



# **NETWRIX EXCHANGE CHANGE REPORTER**

## **ADMINISTRATOR'S GUIDE**

Product Version: 7.2

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# 1. INTRODUCTION

## 1.1. Overview

This guide contains an overview of the NetWrix Exchange Change Reporter functionality and features, and detailed step-by-step instructions on how to configure and use the product. For instructions on how to install the product and configure the target AD domain for monitoring, refer to [NetWrix Active Directory Change Reporter Installation and Configuration Guide](#).

## 1.2. How This Guide Is Organized

This section explains how this guide is organized and provides a brief overview of each chapter.

- Chapter [1 Introduction](#) is the current chapter. It explains the purpose of this document, defines its audience and explains its structure.
- Chapter [2 Product Overview](#) contains an overview of the NetWrix Exchange Change Reporter functionality, lists its main features and benefits, and explains the product workflow. It also contains information on the product editions and a side-by-side comparison of their features.
- Chapter [3 NetWrix Enterprise Management Console Overview](#) provides a description of NetWrix Enterprise Management Console, which is an integrated interface for the most NetWrix products.
- Chapter [4 Managed Object](#) explains how to create and configure a Managed Object using the Managed Object wizard, and how to modify the Managed Object settings.
- Chapter [5 Data Collection](#) explains the NetWrix Exchange Change Reporter data collection workflow and contains detailed information on the Change Summary options and Sessions.
- Chapter [6 Reports](#) provides an overview of the Reports feature (including Snapshot Reporting), explains how to configure and view reports and contains report examples. It also contains step-by-step instructions on how to configure subscriptions to Reports.
- Chapter [7 Configuring Global Settings](#) provides instructions on how to configure the settings that will be applied to all existing Managed Objects and all NetWrix modules enabled for these objects.
- Chapter [8 Additional Configuration](#) provides a description of the product additional configuration options, such as enabling integration with SIEM solutions and excluding data types from data collection and product reports.
- [A Appendix: Registry Keys](#) contains a table with the description of the basic NetWrix Exchange Change Reporter registry keys.
- [B Appendix: Related Documentation](#) contains a list of all documents published to support NetWrix Exchange Change Reporter.

## 2. PRODUCT OVERVIEW

Without argument, Microsoft Exchange is the most important IT infrastructure component in many organizations. Even one hour of email downtime can cost millions of dollars of lost revenue and credibility. Auditing changes to configuration settings in an Exchange environment is critical to ensure reliable email operation, security and compliance. Exchange servers, mailboxes, information stores, permissions and all other types of objects must be monitored on a regular basis to detect any changes, both authorized or not, and the full audit trail must be maintained for compliance and security incident investigation purposes.

NetWrix Exchange Change Reporter is an auditing solution that tracks and reports all changes made to your Exchange Server configuration and permissions. The product generates reports that show all created, deleted, and modified objects and settings, and answer the four basic questions: WHO changed WHAT, WHEN and WHERE. Powered by the NetWrix AuditAssurance™ technology, NetWrix Exchange Change Reporter tracks changes to the configuration settings, creation and deletion of mailboxes, information stores, Exchange servers, connectors, protocol parameters, storage groups and many other types of objects and their permissions. Reports show the before and after values for all modified settings, for example, the previous name of a recently renamed mailbox or what the mailbox quotas looked like before they were changed.

NetWrix Exchange Change Reporter can be purchased separately, but it is installed as an integrated part of a larger change reporter pack which automates auditing of the entire AD infrastructure. The NetWrix Active Directory Change Reporter pack comprises the following modules:

- Active Directory Change Reporter
- Exchange Change Reporter
- Group Policy Change Reporter

**Note:** This guide only covers the configuration and usage of the NetWrix Exchange Change Reporter module. For information on other modules, refer to [NetWrix Active Directory Change Reporter Administrator's Guide](#) and [NetWrix Group Policy Change Reporter Administrator's Guide](#).

### 2.1. Key Features and Benefits

NetWrix Exchange Change Reporter helps you perform the following auditing and reporting tasks:

- Detect and report on changes made to Exchange Servers. Reports include information on WHO changed WHAT, WHEN, and WHERE.
- Report on the before and after values for every change.
- Generate on-demand web-based reports.
- Create custom reports (can also be ordered from NetWrix).
- Store collected audit data and enable historical reporting for any period of time.
- Create email subscriptions for certain report types. The feature is based on the SSRS-reporting functionality and enables automatic delivery of certain report types to a customizable list of email addresses.
- Integration with SCOM. The product stores collected changes in an event log which allows cooperating with SCOM.

## 2.2. Product Workflow

The NetWrix Exchange Change Reporter data collection and reporting workflow is as follows:

1. An administrator configures a Managed Object and sets the parameters for automated data collection and reporting.
2. NetWrix Exchange Change Reporter monitors AD domain and collects audit data on changes and AD configuration snapshots. Audit data is written to a local file-based storage, referred to as the Audit Archive.
3. The product emails Change Summaries to the specified recipients daily at 3:00 AM by default.
4. If the integration with SCOM is enabled, the product will record all changes to the event log.
5. If the Reports functionality is enabled and configured, data is imported from the Audit Archive to a dedicated SQL database. Reports based on audit data can be viewed via NetWrix Enterprise Management Console or in a web browser.

## 2.3. Product Editions

NetWrix Exchange Change Reporter is available in two editions: Freeware and Enterprise. The Freeware Edition can be used by companies and individuals for an unlimited period of time at no charge. The Enterprise Edition can be evaluated free of charge for 20 days.

**Note:** Licenses for different modules of the NetWrix Active Directory Change Reporter pack (Active Directory Change Reporter, Group Policy Change Reporter and Exchange Change Reporter) have to be purchased separately.

The table below outlines the difference between the editions:

Table 1: NetWrix Exchange Change Reporter Editions

Feature	Freeware Edition	Enterprise Edition
Exchange objects and their attributes change reporting (modification, addition, deletion)	Yes	Yes
Exchange object security change reporting	Limited	Fully detailed
WHO, WHEN and WHERE fields for every change	No	Yes
The before and after values for every change	Yes	Yes
SSRS-based reports with filtering, grouping and sorting options	No	Yes
Subscription to SSRS-based reports	No	Yes
Predefined reports for PCI, SOX, and HIPAA	No	Yes
Custom reports	No	Yes. Create manually or <a href="#">order from NetWrix</a> (3 reports at no charge!)
Long-term audit archiving and reporting	No	Any period of time
Integration with Microsoft System Center Operations Manager via <a href="#">SCOM Management Pack for Exchange Change Reporter</a>	No	Yes
A single installation handles multiple domains, each with its own individual settings	No	Yes
Easy integration with other NetWrix products via NetWrix Enterprise Management Console	No	Yes
Daily email Change Summary reflecting the changes made during the last day	Yes	Yes
Technical Support	<a href="#">Support Forum</a> , <a href="#">Knowledge Base</a>	<a href="#">Full range of options</a> (phone, email, <a href="#">support tickets submission</a> , <a href="#">Support Forum</a> , <a href="#">Knowledge Base</a> )
Licensing	Free of charge	Per enabled AD account or volume license, see our <a href="#">pricing information</a> or <a href="#">request a quote</a>



### 3. NETWRIX ENTERPRISE MANAGEMENT CONSOLE OVERVIEW

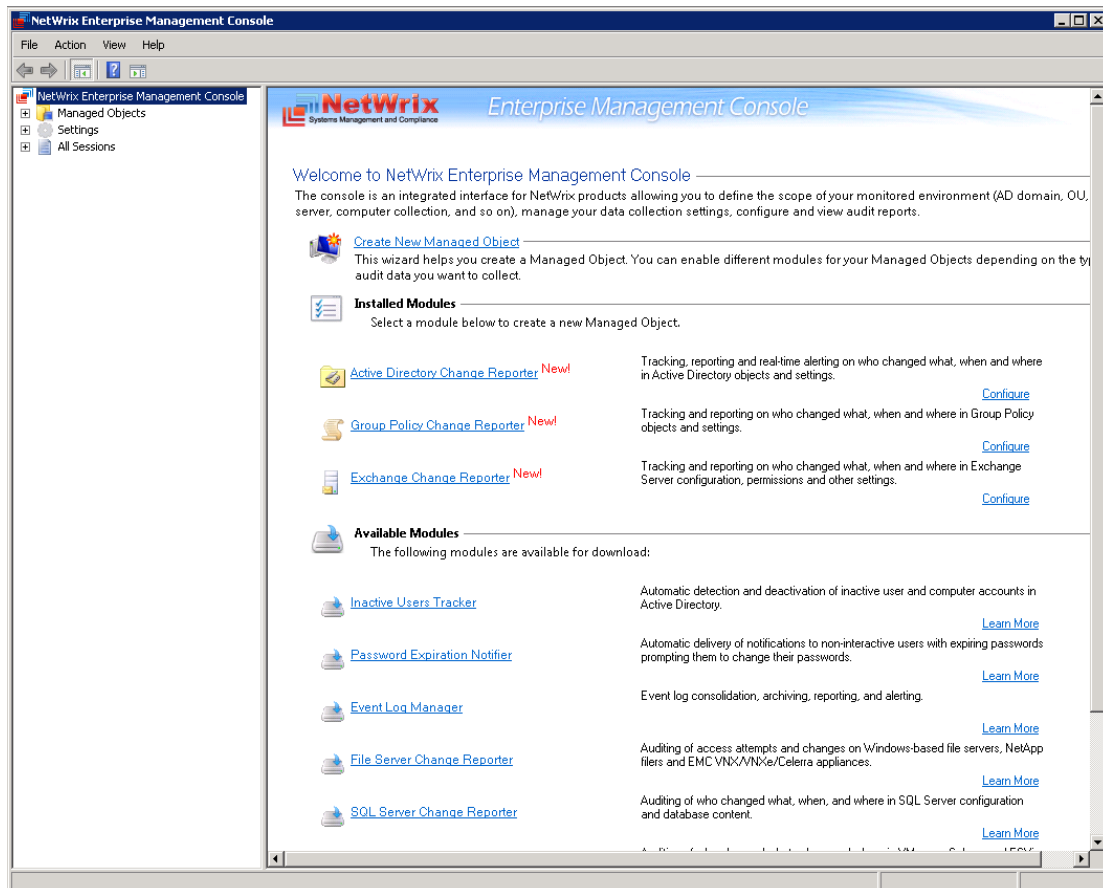
NetWrix Exchange Change Reporter Enterprise Edition is integrated into NetWrix Enterprise Management Console, an MMC snap-in that allows configuring Managed Objects, their settings and reporting options.

NetWrix Enterprise Management Console enables you to do the following:

- Manage the settings of all NetWrix change auditing products via an integrated interface
- Create and configure Managed Objects
- Enable and configure SSRS-based reports
- View Reports
- Configure long-term archiving
- Configure Subscriptions to Reports
- Handle numerous managed objects (domains) with a single installation.
- Configure your Managed Objects settings in a batch
- Enable integration with Third-Party SIEM Solutions

To start NetWrix Enterprise Management Console, navigate to **Start → All Programs → NetWrix → Exchange Change Reporter** and click **Exchange Change Reporter (Enterprise Edition)**. The Enterprise Management Console main page will be displayed:

Figure 1: NetWrix Enterprise Management Console



## 4. MANAGED OBJECT

In NetWrix Exchange Change Reporter, a Managed Object is a domain with MS Exchange Server installed that is monitored for changes.

This chapter provides detailed step-by-step instructions on how to:

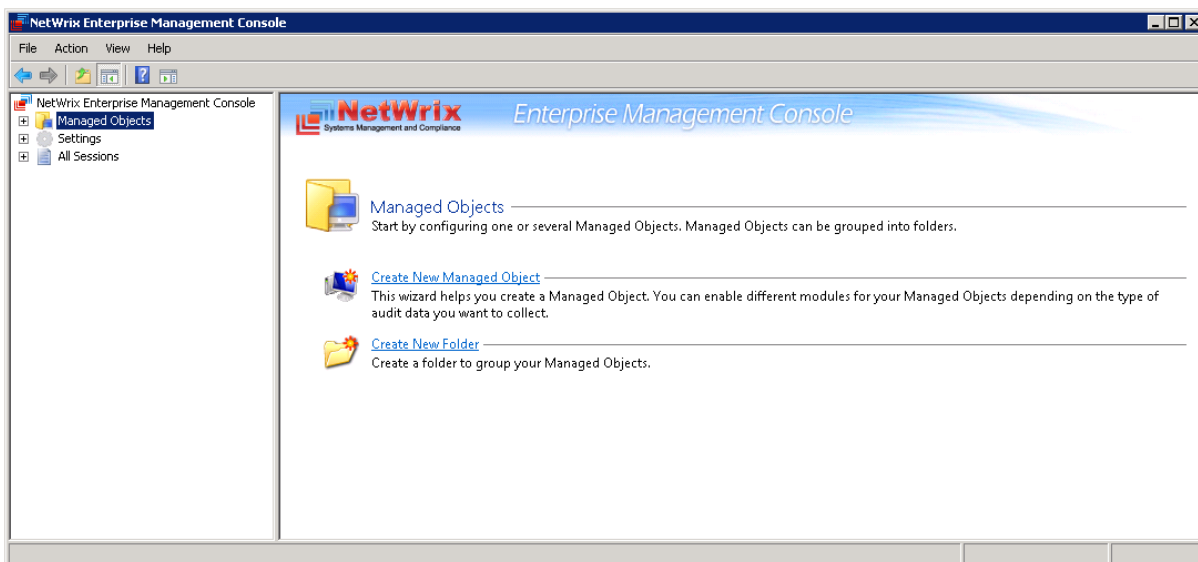
- [Create and configure a Managed Object](#)
- [Modify Managed Object Settings](#)

### 4.1. Creating Managed Object

#### Procedure 1. To create and configure a Managed Object

1. In NetWrix Enterprise Management Console click the **Managed Objects** node in the left pane. The Managed Objects page will be displayed:

Figure 2: The Managed Objects Page



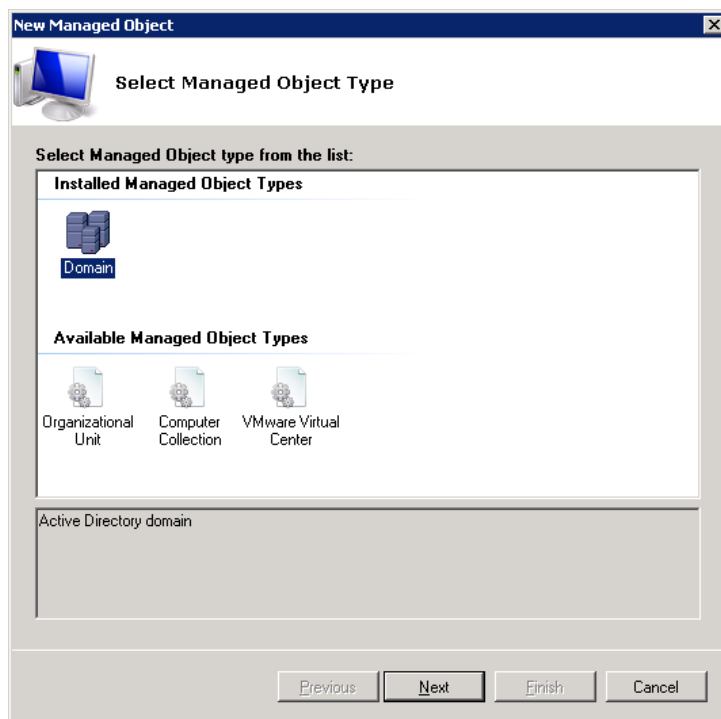
2. In the right pane, click **Create New Managed Object**. Alternatively, right-click the **Managed Objects** node and select **New Managed Object** from the pop-up menu to start the **New Managed Object** wizard.

**Note:** For your convenience, you can group Managed Objects into folders. To create a folder, right-click the **Managed Objects** node, select **New Folder**, and specify the folder name. Then create a new Managed Object inside this folder. You cannot move existing Managed Objects into folders once they have been created.

3. On the **Select Managed Object Type** step, select **Domain** as the Managed Object type and click **Next**.

**Note:** If you have installed other NetWrix products before, the list of Managed Object types may contain several options.

Figure 3: New Managed Object: Select Managed Object Type



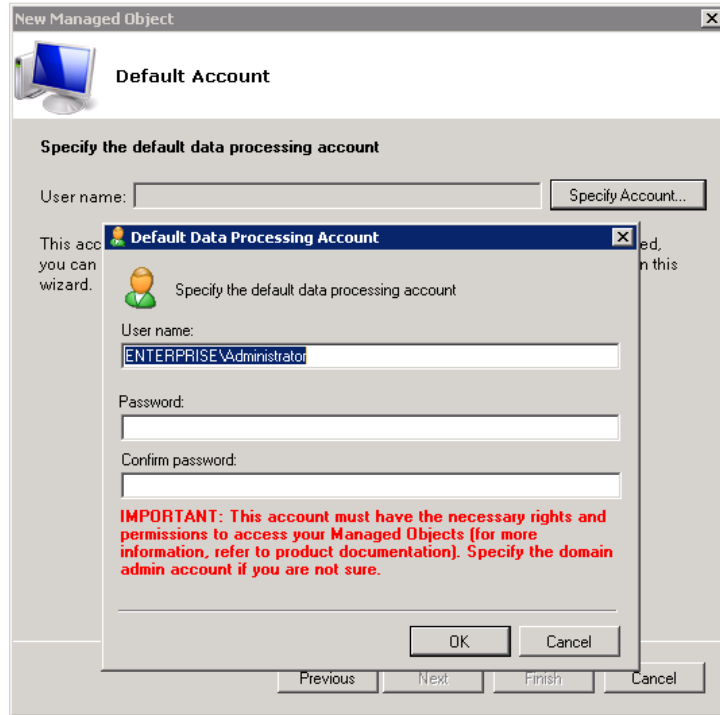
4. On the **Default Account** step, click the **Specify Account** button.

