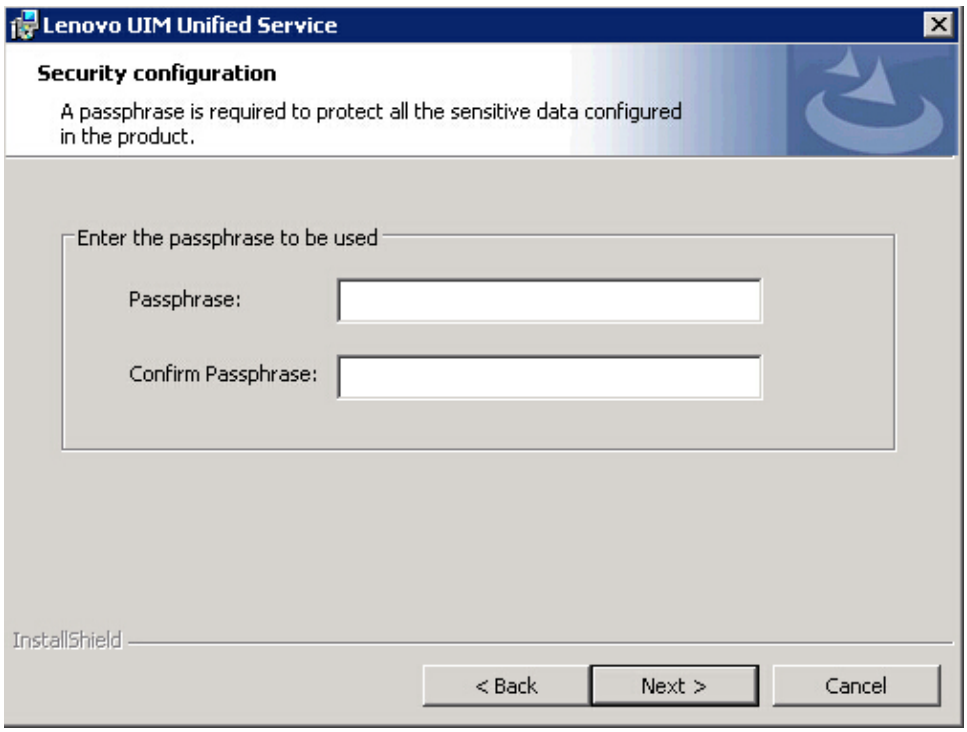


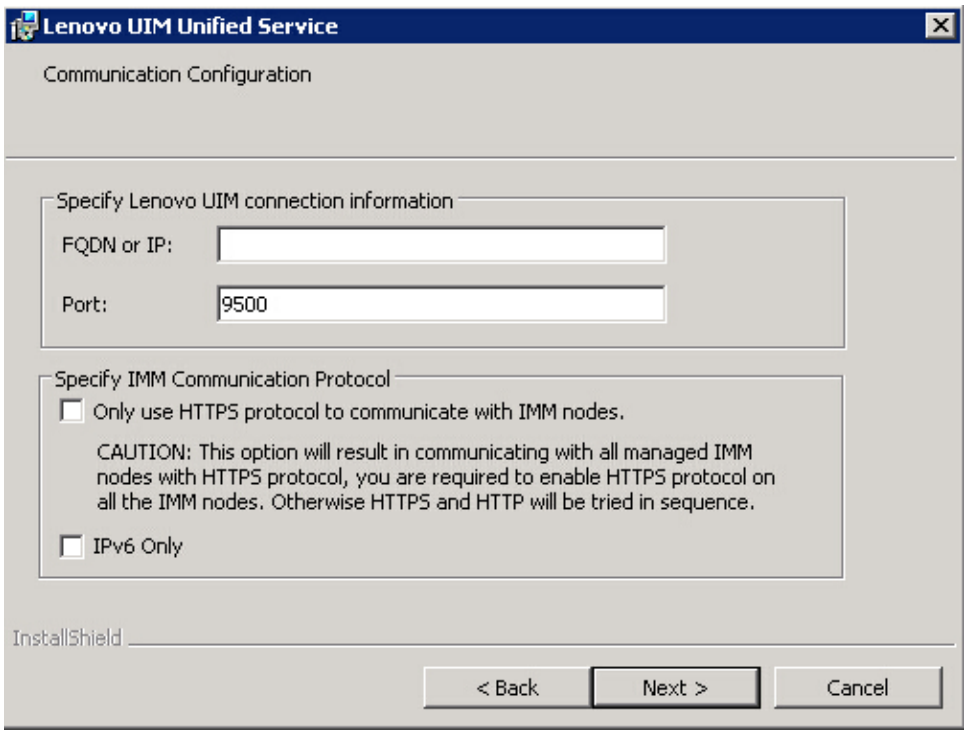
2. Enter a password to access the PostgreSQL database. The database user, `postgres`, cannot be edited. Do not change the TCP port the database service is listening to. Click **Next**.



