

Symprex Exchange Connector

Installation and Configuration Guide

© Symprex Ltd. 2001-2010. All Rights Reserved.

Version 4. Revision 3.

The Symprex logo consists of the word "Symprex" in a white, italicized, sans-serif font, centered within a solid orange rectangular background.

Symprex Ltd.,
London, England.

Web: <http://www.symprex.com>

General: info@symprex.com

Sales: sales@symprex.com

Support: support@symprex.com

TABLE OF CONTENTS

1. Introduction.....	3
1.1. Licensing.....	3
1.2. About this Guide	3
2. Installation Overview	4
2.1. System Requirements.....	4
2.2. General Recommendations	4
2.3. Running the System Check Utility.....	4
2.4. Additional Comments.....	5
3. Service Account Requirements	6
3.1. Account Requirements for Exchange 2007/2010	6
3.2. Account Requirements for Exchange 2003/2000	6
4. Installing Symprex Exchange Connector.....	8
4.1. Installing and Configuring the Symprex Exchange Connector.....	8
4.2. Installing your Symprex Exchange Connector License Key	12
4.3. Configuring Symprex Exchange Connector to Use the Events Service	13
4.4. Configuring Symprex Exchange Connector for SQL Server.....	13
4.5. Finalizing the Installation and Configuration	13
4.6. How to Encrypt and Password Protect the Included Database	13
5. Final Configuration and Additional Information.....	14
5.1. Symprex Exchange Connector Utilities.....	14
5.2. Starting and Stopping the Symprex Exchange Connector Service.....	14
5.3. How to Check the Symprex Exchange Connector Service Status.....	14
6. Installing the Event Service	15
6.1. Installing and Configuring the Symprex Exchange Event Connector	15
6.1.1. Configuring Symprex Exchange Connector to Use Events.....	16
6.1.2. How to Verify the Status of the Event Service and Event Registrations	17
6.2. Installing your Symprex Exchange Connector License Key	18
7. Using Exchange Connector with SQL Server.....	19
7.1. Creating Exchange Connector Database on SQL Server 2008/2005/2000.....	19
7.2. Creating Exchange Connector Database on SQL Server 7.0.....	19
7.3. Configuring Symprex Exchange Connector to Use SQL Server.....	20
8. Troubleshooting.....	22
8.1. Running System Check	22
8.2. Running License Manager.....	22
8.3. Inspecting the Windows Event Log.....	22
8.3.1. Troubleshooting Errors and Warnings.....	23
8.4. Contacting Symprex Technical Support.....	24
9. Contacting Symprex	25
9.1. Visit our Web Site	25
9.2. Contact Us by E-mail	25
9.3. Contact your Local Reseller.....	25
10. License Agreement.....	26

1. INTRODUCTION

Symprex Exchange Connector is a service for Microsoft Exchange, which allows you to replicate Exchange user and calendar data to an Access or SQL Server database. The product is compatible with Exchange 2000, 2003, 2007 and 2010.

Symprex Exchange Connector allows you to develop in-house or third-party applications using the connector database to provide access to the calendar information on specified Exchange servers. Symprex Exchange Connector supports multiple Exchange servers and can scale to any number of users.

Symprex Exchange Connector is event-based and immediately replicates changes to calendars to the Symprex Exchange Connector database allowing for real-time solutions.

More information on this product is available here:

<http://www.symprex.com/connector/index.htm>

Symprex Exchange Connector is required to run LOOK.WEB, which is a web-based group calendar add-on for Microsoft Outlook & Exchange from Symprex. Symprex Exchange Connector can also be used to provide a real-time service for LOOK, a client-based group calendar add-on for Microsoft Outlook & Exchange, also from Symprex.

1.1. Licensing

You need a license key for this product to work. This software will not run without it, not even in evaluation mode. For evaluation purposes you can request a 30-day evaluation license key from Symprex or one of its authorized resellers.

If you have purchased a license for this product it does not include the right to redistribute this product. If you wish to redistribute this product, for example with a solution you have developed using this product, please contact Symprex for a redistribution agreement. You should refer to the End User License Agreement (EULA) for a full statement of the rights conveyed by your product license. See chapter 10.

1.2. About this Guide

This guide will tell you how to install and configure Symprex Exchange Connector.

Chapter 2 provides an installation overview, describes system requirements and describes how to prepare a server for running Symprex Exchange Connector. Chapter 3 explains the required account rights and permissions for the account, which is to be used as the service account for the service. Chapter 4 describes how to perform installation and configuration. Chapter 5 contains additional information on final configuration and also described the utilities that are installed with Symprex Exchange Connector. Chapter 6 explains how to install and configure the real-time event service for Symprex Exchange Connector. Finally, chapter 7 tells you how to create an Exchange Connector database on SQL Server and how to configure Symprex Exchange Connector to use it.

Chapter 8 contains troubleshooting information and will in most cases help you resolve any problems you may encounter.

2. INSTALLATION OVERVIEW

Installing and configuring Symprex Exchange Connector is relatively simple. Before you start you need to make sure your system satisfies some minimum requirements. You also need to decide if you want to install Symprex Exchange Connector on your Exchange server, or on a separate server. This chapter provides an installation overview and includes important information on system requirements and more.

2.1. System Requirements

Before installing Symprex Exchange Connector, make sure your system satisfies these minimum requirements:

Installing on a Windows Server 2008

- Microsoft Windows Server 2008 (32-bit or 64-bit)
And unless the same server is also running Exchange 2003, 2007 or 2010:
- Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2.1
Download via <http://www.symprex.com/link/exchangemapicdo.htm>

Installing on a Windows Server 2003

- Microsoft Windows Server 2003 (32-bit or 64-bit)
And unless the same server is also running Exchange 2000 or 2003:
- Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2.1
Download via <http://www.symprex.com/link/exchangemapicdo.htm>

Installing on a Windows 2000 Server

- Microsoft Windows 2000 Server SP4 or later
- Microsoft Data Access Components (MDAC) 2.6 or later
And unless the same server is also running Exchange 2000 or 2003:
- Microsoft Exchange Server MAPI Client and Collaboration Data Objects 1.2.1
Download via <http://www.symprex.com/link/exchangemapicdo.htm>

2.2. General Recommendations

Symprex Exchange Connector can be installed on a separate server or on your Exchange server.

The server which runs Symprex Exchange Connector may run other software as well, but should not run any other software or scripts that use MAPI, CDO or Microsoft Outlook (it is recommended that Outlook is not installed on the server).

2.3. Running the System Check Utility

When you have installed Symprex Exchange Connector, you can run the System Check utility, which is installed with the product, to check that all required software components are available and are the correct versions.

2.4. Additional Comments

When installing Symprex Exchange Connector on a separate server (that is not running Exchange), Exchange Connector can extract calendars from servers that are running:

- Exchange 2010
- Exchange 2007
- Exchange 2003
- Exchange 2000 (SP3 or later recommended)

Finally, please note that Symprex Exchange Connector may not work if it is installed on a machine that has Outlook installed.

3. SERVICE ACCOUNT REQUIREMENTS

The Symprex Exchange Connector service needs to run in the context of an account that has administrative rights on your Exchange server. This chapter details the required rights and how to assign them. See section 3.1 for Exchange 2007 requirements and section 3.2 for Exchange 2003/2000 requirements.

3.1. Account Requirements for Exchange 2007/2010

To access Exchange 2007/2010, the Symprex Exchange Connector service account must:

- be a member of the *Domain Admins* and *Domain Users* groups **only**
- have the permissions on your Exchange 2007/2010 server as described below
- have privilege *Log in as a service* enabled

To assign the Symprex Exchange Connector service account the required permissions on Exchange 2007/2010, please follow these steps:

Open Windows PowerShell, then run the following commands (substituting the appropriate account name and mailbox database name):

```
Add-ADPermission -Identity "Mailbox Database" -User
"Administrator" -ExtendedRights "Receive-As"
```

```
Add-ADPermission -Identity "Mailbox Database" -User
"Administrator" -ExtendedRights "Send-As"
```

```
Add-ADPermission -Identity "Mailbox Database" -User
"Administrator" -ExtendedRights "Administer Information Store"
```

Symprex Exchange Connector will now be able to access mailbox folders on Exchange 2007/2010. Note that you can also set these permissions on the server level.

