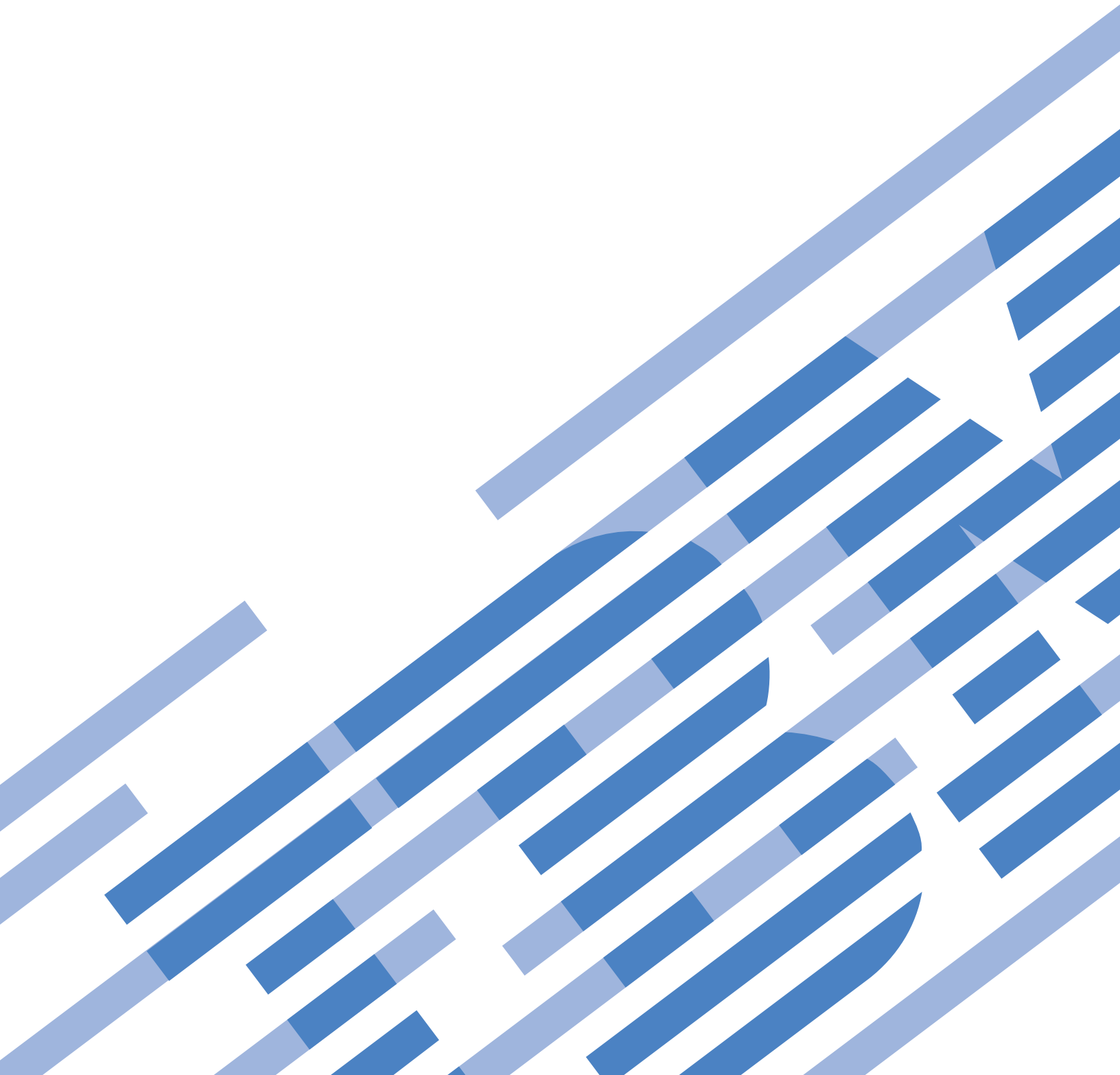




IBM System x

IBM Upward Integration Modules (UIM) Unified Service User's Guide

Version 1.0





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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 1.0 of IBM UIM Unified Service and to all subsequent releases and modifications until otherwise indicated in new editions. UIM Unified Service is a subcomponent of the following software products.

- IBM Upward Integration Modules (UIM) for Microsoft System Center, v5.0
- IBM UIM for VMware vSphere, v3.0

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About this publication

This book provides instructions for installing the IBM UIM 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.

World Wide Web resources

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

IBM Systems Technical support site

Support for IBM Systems and servers

Locate support for IBM hardware and systems-management and systems-deployment software.

IBM website for Microsoft Systems Management Solutions for IBM Servers

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IBM Systems Management for System x

IBM 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, IBM BladeCenter, and IBM IntelliStation® hardware.

Chapter 1. About IBM UIM

The IBM 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, BladeCenter servers, and Flex systems.

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

With UIM, IBM expands the management capabilities of Microsoft System Center and VMware vCenter by integrating IBM 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.

Chapter 2. IBM UIM Unified Service

The IBM UIM Unified Service is the backend component of IBM UIM.

The IBM UIM Unified Service provides the functionality for IBM UIM to access and manage IBM servers. It also provides the implementation for the underlying tool applications, and programming SDKs.

The IBM UIM Unified Service needs to be installed and work in conjunction with either IBM UIM for Microsoft System Center Operation Manager or IBM UIM for VMware vCenter.

Chapter 3. Licensing

The IBM UIM Unified Service is a proprietary product, released under 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.

Chapter 4. Hardware and Software requirements

Information about supported IBM UIM releases, required hardware and software, and suggested requirements for improved performance are described.

