Chapter **4**

Managing Preferences

This chapter describes the principles for the management of preference parameters in a Telelogic Tau environment. It also describes how to use the Preference Manager to customize the Telelogic Tau installation.

For a reference to the Preference Manager and the preference parameters, see <u>chapter 3</u>, *The Preference Manager*.

Introduction

Chapter

Different users are likely to use Telelogic Tau in different ways. Even the same user may use the tools differently in different work areas. The *Preference Manager* allows you to customize the default behavior of the Telelogic Tau tools in order to minimize the number of operations that you have to perform manually after having started a tool.

The Preference Manager allows you to set up the default behavior for the following tools:

- Organizer
- SDL Editor
- Diagram editors
- Text Editor
- Index Viewer
- Type Viewer
- Coverage Viewer
- Overview Generator and Editor
- Simulator Graphical User Interface
- Validator Graphical User Interface
- Help viewer
- Preference Manager
- Print
- generic Telelogic Tau tool preferences.

Note:

The Preference Manager only handles the SDL suite-specific tools, and the common Telelogic Tau tools. The behavior of the TTCN suite-specific tools cannot be changed by these preferences. For more information, see <u>chapter 30</u>, *Customizing the TTCN Suite (on UNIX)*.

Preferences may be customized for an individual user or may apply to an entire project or even organization that uses the Telelogic Tau tools.

How Preferences Are Managed

Depending on your needs and how you configure your environment, the Telelogic Tau tools handle preference parameters either as:

• Organization (company) preferences

These are parameters that should affect all work that is done with the Telelogic Tau tools within an organization; for example you might want to prohibit the use of some specific SDL symbols, to set up printout headers and footers with your company's logotype, etc.

• Project preferences

These are parameters that should affect the properties that are specific for a particular project; for instance what *make* and *build* options should be used by the Analyzer and Code Generators within the scope of a project. *Project preferences* can also be regarded as a specialization of the *organization preferences*, specific for a project.

• User-defined preferences

User-defined preferences are parameters that would typically affect the behavior of the tools to have them fulfil the individual user's needs; such as what additional windows to open or not open at startup of the tool.

• Default (factory) settings

These settings are "burnt-in" into the tools and will be used whenever no other preferences are available.



Figure 68: The user's view of the preference parameters

Preferences and Dialog Options

The Telelogic Tau tools allow you to customize a number of options that define the **default** behavior of a tool, using the Preference Manager (the TTCN suite specific preferences can be customized as described in <u>chapter 30</u>, *Customizing the TTCN Suite (on UNIX)*). Some of these preferences may be overridden during the current tool session, by assigning a new value to the option. The option's latest value will then be memorized and reused, where possible.

Example 12: Print preferences and options. ----

- 1. Assume that you have assigned the Print preference parameter *PrinterCommand* the value lpr (i.e. send to printer queue).
- 2. You print from the SDL Editor, change the option *Execute* to ghostview (i.e. a PostScript previewer) and click *Print*. Next time you print from the SDL Editor, the Execute option is memorized and reads ghostview (until you terminate the SDL Editor session).
- 3. But, when you print from another tool (the MSC Editor for instance), the *Execute* option is preset to the preferred value, i.e. lpr.

Preferences and the SDL Suite Diagram Options

The SDL suite uses your preferred values when you create a new diagram and assign it:

- A width (set with the command <u>Drawing Size</u>)
- A height (set with the command <u>Drawing Size</u>)
- A viewing scale (set with the command <u>Set Scale</u>)

Each individual SDL diagram also stores information about:

- Whether to align symbols and lines to the grid or not
- Whether to check syntax or not when the diagram is edited
- Whether to fix endpoints at frame or not
- Whether to show the Additional Heading symbol only on the first page

These diagram parameters are set with the SDL Editor command *Diagram Options*.

