SAP Tutor

SAP TUTOR

Release 1.4

SAP™

Copyright

Icons

Icon	Meaning
⚠	Caution
💬	Example
💡	Note
🧭	Recommendation
⟨SYN⟩	Syntax

Typographic Conventions

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.
	Cross-references to other documentation.
Example text	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
`EXAMPLE TEXT`	Keys on the keyboard, for example, function keys (such as `F2`) or the `ENTER` key.
Example text	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

SAP Tutor

Use

SAP Tutor is a tool for recording, editing, and playing interactive .

Features

SAP Tutor has the following components:

- **Recorder**

  Tutorial authors use the Recorder to record the work steps of the software to be learned and thereby create the raw version of the tutorial.

- **Editor**

  Tutorial authors use the Editor to edit the raw version of the tutorial and modify it. They can also print and export the tutorial.

- **Player**

  The learner plays the tutorial in the Player, and at the same time executes the work steps of the software to be learned. Learners can also test themselves and check the effectiveness of their learning in the test mode.

Authors need all three components of *SAP Tutor*. Learners, however, only need the Player.

In addition, there is the *SAP Tutor Reporter* program to evaluate the data on user behavior that was recorded when the tutorial was run. *SAP Tutor Reporter* is provided to system and training administrators.

SAP Tutor Player

Use

You can play a tutorial [Page 8] with the *SAP Tutor Player* and in this way learn how to use an application.

Integration

With the *SAP Tutor Player*, you play tutorials that were created and edited with the *SAP Tutor Recorder* and *SAP Tutor Editor* tools. You can install and use the Player without the other two tools.

Features

> The mode and functions available in a tutorial depend on the specifications of the author.

- You can play tutorials that simulate software applications for training purposes.

- You can play tutorials in demo mode [Page 10] to first obtain an overview.

- You can play tutorials in interactive mode [Page 11], which enables you to navigate through the simulated application and enter data. By doing so, you learn how to use the software through practical experience.

- You can play tutorials in test mode [Page 12] to test yourself or check the effectiveness of your learning. It is also possible to combine the demo, interactive, and test modes.

- You can display the information and instructions prepared by the author of a tutorial using different media:

- Speech output [Page 15]

- Text in a speech bubble in the simulation area

- Texts in the *Task Description* and *Step Description* screen areas

- You can also use Microsoft® agent technology in *SAP Tutor Player.* For more information, see Agent [Page 40].

- You can print tutorials [Page 47].

Tutorial

Definition

An electronic self-learning unit with which the user learns how to operate the software.

The user can work with such a tutorial flexibly at his or her own workplace at any time and at his or her own pace. The ability to use the tutorial according to one's own requirements is an important factor for optimal learning.

Interactive tutorials that have been created with *SAP Tutor* simulate workflows in the software to be learned. They enable the user to learn how to use the software through practical experience and, if required, to check the effectiveness of the learning. You do not have to install the software to be learned.

Structure

Tutorial Structure

A tutorial either consists of a lesson, an assessment, or a combination of lesson and assessment.

File Format

SAP Tutor uses its own file format, `.sim`, for recording, editing, and playing tutorials.

File Size

The following factors determine the size of the created files:

- Size of the bitmap files of the screenshots

- Number of steps recorded

- Size and number of inserted objects

Large tutorials containing big screenshots can be several MB in size.

Integration

Evaluating Tutorials

You can install *SAP Tutor Player* so that data on user behavior is recorded and saved during a tutorial that has been set up accordingly. This applies to tutorials played in test, interactive, and demo mode. The statistics are stored in a database specified by the system administrator and can be evaluated using a special SAP Tutor application. For more information about evaluating tutorials, contact your system or training administrator.

Use of the Tutorial in Intranet and Internet

You can start to play *SAP Tutor* tutorials while the file is being read ("Streaming"). Streaming using an HTTP or HTTPS connection is invisible to you. The data is read sequentially, that is in the sequence of the steps: step 1 is the first step that is copied to the local computer, then step two is copied, and so on. If you want to call a step that has not yet been copied to the local computer, the *SAP Tutor* Player waits until the corresponding step is available. After the entire tutorial has been copied to the local computer, the data is stored in the browser cache.

Streaming from a browser (for example, by starting an embedded tutorial on an HTML web page) is possible with the following browsers:

- Microsoft Internet Explorer 5 or higher

- Netscape Communicator 4.7 or higher

All other browsers copy the entire data to the local computer before starting to play it.

Individual steps can be up to 100 KB in size, depending on the size of the screenshot, which means that data transfer using a connection with narrow band-width can be slow, despite the streaming.

Playing Tutorials in Demo Mode

Use

If you want a quick overview on how to use the particular software application without practicing the steps in a tutorial, you can play the tutorial in demo mode. In the demo mode, *SAP Tutor Player* inputs the required data and navigates through the simulated application.

> A tutorial can also consist of a combination of lessons and an assessment. In this case, after the last step of the tutorial has been played, the test mode screen appears automatically.

Prerequisites

You have entered the settings required for the demo mode:

Setting	Meaning
Auto loop enabled	If this option is selected, a tutorial in demo mode is repeated from the beginning after it has finished.
Fullscreen	If this option is selected, *SAP Tutor Player* hides the areas on the right of the screen and the toolbar when in **demo mode**, and displays only the simulated application. To leave the fullscreen mode, press ESC.