Supported IBM UIM Releases

- IBM UIM for Microsoft System Center Operation Manager, v5.0
- IBM UIM for VMware vCenter, v3.0

Hardware requirements (minimum)

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

For improved performance, use:

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

Software requirements

- Windows Server 2008 x64, 2008 R2, 2012, or 2012 R2
- Microsoft Visual C++ 2010 Redistributable Package - x86 (See <http://www.microsoft.com/en-us/download/details.aspx?id=5555>)
- Microsoft Visual C++ 2008 SP1 Redistributable Package - x86 (See <http://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>)
- IBM UIM for Microsoft System Center Operations Manager (SCOM) 2007 R2, 2012, 2012 SP1, 2012 R2 or VMware vCenter 5.1

Chapter 5. Installing the IBM Unified Service

Information about download sites for IBM UIM for Microsoft System Center Operation Manager and IBM UIM for VMware vSphere are provided, along with instructions for installing the products.

Before you begin

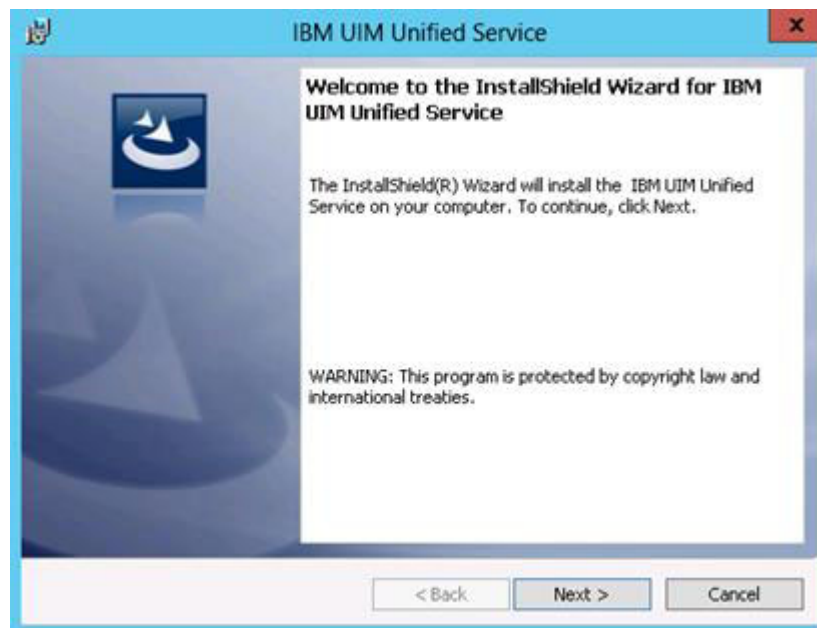
Because the IBM UIM Unified Service installer is a part of IBM UIM installers, you do not need to download it separately. Instead, download the installer of either the IBM UIM for Microsoft System Center or IBM UIM for VMware vCenter.

- **IBM UIM for Microsoft System Center Operation Manager, v5.0** Download it from the IBM UIM download page at <http://www.ibm.com/support/entry/portal/docdisplay?lnodocid=SYST-MANAGE>
- **IBM UIM for VMware vSphere, v3.0** Download it from the IBM UIM download page at <http://www.ibm.com/support/entry/portal/docdisplay?lnodocid=MIGR-VMWARE>

Procedure

The installation process starts automatically during the installation of IBM UIM for Microsoft System Center Operation Manager or IBM UIM for VMware vSphere.

1. On the Welcome to the InstallShield Wizard for IBM UIM Unified Service window, click **Next**.



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.



The screenshot shows the 'Database Configuration' window of the IBM UIM Unified Service installer. The window has a blue title bar with the IBM logo and the text 'IBM UIM Unified Service'. Below the title bar, the text 'Database Configuration' is displayed in bold, followed by 'IBM UIM requires a database'. A message states: 'PostgreSQL will be installed on this system. Please input password and port to proceed.' There are three input fields: 'Username' with the value 'postgres', 'Password' (empty), and 'Port' with the value '9501'. At the bottom, there is an 'InstallShield' logo and three buttons: '< Back', 'Next >', and 'Cancel'.

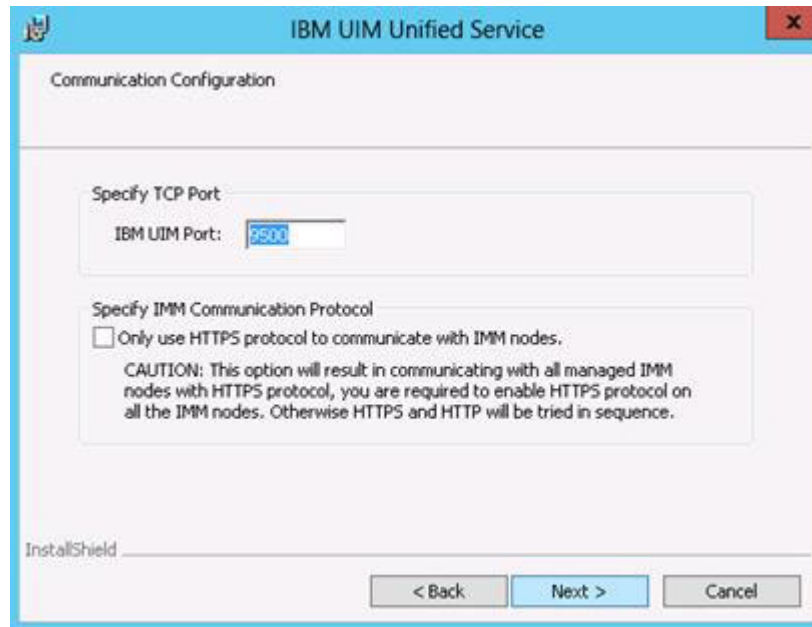
Note: This database configuration is needed only when the IBM UIM Unified Service is installed with the IBM UIM for Microsoft System Center Operation Manager. When installed with IBM UIM for VMware vSphere, this configuration step is not required.

