

SAP CRM Groupware Connector 7.0

SAP CRM 5.0 (as of SP09)

SAP CRM 5.2

SAP CRM 2007

SAP CRM 7.0 (Including Enhancement Packages)



Typographic Conventions

Type Style	Description
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation
Example text	Emphasized words or phrases in body text, graphic titles, and table titles
EXAMPLE TEXT	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example text	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

Additional icons are used in SAP Library documentation to help you identify different types of information at a glance. For more information, see *Help on Help* → *General Information Classes and Information Classes for Business Information Warehouse* on the first page of any version of *SAP Library*.

Contents

1 Introduction.....	4
1.1 About this Document	4
1.2 Further Information	5
2 Planning	6
2.1 Microsoft Exchange Connector.....	7
2.2 Lotus Domino Connector.....	8
2.3 Multi-Connector Landscape	9
2.4 Groupware Connector Landscape	10
2.5 Upgrade to 7.0 SP XX Connector from a Lower Version/SP	12
2.6 Groupware Connector 7.0 - Patches.....	13
3 Preparation.....	14
3.1 Hardware Requirements	14
3.2 Software Requirements: Microsoft Exchange Connector.....	14
3.3 Software Requirements: Lotus Domino Connector.....	16
4 Installation.....	19
4.1 Installing Microsoft Exchange Connector and Proxy.....	19
4.2 Installing Additional Microsoft Exchange Connector Proxies.....	21
4.3 Installing Lotus Domino Connector	26
4.4 Installing Additional Lotus Domino Proxies	29
4.5 Installing patch for Groupware Connector.....	34
5 Post-Installation.....	37
6 Additional Information	38
6.1 Installation Troubleshooting	38
6.2 Installing Multiple Connector Instances	40
6.3 Repairing the Groupware Connector	49
6.4 Uninstalling the Groupware Connector	51

1 Introduction

Server-based groupware integration enables contacts (CRM business partners) and appointments and tasks (CRM activities) to be exchanged between SAP CRM and either a Microsoft® Exchange Server or an IBM® Lotus Domino Server, via the SAP Groupware Connector (in this document referred to as “groupware connector”).

 You cannot use the server-based groupware integration for Microsoft Exchange and Lotus Domino in parallel for the same set of business partners.

The following table shows the equivalency between entities in SAP CRM and a Microsoft Exchange server:

SAP CRM	Microsoft Exchange
Business partner	Contact: <ul style="list-style-type: none">• <i>Contacts</i> folder in user's mailbox (private contacts)• <i>Public</i> folder (public contacts)
Activities or tasks from resource planning	Task: <i>Tasks</i> folder in user's mailbox
Activities or appointments from resource planning	Appointment, meeting: <i>Calendar</i> folder in user's mailbox

The following table shows the equivalency between entities in SAP CRM and a Lotus Domino server:

SAP CRM	Lotus Domino
Business partner	Contact (person): <ul style="list-style-type: none">• User's private contact database (private contacts)• Public contacts database (public contacts)
Activities or tasks from resource planning	To do entry: User's mail database: to-do frameset
Activities or appointments from resource planning	Calendar entry (appointment): User's mail database: calendar frameset

1.1 About this Document

Purpose

This installation guide provides step-by-step instructions for installing the components of the SAP Groupware Connector (hereafter referred to as “groupware connector”) for Microsoft Exchange Server and IBM Lotus Domino Server. The guide also specifies the requirements for the installation of the groupware connector. It covers the following topics:

- Architecture of the groupware connector
- Hardware and software requirements
- Step-by-step installation instructions

 Experience with typical groupware administrative tasks is required for preparing groupware servers for integration.

1.2 Further Information

For information about administrative tasks relating to the groupware connector, see the *SAP Groupware Connector 7.0 Administration Guide* in the SAP Service Marketplace under service.sap.com/crm-inst.

For information about the CRM side customizing, see the SAP Library for SAP Customer Relationship Management in the SAP Help Portal at <http://help.sap.com/crm-core> → <choose a release> → *Application Help* → <choose a language> → *Data Exchange and Mobile Technologies* → *Groupware Integration* → *Server-Based Groupware Integration*.

SAP Notes that are relevant for the SAP Groupware 7.0 release are as follows. Implement these Notes to work with Groupware Connector 7.0:

- [2135697](#) SAP Groupware Connector 7.0 SP 03 - Release Information Note
- [1880129](#) Groupware connector fixes
- [1885752](#) Groupware multiple connector support

2 Planning

The groupware connector synchronizes messages between the SAP CRM server and the groupware server, using a messaging interface. It consists of the following components:

- Groupware connector (of which one instance must be installed)
- Groupware connector proxy (of which one or more instances can be installed).

The number of installed instances of groupware connector proxies depends on the following:

- Geographical distribution of the organization and wide area network (WAN) landscape
- Desired performance of the solution.

Internal communication between the connector and its proxies is optimized to consume as little network traffic as possible, thus supporting distributed solutions where proxies provide a link to remote groupware servers.

The overall performance of the solution greatly depends on the configured landscape, particularly for greatly distributed organizations. Performance is optimized if proxy instances do not communicate with remote groupware servers.

The simplest configuration is when the groupware connector and one instance of the groupware connector proxy per organization are installed on the same server in the same local area network (LAN) as SAP CRM. This configuration is easiest to maintain but has the lowest performance.

 In a distributed organization, SAP recommends that you set up a separate proxy instance within each remote LAN. This will provide much better performance and will dramatically reduce wide area network (WAN) usage, since calls between connectors and proxies are optimized to use as few network resources as possible. Proxy instances can be installed or removed after initial setup is performed.

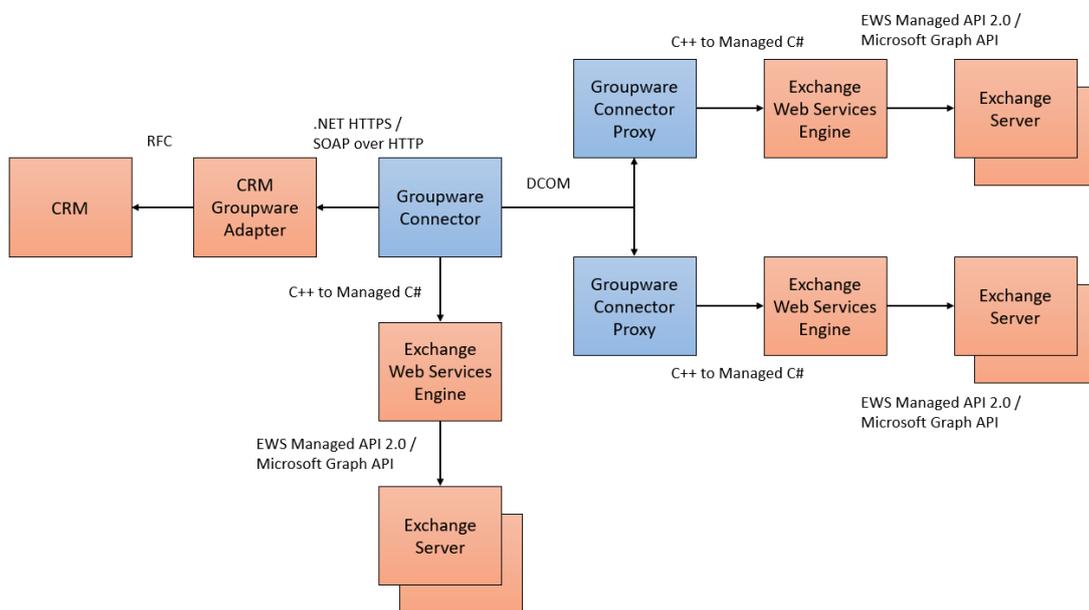
2.1 Microsoft Exchange Connector

The groupware connector for Microsoft Exchange Server is a .NET VC++ application, usually running as a Windows service under an administrative account. For data synchronization, another administrative account, SAP Groupware Admin is required, which must be assigned with permissions to read and write into other users' mailboxes and public folders on the Microsoft Exchange Server.

The groupware connector for Microsoft Exchange Server uses:

- Exchange Web Services (EWS) Managed API 2.0 (Basic Authentication) to connect with Microsoft Exchange On-premise Server.
- Microsoft Graph API (Modern Authentication) to connect with Exchange Online.

The figure below shows the communication between the components:



The groupware connector communicates with SAP CRM via the groupware adapter. The connector uses Simple Object Access Protocol (SOAP) over HTTP or .NET over HTTPS (depending on the connector version) to communicate with the adapter. The groupware connector uses Exchange Web Services (EWS) / Microsoft Graph API for communication with the Microsoft Exchange Server.

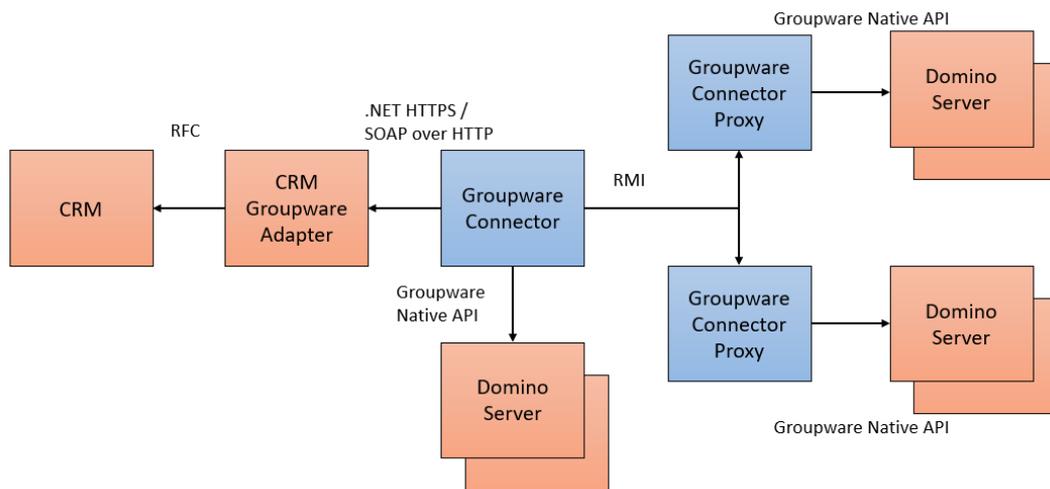
⚠ You must install the groupware connector and the Microsoft Exchange Server in the same domain (same domain concept is not applicable in an Office 365 landscape).

2.2 Lotus Domino Connector

The groupware connector for Lotus Domino is a Java application that uses Lotus Notes libraries during the processing. The connector usually runs as a Windows NT service, supported by a small application called `CustomService.exe`. This application starts Java as a child process with proper parameters set.

The groupware connector for Lotus Domino uses the Lotus Domino toolkit for Java/CORBA to connect to the Lotus Domino Server.

The figure below shows the communication between the components:



The groupware connector communicates with SAP CRM via the groupware adapter. The groupware connector uses RMI for communication with the Lotus Domino server.

⚠ You must install the groupware connector and the Lotus Domino server in the same domain. Installation of the groupware connector and proxy requires the Lotus Notes client to be on same machine.

↑ In case of a remote proxy, each proxy should have a Lotus Notes client on the same machine.

2.3 Multi-Connector Landscape

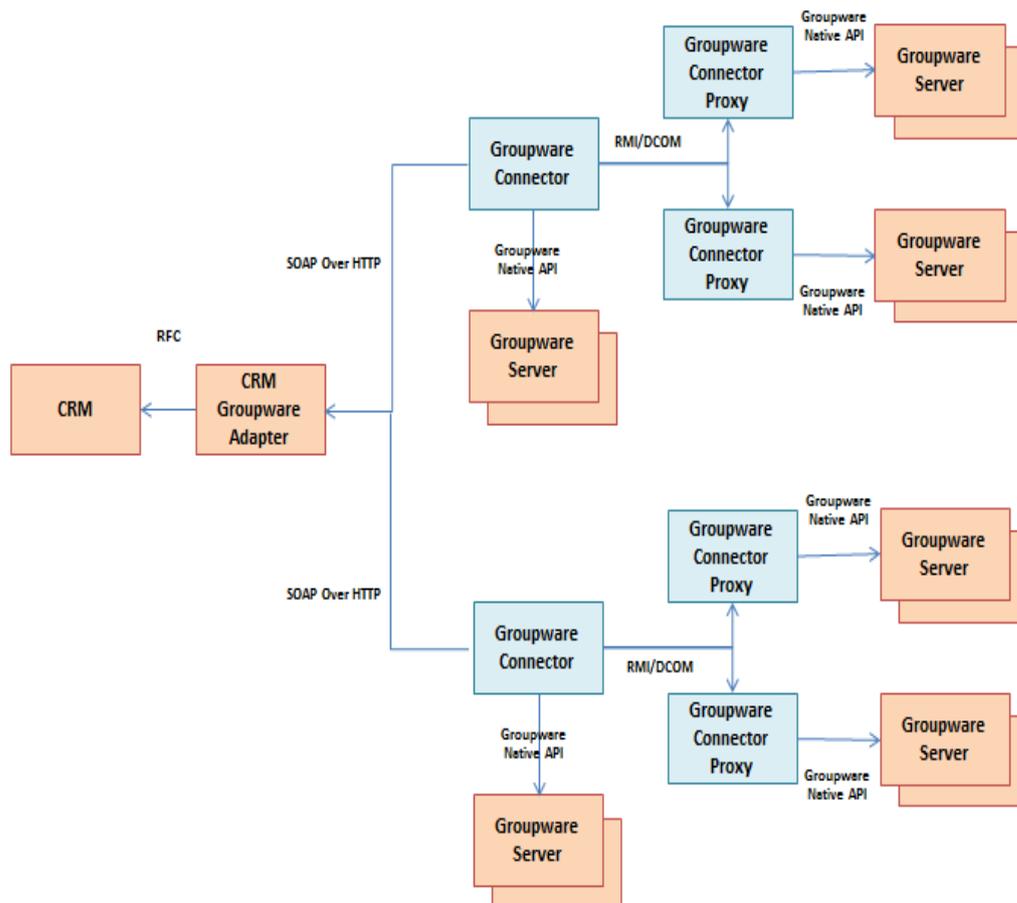
In the lower versions of groupware connector, it was restricted to have only one groupware connector connected to a single CRM system in the production scenario. Typically, most of the organizations have a significant number of mail servers distributed in different geographic locations. In order to cover all the mail servers and to reduce the latency during data exchange, it is now supported to have more than one groupware connector connecting to a single CRM groupware adapter in proximity with the exchange/domino servers.

In Groupware Connector 7.0, data exchange from a single CRM system with multiple connectors, which are in turn mapped to separate groupware servers, is enabled via a multi-connector scenario.

↑ For better performance, when your organization has a large number of Groupware users, SAP recommends that you use Multi-Connector concept by having 300 to 500 Groupware users per instance.

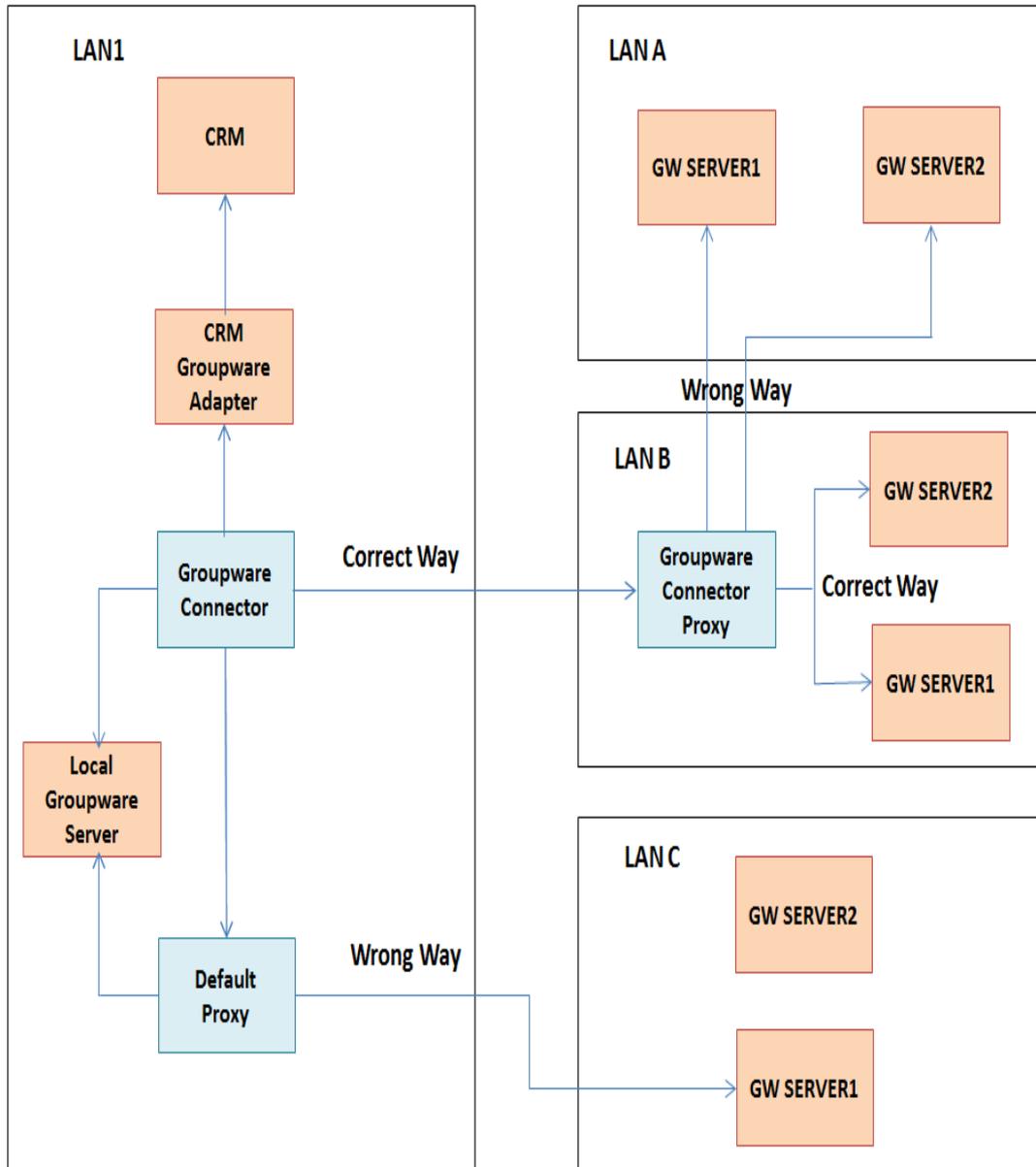
- 💡
- CRM side corrections, CRM side settings, and AdminTool configuration are necessary to enable a multi-connector scenario. For more information, see SAP Note 1885752.
 - **A multi-connector scenario works with connectors of version 7.0 and not between a 5.0 connector and a 7.0 connector.**

The following figure shows the communication between the components in a multi-connector landscape:



2.4 Groupware Connector Landscape

The following figure shows correct and incorrect approaches to building the groupware connector landscape (not applicable in an Office 365 landscape):



Take the following considerations into account when selecting the best solution for your situation:

- The minimum required bandwidth between the groupware connector and the remote proxy instance is 512kbps.
- The minimum required bandwidth between the groupware connector proxy and the remote groupware server is 1Mbps. Note that this is the case for the simplest configuration.
- When using a remote proxy rather than setting up the proxy to deal with remote groupware servers, note the following:

- Network utilization is about 5 times less during replication from SAP CRM to groupware.
- Performance of the replication from groupware to SAP CRM can be up to 100 times faster (depending on WAN bandwidth) because the remote proxy does not utilize the network while detecting changes to objects during synchronization.

