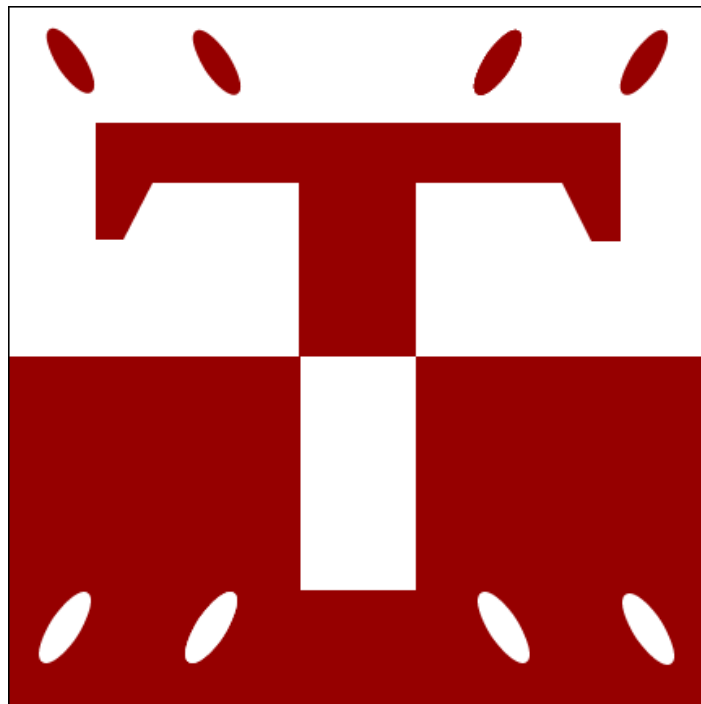


# Tutorix Editor



Version 2.0 / 01/25/2004

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## Contents

Copyright .....	4
Document Conventions.....	5
Icons .....	5
Typographic Conventions.....	5
Preface .....	6
System Requirements.....	7
Hardware .....	7
Software .....	7
Install Tutorix .....	8
Install from CD-ROM .....	8
Install from Installation File (Download).....	8
Installation Process .....	9
Application of Tutorix .....	17
Getting started .....	17
Edit Mode.....	18
Play Mode .....	18
Record Tutorials .....	19
General.....	19
Recording of Raw Version.....	20
Edit Tutorials.....	22
Rework Raw Version .....	22
Verification of Steps .....	22
Field Size of Interaction.....	24
Adjust Position of Agent .....	25
Adjust Gesture Right of Agent.....	25
Changing Text in Bubbles .....	28
Dispense Bubble Text Randomly .....	29
Bubble Events.....	30
Configure Fields of Interaction .....	32
Keyboard Interaction.....	32
Defining Multiple Triggerkeys.....	33
Mouse Interaction .....	34
Additional Options for Keyboard Field of Interaction.....	34
Change Color and Pattern of Field of Interaction.....	35
Position Voice Output .....	36
Individual Nomination of Single Steps .....	37
Task Description .....	38
Meaning of Icons in Task Description Window .....	39
Short Description of Tutorial .....	40
Global Agent Options.....	41
Welcome Picture / Set Welcome Announcement .....	42
Playing Tutorials .....	43
Printing Tutorials .....	45
Extended Tutorial Settings.....	47
Import Screenshot .....	47
Edit Screenshot.....	47
Export Screenshot.....	48
Program Settings .....	49
Define Default Agent.....	49
Set Default Language.....	49
Default Path for Tutorials.....	50

## Contents

Adjust Compression .....	50
Configure Picture Editor.....	51
Technical Information.....	52
File Format.....	52
Command Line Parameters .....	52
Change Default Voice Output.....	53
Required Files.....	54
Registry Settings.....	55
Support codes and their Significance .....	57

## Copyright

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Microsoft Agent 2.0 (MS Agent) is a technology of Microsoft Corporation.

## Document Conventions

### Icons

Icon	Meaning
	Note
	Caution
	Hint

### Typographic Conventions

Type Style	Description
<i>Example text</i>	Characters or words cited according to the user interface.
Example text	Symbolizes an exact user input, involving file and folder names, as well as variable or parameter names.
<Example text>	Characterizes a variable user input. Characters or words in pointed brackets are to be replaced in the program by the user through appropriate entries.

