CHAPTER 12: OUTLOOK SYNCHRONIZATION

Objectives

The objectives for this chapter are:

- Define Outlook Synchronization concepts.
- Set up Outlook Synchronization on the Microsoft Dynamics® NAV side.
- Describe synchronization.
- Set up levels of synchronization.
- Explain Outlook synchronization user roles.
- Set up Outlook Synchronization on the Microsoft® Office Outlook® side.
- Install Microsoft Dynamics NAV synchronization Add-in.
- Configure Microsoft Dynamics NAV synchronization Add-in.
- Perform troubleshooting on the Microsoft Office Outlook side.
- View synchronization progress window.
- Review specifics of successful work with Outlook Synchronization.
Introduction to Outlook Synchronization

To allow everybody in an organization to know as much as possible about the ongoing relations with contacts, it is essential to have as much of the exchanged information stored for public use as possible. This will allow any salesperson to continue working exactly where another salesperson left off with a customer after the last interaction. It will also allow you to plan your meetings and appointments in Microsoft Office Outlook and immediately access the same information in Microsoft Dynamics NAV. This will save you considerable time and prevent unnecessary duplicate work.

Outlook Synchronization enables users to keep data in Microsoft Dynamics NAV and Outlook up-to-date. After changing information on one side, the user can update data in the related items on another side to reflect these changes.

Synchronization is run in Outlook and can be performed either automatically in a predefined period of time or manually by using a convenient interface.

With the help of the Outlook Synchronization functionality, you can synchronize any data from the Microsoft Dynamics NAV to Outlook and vice versa.

This chapter provides information about synchronization and describes the most common synchronization procedures. Demonstrations give practical application of the most common actions taken by an administrator and a power user.

Setting Up Outlook Synchronization on the Microsoft Dynamics NAV Side

Outlook Synchronization setup on the Microsoft Dynamics NAV side involves performing the following actions:

- Setting up synchronization entities
- Setting up levels of synchronization
- Setting up levels synchronization users
- Registering synchronization entities

Synchronization Entity

During synchronization, the data flows from one program to another. Any item that can be synchronized is referred to as a synchronization entity. In Microsoft Dynamics NAV, a synchronization entity can be represented by:

- Tables
- Fields
- Sets of filtered entries satisfying custom selection criteria
In Microsoft Outlook, the following objects can be mapped to synchronization entities:

- Items
- Properties
- Collections

### Levels of Synchronization

The synchronization levels represent a hierarchical structure, each level of which refers to details of a certain Microsoft Dynamics NAV entity and a specific Outlook item. This structure enables users to configure mappings not only to Outlook items but also to the collections associated with these items.

There are two levels of synchronization each including two major stages. The following table provides the levels and their description.

<table>
<thead>
<tr>
<th>Synchronization Level</th>
<th>Description</th>
</tr>
</thead>
</table>
| Level 1               | - Microsoft Dynamics NAV records are to be synchronized with Outlook items. A Microsoft Dynamics NAV table specified on this level is considered a master table in terms of Outlook synchronization.  
                        - Along with tables and items, their fields and properties are also synchronized. |
| Level 2               | - On this level, Microsoft Dynamics NAV record sets (or sub-entities) linked to the Level 1 table by table relation are to be synchronized with Outlook collections linked to the Outlook item.  
                        - Along with record sets (or sub-entities) and collections, their fields and element properties are also synchronized.  
                        This level is an addition to Level 1 synchronization as it helps setup additional tables and collection elements properties associated with the Level 1 entities. |

The following diagram depicts an example of the two levels of synchronization.
FIGURE 12.1 2 LEVELS OF SYNCHRONIZATION

From the diagram, observe that the Level 1 synchronization involves synchronizing of Microsoft Dynamics NAV records (To-dos) with Outlook items (Appointments), including record fields (Description, Priority, Starting Date, and so on) with Outlook item properties (Subject, Importance, Date, and so on).

The Level 2 synchronization supposes synchronizing Microsoft Dynamics NAV sub-entities (Attendees) with Outlook collections (Recipients), along with synchronizing the sub-entity fields (Attendee Type, Attendee Name, Response Status, and so on) with the Outlook collection element properties (Type, Name, Response Status, and so on).

**NOTE:** On the Outlook side, the hierarchy of the items is the following: each Outlook item has properties. An Outlook item may have collections linked to it. Collections consist of collection elements. Each collection element has properties. In this document, element properties are referred to as Outlook collection element property.

These correspondences comprise a mapping schema that contains the information about which items and their attributes take part in synchronization.

**Setting Up Level 1 Synchronization**

Level 1 synchronization is set up on the General FastTab of the Outlook Synch. Entity window and respective fields. To make it obvious, you will set up Level 1 synchronization for the Customer table from the Microsoft Dynamics NAV side and Contact Item from Outlook. You will synchronize only foreign customers – customers for which the territory code is set to Foreign.

As it was already mentioned, the process of setting up each level of synchronization consists of two major stages. To fulfill the first major stage of the Level 1 synchronization – define a master table and an Outlook item for synchronizing – follow this procedure:
1. In the navigation pane, click **Departments > Administration > Application Setup > Microsoft Office Outlook Integration > Outlook Synch. Entities**.

2. In the Action Pane, click **New** to create a new synchronization entity.

3. In the **Code** field, enter its name, for example “CUST”.

4. In the **Description** field, enter text that describes this entity, for example, “Microsoft Dynamics NAV Customers”. Keep in mind that this description will be used in Outlook as the label of the text box for Outlook folders selected for synchronization.

5. Click the AssistButton next to the **Table No.** field on the **General** FastTab of the window. From the **Outlook Synch. Table List** window that appears, select a table, for this example, select table 18, Customer, and then click **OK** to confirm your choice.

The **Table Name** field on the **General** FastTab of the **Outlook Synch. Entity** window is filled in automatically with the name of the selected table, which is called a master table further in this chapter.

Now you need to define the condition as the source for selecting records from the master table for synchronization by applying a specific filter to the master table.

6. Click the AssistButton next to the **Condition** field. The **Outlook Synch. Filters** window appears.
7. Click the AssistButton next to the **Field Name** field to open the list of fields for the master table selected in the **Table No.** field.

8. In the **Outlook Synch. Table Fields** window, select a field and then click **OK**. For this example, select Territory Code.

9. In the **Outlook Synch. Filters** window, click the AssistButton next to the **Type** field and select CONST or FILTER. For this example, select CONST.

10. Fill in the **Value** field with required filtering value. For this example, select FOREIGN. The final filtering expression will be displayed in the **Filtering Expression** field.

11. When you are finished with the filters, click **OK** to apply them and go back to the **Outlook Synch. Entity** window.

12. To specify which Outlook item must be synchronized with the master table, click the AssistButton next to the **Outlook Item** field. The **Outlook Synch. Lookup Names** window appears.
13. From the list of available Outlook items, select ContactItem and then click **OK**.