Each individual MSC also stores information about:

- Whether to show the *instance name* or not
- Whether to show the *instance kind* or not
- Whether to show the *instance composition* or not
- Whether to show the *message name* or not
- Whether to show *message parameters* or not

These diagram parameters are set with the MSC Editor command *Diagram Options*.

Each individual OM, SC and HMSC diagram also stores information about:

• Whether to align symbols and lines to the grid or not

When you save a diagram, the current diagram parameter values are saved on the diagram file and will be reused next time you open it, **overriding the preference parameters**.

Preferences and System File Options

The Telelogic Tau tools use your preferred values when creating new system files (the .sdt files that are managed by the Organizer).

When you save a system file, the parameters that are related to the system are also stored on the system file, **overriding the preference parameters**:

- The parameters managed by the <u>Set Directories</u> dialog
- The parameters managed by the <u>View Options</u> dialog
- The parameters managed by the <u>Set Scale</u> dialog
- The parameters managed by the <u>Analyze</u> dialog
- The parameters managed by the <u>Make</u> dialog

See <u>"Options in the System File" on page 188 in chapter 2, *The Orga-*<u>nizer</u> for a reference to the contents of a system file and what parameters are stored on it.</u> Δ

Starting the Preference Manager

Note:

Each individual user should make sure the HOME environment variable is defined in order to take advantage of the Preference Manager. The HOME variable normally denotes the user's home directory.

To start the Preference Manager:

• Select <u>Preference Manager</u> from the Organizer's Tools menu.

The Preference Manager will be opened.

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Figure 69: The Preference Manager window

Only one instance of the Preference Manager can be started at a time.

Adjusting a Preference Parameter

To modify a preference parameter:

- 1. First, locate the symbol representing the Telelogic Tau tool it governs (you may have to scroll the tree area up or down to make the symbol visible and to expand it with the *Expand* menu choice from *View Menu*).
- 2. Once the parameter is located, select it. (The information within parentheses is the current value, the item within brackets shows the source, i.e. user-defined / project / organization).
- 3. The area at the bottom of the window is updated according to the type of parameter you have selected. The sections below describe how to adjust the preference parameter.

Note:

You have the possibility to revert any parameter to its saved value or default value, using the <u>Set Saved Value</u> / <u>Set Default Value</u> command.

Adjusting a Textual Parameter



To edit a textual value, simply place the cursor on the text field and enter the text of your choice. No control of what is entered takes place.

Adjusting a Boolean Parameter

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Click on to turn an option on.

Adjusting a Ranged Integer



Drag the slider for a coarse adjustment or click the slider bar for a fine adjustment.

Adjusting an Option Menu



Clicking on the button brings up a pop-up menu where all permissible values are listed. Select the value of your choice.

 When you move the mouse pointer over a value in the option menu, a short description of the value is printed in the status bar. Values whose description starts with "(UNIX only)" or "(Windows only)" should only be selected on a UNIX system or a Windows system, respectively.

Adjusting an Option Menu Textual Preference

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	In Windows:	Telelogic	Telelogic	•

You may select the preference parameter from a number of predefined values, available on an option menu (see above). As an alternative, you may type in the value into the text field, which grants access to not predefined values.

Adjusting a Font Preference (Windows only)



You must select the font by clicking the *folder button*, which opens a Microsoft Windows Font dialog. It is not possible to edit the text field to the left of the folder button.

In the font dialog, all TrueType fonts in the system are listed. It is also possible to select font style and size, but these values have no effect. Only the specified font name is used.

- Any font name can be entered by editing the *Font* text field in the font dialog. This possibility is useful when setting a font for printing that is not available in the system, but it does exist on the printer.
- The SDL suite will also recognize the three font names "Times", "Helvetica" and "Courier". These are translated into the True-Type fonts Times New Roman, Arial, and Courier New, respectively.
- When using other fonts than the three mentioned above for printing, the preference Print*<u>DestinationFormat</u> should be set to *MSWPrint* to get the best result for symbols that are adjusted to the text size.