Procedure

The following functions are available in the demo mode:

Icon	Function Name	Meaning
▶	*Start Demo Mode*	The tutorial is run in demo mode. You can start the demo mode from any step.
❚❚	*Stop Demo Mode*	The tutorial pauses at the current step. If you are in fullscreen mode, you can use Pause on the keyboard. To continue in demo mode, press Return.
◀◀	*Restart Tutorial*	Stops the demo mode and returns to the first step of the tutorial.

Playing Tutorials in Interactive Mode

Use

If you are familiarizing yourself with a software application and want to execute the steps set up by the author of a tutorial, you can play the tutorial in the interactive mode. In this mode, you can navigate through the simulated application and enter data. In this way, you familiarize yourself with the software through practical experience.

> A tutorial can contain a combination of interactive steps and steps running in demo mode.
>
> A tutorial can also consist of a combination of lessons and an assessment. In this case, after the last step of the tutorial has been played, the test mode screen appears automatically.

Prerequisites

You have entered the settings required for the interactive mode:

Setting	Meaning
Fullscreen	Hides the description window and the function bar **in interactive mode** and displays the simulated application only. To leave the fullscreen mode, press ESC.

Procedure

Perform the instructions set up by the author of the tutorial. The instructions are presented in different ways (such as spoken instructions, text) depending on the settings for the agent [Page 40].

- The author can specify that your actions are checked. In this case, an error message is output if your action does not coincide with the required action.

- The author can insert hyperlinks and files in the tutorial to provide you with more information.

The following functions are also available in the interactive mode:

Icon	Function Name	Meaning
or *Page Up*	*Previous step*	Return to the previous step of the tutorial.
or *Page Down*	*Next step*	Go to the next step of the tutorial. You may want to skip a step, for example.

Playing Tutorials in Test Mode

Use

You play a tutorial in test mode to check or control the effectiveness of your learning. In the test mode, you perform a specified task in a tutorial. Your behavior is recorded and evaluated.

The following settings are defined automatically when you play a tutorial in test mode:

- The display is shown in fullscreen.
- All navigation options apart from those using the interaction areas are not visible or are not active.
- Agent and bubble text are not visible.
- Interaction areas are not visible.
- All user actions are checked for correctness.

The bubble text and, if applicable, the agent are shown in the following cases:

- To output error messages
- To provide information about input values for input fields

The author can make the following settings for each step:

- Maximum number of permitted mistakes
- Maximum number of achievable points
- Maximum time allowed

The author can also specify which information is displayed to you after the assessment in the evaluation (for instance, number of mistakes made, number of points achieved, and time required).

Prerequisites

The author allows this tutorial to be played in test mode and has made the appropriate settings.

Procedure

1. At the start of the assessment, an introductory text is displayed that explains the task. Take good note of this information and choose *OK* to start the assessment.
2. Perform the steps required to complete the task.
   - If error messages or notes for input fields appear, choose *OK* to confirm these.
   - If you want to end the assessment prematurely, press ESC.

Result

You automatically receive an evaluation of your results at the end of the assessment.

Printing Tutorials

1. Choose 🖨 (*Print Tutorial*).

2. If you want to print the text only without the screenshots, select the *Print Text Only* option.

3. Choose *OK*.

Result

The following tutorial elements are contained in the printout. *SAP Tutor Player* automatically arranges screenshots with their corresponding texts in the printout.

- All work steps or multi-interaction steps

- Bubble texts with the associated step numbers

- Screenshots with frame, if selected

- Task and step descriptions

- Headers and footers

Agent

Definition

Microsoft® software in the form of an animated figure that is used to guide learners through a tutorial [Page 8]. The agent presents instructions to learners. These instructions are displayed in a speech bubble and can also be read aloud using the speech output [Page 15].

Integration

An agent character is delivered with *SAP Tutor*. When you install *SAP Tutor*, you can select whether the software for this agent character should be installed.

For more agent figures, help programs, and additional information about the agents, visit the Microsoft Homepage at **http://www.microsoft.com/msagent**.

In the Player, you can make the following settings for the agents:

Setting	Meaning
Agent character	Choose agent. You can show or hide an agent only if the tutorial author has enabled this.
Speech output	Choose speech output. For more information, see Speech Output [Page 15].
Agent visible in player	These settings define with which media *SAP Tutor Player* presents information to you.
Speech output enabled	
Speech bubble visible	

Speech Output

In the *SAP Tutor Player*, you can use the speech output to have the instructions read aloud. At runtime, a synthesized voice is generated that presents the bubble texts.

You can select from the speech outputs installed on your computer and use the corresponding interface of the Microsoft® agent. For more information about the settings of the speech output, see Agent [Page 40].

You can use the speech output only if the tutorial author has enabled it.

You can use the speech output only in conjunction with Microsoft® agents. For more information, see *www.microsoft.com/msagent*.

The following speech outputs are delivered:

- German

- English

- French

- Italian

- Japanese

- Dutch

- Portuguese

- Spanish

- Russian

SAP Tutor Recorder

Use

You can use the *SAP Tutor Recorder* to record the actions for running an application and thereby create the raw version of an interactive tutorial [Page 8].

Activities

The Recorder records all actions that you perform while using an application. It also automatically generates screenshots and suggestions for instructions and interaction areas.

You can edit the recording to suit your requirements in the Editor.

Preparing for Recording

Prerequisites

You know the process you want to record and the applications you require.

Procedure

> If necessary, switch off the quick infos and the personal input help temporarily in each application to avoid these unnecessary elements being included in the recording.

> In SAP R/3, for example, you make these settings under *Customizing of local layout → Options* and *Local Data*.

1. Start all the applications needed during recording.

2. Start the Recorder. In the Windows start menu, choose *Start → Programs → SAP Tutor → Recorder*.

3. Select the *Ask for tutorial properties* option.

4. In the *Running Applications* window, select the applications you want to record (including those that are started automatically during recording) and move them to the *Applications to be recorded window*.