The **Outlook Synch. Entity** window for the new entity now looks similar to that in the “Setting Up Level 1 Synchronization” figure:

![Figure 12.5: Selecting Outlook Item for Synchronizing](image)

**FIGURE 12.5 SELECTING OUTLOOK ITEM FOR SYNCHRONIZING**

This ends specifying the Microsoft Dynamics NAV master table and the Outlook item for synchronization. To fulfill the second major stage – define Microsoft Dynamics NAV table fields and Outlook item properties that will be synchronized – follow these steps:
1. In the **Outlook Synch. Entity** window for the entity you just created, click **Related Information > Synch. Entity > Fields**. The **Outlook Synch. Fields** window appears.

![Outlook Synch. Fields window](image)

**FIGURE 12.7 MAPPING TABLE FIELDS TO OUTLOOK COLLECTION ELEMENT PROPERTIES FOR THE LEVEL 1**

2. To specify a field that will be mapped to an Outlook item property, in the **Outlook Synch. Fields** window, click the AssistButton next to the **Field No.** field and select the field.

**NOTE:** If the **Table No.** field is empty when you select a field name, select a field from the list for the master table, which you specified in the **Table No.** field on the **General** FastTab of the **Outlook Synch. Entity** window.

There may be a situation when the field that you want to synchronize is absent in the table, which you specified in the **Table No.** field on the **General** FastTab of the **Outlook Synch. Entity** window. In that case, that field can be retrieved from another table using a table relation. You can specify that table in the **Table No.** field.

3. To retrieve a table to specify a table relation for, in the **Outlook Synch. Fields** window, click the AssistButton next to the **Table No.** field.

4. In the **Outlook Synch. Table List** window, select a table and click **OK**. The **Table Name** field is filled in automatically.

5. Now define table relations between the selected and the master tables. Do so by clicking the AssistButton next to the **Table Relation** field. The **Outlook Synch. Filters – Table Relation** window appears.
6. Click the AssistButton next to the Field Name field to open the list of fields for the table selected on the Lines FastTab.

7. In the Outlook Synch. Table Fields window, select a field and then click OK.

8. In the Outlook Synch. Filters window, click the AssistButton next to the Type field and select FIELD.

9. Click the AssistButton next to the Value field. This will open the Outlook Synch. Table Fields window with a list fields of the master table selected in the Table No. field on the General FastTab of the Outlook Synch. Entity window.

10. Select a field and then click OK to insert this field in the Value field. The final filtering expression will be displayed in the Filtering Expression field.

11. When you are finished with the filters, click OK to apply them and go back to the Outlook Synch. Fields window.

**NOTE:** The Condition field can be used to define the condition for retrieving a certain value from several different tables.

*Example:* You have the Affiliation Type field in your master table (this is not a real field; it is hypothetical) and need to retrieve the name of the master table this field belongs to. This field can belong to the either Customer or Vendor table. So if the value belongs to customer, you will need to retrieve his name from the Customer table, if it is the vendor’s, from the Vendor table.

12. In the Outlook Property field of the Outlook Synch. Fields window, click the AssistButton and select the Outlook property that will be synchronized with the selected Microsoft Dynamics NAV table field. Other fields in this window are optional and can be left without changing.
For the sake of this example, after applying table relations and specifying tables, table fields, and Outlook item properties that are to be synchronized, the Outlook Synch. Fields window looks like the following figure.

![Outlook Synch. Fields window](image)

**FIGURE 12.9 SPECIFYING TABLES, TABLE FIELDS AND OUTLOOK ITEM PROPERTIES FOR SYNCHRONIZATION**

13. Click **OK** to apply your changes.

**NOTE:** While synchronization is being performed, Microsoft Dynamics NAV table fields are filled in with the corresponding Outlook item values in the same order in which they are positioned in the Outlook Synch. Fields window.

**Setting Up Level 2 Synchronization**

Similar to setting up Level 1, Level 2 synchronization consists of two major stages:

- Specifying one or more supplementary tables and one or more Outlook collections.
- Mapping supplementary table fields to Outlook collection element properties.

To fulfill the first major stage – specify supplementary tables and Outlook collections – follow these steps:

1. Open the Outlook Synch. Entity window for the entity you just set up Level 1 synchronization. To do so, in the navigation pane, click Departments > Administration > Application Setup > Microsoft Office Outlook Integration > Outlook Synch. Entities.
2. On the Lines FastTab, click the AssistButton next to the Table No. field.
3. In the Outlook Synch. Table List window, select a table that will act as a supplementary table and click **OK**. The Table Name field is filled in with the name of the table automatically.
To bind the master and supplementary tables in the synchronization entity, define the way these tables are related. Defining the tables is performed by associating fields of the master table with those in the supplementary one.

4. On the **Lines** FastTab, click the AssistButton next to the **Table Relation** field. The **Outlook Synch. Filters – Table Relation** window appears.

![Outlook Synch. Filters - Table Relation](image)

**FIGURE 12.10 DEFINING TABLE RELATIONS**

5. Click the AssistButton next to the **Field Name** field to open the list of fields for the supplementary table selected on the **Lines** FastTab.

6. In the **Outlook Synch. Table Fields** window, select a field and then click **OK**.

7. In the **Outlook Synch. Filters** window, click the AssistButton next to the **Type** field and select FIELD.

8. Click the AssistButton next to the **Value** field. This will open the **Outlook Synch. Table Fields** window with a list fields of the master table selected in the **Table No.** field on the **General** FastTab of the **Outlook Synch. Entity** window.

9. Select a field and then click **OK** to insert this field in the **Value** field. The final filtering expression will be displayed in the **Filtering Expression** field.

The following is the example of the **Outlook Synch. Filters – Table Relation** window with the table relations specified.
10. When you are finished with the filters, click **OK** to apply them.

11. To define an Outlook collection to be mapped to the supplementary table selected, on the **Lines** FastTab of the **Outlook Synch. Entity** field, click the AssistButton next to the **Outlook Collection** field. The **Outlook Synch Lookup Names** window appears.

12. Select an Outlook collection to be mapped to the supplementary table and click **OK**.

If the selected collection depends on other entities, you must define these dependencies. An example of the dependency can be an attendee that has a contact person, a contact company, and a salesperson as dependencies. The
dependency record will eventually be used during synchronization to determine which record must be created in Microsoft Dynamics NAV when a new collection element is added to an Outlook Item.

13. To define dependencies for the collection, click the number in the No. of Dependencies field. The Outlook Synch. Dependencies window appears.

![Outlook Synch. Dependencies Window](image)

**FIGURE 12.13 DEFINING DEPENDENCIES**


15. Click the AssistButton next to the Depend. Synch. Entity Code field and select a synchronization entity. The Description field is filled in automatically with the description of the synchronization entity.

16. Click the Condition field. The Outlook Synch. Filters window appears. Fill in the fields here just as you did when setting up conditions for the master table. When done, click OK.

17. To set up table relations, click the Table Relation field. The Table Relation window appears. Fill in the fields here just as you did when setting up table relations between the master table and a supplementary table. When done, click OK.