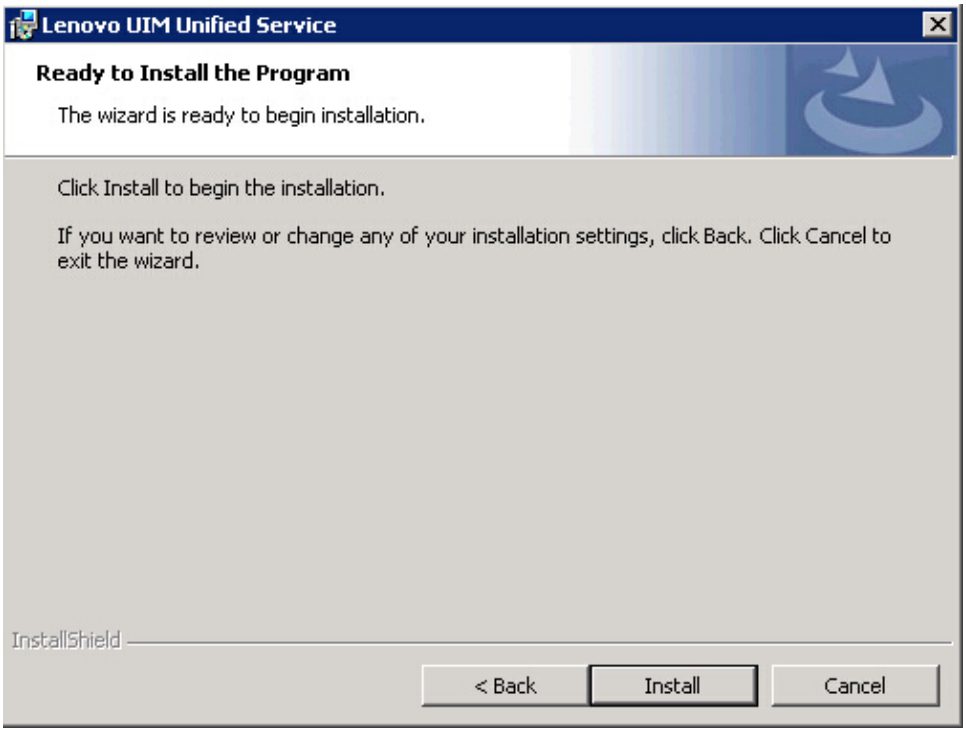
3. Enter a passphrase, then click **Next**.



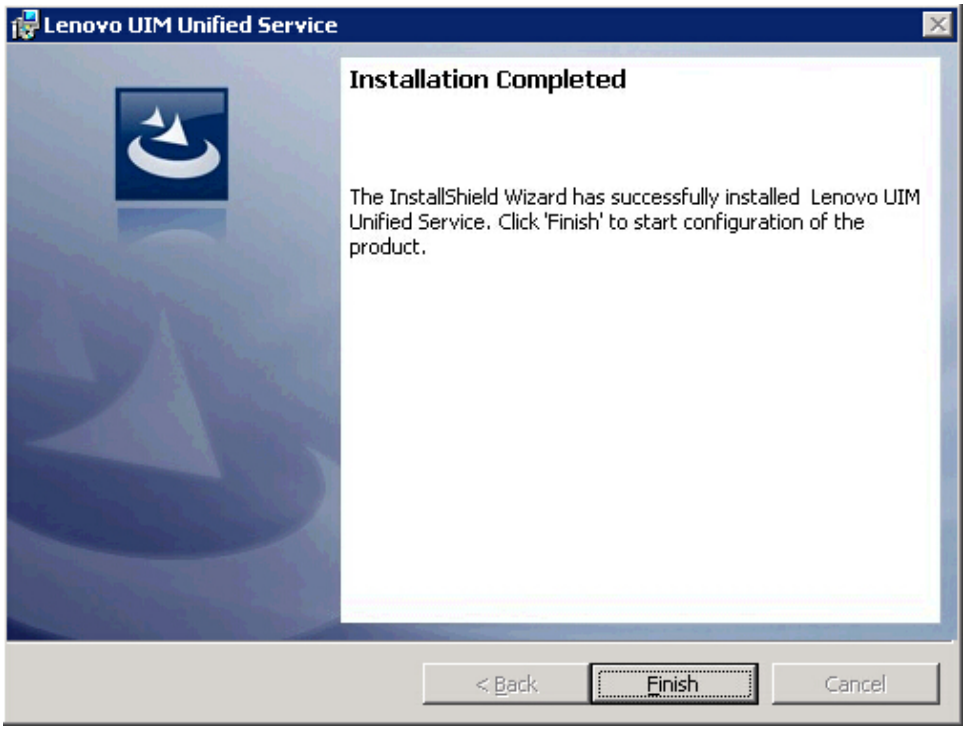
4. Keep the default value in the **Specify the TCP Port** field; this is the port that Lenovo Upward Integration Modules Unified Service will listen on. If you require enhanced security, select the check box **Only use HTTPS protocol to communicate with IMM nodes** to use HTTPS as the communication protocol with IMM CIMON. Click **Next**.