**Note:** If you have installed other NetWrix change reporting products before and specified the default Data Processing Account and the email settings on their configuration, the **Default Account** and **Configure Email Settings** steps of the wizard will be omitted.

5. In the dialog that opens, specify the default Data Processing Account (in the domain\_name\account\_name format) that will be used by NetWrix Exchange Change Reporter for data collection. This account must have the following rights:
  - Local administrator on the computer where NetWrix Exchange Change Reporter is installed.
  - Domain administrator in the monitored domain. Alternatively, it must have the “Manage auditing and security log” right enabled.
  - If this account will be used to access the SQL database with audit data, it must also belong to the target database owner (dbo) role.
  - If your monitored servers run Exchange 2010, the Data Processing Account must also belong to the Organization Management or the Records Management group. Alternatively, the account must be assigned the Audit Logs role.

For detailed instructions on how to assign the required permissions to an account, refer to Section 6.2.1. Configuring Rights and Permissions of [NetWrix Active Directory Change Reporter Installation and Configuration Guide](#).

Figure 4: New Managed Object: Default Account

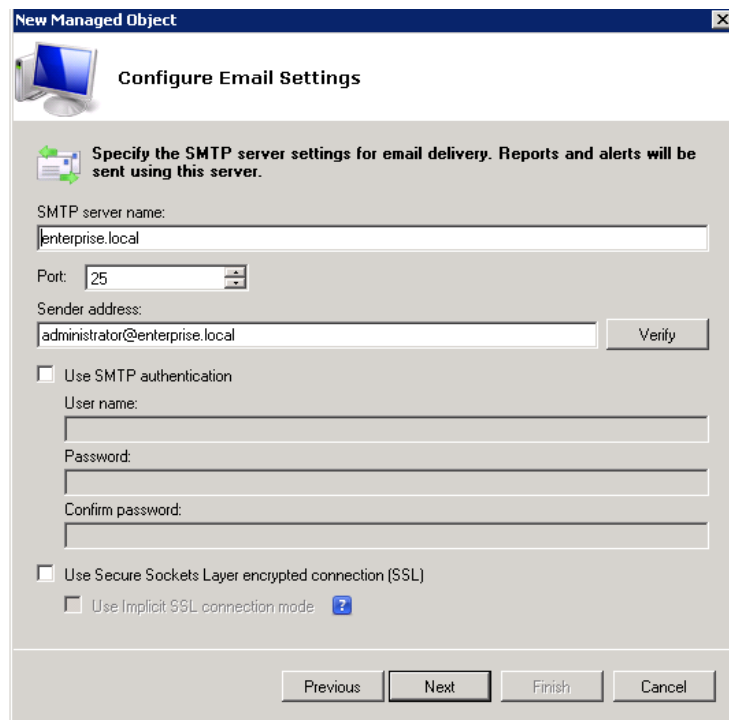


Click **OK** to continue and then **Next**.

**Note:** If later you need to modify the default Data Processing Account, you can do this either for an individual Managed Object (for instructions, refer to [Procedure 3 To modify the Data Processing Account](#)), or for all Managed Objects in a batch (for instructions, refer to [Procedure 21 To modify Data Processing Account settings](#)).

6. On the **Configure Email Settings** step, specify the email settings that will be used for the Change Summary and Reports delivery:

Figure 5: New Managed Object: Configure Email Settings



The following parameters must be specified:

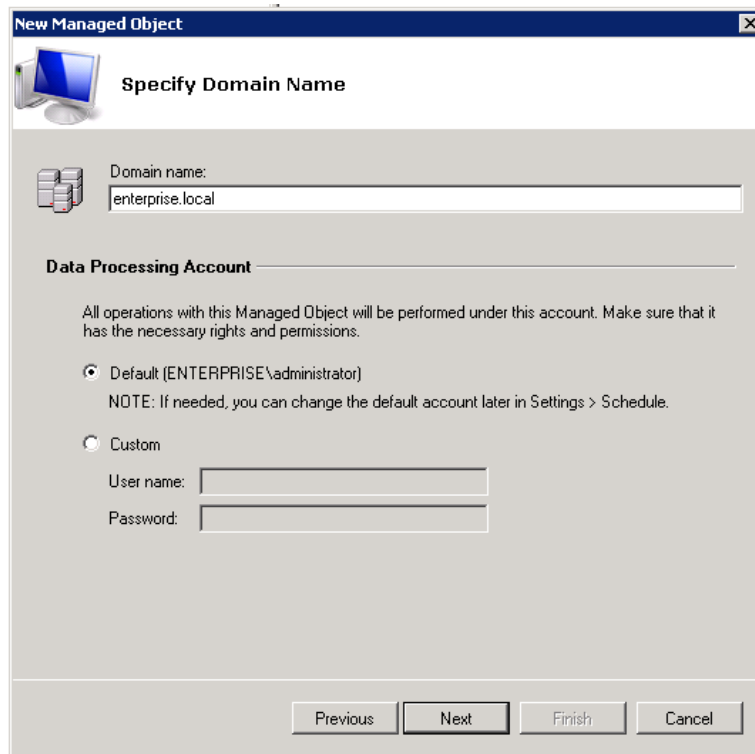
Table 2: Email Settings Parameters

Parameter	Description
SMTP server name	Enter your SMTP server name.
Port	Enter your SMTP server port number.
Sender address	Enter the address that will appear in the "From" field in reports and Change Summaries. To check the email address, click <b>Verify</b> . The system will send a test message to the specified address and will inform you if any problems are detected.
Use SMTP authentication	Select this check box if your mail server requires the SMTP authentication.
User name	Enter a user name for the SMTP authentication.
Password	Enter a password for the SMTP authentication.
Confirm password	Confirm the password.
Use Secure Sockets Layer encrypted connection (SSL)	Select this check box if your SMTP server requires SSL to be enabled.
Use Implicit SSL connection mode	Select this check box if the implicit SSL mode is used, which means that SSL connection is established before any meaningful data is sent.

**Note:** If later you need to modify the email settings, in NetWrix Enterprise Management Console, navigate to **Settings** → **Email Notifications**. In the right pane, click the **Configure** button and edit the required parameters. For instructions, refer to [Procedure 19 To configure the email notifications settings](#).

- On the **Specify Domain Name** step, specify your domain name in the FQDN format:

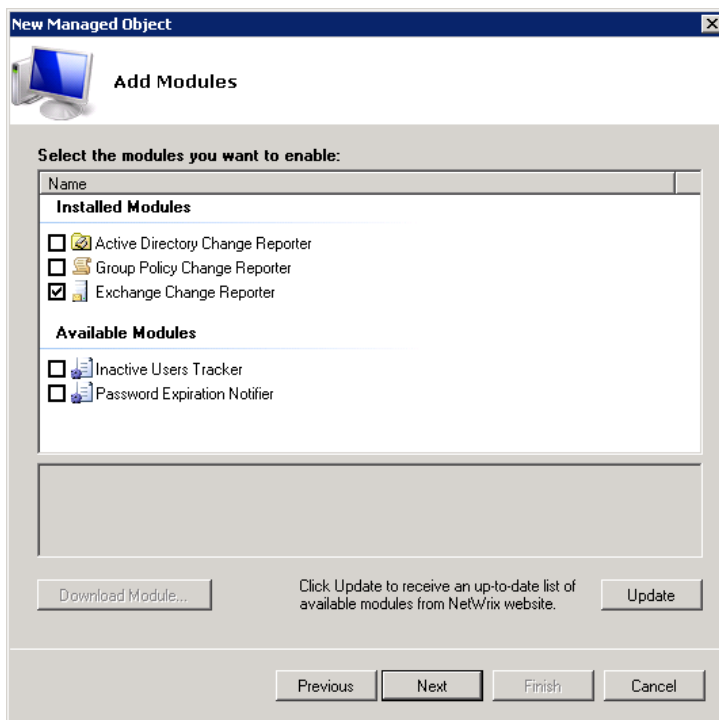
Figure 6: New Managed Object: Specify Domain Name



If you want to use a specific account to collect data from this domain (other than the one you have specified as the default Data Processing Account earlier in this procedure), select the **Custom** option and enter the credentials. This account must be granted the same permissions and access rights as the default Data Processing Account. Click **Next** to continue.

8. On the **Add Modules** step, make sure that NetWrix Exchange Change Reporter is selected under **Installed Modules**:

Figure 7: New Managed Object: Add Modules



**Note:** If you have installed other NetWrix change reporting products before, the list of **Installed Modules** may contain several options.

On this step, under **Available Modules**, there is a list of other NetWrix products that can have domain as a Managed Object type. To get more information on these products and download them, select the corresponding check box, or click a module and then click the **Download Module** button. You will be redirected to the product website page.

9. On the **Reports Settings** step, select the **Enable Reports** check box if you want to use the SSRS-based Reports:

Figure 8: New Managed Object: Reports Settings

**Note:** If you do not enable the **Reports** feature, audit data will not be written to an SQL database. You can enable and configure the feature later when required (for details, refer to Section [6.2 Configuring Reports](#)).

Select one of the following options:

- **Automatically install and configure a new instance of SQL Server Express Edition** to automatically install and configure SQL Server 2005 Express with Advanced Services. Once you have selected this option and clicked **Next**, the Reports Configuration wizard will start. Follow the instructions of the wizard to install and configure SQL Server 2005 Express.
- **Use an existing SQL Server with SQL Reporting Services** to use an already installed SQL Server instance, or to install and configure it manually before proceeding with NetWrix Exchange Change Reporter configuration. For detailed instructions on how to install Microsoft SQL Server 2005/2008 R2/2012 Express with Advanced Services and configure the Reporting Services, refer to the following NetWrix Technical Article: [Installing Microsoft SQL Server and Configuring the Reporting Services](#).

**Note:** It is recommended to consider the maximum database size in different SQL Server versions, and make your choice based on the size of the environment you are going to monitor, the number of users and other factors. Note that the maximum database size in SQL Server Express editions may be insufficient.

If you have selected the second option, specify the following parameters:

Table 3: Reports Parameters

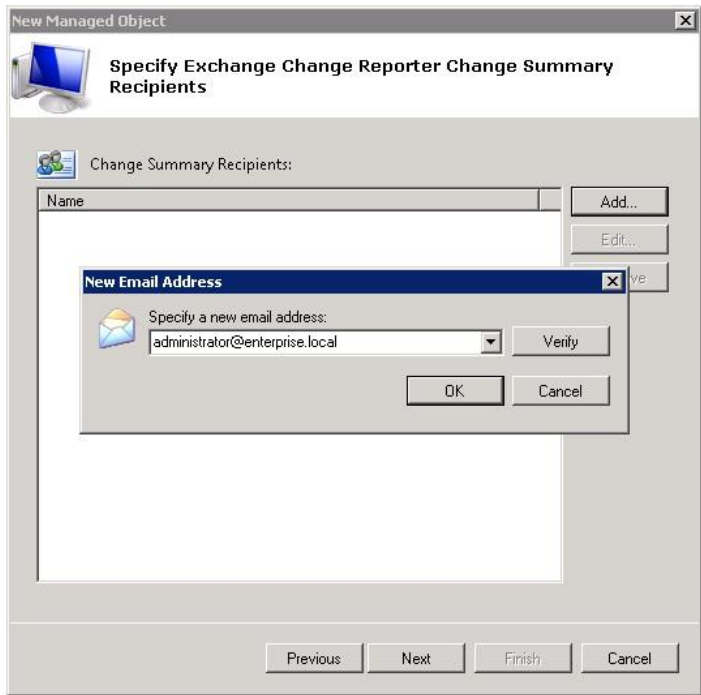
Parameter	Description
SQL Server	Specify the name of the SQL Server instance where a database of collected audit data will be created.
User name	Specify a user name for the SQL Server authentication. <b>NOTE:</b> This user must belong to the target database owners (dbo) role. For instructions on how to assign this role to a user, refer to Section 6.2.1. Configuring Rights and Permissions of <a href="#">NetWrix Active Directory Change Reporter Installation and Configuration Guide</a> .
Password	Enter a password for the SQL Server authentication.
Windows Authentication	Select this option if you want to use the Data Processing Account specified earlier in this procedure to access the SQL database.
Report Server URL	Specify the Report Server URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.
Report Manager URL	Specify the Report Manager URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.

**Note:** If you have already created other Managed Objects, and configured the Reports settings for them, on this step you will only be prompted to enable or disable the Reports feature for this Managed Object. If you want to use custom Reports settings for this Managed Object (for example, write data to a different SQL database), you can change the Reports settings later (for instructions, refer to [6.2.1 Configuring the Reports Settings](#)).

Click **Next** to continue and wait until NetWrix Enterprise Management Console has established a connection with the Report Server.

10. On the **Specify Exchange Change Reporter Change Summary Recipients** step, click the **Add** button to specify the Change Summary recipient(s):

Figure 9: New Managed Object: Specify Change Summary Recipients



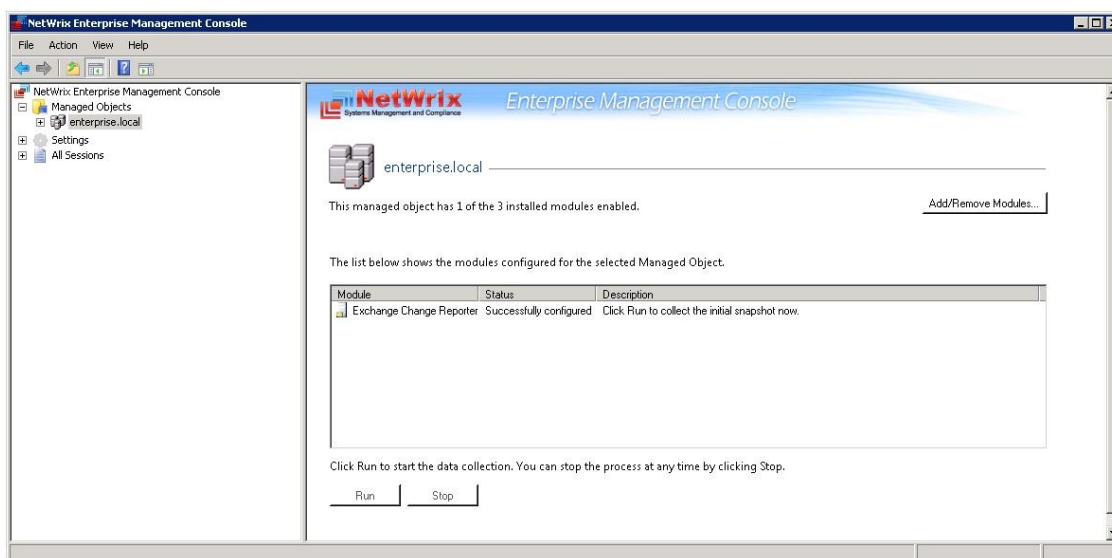


It is recommended to click the **Verify** button. The system will send a test message to the specified email address and will inform you if any problems are detected. Click **OK** to save the changes and then click **Next** to continue. If your audit settings have not been configured properly, you will receive a warning message. For detailed instructions on how to configure audit in your monitored Active Directory domain, refer to Chapter 6. Configuring Target Environment of [NetWrix Active Directory Change Reporter Installation and Configuration Guide](#).

11. On the last step, review your Managed Object settings and click **Finish**. A confirmation message will be displayed.

The newly created Managed Object will appear under the Managed Objects node, and its details will be displayed in the right pane:

Figure 10: The Managed Object Page



## 4.2. Modifying Managed Object Settings

To modify the settings for an existing Managed Object, perform one of the following procedures:

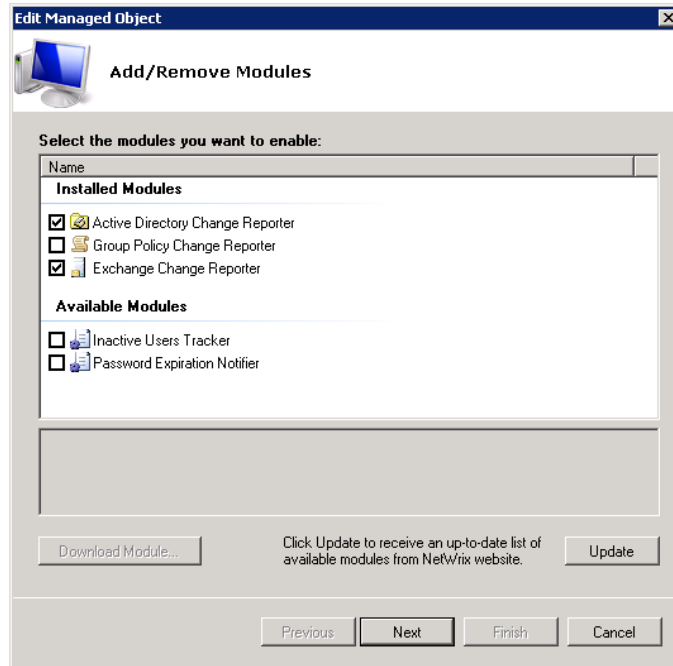
- [To modify general settings](#): add or remove NetWrix modules for the selected Managed Object.
- [To modify the Data Processing Account](#): override the Default Data Processing Account for this Managed Object and specify a different account for data collection.
- [To modify Exchange Change Reporter settings](#)

### Procedure 2. To modify general settings

1. In NetWrix Enterprise Management Console, expand the **Managed Objects** node and select your Managed Object. The Managed Object page will be displayed showing a list of NetWrix modules added for this Managed Object.
2. Click the **Add/Remove Modules** button. The Edit Managed Object wizard will start with the **Add/Remove Modules** screen.