    > Applications in the *Applications to be recorded* window are marked with a square:
    >
    > Blue square: application is open and ready for recording.
    >
    > White square: application is not open. The application is recorded as soon as it is opened.

    > If you want to record an R/3 System, select the *SAP Logon* application. If you use an older SAP GUI version (4.6D and below), select instead the *FRONT* application.

5. The *Applications to be recorded* window might still contain applications from an earlier recording. Select the applications with a blue square that you do **not** want to record and move them to the

    Running Applications window with   ⟪ .

6. To close the Recorder, choose *Exit*.

Result

You have made the required preparations and can record the tutorial (see).

Recording Tutorials

Prerequisites

You have made the preparations described under Preparing for Recording [Page 17].

Procedure

1. Start the applications you want to record.

    To keep the amount of data in the tutorial file as small as possible, we recommend that you set the size of the particular windows no larger than necessary for working with the application.

2. Start the Recorder. In the Windows start menu, choose *Start → Programs → SAP Tutor → Recorder.*

3. To start recording, choose (*Record*).

    The *Create/Open Tutorial* screen appears.

4. Enter a file name and save the file under the desired path.

5. Change or add to the properties and choose *OK*.

    You can change these settings in the Editor at any time.

    The Recorder now appears as an icon in the Systray area of the taskbar.

7. Go to the window of the application to be recorded and enter values for the functions to be recorded in the desired order. The Recorder icon in the Systray temporarily becomes a rotating globe when your interactions with the application are being recorded.

    Because of the recording, the applications to be recorded react more slowly than usual.

    The Recorder creates two screenshots for each interaction: one shows the state **before** the interaction and the other the state **after** the interaction.

    You can also create screenshots at any time during recording. To do so, choose the *Print* button on the keyboard.

8. Call the Recorder again by clicking the icon in the Systray area of the taskbar.

9. To end recording, choose (*Stop*).

    The Recorder automatically runs a cleanup program, creates the tutorial file, and saves it. The cleanup program:

- Generates the texts for the step name and bubble text

- Compresses the file

10. To close the Recorder, choose *Exit*.

Result

You have created a raw version of a tutorial. You can edit this using the *SAP Tutor Editor*.

SAP Tutor Editor

Use

The Editor enables you to edit tutorials.

Integration

You can start the Player from the Editor and immediately check the changes that you made to the tutorial.

Features

You can edit the tutorial as follows:

Specifying Tutorial Type

Use

A tutorial either consists of a lesson, an assessment, or a combination of lesson and assessment. The default *type* setting for new tutorials (and for versions below 1.4) is *Lesson only*.

We recommend that you decide on the intended purpose of the tutorials and then specify the type accordingly before you start any further editing work. You can change the type of tutorial at any time.

You can also change the type for existing tutorials that were created using a version below 1.4 of *SAP Tutor*.

Procedure

1. Choose *Settings → Tutorial Settings*.

2. Select the desired type of tutorial.

3. Choose *OK*.

Editing the Structure

Procedure

If the screenshot you have recorded covers the entire screen and the open Editor is hidden behind it, you can bring the Editor to the front so that you can work with it. To do so, choose *Show Structure* in the context menu of the screenshot.

1. In the *Tasks and Steps* window, check the steps that the Recorder recorded.

    Steps for which the interaction area was recorded are displayed in black. Steps for which, for example, the icon used was not recorded are displayed in red.

2. Edit your structure.

    You can use the following functions in the *Edit* menu:

Function	What you should know
Create Task	See Creating a Task [Page 22].
Create Multi-Interaction Step	See Creating a Multi-Interaction Step [Page 23].
Create Empty Step	See Creating a New Step [Page 24].
Edit Step/Task	Calls the *Step* or *Task Editor*. See Adding Further Details About a Step [Page 26].
Cut	You can paste steps and tasks that you cut or copied in this tutorial or in another one. For more information, see Copying Steps [Page 25].
Copy	
Paste	
Delete	You can delete individual steps or a group of steps.
Make Step Active	This function enables you to activate a step that was previously deactivated.
Deactivate Step	A deactivated step is not displayed when the tutorial is played.
Show/Hide Inactive Steps	Inactive steps are not displayed in the Editor in the *Tasks and Steps* window.

You can also move steps within a tutorial using Drag&Drop.

Creating a Task

Use

You can combine steps with similar content in a task. Tasks simplify the structure of larger tutorials.

> The multilevel structure is only visible in the Editor, not in the Player.

You can create your own description texts for tasks. These are displayed in the *Task Description* window of the Player for all steps belonging to the current task.

Procedure

1. In the *SAP Tutor Editor: <name of tutorial>* window, select all the steps you want to combine in a task and choose *Edit → Create Task*.

   The *SAP Tutor Editor: Create Task* window appears.

2. Enter a name for the task and choose *OK*.

   The *SAP Tutor Editor: <name of the tutorial>* screen appears again.

3. If you want to create a description for the task, select the task in the *SAP Tutor Editor: <name of the tutorial>* window, and choose *Task description*.

   For more information about creating description texts, see Adding Further Details About a Step [Page 26].

Creating a Multi-Interaction Step

Use

You create a multi-interaction step when you want to offer the user several interactions recorded as individual steps (for example, several entries in the same screen) as **one** step.

Procedure

1. Select the steps required and choose *Edit → Create Multi-Interaction Step*.

2. Enter a name and possibly a *Bookmark* and choose *OK*.

3. Select the multi-interaction step and choose *Edit → Edit Step/Task*.

   The *SAP Tutor Editor: Task Editor* window appears.