3.2. Account Requirements for Exchange 2003/2000

To access Exchange 2003/2000, the Symprex Exchange Connector service account must:

- be a member of the *Domain Admins* and *Domain Users* groups **only**
- have the permissions on your Exchange 2003/2000 server as described below
- have privilege *Log in as a service* enabled

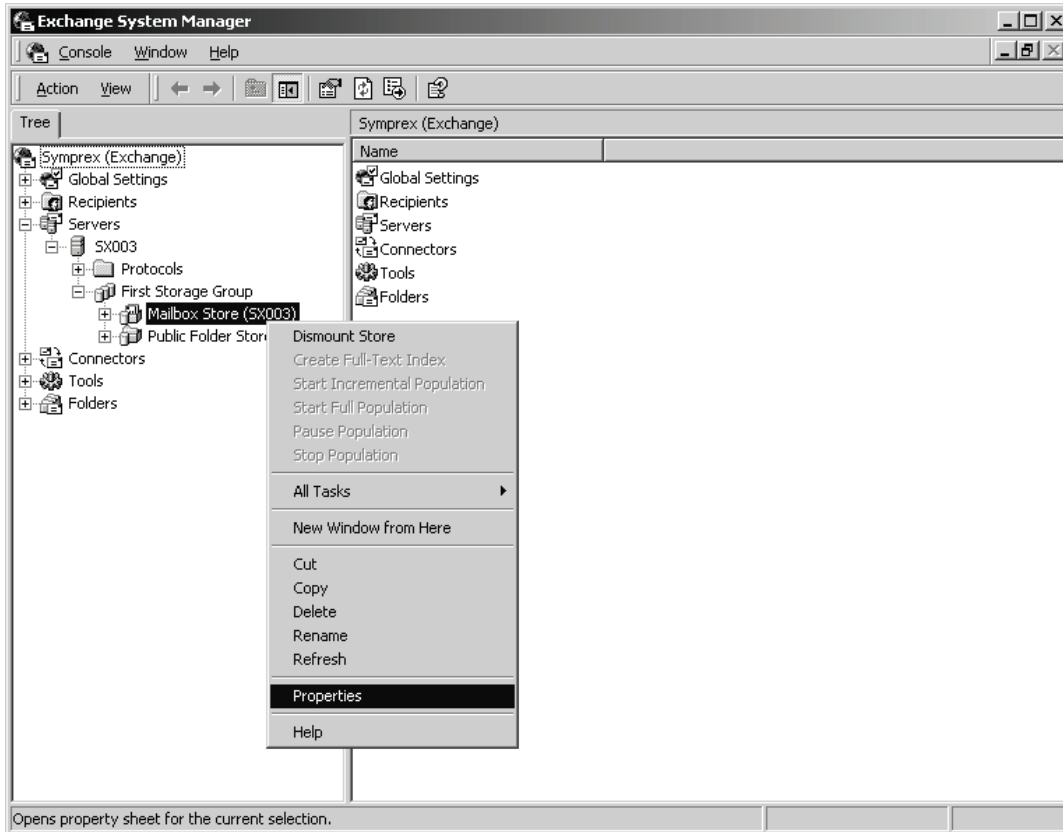
☛ The Local System account can be used if Symprex Exchange Connector is installed on the server running Exchange 2003/2000.

To assign the Symprex Exchange Connector service account the required permissions on Exchange 2003/2000, please follow these steps:

Open Exchange System Manager, then:

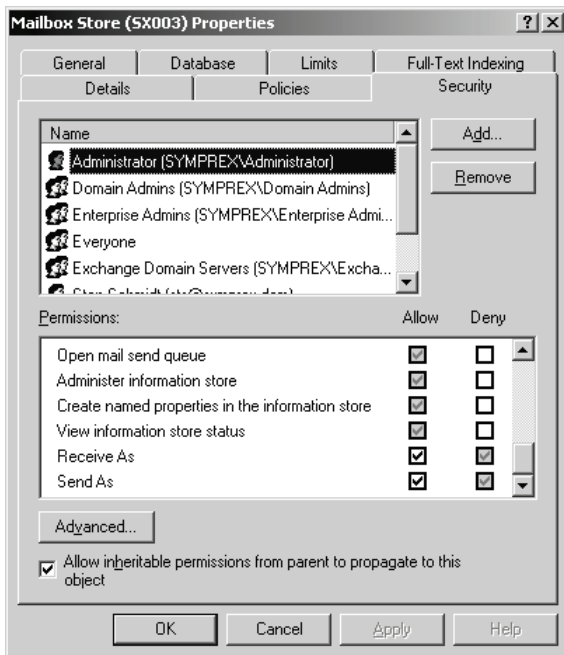
- Select your mailbox store
- Right-click and select Properties to open the Properties dialog

(see top of next page)



Select the Security tab in the mailbox store properties dialog, then, for your account:

- Make sure Receive As is checked
- Make sure Send As is checked



Symprex Exchange Connector will now be able to access mailbox folders on Exchange 2003/2000.

4. INSTALLING SYMPREX EXCHANGE CONNECTOR

The following steps are required to install and configure Symprex Exchange Connector:

- 1) Run the Symprex Exchange Connector Setup
- 2) Install your Symprex Exchange Connector license key

You need the following to make sure the installation will be successful:

- 1) A Symprex Exchange Connector license key, which can be requested from Symprex or an authorized reseller. This software will not run without a full or evaluation license key.
- 2) Details of an administrative account to use as the Symprex Exchange Connector service account. This account must meet the requirements described in chapter 3.

Section 4.1 below describes the installation and configuration of the Symprex Exchange Connector service and database. Section 4.2 explains how to install your license key.

4.1. Installing and Configuring the Symprex Exchange Connector

Run `Symprex_Exchange_Connector_Setup.exe`. This will start the Symprex Exchange Connector Setup program. Remember to close all applications (including the Windows Event Viewer) before starting the installation.

Step through the Welcome, Software License Agreement, Readme Information, and Choose Destination Location dialogs. It is recommended to use the default directory.

Step through the Start Copying Files dialog to start copying and installing files.

Step through the Symprex Exchange Connector Configuration Wizard when all files have been installed:

In the Server field, enter the name of the Exchange server that this installation of Symprex Exchange Connector must connect to, to access address book information.

In the Account field, enter the **alias** of the Exchange mailbox to login to, to access address book information. The Symprex Exchange Connector service account allows it to login to the mailbox without a password.

The mailbox must be a mailbox on the Exchange server specified in the Server field. The account must be visible in the Global Address List and can be the Administrator.

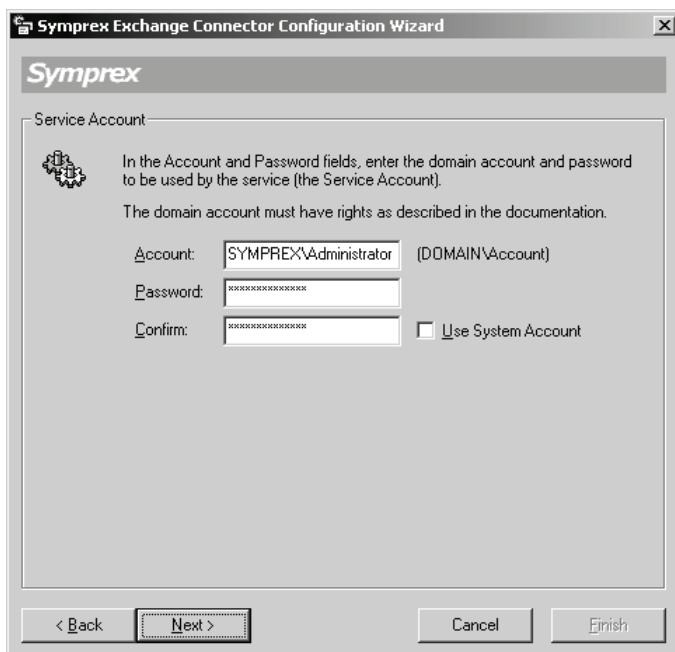
(continued)

To open the address book to select a mailbox, an Exchange profile must exist. Otherwise you will be asked to create one.