3. In the **Installed Modules** list, select or clear the required module check box to add the module or remove it respectively. Click **Next**:

Figure 11: *Edit Managed Object: Add/Remove Modules*



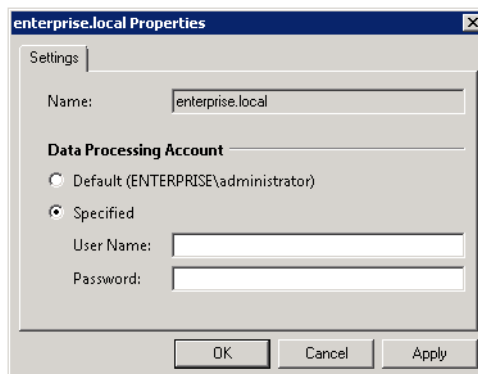
The **Available Modules** list contains all NetWrix products that can have domain as a Managed Object type. To get more information on these products and download them, select the corresponding check box, or click a module and then click the **Download Module** button. You will be redirected to the product website page.

4. Follow the wizard steps to configure the selected module for your Managed Object. For the detailed instructions on the wizard steps, refer to the procedure explaining how to create and configure a Managed Object in the relevant NetWrix product Administrator's guide.

### Procedure 3. To modify the Data Processing Account

1. In NetWrix Enterprise Management Console, expand the **Managed Objects** node and select your Managed Object. Right-click it and select **Properties** from the pop-up menu.
2. In the dialog that opens, select the **Specified** option under **Data Processing Account** and specify the credentials:

Figure 12: *Managed Object Properties*

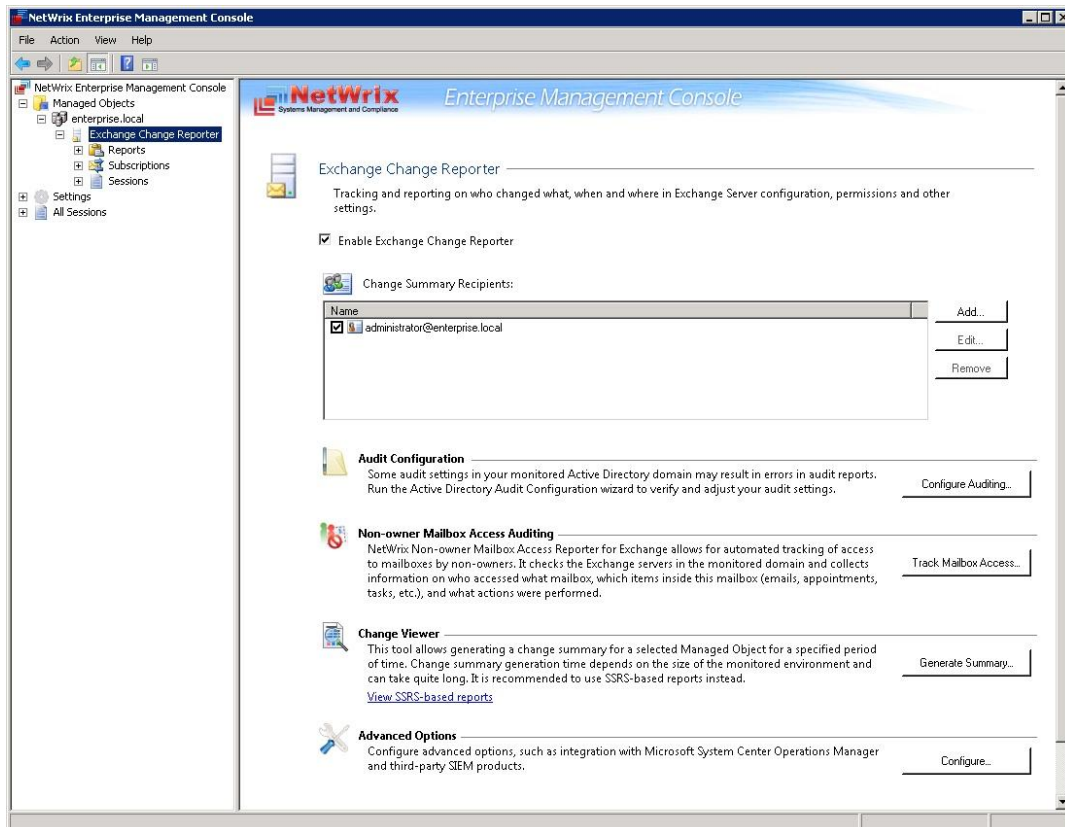


- Click **OK** to save the changes. This account will be used for data collection from this Managed Object.

#### Procedure 4. To modify Exchange Change Reporter settings

- In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** and select Exchange Change Reporter. The following page will be displayed:

Figure 13: The Exchange Change Reporter Page



- To modify NetWrix Exchange Change Reporter settings, do the following:
  - To enable or disable the module, select or clear respectively the **Enable Exchange Change Reporter** check box.
  - To add a new recipient to the **Change Summary Recipients** list, click the **Add** button. In the dialog that opens, specify an email address and click **OK**. It is recommended to click the **Verify** button to check the email address. The system will send a test message to the specified address and will inform you if any problems are detected.
  - To modify an email address in the **Change Summary Recipients** list, select it and click the **Edit** button. Edit the address and click **OK**.
  - To remove an email address from the **Change Summary Recipients** list, select it and click the **Remove** button. The selected address will be deleted.

The Exchange Change Reporter page also provides the following additional configuration options:

- To adjust your audit settings configuration to NetWrix Exchange Change Reporter requirements automatically, you can use the Active Directory Audit Configuration wizard by clicking the **Configure Auditing** button. For detailed instructions on the

wizard steps, refer to [NetWrix Active Directory Change Reporter Installation and Configuration Guide](#).

- To enable non-owner mailbox access auditing, click the **Track Mailbox Access** button. For detailed description of this option, refer to Section [8.1 Auditing of Non-owner Mailbox Access](#).
- To generate a Change Summary for a specific date range, click the **Generate Summary** button. For detailed description of the Change Viewer tool, refer to [Procedure 7 To generate Change Summary for a specific date range](#).
- To access the advanced options, click the **Configure** button. For detailed description of the advanced options, refer to Section [8.2 Enabling Integration with Third-Party SIEM Solutions](#).

## 5. DATA COLLECTION

### 5.1. Data Collection Workflow

A typical NetWrix Exchange Change Reporter data collection workflow is as follows:

1. When a new Managed Object is created, NetWrix Exchange Change Reporter starts collecting data from the monitored domain(s). The first data collection creates an initial snapshot of your monitored domain current state. NetWrix Exchange Change Reporter uses this information as a benchmark to collect data on changes made to the managed domain.
2. After the initial analysis has been completed, an email notification is sent to the specified recipient(s):

*Figure 14: Initial Analysis Notification*



t 3:00 AM by default), NetWrix Exchange Change Reporter writes data on detected changes to a local storage of audit data, the Audit Archive. If the Reports feature is enabled and configured, data is imported from the Audit Archive to an SQL database.

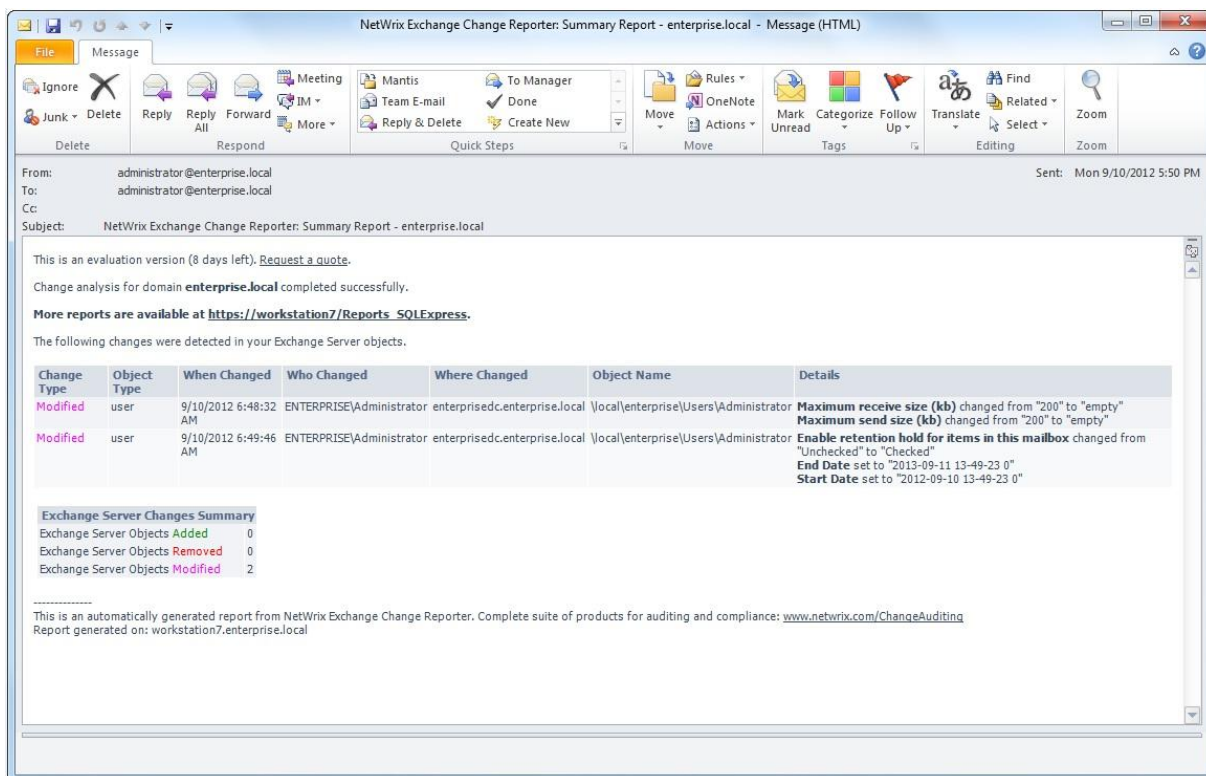
4. At the same time, the product generates and emails a Change Summary to the specified recipients.

**Note:** For NetWrix Exchange Change Reporter to be able to collect audit data successfully, you need to configure your monitored Active Directory domain for audit prior to using the product. For detailed instructions on how to do this, refer to Chapter 6. Configuring Target Environment of [NetWrix Active Directory Change Reporter Installation and Configuration Guide](#).

## 5.2. Change Summary

By default, a Change Summary is emailed to the specified recipients daily at 3:00 AM and contains information on changes that occurred in the last 24 hours:

Figure 15: Change Summary Example



It provides the following information:

Table 4: Change Summary Fields

Parameter	Description
Change Type	Shows the type of action that was performed on the Exchange object. The values are: <ul style="list-style-type: none"> <li>• Added</li> <li>• Removed</li> <li>• Modified</li> </ul>
Object Type	Shows the type of the Exchange object that was changed, e.g. "user".
When Changed	Shows the exact time when the change occurred.
Who Changed	Shows the name of the account under which the change was made.
Where Changed	Shows the name of the domain controller where the change was made.
Object Name	Shows the path to the Exchange object that was changed.
Details	Shows the before and after values for the modified object.

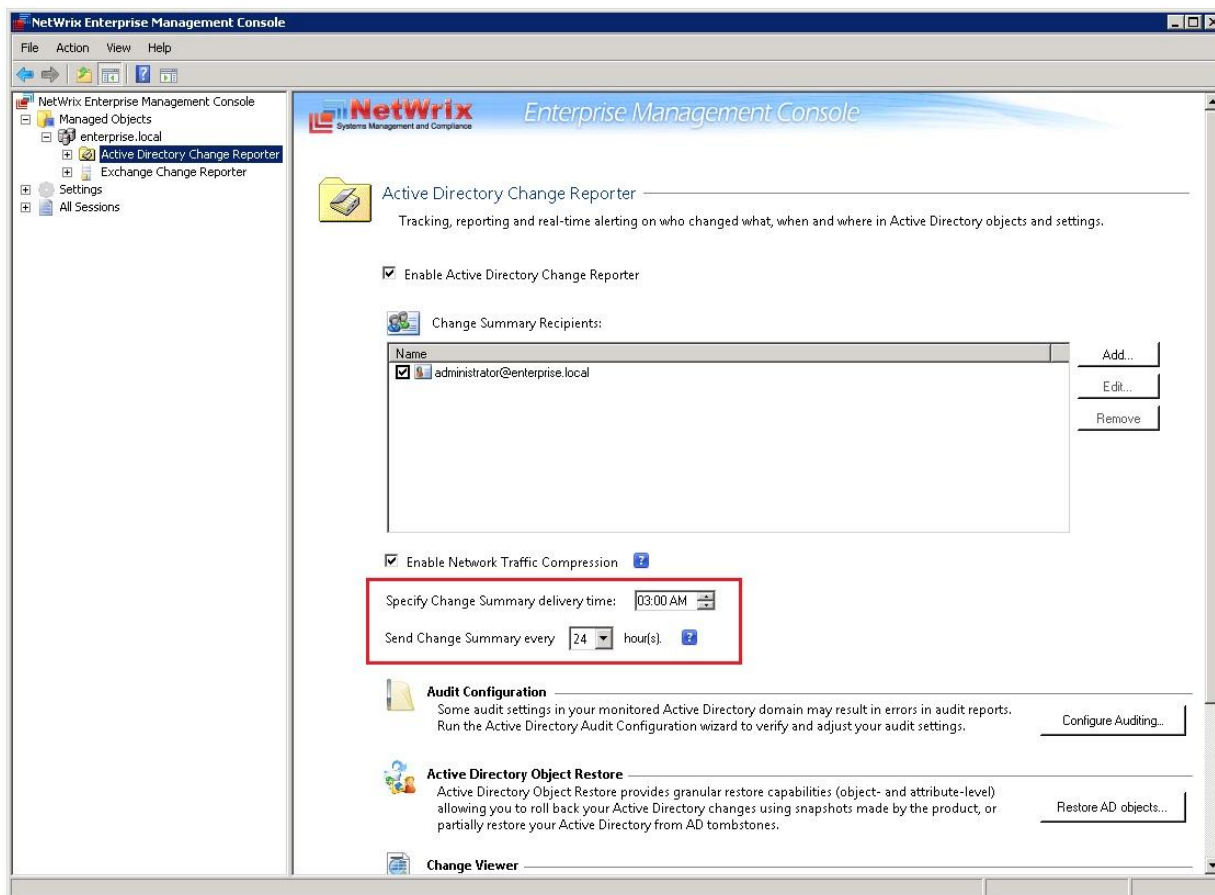
## 5.2.1. Modifying Change Summary Delivery Schedule

The Change Summary delivery schedule can only be modified if the Active Directory Change Reporter module is enabled for your Managed Object.

### Procedure 5. To modify Change Summary delivery schedule

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Active Directory Change Reporter**:

Figure 16: The Active Directory Change Reporter Page



2. In the right pane, set the time for the Change Summary delivery in the **Specify Change Summary delivery time** entry field.
3. If you wish to receive the Change Summary more frequently than once a day, modify the default value in the **Send Change Summary every x hour(s)** entry field. The Change Summary will be delivered at a specified interval starting from the time indicated above.

**Note:** The changes will be applied to all modules of the NetWrix Active Directory Change Reporter pack enabled for the selected Managed Object.



## 5.2.2. Generating Change Summary on Demand

If you wish to generate an on-demand Change Summary without waiting for a scheduled delivery, do the following:

### Procedure 6. To generate Change Summary on Demand

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** (see [Figure 10: The Managed Object Page](#)).
2. In the right pane, click the **Run** button.
3. A Change Summary will be generated and sent to the specified recipient(s).

**Note:** Depending on the size of the monitored environment and the number of changes, Change Summary generation may take quite long.