4. On the *Bubble* tab page, revise the texts.

Result

For the learner, the multi-interaction step looks the same as the other steps in the dropdown list. However, he or she sees multiple interaction areas in the screenshot.

Only the active interaction area is highlighted in the Editor.

Example

When working with an application, you make several entries one after the other in several areas in a screen. You can proceed in any order. The Recorder, however, records each input as a separate step, and the steps appear numbered in the *Steps in Tutorial* window in the Player.

You create a multi-interaction step. The user sees the name of the step and a description. This text is visible while the learners perform the different interactions.

Creating a New Step

1. Choose *Edit → Create Empty Step*.

    Your graphics application appears.

2. Edit the new screen or import an existing one.

    - If you want to edit the screen, do so in the open graphics application. Save the changes and close the graphics application.

    - If you want to import a screen, close the graphics application. For more information about importing screens, see Adding Further Details About a Step [Page 26].

3. Assign the step a name, create a description and a bubble text, and so on (see Adding Further Details About a Step [Page 26]).

Copying Steps

Use

It may be meaningful to copy steps for the following reasons:

- Steps are the same or similar at several locations in the tutorial.

- Steps are the same or similar in different tutorials.

    To open two tutorials at the same time, start a second instance of the Editor.

- You want to insert additional steps or information in a tutorial and already have an appropriate template.

Procedure

1. Select the step you want to copy and choose *Edit → Copy*.

2. Select the step **after** which it should be inserted in the tutorial and choose *Edit → Paste*.

- If necessary, change the name, description, and bubble text (see Adding Further Details About a Step [Page 26]).

Result

You have created a copy of the step. You can edit and use the copy completely independently of the original.

Adding Further Details About a Step

Procedure

4. In the *SAP Tutor Editor <name of tutorial>* window, select a step, a multi-interaction step, or an element of a multi-interaction step and choose *Edit → Step/Task*.

   The *SAP Tutor: Step Editor* screen appears.

   Depending on the element you select, not all functions described in the following are available.

5. Edit the fields on the *Step* tab page:

   a. *Name*

   Enter a name for the step. The proposed name is identical with the instruction that is automatically created and that the user sees in the speech bubble.

   The name is used at the following locations to identify the step:

- In the Editor, in the *Tasks and Steps* window

- In the Player

   Automatically created proposal: "Enter 'Demo' using the keyboard."

   Meaningful change: **Enter user name**.

   b. *Bookmark*

   If you want to define a jump to the current step from another step, specify a name for the bookmark. Otherwise, leave the field blank.

   If you assign identical names to the bookmarks, the Editor numbers them automatically.

   If you define a bookmark, the step is displayed in the *Tasks and Steps* window in blue. The name of the bookmark is displayed following the step, separated by a slash.

   c. *Run This Step In Demo Mode*

   The selected step runs automatically. To create a sequence of automatically running steps, select this option for each step that should run automatically.

   d. *Omit This Step In Test Mode*

   If you do not want a step to be displayed in test mode, select this option. For more information, see Adding Further Details About the Test Mode [Page 37].

   e. *Description*

   If you want to create a detailed description for a step, choose *Description*.

   The description editor appears, which enables you to:

- Create and format descriptions

- Check spelling [Page 32]

- Insert objects and hyperlinks. For more information, see Inserting Objects [Page 30] and Inserting Hyperlinks [Page 31].

   If you exit the description editor by choosing *OK* or by calling another step directly, the editor automatically saves the current contents and formatting.

f. Displayed Screenshot

Choose the screenshot that shows the user more clearly which interaction he or she should perform.

You can also perform the following functions with screenshots:

Function	Examples of uses	What you should know
Export	Edit screenshot offline. Use screenshot in another application.	
Import	Replace screenshot.	You can only import bitmap files (*.bmp). The imported screenshot is not inserted in the tutorial; instead it replaces the existing one.
Edit	Make changes directly from the Editor without exporting the screenshot and importing it again.	To make the changes, the application defined in the Registry setting HKEY_CURRENT_USER\Software\SAP\SimTool\Editor\Settings\Bitmapeditor is automatically started.

3. Edit the fields on the *Bubble* tab page:

In the *Information Text* field, you can enter information for the learner on the instruction to be followed.

You can enter the instruction the learner is to follow in the *Instruction Text* field.

Both texts are displayed in a speech bubble.

If the learner performs an incorrect action, he or she receives an error message and the instruction from the *Instruction Text* field again. For more information about the text for error messages, see Editing Feedback Texts [Page 39].

You can specify font, font size, and font color for the bubble text and the width of the speech bubble. To do so, choose *Bubble settings*.

You can also define these settings for the entire tutorial. To do so, choose *Settings → Bubble Settings*.

4. If you add more details to a *Step*, also edit the fields on the *Interaction area* tab page. For more information, see Adding Further Details About an Interaction Area [Page 33].

Result

You have added more details on a step or task.

Then add the details described above for the next step, multi-interaction step, or task. When you have edited all the steps, choose *Close*.

Creating an Interaction Area or Attention Area

Use

You can create two types of areas:

- **Interaction areas** show the tutorial user where to perform an interaction when playing the tutorial. They appear in the Editor as a frame with shaded contents.

- **Attention areas** direct the tutorial user's attention to the area of interest in the simulated application. They appear in the Editor as an empty frame.

You can create interaction areas and attention areas after the tutorial has been recorded. This may be necessary for two reasons:

- An area was not recorded or was not recorded correctly. If necessary, change the incorrect area or create it again.

