

Plug-In Manager

The Natural Studio user interface is extensible by plug-ins. Part of the Natural Studio functionality itself is delivered in the form of plug-ins.

Once a plug-in is installed in Natural Studio, it needs not to be active and available in every Natural session and for every user. Which plug-ins are actually active and visible is configurable on a per user basis. The information which plug-ins are active for a user is stored in the user's profile in the registry. The user selects plug-ins for activation and deactivation with the Plug-in Manager.

The activation of plug-ins can also be entirely disabled and enabled on user basis. Initially, plug-in activation is disabled. In order to work with plug-ins, you must first enable plug-in activation.

Note:

A sample plug-in is delivered in source code in the library SYSEXPLG. With the current version of Natural Studio the plug-in interface is not released for external use. The interface will be further extended and possibly modified in upcoming versions. With the current version, you are therefore not recommended to implement your own plug-ins.

The following topics are covered:

- Purpose of the Plug-In Manager
 - Enabling Plug-In Activation
 - Activating the Plug-In Manager
 - Deactivating the Plug-In Manager
 - Using the Plug-In Manager
 - Natural Studio Sample Plug-In
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Purpose of the Plug-In Manager

The Plug-in Manager lists all installed plug-ins and shows their name, type, activation status and activation mode. In addition, it enables you to activate and deactivate installed plug-ins in order to configure your personal development environment.

Enabling Plug-In Activation

The activation of plug-ins can be entirely enabled and disabled on a per user basis. As default, plug-in activation is disabled. In order to work with plug-ins, you must first enable plug-in activation.

To enable Plug-in activation

- Check the checkbox "Enable plug-ins" in **Tools > Options > Workspace**.

To disable Plug-In activation

- Uncheck the checkbox "Enable plug-ins" in **Tools > Options > Workspace**.

Activating the Plug-In Manager

The Plug-in Manager is itself implemented as a plug-in written in Natural. By definition, the Plug-in Manager itself cannot be dynamically activated. If plug-in activation is enabled, the Plug-in Manager is instead always available under the fixed item **Plug-in Manager** in the **Tools** menu bar.

Deactivating the Plug-In Manager

The Plug-in Manager is included in the list of plug-ins where it can be deactivated like any other plug-in (see To deactivate a plug-in).

But, of course, it can then not be reactivated manually in the same Natural Studio session, because in order to do so, you would need an active Plug-in Manager. However, as its activation mode is Automatic, it will be activated again at the start of the next Natural Studio session if plug-in activation is enabled.

Using the Plug-In Manager

If you do not see the **Tools** menu bar, first make it visible by selecting **Tools > Customize > Toolbars**.

▶ To start the Plug-in Manager

- Click its icon in the **Tools** menu bar.

The Plug-in Manager displays the list of plug-ins available in an installation and shows them in a list. The plug-ins that are already active for you are marked. You may activate or deactivate plug-ins.

Using context menu commands, you can modify the activation status and mode of individual Plug-ins.

▶ To activate a plug-in

1. Select the plug-in in the list.
2. Click the right mouse button.
3. From the resulting context menu, choose **Activate**.

▶ To deactivate a plug-in

1. Select the plug-in in the list.
2. Click the right mouse button.
3. From the resulting context menu, choose **Deactivate**.

▶ To cause the plug-in to be activated each time you start Natural Studio

1. Select the plug-in in the list.
2. Click the right mouse button.
3. From the resulting context menu, choose **Activation mode > Automatic**.

▶ To cause the plug-in to stay inactive when you start Natural Studio

1. Select the plug-in in the list.
2. Click the right mouse button.
3. From the resulting context menu, choose **Activation mode > Manual**.
You can later activate the plug-in manually using the Plug-in Manager.

Natural Studio Sample Plug-In

- Purpose of the Natural Studio Sample Plug-In
- Activating the Sample Plug-In
- Using the Sample Plug-In
- Deactivating the Sample Plug-In

Purpose of the Natural Studio Sample Plug-In

The Natural Studio Sample Plug-in demonstrates how the Natural Studio metastructure can be extended with plug-ins that define your own object types, assign commands to them and display objects as nodes in tree views and list views.

The sample plug-in shows information about the Natural User Exit subprograms contained in the library SYSEXT. It allows users to list their documentation and to execute a test program for each of them.

The source code of the sample plug-in (contained in the library SYSEXPLG) is intended to give an impression of how plug-ins can be implemented with Natural Studio. With the current version of Natural Studio the plug-in interface itself is not released for external use. With this version, it is therefore not recommended to use the interface to implement your own plug-ins.

Activating the Sample Plug-In

The sample plug-in is installed automatically during Natural Studio installation. By default the activation of plug-ins is disabled. Therefore in order to use the sample plug-in, you must first enable plug-in activation and then activate the sample plug-in.

To enable Plug-in activation

- Check the checkbox "Enable plug-ins" in **Tools > Options > Workspace**.

To activate the sample plug-in:

1. Start the Plug-in Manager using **Tools > Configuration Tools > Plug-in Manager**.
2. Select "Natural Studio Sample Plug-in" in the "Plug-in Manager" window.
3. Select the **Activate** command in the context menu
4. Close the Plug-in Manager

Using the Sample Plug-In

During activation, the plug-in creates and displays a toolbar that contains two commands: "Open Tree View" and "Open List View". These two commands also appear in the **Sample Plug-in** sub-menu in the **Tools** menu and in the context menus of the Natural object types Program, Subprogram and Text.

Command "Open Tree View":

- If a user exit subprogram (subprogram USRnnnnN in library SYSEXT), its description (text member USRnnnnT in library SYSEXT) or its test program (program USRnnnnP in library SYSEXT) is selected, the command displays information about this user exit in a tree view.
- If none of the above is selected, the command displays information about all user exit in a tree view.

Command "Open List View":

- Displays the same information in a list view

Deactivating the Sample Plug-In

To deactivate the sample plug-in:

1. Start the Plug-in Manager using **Tools > Configuration Tools > Plug-in Manager**.
2. Select "Natural Studio Sample Plug-in" in the "Plug-in Manager" window
3. Select **Deactivate** in the context menu.
4. Close the Plug-in Manager