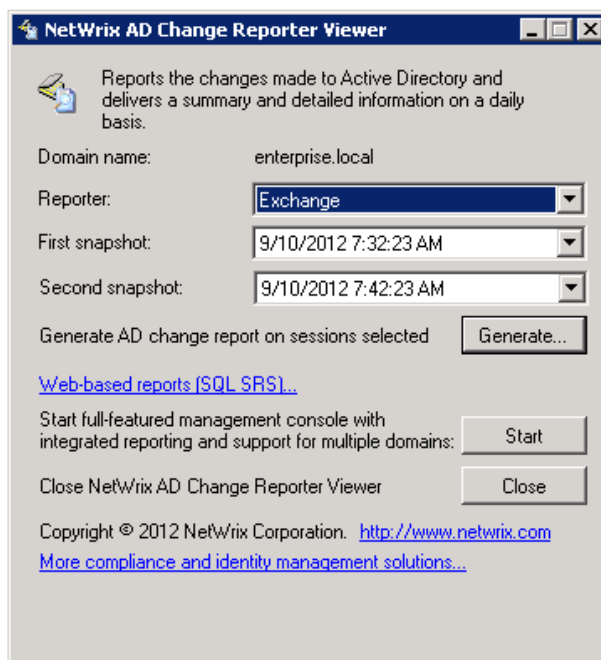
## 5.2.3. Viewing Change Summary for a Specified Date Range

If you want to generate a Change Summary for a specific date range, do the following:

### Procedure 7. To generate Change Summary for a specific date range

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter**.
2. In the right pane, click the **Generate Summary** button next to **Change Viewer**. The Change Viewer tool will open:

Figure 17: NetWrix AD Change Reporter Viewer

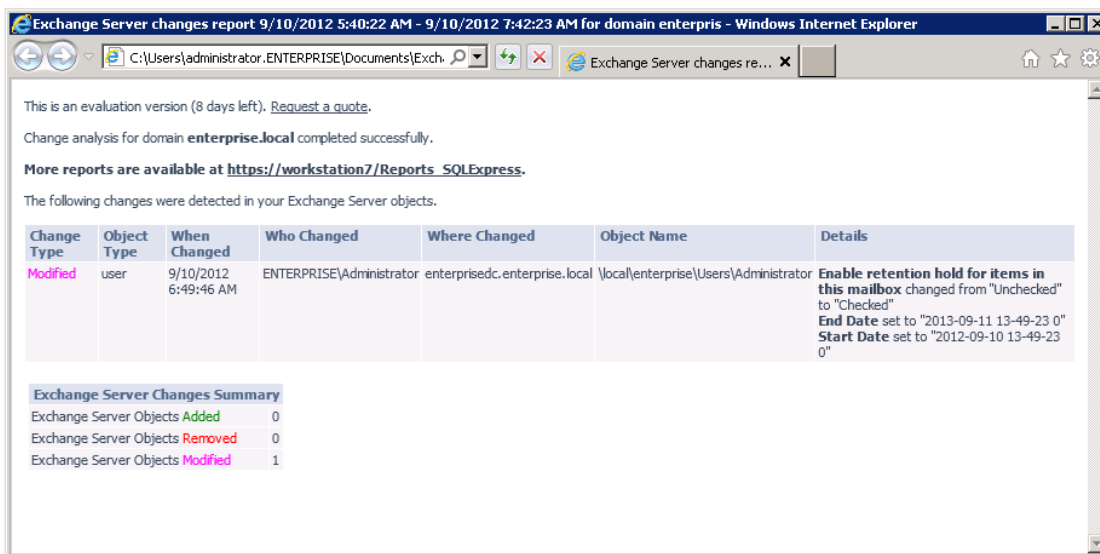


3. Make sure **Exchange** is selected in the **Reporter** drop-down list.
4. Specify the date range by selecting NetWrix Exchange Change Reporter snapshots in the **First snapshot** and **Second snapshot** drop-down lists.
5. Click the **Generate** button.
6. In the **Save as** dialog, specify the location where the Change Summary will be saved. By default, the html file is saved in the user's **Documents** folder.



7. Once generated, the Change Summary will be displayed in your default web browser:

Figure 18: Change Summary for a Specific Date Range



**Note:** Change Summary generation time depends on the selected date range and the size of the monitored environment, and can take quite long. It is recommended to use the [Reports](#) functionality to review changes made to the monitored domain.

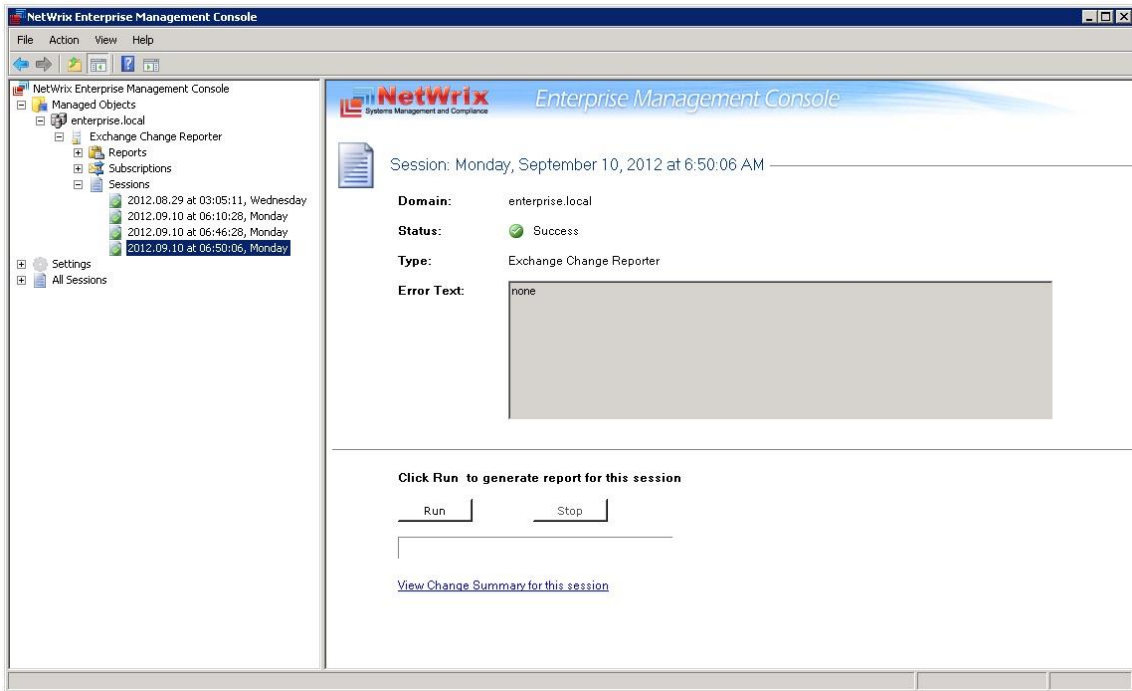
### 5.3. Sessions

A session is a scheduled or on-demand data collection which triggers Change Summary generation and delivery. You can view sessions in two ways:

- Under a particular Managed Object and NetWrix module enabled for it: in NetWrix Enterprise Management Console navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Sessions**.
- In bulk for all Managed Objects and installed modules: in NetWrix Enterprise Management Console select the **All Sessions** node in the left pane.

When a particular Session is selected in the tree, its details are displayed in the right pane:

Figure 19: The Session Details Page



The following information is provided:

Table 5: Session Details

Parameter	Description
Domain	Shows the name of the monitored domain.
Status	Shows the Session status. The values are: <ul style="list-style-type: none"> <li>• Success</li> <li>• Error</li> </ul>
Type	Shows the NetWrix module that this Session is for.
Error Text	Displays an error text if the Session status is Error.

From this page, you can also view a Change Summary for a particular Session in a web browser. For detailed instructions on how to perform these tasks, refer to Section [5.3.1 Viewing Change Summary for Sessions](#).

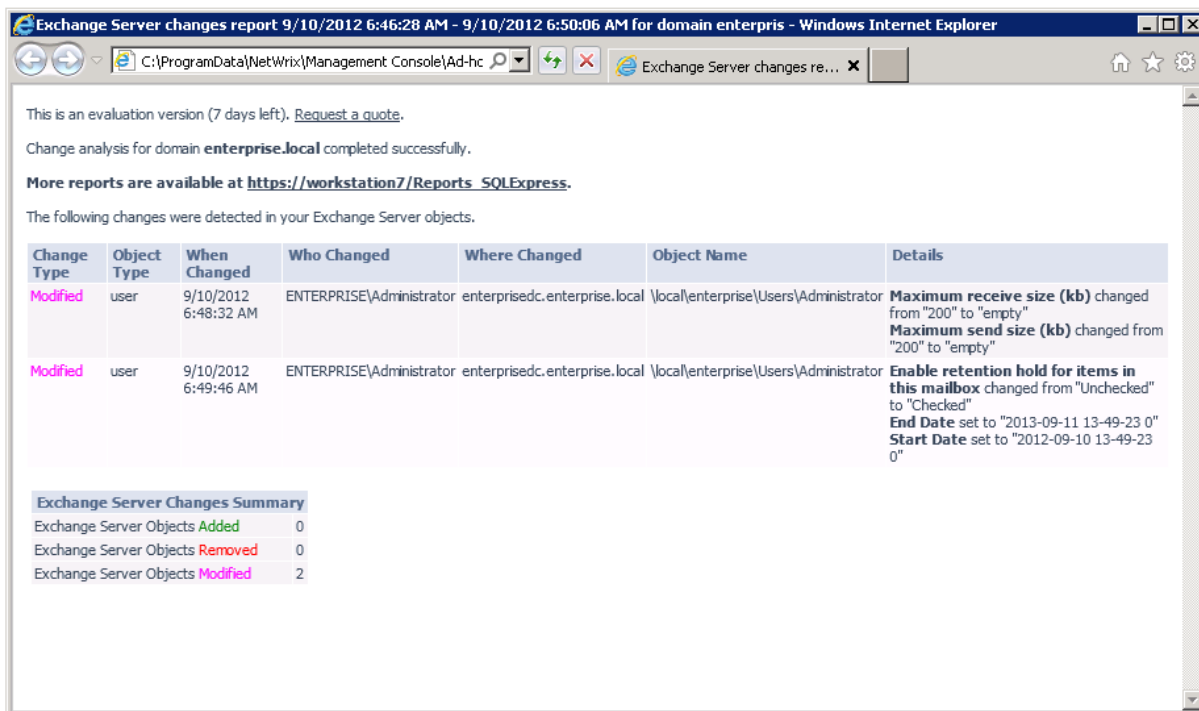
You can configure the number of Sessions available for review in NetWrix Enterprise Management Console by specifying the date range for Sessions to be stored. For detailed instructions on how to do this, refer to Section [7.3 Configuring Audit Archive Settings](#).

### 5.3.1. Viewing Change Summary for Sessions

**Procedure 8.** To view Change Summary for a Session

1. Select a Session that you want to view a Change Summary for.
2. In the right pane, click the **Run** button. If you have already generated the Change Summary for this session before, click the **View Change Summary for this session** link.
3. The Change Summary for this session will be displayed in your default web browser:

Figure 20: Web-based Change Summary



## 6. REPORTS

### 6.1. Reports Overview

NetWrix Exchange Change Reporter allows generating reports based on Microsoft SQL Server Reporting Services (SSRS). The product provides a wide variety of predefined report templates that will help you stay compliant with various standards and regulations (HIPAA, PCI and SOX). You can use different output formats for your reports, such as PDF, XLS, and so on.

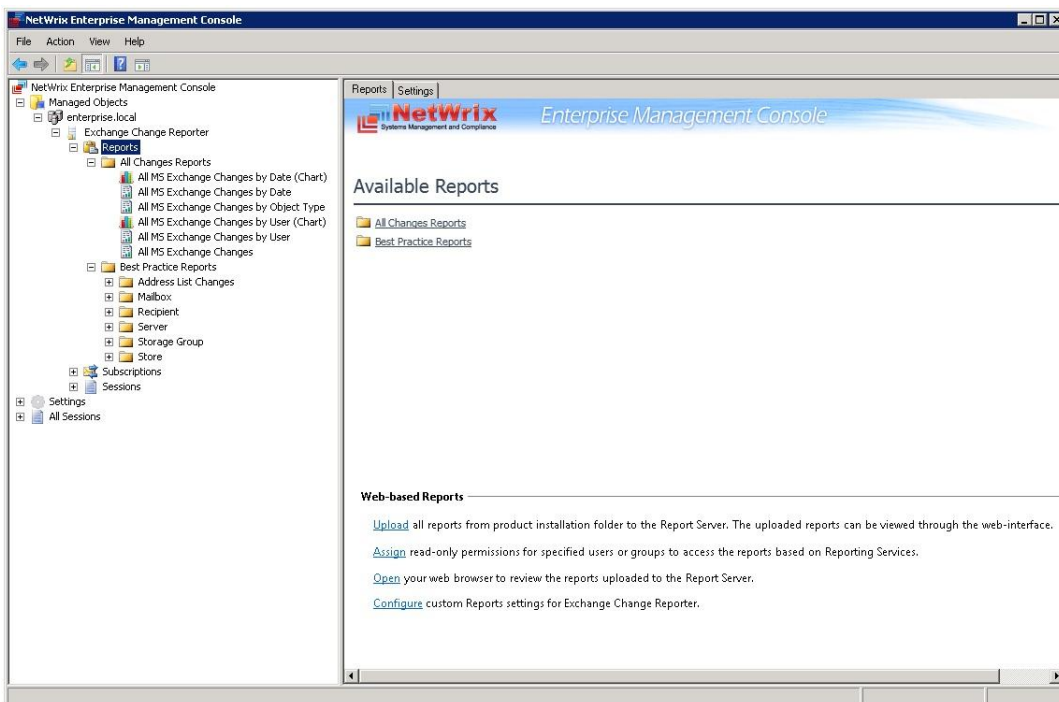
**Note:** If your situation requires the use of additional report types, you can [order custom report templates](#) from NetWrix.

In NetWrix Exchange Change Reporter, three types of reports are available:

- **All Changes Reports:** show a summary of all Exchange Server changes filtered by different parameters (date, user and so on) and in different formats (table or chart).
- **Best Practice Reports:** show the information most commonly required for audit purposes.

For a full list of available reports, expand the corresponding node under **Managed Objects** → <Managed\_Object\_name> → Exchange Change Reporter → Reports:

Figure 21: The Reports Page



### 6.2. Configuring Reports

To configure the SSRS-based Reports, or modify the Reports settings for your Managed Object, perform the following operations:

- [Configure SQL Server Settings](#)
- [Upload report templates to the SRS Server](#)
- [Import audit data from the Audit Archive to an SQL database](#)
- [Assign permissions to view reports](#)

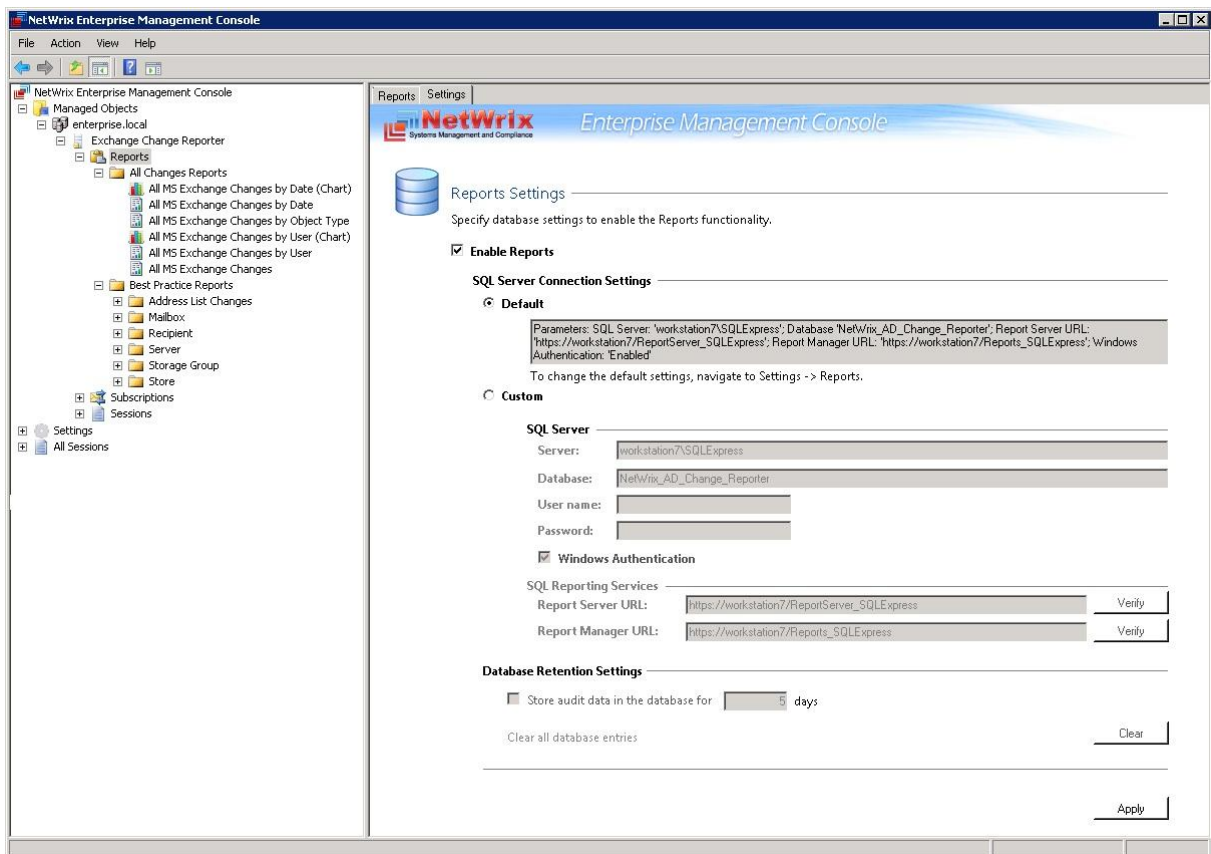
## 6.2.1. Configuring the Reports Settings

If you have not enabled and configured the Reports feature on Managed Object creation, or if you want to modify the Reports settings for an existing Managed Object, do the following:

### Procedure 9. To configure the Reports settings

1. In NetWrix Enterprise Management Console, navigate to **Managed Object** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Reports**. The Reports page will be displayed.
2. Click **Configure** under **Web-based Reports**, or switch to the **Settings** tab. The following page will be displayed:

Figure 22: Reports Settings



3. Specify the following parameters:

Table 6: Reports Settings

Parameter	Description
Enable Reports	Select this check box to enable the reports functionality for the selected Managed Object.
Default	Select this option to use the default SQL Server connection settings.
Custom SQL Server Connection Settings	Select this option to specify your custom settings.
Server	Specify the name of an existing SQL Server instance where a database of audit data will be created.
Database	Specify the SQL database name.
User name	Enter a user name for the SMTP authentication. This user must belong to the target database owner (dbo) role.