3. Enter a passphrase, then click Next.

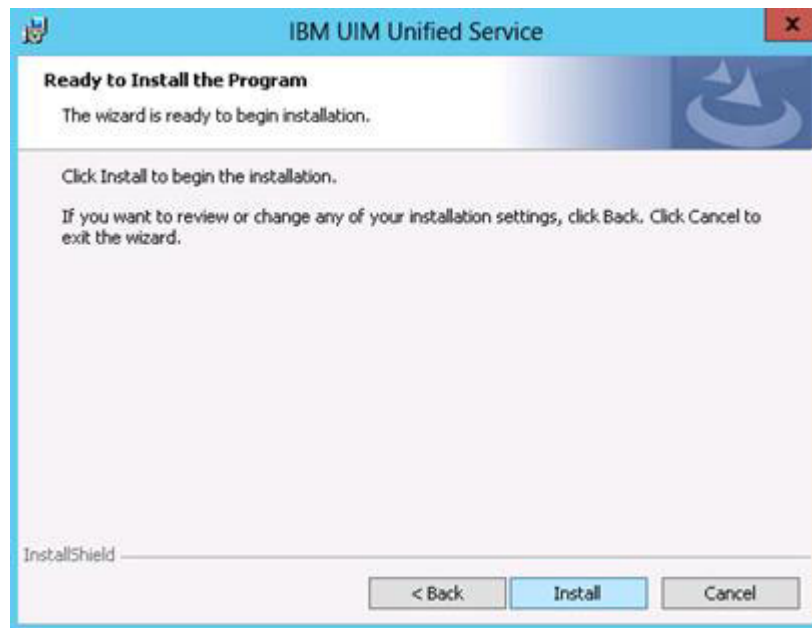


The screenshot shows the 'Security configuration' window of the IBM UIM Unified Service installer. The window has a blue title bar with the IBM logo and the text 'IBM UIM Unified Service'. Below the title bar, the text 'Security configuration' is displayed in bold, followed by 'A passphrase is required to protect all the sensitive data configured in the product.' A message states: 'Enter the passphrase to be used'. There is one input field labeled 'Passphrase:' with a masked password (four dots). At the bottom, there is an 'InstallShield' logo and three buttons: '< Back', 'Next >', and 'Cancel'.

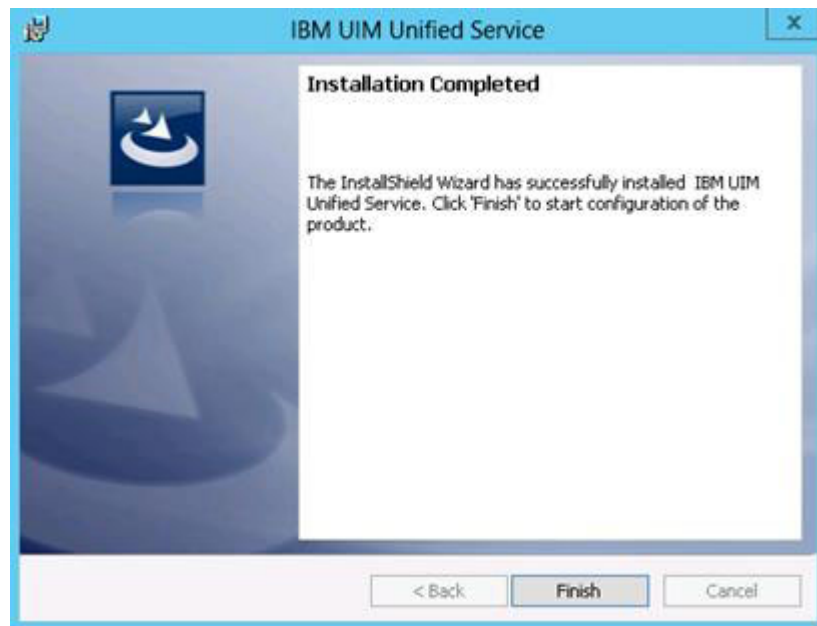
4. Keep the default value in the **Specify the TCP Port** field; this is the port that IBM UIM Unified Service will listen on. If you require enhanced security, select the checkbox **Only use HTTPS protocol to communicate with IMM nodes** to use HTTPS as the communication protocol with IMM CIMON. Click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

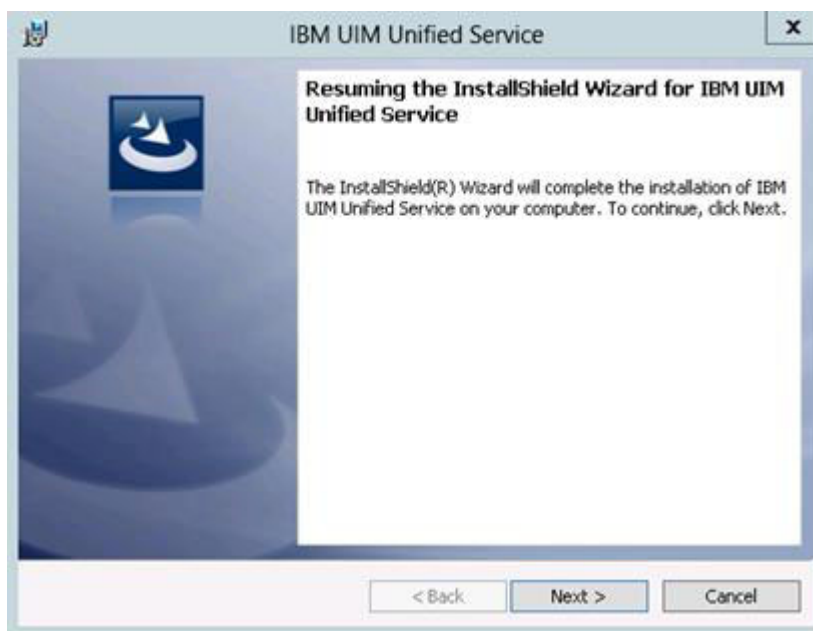
You might need to perform an upgrade installation if an earlier version of IBM UIM Unified Server application is installed.