The Servers field is only used when you are installing more than one instance of Symprex Exchange Connector. In this case, you must enter a list of the server(s) that the current instance is responsible for importing from. Otherwise, leave this field empty.

It is recommended that you do not tick Use Symprex Exchange Event Connector during installation. Once you have the product running, go to chapter 6, which tells about the event service and how to install and configure it.

Click Next to continue.

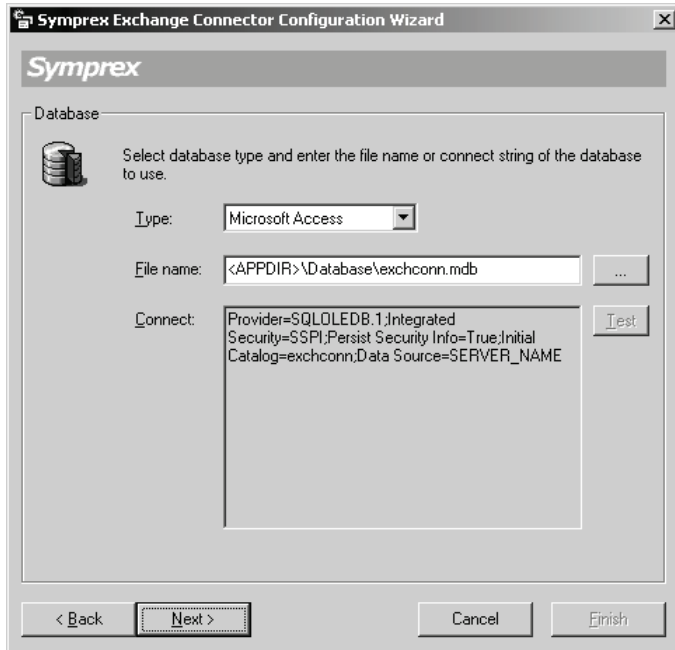


The Symprex Exchange Connector service needs to run in the context of a service account that has administrative rights on Exchange.

See chapter 3 for information on account requirements if you have not already done so.

Using the System Account only works when Symprex Exchange Connector is installed on an Exchange 2003/2000 server.

Click Next to continue.



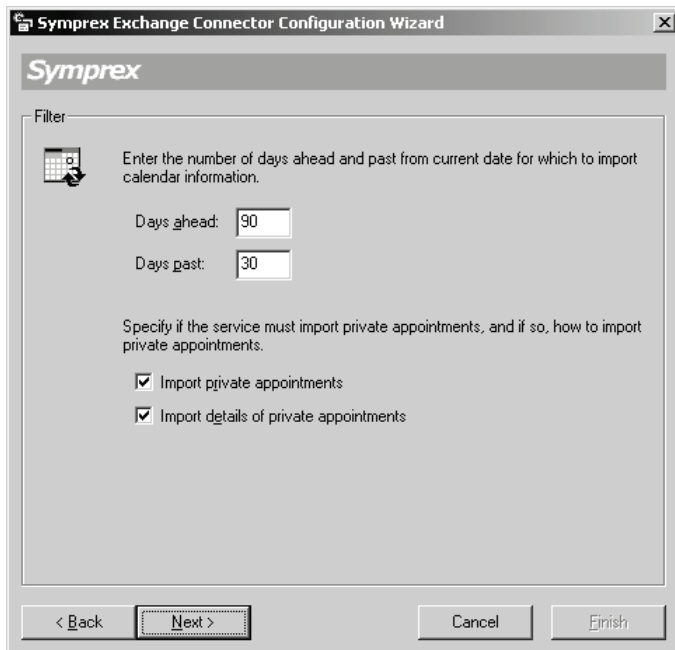
In the Type field select the type of database the Symprex Exchange Connector must use.

In the File name field, enter the file name of the Symprex Exchange Connector database.

If you did not change the database destination during installation, you can use the default value.

If you would like Symprex Exchange Connector to use a database on a SQL Server please see chapter 7 for more information. Note that it is recommended to first configure and get Symprex Exchange Connector running with the included database.

Click Next to continue.



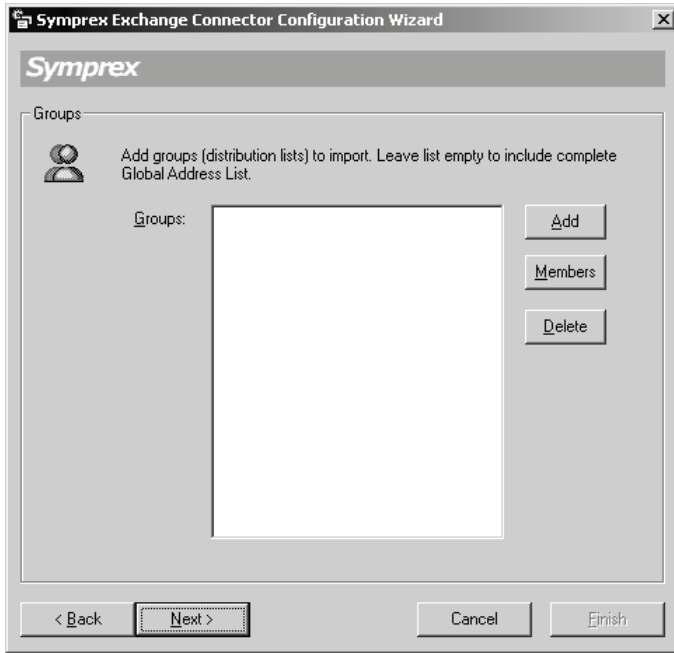
In the Days ahead and Days past fields, enter how many days ahead and past from the current date that Symprex Exchange Connector must import into the database from each calendar.

Optionally, specify if appointments marked *Private* must be imported.

Also optionally, specify if details of any imported private appointments must be imported. If details are not imported, only the start time, end time and free/busy type of private appointments will be imported.

If the details of private appointments are imported it is up to the client that uses the Symprex Exchange Connector database to enforce any privacy required.

Click Next to continue.



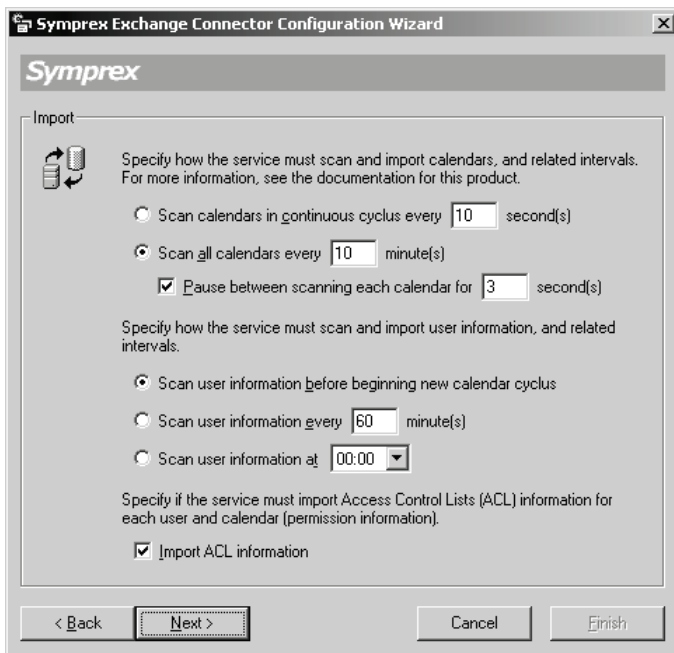
Specify the groups (distribution lists) containing mailboxes that must be imported with calendar information into the database maintained by the Symprex Exchange Connector.