- Several entries are possible or required on one screen of the application. You did not make all the entries during recording, but want to show them to the tutorial user in the tutorial.

Procedure

1. Select the step for which you want to create an area.

    You can delete areas by placing your cursor on the area and choosing *Delete Area* in the context menu.

2. In the context menu, choose *Draw Interaction Area* or *Draw Attention Area*.

3. Position the cursor at the desired location in the screenshot and drag the mouse holding the left mouse button down. Release the mouse button when the frame has the desired size. The area is created.

    The *SAP Tutor: Step Editor* screen appears.

- When you have drawn a new **interaction area**, the *SAP Tutor: Step Editor* screen is displayed. For more information, see Adding Further Details About a Step [Page 26] and Adding Further Details About an Interaction Area [Page 33].

- If you created an **additional interaction area**, a multi-interaction step with subordinate interactions is automatically created in the *Tasks and Steps* window. The newly created interaction initially has the name "Copy of <Name of the copied step>". You can change this name in the *Step Editor* window. For more information, see Adding Further Details About a Step [Page 26].

- To change the color or frame width of an area, select *Frame Color* or *Frame Width* in the area's context menu.

    You can also define these settings for the entire tutorial. To do so, choose *Settings* → *Area Settings*.

    If you set the value for the frame width of an interaction area to **0**, the interaction area cannot be seen in the Player but is still functional.

    Do not use the same color for attention areas and interaction areas as this will cause confusion.

Setting the Cursor

Use

In the Editor, you can define whether a cursor should be displayed in the tutorial and where it should be displayed for each step.

Procedure

1. To show the cursor, select a step or an interaction, choose *Step* and select the *Cursor Visible for this interaction* option.

2. To specify that the cursor is displayed at a certain location in the screenshot, drag it to the desired location by holding the left mouse button down.

Inserting Objects

You can insert or link objects in the *Task Description* and *Step Description* fields. The learner can start objects directly from a tutorial.

Inserted objects are embedded in the tutorial, that is, they are saved with the tutorial. They are either displayed statically in the *Step Description* or *Task Description* field or can be started from this window. The types of files that you can insert depends on your system.

Some file types can be opened in change mode by double-clicking them.

The software to display or play these files must be available on the learner's computer so that they can be opened there.

Inserted objects increase the file size of a tutorial.

Procedure

1. Select a step or task.

2. Choose *Edit → Edit Step/Task*.

3. On the *Step* tab page, choose *Description*.

4. Choose one of the following options for inserting the object:

   - Choose *Insert Object*, then *Create from file → Browse* and select the required file.

   - You can use Drag&Drop to insert existing objects in the description editor window. In this case, the objects are inserted as icons.

Inserting a Hyperlink

You can insert hyperlinks in the task and step descriptions, which reference objects or web sites. The tutorial user can start the web sites directly from a tutorial.

Procedure

5. Select a step or task.

6. Choose *Edit → Edit Step/Task*.

7. On the *Step* tab page, choose *Description*.

8. Choose (*Insert Hyperlink*).

9. Enter the text that should be formatted as the link and the required URL.

10. Choose *OK*.

> You can also link hyperlinks directly to an interaction area. For more information, see Adding Further Details About an Interaction Area [Page 33].

Checking Spelling

Use

You can check the spelling for all texts except those displayed in a speech bubble (instruction texts, interaction texts, and feedback texts).

SAP Tutor Editor uses the spellchecker from Microsoft® Word. The Editor uses the language you have specified in the tutorial properties as the language for the spellchecker.

Prerequisites

The Microsoft® Word spellchecker for the language of the texts you want to have checked is installed on your computer.

Procedure

In the text Editor, choose *Spelling*.

Adding Further Information About an Interaction Area

Prerequisites

You have opened the *Step Editor* for a step.

Procedure

1. Make additional entries for *User Input*.

    You can make different entries for *User Input* according to the type of interaction area.

    The type specifies the kind of interaction the learner should perform. When the interaction area has been recorded using the Recorder, the type of interaction you performed is specified. You normally do not need to change this setting. If you created the interaction area manually, you must check this setting.

Type	Function	Meaning
Click, double-click, right click		Interaction area for simulating pushbuttons, menu entries, indicators, and so on.
	Ignore Expected Input	Only relevant if: you have a multi-interaction step with an input field and expected user input, and an interaction area with click, double-click, or right click. Both interaction areas lead to the same target. Select this option to enable the learner to perform the click interaction without having to make an entry in the input field at the same time.
	Default (Enter)/Cancel (ESC)	Trigger the selected action in *Next Step* (alternative to mouse action).
	If the learner does not perform the interaction correctly, the player displays a message and repeats the instruction text. For more information about editing the message text, see Adding Further Details About the Test Mode [Page 37].	
Input field		Interaction area for simulating user input.
	User Input	Text used for the animation of the text entry for the relevant field in demo mode, and, if necessary, for checking the user input.

	Expected input	Compares the text input of the learner with the text specified in the *User Input* field. If the learner makes an incorrect entry, the Player displays a message and repeats the instruction text. For more information about editing the message text, see Adding Further Details About the Test Mode [Page 37].
	Case sensitive	Also takes account of the case when checking the user input.
	Password	The text appears in this field as *.
	Default Text	Simulates the default field value of an input field.
	Default (Enter)/Tab	Specifies whether pressing *Enter* or *Tab* completes text entry.
	Input Field Settings	Specifies the font, font color, and background color for the interaction area. You can also define these settings for the entire tutorial. To do so, choose *Settings → Input Settings*. If the expected user input extends over several lines, choose *Wrap text*. The user input cannot be checked for these fields.
Drag and Drop Source/Drag and Drop Target		Interaction areas for simulating Drag and Drop interactions.