Procedure

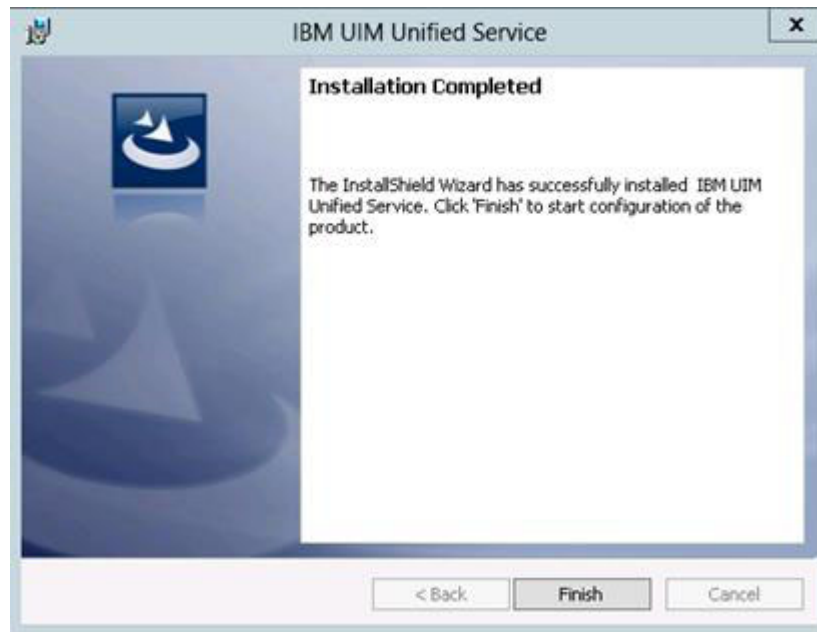
1. From the InstallShield Wizard upgrade window, click **Yes** to continue.



2. Click **Next** to continue with the upgrade.



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

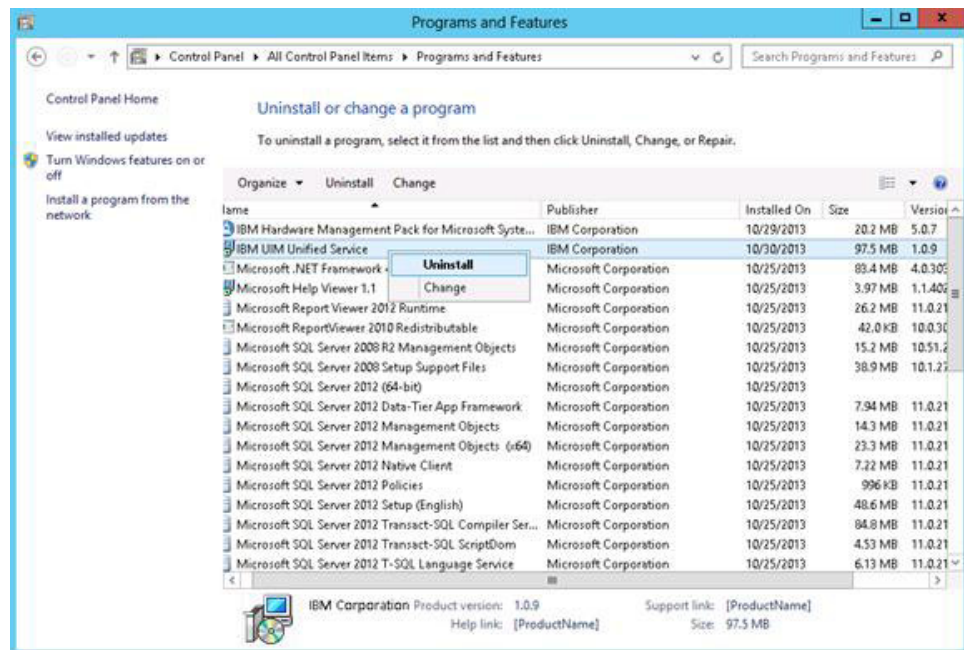


Chapter 7. Uninstalling

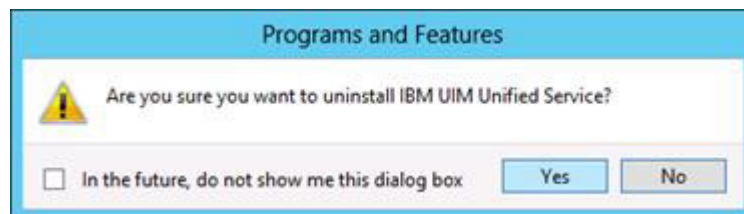
Use this procedure to uninstall the IBM UIM Unified Service.

Procedure

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



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



Results

This procedure removes the IBM UIM Unified Service application, as well as Python 2.7.5 from the system. The PostgreSQL (if the IBM UIM Unified Service was installed with the IBM UIM for Microsoft System Center Operation Manager) and IBM GSKit 8.0.50.11 must be removed separately.

Related tasks:

“Uninstalling postgresQL”

This is an optional operation. You may keep it in system for future use when reinstall IBM UIM Unified Service.