The following is the example of the Outlook Synch. Dependencies window with the specified dependencies.
18. When you are finished with specifying dependencies, click **OK**.

Notice that the number in the **No. of Dependencies** field in the **Outlook Synch. Entity** window has changed, and now it shows the number of dependencies you have specified.

**NOTE:** If a synchronization entity assigned to a synchronization user has dependencies, you will not be able to specify Outlook collections to be synchronized for that synchronization entity; you must also assign dependent synchronization entities to the same synchronization user. For more about configuring dependencies, refer to the “Defining a Synchronization User” demonstration.

Now, it is necessary to map supplementary table fields to Outlook collection element properties. To do so, proceed to the following steps:
1. Go back to the **Outlook Synch. Entity** window for the synchronization entity that you are setting up.

2. On the **Lines** FastTab, select a line with the supplementary table and Outlook collection you specified and click **Actions > Line > Fields**.

The **Outlook Synch. Fields** window appears. The process of mapping supplementary table fields to Outlook collection element properties is similar to the process of mapping the master table fields to the Outlook item properties. To continue setting up synchronization, do the following:

3. To specify a field that will be mapped to an Outlook item property, in the **Outlook Synch. Fields** window, click the AssistButton next to the **Field No.** field and select the field.

**NOTE:** If the **Table No.** field is empty when you select a field name, the program suggests that you select a field from the list of fields of the supplementary table that you specified in the **Table No.** field on the **Lines** FastTab of the **Outlook Synch. Entity** window.

There may be a situation when the field that you want to synchronize is absent in the table that you specified in the **Table No.** field on the **Lines** FastTab of the **Outlook Synch. Entity** window. In that case, that field can be retrieved from another table using a table relation. You can specify that table in the **Table No.** field.

4. To specify the table in the **Table No.** field, in the **Outlook Synch. Fields** window, click the AssistButton next to the **Table No.** field.

5. In the **Outlook Synch. Table List** window, select a table and click **OK**. The **Table Name** field is filled in automatically.

6. To set up table relations, click the **Table Relation** field. The **Outlook Synch. Filters – Table Relation** window appears. Fill in the fields here just as you did when setting up table relations between the master table and a supplementary table for Level 1 synchronization. When done, click **OK**.

7. In the **Outlook Property** field of the **Outlook Synch. Fields** window, click the AssistButton and select the Outlook collection element property that will be synchronized with the selected Microsoft Dynamics NAV table field. Other fields in this window are optional and can be left without changing.

8. Click **OK** to apply your changes.

In the **Outlook Synch. Fields** window, the **Search Field** field is used for defining which Outlook collection element property must be used as a search field to search for depending entities.

When a new collection element is added for the Outlook item, the program is trying to find an Outlook item that corresponds to that collection element in the
synchronization folders that you specify. It uses the Outlook item property marked as search field for the search.

For instance, whenever a new recipient is added to an Outlook appointment item, the program is searching for the Outlook contact item associated with this recipient by its Address property in the synchronization folder that stores Outlook contacts.

If the Outlook contact item is found, it is then sent to Microsoft Dynamics NAV during synchronization process along with the recipient. This way, Microsoft Dynamics NAV can synchronize dependent synchronization entities while synchronizing collection elements.

To define which Outlook collection element property must be used as a search field for searching depending entities, select the Search Field check box next to the relevant Outlook Property field.

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**NOTE:** You can specify fields that can be used as search fields only while setting up Level 2 synchronization.

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**Outlook Synchronization User Roles**

For each table in Microsoft Dynamics NAV that takes part in synchronization, synchronization user roles determine what specific actions are permissible for the user. In other words, the user can read, insert, modify, or delete entries in the synchronization related Microsoft Dynamics NAV tables based on the permissions available with a specific role.

In Outlook synchronization, there are three roles:

- User
- Power User
- Administrator

**User**

A user is a role whose permissions are limited to viewing the settings of the synchronization and actually performs synchronization of entities. Under this role, the user cannot create, change, or remove any synchronization related settings.

**Power User**

In contrast to the user role, a power user can change another user's synchronization preferences in Microsoft Dynamics NAV. The power user can only operate with the user setup functionality.
Administrator

An administrator has the ability to define the synchronization users and change the synchronization entities. For more information about these activities, refer to the “Defining a Synchronization User” demonstration and “Levels of Synchronization” topic in this chapter.

NOTE: All scenarios that relate to setting up synchronization entities and synchronization users on the Microsoft Dynamics NAV side, can be fulfilled only by a power user or an administrator.

Demonstration – Defining a Synchronization User

In this demonstration, an administrator specifies a set of entities that the synchronization user can work with and defines in what direction the user can synchronize data. A user selected for synchronization must already have a Windows login registered in Microsoft Dynamics NAV.

Follow these steps:

1. In the navigation pane, click Departments > Administration > Application Setup > Microsoft Office Outlook Integration > Outlook Synch. User Setup. The list of Outlook synchronization users appears.

2. In the Action Pane, click New to create a new synchronization user. The Outlook Synch. User Setup window appears.

3. In the User ID field, click the AssistButton and select the user. This user must already be registered in the system and have a valid Windows login.

4. To specify synchronization entities for this user, in the Outlook Synch. User Setup window, click the AssistButton next to the Synch. Entity Code field and select an entity. The Description field
is filled in automatically with the description of the selected synchronization entity.

5. In the **Synch. Direction** field, click the AssistButton to select the direction of synchronization: Bidirectional, Microsoft Dynamics NAV to Outlook, or Outlook to Microsoft Dynamics NAV.

FIGURE 12.17 THE SYNCHRONIZATION USER IS SET UP

6. To specify which Outlook collections you want to be synchronized, in the **No. of Elements** field, click the number. The **Outlook Synch. Setup Details** window appears.

FIGURE 12.18 SPECIFYING OUTLOOK COLLECTIONS FOR SYNCHRONIZATION
7. In the Action Pane of this window, click **New** to assign an Outlook collection that you want to take part in the synchronization process.

8. Click the **Outlook Collection** field on the first empty line. The **Outlook Synch. Lookup Names** window appears.

![Outlook Synch. Lookup Names window](image)

**FIGURE 12.19 SELECTING OUTLOOK COLLECTION**

9. Select an Outlook collection that you want to take part in the synchronization process and click **OK**.

The collection is not chosen, however, and the program responds with an error message which informs that this collection is based on entities that have not been set up for synchronization for the current synchronization user. The system administrator stops this procedure and sets up the required entities for the current user.

The administrator views what dependencies exist for the Recipients collection. To view dependencies, follow these steps:

1. Open the list of the synchronization entities. In the navigation pane, click **Departments > Administration > Application Setup > Microsoft Office Outlook Integration > Outlook Synch. Entities**.
2. Because for the synchronization user the APP entity was specified, browse to the APP entity and open its card.
3. On the **Lines** FastTab of the window, go to the **Outlook Collection** field with Recipients.
4. Click **Actions > Line > Dependencies**. The **Outlook Synch. Dependencies** window opens.
This window displays a list of entities that relate to the synchronization entity.