To include the complete Global Address List (GAL) leave the list empty – do not select any groups.

The members of a group can be shown by pressing the Members button. Groups can be deleted by pressing the Delete button.

NOTE: To open the address book to select groups, an Exchange profile must exist. Otherwise you will be asked to create one, when trying to open the address book.

Click Next to continue.



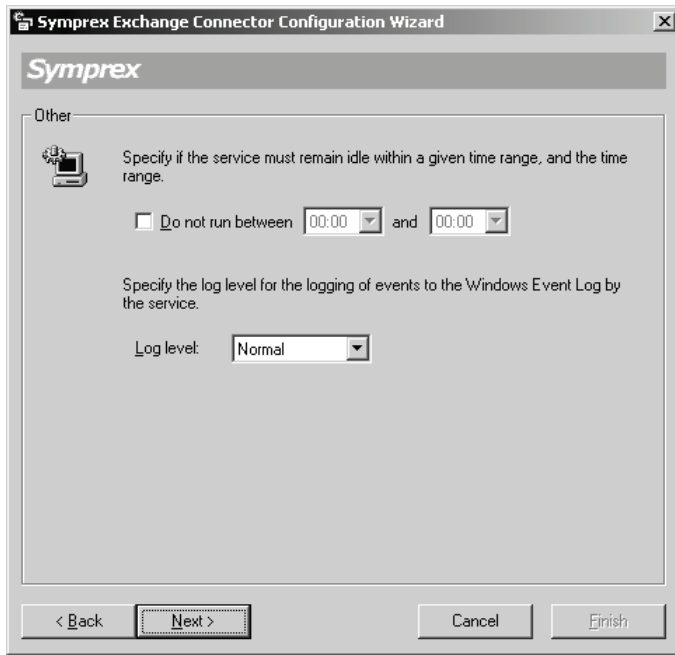
Specify when and how often to import calendar information into the Symprex Exchange Connector database.

Also specify when and how often to import user information into the Symprex Exchange Connector database.

If you would like Symprex Exchange Connector to import the Outlook calendar permissions set by users, check the “Import ACL information” option.

As with the other configuration of Symprex Exchange Connector you can change this configuration at a later time.

Click Next to continue.



Optionally, specify a period where the Symprex Exchange Connector service should not import data from your Exchange server. This is useful, for example, if backup of the Exchange server is performed overnight where it may be desirable to disable the import of data.

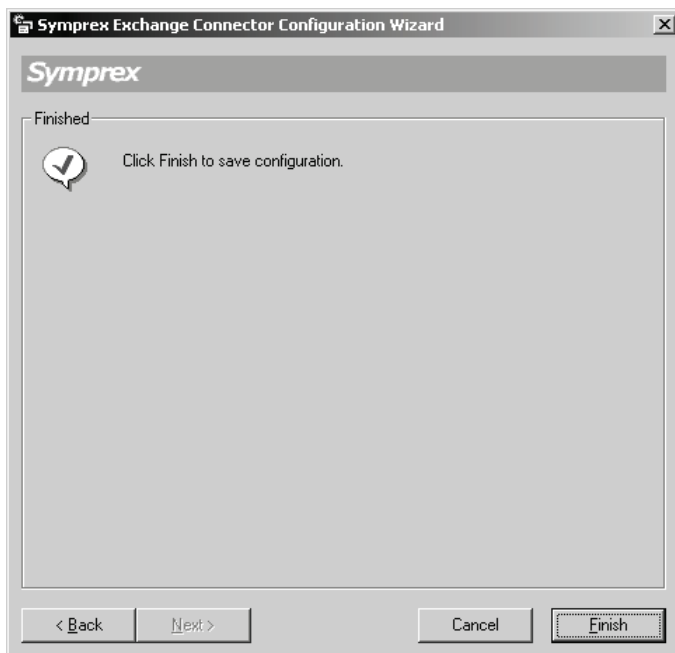
Finally, you can set a desired log level:

Low –log only errors.

Normal – log important information and errors.

High – log all information and errors.

Click Next to continue.



Click Finish to apply the service account and password and apply your Symprex Exchange Connector configuration.

Congratulations! You have now completed the Symprex Exchange Connector service and database installation. Before trying to start the service, you must install your Symprex Exchange Connector license key. Without a license key, the service will not start.

4.2. Installing your Symprex Exchange Connector License Key

Before starting the Symprex Exchange Connector service, you must acquire and install a Symprex Exchange Connector license key. The software will not run without it, not even in evaluation mode. You can request an evaluation license from Symprex or an authorized reseller and install it using the License Manager that comes with Exchange Connector.

You can view any currently installed Symprex Exchange Connector license running the License Manager installed together with Symprex Exchange Connector.

4.3. Configuring Symprex Exchange Connector to Use the Events Service

Chapter 6 tells you about the event service for Symprex Exchange Connector and how to install and configure it. The event service can be installed on your Exchange 2000 or 2003 server and will notify Symprex Exchange Connector of changes to calendars, effectively turning Symprex Exchange Connector into a (near) real-time solution.

4.4. Configuring Symprex Exchange Connector for SQL Server

Chapter 7 explains how to create the Symprex Exchange Connector database on SQL Server 2005, 2000 and 7.0. It is recommended that you verify Symprex Exchange Connector runs with the included database before configuring it for use with SQL Server.

4.5. Finalizing the Installation and Configuration

The Application Event Log must be set to automatically overwrite old events as needed or it may fill up. Configure the Application Log to "Overwrite Events as needed".

The Symprex Exchange Connector service is not installed to automatically start during boot. You can use the Symprex Exchange Connector Service Manager to specify if the service should start during boot.

4.6. How to Encrypt and Password Protect the Included Database

The database included and installed with Symprex Exchange Connector is not encrypted or password protected. It can be opened with Microsoft Access 2000 or later.

To encrypt and password protect the database run the Database Tool and select "Change database password". Enter your chosen password and press OK. The database will be encrypted using your password. The password will be required to open the database in Microsoft Access 2000 or later (or any other application that can open Access databases).

5. FINAL CONFIGURATION AND ADDITIONAL INFORMATION

The Application Event Log must be set to automatically overwrite old events as needed or it will quickly fill up. Set the application log to "Overwrite Events as needed".

The Symprex Exchange Connector service is not installed to automatically start during boot. You can use the Symprex Exchange Connector Service Manager to specify if the service should start during boot.

5.1. Symprex Exchange Connector Utilities

The following Symprex Exchange Connector utilities are available in the Symprex Exchange Connector Programs group from the Start menu:

- Configuration
- Database Tool
- License Manager
- Service Manager
- System Check

The Configuration program allows you to change the configuration, including the Symprex Exchange Connector service account and password.

The Database Tool allows you to repair the Symprex Exchange Connector database, and also to delete all data from it. The Database Tool also provides you with information on the size of the database as well as the number of records in the user and appointment tables.

The License Manager shows you any license information currently installed. It shows if your license is a full license or an evaluation license, your license name and key, an expiry date if any, and the user limit (calendar limit).

The Service Manager allows you to start and stop the Symprex Exchange Connector service. It also allows you to specify if the service should start during booting the server.

The System Check program checks the status and availability of various components, which are required for Symprex Exchange Connector to function correctly.

5.2. Starting and Stopping the Symprex Exchange Connector Service

You can use the Symprex Exchange Connector Service Manager to start and stop the service. You can also start and stop the Symprex Exchange Connector service from the Windows Services panel.

5.3. How to Check the Symprex Exchange Connector Service Status

You can check the Symprex Exchange Connector service status, whether it is running or stopped, using the Symprex Exchange Connector Service Manager.

Symprex Exchange Connector logs all status information to the Windows Event Log. Events are logged for the application SpxEcc.

6. INSTALLING THE EVENT SERVICE

The Symprex Exchange Event Connector service can be installed on your Exchange 2000 or 2003 server to notify Exchange Connector of changes to calendars, effectively turning the product into a (near) real-time solution. Exchange Connector will act upon events received from the event service to immediately import calendar changes.