5. Click **Next** to continue with the file database installation.



6. When the installation is complete, the following window opens. Click **Finish** to exit the installation wizard.

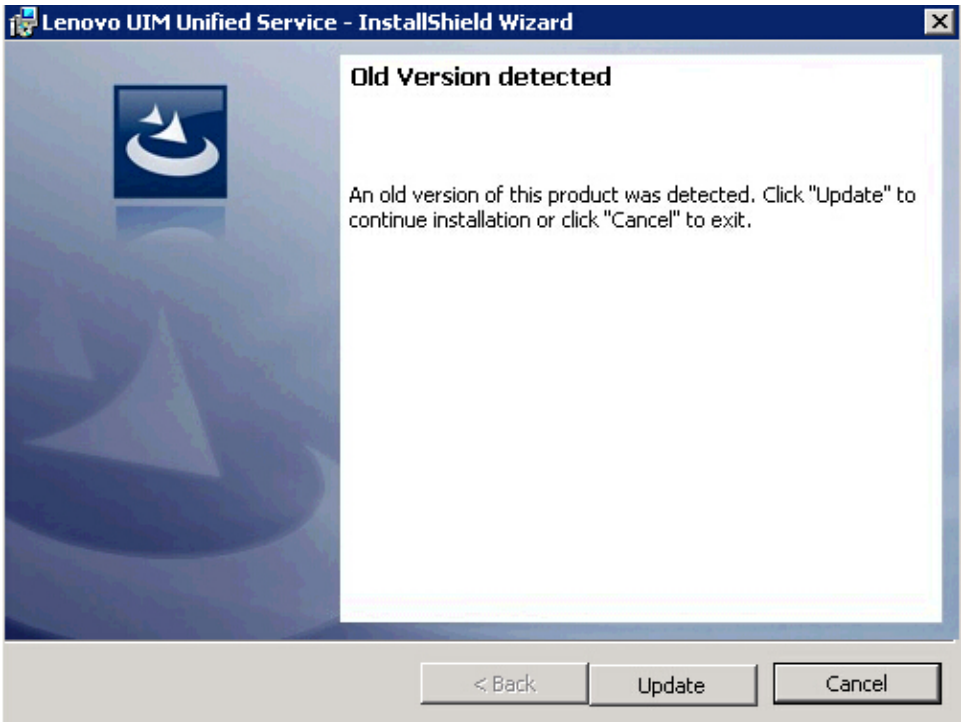


Chapter 6. Upgrading

You might need to perform an upgrade installation if an earlier version of Lenovo Upward Integration Modules Unified Service application is installed.

Procedure

1. From the InstallShield Wizard upgrade window, click **Update** to continue with the upgrade.



2. After the installation completes, click **Finish** to exit.

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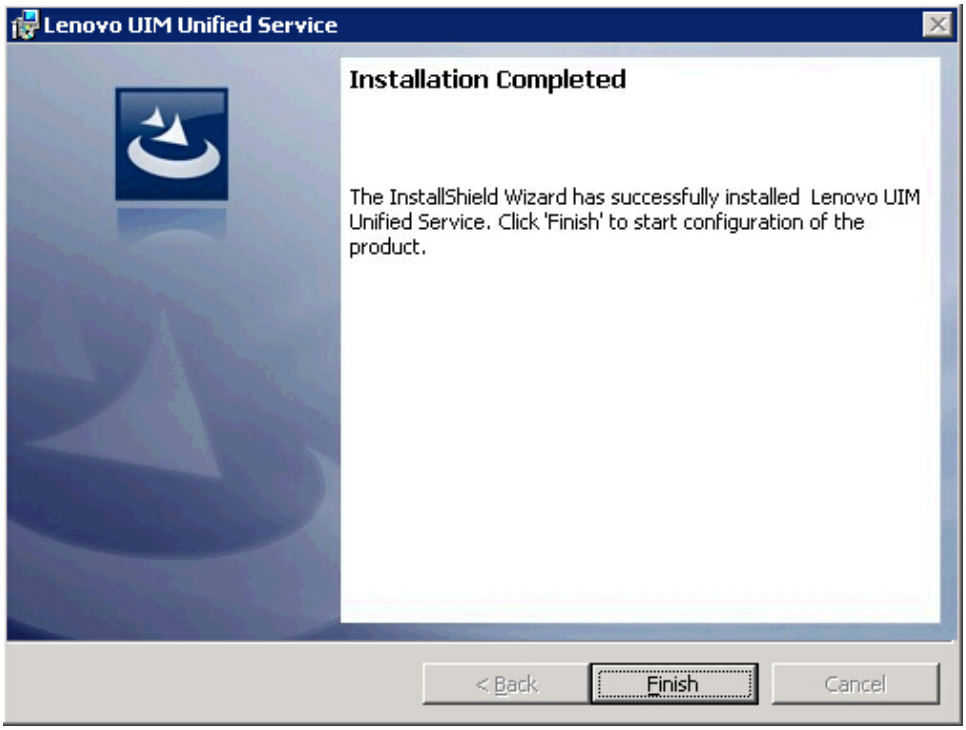
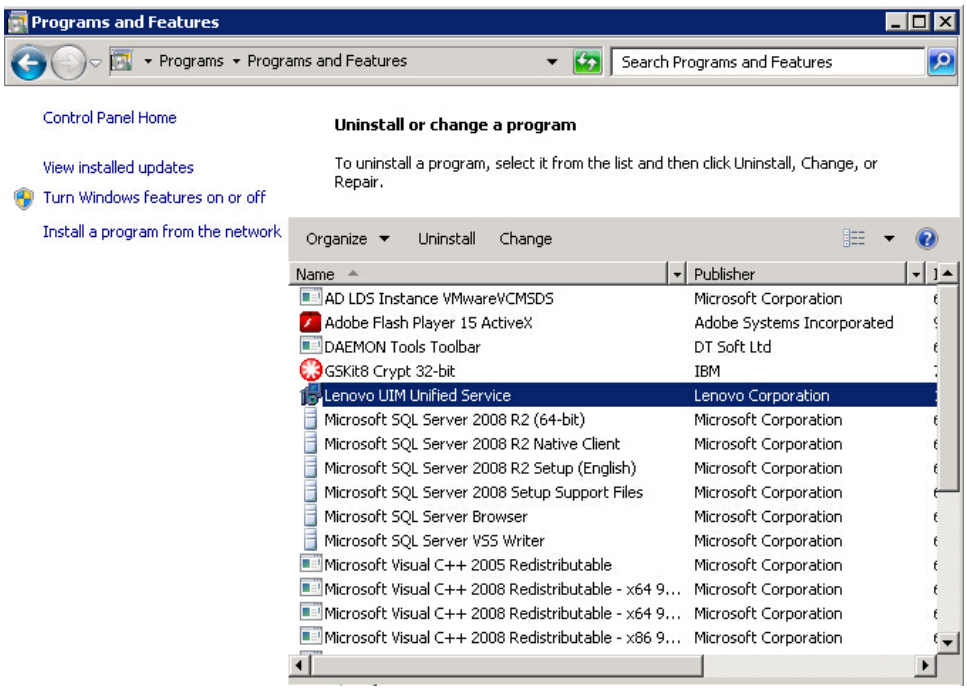