 As of SAP CRM 5.0 SP09, the *MapBox* functions for data conversion are integrated into SAP NetWeaver Application Server ABAP. SAP recommends that you discontinue use of the Java MapBox. Groupware integration data can be easily migrated to the ABAP-based MapBox. For information about migration, see SAP Note [1595938](#).

2.5 Upgrade to 7.0 SP XX Connector from a Lower Version/SP

 **The upgrade option is not available in the groupware connector installer, you will have to uninstall the previous version/SP of groupware connector and install the latest SP of 7.0 groupware connector.**

 If groupware server is migrated from Domino to Exchange, make sure that the users' mailbox is migrated correctly and the custom properties and values of the appointments, tasks, and contacts are retained after migration.

Every synced activity or contact will have a unique BDoc ID representing the object in CRM and will have a UID representing the object in the groupware server. These IDs are required to determine whether the object is new or already synced.

Procedure

Follow the steps below to upgrade to the latest SP of 7.0 Connector from a lower version/SP:

1. Stop the connector and proxy services of the older version that is installed.
2. If upgrading from a Connector 5.0 or lower, take a backup of the *Storage* folder located in the *Connector* folder. **This is required in a roll back situation.**
3. If upgrading from a different SP of Connector 7.0, take a backup of the following files:
 - a. All the XMLs (*config*, *proxies*, *userlist*, *applist*, *catslist*) present in *Connector* folder
 - b. *Storage* folder present in *Proxy* folder
4. Uninstall the lower version/SP instances of groupware connector and proxy.
5. Follow the installation steps as described in section [4 Installation](#) to install the latest SP of Groupware Connector 7.0.
6. For more information about configuring the services in this scenario, see the section *Upgrade to 7.0 SP XX Connector from a Lower Version/SP* in the *Groupware Connector 7.0 Administration Guide*.

2.6 Groupware Connector 7.0 - Patches

 You can apply Groupware Connector patch only if you have installed Groupware Connector 7.0 SP 03 or higher.

Delivery of fixes for Groupware Connector 7.0 SP 03 is made available frequently by releasing patches (you can find the SMP path from the Release Information Note of the corresponding patch version). Patch can be installed manually by running the Update.exe on the Groupware Connector machine. Only the latest patch will be available on Service Market Place. Every new patch is cumulative i.e., all the fixes that are part of the patch '(N-1)' will be part of the patch 'N'.

Refer to [section 4.5](#) for step by step procedure to install the patch.

 Patch runs as an update so you will not be able to select or change any settings as you would have done during the setup installation.

3 Preparation

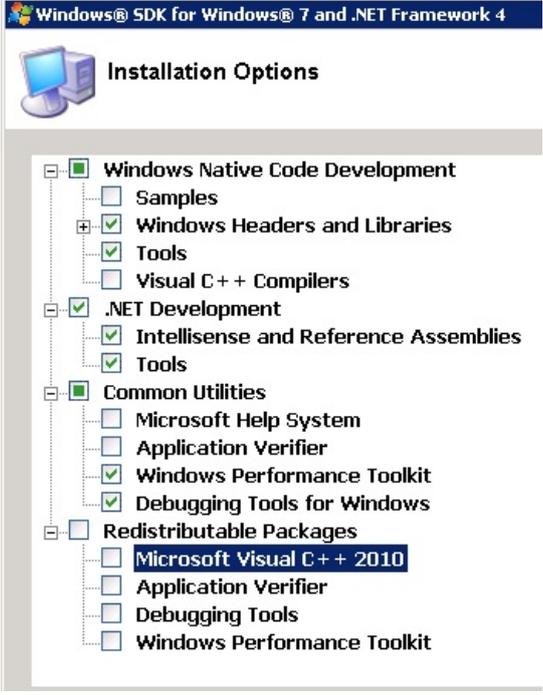
3.1 Hardware Requirements

The machine on which the connector will be installed must meet the following requirements:

Component	Description
Processor	Intel P4 2GHz or higher, or compatible 2GHz processors
Minimum RAM	4 GB (8 GB RAM is recommended)
Minimum disk space	16 GB
Network configuration	Minimum 512kbps line or higher, a LAN is recommended

3.2 Software Requirements: Microsoft Exchange Connector

Component	Description
Operating system of connector machine	<p>Microsoft Windows Server 2003 or 2008 or 2008 R2 or 2012 or 2012 R2 or 2016 or 2016 R2</p>  <ul style="list-style-type: none"> Windows Server 2012 R2 supported from Connector 7.0 SP 02 onwards Windows Server 2016 or 2016 R2 supported from Connector 7.0 SP 03 Patch 10 onwards
Microsoft Exchange Server	<p>Microsoft Exchange Server 2010 (64-bit) or Microsoft Exchange Server 2013 (64-bit) or Microsoft Exchange Server 2016 (64-bit) or Microsoft Exchange Server 2019 (64-bit) or Microsoft Office 365 (Exchange online)</p>  Do not install the groupware connector and the Microsoft Exchange Server on the same system.
Microsoft Outlook	<p>Microsoft Outlook 2007 or 2010 or 2013 or 2016 or 2019 (32-bit or 64-bit versions) Microsoft Outlook Web Access 2010 or 2013 or 2016 or 2019</p>
Microsoft .NET Framework	<p>Microsoft .NET Framework 4 (Standalone Installer) or Microsoft .NET Framework 4.5 (Standalone Installer) or Microsoft .NET Framework 4.7 (Standalone Installer) You can download this from the Microsoft Download Center.</p>  <ul style="list-style-type: none"> Install full version of .NET Framework 4.0 or 4.5 or 4.7 and not .NET Framework client version for 4.0 or 4.5 or 4.7. This is a prerequisite for groupware connector installation You do not have to uninstall any previous versions that are installed. Modern Authentication (OAuth 2.0) is supported only with .NET Framework 4.5 and higher. Additionally, .NET Framework 4.5 is compatible only from Windows Server 2012 onwards.

<p>Microsoft Windows SDK</p>	<p>Microsoft Windows SDK v7.1 or v8.1 or 10.1 Depending on your Operating System (32 BIT or 64 BIT), you can download this from the Microsoft Download Center.</p>  <p>Windows® SDK for Windows® 7 and .NET Framework 4</p> <p>Installation Options</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Windows Native Code Development <ul style="list-style-type: none"> <input type="checkbox"/> Samples <input checked="" type="checkbox"/> Windows Headers and Libraries <input checked="" type="checkbox"/> Tools <input type="checkbox"/> Visual C++ Compilers <input checked="" type="checkbox"/> .NET Development <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Intellisense and Reference Assemblies <input checked="" type="checkbox"/> Tools <input checked="" type="checkbox"/> Common Utilities <ul style="list-style-type: none"> <input type="checkbox"/> Microsoft Help System <input type="checkbox"/> Application Verifier <input checked="" type="checkbox"/> Windows Performance Toolkit <input checked="" type="checkbox"/> Debugging Tools for Windows <input type="checkbox"/> Redistributable Packages <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Visual C++ 2010 <input type="checkbox"/> Application Verifier <input type="checkbox"/> Debugging Tools <input type="checkbox"/> Windows Performance Toolkit <p>!</p> <ul style="list-style-type: none"> • During windows sdk installation, select only the options as shown in the above screenshot. • Microsoft windows sdk will not install if redistributable package is present in the machine, you will have to uninstall the existing Microsoft Visual C++ Redistributable package before installing SDK. • This is a prerequisite for groupware connector patch installation.
<p>Microsoft Visual C++ Redistributable Package</p>	<p>Microsoft Visual C++ 2010 SP1 Redistributable Package (x86) or Microsoft Visual C++ 2013SP1 Redistributable Package (x86) You can download this from the Microsoft Download Center.</p> <p>! This is a prerequisite for groupware connector installation.</p>

! Do not install the groupware connector and the Microsoft Exchange Server on the same system.

3.3 Software Requirements: Lotus Domino Connector

Component	Description
Operating system of connector machine	<p>Microsoft Windows Server 2003 or 2008 or 2008 R2 or 2012 or 2012 R2 or 2016 or 2016 R2</p>  <ul style="list-style-type: none"> Windows Server 2012 R2 supported from Connector 7.0 SP 02 onwards Windows Server 2016 or 2016 R2 supported from Connector 7.0 SP 03 Patch 10 onwards
Lotus Domino Server	<p>Lotus Domino 8.0 or 8.5 or 9.0</p>  Do not install the groupware connector and the Lotus Domino server on the same system.
Java Runtime Engine (JRE)	<p>JRE 1.6.0_25 (6u25) (x86) or higher</p> <p>You can download this from the Oracle Technology Network.</p>  This is a prerequisite for groupware connector installation.
IBM Lotus Notes	<p>Lotus Notes 8.0 or 8.5 or 9.0</p>  This is a prerequisite for groupware connector installation.
Microsoft .NET Framework	<p>Microsoft .NET Framework 4 (Standalone Installer) or Microsoft .NET Framework 4.5 (Standalone Installer) or Microsoft .NET Framework 4.7 (Standalone Installer)</p> <p>You can download this from the Microsoft Download Center.</p>  <ul style="list-style-type: none"> Install full version of .NET Framework 4.0 or 4.5 or 4.7 and not .NET Framework client version for 4.0 or 4.5 or 4.7. This is a prerequisite for groupware connector installation. You do not have to uninstall any previous versions that are installed.
Microsoft Windows SDK	<p>Microsoft Windows SDK v7.1 or v8.1 or 10.1</p> <p>Depending on your Operating System (32 BIT or 64 BIT), you can download this from the Microsoft Download Center.</p>

	 <p>Windows® SDK for Windows® 7 and .NET Framework 4</p> <p>Installation Options</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Windows Native Code Development <ul style="list-style-type: none"> <input type="checkbox"/> Samples <input checked="" type="checkbox"/> Windows Headers and Libraries <input checked="" type="checkbox"/> Tools <input type="checkbox"/> Visual C++ Compilers <input checked="" type="checkbox"/> .NET Development <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Intellisense and Reference Assemblies <input checked="" type="checkbox"/> Tools <input checked="" type="checkbox"/> Common Utilities <ul style="list-style-type: none"> <input type="checkbox"/> Microsoft Help System <input type="checkbox"/> Application Verifier <input checked="" type="checkbox"/> Windows Performance Toolkit <input checked="" type="checkbox"/> Debugging Tools for Windows <input type="checkbox"/> Redistributable Packages <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Microsoft Visual C++ 2010 <input type="checkbox"/> Application Verifier <input type="checkbox"/> Debugging Tools <input type="checkbox"/> Windows Performance Toolkit <p>💡</p> <ul style="list-style-type: none"> • During windows sdk installation, select only the options as shown in the above screenshot. • Microsoft windows sdk will not install if redistributable package is present in the machine, you will have to uninstall the existing Microsoft Visual C++ Redistributable package before installing SDK. • This is a prerequisite for groupware connector patch installation.
Microsoft Visual C++ Redistributable Package	<p>Microsoft Visual C++ 2010 SP1 Redistributable Package (x86) or Microsoft Visual C++ 2013 SP1 Redistributable Package (x86) You can download this from the Microsoft Download Center.</p> <p>💡 This is a prerequisite for groupware connector installation.</p>
Notes.jar	<p>You must install one of the following:</p> <ul style="list-style-type: none"> • Lotus Notes 8.0 or higher • Lotus Domino Designer 8.0 or higher • Lotus Domino Administrator 8.0 or higher <p>💡</p> <ul style="list-style-type: none"> • The version of the products listed above should be the same as the version of the default Lotus Domino Messaging Server • The <code>Notes.jar</code> file must be available on the machine on which the groupware connector will be installed.
Sun Java Mail API	<p>Sun Java Mail API 1.3.1 You can download this from the Oracle Technology Network.</p> <p>💡 This is a prerequisite for groupware connector installation.</p>

JavaBeans Activation Framework (JAF)	JavaBeans Activation Framework (JAF) 1.0.2 You can download this from the Oracle Technology Network.  This is a prerequisite for groupware connector installation.
--------------------------------------	--

 Do not install the groupware connector and the Lotus Domino server on the same system.

4 Installation



- Groupware Connector for Microsoft Exchange server and Groupware Connector for Lotus Domino server can co-exist on the same machine. (Only the latest connector, Domino or Exchange, will be displayed under “Mail Server” in the registry)
- Groupware Connector 5.0 and Groupware Connector 7.0 can co-exist on the same machine, but their services should not be running against the same CRM system or for the same set of groupware users.



Microsoft Windows SDK v7.1 or v8.1 or v10.1 is an additional prerequisite to be installed before installing Connector 7.0 SP 03. (Microsoft windows sdk will not install if redistributable package is present in the machine, you will have to uninstall the existing Microsoft Visual C++ Redistributable package before installing SDK).



System time zone of the machine on which groupware proxy is installed and the system time zone of the machine on which Microsoft Exchange Server is installed should be the same.

4.1 Installing Microsoft Exchange Connector and Proxy

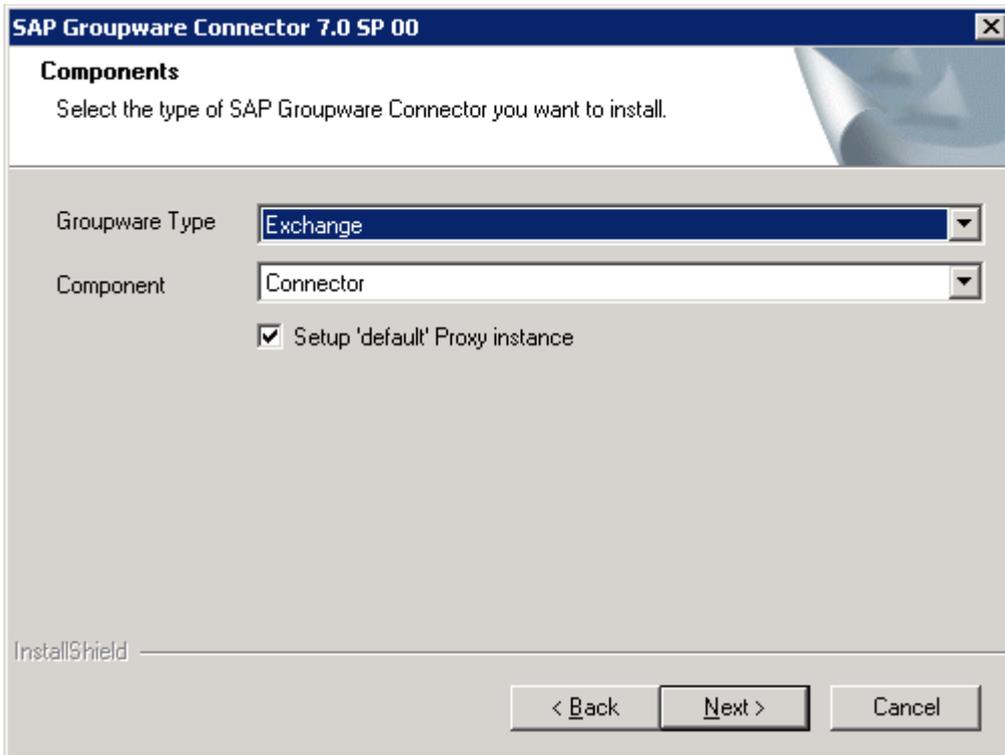
This procedure explains how to install the groupware connector for Microsoft Exchange on a Microsoft Windows Server operating system.



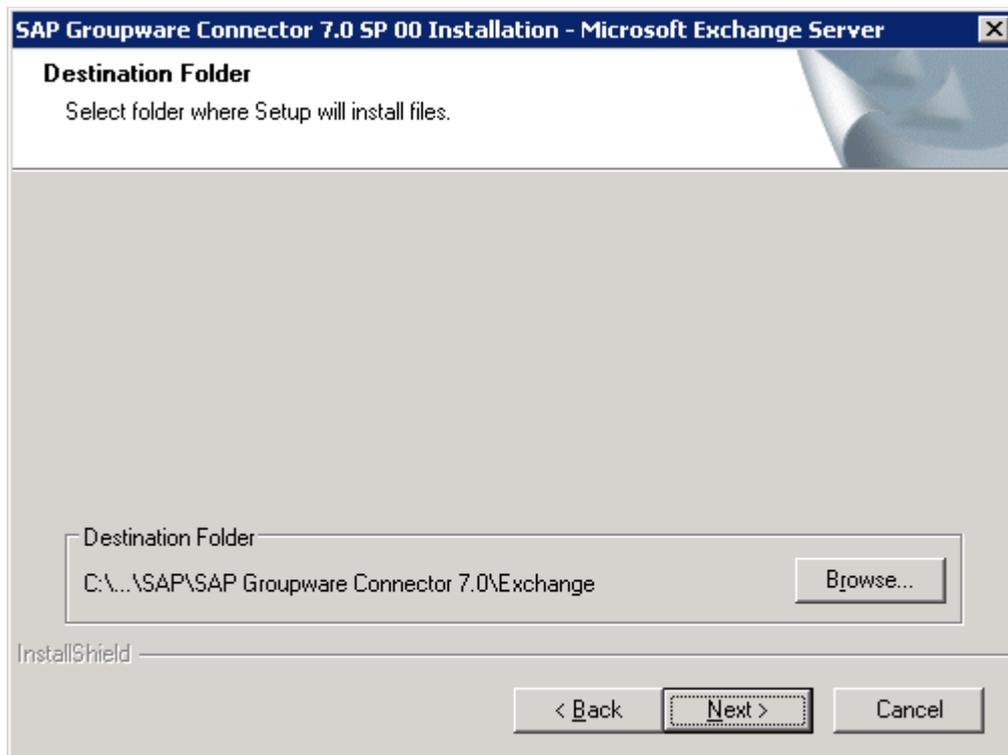
If you are upgrading from a lower version, refer to section [2.5 Upgrade to 7.0 SP XX Connector from a Lower Version/SP](#) before you start the installation.