Adjusting a File Preference



You may assign the preference parameter any file name, entered as a text string into the text field.

- You can also click the folder button, which issues a file selection dialog in which you can select a file.

Customizing the On-Line Help

In Telelogic Tau, you can request on-line help by selecting a menu choice in a *Help* menu, a pop-up menu or by clicking a *Help* button in a dialog. For more information about *Help* menu choices, see <u>"Help Menu" on page 15 in chapter 1, *User Interface and Basic Operations*.</u>

To be able to view the on-line help, you need to have one of the following HTML-viewers installed:

- Netscape Navigator
- Microsoft Internet Explorer¹

Also, you have to make sure that the on-line help files (in HTML-format) have been installed.

In the on-line help, you can also find information about how to use it.

Configuring the Help Environment

1. In the Preference Manager window, locate the icon symbolizing the help preferences.

- 2. Double-click the icon. This will expand it and list the available help preferences.
- 3. Select and, if required, adjust the preference <u>*HelpViewer*</u> to an adequate value, either *Netscape* or *Internet Explorer*. Use the option menu that appears at the bottom of the window to select the value.
- 4. Select and, if required, adjust the preference parameter <u>NetscapeCommand</u> or <u>InternetExplorerCommand</u> to a command that starts Netscape Navigator or Internet Explorer in your computer environment. Type the command in the text field that appears at the bottom of the window.

Note:

Help

The command must be available via your PATH variable.

^{1.} Telelogic Tau supports Microsoft Internet Explorer 4.0 and later versions as help viewer, but it may also work to use earlier versions.

To limit local disk space usage in a multi-user environment, you may optionally put the on-line help files on a network server (unless you already have a network installation of Telelogic Tau, which is usually the case on UNIX). To do this, you move all files in the help directory and its subdirectories (available in the local installation directory, by default C:\Telelogic\SDL_TTCN_Suite4.5) to the network server area. This step may already have been performed on your computer system, so check where the on-line help files are stored.

Then check and adjust the preference parameter <u>*HelpDirectory*</u> to the help directory on the network server.

- 5. Select and, if required adjust the preference parameter <u>HelpDirectory</u> to the help directory (by default C:\Telelogic\SDL_TTCN_Suite4.5\help in Windows and /appl/telelogic/help/ on UNIX).
- 6. Save the preference settings and exit the Preference Manager. The on-line help is now configured in accordance to your computer environment.

Timeout Issues

When you request on-line help from Telelogic Tau, the Postmaster supervises the communication. On a heavily loaded computer system, the help viewer may fail to respond within the time limit specified by the environment variable <u>STARTTIMEOUT</u>. When this occurs **on UNIX**, a message is appended to the console window. The environment variable should be adjusted to a higher value to match the typical response times for the computer system where Telelogic Tau and the help viewer are running.

Customizing User-Defined Preferences

Saving Parameters as User-Defined

To preserve the modifications for the future Telelogic Tau tools sessions, you must save the preference settings. The preferences are saved on a preference file denoted by \$HOME/.sdtpref (on UNIX), or %HOME%\sdt.ini (in Windows).

Note:

In Windows: If the environment variable HOME is not set, the preferences are stored on a preference file in the directory from which the tool was started.

Whenever you require to save a company or project preference (and thus customize it as your personal preference), you need to confirm the operation by clicking *Save* in the following dialog:

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Figure 70: Confirming to modify a project or organization parameter

The reason for this is that a parameter which is defined at the company or project level should not be possible to modify inadvertently by any individual user of the Telelogic Tau tools.

Reverting User-Defined Parameters

The Telelogic Tau tools allows you to remove a preference parameter from your personal settings, in which case you will revert to the project or company preferences (or the default settings, if no project or company preferences are defined).