Lenovo UIM Unified Service
Installation Completed
The InstallShield Wizard has successfully installed Lenovo UIM Unified Service. Click 'Finish' to start configuration of the product.
< Back
Finish
Cancel

Chapter 7. Uninstalling

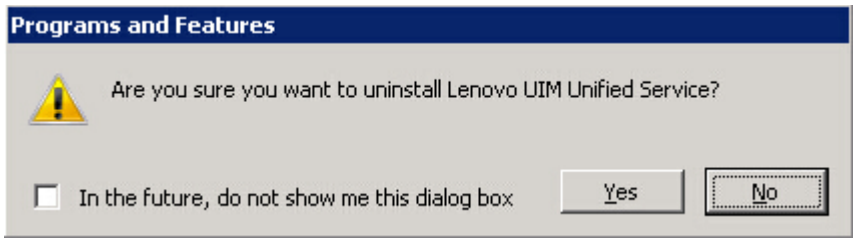
Use this procedure to uninstall the Lenovo Upward Integration Modules Unified Service.

Procedure

1. From the Control Panel, open the **Programs and Features** window. Right click on **Lenovo Unified Service**, then select **Uninstall**.



2. Click **Yes** to continue with the uninstallation.



Related tasks:

"Uninstalling PostgreSQL" on page 16
This is an optional operation. It is possible to uninstall Lenovo Upward Integration Modules Unified Service but retain a copy of PostgreSQL on your system for future use.

"Uninstalling IBM GSKit" on page 18
This is an optional operation. It is possible to uninstall Lenovo Upward Integration Modules Unified Service but retain a copy of IBM GSKit on your system for future use.

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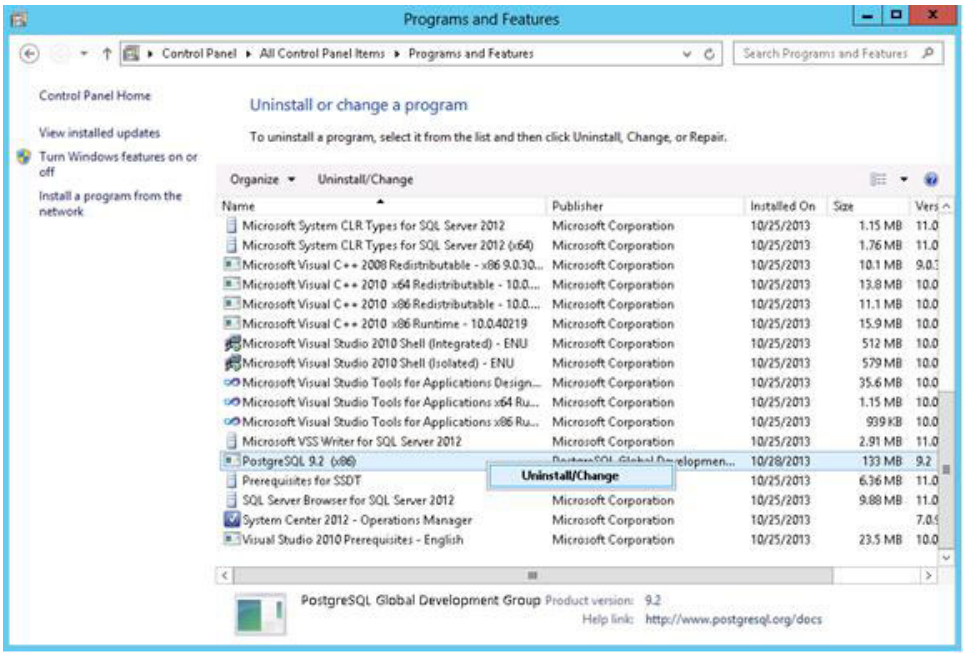
Uninstalling PostgreSQL

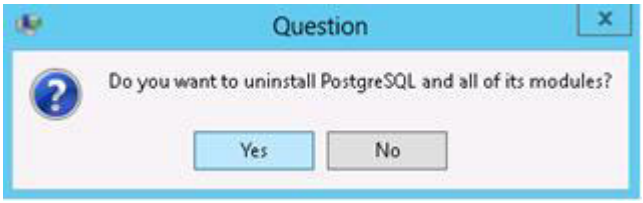
This is an optional operation. It is possible to uninstall Lenovo Upward Integration Modules Unified Service but retain a copy of PostgreSQL on your system for future use.