2. Under *Next step*, specify which step the user should jump to after the current step.

Setting	Function
Next sequential step (default setting)	Goes to the next step in the sequence of the structure. If you have selected *Next sequential step* in a tutorial for the last step, the Player is stopped automatically after this step.
None	The Player stays on this step in the tutorial. This is meaningful for multi-interaction steps, for example, when the user is required to make more than one entry without leaving the step. Specify *Next sequential step* for the last input field, so that the user continues through the tutorial.
Leave Tutorial	The tutorial is ended.
Bookmark (optional)	If you have defined a bookmark in another step, you can select it here. This step becomes the next step in the tutorial. This is meaningful if, for example, different screens should appear depending on the interaction executed by the

	user.
	For more information about defining bookmarks, see Adding Further Details About a Step [Page 26].

3. Under *Hyperlink*, enter the file or website that should be called as a result of the interaction. Enter the URL or path in the input field or select the file.

> Ensure that the *None* option has not been selected under *Next Step*. Otherwise the user falls into a loop.

4. If the user can also use a key or a combination of keys as an alternative to an interaction, specify this under *Keyboard Shortcut*.

See also:

Playing Tutorials in Demo Mode [Page 10]

Editing Introductory Texts

Use

An introductory text can be displayed at the beginning of a lesson and informs the tutorial user about the theme and content of the tutorial. An assessment should always begin with an introductory text that contains the task description and other information.

Prerequisites

You have defined the tutorial settings.

Procedure

1. Choose *Settings → Assessment Settings*.

2. Choose the *Lesson introduction* or *Assessment introduction* tab page.

   You can also save and reuse the introductory text as the default. To do so, choose *Set as default* or *Get default*.

3. Choose *Edit*...

4. Edit the introductory text.

   When you create an introductory text for an assessment, ensure that the task description and all information required by the learner to perform the task are contained in the text.

5. Choose *OK*.

Adding Further Information About the Test Mode

Use

You can define different settings that control how the tutorial appears in test mode. This includes introductory and feedback texts, summary, and cut off values for the successful completion of an assessment.

You can suppress individual steps for the test mode that provide, for example, notes only but contain no interactions and are, therefore, irrelevant to the assessment.

Procedure

1. Choose *Settings → Assessment Settings*.

2. Edit the introductory texts.

    For more information, see Editing Introductory Texts [Page 36].

3. Edit the feedback texts.

    For more information, see Editing Feedback Texts [Page 39].

4. Edit the texts for the assessment summary. There are different texts for passed and failed assessments. Choose the *Assessment summary pass* or *Assessment summary failure* tab page.

5. Choose *Edit*... and edit the text. You can add statistical information to the text. To do so, use placeholders (which can also be formatted). The placeholders are filled automatically with the current values after an assessment and displayed in the assessment summary. To insert the placeholder, select it and choose *Insert*.

    The placeholders have the following meaning:

Placeholder	Meaning
<Mistakes>	Total number of mistakes
<Percent>	Number of mistakes in percent
<Points>	Total number of points
<Result>	Overall result
<Skipped>	Number of steps not completed successfully
<Time>	Total time

    This selection does not affect the scope of data that is saved for the evaluation of user behavior, if required. For more information, see Tutorial [Page 8].

6. In the *Cut off value for successful completion of assessment* field, specify the value at which an assessment is considered a pass.

7. You can specify that a step in the tutorial is not shown in test mode.

    For more information, see Adding Further Details About a Step [Page 26].

8. Choose *OK*.

Specifying Assessment Settings for an Interaction Area

Use

You can specify the following values for each interaction area:

- Maximum number of permitted mistakes

- Maximum number of achievable points

- Maximum time allowed

If the learner exceeds the maximum number of permitted mistakes or the maximum time allowed, the Player outputs a feedback text and moves to the next step. For more information, see Editing Feedback Texts [Page 39].

Prerequisites

You have selected *Lesson with assessment* or *Assessment only* for the type of tutorial.

For more information, see Specifying Tutorial Type [Page 20].

Procedure

1. Open the *Step Editor* by double-clicking a step or an element of a multi-interaction step.

2. Choose the *Assessment* tab page.

3. Enter values for *Maximum Mistakes*, *Maximum Points*, and *Maximum Time Allowed* in the corresponding fields. You can also save and reuse these values as the default.

   If you do not want to set a time limitation, enter **0** in the *Maximum Time Allowed* field.

Editing Feedback Texts

Use

SAP Tutor Player compares the actions of the learner with the specifications of the author and outputs feedback for errors, which is displayed as text in a speech bubble. Feedback texts are output in the following cases:

- The learner's action does not coincide with the expected action.

  This kind of feedback is used for all types of tutorial, and the instruction text is also repeated.

  For more information about defining an expected action, see Adding Further Details About an Interaction Area [Page 33].

  For more information about creating an instruction text, see Adding Further Details About a Step [Page 26].

- The number of permitted tries or time allowed has been exceeded.

  The texts for *Feedback tries* and *Feedback time* are only output in test mode, if the specified values are exceeded.

  For more information, see Specifying Test Mode Settings for an Interaction Area [Page 38].

Prerequisites

You have defined the tutorial settings.

Procedure

1. Choose *Settings → Assessment Settings*.

2. Edit the feedback texts for mistakes, tries, and time on the appropriate tab page. You can also save and reuse these texts as the default.