The following steps are required to install and configure the event service:

- 1) Run the Symprex Exchange Event Connector Setup
- 2) Install your Symprex Exchange Connector license key (unless the Symprex Exchange Connector itself is also installed on your Exchange server)

Section 6.1 below describes the installation and configuration of the Symprex Exchange Event Connector service. Section 6.2 explains how to install your license key.

6.1. Installing and Configuring the Symprex Exchange Event Connector

Run `Symprex_Exchange_Event_Connector_Setup.exe`. This will start the Symprex Exchange Event Connector Setup program. Remember to close all applications (including the Windows Event Viewer) before starting the installation.

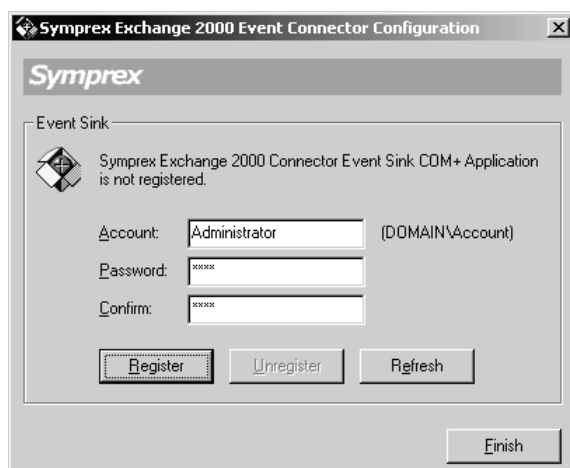
• Note that the Symprex Exchange Event Connector must be installed on your Exchange 2000 or 2003 server. It will automatically communicate events to Symprex Exchange Connector regardless of whether it is installed on your Exchange server or another server.

Step through the Welcome, Software License Agreement, Readme Information, and Choose Destination Location dialogs. It is recommended to use the default directory.

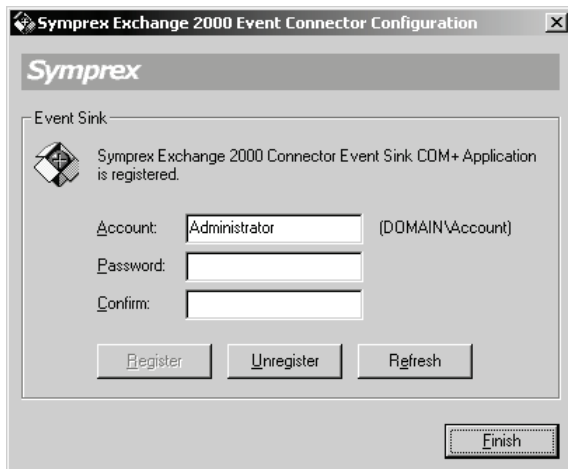
Step through the Start Copying Files dialog to start copying and installing files.

The Symprex Exchange Event Connector Configuration program appears when all files have been installed.

You must register the Symprex Exchange Connector Event Sink COM+ Application. It is recommended to use the local Exchange server Administrator account and password to do so. Enter the account and password and press Register as illustrated below:



When the Symprex Exchange Connector Event Sink COM+ Application has been registered the Configuration program will show this and the account that it is registered with. This is illustrated below:



Click Finish to close the Configuration program.

You must now install your Symprex Exchange Connector license key (unless the Symprex Exchange Connector itself is also installed on your Exchange server). This is explained in the below section 6.2.

Once you have ensured that the license key is installed, open Symprex Service Manager installed with Symprex Exchange Event Connector, start the event service and also make sure the Auto-start service when OS starts checkbox is ticked. This is illustrated below:



The event service is now running.

6.1.1. Configuring Symprex Exchange Connector to Use Events

Finally, to complete the configuration, simply open the Symprex Exchange Connector Configuration program and on the Exchange Server tab, tick the option Use Symprex Exchange Event Connector and click Finish. This is illustrated below.



6.1.2. How to Verify the Status of the Event Service and Event Registrations

When you have ticked the option to Use Symprex Exchange Event Connector and clicked Finish (as illustrated above), Symprex Exchange Connector will start requesting event sink registrations for each mailbox that it is configured to import. These requests are logged to the Application Log in the Windows Event Log. Look for the following events on the machine running Symprex Exchange Connector:

Application	Type	Event	Event Description
SpxEcc	Information	1200	Requesting event sink registrations.
SpxEcc	Information	1201	Requesting event sink registrations done.
SpxEcc	Error	1202	Requesting event sink registrations failed.

The Symprex Exchange Event Connector service will handle the requests for event sink registration. The registrations are logged to the Application Log in the Windows Event Log. Look for the following events on the machine running the Symprex Exchange Event Connector service:

Application	Type	Event	Event Description
SpxEss	Information	1100	The Symprex Exchange Connector event sink registered successfully with mailbox
SpxEss	Error	1101	The Symprex Exchange Connector event sink failed to register with mailbox....
SpxEss	Information	1102	The Symprex Exchange Connector event sink unregistered successfully with mailbox
SpxEss	Error	1103	The Symprex Exchange Connector event sink failed to unregister with mailbox

The Symprex Exchange Event Connector service may also log other errors than listed in the above table.

6.2. Installing your Symprex Exchange Connector License Key

Before starting the Symprex Exchange Event Connector service, you must install your Symprex Exchange Connector license key.

You can view any currently installed Symprex Exchange Connector license running the License Manager installed together with Symprex Exchange Event Connector.

7. USING EXCHANGE CONNECTOR WITH SQL SERVER

Configuring Symprex Exchange Connector to use SQL Server or Microsoft Data Engine (MSDE) is relatively straightforward. First you must create the database on SQL Server, then you must configure Symprex Exchange Connector to use the SQL Server database.

Section 7.1 below explains how to create the database on SQL Server 2008/2005/2000.

Section 7.2 below explains how to create the database on SQL Server 7.0.

Section 7.3 explains how to configure Symprex Exchange Connector to use SQL Server.

7.1. Creating Exchange Connector Database on SQL Server 2008/2005/2000

To create the Symprex Exchange Connector database on your SQL Server, follow these steps:

1. Use the **SQL Server Enterprise Manager** to create a new database named **exchconn**.
2. Select options for your new **exchconn** database in the **SQL Server Enterprise Manager**, then on the **Options** tab, select the **Simple** recovery model and also tick the **Auto shrink** checkbox.
3. Use the **SQL Query Analyzer** to run the **Database Script.sql** script to create the Symprex Exchange Connector tables and other objects in the **exchconn** database.
4. Use the **SQL Query Analyzer** to run the **Populate Enumeration Tables.sql** script to populate the enumeration tables in the **exchconn** database.

You are now ready to configure Symprex Exchange Connector to use the new SQL Server database. See section 7.3 below for information on how to do this.

7.2. Creating Exchange Connector Database on SQL Server 7.0

To create the Symprex Exchange Connector database on your SQL Server, follow these steps:

1. Use the **SQL Server Enterprise Manager** to create a new database named **exchconn**.
2. Select options for your new **exchconn** database in the **SQL Server Enterprise Manager**, then on the **Options** tab, tick the **Truncate log on checkpoint** checkbox and also tick the **Auto shrink** checkbox.
3. Use the **SQL Query Analyzer** to run the **Database Script (7.0).sql** script to create the Symprex Exchange Connector tables and other objects in the **exchconn** database.
4. Use the **SQL Query Analyzer** to run the **Populate Enumeration Tables.sql** script to populate the enumeration tables in the **exchconn** database.

You are now ready to configure Symprex Exchange Connector to use the new SQL Server database. See section 7.3 below for information on how to do this.

7.3. Configuring Symprex Exchange Connector to Use SQL Server

You must configure SQL Server to accept SQL Server authentication – the authentication mode clients of the database will normally use (clients will normally log on to the database using a specific SQL Server account and then validate access to calendar data against the security information imported into the database by the Symprex Exchange Connector).