“Uninstall IBM GSKit” on page 19

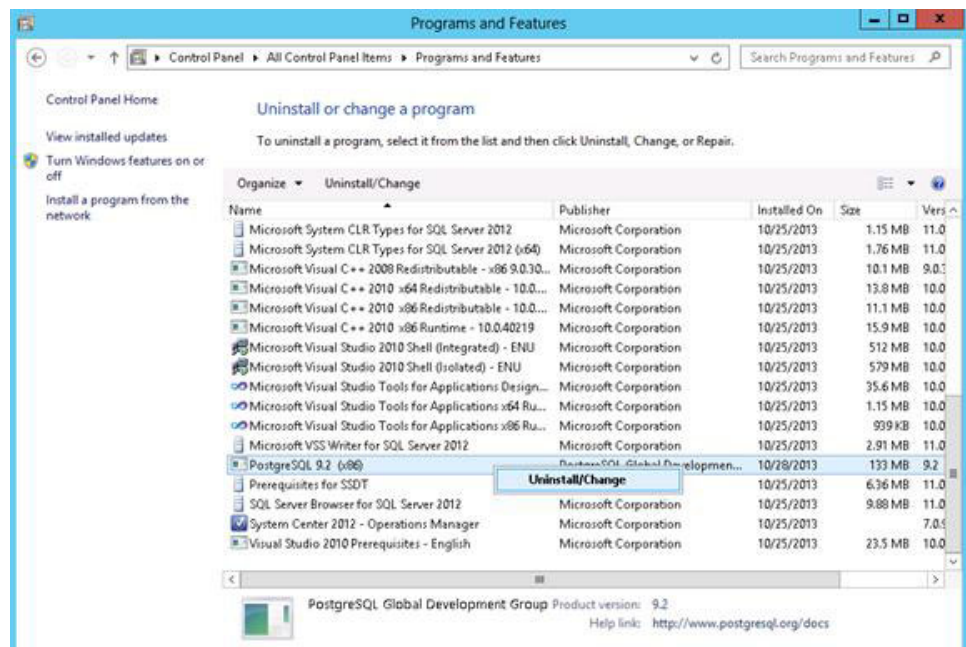
This is an optional operation. You may keep it in system for future use when reinstall IBM UIM Unified Service.

Uninstalling postgresQL

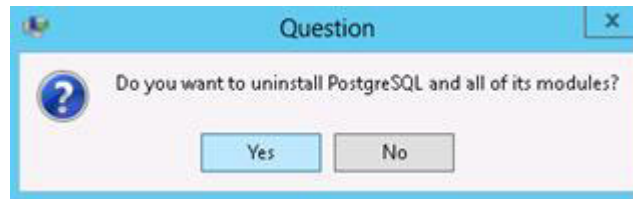
This is an optional operation. You may keep it in system for future use when reinstall IBM UIM Unified Service.

Procedure

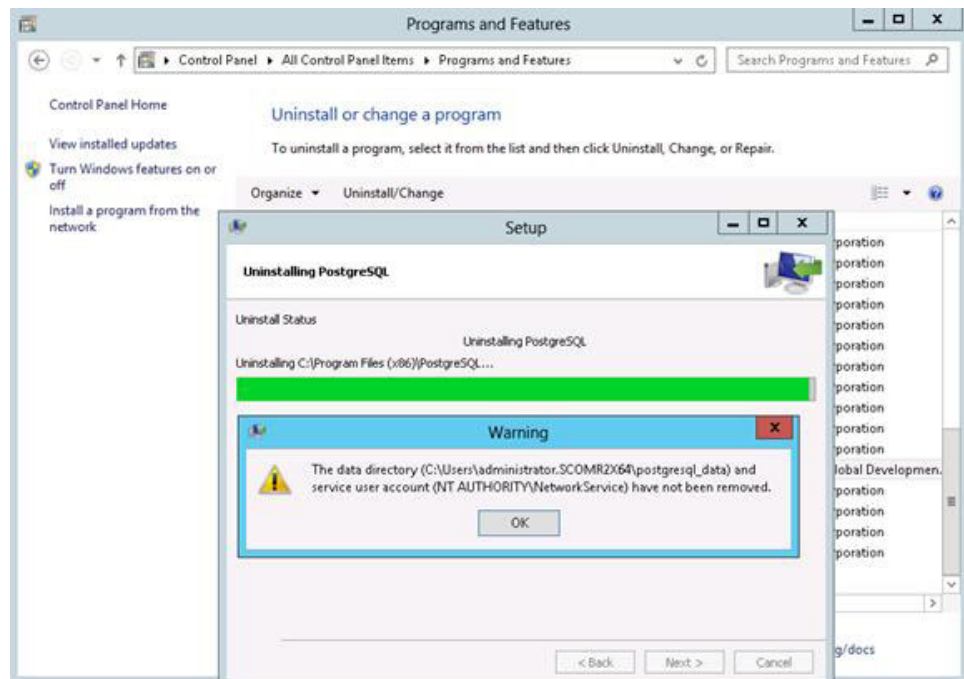
1. From the Control Panel, open the **Programs and Features** window. Right click **PostgreSQL**, then select **Uninstall/Change**.



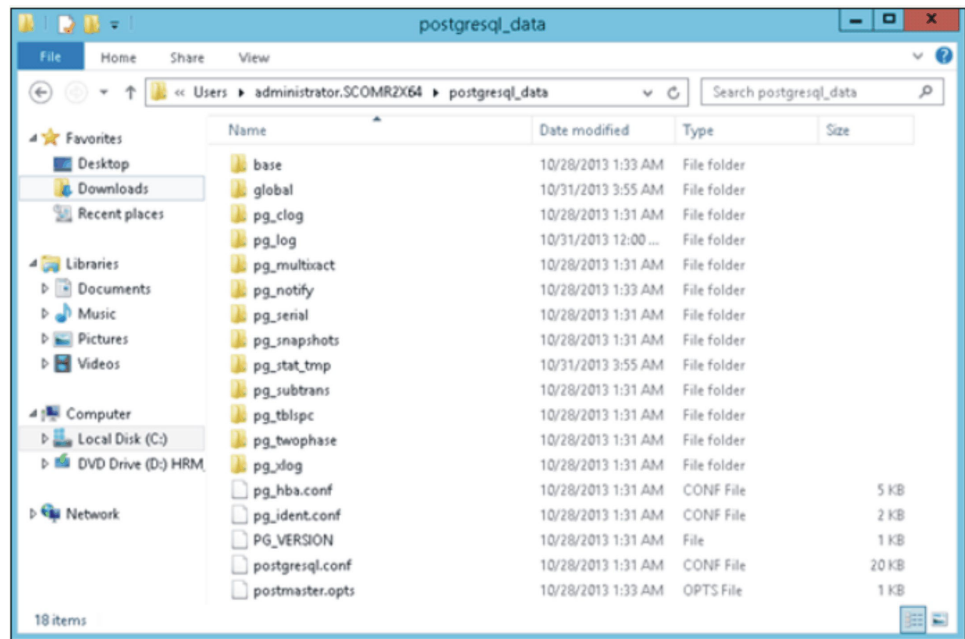
2. Click **Yes** to continue with the uninstallation.