Parameter	Description
Password	Enter a password for the SMTP authentication.
Windows Authentication	Select this option if you want to use the Data Processing Account specified during Managed Object creation to access the SQL database. Uncheck this box if you want to use the SQL Server authentication.
Report Server URL	Specify the Report Server URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.
Report Manager URL	Specify the Report Manager URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.
Store audit data in the database for x days	This option is disabled in this product version.
Clear all database entries	This option is disabled in this product version.

4. Click **Apply** to save the changes.

**Note:** When you configure the Reports settings, a SQL database for audit data is created. If you skip the Reports configuration on a Managed Object creation, the database will not be created, and audit data will only be written to the local repository, the Audit Archive. If later you decide to enable the Reports feature for this Managed Object and want historical audit data to be available for reporting, you will have to import data from the Audit Archive to the SQL database using the DB Importer tool. For detailed instructions on how to do this, refer to Section [6.2.3 Importing Audit Data to SQL Database](#) of this guide.

### 6.2.2. Uploading Report Templates to the Report Server

If you have not enabled the Reports feature when creating a Managed Object, and decided to enable it later, you need to upload the report templates to the Report Server. To upload the report templates, do the following:

#### Procedure 10. To upload report templates to the Report Server

- On the Reports page (see [Figure 21: The Reports Page](#)), click **Upload** under **Web-based Reports**. The system will upload the report templates to the Report Server and will display the following confirmation message when the operation is completed:

Figure 23: Uploading Report Templates



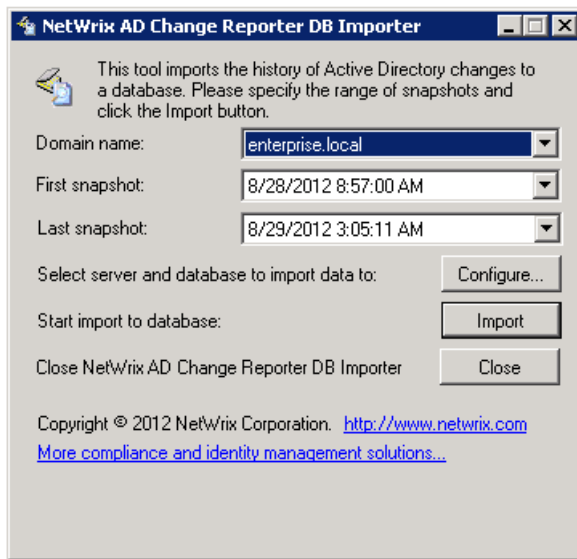
### 6.2.3. Importing Audit Data to SQL Database

If you have not enabled the Reports feature when creating a Managed Object, and decided to enable it later, you may want to make audit data stored in the Audit Archive available for Reports. This can be done by importing data from the Audit Archive to an SQL database with the DB Importer tool. This tool can also be used for data recovery in case the database is corrupted.

**Procedure 11. To import audit data**

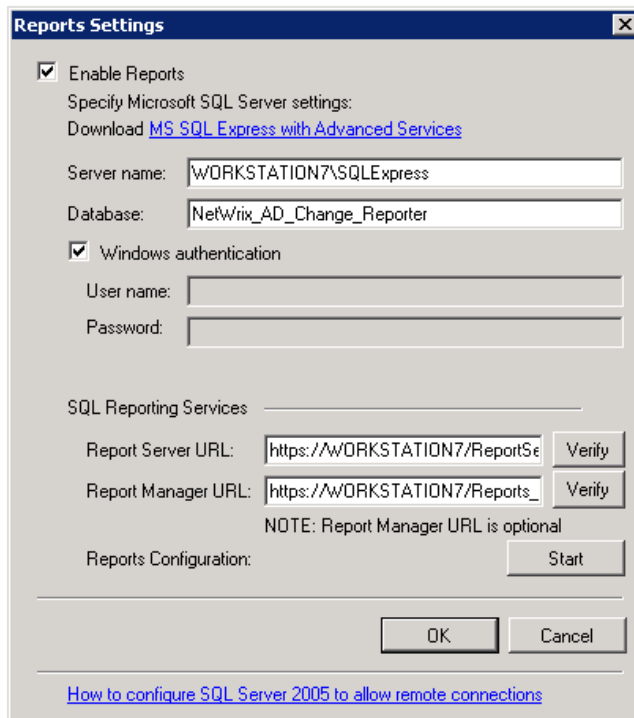
1. Navigate to **Start → All Programs → NetWrix → Exchange Change Reporter → Advanced Tools** and select **DB Importer**. The DB Importer dialog will open:

*Figure 24: NetWrix AD Change Reporter DB Importer*



2. Select your monitored domain in the **Domain name** menu and the time range for which you want to import data from the **First snapshot** and **Last snapshot** drop-down lists.
3. Click the **Configure** button to select the target database. The following dialog will be displayed with the default SQL Server and Report Server Settings:

*Figure 25: Reports Settings*



4. Verify the database settings and click **OK**.

- Click the **Import** button to start importing data from the Audit Archive to the selected database. A confirmation message will be displayed on successful operation completion.

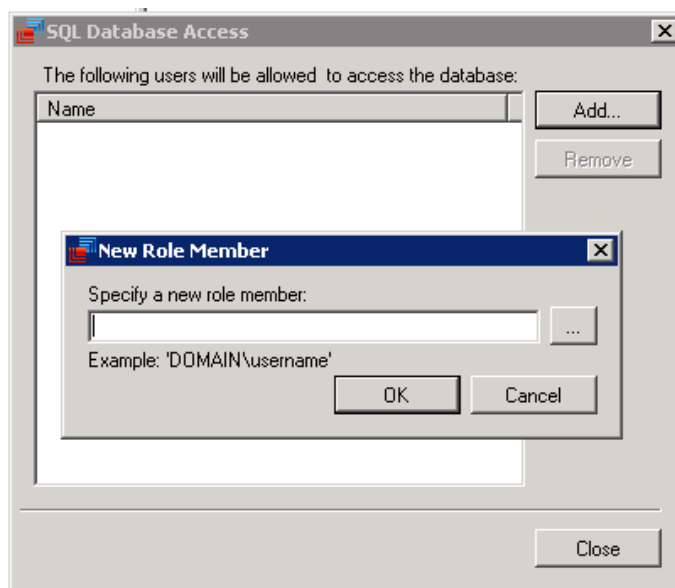
### 6.2.4. Assigning Permissions to View Reports

Your situation may require that different users in your organization have access to reports. By default, the reports can only be accessed by domain administrators. To grant other users access to the reports, do the following:

#### Procedure 12. To assign permissions to view reports

- On the Reports Page, click **Assign** under **Web-based Reports**. The following dialog will be displayed:

Figure 26: SQL Database Access



- Click the **Add** button and specify the name of the user or group that you want to assign permissions to. You can click the  button to search for users or groups inside your Active Directory domain. Then click **OK**. The selected user(s) will now be able to view reports.

## 6.3. Viewing Reports

NetWrix Exchange Change Reporter provides two options for viewing reports:

- [In NetWrix Enterprise Management Console](#)
- [In a web browser](#)

### 6.3.1. Viewing Reports in NetWrix Enterprise Management Console

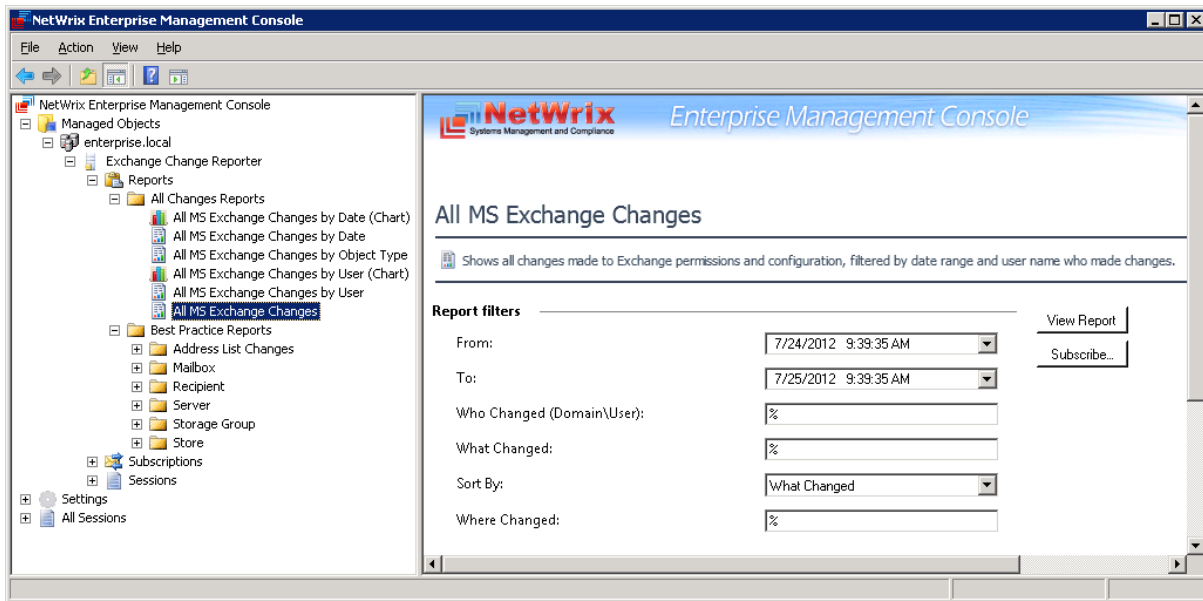
#### Procedure 13. To view a report in NetWrix Enterprise Management Console

- In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Reports**.



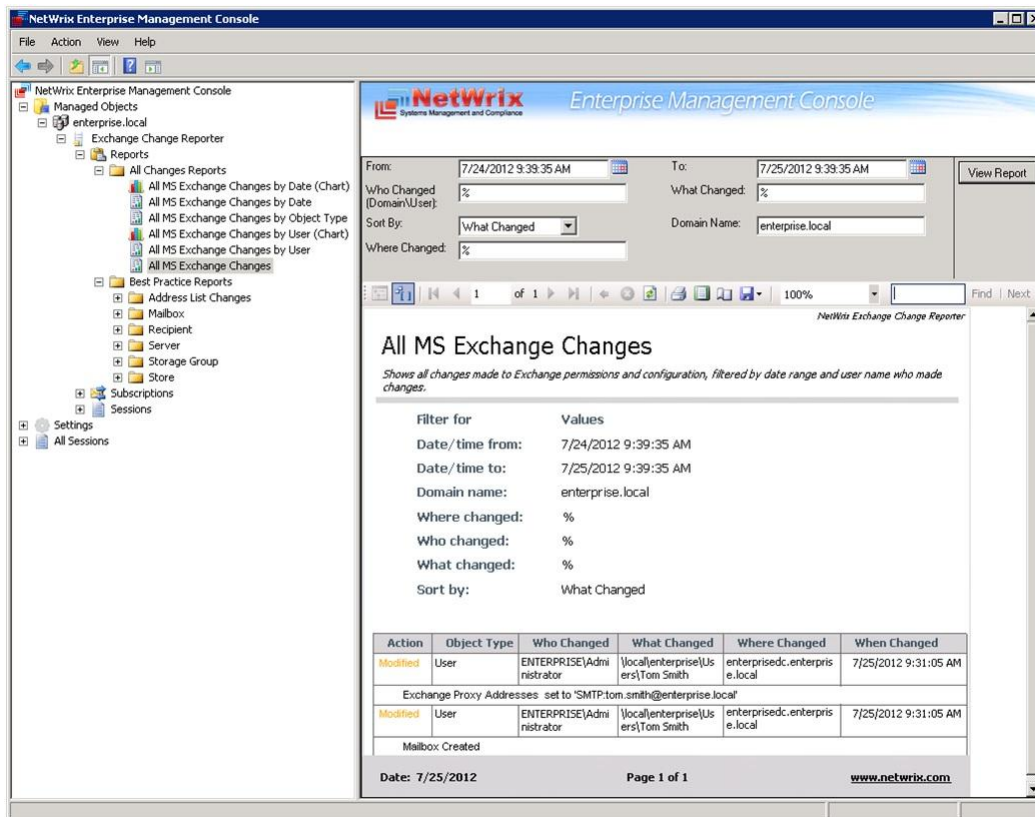
2. Select a report from one of the folders. The Report Filters page will be displayed on the right:

Figure 27: The Report Filters Page



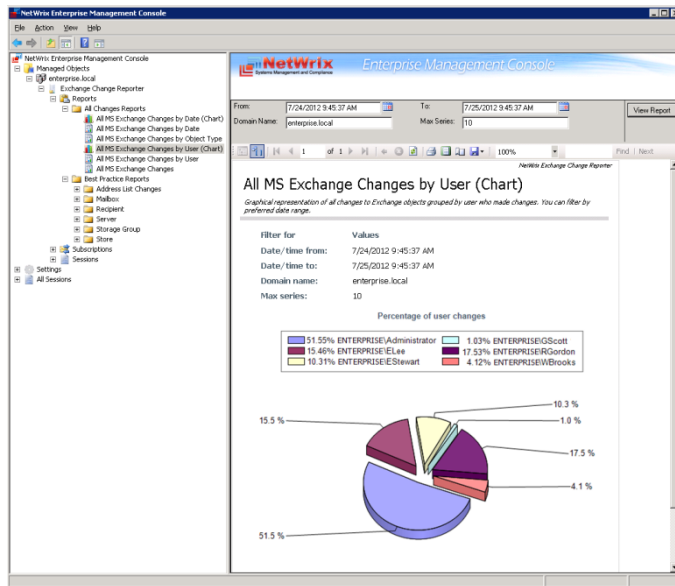
3. Specify the report filters (a wildcard (%) can be used to replace any number of characters) and click the **View Report** button (**View Chart** for chart reports). The report will be displayed in the right pane:

Figure 28: The All MS Exchange Changes Report (Console)



The chart reports provide a visual representation of the changes statistics in the monitored domain:

Figure 29: All MS Exchange Changes by User (Chart)



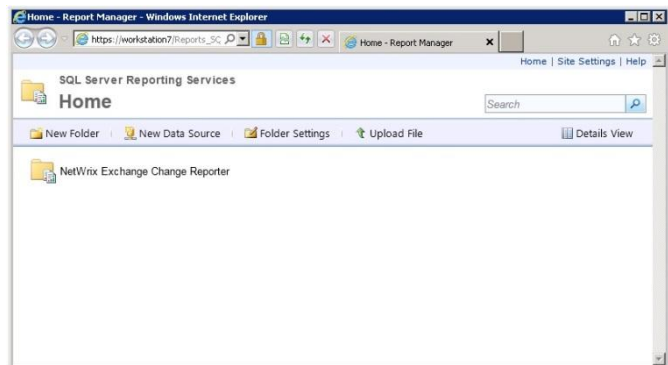
### 6.3.2. Viewing Reports in a Web Browser

For reports to be available for viewing in a web browser their templates should be uploaded to the Report Server. This can be done either automatically during the Managed Object creation, or manually. For instructions on how to upload the reports, refer to Section [6.2.2 Uploading Report Templates to the Report Server](#).

#### Procedure 14. To view a report in a web browser:

1. Open a web browser and type in the Report Server URL (you can find the URL in NetWrix Enterprise Management Console by navigating to **Settings** → **Reports**). Alternatively, in NetWrix Enterprise Management Console, navigate to the Reports page and click **Open** under **Web-based Reports**. The following page will be displayed:

Figure 30: SQL Server Reporting Services Home Page

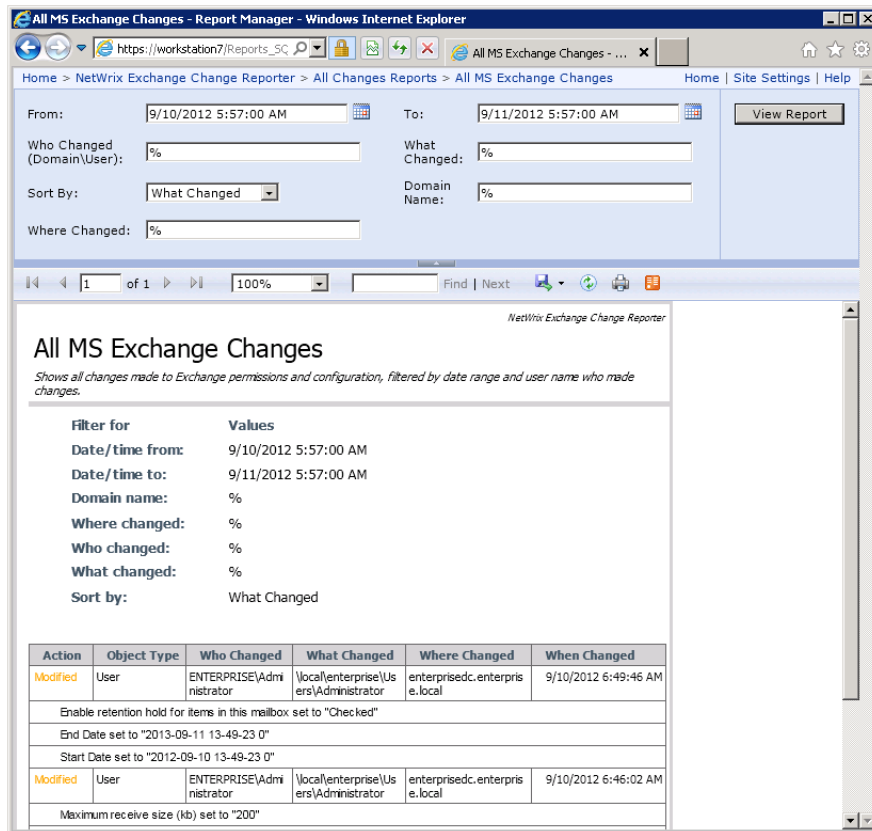


**Note:** If you have other NetWrix change reporting modules installed, and if the Reports feature is enabled and configured for them, the SQL Server Reporting Services page will contain reports folders for all of these modules.