Procedure

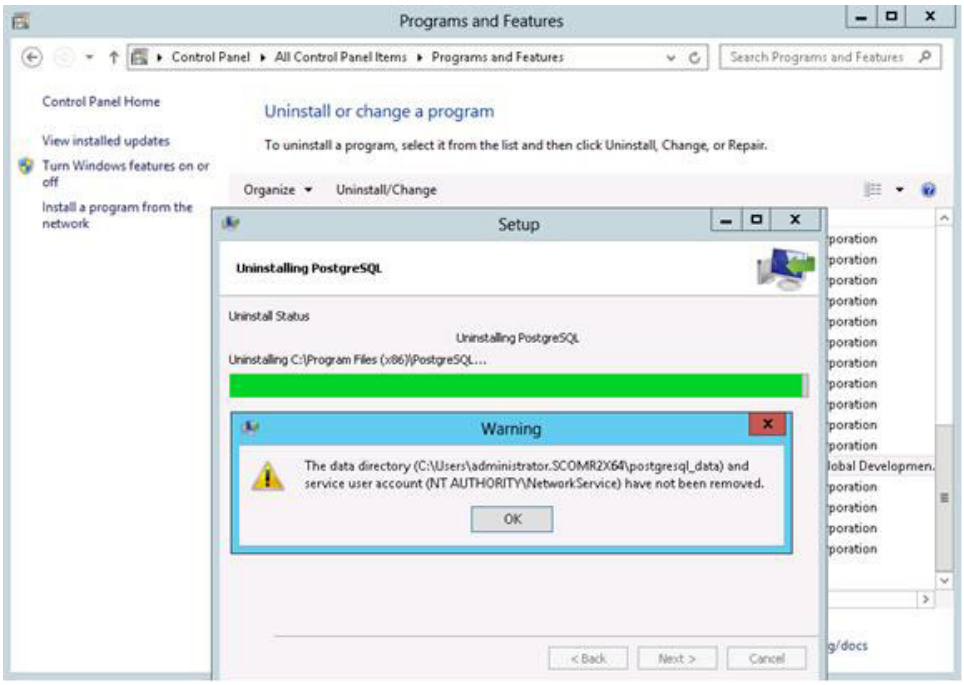
1. From the Control Panel, open the **Programs and Features** window. Right click **PostgreSQL**, then select **Uninstall/Change**.



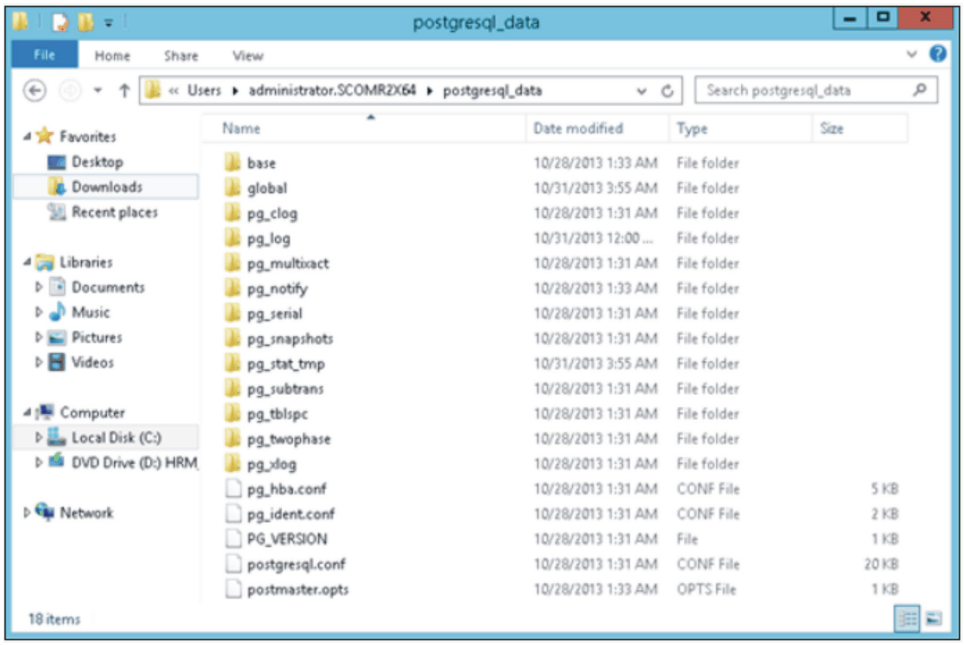
2. Click **Yes** to continue with the uninstallation.