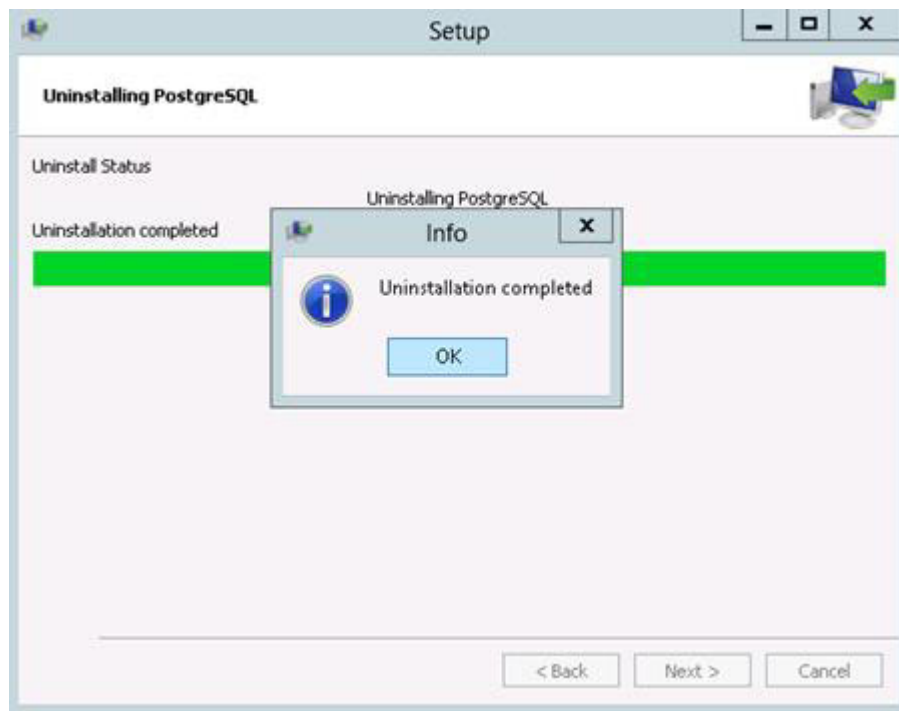
3. A window opens notifying you that the user data and configuration files are kept in the file system for future use and that if you want to remove them from the system, you must do it manually. Click **OK** to close the window, then click **Next** to continue.



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.