2. Click the **NetWrix Exchange Change Reporter** folder and navigate to the report you want to generate. Click the report name. The report will be displayed showing the changes that occurred in the last 24 hours. On this page, you can specify filters to

the selected report and click the View Report button (View Chart for chart reports) to apply them:

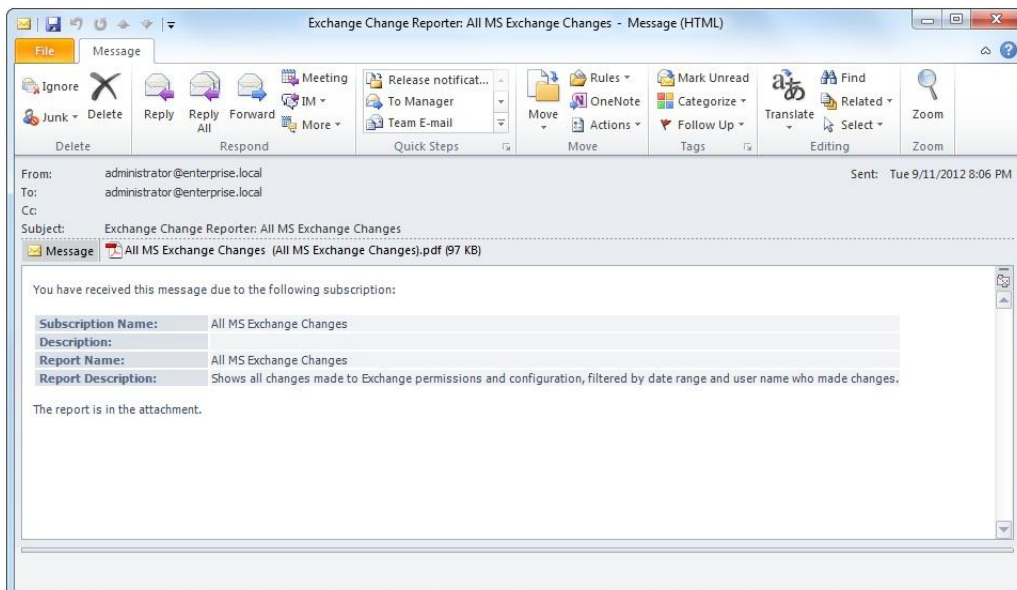
Figure 31: All MS Exchange Changes Report (Web Browser)



## 6.4. Configuring Report Subscriptions

In NetWrix Exchange Change Reporter, you can configure a Subscription to schedule automatic report generation and delivery. You can apply various filters to your reports, and select their output format. The report will be sent as an email attachment in the selected format:

Figure 32: Subscription Report Example



This section provides detailed instructions on how to:

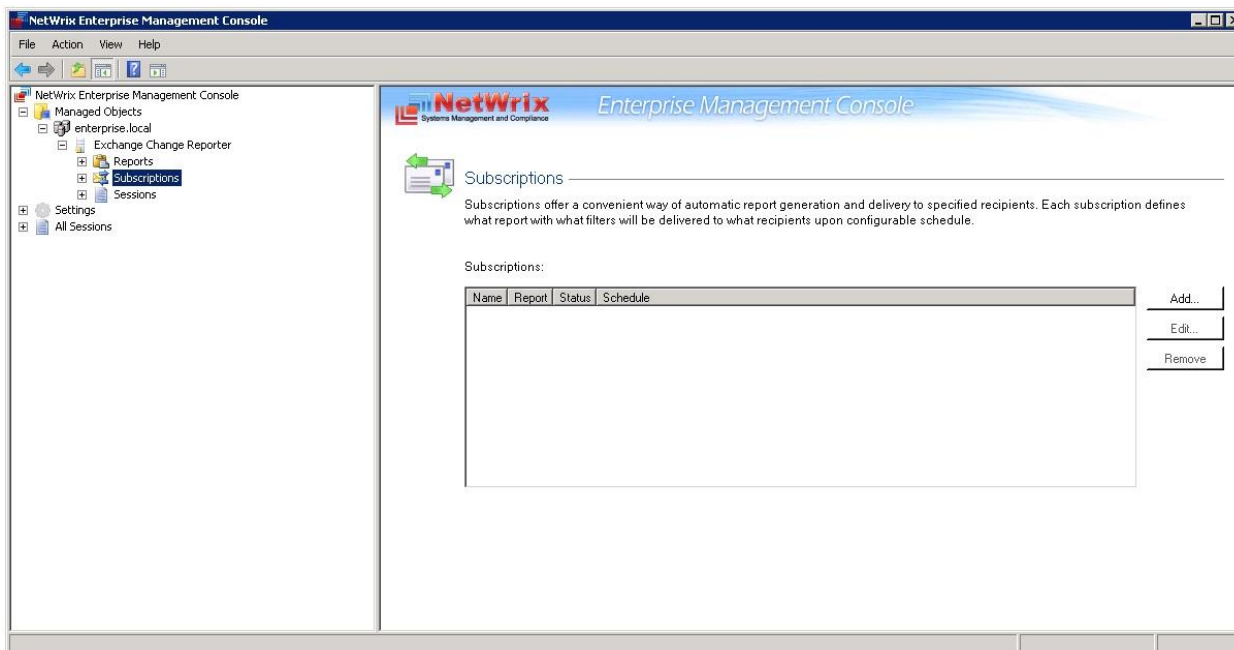
- [Create a Subscription](#)
- [Modify a Subscription](#)
- [Force on-demand report delivery](#)

## 6.4.1. Creating a Subscription

### Procedure 15. To create a Subscription

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Subscriptions**. The following page will be displayed:

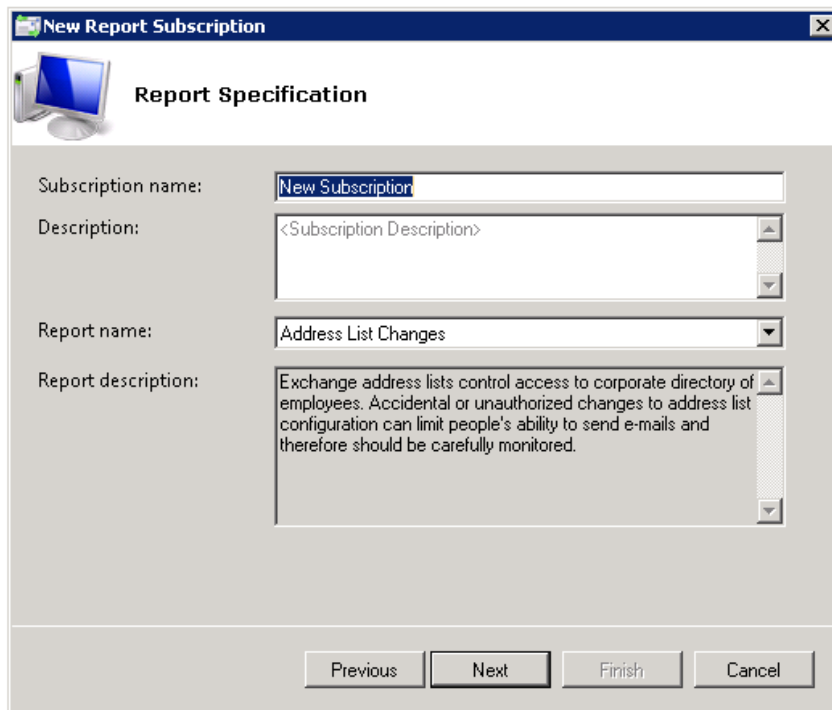
Figure 33: Subscriptions Page



2. Click the **Add** button to start the Report Subscription wizard. You can also start the Report Subscription wizard by selecting a report and clicking the **Subscribe** button on the report page.

- On the Welcome page, click **Next**. When connection with the Report Server is established, the following dialog will be displayed:

Figure 34: New Report Subscription: Report Specification



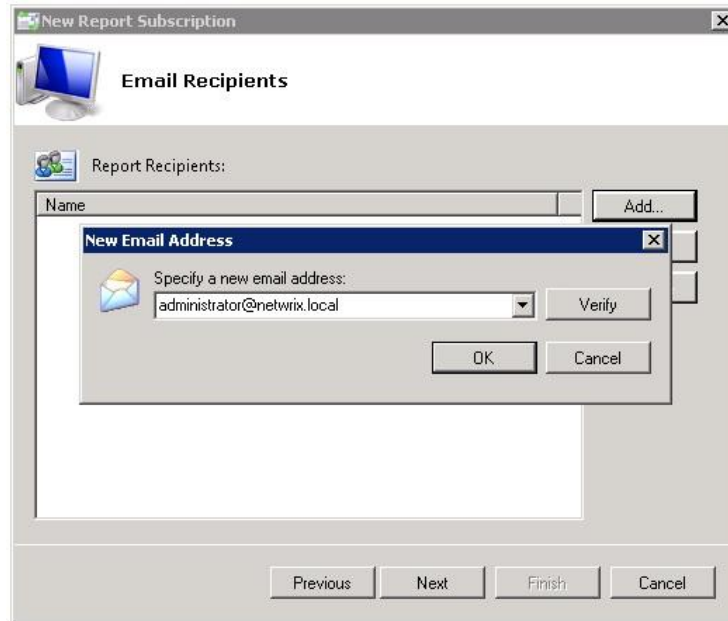
- Specify the following parameters and click **Next**:

Table 7: Subscription Settings

Parameter	Description
Subscription Name	Specify the subscription name (this name will be displayed in NetWrix Enterprise Management Console under the <b>Subscriptions</b> node).
Description	Enter the subscription description (optional).
Report name	Select the report that you want to subscribe to from the drop-down list. <b>NOTE:</b> If you start the Report Subscription wizard from a specific report, this field will be filled in automatically.
Report description	This field is populated automatically depending on the selected report.

- On the **Email Recipients** step, click the **Add** button and specify the email address(es) of the report recipients. It is recommended to click the **Verify** button. The system will send a test message to the specified email address(es) and will inform you if any problems are detected. Click **OK** to add the address and then **Next**.

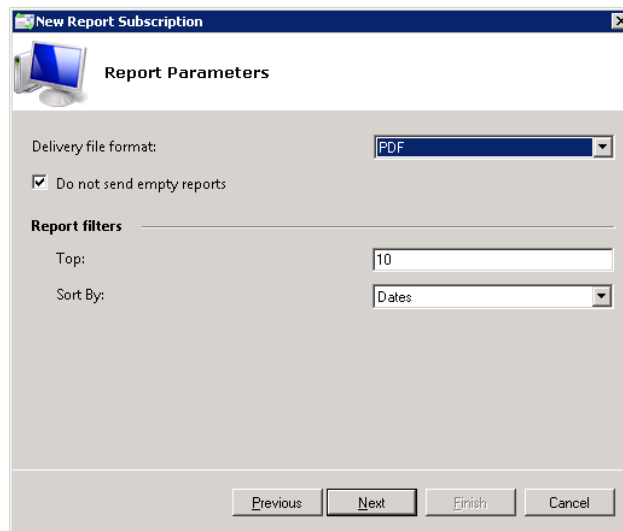
Figure 35: New Report Subscription: Email Recipients



- On the **Report Parameters** step, select the report delivery format and check the **Do not send empty reports** box, if you do not want reports to be generated when no changes occurred during the reporting period. Specify the report filters (which differ depending on the selected report) and click **Next**.

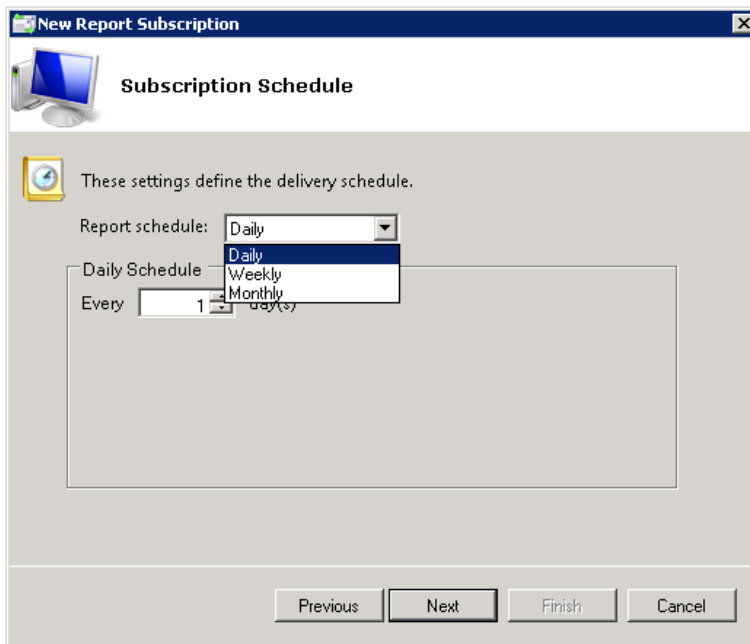
**Note:** The list of formats available may vary depending on the SQL Server version: MS Excel, Word, PDF and others.

Figure 36: New Report Subscription Wizard: Report Parameters



- On the **Subscription Schedule** step, specify the report delivery schedule. The following options are supported:
  - Daily:** reports will be delivered at a specified interval (in days) at 3:00 AM.
  - Weekly:** reports will be delivered on the specified day(s) of the week at 3:00 AM.
  - Monthly:** reports will be delivered in the specified months on the selected date at 3:00 AM.

Figure 37: New Report Subscription: Subscription Schedule



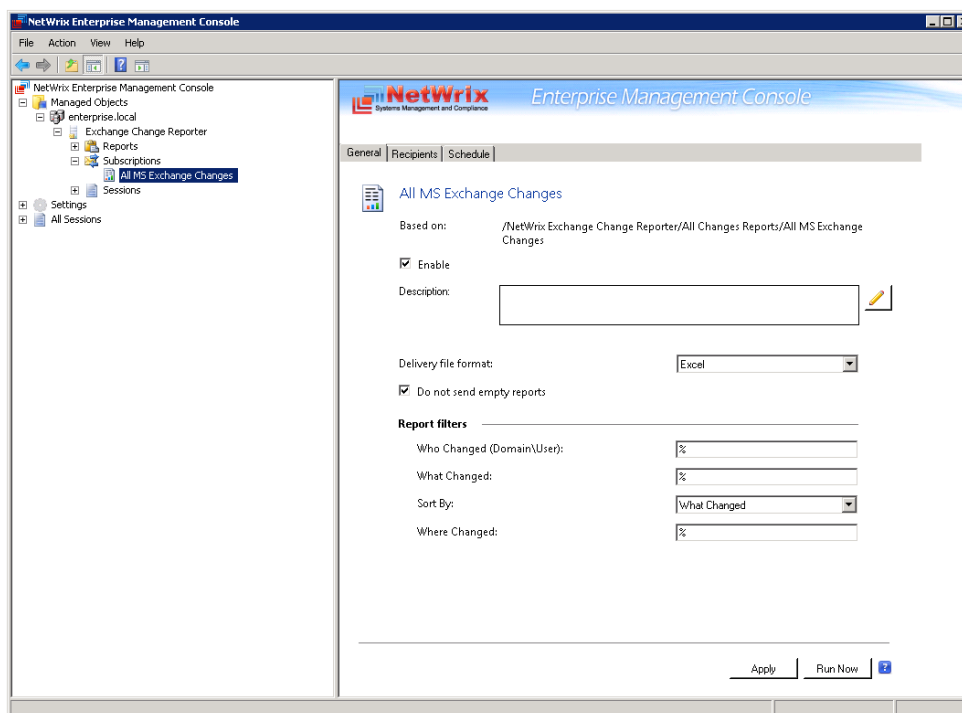
8. On the last step, review your Subscription settings and click **Finish**. The new Subscription will appear under the **Subscriptions** node in the left pane.

### 6.4.2. Modifying a Subscription

#### Procedure 16. To modify a Subscription

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Subscriptions** and select the Subscription you want to modify. The Subscription page will be displayed:

Figure 38: The Subscription Page



2. Modify the subscription parameters in the **General**, **Recipients** and/or **Schedule** tabs, and click **Apply** to save the changes.

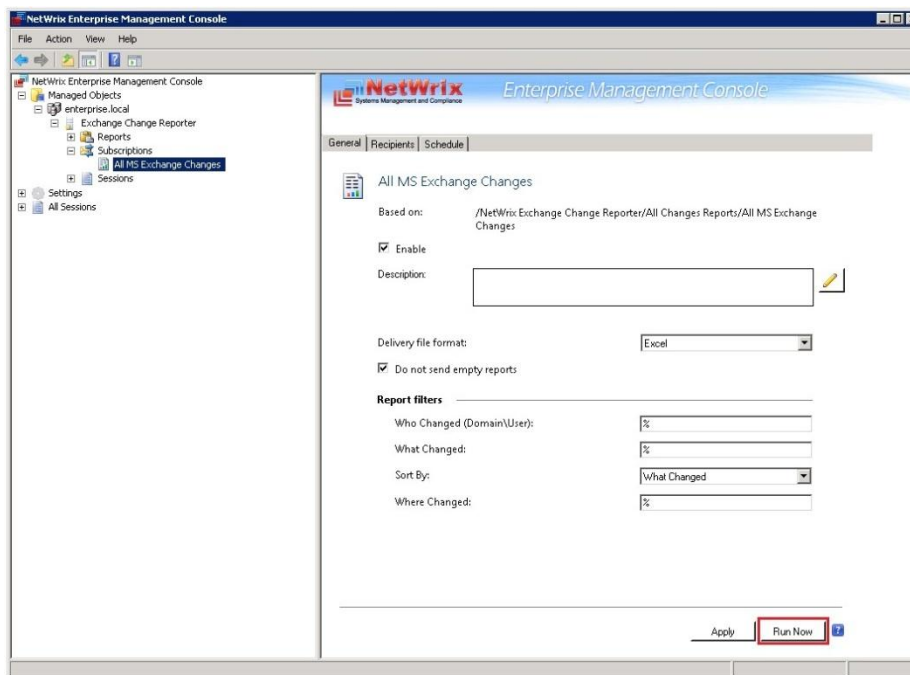
### 6.4.3. Forcing On-Demand Report Delivery

You can force an on-demand delivery of any report that you have configured a subscription for.