3. Edit the texts for the assessment summaries.

4. Choose *OK*.

See also:

Adding Further Details About the Test Mode [Page 37].

Agent

Definition

Microsoft® software in the form of an animated figure that is used to guide learners through a tutorial [Page 8]. The agent presents instructions to learners. These instructions are displayed in a speech bubble and can also be read aloud using the speech output [Page 15].

Integration

An agent character is delivered with *SAP Tutor*. When you install *SAP Tutor*, you can select whether the software for this agent character should be installed.

For more agent figures, help programs, and additional information about the agents, visit the Microsoft Homepage at **http://www.microsoft.com/msagent**.

In the Player, you can make the following settings for the agents:

Setting	Meaning
Agent character	Choose agent. You can show or hide an agent only if the tutorial author has enabled this.
Speech output	Choose speech output. For more information, see Speech Output [Page 15].
Agent visible in player	These settings define with which media *SAP Tutor Player* presents information to you.
Speech output enabled	
Speech bubble visible	

Showing and Hiding Agent and Speech Bubble

Use

You can perform the following functions with the agent or the speech bubble:

- Show and hide agent and speech bubble in the Editor

- Show and hide agent and speech bubble for individual steps in the Player

    These specifications determine whether the tutorial user can display an agent or a speech bubble in the tutorial.

Showing and Hiding Agent and Speech Bubble for the Editor

Choose *Settings → Editor Settings → Agent Visible in Editor* or *Bubble Visible in Editor.*

These settings have no effect on the Player.

Showing and Hiding Agent and Speech Bubble for the Player

For more information, see .

Showing and Hiding Agent and Speech Bubble for Individual Steps in the Player

- Agent:

    Select a step or a multi-interaction step and choose *Step → Agent Visible for this interaction.*

- Speech bubble:

    The speech bubble is only visible if an information text or instruction text exists.

Specifying the Position of Agent and Speech Bubble

Use

In the Editor, you can specify where the agent or speech bubble should be positioned for each step. You can also specify which gestures the agent should make.

Procedure

1. To specify that agent and speech bubble are displayed at a certain location in the screenshot, drag the object to the desired location by holding the left mouse button down, choose *Step*, and choose *Save Agent Position* or *Reset Bubble Position*.

   You can position the speech bubble independently of the agent.

   You can change the position of the speech bubble's pointer. Call the context menu of the speech bubble and select a pointer position.

2. To specify the agent's gestures, choose the appropriate option in the agent's context menu.

   The standard position of the agent is to the right of the interaction area. If you move an interaction area or change its size, the agent's position is automatically adjusted accordingly.

Result

You have specified the agent and speech bubble settings for the step selected or multi-interaction step.

Cleaning Up Tutorials

Use

⚠️

When you have cleaned up a tutorial, you cannot undo this. To avoid loss of data, create a backup before you clean up the tutorial.

This function can reduce the size of the tutorial.

The Editor performs the following actions automatically:

- Deletes all inactive steps
- Deletes all unused screenshots
- Calculates and saves the difference between the screens used

Procedure

Choose *File → Cleanup Tutorial*.

Specifying Tutorial Settings

Use

You define the following settings:

- Type of tutorial

- How the tutorial should be played

- Whether data should be collected while the tutorial is playing

These settings overwrite the settings in the Player and cannot be changed by the learner.

Procedure

1. Choose Settings → *Tutorial Settings*.

2. Make the required settings:

Setting	Function
Run Tutorial in Demo Mode	The tutorial is started in demo mode.
Enable Agent	The agent is visible when you play the tutorial. The learner can, however, switch the agent off.
	If you deselect this option, the agent is not visible in the Player. The learner cannot switch the agent on again.
Enable Speech Output	The bubble text is read aloud from the speech bubble when you play the tutorial. The learner can, however, switch the speech output off.
	If you deselect this option, the speech output is deactivated. The learner cannot switch it on again.
Enable Speech Bubble	The speech bubble is visible when you play the tutorial. The learner can, however, switch the speech bubble off.
	If you deselect this option, the speech bubble is not visible in the Player. The learner cannot switch it on again.
Enable Printing	The learner can print the tutorial from the Player.
Enable Descriptions	The task and step descriptions are displayed in the appropriate windows when you play the tutorial.
Screen Mode	You can play the tutorial in one of the following modes:
	• Full Screen (control elements of the Player not visible)
	• Standard (control elements of the Player visible)
	• Player Setting (the setting made by the learner in his or her Player is taken into account)
Agent Character	The agent character specified here is displayed when you play the tutorial.
	To enable the agent character to be displayed in the Player, it must be installed on the learner's computer. If it is not installed, the agent character specified in the Player settings is displayed.
Speech Output	The speech output specified here is displayed when you play the tutorial.

	To enable the speech output to be used in the Player, it must be installed on the learner's computer. If it is not installed, the speech output specified in the Player settings is used.
Data Collection	Defines when data on user behavior is saved.
	Data is recorded regardless of the tutorial type - for assessments and for lessons.
	The options are dependent of the set up of your system. The system administrator specifies whether data can be saved at all and, if required, sets up an appropriate database. For more information, contact the system administrator responsible.
	• *Never collect data*: data is never collected for this tutorial even if the system set up permits this.
	• *Always collect data*: data is always collected if the system set up permits this.
	• *User can decide if data is to be collected*: the learner is asked at the beginning of the tutorial if data should be collected. Data is collected if the learner wants data to be collected and if the system set up permits this.
	Only choose the *Always collect data* and *User can decide if data is to be collected* options if the system set up actually permits data to be saved.