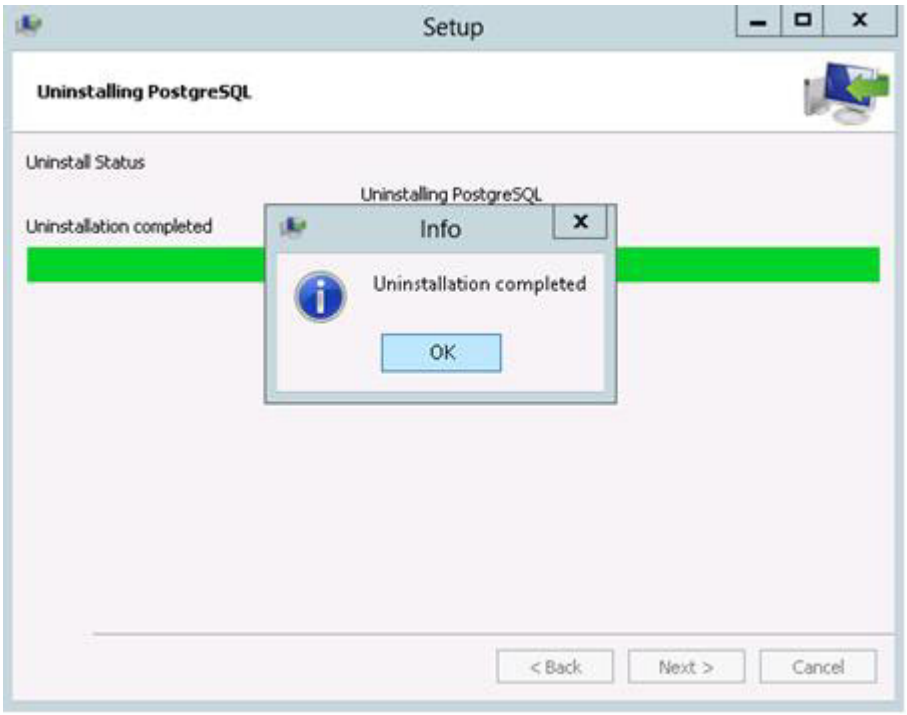
3. A window opens notifying you that the user data and configuration files are kept in the file system for future use and that if you want to remove them from the system, you must do it manually. Click **OK** to close the window, then click **Next** to continue.



4. The files that are kept are shown in the postgresql_data window. If you do not need them in the future, you can manually remove them.