To revert a user-defined preference parameter, you must remove it from your preference file. The Telelogic Tau tools can do this for you:

- 1. Locate the preference parameter and select it.
- 2. From the *Edit* menu, select *Unsave*. A dialog appears, prompting you to confirm the operation.



Figure 71: The Unsave dialog

- Click on the *OK* button to confirm the operation.
- 3. The parameter will be removed from your personal preferences next time you *Save* the preference settings.

Customizing Company Preferences

The Telelogic Tau installation may contains a file with all Preference parameters, along with their default values. The file is identified as \$telelogic/.sdtpref (on UNIX), or sdt.ini (in Windows), and resides in the installation directory of the Telelogic Tau tools.

This file is also referred to as the *company / organization preference file*. **In Windows**, to be meaningful in a multi-user environment, the company preference file should be stored on a network drive (and, of course, all Telelogic Tau users should have read access to this file).

To customize the company's preferences, do as follows:

- 1. **UNIX only:** Login on a privileged account (for instance as system manager or the user who is the owner of the installation).
- On UNIX: Change the default directory to \$telelogic. Start the Telelogic Tau tools.
 In Windows: Start a Telelogic Tau tool from the installation directory, i.e. not from a shortcut icon that defines another start directory.
- 3. Start the Preference Manager from the Organizer.

- 4. Modify the preference parameters of your choice (described in <u>"Adjusting a Preference Parameter" on page 287</u>). For a description of the meaning of the preference parameters, see <u>"Preference Parameters" on page 235 in chapter 3, *The Preference Manager*.</u>
- 5. Save the parameter setup. This concludes the procedure. From now on, all users (in Windows, those that are running the Telelogic Tau tool from the network installation) will have the company setup as default (unless they have a different setup in their \$HOME/.sdtpref (on UNIX), or %HOME%\sdt.ini (in Windows))

The TTCN suite specific preferences and their default values **on UNIX** are described in <u>"How Resources Are Read" on page 1228 in chapter</u> <u>30, Customizing the TTCN Suite (on UNIX)</u>.

Customizing Project Preferences

It is possible to customize the default preferences by defining a so called *project preference file*. The values defined here will supersede the company preferences.

To create a preference file that will be used by a specific project, perform the following steps:

- 1. **UNIX only:** Login on a privileged account (for instance as project manager or a user who has write access to a project directory).
- On UNIX: Copy the company preference file to a suitable directory (where the project preference file will be stored). Change the default directory to that directory, and start the Telelogic Tau tools.
 In Windows: Copy the company preference file to a suitable directory on a network drive, where the project preference file will be stored (using a directory on a local HDD for this purpose makes no sense). Start the SDL suite using a shortcut icon that designates this directory as the start directory.
- 3. Start the Preference Manager from the Organizer.
- 4. Modify the preference parameters of your choice (described above in <u>"Adjusting a Preference Parameter" on page 287</u>. For a description of the meaning of the preference parameters, see <u>"Preference Parameters" on page 235 in chapter 3</u>, *The Preference Manager*.
- 5. Save the parameter setup.

 On UNIX: In a suitable file that all project members should source, insert the following statement: setenv SDTPREF <directory>

In Windows 95/98, insert the following in a suitable batch file that each project member runs at start-up (e.g. AUTOEXEC.BAT): set SDTPREF <directory>

In Windows NT/2000, using the System properties in the Control Panel, set a SDTPREF environment variable to <directory>

In all cases, <directory> denotes the project directory. Failing to do this will cause the Telelogic Tau tools to ignore the project preferences and to use company preferences instead.

7. This concludes the procedure. From now on, all project members will have the project setup as default (unless they have a different setup in their \$HOME/.sdtpref (on UNIX), or \$HOME\$\sdt.ini (in Windows)).

Locating the Preference Sources

To obtain information about the preference sources that are currently used (i.e. the directories and files that contain the company, project and user-defined preferences):

• Select Info from the File menu. A message box is issued:



Figure 72: The message with information about preference sources