The Symprex Exchange Connector can either log on to the SQL Server using SQL Server authentication or Windows authentication. If you want Symprex Exchange Connector to log on to the database using Windows authentication, you must also configure SQL Server to accept Windows authentication.

Regardless of the authentication method you want Symprex Exchange Connector to use, Symprex Exchange Connector must have full access to the Symprex Exchange Connector database on SQL Server.

To configure the Symprex Exchange Connector to use your SQL Server database, follow these steps:

1. Stop the Symprex Exchange Connector service.
2. Open **Configuration** from the Symprex Exchange Connector folder, and select the **Database** tab.
3. Select database type **Microsoft SQL Server**, and specify the appropriate connect string (depending whether to use SQL Server or Windows authentication – see the connection strings below).
4. Press **Test** to verify that the connection works.
5. Press **Finish** to save the new configuration.
6. Restart the Symprex Exchange Connector service.

You can use the Database Tool to verify that data are imported into the tables in the SQL Server database. You may also want to check the Windows Event Log for any errors or warnings from SpxEcc in the Application Log.

SQL Server Authentication Connect String

Replace PASSWORD, USER_NAME and SERVER_NAME with the correct values:

```
Provider=SQLOLEDB.1;Password="PASSWORD";Persist Security
Info=True;User ID="USER_NAME";Initial Catalog=exchconn;Data
Source=SERVER_NAME
```

Windows Authentication Connect String

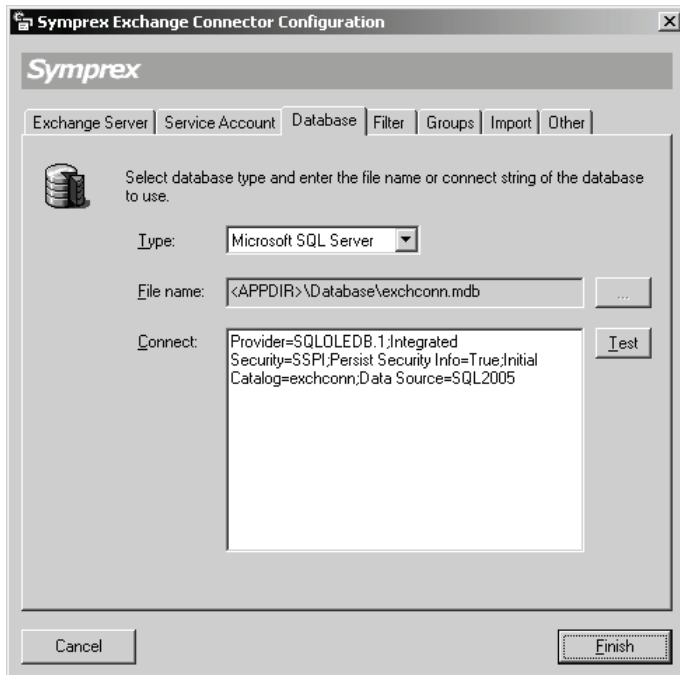
Replace SERVER_NAME with the correct value:

```
Provider=SQLOLEDB.1;Integrated Security=SSPI;Persist Security
Info=True;Initial Catalog=exchconn;Data Source=SERVER_NAME
```

NOTE: When using Windows authentication, the Symprex Exchange Connector will log on to SQL Server with the account that is the Symprex Exchange Connector service account.

Example

The example below shows the Configuration window where Symprex Exchange Connector has been configured to use SQL Server using Windows authentication:



NOTE: In this case Windows authentication is used for connecting to the SQL Server and the Exchange server is named SQL2005.

8. TROUBLESHOOTING

Symprex Exchange Connector is a relatively uncomplicated product, but it requires and relies on several Microsoft components, and on a number of required system permissions. This chapter explains how to troubleshoot Symprex Exchange Connector if it does not work correctly after you have finished the installation.

If Symprex Exchange Connector does not work as expected, the following steps should help determine the cause of the problem and its solution:

- Running System Check (8.1 below)
- Running License Manager (8.2 below)
- Inspecting the Windows Event Log (8.3 below)

8.1. Running System Check

The first step in troubleshooting Symprex Exchange Connector is to run the System Check utility, which is available from the Symprex Exchange Connector folder in the Windows start menu.

Press the Check button, then review the generated log for any errors or warnings, and in particular look for errors or warnings in the following test points:

- Test Microsoft Jet installation
- Test Microsoft Data Access Components (MDAC) installation
- Test CDO library installation
- Test CDO ACL library installation
- Test database connection

Each of these tests should report "object created successfully" and list a file name and path, file version and product version.

If any of these tests fail, please see the system requirements in section 2.1.

8.2. Running License Manager

The second step in troubleshooting Symprex Exchange Connector is to run the License Manager utility, which is available from the Symprex Exchange Connector folder in the Windows start menu. Then ensure that a suitable full license or evaluation license is installed (and has not expired if an expiry date is set).

8.3. Inspecting the Windows Event Log

The third step in troubleshooting Symprex Exchange Connector is to open the Windows Event Log viewer, select the Application Log, and look for any errors or warnings for the application SpxEcc.

Common service errors and warnings, and their solutions are described in the following section.

8.3.1. Troubleshooting Errors and Warnings

Problem	Solution
<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Address information import failed.</i></p> <p><i>Step: Locate Global Address List</i> <i>Error: 0x80004005</i> <i>Description: Collaboration Data Objects - [E_FAIL(80004005)]</i></p>	<p>Troubleshooting:</p> <ol style="list-style-type: none"> 1) On the Exchange Server tab in the Configuration panel, enter the name of the Exchange server, which the service must get address list information from. The name is case sensitive and is the Netbios name of the machine. 2) On the Exchange Server tab in the Configuration panel, enter the <i>alias</i> of a mailbox, which resides on the server. The most common reason for E_FAIL is to have entered the <i>user name</i> of a mailbox, or a <i>profile name</i>. It must be the <i>alias</i> of the mailbox to use. Also, the account must not be hidden from the Global Address List, or the same error will occur. The alias is case sensitive. It can be the Administrator account. 3) On the Service Account tab in the Configuration panel, make sure Use System Account is only checked if you have installed Symprex Exchange Connector on an Exchange 2003/2000 server. Otherwise, you must provide an admin domain account as service account. See chapter 3 for more information.
<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Address information import failed.</i></p> <p><i>Step: Logon using profile 'Server/Account'</i> <i>Error: 0x80040106</i> <i>Description: Collaboration Data Objects - [MAPI_E_UNKNOWN_FLAGS(80040106)]</i></p>	<p>This problem occurs when the MAPI subsystem on the machine running Symprex Exchange Connector is not installed correctly or has been damaged. This problem may also occur if Microsoft Outlook is installed on the machine.</p> <p>This problem should not occur on an Exchange server, but it may do so if Outlook is installed. In this case, the problem can be rectified by installing an appropriate service pack for Exchange.</p>

<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Address information import failed.</i></p> <p><i>Step: Logon using profile 'Server/Account'</i> <i>Error: 0x80070057</i> <i>Description: Collaboration Data Objects - [E_INVALIDARG(80070057)]</i></p>	<p>The reason for this problem and the solution is the same as for the above problem (MAPI_E_UNKNOWN_FLAGS).</p> <p>In particular this error can occur if Outlook 2002 (XP) or later is installed.</p>
<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Address information import failed.</i></p> <p><i>Step: Create MAPI session object</i> <i>Error: 0x1AD</i> <i>Description: ActiveX component can't create object</i></p>	<p>Please run the System Check utility, which should determine the cause of the problem and its solution.</p>
<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Calendar information import failed.</i></p> <p><i>Mailbox: mailbox@server</i></p> <p><i>Step: Open calendar</i> <i>Error: 0x8004011D</i> <i>Description: You do not have permission to log on. [Microsoft Exchange Server Information Store - [MAPI_E_FAILONEPROVIDER(8004011D)]]</i></p>	<p>This error usually occurs because the domain account used for the Symprex Exchange Connector service does not have the necessary permissions on your Exchange server.</p> <p>See chapter 3 for more information on how to ensure that the service account has the required permissions on your Exchange server.</p>
<p>SpxEcc fails logging the following error in the Windows Event Log:</p> <p><i>Calendar information import failed.</i></p> <p><i>Mailbox: mailbox@server</i></p> <p><i>Step: Get address id for current user mailbox@server</i> <i>Error: 0x8004010F</i> <i>Description: [Collaboration Data Objects - [MAPI_E_NOT_FOUND(8004010F)]]</i></p>	<p>This error usually occurs because the account "mailbox@server" is hidden from the Global Address List. To solve this problem, unhide the account so that it is visible in the Global Address List.</p>

8.4. Contacting Symprex Technical Support

If the above troubleshooting does not help identify any problems with Symprex Exchange Connector, please contact Symprex Technical Support. See chapter 9 for more information on how to contact Symprex.