Procedure

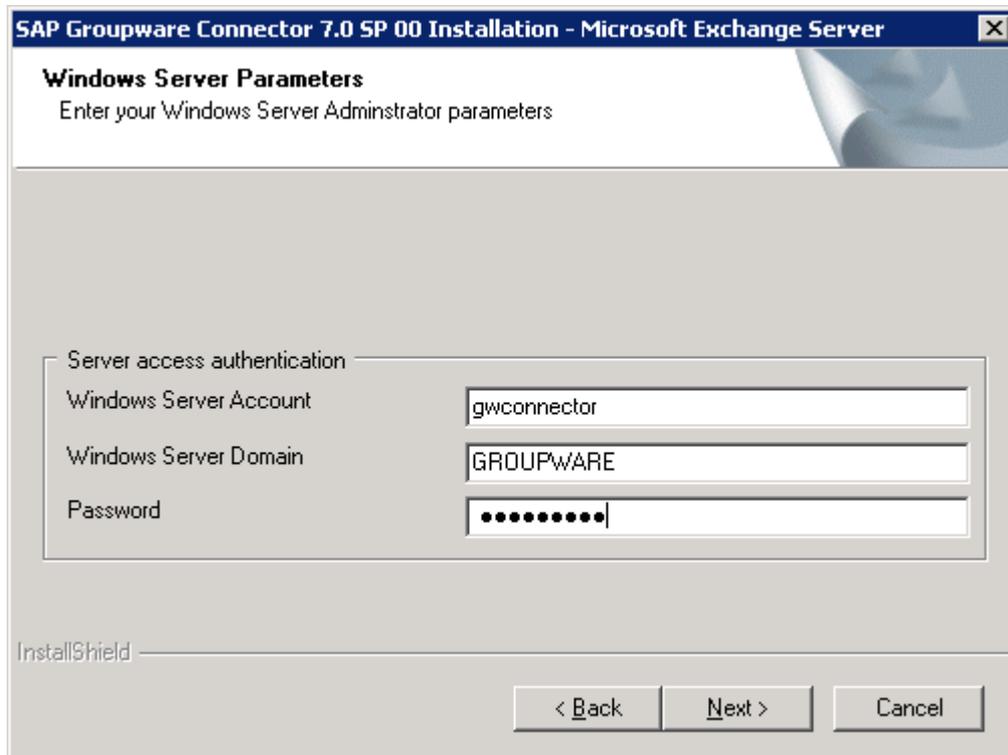
1. Log on to your host using the prepared administrative account for the groupware connector.
 - You must have Admin rights on the machine (you must belong to the Administrator group).
2. Launch the `setup.exe`.
 - Right click on `setup.exe` and select *Run as Administrator*.
3. On the *Welcome* screen click *Next*.
 - a. Read the text on the *Installation Prerequisites* window which is displayed only in Groupware Connector 7.0 SP 01 and below and check if your computer meets all the software and hardware requirements. If it does, click *Next*.
4. Choose *Exchange* as the type of groupware connector that you want to install and select the component *Connector*. Indicate whether you want to install an instance of the default groupware connector proxy.



5. Click *Next* and wait while the setup routine detects the required software.
6. Choose the folder where the setup program will install the groupware connector and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Exchange*
To select a different folder, click *Browse*.



7. Enter the Windows Server Administrator parameters and click *Next*. The *Windows Server Account*, *Windows Server Domain*, and *Password* parameters are used as logon information for the groupware connector service. The properties of the currently logged on user are filled by default.



8. Review your settings and click *Next* to start copying files.
9. The installation is complete. Click *Finish* to exit the wizard.

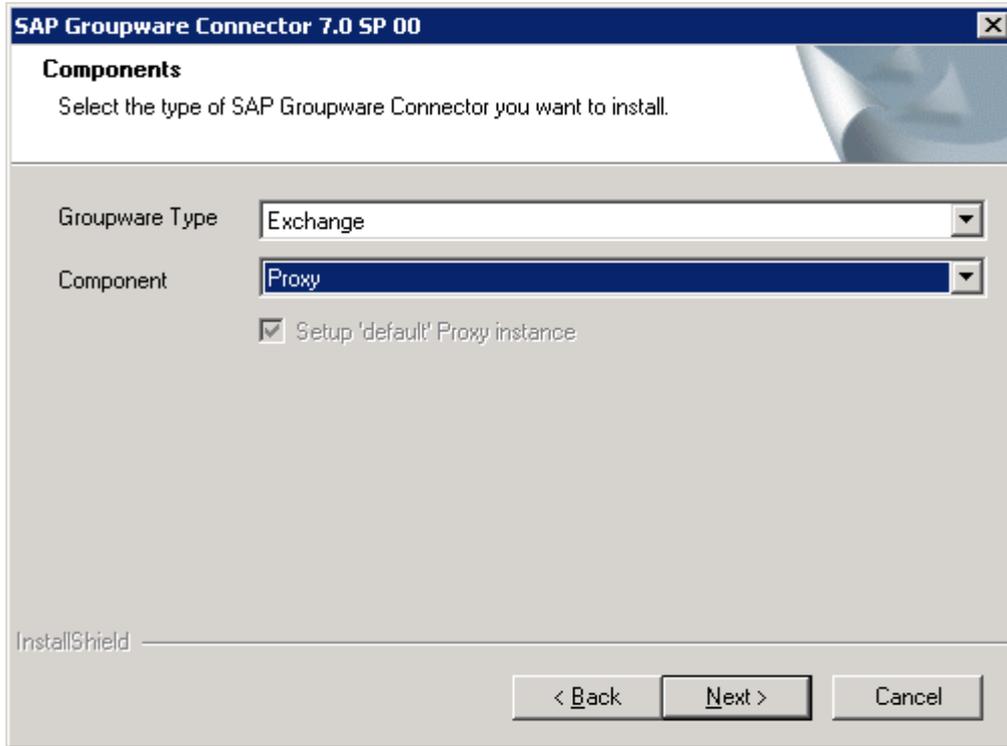
4.2 Installing Additional Microsoft Exchange Connector Proxies

This procedure explains how to install a separate groupware connector proxy for Microsoft Exchange on a Microsoft Windows Server operating system.

Procedure

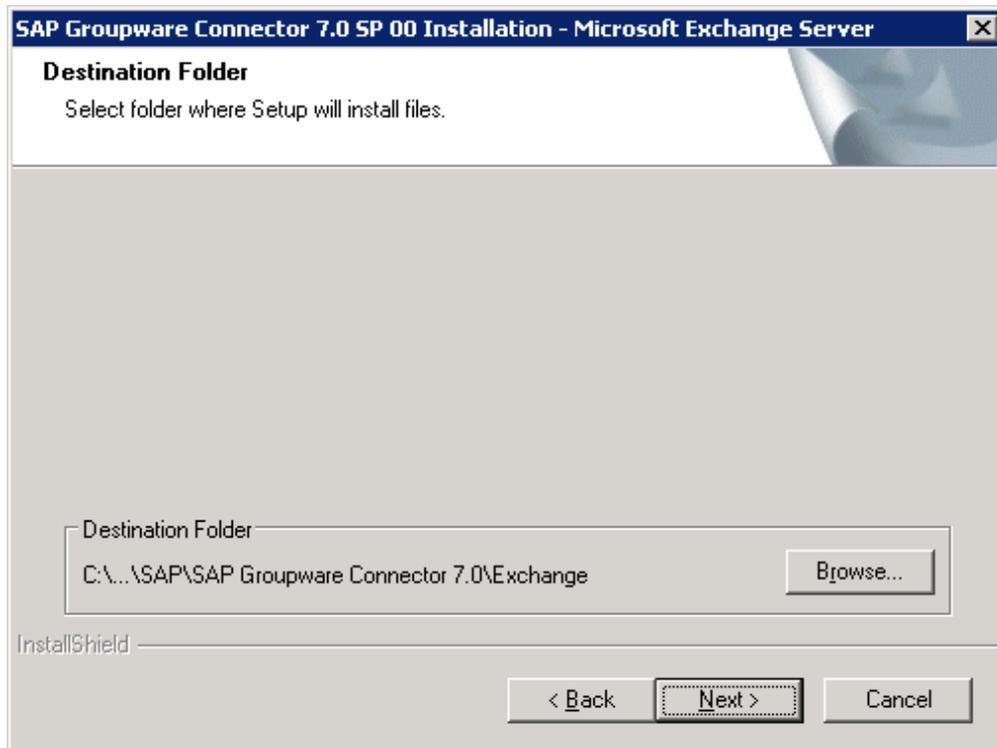
1. Log on to your host using the prepared administrative account for the groupware connector.
 -  You must have Admin rights on the machine (you must belong to the Administrator group).
2. Launch the `setup.exe`.
 -  Right click on `setup.exe` and select *Run as Administrator*.
3. On the *Welcome* screen click *Next*.
 - a. Read the text on the *Installation Prerequisites* screen which is displayed only in Groupware Connector 7.0 SP 01 and below and check if your computer meets all the software and hardware requirements. If it does, click *Next*.

4. Choose *Exchange* as the type of groupware connector and select the component *Proxy*.

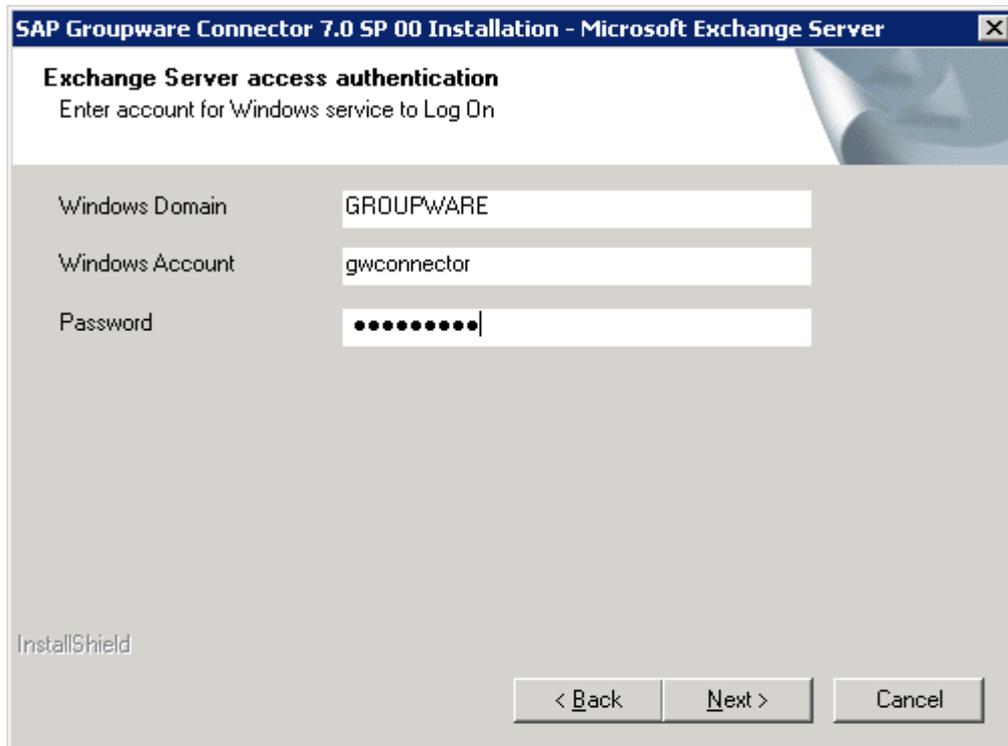


5. Click *Next* and wait while the setup routine detects the required software.

6. Select the folder where the setup program will install the groupware connector proxy and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Exchange*. To select a different folder, click *Browse*.



7. Enter the Windows Server Administrator parameters and click *Next*.
The *Windows Server Account*, *Windows Server Domain*, and *Password* parameters are used as logon information for the groupware proxy service. The properties of the currently logged on user are filled by default.



8. Review your settings and click *Next* to start copying files.
9. Click *Finish* to exit the Wizard.
10. On the computer with the groupware connector installed, log on using the administrative account and start the AdminTool (`AdminTool.exe`), which can be found in the *Installation* folder under *Connector*.

 Right click on `AdminTool.exe` and select *Run as Administrator*.

4.3 Installing Lotus Domino Connector

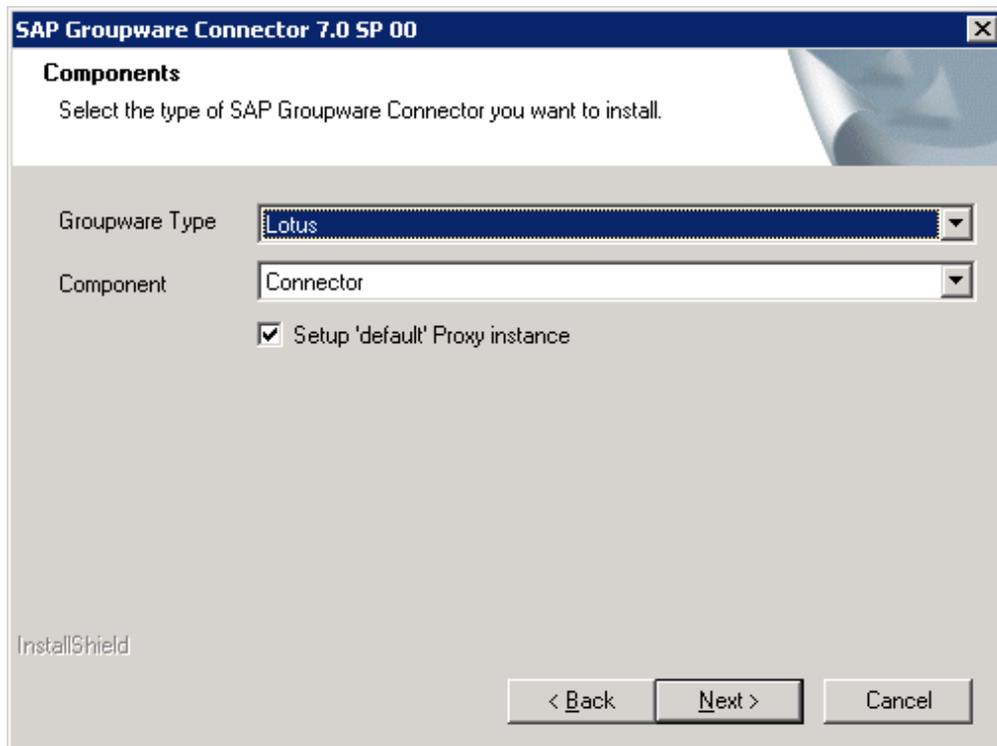
This procedure explains how to install the groupware connector for Lotus Domino on a Microsoft Windows Server operating system.



- The Lotus Notes client must be installed prior to installation of the groupware connector.
- If you are upgrading from a lower version, refer to section [2.5 Upgrade to 7.0 SP XX Connector from a Lower Version/SP](#) before you start the installation.

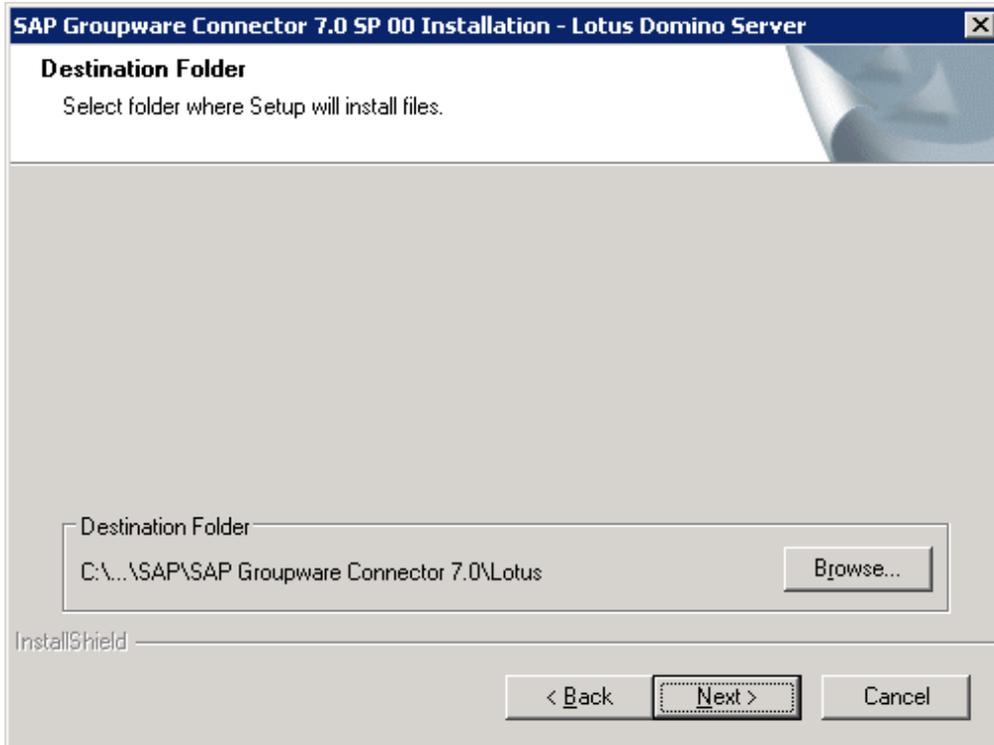
Procedure

1. Log on to your host using the prepared administrative account for the groupware connector.
 You must have Admin rights on the machine (you must belong to the Administrator group).
2. Launch the `setup.exe`.
 Right click on `setup.exe` and select *Run as Administrator*.
3. On the *Welcome* screen click *Next*.
 - a. Read the text on the *Installation Prerequisites* window which is displayed only in Groupware Connector 7.0 SP 01 and below and check if your computer meets all the software and hardware requirements. If it does, click *Next*.
4. Choose *Lotus* as the type of groupware connector that you want to install and select the component *Connector*. Indicate whether you want to install an instance of the default groupware connector proxy.