5. Click **OK** to finish the uninstallation process.

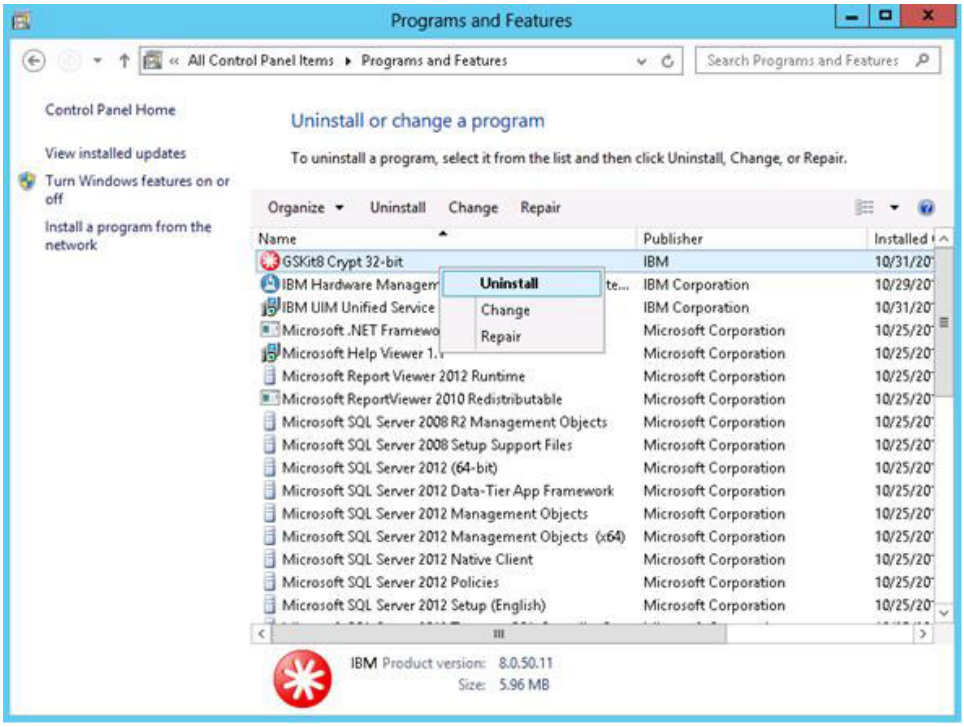


Uninstalling IBM GSKit

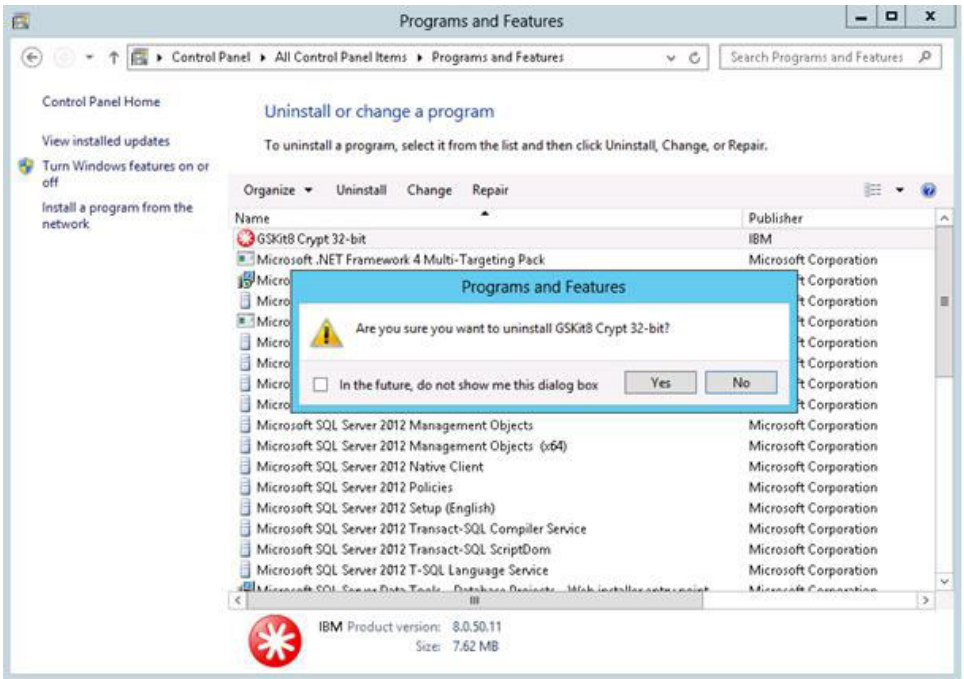
This is an optional operation. It is possible to uninstall Lenovo Upward Integration Modules Unified Service but retain a copy of IBM GSKit on your system for future use.

Procedure

1. From the Programs and Features window, click **Yes** to confirm the uninstallation of GSKit8.



2. Click **Yes** in the Programs and Features uninstallation confirmation window to proceed with the uninstallation.

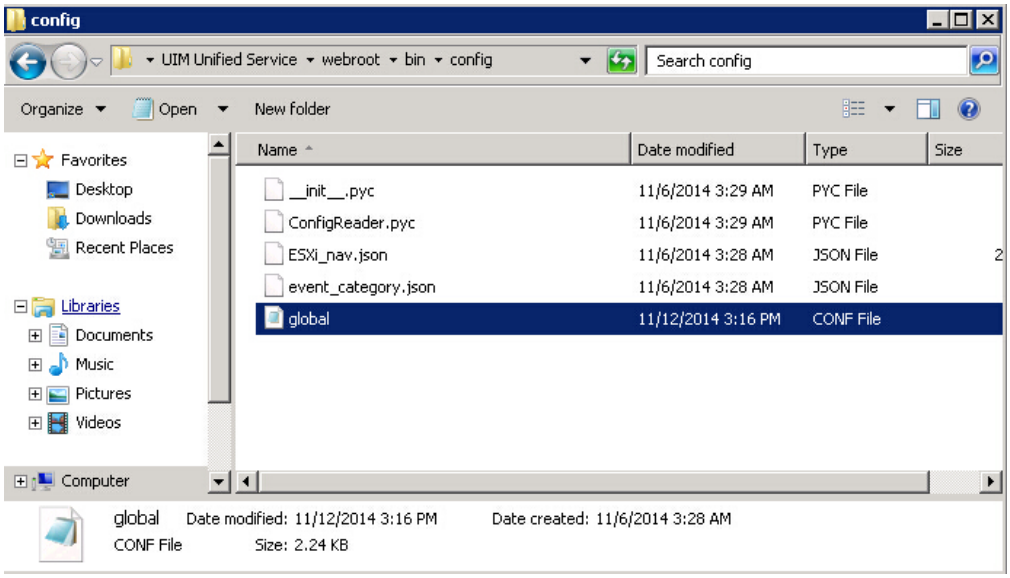


Chapter 8. Configuration file

The `global.conf` file contains all the configurable settings for the Lenovo Unified Service.

The `global.conf` file is located in `\UIM Unified Service\webroot\bin\config` of the Lenovo Upward Integration Modules Unified Service installation path, typically `C:\Program Files (x86)\lenovo`.

Unless you are sure that changes will not cause a problem, it is best to leave the settings unaltered. For changes to take effect, the Lenovo Unified Service must be restarted after the configuration file is modified.



Services

Three Windows services are created by the Lenovo Unified Service installer:

- Lenovo Upward Integration Modules Webservice
- Lenovo Upward Integration Monitor
- Lenovo Upward Integration Server

These services automatically start when the Unified Service is installed by the Lenovo Upward Integration Modules for Microsoft System Center Operations Manager or by the VMware vSphere installer. If the Lenovo Unified Service is installed as a standalone application, these services do not automatically start.