The administrator sets up the following entities to be synchronized for the current synchronization user as well:

- **CONT_COMP**: This entity is required for synchronizing Microsoft Dynamics NAV contacts of the Company type.
- **CONT_PERS**: This entity is required for synchronizing Microsoft Dynamics NAV contacts of the Person type.
- **CONT_SP**: This entity is required for synchronizing Microsoft Dynamics NAV salespeople.

As the administrator, you perform the following procedure to set up entities to be synchronized:

1. Open the **Outlook Synch. User Setup** window.
2. Click **New** to create a new entry for the same synchronization user.
3. In the **Synch. Entity Code** field, click the AssistButton and select the CONT_COMP entity.

Repeat steps 2 and 3 for the CONT_PERS and CONT_SP entities.

With the dependencies added to the synchronization process, the administrator returns to the procedure of setting up the recipients for the APP synchronization entity:

1. In the **Outlook Synch. User Setup** window, select the synchronization user that you set up with the APP synchronization entity assigned.
3. Click within the **Outlook Collection** field on the first entry. The **Outlook Synch. Lookup Names** window opens.

   ![Outlook Synch. Lookup Names](image1)

   **FIGURE 12.21 SETTING UP RECIPIENTS**

4. Select the **Recipients** entry and click **OK**. Now the **Outlook Synch. Setup Details** window contains the name of the Recipients collection in the **Outlook Collection** field.

   ![Outlook Synch. Setup Details](image2)

   **FIGURE 12.22 THE OUTLOOK COLLECTION SELECTED FOR SYNCHRONIZATION**

*NOTE*: Other Outlook collections that you did not select will not take part in synchronization.

*If no Outlook collection is selected for synchronization, the program will perform only Level 1 synchronization. To read more about levels of synchronization, refer to the “Levels of Synchronization” topic in this chapter.*

5. In the **Outlook Synch. Setup Details** window, click **OK**.
6. The number in the **No. of Elements** field of the **Outlook Synch. User Setup** window is changed since you added the Recipients Outlook collection.

![Outlook Synch. User Setup window](image)

**FIGURE 12.23 THE OUTLOOK COLLECTION SELECTED FOR SYNCHRONIZATION**

7. To specify a condition regarding what data the user wants to be synchronized from Microsoft Dynamics NAV to Outlook, click the AssistButton next to the **Condition** field. The **Outlook Synch. Filters – Condition** window appears.

8. Click the AssistButton next to the **Field Name** field.

9. In the **Outlook Synch. Table Fields** window, select, for example, a salesperson and click **OK**.

10. Click the AssistButton next to the **Type** field and select **CONST**.

11. In the **Value** field, you can specify the salesperson code **AH**.

**NOTE**: In a real-world scenario, a synchronization user ID and the salesperson code are the same.

The final filtering expression is displayed in the **Filtering Expression** field.

![Filtering Expression window](image)

**FIGURE 12.24 DEFINING CONDITIONS**
NOTE: The meaning of the filter you just set up for this entity is that during synchronization, Annette Hill will receive only her to-dos.

If you leave the Condition field empty, all to-dos from Microsoft Dynamics NAV will be synchronized with AH’s Outlook appointments (as you selected the APP entity that relates to appointments on the Outlook side). For contacts, you can leave the Condition field empty to have all Microsoft Dynamics NAV contacts in your Outlook. If you want, you can apply the same condition to the contacts.

Microsoft Dynamics NAV items that do not meet the specified condition will not take part in synchronization.

12. Click OK to go back to the Outlook Synch. User Setup window.

FIGURE 12.25 A CONDITION DEFINED

NOTE: While selecting synchronization entities in the Outlook Synch. User Setup window, you can select only among existing ones with their predefined settings. You can create another synchronization entity and specify exactly what you want to be synchronized. For more information about creating a synchronization entity, refer to the “Set Up Level 1 Synchronization” demonstration.

As soon as the synchronization starts, the program creates an internal document to store these correlations. This document is called a mapping schema.

The Microsoft Dynamics NAV Synchronization add-in that is installed on the Outlook side receives the mapping schema and keeps it in the isolated storage to make the entity mapping available to Outlook. To find out more about Microsoft Dynamics NAV Synchronization add-in, refer to the “Microsoft Dynamics NAV Synchronization Add-in” topic in this chapter.

For convenience, the Microsoft Dynamics NAV synchronization includes a set of default entity mappings. As in Outlook Integration for version 4.0 of Microsoft Dynamics NAV, the following mappings are already configured:
Chapter 12: Outlook Synchronization

<table>
<thead>
<tr>
<th>Microsoft Dynamics NAV</th>
<th>Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts of the Person and Company types</td>
<td>Contacts</td>
</tr>
<tr>
<td>Salespeople</td>
<td>Contacts</td>
</tr>
<tr>
<td>To-dos</td>
<td>Tasks</td>
</tr>
<tr>
<td>Meetings</td>
<td>Appointments</td>
</tr>
</tbody>
</table>

**NOTE:** Defining a synchronization user is one of the two crucial steps in initiating synchronization. Another step is registering table fields that are participating in the synchronization process within Microsoft Dynamics NAV. For more information about registering field, refer to the “Registering Synchronization Entities” topic in this chapter.

**Registering Synchronization Entities**

Once you have finished setting up Level 1 and Level 2 of synchronization, you must run the Outlook Synch. Change Log Set. batch job. This batch job makes the Microsoft Dynamics NAV Change Log functionality track all the fields that you have specified during setup. This step is essential for Outlook Synchronization. If you omit this step – no changes will be detected in Microsoft Dynamics NAV and consequently nothing will be synchronized with Outlook.

The **Outlook Synch. Change Log Set.** request page can be accessed either from the **Outlook Synch. Entity** or from the **Outlook Synch. User Setup** window by clicking Related Information > Synch. Entity > Register in Change Log Setup.

**Lab 12.1 – Map the Customer Table to Outlook Contact Item**

In this lab, you will practice adding a field for a master table and an Outlook collection property to participate in synchronization.

**Scenario**

As a sales manager, you want to specify an additional field to be synchronized on the Level 1 of synchronization.

**Challenge Yourself**

Add the **Country/Region** field for the Level 1 of synchronization where Customer is a master table. Map this field to the corresponding property of the Outlook item.

**Need a Little Help?**

1. Browse to the entity you created, which is set up for synchronizing the Customer table from the Microsoft Dynamics NAV side with the Contact item from the Outlook side.
2. Add the **Country/Region** field for the master table and specify the corresponding Outlook item property for synchronization. Be sure to add the **Country/Region** field on the fourth line of the window.

**Step by Step**

Browse to the entity you created, which is set up for synchronizing the Customer table from the Microsoft Dynamics NAV side with the Contact item from the Outlook side.

1. In the navigation pane, click **Departments > Administration > Application Setup > Microsoft Office Outlook Integration > Outlook Synch. Entities**.
2. On the list of the Outlook synchronization entities, select the entity for which you want to add a field for the master table and open its card.