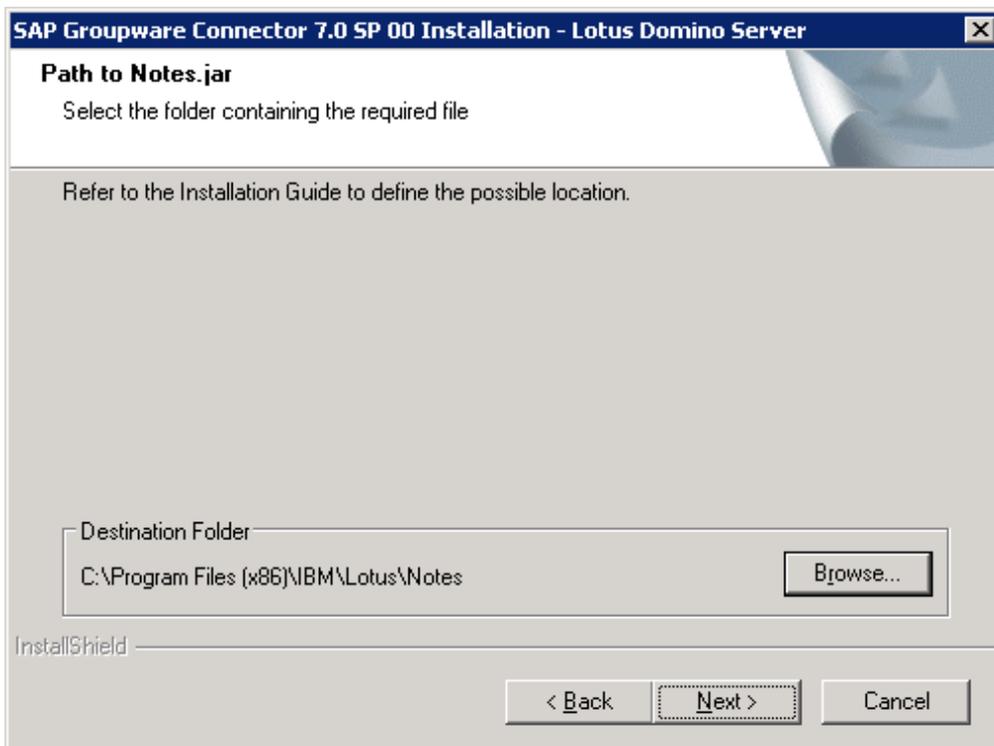


5. Click *Next* and wait while the setup routine detects the required software.

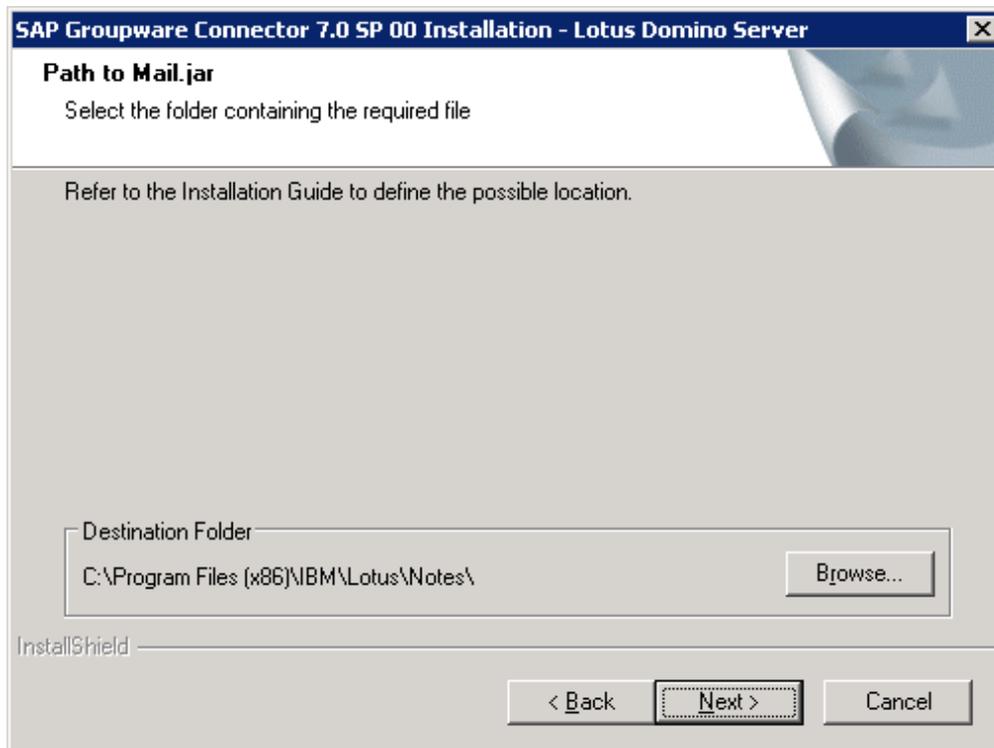
6. Select the folder where the setup program will install the groupware connector and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Lotus*. To select a different folder, click *Browse*.



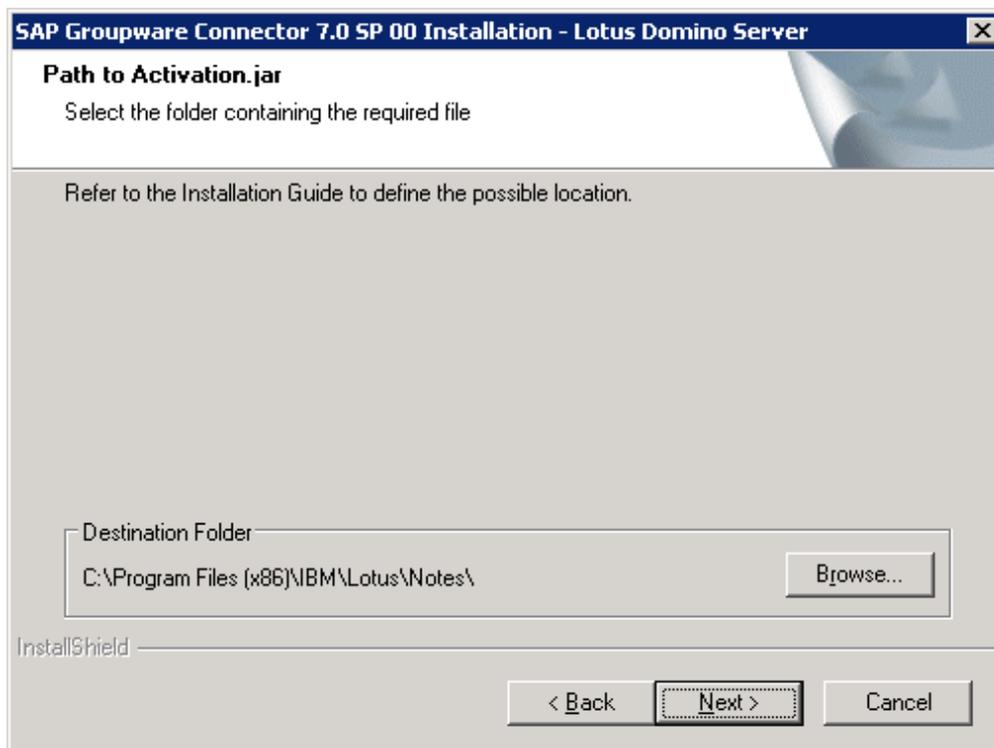
7. Browse for the path containing the *Notes.jar* file and click *Next*.



- Browse to the path containing the `Mail.jar` file (present in the installation folder of Lotus Notes or Sun Java Mail API) and click *Next*.



- Browse to the path containing the `Activation.jar` file (present in the installation folder of Lotus Notes or JavaBeans Activation Framework) and click *Next*.



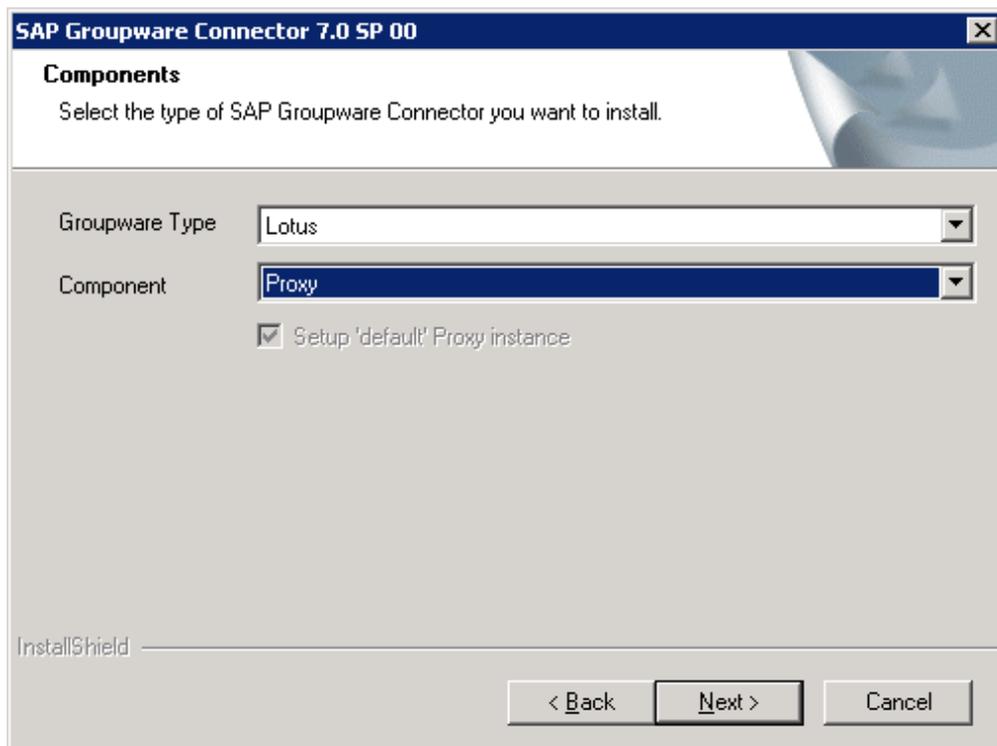
10. Review your settings and click *Next* to start copying files.
11. The installation is complete. Click *Finish* to exit the wizard.

4.4 Installing Additional Lotus Domino Proxies

This procedure explains how to install a separate groupware connector proxy for Lotus Domino on a Microsoft Windows Server operating system.

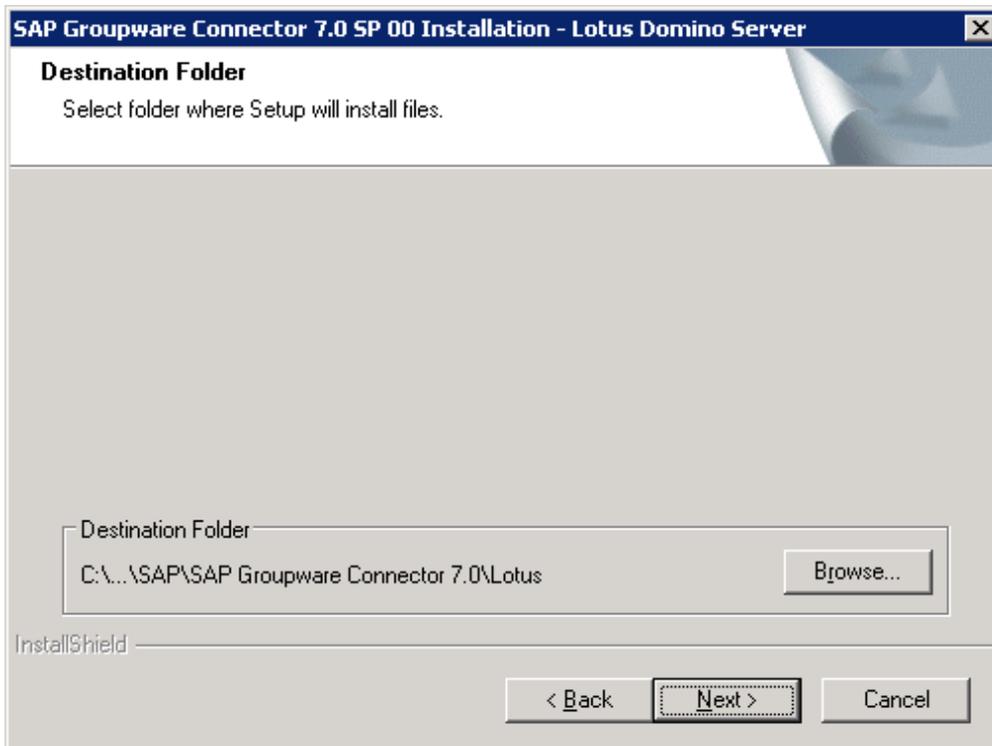
Procedure

1. Log on to your host using the prepared administrative account for the groupware connector.
 -  You must have Admin rights on the machine (you must belong to the Administrator group).
2. Launch the `setup.exe`.
 -  Right click on `setup.exe` and select *Run as Administrator*.
3. On the *Welcome* screen click *Next*.
 - a. Read the text on the *Installation Prerequisites* window which is displayed only in Groupware Connector 7.0 SP 01 and below and check if your computer meets all the software and hardware requirements. If it does, click *Next*.
4. Select *Lotus* as the groupware type and *Proxy* as the component.

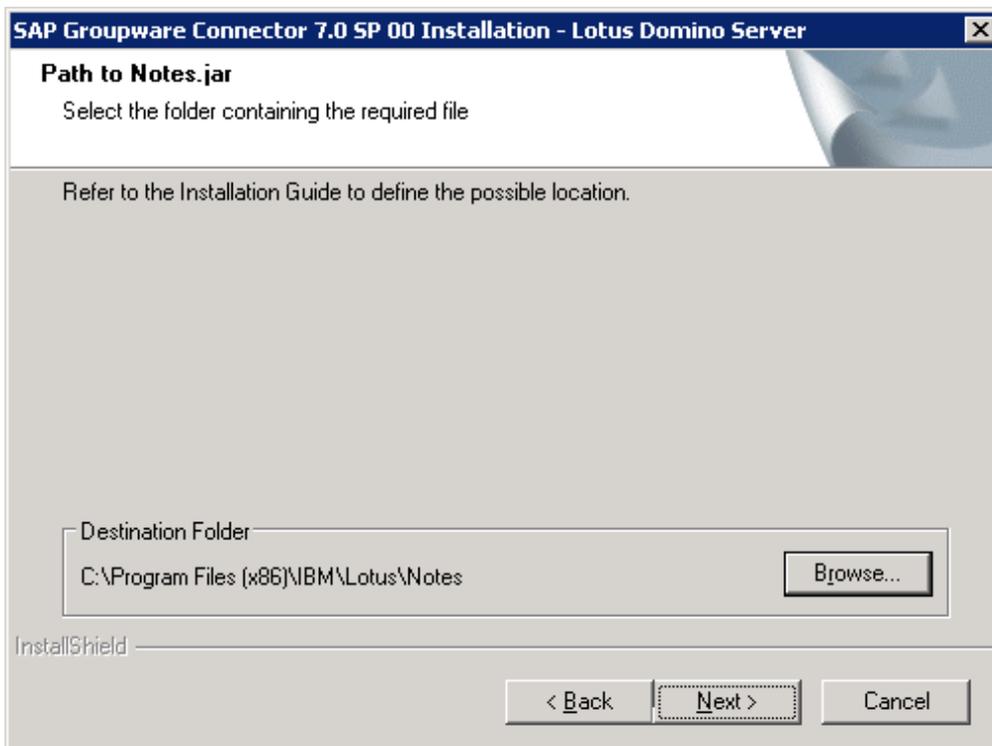


5. Click *Next* and wait while the setup routine detects the required software.

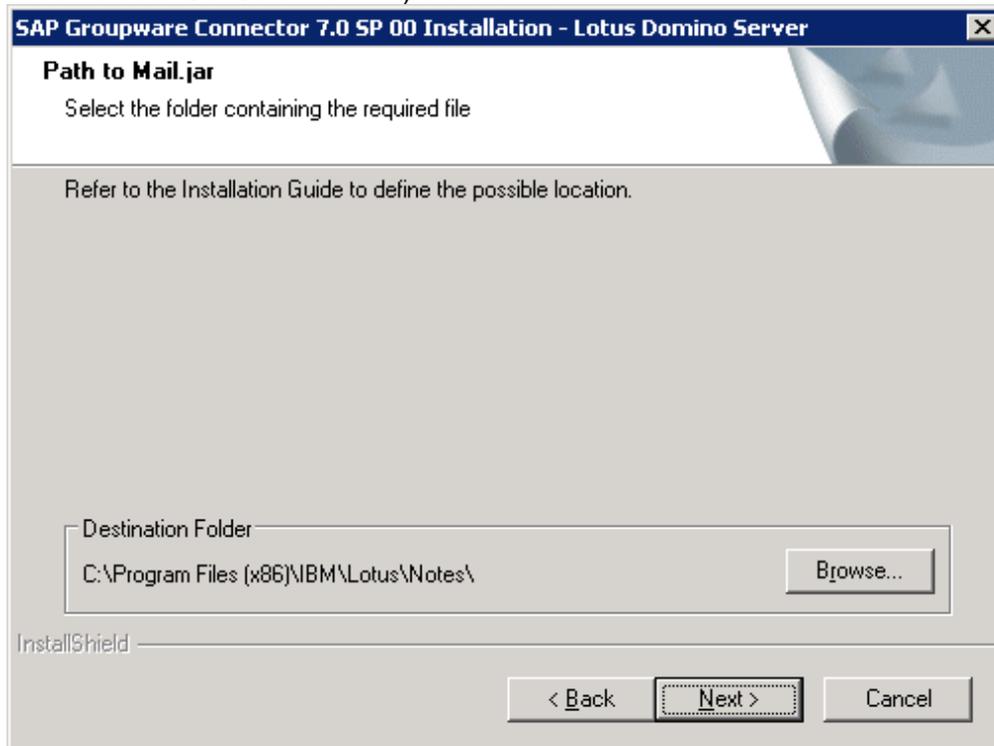
6. Choose the folder where the setup program will install the groupware proxy and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Lotus*. To select a different folder, click *Browse*.