3. Choose *OK*.

Result

You have specified how the tutorial is played when the learner starts it. You can change these settings at any time before you pass on the tutorial file.

Specifying Settings for Older Tutorials

Use

If you want to use all the new functions for the test mode in *SAP Tutor* Version 1.4 for tutorials that were created using an earlier version than 1.4, you must define different settings in the tutorials. You can either make these settings individually in the Editor or use an auxiliary program.

The auxiliary program enables you to assign standard values and texts for the new functions to an older tutorial. If you have already saved standard settings, these settings are used. Otherwise, the settings delivered with *SAP Tutor* are used.

The following settings are defined:

- *Type of tutorial*: `Lesson only`

- *Data Collection*: `Never collect data`

- *Cut off value for successful completion of assessment*: `75%`

The following texts are assigned:

- Introductory texts for *Lesson* and *Assessment*

- Feedback texts for *Mistakes*, *Tries* and *Time*

- Texts for *Assessment summary pass* and *Assessment summary failure*

Prerequisites

The tutorial is not open.

Procedure

1. Open the *c:\Program Files\SAP\SAP Tutor* folder.

2. Move the tutorial file (*.sim*) to the *iTutorCleanup.exe* file using Drag&Drop.

   Use the *iTutorCleanup* program to open the tutorial. The settings are made automatically, saved, and the tutorial is closed.

Printing Tutorials

4. Choose *File* → *Print*.

5. The *Page Setup* dialog box appears. Make the required settings:

- To edit the header or footer area, double-click the corresponding area in the print preview.

    The settings you make for headers and footers are saved with the tutorial.

- To change the size and position of the areas, drag the delimiters to the required position.

    If individual screen areas overlap, this can impair the printing quality.

- If you want to print the text only without the screenshots, select the *Print Text Only* option.

6. Choose *OK*.

Result

The following tutorial elements are contained in the printout. *SAP Tutor* automatically arranges screenshots with the texts that correspond to them on the printout.

- All work steps or multi-interaction steps
- Bubble texts with the associated step numbers
- Screenshots with frame, if selected
- Task and step descriptions
- Headers and footers

Exporting Tutorials

Use

You can also export tutorials in an XML or Microsoft® Word (DOC) format. You can process the tutorial files further in these formats, for example, to prepare them for documentation purposes.

You can also re-import tutorials that have been exported in XML format.

Prerequisites

If you want to export in Microsoft® Word (DOC) format, you must have *Microsoft® Word 97* or *Microsoft® Word 2000* installed on your computer.

Exporting in XML Format

The file name of the exported XML file is always *export.xml*. *SAP Tutor Editor* overwrites an existing file with this name automatically. You are therefore recommended to create a new directory to store the XML file before you export it.

1. Choose *File → Export → XML.*

2. Select the required directory and choose *OK.*

Exporting in Microsoft® Word Format

SAP Tutor Editor uses a document template to create the word file. You can select the document template you want to use and adjust it individually.

You find the standard document templates (*.dot) under *c:\Program Files\SAP\SAP Tutor.*

You can change the formatting of the individual placeholders, add prefixes or suffixes to placeholders, and delete placeholders.

1. Choose *File → Export → Word.*

2. In the *Export to* field, enter a file name.

3. In the *Template* field, select a document template.

4. Choose *OK*.

Glossary

Agent: Animated figure that presents the instruction text. The agent's gestures point to screen elements that are important for the user interaction (for example, input fields, pushbuttons).

Task: Work unit consisting of a number of individual steps. The author defines the task by combining a number of recorded steps into a task and creating a task description in the Editor, if required.

Symbol in the Editor:

Author: Person who creates an interactive tutorial.

Description: Additional explanation that the author can create for steps and tasks.

Screenshot: The Recorder records two screenshots for each step: one before and one after performing an interaction. The author can specify which of the two screenshots is displayed in the Player.

Attention area: Frame in the tutorial that points out important screen areas. Attention areas appear in the Editor as an empty frame.

Interaction: Any kind of action by the tutorial user, such as mouse click on a pushbutton, text input, double-click, or menu navigation.

Symbol in the Editor:

Interaction area: Frame in the tutorial that shows the tutorial user where an interaction should be executed on the screenshot. An interaction area appears in the Editor as a frame with shaded contents.

Lesson: Tutorial or part of a tutorial for learning, training, or presentation purposes (in contrast to an assessment).

Learner: User of an interactive tutorial.

Multi-interaction step: Step in which the user can perform multiple, possibly alternative, interactions on one screenshot. There are thus multiple interaction areas on the screen. The author can edit the multi-interaction step and the individual interactions in the Editor. For the learner, the multi-interaction step looks the same optically as the other steps in the *Steps in the Tutorial* window of the Player. However, he or she sees multiple interaction areas on the screen.

Symbol in the Editor:

Step: Interaction between the author and the application to be recorded resulting in the screenshot being recorded, for example, mouse-click on a pushbutton. The Recorder generates an interaction area and a bubble text for each step.

The learner must execute exactly this step when using the tutorial.

The application environment is simulated in the Player and the learner can reproduce the interaction of the author. The result of the interaction is that the next step of the tutorial appears.

Speech bubble: Contains information and instructions for the learner. The Recorder automatically creates the instruction in the bubble text during recording and the author can modify this instruction.

Bookmark: You can use the bookmark to jump from one step to another. The learner then continues to play the tutorial from this location.

Assessment: Tutorial or part of a tutorial that is played in test mode and used to check the effectiveness of the learning.

Tutorial: Electronic self-learning unit with the file name extension *.sim.*

Root task: Task in which all the steps of a tutorial are combined during recording.