Add the **Country/Region** field for the master table and specify the corresponding Outlook item property for synchronization.

1. To add a field for the master table, in the **Outlook Synch. Entity** window, click **Related Information > Synch. Entity > Fields**. The **Outlook Synch. Fields** window appears.

![FIGURE 12.26 MAPPING MASTER TABLE FIELDS TO OUTLOOK ITEM PROPERTIES](image)

2. Go to the fourth line and click **New**.
3. In the **Table No.** field, click the AssistButton and select 9 for the **Country/Region** table. From this table, select the **Country/Region** field. Click **OK**.
4. Define table relations between the selected and the master tables by clicking the AssistButton next to the **Table Relation** field. The **Outlook Synch. Filters – Table Relation** window appears.
5. Click the AssistButton next to the **Field Name** field to open the list of fields for the supplementary table selected on the **Lines** FastTab.

6. In the **Outlook Synch. Table Fields** window, select the **Code** field and then click **OK**.

7. In the **Outlook Synch. Filters** window, click the AssistButton next to the **Type** field and select **FIELD**.

8. Click the AssistButton next to the **Value** field. This will open the **Outlook Synch. Table Fields** window with a list fields of the master table selected in the **Table No.** field on the **General** FastTab of the **Outlook Synch. Entity** window.

9. Select field 35, **Country/Region**, and then click **OK** to insert this field in the **Value** field. The final filtering expression will be displayed in the **Filtering Expression** field.

10. When you are finished with the filters, click **OK** to apply them and go back to the **Outlook Synch. Fields** window.
11. Click the AssistButton next to the Field No. field. In the Outlook Synch. Table Fields window, select field 2, Name and click OK. The Field Name field is filled in automatically.

12. In the Outlook Property field of the Outlook Synch. Fields window, click the AssistButton and select the BusinessAddressCountry property. The Outlook Synch. Fields window now looks like the following figure.

![Outlook Synch. Fields window](image)

**FIGURE 12.29 NEW FIELD ADDED FOR SYNCHRONIZATION**

Now, one more Microsoft Dynamics NAV table and table field will be synchronized with the Outlook item property.

13. Click OK to apply your changes.

**Setting Up Outlook Synchronization on the Outlook Side**

To define the synchronization settings, specify troubleshooting options, and perform synchronization, the user appeals to the interface available in Outlook.

**Microsoft Dynamics NAV Synchronization Add-in**

The Microsoft Dynamics NAV Synchronization add-in is a key component of the synchronization setup process and the main user interface to control the settings of synchronization. This component also features a mechanism for the resolution of synchronization conflicts and errors. The Microsoft Dynamics NAV Synchronization add-in is installed at the Outlook side.

**Specifics in Installing Microsoft Dynamics NAV Synchronization Add-in**

The Microsoft Dynamics NAV Synchronization add-in contains the means necessary for setting up and adjusting synchronization options. The add-in is the only part of Outlook synchronization that users install on the Outlook side. The “Synchronization Add-in Options” topic will cover how to install, set up, and remove the Microsoft Dynamics NAV Synchronization add-in. The Microsoft
Dynamics NAV Synchronization add-in is a part of the Microsoft Dynamics NAV installation package and you must choose to install it.

![Microsoft Dynamics NAV Synchronization add-in](image)

**FIGURE 12.30 INSTALLING MICROSOFT DYNAMICS NAV SYNCHRONIZATION ADD-IN**

The procedure of installing the add-in component is part of the standard Microsoft Dynamics NAV installation.

After you install the add-in, the **Microsoft Dynamics NAV Synchronization** toolbar will appear in Outlook the next time that you start it.

**Synchronization Add-in Options**

This section covers all the settings and options available on the **Microsoft Dynamics NAV Synchronization** toolbar and in the **Settings** window used for adjusting the way synchronization is to be performed.

**Microsoft Dynamics NAV Synchronization Toolbar**

The **Microsoft Dynamics NAV Synchronization** toolbar makes it possible to do the following:

- Start synchronization.
- Set up synchronization options.
- Resolve synchronization conflicts and observe synchronization errors.
- Test the connection status.
The **Synchronize** button starts synchronizing the Outlook items that have not been synchronized since the last modification and items that have not been synchronized at all (new items).

The **Full Synchronization** button lets users synchronize all Outlook items that are stored in folders specified on the **Folders** tab of the **Settings** window. It also retrieves all Microsoft Dynamics NAV entities, not only those that were changed. Outlook items are not synchronized if no fields have changed since the last synchronization.

For example, full synchronization might be required when you first start using the synchronization feature and you want to transfer all Microsoft Dynamics NAV entities into Outlook, not only those that were changed there. By default, the **Full Synchronization** button cannot be seen. However, it can be added to the toolbar using the **Customize** tab of the **Settings** window.

**NOTE:** If a different custom toolbar called Microsoft Dynamics NAV Synchronization exists in your Outlook, it will be removed during the add-in installation. All buttons that were on that custom toolbar will be lost.

**Settings Window**

When a user clicks the **Settings** button, the **Settings** window appears, where synchronization and conflict resolution settings can be adjusted. This window contains five tabs:

- General
- Connection
- Folders
- Filters
- Customize

**General Tab**

The **General** tab controls the primary synchronization options. Here, the user can specify information about different aspects of the synchronization process. To define the behavior of the program in case a conflict occurs, the user must select a desirable option in the **Synchronization conflicts resolution** group.
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FIGURE 12.32 THE GENERAL TAB OF THE SETTINGS WINDOW

Connection Tab

The Connection tab contains options for setting up a server for communication between Outlook and Microsoft Dynamics NAV, in addition to the connection type to be used to interact with that server.

FIGURE 12.33 THE CONNECTION TAB

The following server options are available:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Dynamics NAV Server Tier</td>
<td>Communication will be performed through the Microsoft Dynamics NAV Server. If this option is selected, the user can adjust Web service settings.</td>
</tr>
</tbody>
</table>
Microsoft Dynamics NAV Database Server | Communication is performed through the Microsoft Dynamics NAV database server. If the user selects this option, it is possible to view the C/Front.NET related settings in the Connection Type area in this window.

Microsoft SQL Server | The SQL server will be responsible for communication. If you select this option, you will be able to select a Microsoft Dynamics NAV database name in the Connection Type area.

In the Company Name field, the user enters the name of the company that is involved in synchronization. The company must already be registered in Microsoft Dynamics NAV.

Folders Tab

To select the folders for synchronizing Outlook items with Microsoft Dynamics NAV entities and for storing already synchronized items, use the Folders tab. The controls in the Settings window are added dynamically, depending on the information about the synchronized entities that is retrieved from Microsoft Dynamics NAV Server. The server obtains information about the synchronized entities from the Outlook Synch. User Setup window. There must be a separate folder for each synchronization entity that the user defined in Microsoft Dynamics NAV. The labels for these controls correspond to the values of the Description field in the Outlook Synch. Entity window in Microsoft Dynamics NAV.