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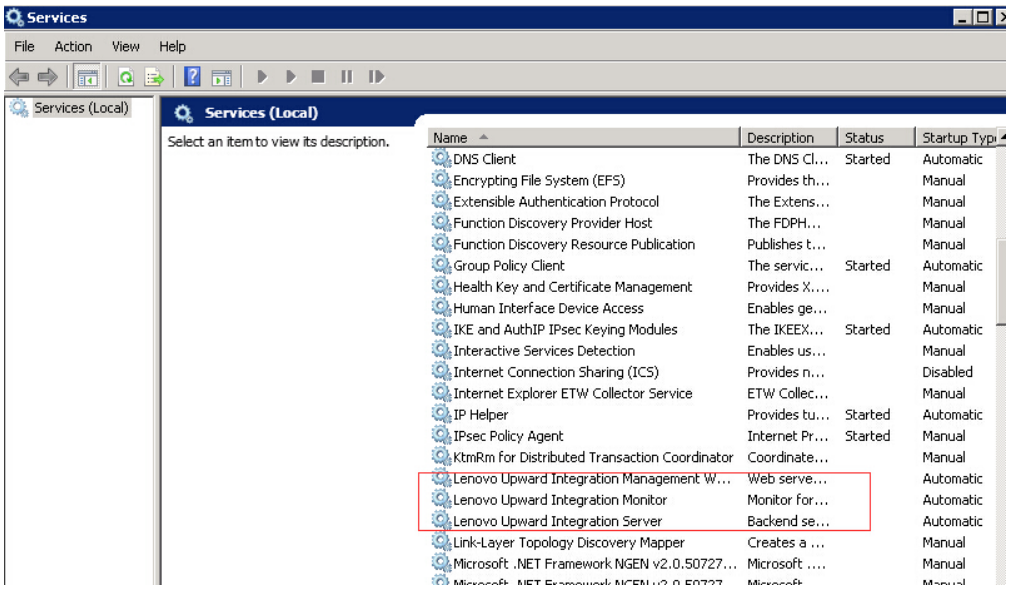

Database Backup and Restore

The Lenovo Upward Integration Modules Unified Service itself does not back up data and restore functionality. This activity can be done through other means.

To back up and restore the database for the Lenovo Upward Integration Modules for Microsoft System Center Operations Manager or for VMware vSphere, use the PostgreSQL tools, such as pg_dump, pg_dumpall, and psql. These tools are located in the `bin` directory of the PostgreSQL installation path, typically `C:\Program Files (x86)\PostgreSQL\9.2\bin`. For usage details, refer to the online documentation.

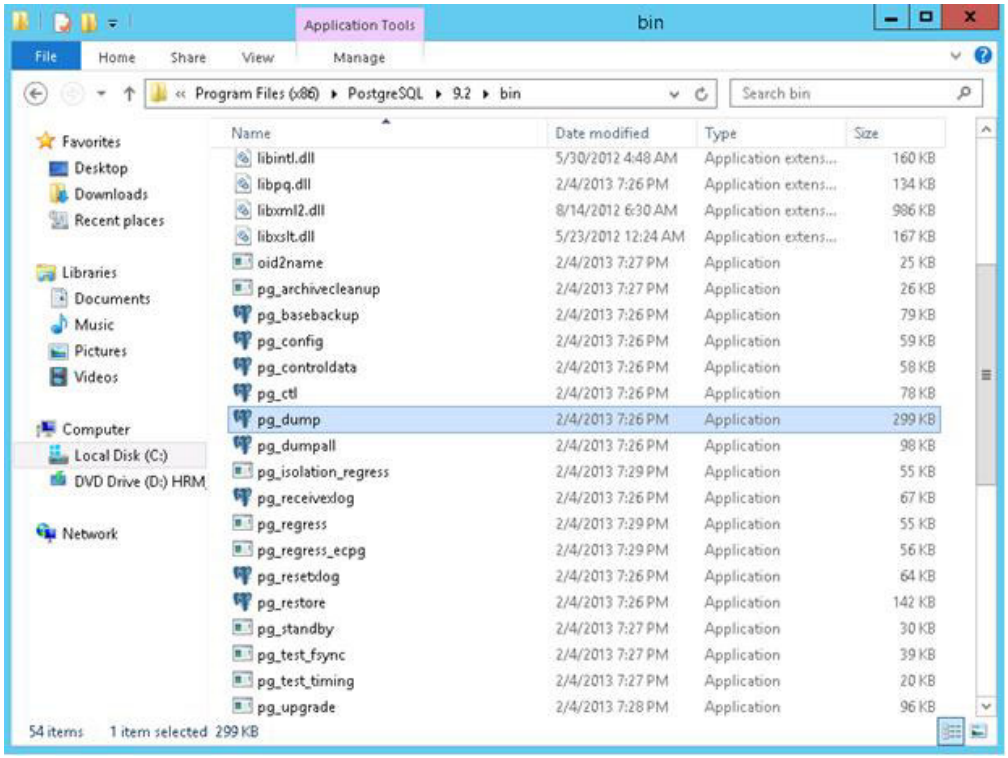

Table 1. Network access and firewall default settings

Protocol	Port	Direction	Comments
TCP	9500	In-bound	Lenovo Unified Service
TCP	9501	In-bound	PostgreSQLService

If a firewall application is in use, you might need to make exceptions to the firewall rules to allow the corresponding network communications.

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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

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Some software might differ from its retail version (if available) and might not include user manuals or all program functionality.

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