9. CONTACTING SYMPREX

Symprex is a company with a passion for technology and the determination to help you increase your return of investment in the Microsoft Exchange & Outlook platform.

It is our ambition that Symprex products can help our customers increase employee productivity, streamline business processes, and reduce overall business costs.

We develop software add-on solutions for the Microsoft Exchange & Outlook messaging and collaboration platform, and market and support our products from our web site and through an extensive worldwide reseller network.

9.1. Visit our Web Site

Our web site provides general information about Symprex and our products:

<http://www.symprex.com>

If you experience technical problems with one of our products, please visit our support page:

<http://www.symprex.com/support.htm>

9.2. Contact Us by E-mail

Please e-mail general enquiries about Symprex or our products to:

info@symprex.com

Please e-mail sales enquiries to:

sales@symprex.com

Please e-mail support enquiries to:

support@symprex.com

9.3. Contact your Local Reseller

Symprex has partners and resellers in most countries. You can find your local reseller here:

<http://www.symprex.com/resellers.htm>

10. LICENSE AGREEMENT

Symprex Exchange Connector

Copyright © 2001-2010 by Symprex Ltd. All rights reserved.

SERVER LICENSE FOR SYMPREX EXCHANGE CONNECTOR

END-USER LICENSE AGREEMENT

IMPORTANT-READ CAREFULLY: This End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Symprex Limited for the Symprex software product identified above, which includes computer software and may include associated media, printed materials, and "online" or electronic documentation ("SOFTWARE PRODUCT"). An amendment or addendum to this EULA may accompany the SOFTWARE PRODUCT. BY INSTALLING, COPYING, OR OTHERWISE USING THE SOFTWARE PRODUCT, YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, DO NOT INSTALL OR USE THE SOFTWARE PRODUCT; YOU MAY, HOWEVER, RETURN IT TO YOUR PLACE OF PURCHASE FOR A FULL REFUND.

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF LICENSE.

This EULA grants you the following rights provided that you comply with all terms and conditions of this EULA:

a. Types of Software.

The SOFTWARE PRODUCT contains some or all of the following types of software: "Server Software" that provides services or functionality on a computer acting as a server (and, the computer running the Server Software shall be referred to as the "Server"); and "Client Software" that allows a computer, workstation, terminal, handheld PC, pager, telephone, "smart phone", or other electronic device (each of the foregoing a "Device") to access or utilize the services or functionality provided by the Server Software. Several copies of the Server Software, each of which is compatible with a different microprocessor architecture (such as the x86 architecture or various RISC architectures), may be provided.

b. Installation

Server Software. At any given time, you may install one copy of the Server Software for only one of those architectures on a single computer. Client Software. You may install the Client Software on any Device.

c. Use of the Server Software.

You may use one copy of the Server Software on one Server. You must acquire a separate Calendar Access License for each calendar that Symprex Exchange Connector imports from a calendar server, such as a Microsoft Exchange Server, and that are thus available to users via the Symprex Exchange Connector service. You do not need a separate Client Access License to access or otherwise utilize the services of Symprex

Exchange Connector, except to the extent that a Server or Server Software component which requires a Client Access License is accessed or utilized by Symprex Exchange Connector.

d. Use of the Client Software.

You may use the Client Software provided that you acquire Client Access Licenses as required in Paragraph 1(c) above, and subject to any limitations set forth in Paragraph 2.

e. Evaluation Software.

If the SOFTWARE PRODUCT is labeled "Evaluation Version" or "EV", then, notwithstanding Section 1 of this EULA, your use of the SOFTWARE PRODUCT is limited to use for demonstration, test, or evaluation purposes for a limited period of time governed by the evaluation license and you may not resell, or otherwise transfer for value, the SOFTWARE PRODUCT.

f. Not for Resale Software.

If the SOFTWARE PRODUCT is labeled "Not for Resale" or "NFR", then, notwithstanding Section 1 of this EULA, your use of the SOFTWARE PRODUCT is limited to use for demonstration, test, or evaluation purposes and you may not resell, or otherwise transfer for value, the SOFTWARE PRODUCT.

g. Academic Edition Software.

If the SOFTWARE PRODUCT is identified as "Academic Edition" or "AE", you must be a "Qualified Educational User" to use the SOFTWARE PRODUCT. If you are not a Qualified Educational User, you have no rights under this EULA. To determine whether you are a Qualified Educational User, please contact Symprex Limited.

h. Installation on a Single Server.

The SOFTWARE PRODUCT is licensed as a single product. The Server Software components may not be separated for use on more than one Server, unless otherwise provided herein.

i. No calendar access "Multiplexing" or "Pooling".

Use of software or hardware that reduces the number of Calendars directly accessed or imported by Symprex Exchange Connector (sometimes called "multiplexing" or "pooling" software or hardware) does not reduce the number of Calendar Access Licenses required; the required number of Calendar Access Licenses would equal the number of distinct inputs to the multiplexing or pooling software or hardware "front end".

j. No client access "Multiplexing" or "Pooling".

Use of software or hardware that reduces the number of Devices directly accessing or utilizing the Server Software does not reduce the number of Client Access Licenses required; the required number of Client Access Licenses would equal the number of distinct inputs to the multiplexing or pooling software or hardware "front end".

k. Additional Software.

Any software provided to you by Symprex which updates or supplements the original SOFTWARE PRODUCT is part of the SOFTWARE PRODUCT and is governed by this

EULA, unless other terms of use are provided with such updates or supplements. Any software provided to you along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to you under the terms of that license agreement, except if this EULA specifically sets forth the terms of use for such software then the terms set forth in this EULA shall apply.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

Server Software Transfer.

You may transfer the Server Software to another computer, provided that it is removed from the computer from which it is transferred.

Rental.

You may not rent, lease, or lend the SOFTWARE PRODUCT.

Transfer to Third Party.

The initial user of the SOFTWARE PRODUCT may make a one-time permanent transfer of this EULA and SOFTWARE PRODUCT only directly to an end user. This transfer must include all of the SOFTWARE PRODUCT (including all component parts, the media and printed materials, this EULA, and, if applicable, the Certificate of Authenticity). Such transfer may not be by way of consignment or any other indirect transfer. The transferee of such one-time transfer must agree to comply with the terms of this EULA, including the obligation not to further transfer this EULA and SOFTWARE PRODUCT.

Notice to Users.

You shall inform all users of the SOFTWARE PRODUCT of the terms and conditions of this EULA.

Limitation on Reverse Engineering, Decompilation, and Disassembly.

You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.

Version Limitation.

The Server Software contains a certain version number (such as version "2.5"). This EULA permits you to install one copy of the Server Software with the same (or a lower) version number as the Server Software version number listed above on a single computer. This EULA also permits you to install one copy of a lower version of a Server Software component that is contained in the SOFTWARE PRODUCT.

Termination.

Without prejudice to any other rights, Symprex may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.

Consent to Use of Data.