NOTE: Specifying folders is essential. If no folder is specified, the solution will not work.

Filters Tab

On the Filters tab, you can specify criteria to define more accurately the Outlook items that will be synchronized with Microsoft Dynamics NAV entities. The items sorted out will not be synchronized. The items that the user will apply filters to originate from the folders specified on the Folders tab.

Each item type has its own set of filters that can be edited in the Filter window. The user can click the Edit button on the Filters tab next to the filter to be modified.

The filter expressions are shown in the rows in the Do not synchronize items that match these criteria area. In this area, the user can delete excessive criteria or add more using the functionality available in the Define more criteria area in the Filter window.

Customize Tab

On the Customize tab, select which command buttons are available on the Microsoft Dynamics NAV Synchronization toolbar.
Synchronization Process

When all the settings in the Settings window are defined, you can run synchronization. You do this only on the Outlook side by clicking the Synchronize button on the Synchronization toolbar.

You can run synchronization manually any time you want to update information on Microsoft Dynamics NAV side and the Outlook side. Or you can have synchronization to run automatically in the predefined period of time. You specified this period in the Schedule automatic synchronization every … minutes field on the General tab of the Settings window in Outlook.

Synchronization is being performed according to the mapping schema retrieved from Microsoft Dynamics NAV. It contains Microsoft Dynamics NAV entities and respective Outlook items that must be synchronized.

While synchronization is being performed, you can view its progress in the Synchronization Progress window.

Synchronization Progress Window

The Synchronization Progress window shows the status of the synchronization being performed. By design, it is similar to the Send/Receive window available in Outlook.

The user accesses the Synchronization Progress window by clicking the Synchronize button on the Microsoft Dynamics NAV Synchronization toolbar.
NOTE: The Synchronization Progress window opens only if the Show synchronization progress check box on the General tab of the Settings window is selected and synchronization is run manually. If the Schedule automatic synchronization every … minutes check box is selected on the General tab of the Settings window and synchronization is started automatically, the Synchronization Progress window will not be shown.

If a user clicks the Synchronize button on the Microsoft Dynamics NAV Synchronization toolbar while the synchronization is already running in the background, the Synchronization Progress window pops up to display the current status of the synchronization.

In the Synchronization Progress window, the user can view details of the current synchronization process. Clicking the Details button reveals the synchronization status of:

- The synchronization process
- Outlook and Microsoft Dynamics NAV items
- Finalization

When the synchronization process is complete, the Synchronization Progress window displays the summary of the performed actions.

NOTE: To be able to view the synchronization summary, the Show synchronization summary check box in the Settings window must be selected.

Demonstration – Synchronize Automatically

A sales manager has to synchronize Outlook items and Microsoft Dynamics NAV entities. The Microsoft Dynamics NAV entities are contacts of the Company type, meetings, and tasks. The synchronization options must provide automatic running of synchronization every 60 minutes.

If a synchronization conflict appears during synchronization (meaning that both corresponding and previously synchronized Microsoft Dynamics NAV entity and Outlook item were changed), all Microsoft Dynamics NAV entities must be replaced with Outlook items. For each folder in Outlook where synchronized items are to be stored, apply a filter with conditions that limit the number of Outlook items that will be synchronized.

To synchronize items, you as a sales manager must do the following:

1. Click the Settings button on the Microsoft Dynamics NAV Synchronization toolbar. This opens the Settings window.
2. On the General tab, fill in the available fields in the following way:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule automatic</td>
<td>Select this field. Put 60 as the frequency</td>
</tr>
<tr>
<td>synchronization every</td>
<td>for automatic synchronization</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Show synchronization progress</td>
<td>Select this check box.</td>
</tr>
<tr>
<td>Show synchronization summary</td>
<td>Select this check box.</td>
</tr>
<tr>
<td>Synchronization conflicts resolution</td>
<td>Select the Replace Microsoft Dynamics NAV records with Outlook items option.</td>
</tr>
</tbody>
</table>

3. On the Connection tab, fill in the available fields as follows:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server Type</td>
<td>Select the Microsoft Dynamics NAV Service Tier option</td>
</tr>
<tr>
<td>Connection Type</td>
<td>Web Service</td>
</tr>
<tr>
<td>Company Name</td>
<td>Enter the name of the demo company: CRONUS International Ltd.</td>
</tr>
</tbody>
</table>

4. Click the Folders tab to assign folders for storing synchronized data. On this tab, fields that have folder names as captions are available.

5. To define a path of each of these folders, click the AssistButton next to the field. The Select Folder window appears.
   - For contacts of the Company type select Contacts.
   - For the Meeting select the Appointments folder.
   - For Tasks select Tasks.

6. In the Filters tab, specify filters for each entity that are to be synchronized. To start defining filters, click Edit next to contacts of the Company type. The Filter window appears. Use the information in the following table.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Name</td>
<td>Categories</td>
</tr>
<tr>
<td>Condition</td>
<td>Contains</td>
</tr>
<tr>
<td>Value</td>
<td>Important</td>
</tr>
</tbody>
</table>

7. Click OK to apply the filter.

8. On the Settings window, click Edit next to the Meeting folder label. In the Filter window, select the following values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Name</td>
<td>Subject</td>
</tr>
<tr>
<td>Condition</td>
<td>Contains</td>
</tr>
<tr>
<td>Value</td>
<td>Outlook</td>
</tr>
</tbody>
</table>

9. Click OK.

10. On the Settings window, click Edit next to the Tasks folder label. In the Filter window, select the following values:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
</table>
11. After you have set up all the options necessary for completing the demonstration, click OK to apply the changes. The program will run synchronization in every 60 minutes and will resolve synchronization conflicts by replacing all Microsoft Dynamics NAV entities with Outlook items.

**Lab 12.2 – Synchronize Manually**

In this lab, you will practice running synchronization manually. This lab is based on the results of the Synchronize Automatically demonstration.

**Scenario**

Synchronize Outlook items and Microsoft Dynamics NAV objects manually instead of automatically.

**Challenge Yourself**

The sales manager creates an appointment, a task, and a contact in Outlook to synchronize with the corresponding Microsoft Dynamics NAV objects by performing the following:

1. Create an appointment.
2. Make it appear in the calendar.
3. Start the synchronization manually.
4. Check synchronization results.

**Need a Little Help?**

1. Specify the exact subject, location, label, and time for the new appointment. Make the appointment appear in the calendar as the out of office time.
2. Start the synchronization manually, instead of waiting until automatic synchronization will run.
3. Verify that the items in the folders specified in the Settings window are synchronized with Microsoft Dynamics NAV objects.