#### Procedure 17. To force on-demand report delivery

1. In NetWrix Enterprise Management Console, expand the **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** → **Subscriptions** node and select the Subscription for the report that you want to generate and send.
2. On the report Subscription page, click **Run Now**:

Figure 39: The Subscription Page



The report will be generated and sent to the specified recipient(s). The report will contain data starting from the last scheduled report delivery (or from Subscription creation time, if no scheduled deliveries have occurred so far) and until the last scheduled data collection time (3:00 AM by default).



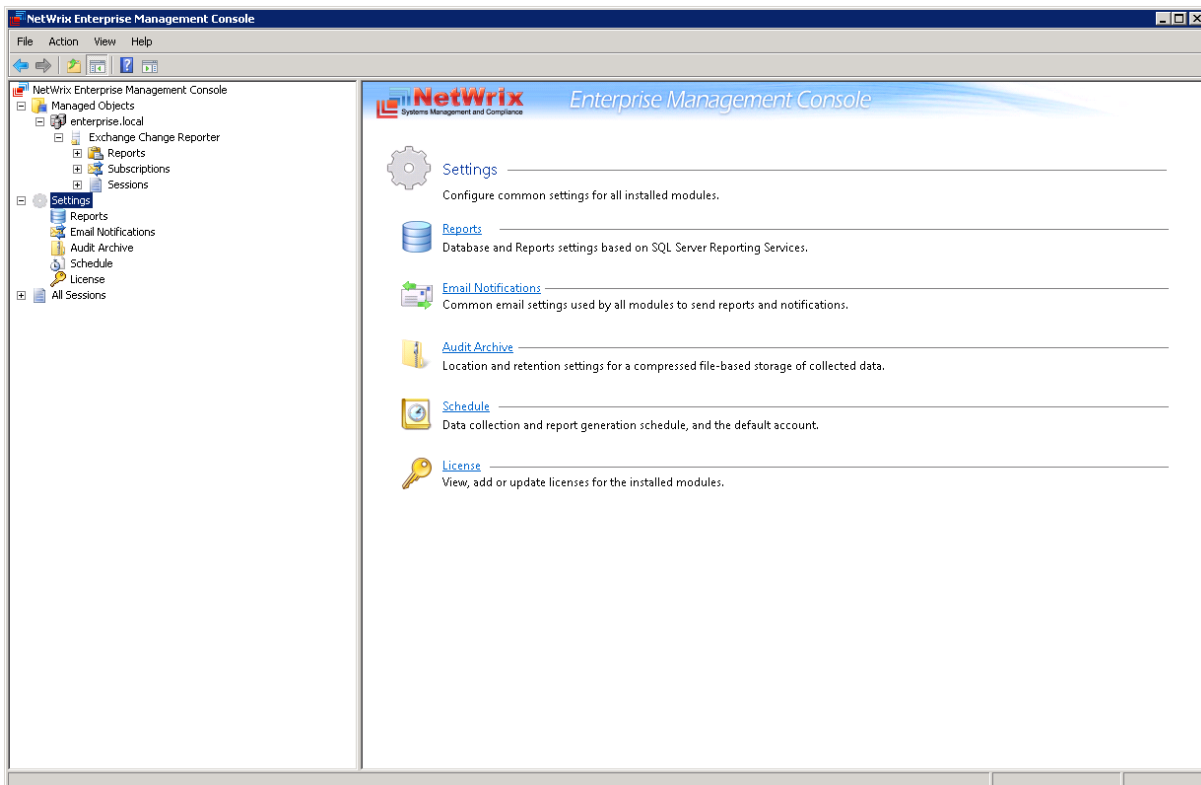
## 7. CONFIGURING GLOBAL SETTINGS

NetWrix Enterprise Management Console provides a convenient interface for configuring or modifying the settings that will be applied to all existing Managed Objects and all NetWrix modules enabled for these objects. This chapter provides detailed instructions on how to configure these settings.

**Note:** For instructions on how to configure or modify the settings for an individual Managed Object, or a NetWrix change reporting module enabled for this object, refer to Section [4.2 Modifying Managed Object Settings](#).

To access global settings, expand the Settings node in the left pane:

Figure 40: The Settings Page



The following settings can be configured:

- [Reports Settings](#)
- [Email Notifications Settings](#)
- [Audit Archive Settings](#)
- [Data Processing Account Settings](#)
- [License Settings](#)

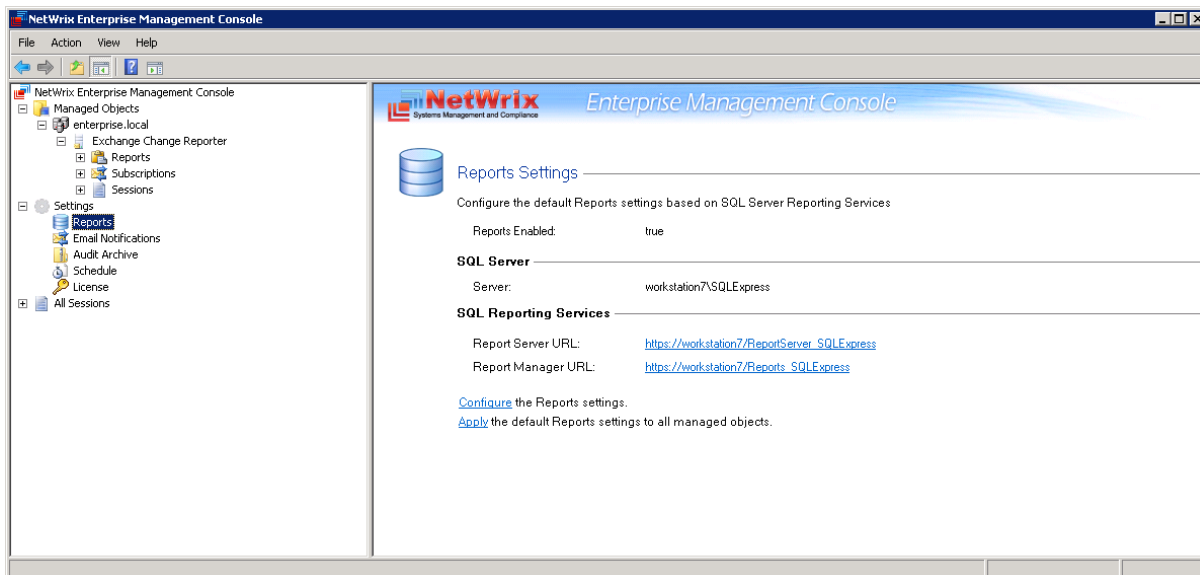
## 7.1. Configuring the Reports Settings

The Reports option allows configuring the SQL Server and Report Server settings.

### Procedure 18. To configure the Reports settings

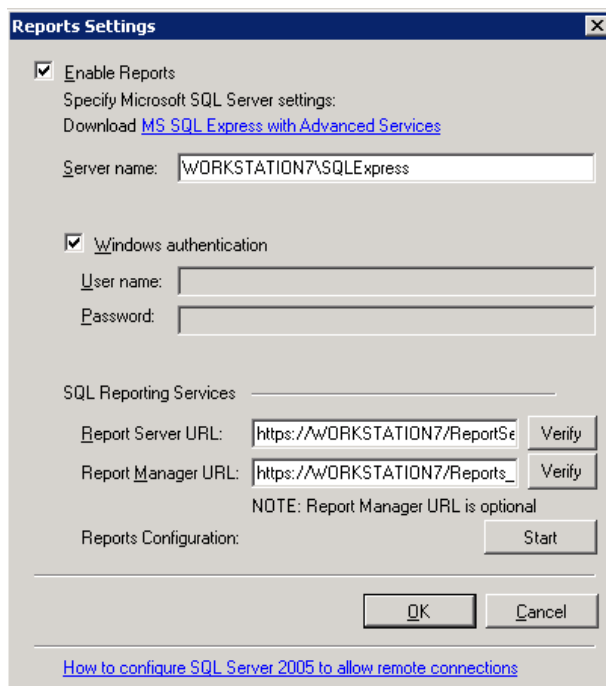
1. In NetWrix Enterprise Management Console, navigate to **Settings** → **Reports**. Alternatively, you can click **Reports** in the **Settings** page. The following page will be displayed showing the current Reports settings:

Figure 41: Settings: Reports



2. Click **Configure** in the right pane. The following dialog will be displayed:

Figure 42: The Reports Settings Dialog



- Specify or modify the following parameters:

*Table 8: The Reports Settings*

Parameter	Description
Enable Reports	Select this check box to enable the Reports feature for all Managed Objects.
Server name	Specify the name of an existing SQL Server instance where an audit database will be created.
Windows authentication	Select this box if you want to use the Data Processing Account you specified on the Managed Object creation to access the SQL database. Clear the box to use the SQL Server authentication.
User name:	Specify a user name for the SQL Server authentication. <b>NOTE:</b> This user must belong to the target database owner role.
Password:	Specify a password for the SQL Server authentication.
Report Server URL	Specify the Report Server URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.
Report Manager URL	Specify the Report Manager URL. <b>NOTE:</b> It is recommended to click the <b>Verify</b> button to ensure that the resource is reachable.
Reports Configuration	Click the <b>Start</b> button to launch the Reports Configuration wizard that automatically installs and configures Microsoft SQL Server 2005 Express with Advanced Services.

- Click **OK** to save your changes and then **Yes** in the confirmation message to apply these settings to all Managed Objects.

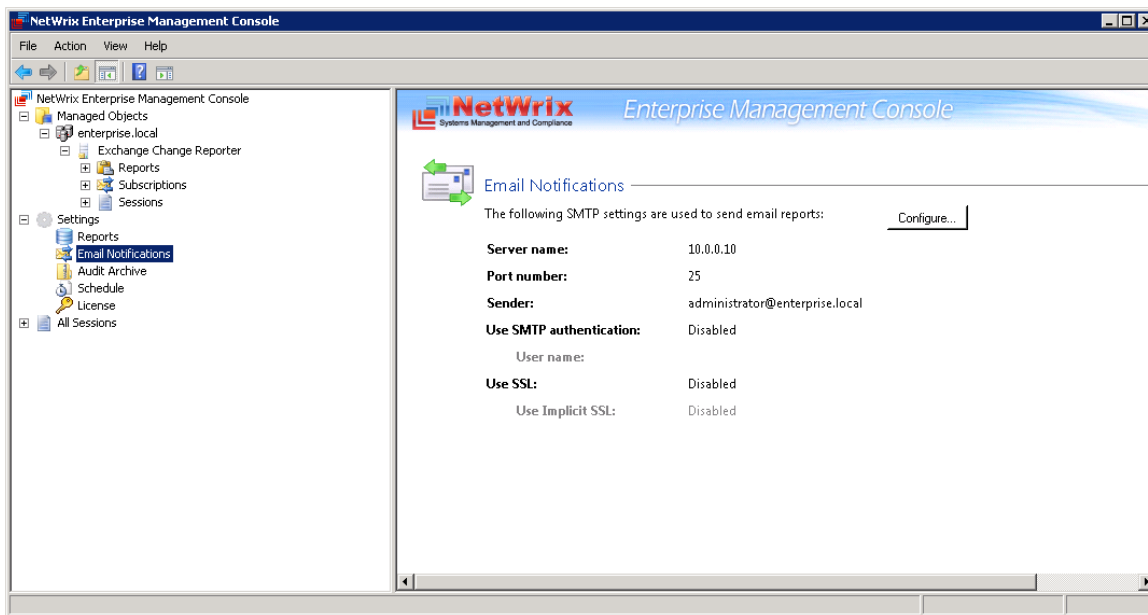
## 7.2. Configuring the Email Notifications Settings

The **Email Notifications** option allows configuring the SMTP settings used to deliver Change Summaries and Reports.

### Procedure 19. To configure the email notifications settings

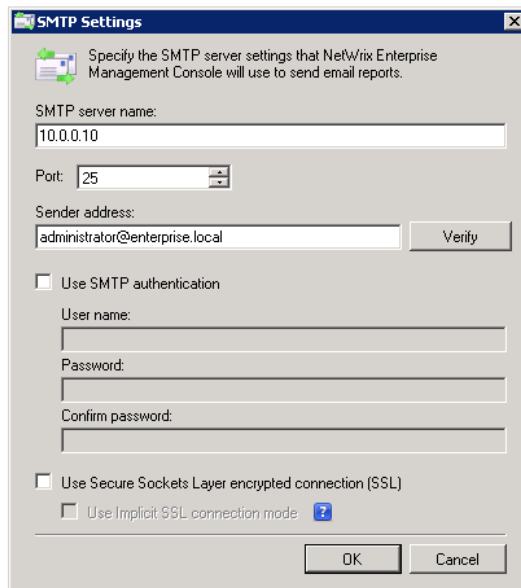
1. In NetWrix Enterprise Management Console, navigate to **Settings** → **Email Notifications**. Alternatively, you can click **Email Notifications** in the Settings page. The following page will be displayed showing the current email settings:

Figure 43: Settings: Email Notifications



2. Click the **Configure** button in the right pane. The **SMTP Settings** dialog will be displayed:

Figure 44: SMTP Settings



3. Modify the settings and click **OK**. For a detailed explanation of the email parameters, refer to [Table 2: Email Settings Parameters](#).

## 7.3. Configuring Audit Archive Settings

The **Audit Archive** option allows configuring the settings for the local repository of audit data.

### Procedure 20. To configure the Audit Archive settings

1. In NetWrix Enterprise Management Console, navigate to **Settings** → **Audit Archive**. Alternatively, you can click **Audit Archive** in the Settings page. The following page will be displayed showing the current Audit Archive settings:

Figure 45: Settings: Audit Archive



2. You can modify the following settings:

Table 9: Audit Archive Settings

Parameter	Description
Write audit data to	Specify the path to the folder where your audit data will be stored. Click the <b>Browse</b> button to select a location.
Specify the retention period for audit data	Specify the number of months for which audit data will be stored. Data will be deleted automatically when its retention period is over.
Specify the retention period for sessions	Specify the number of days for which sessions (that is the information on daily data collection status) are stored and are available for review in NetWrix Enterprise Management Console. <b>NOTE:</b> The session retention period does not affect the Audit Archive retention setting.

**Note:** It is strongly recommended not to disable the **Write data to the Audit Archive** option, because if the audit data is not written locally, it will not be imported to the SQL database and will be unavailable for reports.

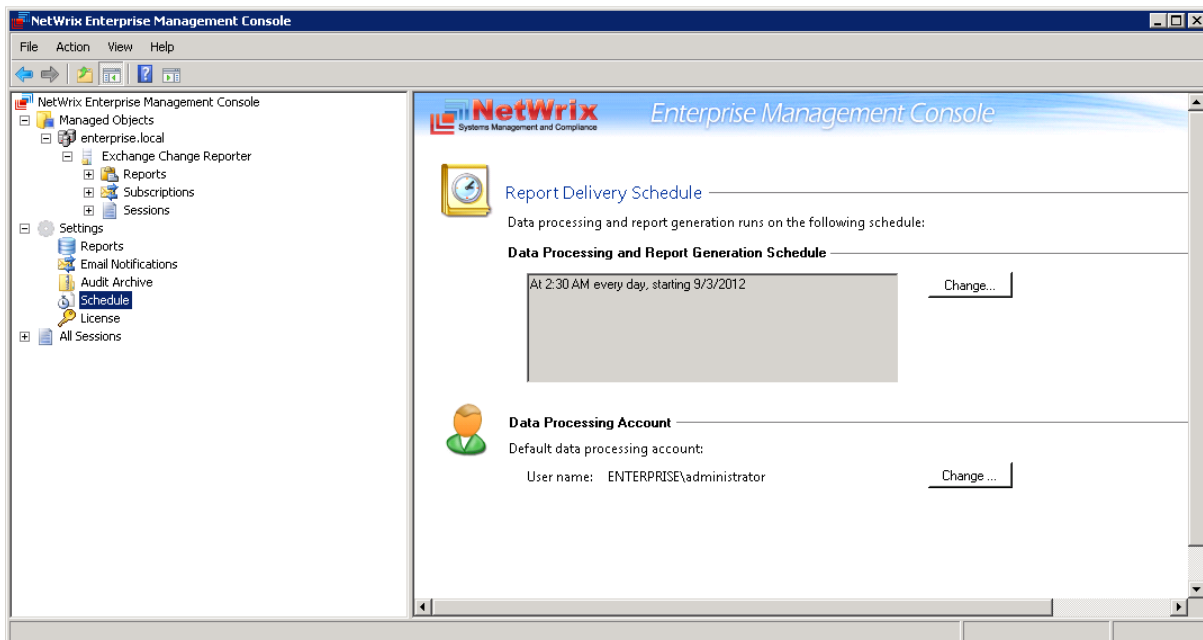
## 7.4. Configuring Data Processing Account Setting

The **Schedule** option allows modifying the default settings for Data Processing Account. To modify these settings, do the following:

### Procedure 21. To modify Data Processing Account settings

1. In NetWrix Enterprise Management Console, navigate to **Settings** → **Schedule**. Alternatively, you can click **Schedule** in the Settings page. The following page will be displayed showing the current data processing settings:

Figure 46: Settings: Schedule



2. Click the **Change** button next to **Default data processing account**. In the dialog that opens, specify the account credentials and click **OK**.