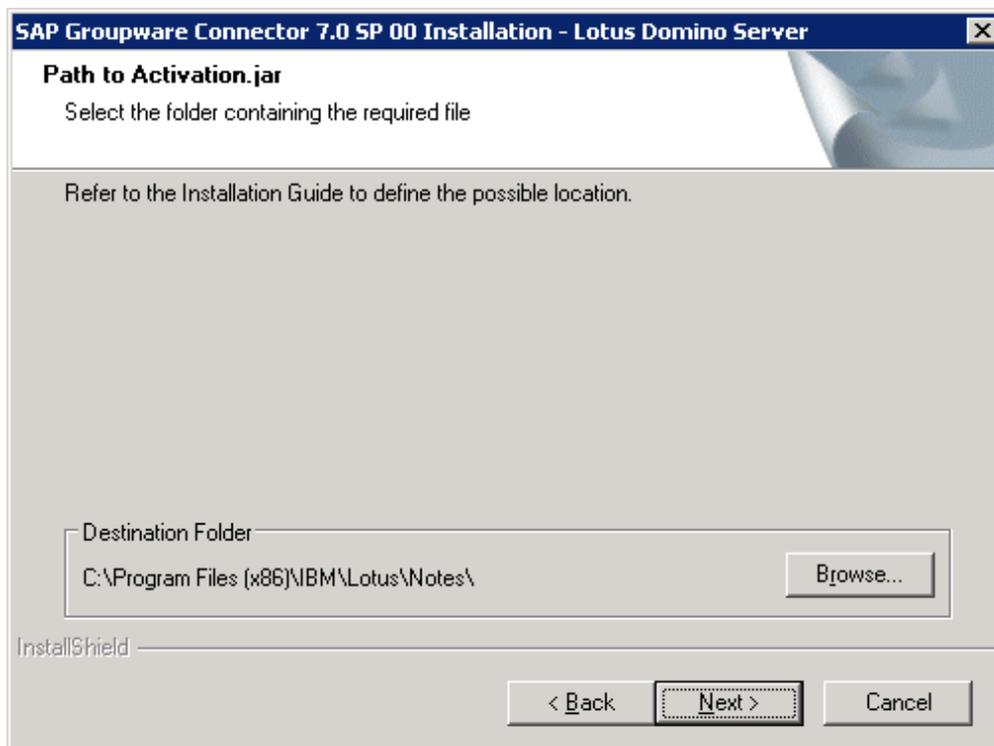
7. Browse to the path containing the *Notes.jar* file and click *Next*.



8. Browse to the path containing the `Mail.jar` file (present in the installation folder of Lotus Notes or Sun Java Mail API) and click *Next*.



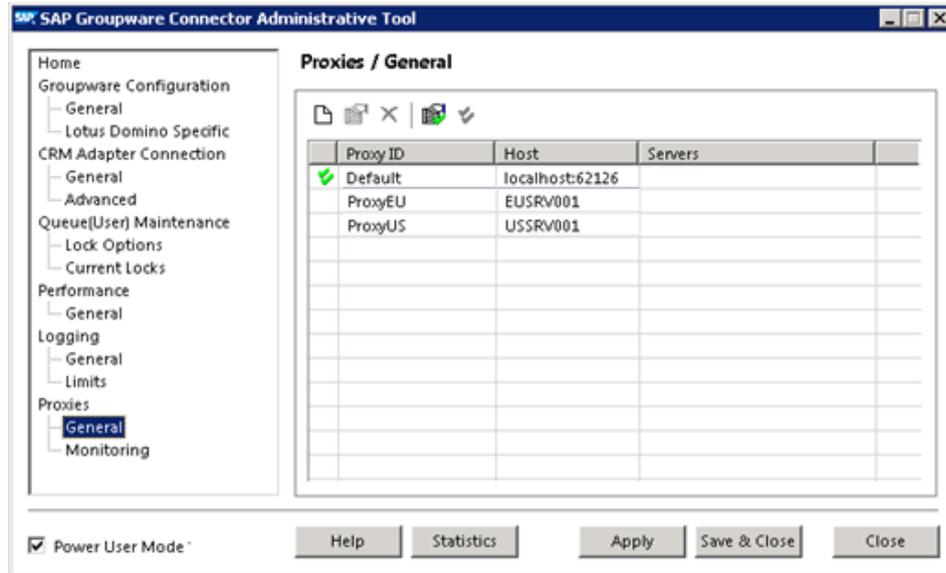
9. Browse to the path containing the `Activation.jar` file (present in installation folder of Lotus Notes or JavaBeans Activation Framework) and click *Next*.



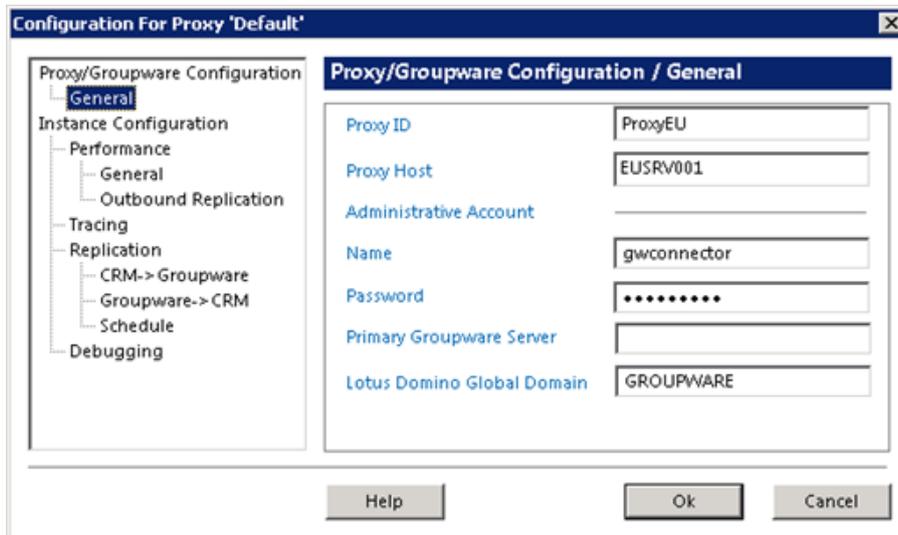
10. Review your settings and click *Next* to start copying files.
11. The installation is complete. Click *Finish* to exit the wizard.
12. On the computer with the groupware connector installed, log on using the administrative account and start the AdminTool (`AdminTool.exe`), which can be found in the *Installation* folder under *Connector*.

 Right click on `AdminTool.exe` and select *Run as Administrator*.

13. In the AdminTool, register the newly installed proxy instance as follows:
 - a. Go to *Proxies* → *General* and click the *Add New Proxy* button in the toolbar.



- b. In the popup provide the required values and click *OK*. Click the *Apply* button in the main window to save the changes to the configuration file.



 SAP recommends that you set one proxy instance as the default. This ensures that messages are processed if no explicit mapping is configured for a target Lotus Domino server.

The installation and registration of a new proxy instance is complete.

 If the additional proxy instance is not installed on the connector system, apply SAP Note [1688921](#).

4.5 Installing patch for Groupware Connector

This procedure explains how to install patch for the connector and proxy instances of Groupware Connector 7.0 SP 03 (or higher) version.



- Windows SDK v7.1, v8.1 or v10.1 is a mandatory prerequisite to apply patch, refer to the [Software requirements \(section 3.3\)](#) for more information on this.
- Groupware Connector 7.0 SP 03 (or higher) should be installed before installing the patch.

Procedure

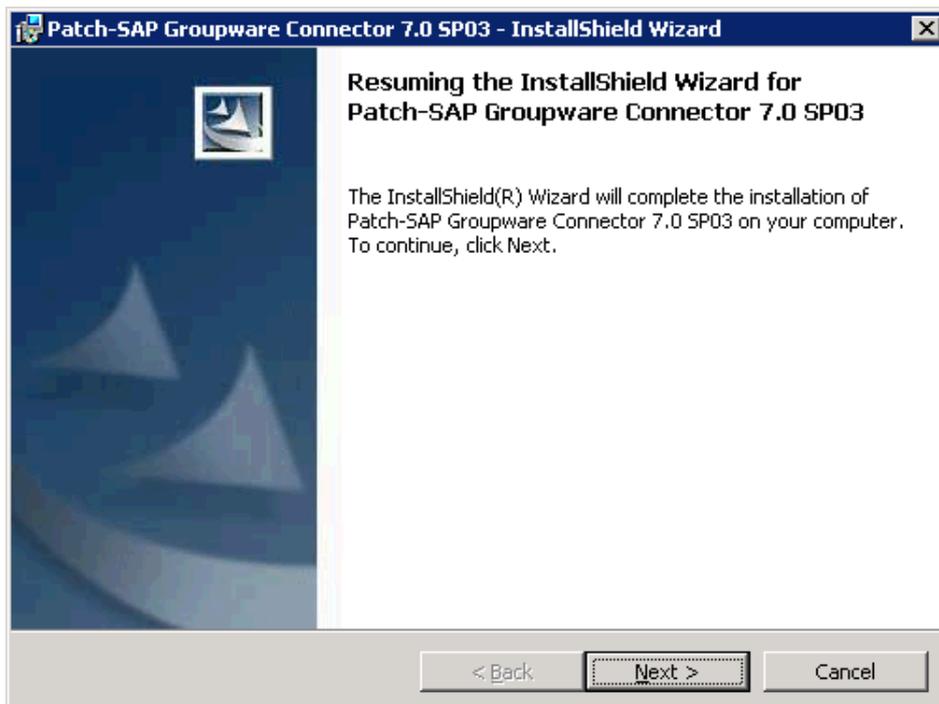
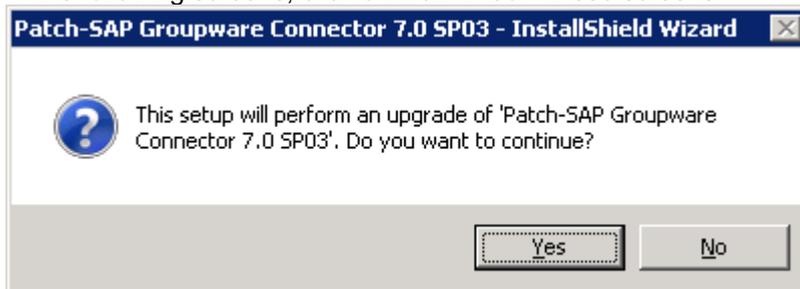
1. Log on to your connector (or proxy) host using the prepared administrative account for the groupware connector.

You must have Admin rights on the machine (you must belong to the Administrator group).

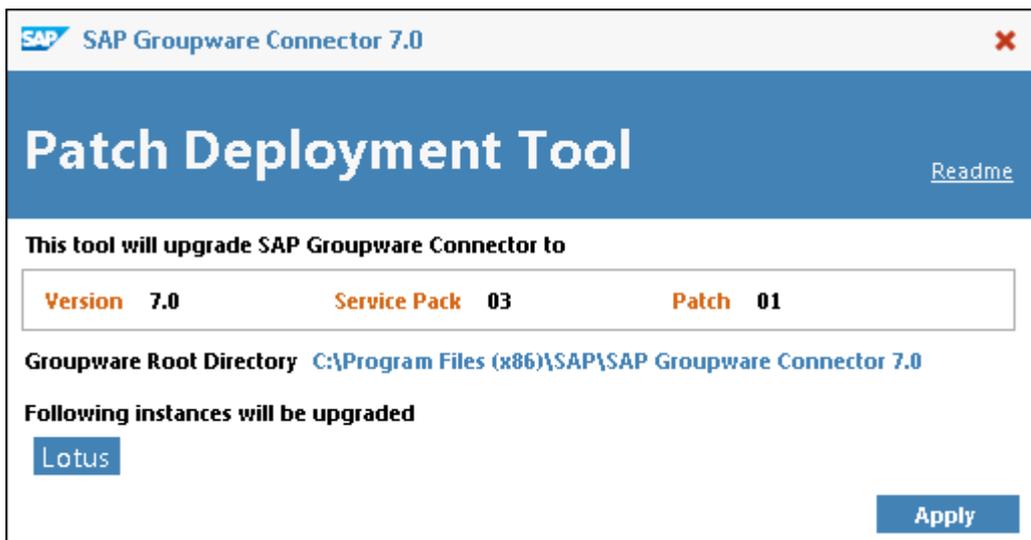
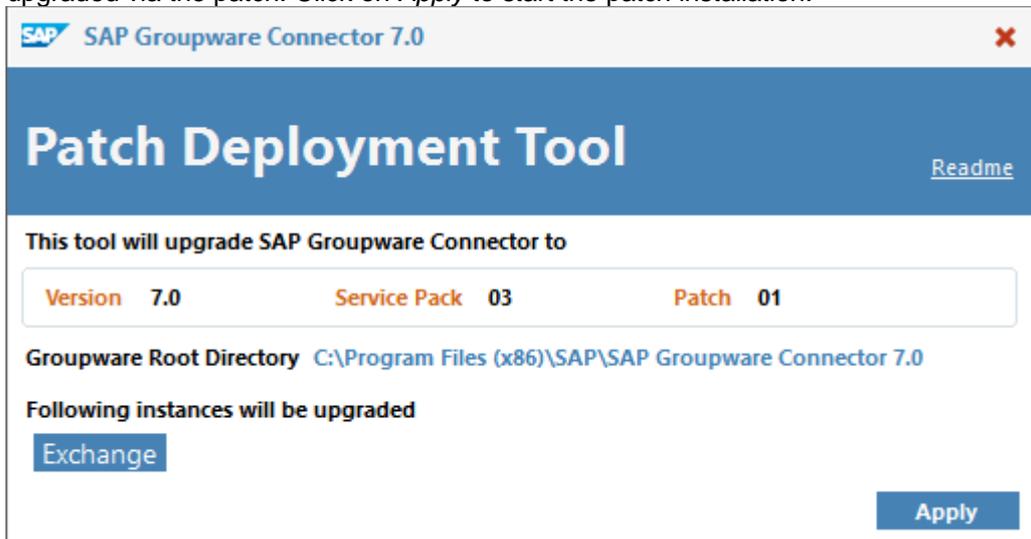
2. Launch the `Update.exe`.

Right click on `Update.exe` and select *Run as Administrator*.

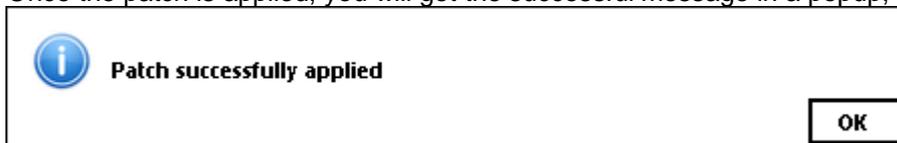
3. In the following screens, click on *Next* in both these screens.



4. In the following screen, you will provide the information on the Groupware connector and patch version, path to the groupware root directory and the instances that will be upgraded via the patch. Click on *Apply* to start the patch installation.



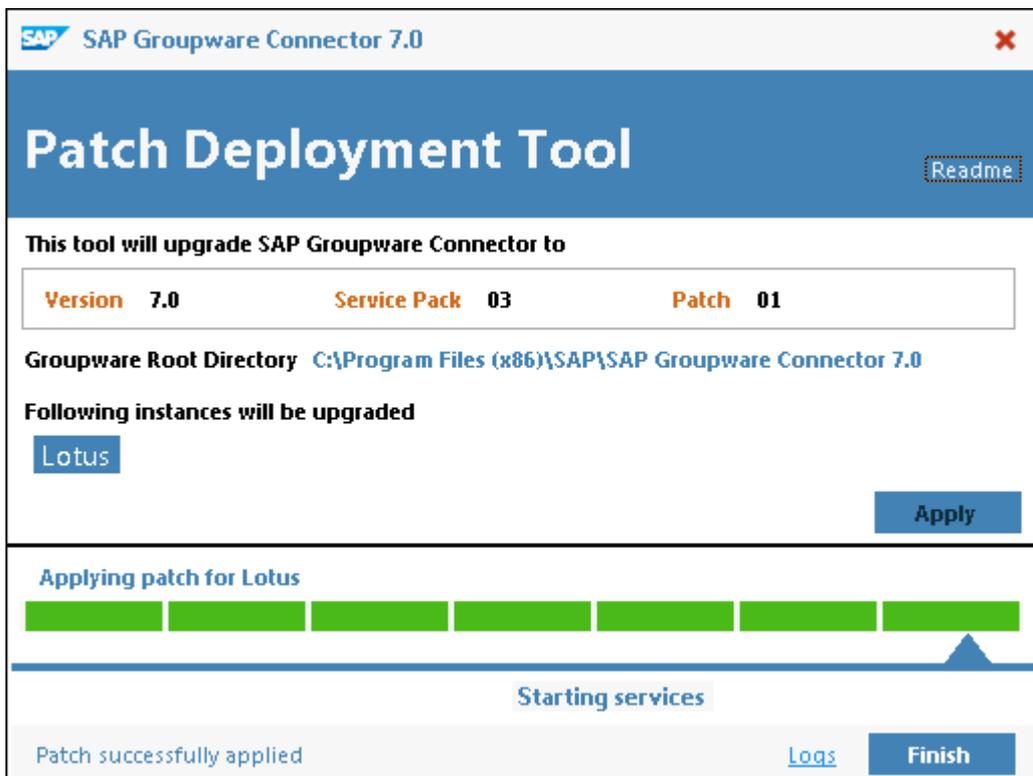
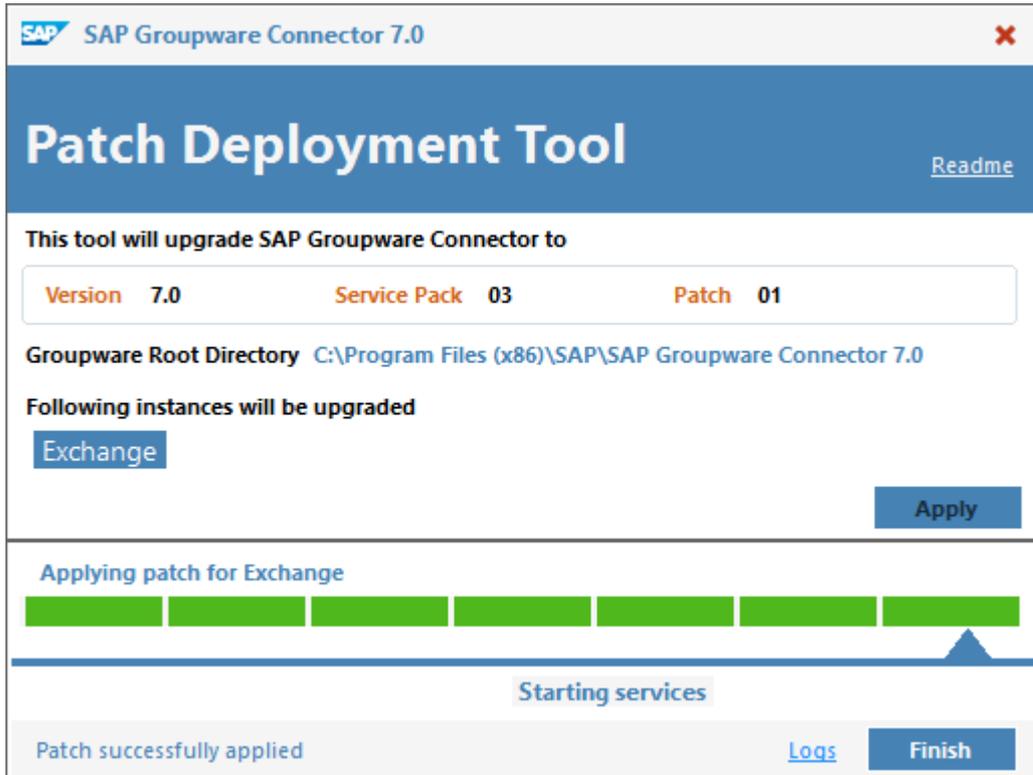
5. Once the patch is applied, you will get the successful message in a popup, click on OK.



i If the patch tool could not start the Groupware Connector services after applying the patch, you may get the following popup; you will have to manually start the services via *Services.msc*.