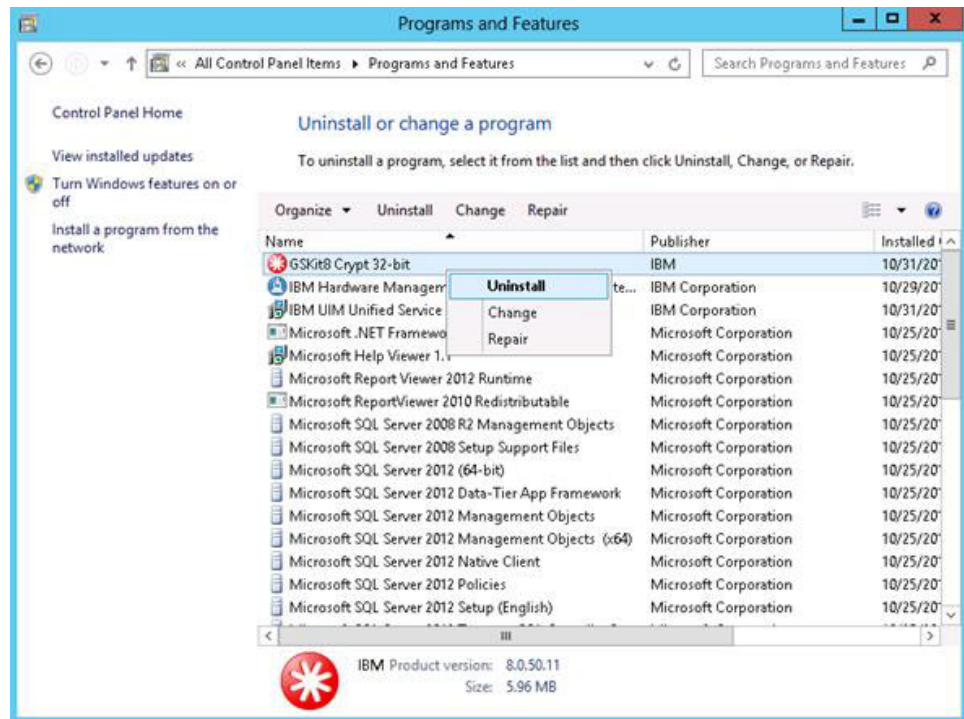


Uninstall IBM GSKit

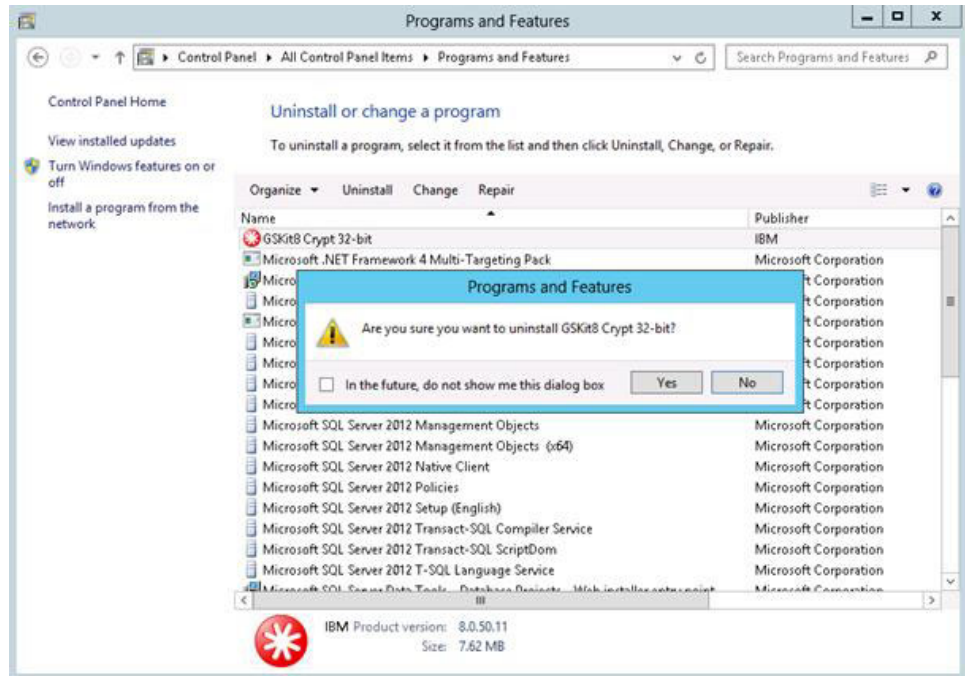
This is an optional operation. You may keep it in system for future use when reinstall IBM UIM Unified Service.

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.

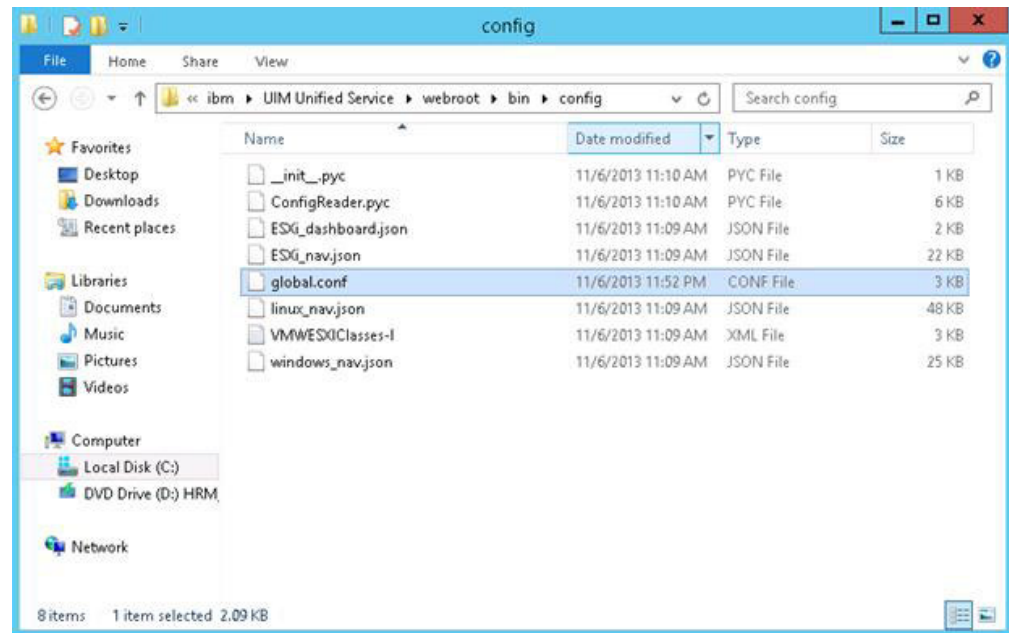


Chapter 8. Configuration file

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

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

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 IBM Unified Service must be restarted after the configuration file is modified.

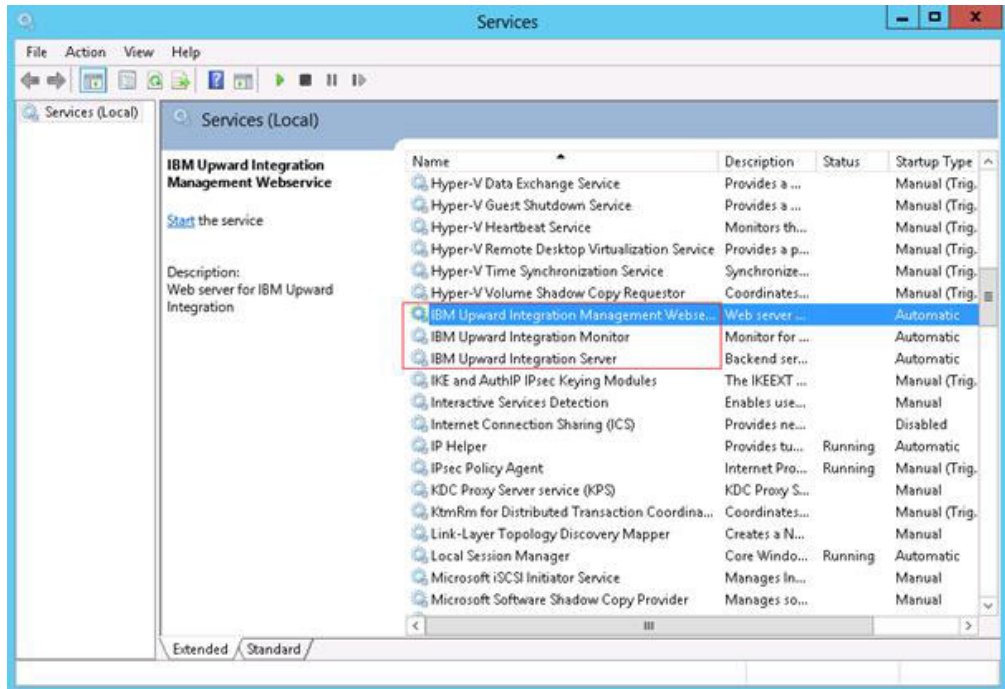


Services

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

- IBM Upward Integration Management Webservice
- IBM Upward Integration Monitor
- IBM Upward Integration Server

