Microsoft Dynamics

Management Reporter
Integration Guide for
Microsoft Dynamics® NAV

July 2013

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Introduction

Management Reporter 2012 for Microsoft Dynamics® ERP uses a data mart database to integrate data between Microsoft Dynamics NAV and Management Reporter. You can view and use the data from Microsoft Dynamics NAV to create financial reports in Management Reporter 2012 without affecting the original data in the ERP database.

A data mart integration creates a database of information from the original ERP database to create financial reports in Management Reporter 2012. This integration provides high level of integration with a Microsoft Dynamics NAV system, and offers enhanced report generation options.

Data for the following entities are available for integration into Management Reporter 2012:

- Actual balance
- Budgets
- Multiple currency information, for functional and reporting currencies
- Fiscal Periods
- Dimensions
- Companies


System setup

Before you configure the Microsoft Dynamics NAV data mart integration, your system must meet the minimum requirements for Management Reporter. For more information, see the System requirements for Management Reporter. Additional prerequisites are listed below.

System prerequisites

The following components must be installed before the data mart integration can be configured on your system.

- **Microsoft Dynamics NAV 2009 R2**
  
The data provider is compatible with Microsoft Dynamics NAV 2009 R2. Earlier versions of this system must be upgraded to Microsoft Dynamics NAV 2009 R2 to integrate with Management Reporter 2012.

  **Note:** The data provider does not require the Microsoft Dynamics NAV 2009 R2 client to be installed on the same computer, but the data provider requires access to the ERP database.

- **Management Reporter 2012 server components**
  
  Data providers must be configured on any computer that hosts the Management Reporter 2012 application service and process service. To configure these components, see the Management Reporter installation guide.
User account requirements

Security permissions for the Microsoft Dynamics NAV integration user must be set up before configuring Management Reporter. The user account that is used to configure the data mart integration must meet the following requirements:

<table>
<thead>
<tr>
<th>Application</th>
<th>Permissions required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Dynamics NAV</td>
<td>• Have a user account in Microsoft Dynamics NAV with access to companies</td>
</tr>
<tr>
<td></td>
<td>• To create a data mart database, must be a member of the <strong>SysAdmin</strong> group</td>
</tr>
<tr>
<td>Management Reporter</td>
<td>• Be assigned to the <strong>Administrator</strong> role</td>
</tr>
<tr>
<td></td>
<td>• Have an Active Directory® domain account user ID and password</td>
</tr>
</tbody>
</table>

In addition, Management Reporter 2012 requires database access to the Microsoft Dynamics NAV SQL Server database. When you configure the data integration, you must enter credentials that have access to the Microsoft Dynamics NAV database. Depending on the verification option that you select, different permissions are required for the user account that is assigned to the Management Reporter process service, also known as the Service account:

- If you are using Windows Authentication, the Service account credentials must be assigned to the **db_datareader** role in the Microsoft Dynamics NAV database.
- If you are using SQL Server authentication, the SQL Server credentials that you provide must be assigned the **db_datareader** role in the Microsoft Dynamics NAV database. No additional permissions are required for the Management Reporter user account.

For more information about the Service account, see the Management Reporter installation guide.

**Note:** All Management Reporter users must have Active Directory domain accounts for authentication. These credentials are used by the data provider to connect to Microsoft Dynamics NAV. For more information, see "How to create a domain account in Active Directory" on MSDN (http://msdn.microsoft.com/en-us/library/aa545262(CS.70).aspx).

After Management Reporter is installed and fully configured, you can add users and modify security permissions. See the Management Reporter Help documentation for more information.
Configuring the data integration

The data mart for Microsoft Dynamics NAV is installed at the same time as the Management Reporter server components. For more information and installation procedures, see the see the Management Reporter installation guide.

The following procedures explain how to configure the data integration for Management Reporter.

Configure the data integration

Management Reporter uses a data mart to integrate information from a Microsoft Dynamics NAV system. You can configure these components during initial configuration or after you have set up the application service and process for Management Reporter 2012.

**Note:** Management Reporter 2012 can integrate with multiple ERP systems, but you can configure only one instance at a time.

1. Click **Start**, select **Programs**, select **Microsoft Dynamics**, select **Management Reporter 2012**, and then select **Configuration Console** to open the Management Reporter configuration console.
2. In the Management Reporter configuration console, click **File**, and then select **Configure** to open the Custom Configuration dialog.
3. Under **Management Reporter Application Service**, select the **Add Microsoft Dynamics NAV Data Mart** check box, and then click **Next**.
4. On the **Prerequisite Validation** page, review any failed prerequisites or warnings and resolve issues before continuing with the installation process. Click **Revalidate** to run the validation again.
5. Click **Next**.
6. On the **Settings** page, under **Dynamics NAV connection information**, enter the name of the Microsoft Dynamics NAV server to connect to in the **Database server** field.
7. Enter the domain, user name, and password of the Service account, or select **Use Windows authentication** to connect to the ERP database using the user account that the services are running under.
   For more information about this account, see [User account requirements](#) and the [Management Reporter installation guide](#).
8. If the SQL Server is configured to use Secure Lockets Layer (SSL) for encryption, select **Encrypt Connection**. The data that is transmitted between the SQL server and Management Reporter 2012 services is encrypted.
   **Note:** to use this option, you must configure SSL on the server and install certificates. For more information, see “Encrypting connections to SQL Server” on MSDN ([http://msdn.microsoft.com/en-us/library/ms189067.aspx](http://msdn.microsoft.com/en-us/library/ms189067.aspx)).
9. In the **Database** field, select the Microsoft Dynamics NAV database to connect to.
10. Under **Data mart connection** information, in the **Database server** field, enter the name of the SQL server that hosts the Microsoft Dynamics NAV database.
11. To connect to an existing data mart database, select **Connect to an existing database**.
12. Enter the user name and password of a user account that has permissions to connect to the data mart database. To configure the database using your current credentials, select **Use Windows authentication**.
13. In the **Data mart database** field, select an existing database to connect to, or enter a unique name to create a new data mart database.
14. Click **Next**.