**Step by Step**

*Specify the exact subject, location, label, and time for the new appointment. Make the appointment appear in the calendar as the out of office time.*

1. In Outlook, open the folder that was specified for storing calendar items and then click New > Appointment. Use the information in the following table.
Chapter 12: Outlook Synchronization

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Meeting with Customers (with Outlook as their subjects)</td>
</tr>
<tr>
<td>Location</td>
<td>Enter where this appointment is to occur</td>
</tr>
<tr>
<td>Label List</td>
<td>Business</td>
</tr>
<tr>
<td>Start Time</td>
<td>The twelfth of the current month</td>
</tr>
<tr>
<td>All Day Event</td>
<td>Select</td>
</tr>
<tr>
<td>Show As</td>
<td>Out of Office</td>
</tr>
</tbody>
</table>

2. In the Tasks window, open the folder that was specified for storing tasks and then click New > Task. Fill in all the necessary fields to create the task.

3. In the Contacts window, open the folder that was specified for storing contacts and then click New > Contact. Fill in all the necessary fields to create the contact.

Start the synchronization manually, instead of waiting until automatic synchronization will run.

1. Click the Settings button on the Microsoft Dynamics NAV Synchronization toolbar to open the Settings window.
2. On the General tab, select the Show synchronization summary check box. This option makes sure that after you perform synchronization, the Synchronization Summary window opens and displays what items have been synchronized.

According to the settings made in the Synchronize Automatically demonstration, synchronization must run every 60 minutes. Clear the Schedule automatic synchronization every … minutes check box to run synchronization manually.

3. Click OK to apply your changes and close and window.
4. Click the Synchronize button on the Microsoft Dynamics NAV Synchronization toolbar.

Verify that the items in the folders specified in the Settings window are synchronized with Microsoft Dynamics NAV objects.

5. Open the Synchronization Summary window to view the number of items that have been synchronized.
6. Verify that the items you have created in Outlook appeared in Microsoft Dynamics NAV.

Troubleshooting

You can view the list of the synchronization errors and conflicts that occurred during synchronization. To make this information available, you open the Troubleshooting window by clicking the Troubleshooting button on the Microsoft Dynamics NAV Synchronization toolbar.
One of two outcomes after the synchronization is performed is possible:

- No errors or conflicts have been logged. In this case, the **Troubleshooting** button is white in color.
- At least one conflict or error has been logged. The **Troubleshooting** button is red.

In both cases, if you click the **Troubleshooting** button, the **Troubleshooting** window appears, with or without errors and conflicts.

The **Troubleshooting** window contains two tabs:

- **Errors** – Displays synchronization errors.
- **Conflicts** – Displays synchronization conflicts.

**Errors Tab**

The **Errors** tab displays the errors occurred during synchronization process. New entries are added, for example, as a consequence of an attempt to synchronize items from a folder that has been deleted. After every synchronization session, the program updates the list of errors on the **Errors** tab.

After correcting an error either on the Outlook or Microsoft Dynamics NAV side, the user can delete the corresponding error record manually by clicking the **Delete** button on the **Errors** tab toolbar. The **Delete All** button makes it possible to delete all the records in the error log.

![FIGURE 12.35 SYNCHRONIZATION ERRORS](image)

**Technical problems like Outlook exceptions or operating system errors that occurred during synchronization are stored in the log file created in the Outlook folder and are often not displayed on the Errors tab. This log is intended for the system administrators.**

**NOTE:** New errors make the list bigger even if the identical entries already exist – the same error can be listed more than once.
Conflicts Tab

The **Conflicts** tab contains information about the mapped Outlook items and Microsoft Dynamics NAV entities that have been modified after the previous synchronization, both on the Microsoft Dynamics NAV and Outlook side. The entries displayed on the **Conflicts** tab show which objects cannot be synchronized automatically, and the user has to decide how to resolve the conflict.

![FIGURE 12.36 THE CONFLICTS TAB](image)

If the program registers any conflicts, the list of conflicts is updated.

---

**NOTE**: Records of synchronization conflicts will be stored and then displayed on the **Conflicts** tab if the **Resolve conflicts manually** option is selected on the **General** tab of the **Settings** window. If you select any other option for conflict resolution, synchronization conflicts will be resolved automatically according to the selected option and therefore will not be logged.

---

**NOTE**: Conflicts that remained from the previous synchronization are deleted.

Lab 12.3 – Resolve Synchronization Conflicts

In this lab, you will practice resolving synchronization conflicts that occur. This lab is based on the result of Lab 12.2.

**Scenario**

The sales manager needs to manually resolve the conflicts that occurred during synchronization.

The appointment created in Lab 12.2 now exists in the user’s Outlook. And now the sales manager calls to that user and asks him to postpone an appointment until the 14th of the current month. However, by mistake the user changed the
date to the 13th. In his turn, the sales manager also changes the time on the corresponding to-do in Microsoft Dynamics NAV.

**Challenge Yourself**

Resolve the logged conflict in favor of information provided by the sales manager.

**Step by Step**

1. In Outlook, click **Settings** on the Microsoft Dynamics NAV Synchronization toolbar. The **Settings** window opens.
2. On the **General** tab, select the **Resolve conflicts manually** option in the **Synchronization conflicts resolution** area. This option signifies that each synchronization conflict will be stored in the troubleshooting log.
3. Click **OK** to apply changes and close the **Settings** window.
4. In Outlook, open the appointment that you created for the **Synchronize Manually** demonstration. Change the date to the 13th of this month and save the appointment.
5. Click **Synchronize** on the Microsoft Dynamics NAV Synchronization toolbar to run synchronization. The **Troubleshooting** button turns to red, which means that synchronization conflicts occurred and have been logged.
6. Click **Troubleshooting** on the Microsoft Dynamics NAV Synchronization toolbar. The **Troubleshooting** window appears.
7. Go to the **Conflicts** tab to view the synchronization conflict.
8. To view details of this conflict, double-click the appropriate entry. The **Conflict Details** window appears and shows what data has been mismatched during synchronization. In this case it will be dates.
9. Click **OK** to close the window.
10. To resolve the conflict in favor of the sales manager, select the conflict and then click the **Replace Outlook Item** button on the toolbar.
11. Click **OK** to close the **Troubleshooting** window. Click **OK** to apply changes on the confirmation message that appears.
12. Open the appointment that you synchronized with Microsoft Dynamics NAV to notice that the date has been changed to the 14th.

**Points to Remember**

When synchronizing such different applications as Microsoft Dynamics NAV and Outlook, the user must consider the specifics of each. This section helps avoid many pitfalls of synchronization.

**Working with Contacts**

When working with contacts, remember the following:
Salespeople can only be created in Microsoft Dynamics NAV. Because of functional limitations imposed by Microsoft Dynamics NAV for adding salespeople (absence of the No. Series functionality), whenever an Outlook contact is to be synchronized with a Microsoft Dynamics NAV salesperson – the latter must be created in Microsoft Dynamics NAV as a salesperson and then synchronized to Outlook. After the salesperson is created in this manner, its properties can be synchronized both directions.

Make sure that the Full Name field is empty on the Contact Card window in Outlook (or it contains the same value as the Company field) for contacts that are to be synchronized with Microsoft Dynamics NAV contacts of the Company type. Since the name of contacts of the Company type is always the same as the company name, the related Outlook contacts either must not have the full name specified or the full name must be identical to the value in the Company field. If the user specifies the full name different from the company name, the data in Microsoft Dynamics NAV can become inconsistent.