6. Click on Finish to exit the wizard.



↑ After installing Groupware Connector patch, it is necessary to reboot the machine.

5 Post-Installation

 After installing Groupware Connector or Proxy, it is necessary to reboot the machine.

After installing Groupware Connector and Proxy, the following windows services are created (Microsoft Windows *Start* menu → *Control Panel* → *Administrative Tools* → *Services*) depending on the Groupware Type and Component selected during the installation:

- SAP MS Exchange Groupware Connector 7.0
- SAP MS Exchange Groupware Connector Proxy 7.0
- SAP Lotus Groupware Connector 7.0
- SAP Lotus Groupware Connector Proxy 7.0

The installation path selected during the installation (the default path is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0*) can be accessed using `%sgwirootdir%`. The files and folder structure in the installation path depend on the Groupware Type and Component selected during the installation.

Groupware Type	Folder Structure
Exchange	Connector (available only if Connector is installed) EWSFramework Proxy (available only if Proxy is installed) SupportCentre
Lotus	Connector (available only if Connector is installed) Proxy (available only if Proxy is installed)

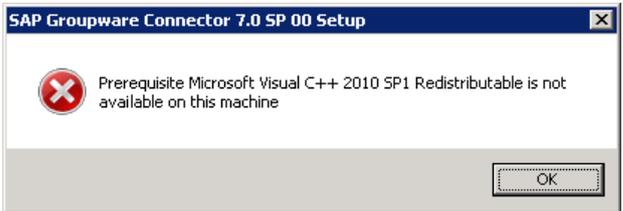
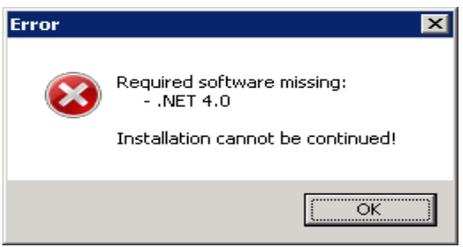
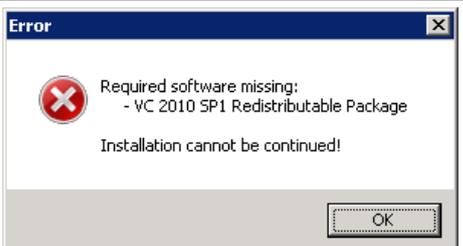
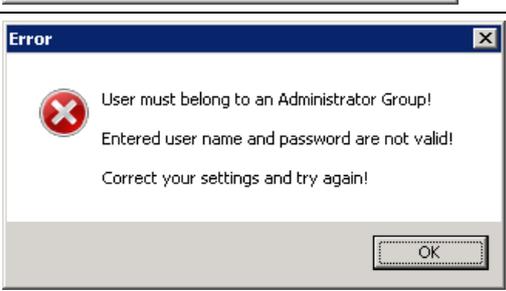
Before you start the proxy and connector services you must configure the AdminTool with the connection details to the CRM system and Exchange Server or Domino Server. For more information, see the section *Configuration Parameters* in the Administrative Tool in the *SAP Groupware Connector 7.0 Administration Guide* in the SAP Service Marketplace under service.sap.com/crm-inst.

 Right click on `AdminTool.exe` and select *Run as Administrator* to start it.

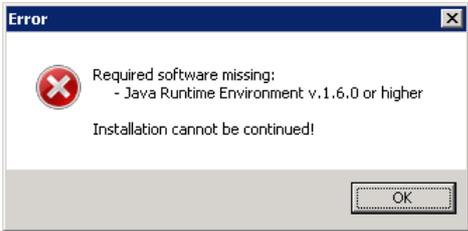
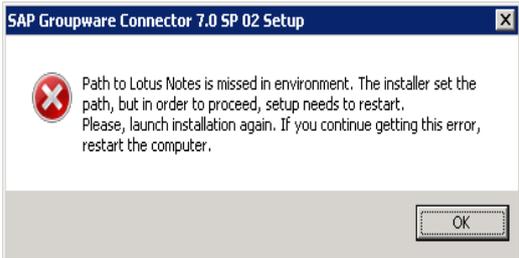
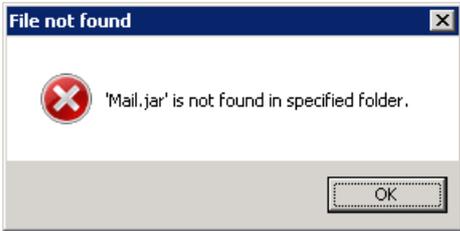
6 Additional Information

6.1 Installation Troubleshooting

6.1.1 Microsoft Exchange Connector

Alert Window	Problem and Solution
	<p>Cause: Microsoft Visual C++ 2010 SP1 Redistributable is a prerequisite to start connector installation.</p> <p>Solution: Install Microsoft Visual C++ 2010 SP1 Redistributable Package (x86) before connector installation.</p>
	<p>Cause: .NET Framework 4.0 is a prerequisite for connector installation.</p> <p>Solution: Install the full version of .NET Framework 4.0 and restart the Installation Wizard.</p>
	<p>Cause: Microsoft Visual C++ 2010 SP1 Redistributable is a prerequisite for connector installation.</p> <p>Solution: Install Microsoft Visual C++ 2010 SP1 Redistributable Package (x86) and restart the Installation Wizard.</p>
	<p>Cause: You must belong to an administrator group and the user name and/or the password are not valid.</p> <p>Solution: Correct the user name and/or the password.</p>

6.1.2 Lotus Domino Connector

Alert Window	Problem and Solution
	<p>Cause: Java 1.6.0 is a prerequisite for connector installation.</p> <p>Solution: Install JRE 1.6.0_25 or higher and restart the Installation Wizard.</p>
	<p>Cause: Connector installation unable to find the PATH variable of Lotus Notes.</p> <p>Solution: Follow the steps as mentioned in the SAP Note 1548964 which is applicable for all Lotus Domino versions.</p>
	<p>Cause: <code>Notes.jar</code> was not found, it is required for lotus connector installation.</p> <p>Solution: Browse to the folder where <code>notes.jar</code> is available where Lotus Notes is installed. If Lotus Notes 8.0 or 8.5 is not installed, close the Installation wizard, install the required software, and restart the installation.</p>
	<p>Cause: <code>Mail.jar</code> was not found, it is required for lotus connector installation.</p> <p>Solution: Browse to the folder where <code>mail.jar</code> is available in the Sun Java Mail API installation directory. If Sun Java Mail API 1.3.1 is not installed, close the Installation wizard, install the required software, and restart the installation.</p>
	<p>Cause: <code>Activation.jar</code> was not found, it is required for lotus connector installation.</p> <p>Solution: Browse to the folder where <code>activation.jar</code> is available in the JavaBeans Activation Framework installation directory. If JavaBeans Activation Framework 1.0.2 is not installed, close the Installation wizard, install the required software, and restart the installation.</p>

6.2 Installing Multiple Connector Instances

If you want to reuse the same hardware to test in different landscapes, you can install multiple instances of the groupware connector on one server. This allows you to connect different SAP CRM systems to different groupware using the same hardware.



- Setting multiple instances of groupware connector components is intended only for testing purposes and is not supported in the productive environment.
- The components of the groupware connector communicate only with the components of the same instance ID. For example, a groupware connector installed with instance ID = 3 will connect only to proxy instances installed with instance ID = 3.
- A maximum of 4 instances of connector and 4 instances of proxy can be installed on the same machine.
- **All instances of Connector and Proxy should be installed in the same root directory and the version of all the instances should be the same.**
- Uninstallation of a particular instance and reinstallation of the same instance is not possible unless you uninstall all the instances.

6.2.1 Installing Multiple Exchange Connector\Proxy Instances

This procedure explains how to install multiple instances of the connector and proxy for Microsoft Exchange on a Microsoft Windows Server operating system.



If Exchange Connector and Proxy are installed, it will correspond to Instance 1.

Procedure

1. Log on to your host using the prepared administrative account for the groupware connector.



You must have Admin rights on the machine (you must belong to the Administrator group).

2. Open a command prompt and navigate to the folder where the groupware connector installer is available.
3. Launch the following command line from the folder where groupware connector `setup.exe` is available:

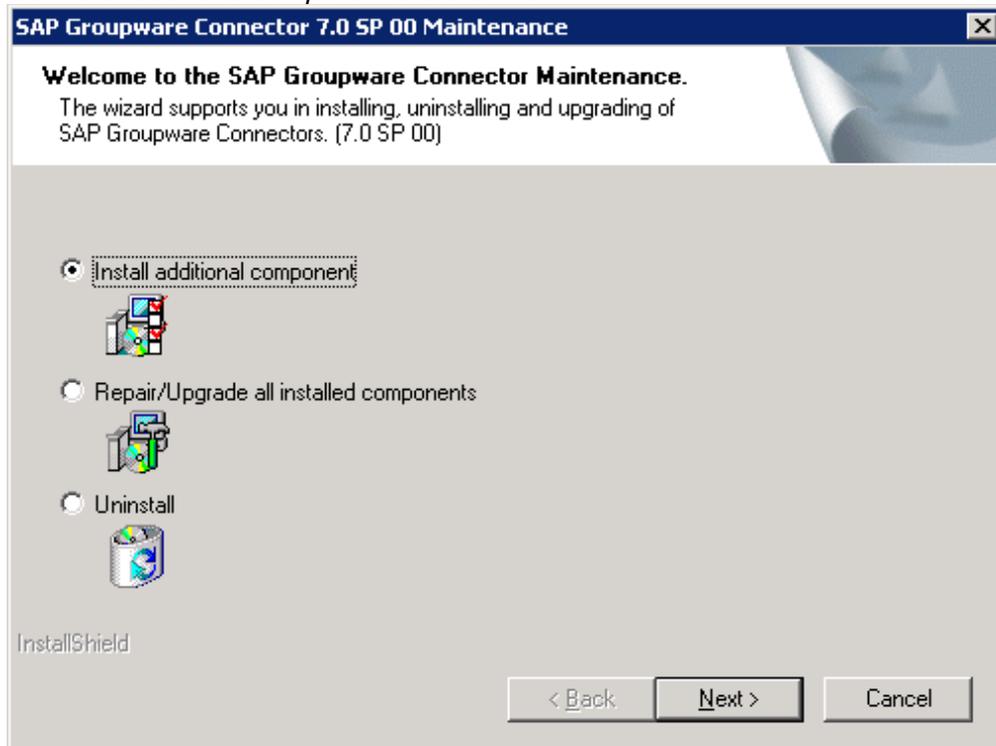
```
Setup.exe /Instance=N
```

Where N is the ID of the instance from 1 to 4.

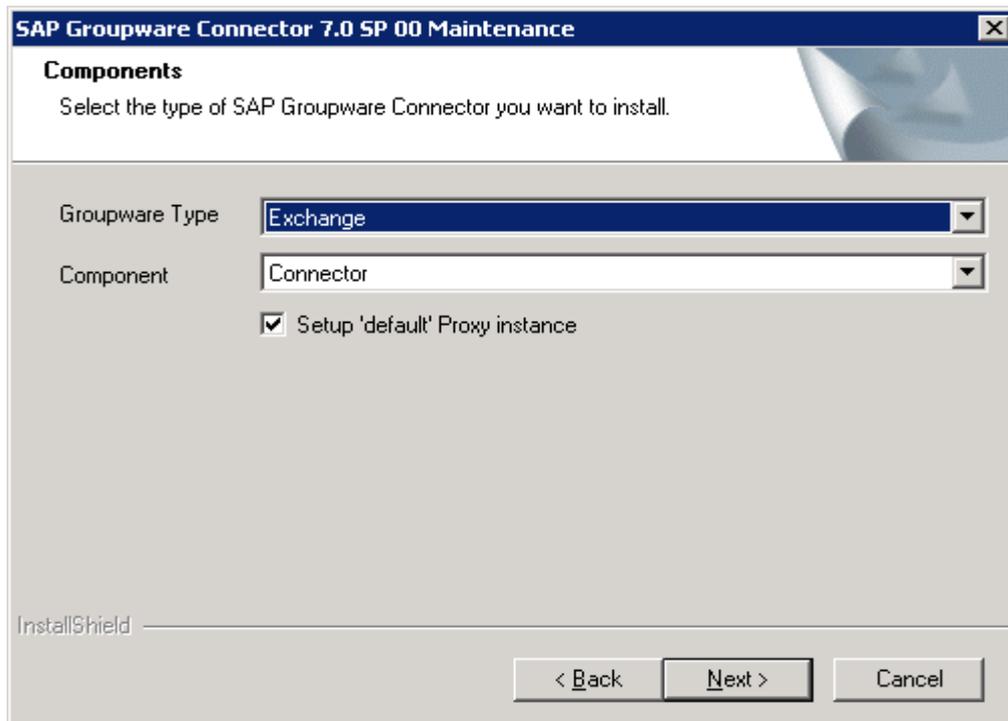


In this example `Setup.exe /Instance=2` is used.

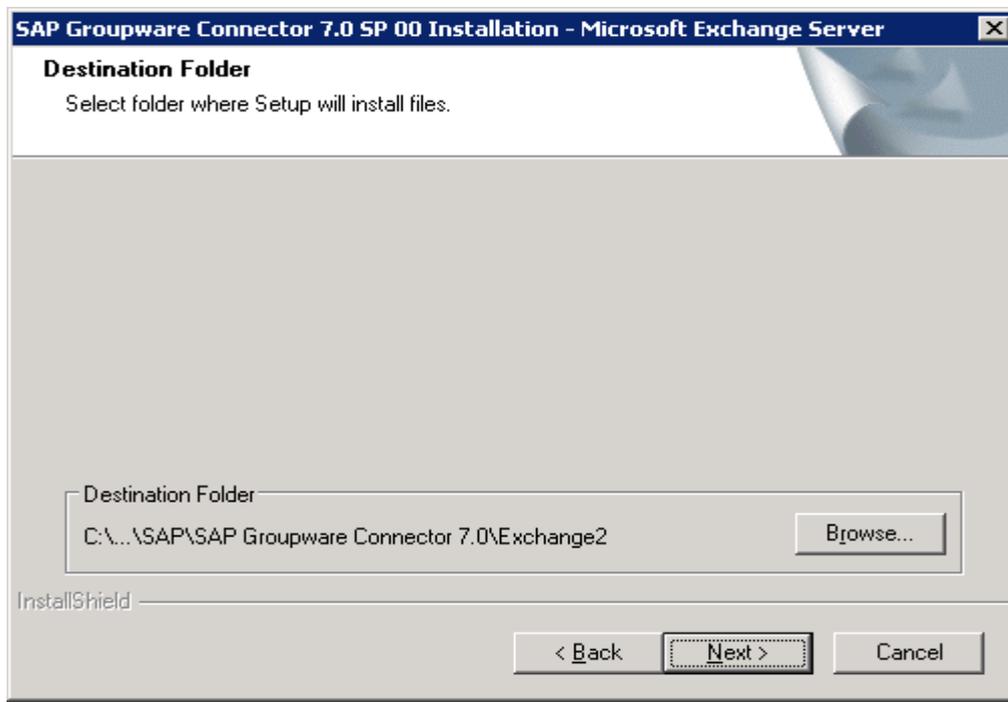
4. On the *Welcome* screen of the *SAP Groupware Connector 7.0 Maintenance* window select *Install additional component* and click *Next*.



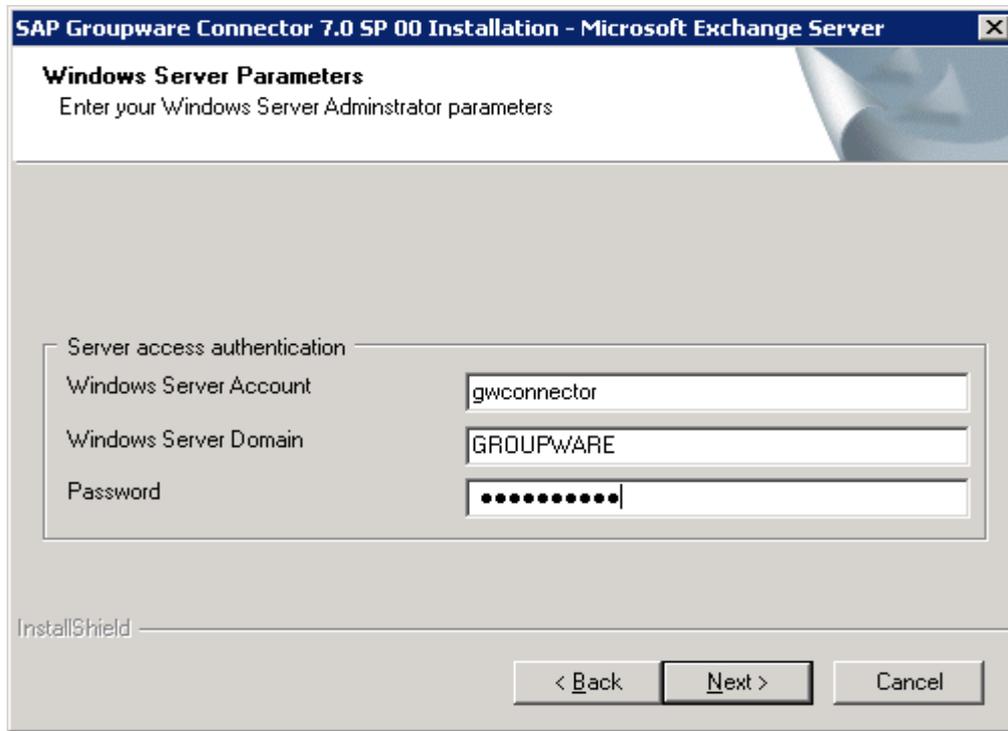
5. Choose *Exchange* as the type of groupware connector that you want to install and choose the component *Connector*. Indicate whether you want to install an instance of the default groupware connector proxy.