15. Review the configuration information, and then click **Configure**.

16. When a message is displayed that indicates that the data mart integration has been successfully configured, click **Close**.

17. To integrate with another instance of Microsoft Dynamics NAV, repeat steps 1 through 16. To integrate with another ERP system, see the integration guide for that ERP system.

18. After all integrations are configured for Microsoft Dynamics NAV, you must import companies. For more information, see **Import companies**.

### Import companies

After you have installed Management Reporter 2012 services and integrated with a Microsoft Dynamics NAV system, you must import company information from the Microsoft Dynamics NAV database into Management Reporter 2012.

**Note:** If you are upgrading from a previous version of Management Reporter, you must import all companies that you want to access in Management Reporter 2012. This includes companies that you have integrated with previous versions of Management Reporter.

1. In the Management Reporter 2012 configuration console, verify that the application service is running.

   **Note:** The application service must be running to import company information.

2. In the navigation pane of the Management Reporter configuration console, expand the **Management Reporter 2012 services** node. Under **ERP Integrations**, select the integration to import companies from.

3. Click **Import** in the display pane.

4. Enter the domain, user name, and password of a user account that has access to the data mart database. For more information, see **User account requirements**.

5. Review the list of available companies. If a company has already been imported, **Already imported** will be selected. To not import a company, select **Skip import**.

6. Click **Import companies**.

7. When a message is displayed that indicates that the companies have been successfully imported, click **OK**.

8. To view the list of imported companies, click **Companies** under the **Management Reporter Services** node in the navigation pane.
Select the default company

The first time that you open Report Designer, you will be prompted to designate a default company that identifies the source of data for reporting. This name will appear in the headings of reports that are created in Management Reporter.

1. Open Report Designer. On the Company menu, click Companies to open the list of companies in Management Reporter.

2. Select the company to be assigned as the default company, and then click Set as default.

3. Provide a user ID and password to connect to the company. These credentials must match the credentials that are stored in Microsoft Dynamics NAV.

4. To save your credentials and not enter them each time that you connect to Microsoft Dynamics NAV, select the Save my credentials check box.

5. Click OK to select the default company.

6. Click Close.
Appendix

The following sections provide additional information about the Microsoft Dynamics NAV data mart integration.

Data mart displays only attributes associated with transactions

In previous versions of Management Reporter, data providers displayed all attribute values that were listed in the ERP database, regardless of context or functionality. This included attributes that were not associated with transaction data.

When you use a data mart integration with Management Reporter 2012, only the attribute values that are associated with a transaction are displayed. This improves report generation and analysis.

Unposted transactions are not supported in the data mart

In Management Reporter 2012, unposted transactions in Microsoft Dynamics NAV are not supported for integration. When you design a report, the provisional level of “unposted“ might be displayed as an available option, but unposted transactions will not integrate. This occurs because the data mart can support unposted transactions, but the data providers that connect the data mart to the ERP system do not support the integration of transactions of this type.

Renaming companies from Microsoft Dynamics NAV

If you rename a company after the company information has been integrated into the data mart database, then a new company is created in Management Reporter 2012 under the new name. The new company is not connected with transactions that have already been integrated, and the original company name and information is still available in the Management Reporter database.

To change the name of an existing company in Management Reporter 2012 and not duplicate company information, the current company integration must be deleted and the company must be re-integrated under the new name.

Changing report timeout settings

If a large report requires more than 30 minutes to process, this might result in a report that contains no data. To correct this issue, you might need to change the timeout settings.

If you have upgraded to Management Reporter 2012 Rollup 3 or later, you can adjust the default settings of timeouts in the MRserviceHost.settings.config file.

- To increase the timeout during integration of data into the data mart, modify the SqlBulkCopyTimeout, and SqlBulkCopyBatchSize settings.
- To adjust the timeout for running data mart based reports, modify the DataMartQuery setting.

Note: The MRserviceHost.settings.config file is not modified during upgrade. Any modifications to this file must be completed manually. If you have upgraded from a previous release of Management Reporter 2012, you might need to manually create these parameters.

For more information or additional assistance, contact Microsoft Support.
Modifying fiscal years in the data mart

Modifying the boundaries of fiscal years is not supported for Management Reporter 2012. If you change the boundaries of a fiscal year in Microsoft Dynamics NAV that has been integrated into Management Reporter 2012, these changes will not be synchronized correctly and reporting inaccuracies may result.

**Note:** Updates to the start dates and end dates of fiscal years in Microsoft Dynamics NAV are not updated in the data mart integration.

Integrating a data mart with a second ERP database

If you have set up a data mart integration with one Microsoft Dynamics ERP database, Management Reporter does not support a second integration with another ERP system that connects to the same data mart database. You must create a second data mart database for the second Microsoft Dynamics ERP.

Integrations might fail when customizations are made to database field lengths

If customizations are made in Microsoft Dynamics NAV to support larger values, such as increasing a field from 40 characters to 100 characters, the integration might fail and following message might be displayed: "String or binary data would be truncated."

If you receive this error, contact Microsoft Support to work with the Management Reporter team for assistance.