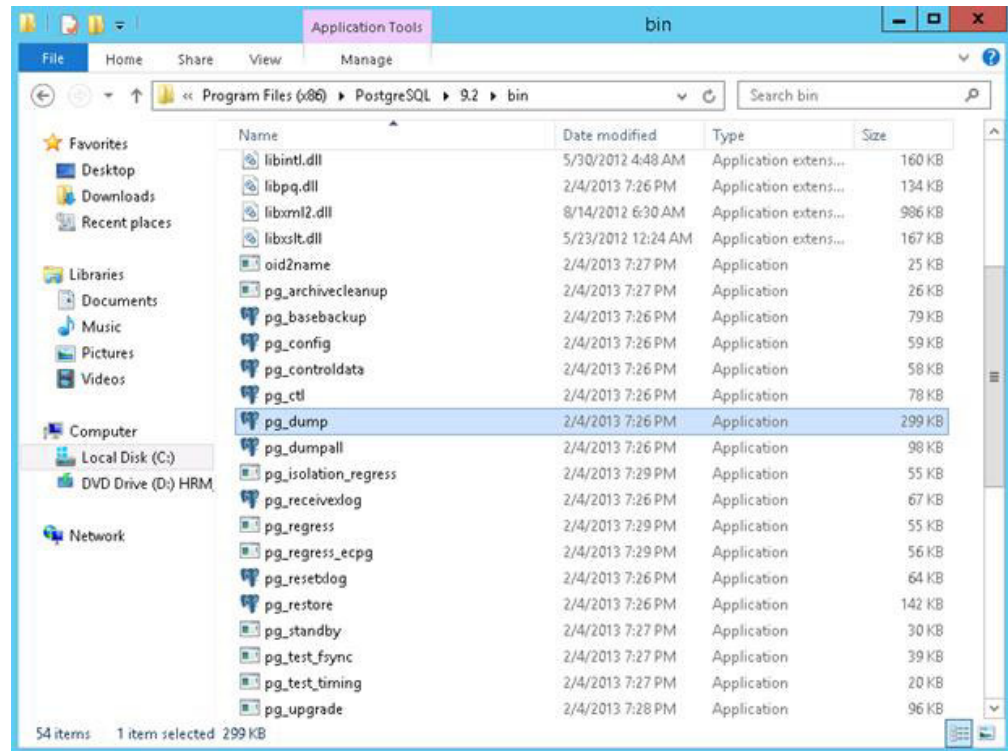
These services will automatically start if the Unified Service was installed by the IBM UIM for Microsoft System Center Operation Manager or VMware vSphere installer. If the IBM Unified Service is installed as a standalone application, these services will not automatically start.



Database Backup and Restore

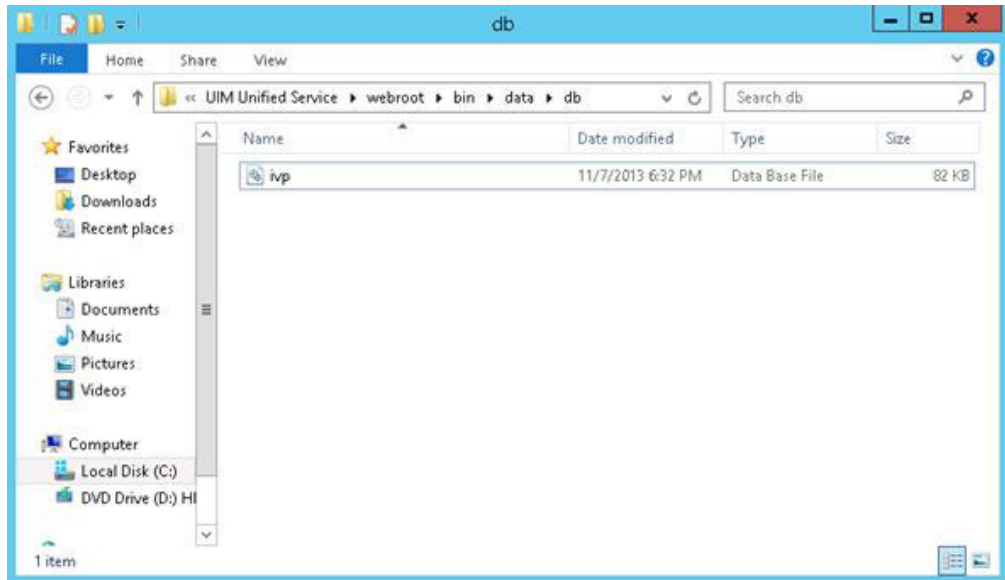
The IBM UIM Unified Server itself does not provide data backup and restore functionality. This activity can be done through other means.

To back up and restore the database for the IBM UIM for Microsoft System Center Operation Manager, 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.



For IBM UIM for VMware vSphere, follow these instructions:

1. Stop the three Windows services for the Windows Services window as shown in the previous figure.
 - IBM Upward Integration Management Webservice
 - IBM Upward Integration Monitor
 - IBM Upward Integration Server
2. Copy the file `ivp.db` to another folder with a specific file name as a backup, and copy one of the backups to overwrite the file `ivp.db` to restore the data. The `ivp.db` file is located in `\UIM Unified Service\webroot\bin\data\db` directory of the IBM UIM Unified Service installation path, typically `C:\Program Files (x86)\ibm`.
3. Restart the three Windows services.



Network Access and Firewall Settings

Table 1. . Default settings

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

If a firewall application is in use, exceptions may need to be made to the firewall rules to allow the corresponding network communications.

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View important assumptions about terminology and claims.

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CD or DVD drive speed is the variable read rate. Actual speeds vary and are often less than the possible maximum.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1024 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.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard disk drive bays with the largest currently supported drives that are available from IBM.

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Readers' Comments — We'd Like to Hear from You

IBM System x
IBM Upward Integration Modules (UIM) Unified Service User's Guide
Version 1.0

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