6. Click *Next* and wait while the setup routine detects the required software.
7. Select the folder where the setup program will install the groupware connector and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Exchange2*.



8. Enter the Windows Server Administrator parameters and click *Next*. The *Windows Server Account*, *Windows Server Domain*, and *Password* parameters are used as logon information for the groupware connector service. The properties of the currently logged on user are filled by default.



9. Review your settings and click *Next* to start copying files.
10. The installation is complete. Click *Finish* to exit the wizard.

 Repeat the steps above to install Instance 3 and Instance 4 of Exchange connector and proxy.

6.2.2 Installing Multiple Domino Connector\Proxy Instances

This procedure explains how to install multiple instances of the connector and proxy for Lotus Domino on a Microsoft Windows Server operating system.

 If Domino Connector and Proxy are installed, it will correspond to Instance 1.

Procedure

1. Log on to your host using the prepared administrative account for the groupware connector.

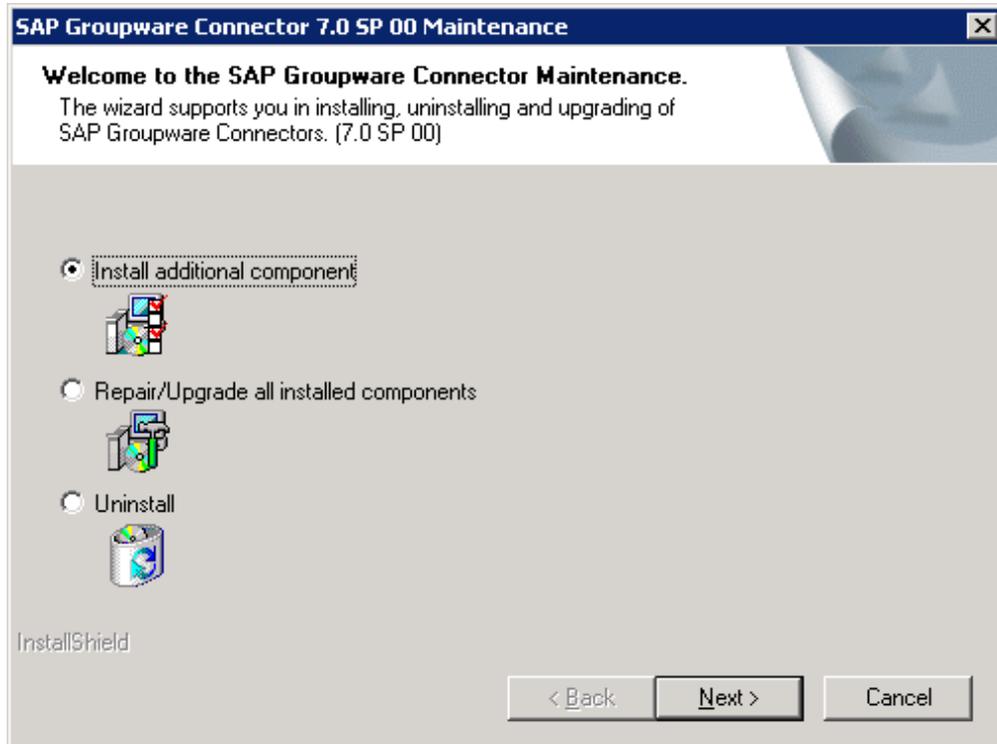
 You must have Admin rights on the machine (you must belong to the Administrator group).
2. Launch the following command line from the folder where groupware connector `setup.exe` is available:


```
Setup.exe /Instance=N
```

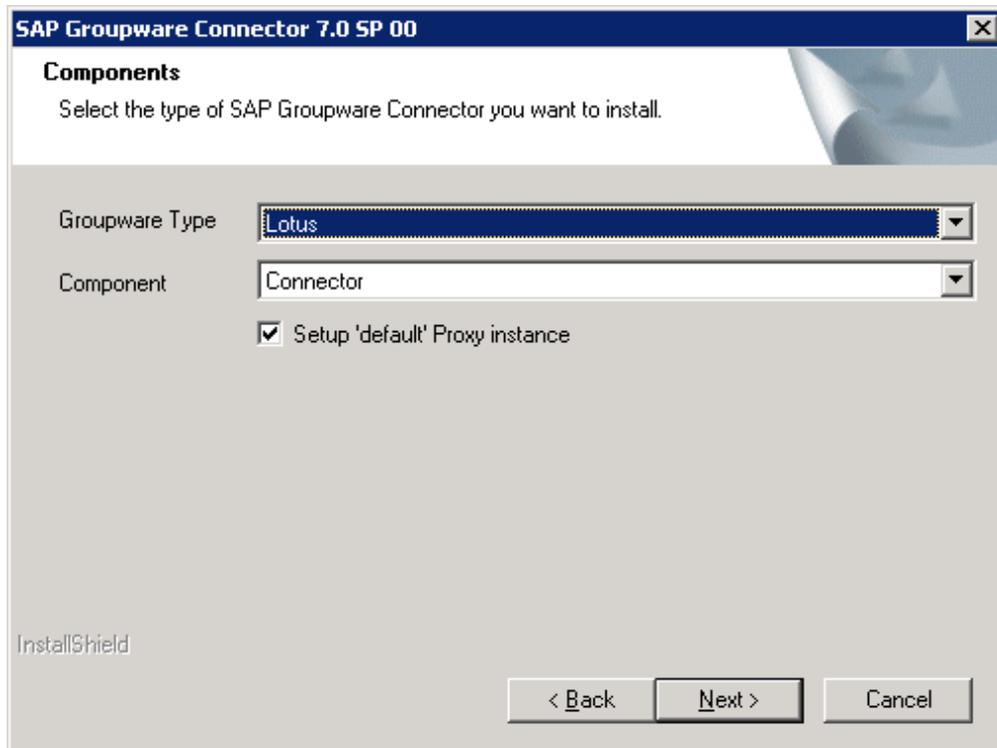
 Where N is the ID of the instance in the range 1 to 4.

 In this example `Setup.exe /Instance=2` is used.

3. On the *Welcome* screen of the *SAP Groupware Connector 7.0 Maintenance* window select *Install additional component* and click *Next*

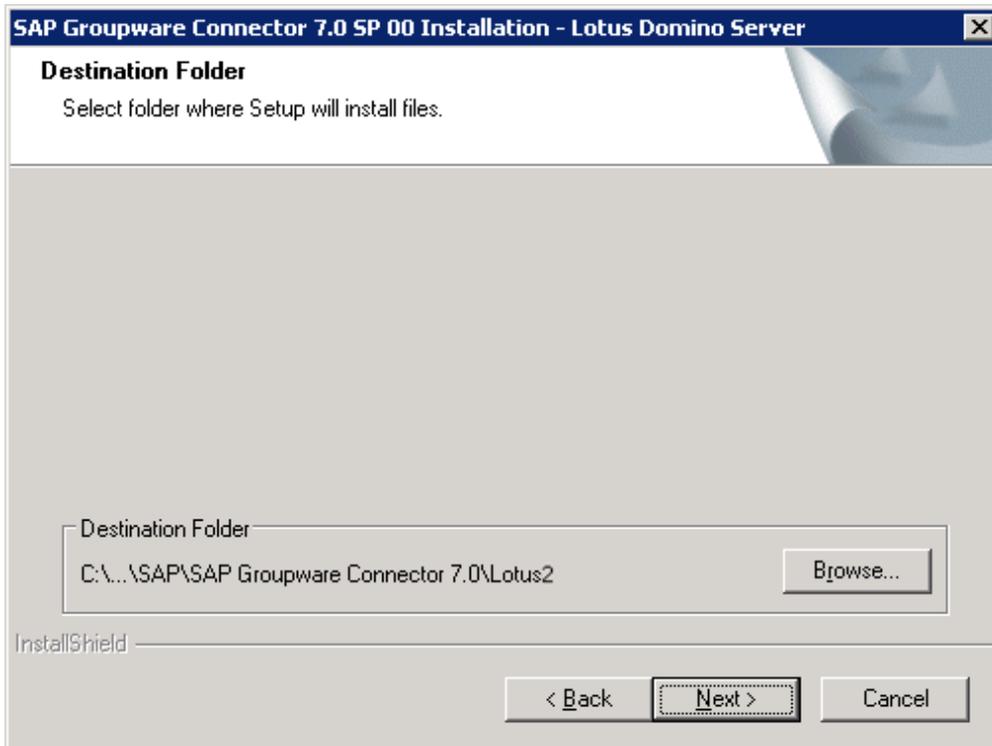


4. Choose *Lotus* as the type of groupware connector that you want to install and choose the component *Connector*. Indicate whether you want to install an instance of the default groupware connector proxy.

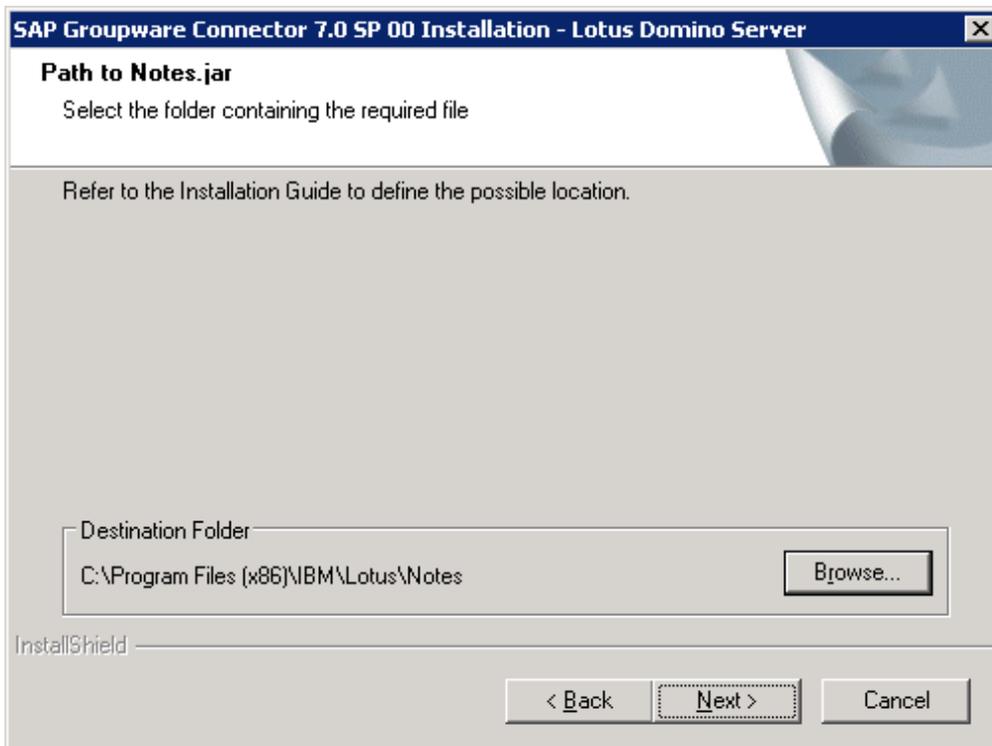


5. Click *Next* and wait while the setup routine detects the required software.

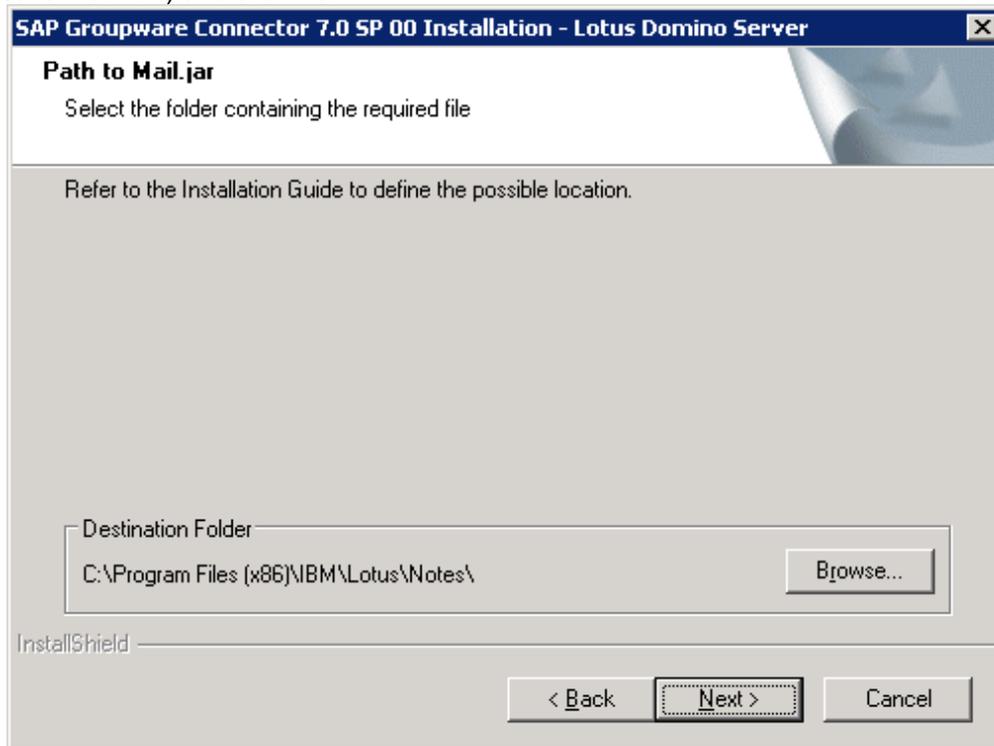
6. Choose the folder where the setup program will install the groupware connector and click *Next*. The default folder is *C:\Program Files (x86)\SAP\SAP Groupware Connector 7.0\Lotus2*.



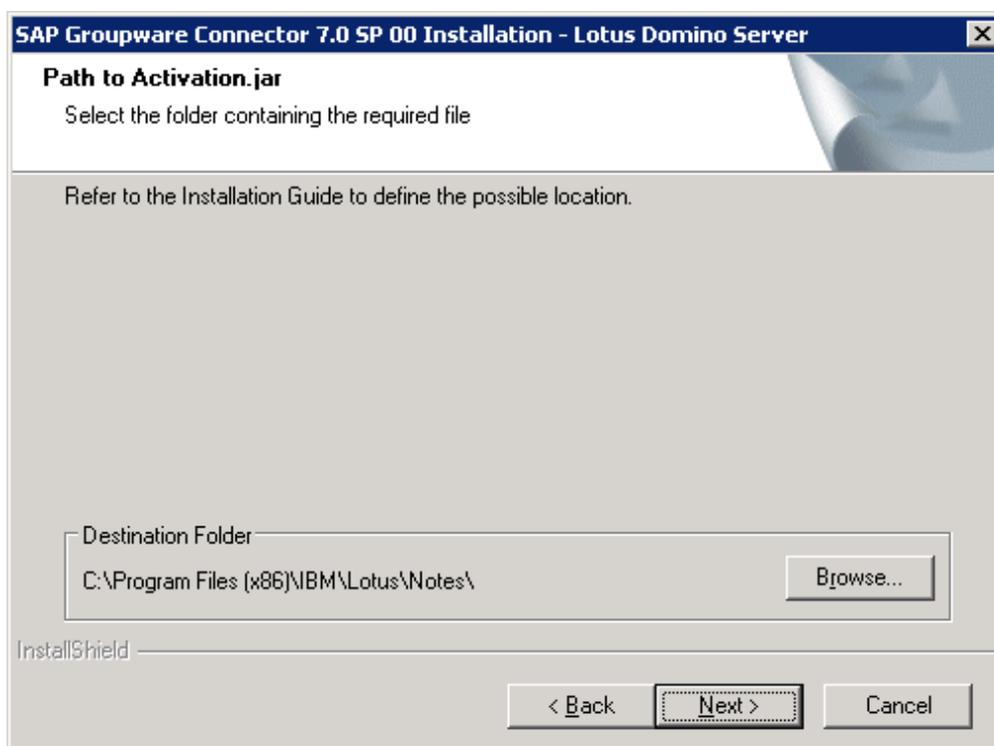
7. Browse for the path containing the *Notes.jar* file and click *Next*.



8. Browse for the path containing the `Mail.jar` file (present in the installation folder of Sun Java Mail API) and click *Next*.



9. Browse for the path containing the `Activation.jar` file (present in the installation folder of JavaBeans Activation Framework) and click *Next*.



10. Review your settings and click *Next* to start copying files.

11. The installation is complete. Click *Finish* to exit the wizard.

 Repeat the steps above to install Instance 3 and Instance 4 of Domino connector and proxy.

6.3 Repairing the Groupware Connector

Before you repair, stop the connector and proxy services. To do this, choose the Microsoft Windows *Start* menu and navigate to *Control Panel* → *Administrative Tools* → *Services*. Select the relevant service and click *Stop*.