**Note:** The **Data Processing and Report Generation Schedule** setting is inapplicable to NetWrix Exchange Change Reporter.

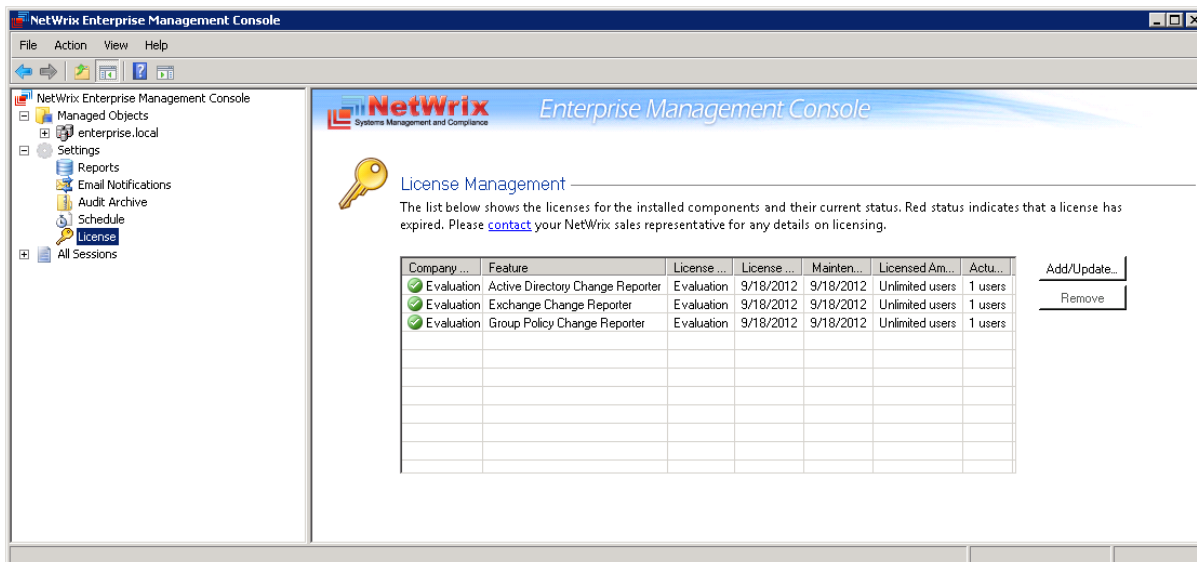
## 7.5. Configuring License Settings

The License option allows viewing your current licenses for the installed NetWrix products, updating them and adding new licenses.

### Procedure 22. To configure licenses

1. In NetWrix Enterprise Management Console, navigate to **Settings** → **License**. Alternatively, you can click **License** in the Settings page. The following page will be displayed showing the list of your current licenses:

Figure 47: Settings: License



2. The following options are available:
  - To add/update your licenses, click the **Add/Update** button. In the dialog that opens, specify your company name, your license count and the license codes (separated by commas or semi-colons).

**Note:** You can only install multiple licenses at the same time if they have the same license count. Otherwise, install them separately.

  - To remove a license, select it from the list and click the **Remove** button. Then click **Yes** in the confirmation dialog.

**Note:** NetWrix Exchange Change Reporter is a part of a larger change reporter pack that includes the following three modules:

  - NetWrix Active Directory Change Reporter
  - NetWrix Exchange Change Reporter
  - NetWrix Group Policy Change Reporter

Licenses for each of these modules have to be purchased separately. When you install the Enterprise Edition without purchasing a license, you can use the product forming the pack free of charge for 20 days. If you then purchase a license for one of the modules, the other modules will switch to the Freeware mode.

## 8. ADDITIONAL CONFIGURATION

This Chapter provides instructions on how to fine-tune NetWrix Exchange Change Reporter using the additional configuration options. It explains how to:

- [Auditing of Non-owner Mailbox Access](#)
- [Enabling integration with third-party SIEM solutions](#)
- [Excluding or including certain data types from/in reports](#)

### 8.1. Auditing of Non-owner Mailbox Access

You can expand the scope of your Exchange environment auditing with NetWrix Non-owner Mailbox Access Reporter. NetWrix Non-owner Mailbox Access Reporter checks the Exchange servers in the monitored domain and tracks non-owner mailbox access, including the information on who accessed what mailbox, which items inside the mailbox (emails, appointments and so on) and what actions were performed with them.

To use the option of Non-owner Mailbox Access Auditing, in Enterprise Management Console tree navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter** and click the **Track Mailbox Access** button. If NetWrix Non-owner Mailbox Access Reporter has already been installed on the computer running NetWrix Exchange Change Reporter, clicking the button will start the module configuration dialog. Otherwise, you will be redirected to the NetWrix Non-owner Mailbox Access Reporter website page where you can learn more about the product and download it.

### 8.2. Enabling Integration with Third-Party SIEM Solutions

If your organization is already using a third-party SIEM solution, NetWrix Exchange Change Reporter can help protect these investments by integrating with major SIEM systems and letting you manage audit data in your usual way, but with improved performance and increased reliability of collected audit data.

NetWrix Exchange Change Reporter can integrate with all major SIEM solutions, including Microsoft SCOM, RSA enVision®, ArcSight® Logger™, Novell® Sentinel™, NetIQ® Security Manager™, IBM Tivoli® Security Information and Event Manager™ and many other.

If integration with SIEM products is enabled, a custom Windows event log is created called NetWrix Change Reporter. This event log will generate events for each detected change (for detailed information on such events and their IDs, refer to the following NetWrix Technical Article: [Integration with Third-Party SIEM Systems](#)). You can configure custom processing rules, alerts and reports in your SIEM solution to react to these events.

If you are using Microsoft SCOM and want to integrate it with NetWrix Exchange Change Reporter, you need to install [NetWrix Exchange Change Reporter SCOM Management Pack](#), which is a solution that captures events written by NetWrix Exchange Change Reporter into the dedicated event log, and then feeds it to Microsoft SCOM that generates corresponding reports and alerts (for a detailed description of alerts triggered by SCOM alerting rules, you can refer to the following NetWrix Technical Article: [NetWrix Active Directory Change Reporter SCOM Alerts Specification](#)).

To enable integration with SIEM systems, do the following:

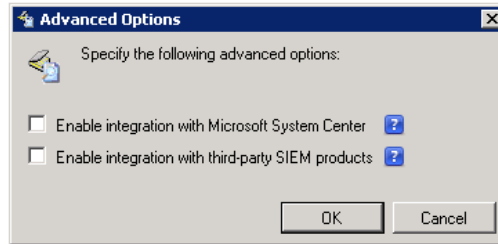
#### Procedure 23. To enable integration with third-party SIEM solutions

1. In NetWrix Enterprise Management Console, navigate to **Managed Objects** → **<Managed\_Object\_name>** → **Exchange Change Reporter**.



- In the right pane, click the **Configure** button next to **Advanced Options**. The following dialog will be displayed:

Figure 48: The Advanced Options Dialog



- Select the **Enable integration with Microsoft System Center** option to integrate the product with Microsoft SCOM, or the **Enable integration with third-party SIEM products** option to integrate the product with a different SIEM solution, and click **OK** to save the changes.

### 8.3. Excluding/Including Data Types From/in Reports

You can fine-tune NetWrix Exchange Change Reporter by specifying various data types that you want to exclude from the product reports. This can be done by editing .txt configuration files located in the product installation folder. The table below provides a list of the product configuration files, their description, syntax and examples. One entry per line is accepted.

Table 10: NetWrix Exchange Change Reporter Configuration Files

File Name	Description	Syntax	Example
aal_omitlist.txt	For Exchange Server 2010 and later, the file contains a list of changes performed by cmdlets. To exclude a change from reports, specify names of a cmdlet and the attribute that is changed by the selected cmdlet.	cmdlet.attrname  <b>Note:</b> You can use a wildcard (*) for a cmdlet or an attribute name.	Set-User Set-Contact Set-Group #Update-AddressList Add-ADPermission Remove-ADPermission #RBAC: *- MailboxAuditLogSearch *-AdminAuditLogSearch
aal_propnames.txt	For Exchange Server 2010 and later, the file contains a list of human-readable names of changed attributes to be displayed in change reports. To exclude a change from the reports, specify names of a cmdlet and the attribute that is changed by the selected cmdlet.	classname.attrname=intelligible  <b>Note:</b> You can use a wildcard (*) for a cmdlet or an attribute name.	*- OutlookAnywhere.SSLOffloading = Allow secure channel (SSL) offloading
omitobjlist_ecr.txt	Contains a list of human-readable	Classname	exchangeAdminService msExchMessageDeliveryConfi

File Name	Description	Syntax	Example
	names of object classes to be excluded from change reports	<b>Note:</b> You can use a wildcard (*) for a class name to specify an attribute for all classes.	g Exchange_DSAccessDC
omitpathlist_ecr.txt	Contains a list of AD paths to be excluded from change reports.	Path  <b>Note:</b> You can use a wildcard (*) for a path.	*\Microsoft Exchange System Objects\SystemMailbox*
omitproplist_ecr.txt	Contains a list of object types and properties to be excluded from change reports.	classname.attrname  <b>Note:</b> A wildcard (*) can be used instead of an object type or a property name to exclude all object types/property names. If there is no separator (.) between an object type and a property name, the whole entry is treated as an object type.	msExchSystemMailbox.* *.msExchEdgeSyncCredential *.msExchMailboxMoveTarget MDBLink *.adminDescription
omitreporterrors_ecr.txt	Contains a list of errors to be excluded from Change Summaries.	Error message text  <b>Note:</b> You can use a wildcard (*) for an error text to exclude the entire error by a unique part of it.	To omit the error "The HTTP service used by Public Folders is not available, possible causes are that Public stores are not mounted and the Information Store service is not running. ID no: c1030af3", add *c1030af3* to the file.
omitserverlist_ecr.txt	Defines the MS Exchange 2003 servers to be excluded from data collection.	NetBIOS_server_name  <b>Note:</b> You can use the wildcard (*) when specifying servers for exclusion.	Exchangesrv01
omitexchangeserverlist.txt	Defines the MS Exchange 2010 servers to be excluded from data collection.	FQDN_server_name  <b>Note:</b> You can use the wildcard (*) when specifying servers for exclusion.	Exchangeserv01.entreprise.local
omitstorelist_ecr.txt	Contains a list of classes and attributes names to be excluded from MS Exchange snapshots.	classname.attrname  <b>Note:</b> A wildcard (*) can be used instead of an object type or a property name to exclude all object types/property names. If there is no separator (.) between an object type and a property name, the whole entry is treated as an object type.	Exchange_Server.AdministrativeGroup Exchange_Server.AdministrativeNote Exchange_Server.CreationTime
propnames_ecr2003.txt	Contains a list of human-readable names for object	classname.attrname=intelligiblename	###WMI / AD (Common) Exchange_Mailbox = Mailbox

File Name	Description	Syntax	Example
	types and properties of MS Exchange 2003 to be displayed in change reports.	<b>Note:</b> You can use a wildcard (*) for a class name to specify an attribute for all classes.	Exchange_Mailbox.StorageLimitInfo = Storage Limit Info
propnames_ecr2007.txt	Contains a list of human-readable names for object classes and attributes of MS Exchange 2007 to be displayed in change reports.	classname.attrname=int elligible <b>Note:</b> You can use a wildcard (*) for a class name to specify an attribute for all classes.	msExchMDBAvailabilityGroup = Database Availability Group

## A APPENDIX: REGISTRY KEYS

The table below contains the description of the basic NetWrix Exchange Change Reporter registry keys that you may need to configure while using the product. To configure a registry key, navigate to **Start** → **Run**, and type in regedit to launch Registry Editor.

Table 11: NetWrix Exchange Change Reporter Registry Keys

Registry Key	Type	Description/Value	Created during setup	Preserved during upgrade
<b>HKEY_LOCAL_MACHINE\SOFTWARE\{WOW6432Node}\NetWrix\AD Change Reporter</b>				
CleanAutoBackupLogs	REG_DWORD	Defines the retention period for the security log backups: 0 - backups are never deleted from DCs [X] - backups are deleted after [X] hours	Yes	Yes
IgnoreAuditCheckResultError	REG_DWORD	Defines whether audit check errors should be displayed in the Change Summary footer: 0 - display errors 1 - do not display errors	Yes	No
IgnoreRootDCErrors	REG_DWORD	Defines whether to display audit check errors for the root domain (when data is collected from a child domain) in the Change Summary footer: 0 - display errors 1 - do not display errors	Yes	No
MonitorModifiedAndRevertedBack	REG_DWORD	Defines whether the Change Summary displays the attributes whose values were modified and rolled back between data collections: 0- the attributes are not displayed 1 - the attributes are displayed as "modified and reverted back"	No	No

Registry Key	Type	Description/Value	Created during setup	Preserved during upgrade
ShortEmailSubjects	REG_DWORD	Defines whether to contract the email subjects (e.g. NetWrix Exchange Change Reporter: Summary Report → ECR Report): 0 - no; 1 - yes	No	No
ProcessBackupLogs	REG_DWORD	Defines whether to process security log backups: 0 - no; 1 - yes <b>Note:</b> Even if this key is set to 0, the security log backups will not be deleted regardless of the value of the CleanAutoBackupLogs key.	Yes	No
ShowReportFooter	REG_DWORD	Defines whether to display the footer in the Change Summary emails: 0 - no; 1 - yes	Yes	No
ShowReportGeneratorServer	REG_DWORD	Defines whether to display the report generation server in the Change Summary footer: 0 - no; 1 - yes	Yes	No
ShowSummaryInFooter	REG_DWORD	Defines whether to display summary information in the Change Summary footer: 0 - no; 1 - yes	Yes	No
ShowSummaryInHeader	REG_DWORD	Defines whether to display summary information in the Change Summary header: 0 - no; 1 - yes	Yes	No
<b>HKEY_LOCAL_MACHINE\SOFTWARE\{WOW6432Node}\NetWrix\AD Change Reporter\&lt;Managed Object Name&gt;</b>				
CollectLogsMaxThreads	REG_DWORD	Defines the number of DCs to simultaneously start log collection on	No	Yes

Registry Key	Type	Description/Value	Created during setup	Preserved during upgrade
HKEY_LOCAL_MACHINE\SOFTWARE\{WOW6432Node}\NetWrix\Management Console\Database settings				
overwrite_datasource	REG_DWORD	Defines whether to overwrite the database connection settings (stored in the reports data source) if they differ from the SQL server settings specified when configuring the Managed Object 0 - no; 1 - yes	No	Yes
SqlOperationTimeout	REG_DWORD	Defines the timeout for executing SQL queries such as data selection, insertion or deletion (in seconds)	No	Yes
timeout	REG_DWORD	Defines the connection to the SQL database timeout (in seconds)	No	No

## B APPENDIX: RELATED DOCUMENTATION

The table below lists all documents available to support NetWrix Exchange Change Reporter:

Table 12: Product Documentation

Document Name	Overview
NetWrix Exchange Change Reporter Administrator's Guide	The current document. Provides a detailed explanation of the NetWrix Exchange Change Reporter features and step-by-step instructions on how to configure and use the product.
<a href="#">NetWrix Exchange Change Reporter Quick-Start Guide</a>	Provides an overview of the product functionality and instructions on how to install, configure and start using the product. This guide can be used for evaluation purposes.
<a href="#">NetWrix Exchange Change Reporter User Guide</a>	Provides the information on different NetWrix Exchange Change Reporter reporting capabilities, lists all available reports and explains how they can be viewed and interpreted.
<a href="#">NetWrix Active Directory Change Reporter Installation and Configuration Guide.</a>	Provides detailed instructions on how to install and configure NetWrix Exchange Change Reporter.
<a href="#">NetWrix Active Directory Change Reporter Administrator's Guide</a>	Provides a detailed explanation of the NetWrix Active Directory Change Reporter features and step-by-step instructions on how to configure and use the product.
<a href="#">NetWrix Active Directory Change Reporter Release Notes</a>	Contains a list of the known issues that customers may experience with NetWrix Active Directory Change Reporter 7.2, and suggests workarounds for these issues.
<a href="#">NetWrix Active Directory Change Reporter Freeware Edition Quick-Start Guide</a>	Provides instructions on how to install, configure and use NetWrix Active Directory Change Reporter, NetWrix Group Policy Change Reporter and NetWrix Exchange Change Reporter Freeware Edition.
<a href="#">Troubleshooting Incorrect Reporting of the "Who Changed" Parameter</a>	Step-by-step instructions on how to troubleshoot incorrect reporting of the 'who changed' parameter.
<a href="#">Installing Microsoft SQL Server and Configuring the Reporting Services</a>	This technical article provides instructions on how to install Microsoft SQL Server 2005/2008 R2/2012 Express and configure the Reporting Services.
<a href="#">How to Subscribe to SSRS Reports</a>	This technical article explains how to configure a subscription to SSRS reports using the Report Manager.
<a href="#">Integration with Third Party SIEM Systems</a>	This article explains how to enable integration with third-party Security Information and Event Management (SIEM) systems.