As you set up synchronization and run the Outlook Synch. Change Log Set. batch job the first time, you must reopen the Microsoft Dynamics NAV application. This enables the program to log changes made in synchronization entities. Registering entities in the change log is necessary to make them available for the Outlook Synchronization.

To make sure that the e-mail address of a newly synchronized salesperson is stored in the correct format, define the e-mail address in Outlook. Because of the specifics of storing e-mail addresses at the Exchange server in Outlook, the correct e-mail format will be applied only when the address is specified for the contact in Outlook. Therefore, if a Microsoft Dynamics NAV salesperson is synchronized for the first time, leave its e-mail address empty, synchronize the contact with Outlook, add the e-mail address to the contact in Outlook and synchronize the change back to Microsoft Dynamics NAV.

Avoid starting names of companies with the word “The”. Because of the specifics of Outlook, the word “The” that starts a company name is moved to the end of the name (e.g. “Cannon Group, The”). Therefore the synchronization will fail because the related Microsoft Dynamics NAV contact of the Company type will not be found.

Working with Tasks and Appointments

The following recommendations will facilitate working with tasks and appointments:

The name of the actual Outlook user (the synchronization user) must coincide with the name of the salesperson in Microsoft Dynamics NAV. To synchronize tasks and appointments, the Outlook user must be the salesperson in Microsoft Dynamics NAV. The name and e-
mail address must be identical in both applications. Otherwise the synchronization fails.

When you create an appointment or task, select related contacts and recipients only from the folders defined in the synchronization setup. If contacts and recipients are selected from other folders, these appointments and tasks will not be synchronized.

- Outlook tasks can be synchronized with Microsoft Dynamics NAV to-dos either of the Phone Call or Blank type. To-dos of these types can have only one contact assigned. If more than one contact is specified for the corresponding Outlook task, the program automatically chooses the last and ignores the rest.

- If you intend to use a contact as a related contact in tasks and appointments, do not fill in the Title field (with Mr. or Mrs.) in the Check Full Name window accessed by clicking the Full Name button in the Contact window in Outlook. Otherwise, the program may not find this contact during synchronization.

- When synchronizing Outlook tasks, select only contacts that are already synchronized with Microsoft Dynamics NAV contacts of the Company or Person type (not Salespeople). Microsoft Dynamics NAV allows only contacts of the Person or Company type to be assigned a to-do (the Phone Call or Blank type).

- Tasks assigned to other users, but stored in the synchronization folder of the Outlook synchronization user are not synchronized.

- Appointments stored in the synchronization folder but containing the organizer different from the Outlook synchronization user are not synchronized because of Outlook limitations.

- Make sure that the contact added manually to tasks and appointments is recognized as a valid Outlook contact and is stored in the synchronization folders. If you insert a contact manually, you must check if the specified value is the name of a valid Outlook contact (using the Check Names button available on the Tools menu). Otherwise the contact is not synchronized.

**General Settings**

When synchronizing data, consider the following Outlook specifics:

- The synchronization folder moved to the Deleted Items folder in Outlook can still be used during synchronization. To remove a synchronization folder the user must delete it completely from the Deleted Items, too. Then it is necessary to run the synchronization and restart Outlook for the changes to take effect.

- Avoid duplicates in the fields marked as Search Fields in the synchronization entity settings in Microsoft Dynamics NAV. Such fields are used for finding synchronization entities. Otherwise Outlook only synchronizes the first one it finds, ignoring the other ones. For example, as the related contacts are identified by their names, there must not be two such contacts that have the same name.
Multiple profiles in Outlook are not supported. If you have more than one Outlook profile connected to different Exchange servers, and one of them is prepared from synchronization, then all profiles will have identical synchronization settings (except the folders selected for storing synchronized items).

Do not change the system time manually. The current version of synchronization supports only automatic time changes caused by a time zone change or summer/winter time change. Therefore, it is not recommended to change the system time manually.

Adjust the time span between automatic synchronizations according to the number of objects that must be synchronized. If many entities are expected to be synchronized, increase the scheduled period of time that needs to elapse between synchronization.

Summary

Microsoft Dynamics NAV offers a feature for synchronizing its entities with corresponding Outlook items: Outlook Synchronization. You can choose among three synchronization directions: from Microsoft Dynamics NAV to Outlook, from Outlook to Microsoft Dynamics NAV, or bidirectional.

The synchronization entities are set up on Microsoft Dynamics NAV side. Synchronization becomes available for a synchronization user when:

- The synchronization entities are created in Microsoft Dynamics NAV
- The needed synchronization entity is added for the user in the Outlook Synch. User Setup window.
- Table fields participating in synchronization are registered.

On the Outlook side, you can run the synchronization process and view synchronization errors and conflicts that occur.
Test Your Knowledge

1. What does Level 1 synchronization include?

2. True or False:
   In Microsoft Dynamics NAV, a synchronization entity can be represented by tables, fields, and sets of filtered entries.

3. Complete the following sentence:
   Directions of synchronization can be from __________ to, from __________ to, and __________.

4. Which of the following Outlook objects can be mapped to synchronization entities in Microsoft Dynamics NAV? (Select all that apply.)
   ( ) Items
   ( ) Letters
   ( ) Collections
   ( ) Properties

5. Where can you view the list of synchronization errors?
6. True or False:
The **Synchronization Progress** window is always open if the **Show synchronization progress** check box is selected.
Quick Interaction: Lessons Learned

Take a moment to write down three Key Points you have learned from this chapter:

1. 

2. 

3. 

Solutions

Test Your Knowledge

1. What does Level 1 include?

MODEL ANSWER:

On the Level 1, Microsoft Dynamics NAV records are to be synchronized with Outlook items.

Along with tables and items, their fields and properties are synchronized.

2. True or False:

   In Microsoft Dynamics NAV, a synchronization entity can be represented by tables, fields, and sets of filtered entries.

MODEL ANSWER:

True: In Microsoft Dynamics NAV, a synchronization entity can be represented by tables, fields, and sets of filtered entries.

3. Complete the following sentence:

   Directions of synchronization can be from ______________ to, from ______________ to, and ______________.

MODEL ANSWER:

Directions of synchronization can be from Microsoft Dynamics NAV to Outlook, from Outlook to Microsoft Dynamics NAV, and bidirectional.

4. Which of the following Outlook objects can be mapped to synchronization entities in Microsoft Dynamics NAV?

   (√) Items
   ( ) Letters
   (√) Collections
   (✓) Properties

5. Where can you view the list of synchronization errors?

MODEL ANSWER:

The list of synchronization errors that occur during synchronization can be viewed on the Outlook side.

6. True or False:

   The Synchronization Progress window is always open if the Show synchronization progress check box is selected.

MODEL ANSWER:
False: If the **Schedule automatic synchronization every … minutes** check box is selected on the **General** tab of the **Settings** window and synchronization is started automatically, the **Synchronization Progress** window will not be shown.