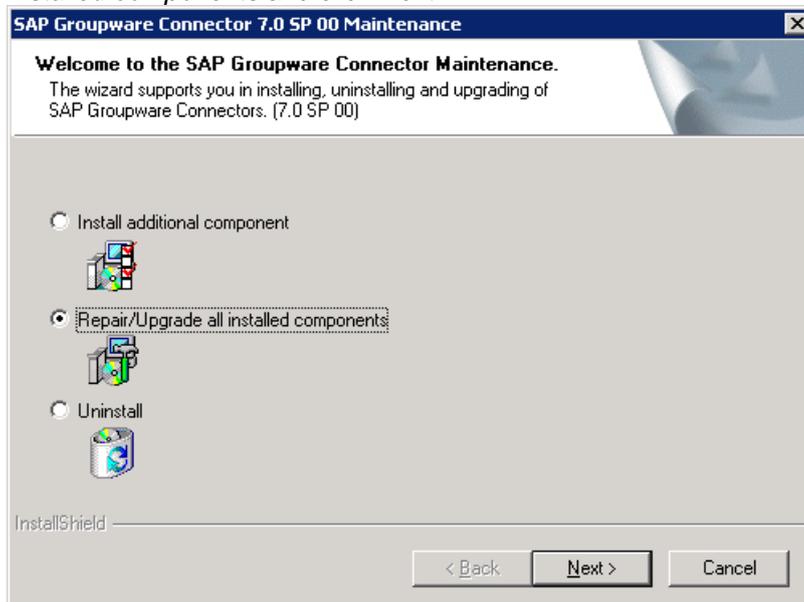
This procedure explains how to repair groupware connector and proxy on a Microsoft Windows Server operating system.

Procedure

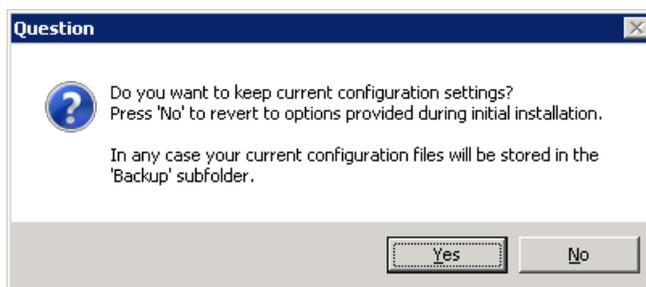
1. In the *Control Panel*, navigate to the tool for adding/removing programs.
2. Select the program *SAP Groupware Connector 7.0* and click on *Uninstall*.

 You must have Admin rights on the machine (must belong to the Administrator group).

3. On the *Welcome* screen of Groupware Connector Maintenance select *Repair/Upgrade all installed components* and click *Next*.



You are prompted to confirm if you want to retain the current configuration settings.



4. If you choose *Yes*, the AdminTool settings are retained in *Config.xml* and *Proxies.xml*. If you choose *No*, the AdminTool settings are reset to the default configuration provided during installation.
5. Click *Yes* or *No* to start the repair process.
6. When the repair is complete, click *Finish* to exit the wizard.

7. A folder named `Backup` is created in the `Connector` folder which will contain the following xml files:

- `AppList.xml`
- `Config.xml`
- `Monitoring.xml`
- `Proxies.xml`
- `queue-locks.xml`
- `Statistics.xml`
- `UserList.xml`
- `CatsList.xml`

6.4 Uninstalling the Groupware Connector

Before you uninstall, stop the connector and proxy services. To do this, choose the Microsoft Windows *Start* menu and navigate to *Control Panel* → *Administrative Tools* → *Services*. Select the relevant service and click *Stop*.

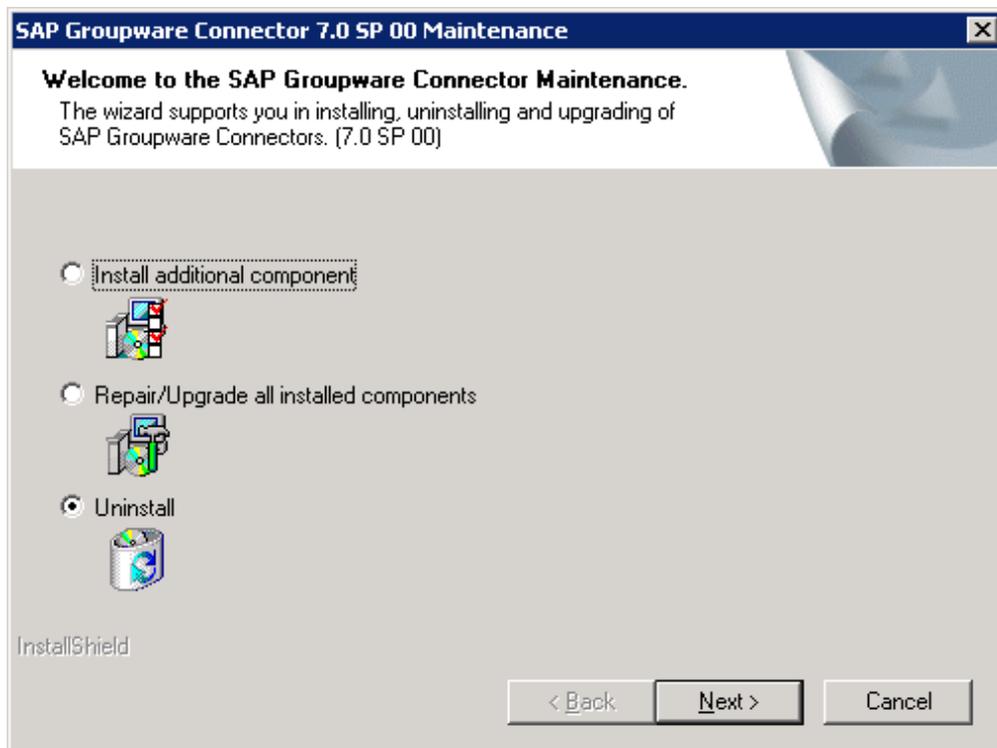
This procedure explains how to uninstall one or more instances of groupware connector and proxy on a Microsoft Windows Server operating system.

Procedure

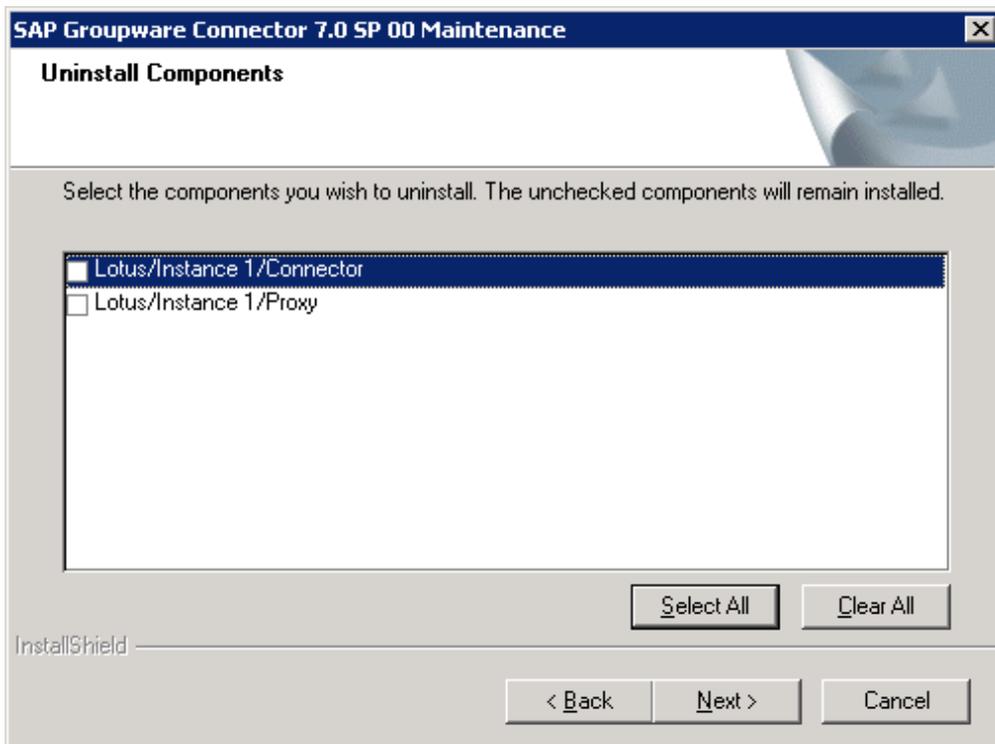
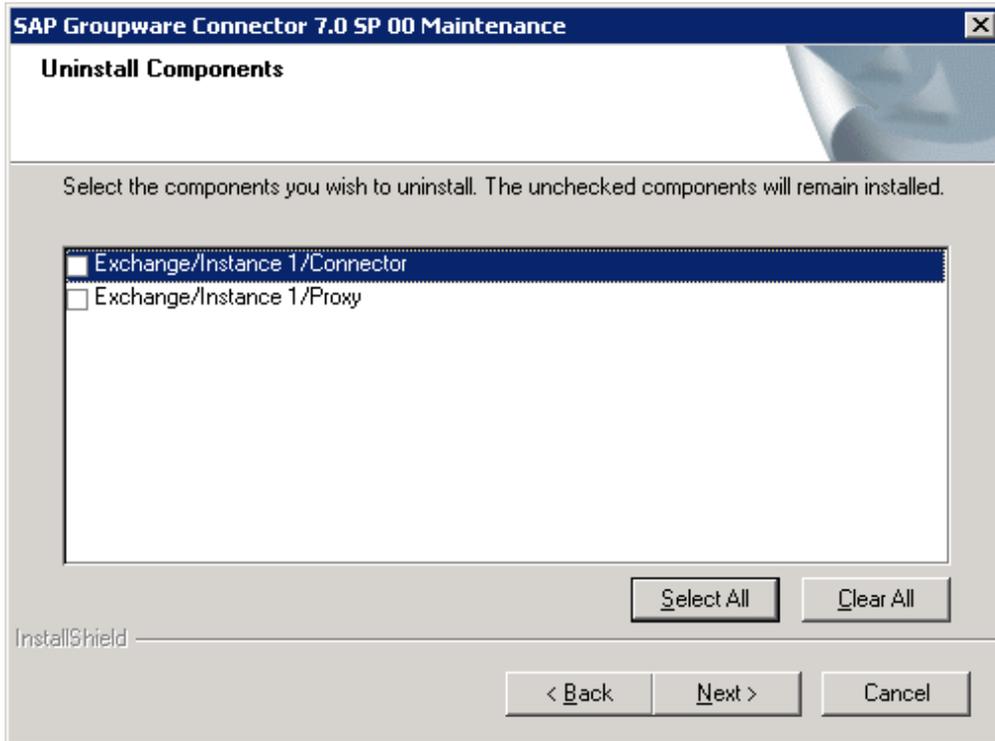
1. In the *Control Panel*, navigate to the tool for adding/removing programs.
2. Select the program *SAP Groupware Connector 7.0* and click on *uninstall*.

 You must have Admin rights on the machine (you must belong to the Administrator group).

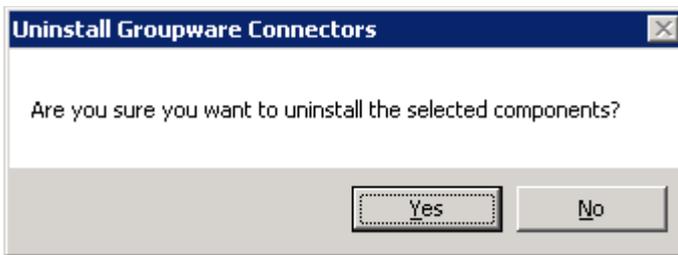
3. On the *Welcome* screen of the *SAP Groupware Connector 7.0 Maintenance* window select *Uninstall* and click *Next*.



4. Choose the components that you want to uninstall.



5. Click *Next*. You are prompted to confirm the uninstallation of the selected components. Click *Yes*.

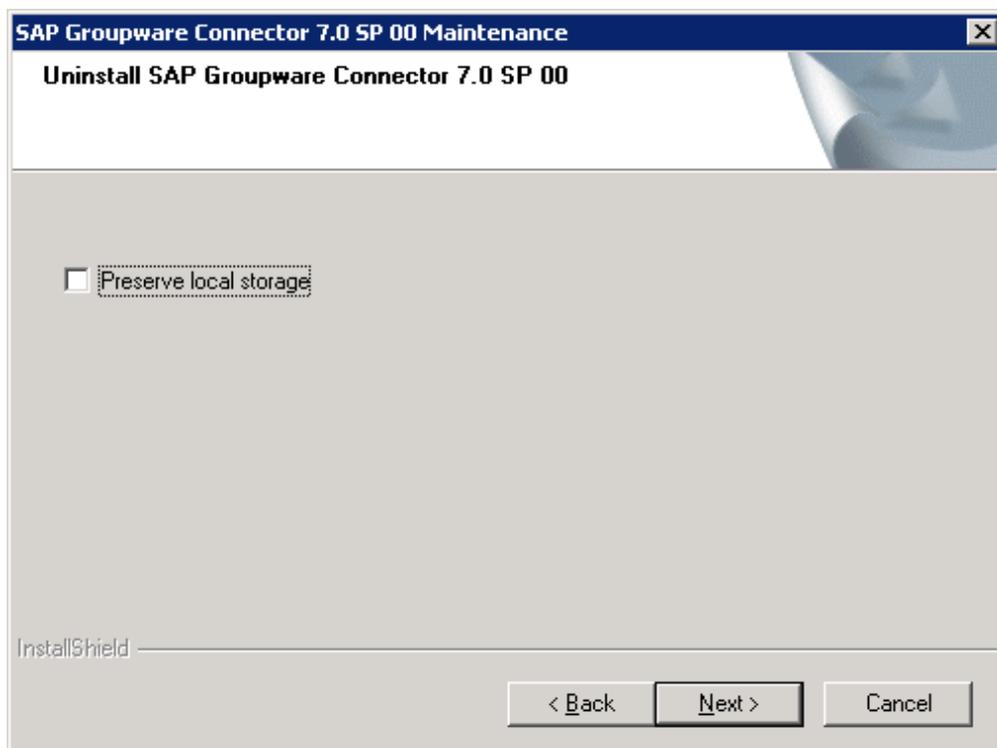


6. When choosing the *Preserve Local storage* option, some XML files and the `Proxy` storage folder are backed up during uninstallation. The following files are backed up in the `Connector` folder:

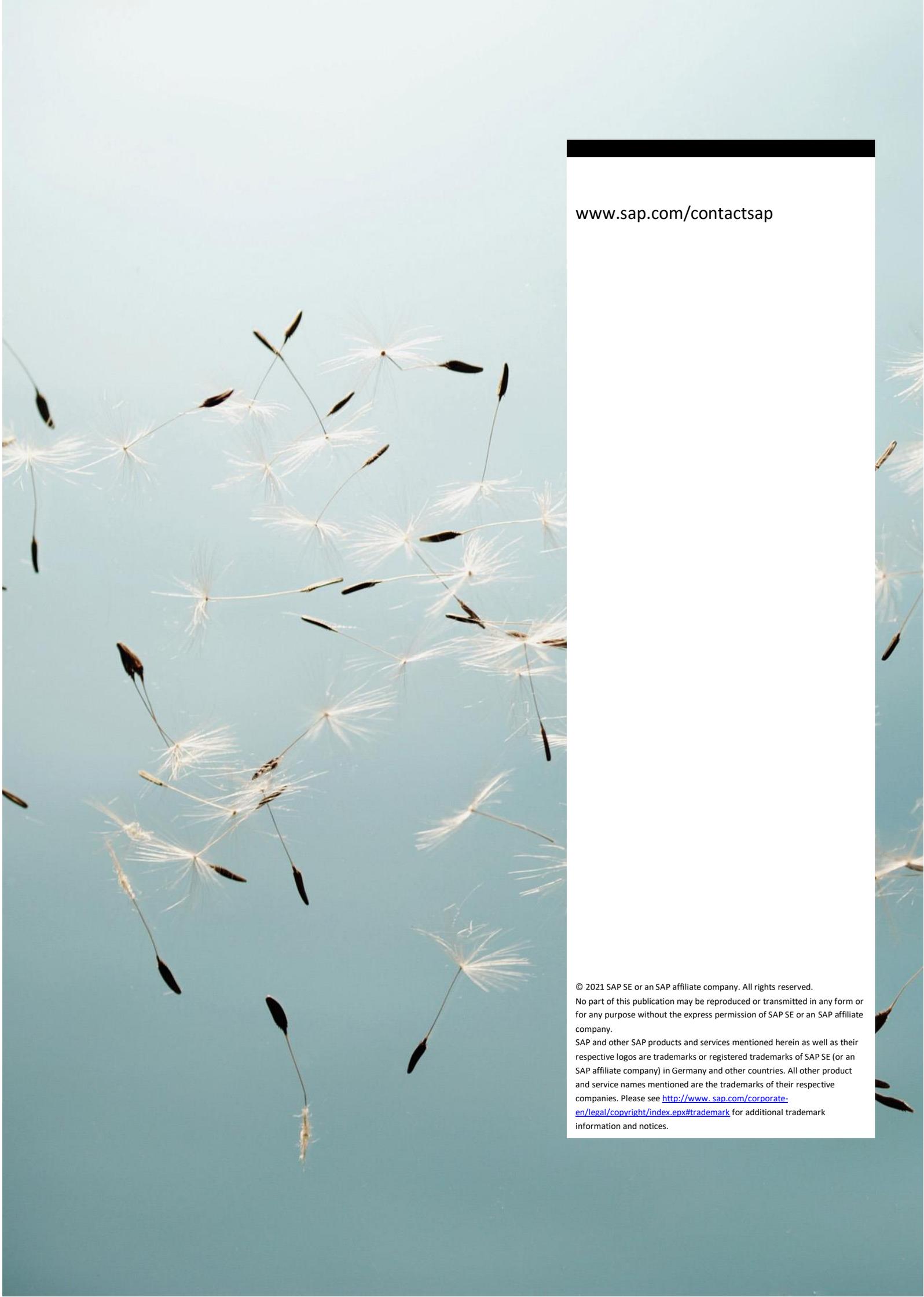
- `AppList.xml`
- `Config.xml`
- `Monitoring.xml`
- `Proxies.xml`
- `queue-locks.xml`
- `Statistics.xml`
- `UserList.xml`
- `CatsList.xml`

The following files that were part of the `Storage` folder are backed up in the `Proxy` folder:

- `SyncHistory` folder
- `BDOCIdMap.xml`
- `SyncUsers.xml`



7. Click *Next* to start uninstalling the selected components.
8. Uninstallation is complete. Click *Finish* to exit the wizard.



www.sap.com/contactsap

© 2021 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. Please see <http://www.sap.com/corporate-en/legal/copyright/index.epx#trademark> for additional trademark information and notices.