With respect to technical information you provide to Symprex as part of any (if any) support services related to the SOFTWARE PRODUCT ("Support Services"), you agree that

Symprex (and its affiliates and agents) may collect, process and use such information for its business purposes, including for product support and development. Symprex will not utilize such technical information in a form that personally identifies you.

3. INTELLECTUAL PROPERTY RIGHTS.

All title and intellectual property rights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the SOFTWARE PRODUCT), and any copies you are permitted to make herein are owned by Symprex or its suppliers. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE PRODUCT is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content. If this SOFTWARE PRODUCT contains documentation which is provided only in electronic form, you may print one copy of such electronic documentation. You may not copy the printed materials accompanying the SOFTWARE PRODUCT. All rights not expressly granted are reserved by Symprex.

4. REINSTALLATION COPY.

After installation of one copy of the SOFTWARE PRODUCT pursuant to this EULA, you may keep the original media on which the SOFTWARE PRODUCT was provided by Symprex solely for archival purposes or reinstallation of the SOFTWARE PRODUCT on the same computer as the SOFTWARE PRODUCT was previously installed.

5. DUAL-MEDIA SOFTWARE.

You may receive the SOFTWARE PRODUCT in more than one medium. Regardless of the type or size of medium you receive, you may use only one medium that is appropriate for your single computer. You may not use the other medium for another computer. You may not loan, rent, lease, or otherwise transfer the other medium to another user, except as part of the permanent transfer (as provided above) of the SOFTWARE PRODUCT.

6. LIMITED WARRANTY

Symprex warrants that the SOFTWARE PRODUCT will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of receipt. If an implied warranty or condition is created by your state/jurisdiction and federal or state/provincial law prohibits disclaimer of it, you also have an implied warranty or condition, BUT ONLY AS TO DEFECTS DISCOVERED DURING THE PERIOD OF THIS LIMITED WARRANTY (NINETY (90) DAYS). AS TO ANY DEFECTS DISCOVERED AFTER THE NINETY (90) DAY PERIOD, THERE IS NO WARRANTY OR CONDITION OF ANY KIND. Some states/jurisdictions do not allow limitations on how long an implied warranty or condition lasts, so the above limitation may not apply to you. Any supplements or updates to the SOFTWARE PRODUCT, including without limitation, any (if any) service pack or hot fixes provided to you after the expiration of the ninety (90) day Limited Warranty period are not covered by any warranty or condition, express or implied.

LIMITATION ON REMEDIES; NO CONSEQUENTIAL OR OTHER DAMAGES.

Your exclusive remedy for any breach of this Limited Warranty is as set forth below. Except for any refund elected by Symprex, YOU ARE NOT ENTITLED TO ANY DAMAGES, INCLUDING BUT NOT LIMITED TO CONSEQUENTIAL DAMAGES, if the SOFTWARE PRODUCT does not meet Symprex's Limited Warranty, and, to the maximum extent allowed by applicable law, even if any remedy fails of its essential purpose. The terms of Paragraph 8 below ("Exclusion of Incidental, Consequential and Certain Other

Damages") are also incorporated into this Limited Warranty. Some states/jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Limited Warranty gives you specific legal rights. You may have others which vary from state/jurisdiction to state/jurisdiction.

YOUR EXCLUSIVE REMEDY.

Symprex's and its suppliers' entire liability and your exclusive remedy shall be, at Symprex's option from time to time, (a) return of the price paid (if any) for, or (b) repair or replacement of, the SOFTWARE PRODUCT that does not meet this Limited Warranty and that is returned to Symprex with a copy of your receipt. You will receive the remedy elected by Symprex without charge, except that you are responsible for any expenses you may incur (e.g. cost of shipping the SOFTWARE PRODUCT to Symprex). This Limited Warranty is void if failure of the SOFTWARE PRODUCT has resulted from accident, abuse, misapplication, abnormal use or a virus. Any replacement SOFTWARE PRODUCT will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Neither these remedies nor any product support services offered by Symprex are available without proof of purchase from Symprex or an authorized international source. To exercise your remedy, contact Symprex Limited.

7. DISCLAIMER OF WARRANTIES.

The Limited Warranty that appears above is the only express warranty made to you and is provided in lieu of any other express warranties (if any) created by any documentation or packaging. Except for the Limited Warranty and to the maximum extent permitted by applicable law, Symprex and its suppliers provide the SOFTWARE PRODUCT and Support Services (if any) AS IS AND WITH ALL FAULTS, and hereby disclaim all other warranties and conditions, either express, implied or statutory, including, but not limited to, any (if any) implied warranties or conditions of merchantability, of fitness for a particular purpose, of lack of viruses, of accuracy or completeness of responses, of results, and of lack of negligence or lack of workmanlike effort, all with regard to the SOFTWARE PRODUCT, and the provision of or failure to provide Support Services. ALSO, THERE IS NO WARRANTY OR CONDITION OF TITLE, QUIET ENJOYMENT, QUIET POSSESSION, CORRESPONDENCE TO DESCRIPTION OR NON-INFRINGEMENT WITH REGARD TO THE SOFTWARE PRODUCT.

8. EXCLUSION OF INCIDENTAL, CONSEQUENTIAL AND CERTAIN OTHER DAMAGES.

To the maximum extent permitted by applicable law, in no event shall Symprex or its suppliers be liable for any special, incidental, indirect, or consequential damages whatsoever (including, but not limited to, damages for loss of profits or confidential or other information, for business interruption, for personal injury, for loss of privacy, for failure to meet any duty including of good faith or of reasonable care, for negligence, and for any other pecuniary or other loss whatsoever) arising out of or in any way related to the use of or inability to use the SOFTWARE PRODUCT, the provision of or failure to provide Support Services, or otherwise under or in connection with any provision of this EULA, even if Symprex or any supplier has been advised of the possibility of such damages.

9. LIMITATION OF LIABILITY AND REMEDIES.

Notwithstanding any damages that you might incur for any reason whatsoever (including, without limitation, all damages referenced above and all direct or general damages), the entire liability of Symprex and any of its suppliers under any provision of this EULA and your exclusive remedy for all of the foregoing (except for any remedy of repair or replacement elected by Symprex with respect to any breach of the Limited Warranty) shall

be limited to the greater of the amount actually paid by you for the SOFTWARE PRODUCT or US\$5.00. The foregoing limitations, exclusions and disclaimers (including Sections 6, 7 and 8 above) shall apply to the maximum extent permitted by applicable law, even if any remedy fails its essential purpose.

10. NOTE ON USAGE.

THE SOFTWARE PRODUCT CONTAINS CODE WRITTEN IN VISUAL BASIC, VBSCRIPT AND JAVA ("PROGRAMMING LANGUAGES"). THESE PROGRAMMING LANGUAGES ARE NOT FAULT TOLERANT AND ARE NOT DESIGNED, MANUFACTURED, OR INTENDED FOR USE OR RESALE AS ONLINE CONTROL EQUIPMENT IN HAZARDOUS ENVIRONMENTS REQUIRING FAIL-SAFE PERFORMANCE, SUCH AS IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL, DIRECT LIFE SUPPORT MACHINES, OR WEAPONS SYSTEMS, IN WHICH THE FAILURE OF VISUAL BASIC, VBSCRIPT OR JAVA TECHNOLOGY COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE.

11. APPLICABLE LAW.

This EULA is governed by the laws of the United Kingdom.

12. ENTIRE AGREEMENT.

This EULA (including any addendum or amendment to this EULA which is included with the SOFTWARE PRODUCT) and the Client Access License (if applicable) are the entire agreement between you and Symprex relating to the SOFTWARE PRODUCT and the Support Services (if any) and they supersede all prior or contemporaneous oral or written communications, proposals and representations with respect to the SOFTWARE PRODUCT or any other subject matter covered by this EULA. To the extent the terms of any Symprex policies or programs for Support Services conflict with the terms of this EULA, the terms of this EULA shall control.

13. QUESTIONS?

Should you have any questions concerning this EULA, please contact Symprex Limited. See <http://www.symprex.com> for contact information.

###