## Preface

Today, transfer of knowledge becomes increasingly important. Business processes rapidly change, infrastructures are constantly being modernized – additional knowledge and new skills are needed and must be accessible to employees in the fastest and most efficient manner. Classical schooling or generic training manuals are in today's economical growing demands barely sufficient. Tutorix sets the pattern for new measures in the area of electronic learning (e-learning), be it to indoctrinate users in new software applications or to make business processes accessible to employees in company wide interactive form. Tutorix is suitable for continuous studies, as well as initial training for the implementation of new software solutions.

### What is Tutorix?

Tutorix is an innovative and modern tool, which helps you to create interactive self learning units called tutorials and make them available to your employees. Your employees aren't completely alone: By using a Tutorix compiled learning unit (tutorial), you will be guided through the entire learning process with a simulated intelligent agent. With the tutorials your employees will become familiar with new applications and business processes in the easiest fashion. All workflows may be independently simulated, without actual learning tools being installed on the employees PC, hence only relevant schooling information will be passed on.

Tutorix offers various options for the preparation and distribution of know how corporation wide and amends in an ideal way the concept of training of your corporation.

A possible use for the Tutorix generated tutorials is the indoctrination of operation of a new software or an appointed work process without the help of a human instructor. For the education of a software product it need not be actually installed by the user of the tutorial, Tutorix makes the surface of a software visible for all users through screenshots.

You will find an example of this on the enclosed CD-ROM, on which the operation of Tutorix, with help of a tutorial, can be easily learned. If you have downloaded Tutorix from the internet, you will find additional tutorials for applications of Tutorix under <http://www.mindleads.com>

A tutorial may be sent via email to all users of a PC or it may be made available over the network to a variety of users. The tutorials may be used at work, as well as at home or en route with a laptop. The user could learn at his own pace and repeat the units as often as required. The prerequisite for playback of tutorials is only the installation of the Tutorix Player software on the users computer.

## System Requirements

### Hardware

The following hardware equipment is necessary for installation and use of Tutorix software:

Minimum:

- Pentium or similar Processor 200 MHz
- 32 MB of RAM for Windows 95/98/ME
- 64 MB of RAM for Windows NT/2000/XP
- 40 MB free disk space for installation
- 80 MB free disk space for the use of Tutorix Editor
- CD-ROM drive, if you install Tutorix by CD-ROM
- Display resolution of 800 x 600 pixels, 256 colors

Recommended:

- Pentium or similar Processor >500 MHz
- 64 MB of RAM for Windows 95/98/ME
- 128 MB of RAM for Windows NT/2000/XP
- 40 MB free disk space for installation
- > 1 GB free disk space for the use of Tutorix Editor
- Soundcard for speech output
- CD-ROM drive, if you install Tutorix by CD-ROM
- Display resolution of 1024 x 768 pixels, 65536 colors

### Software

Tutorix runs on following operating systems:

- Microsoft Windows 95 B or higher (OSR-2 Release)
- Microsoft Windows 98
- Microsoft Windows 98 Second Edition
- Microsoft Windows Millenium Edition (Windows ME)
- Microsoft Windows NT 4.0 (SP6 or higher required)
- Microsoft Windows 2000
- Microsoft Windows XP
- Microsoft Windows 2003 Server



Windows NT4 / 2000 / XP / 2003 require computer administrator rights for installation.

## Install Tutorix

In general, the installation process runs without interruption. Depending upon the version of your operating system, it may be necessary to update some system components. The installation program automatically detects the required system components and downloads them from the internet if necessary. If you do not have access to the internet, please contact the support team of Mindleads Technology.

### Install from CD-ROM

- Close all windows and/or programs. Insert the Tutorix Editor CD-ROM.
- Wait until the Tutorix installation software starts. Depending upon your hardware equipment this process can take from a few seconds up to one minute.

### Install from Installation File (Download)

- Double click the file `TutorixEditor20EN.exe`.
- Wait until the Tutorix installation software starts. Depending upon your hardware equipment, this process can take from a few seconds up to one minute.



The installation software is able to detect previous versions of Tutorix. Upon detecting an existing installation of an older version, an update will be initiated.



Before a new installation can be done, you must quit Tutorix software. If Tutorix Editor or Tutorix Player is running on your system, close both programs before you continue with a new installation.



## Installation Process

1. The window below appears. Click *Next* to start the installation process.



2. Carefully read the license agreement and select *I accept the terms in the license agreement* if you agree to the license conditions.

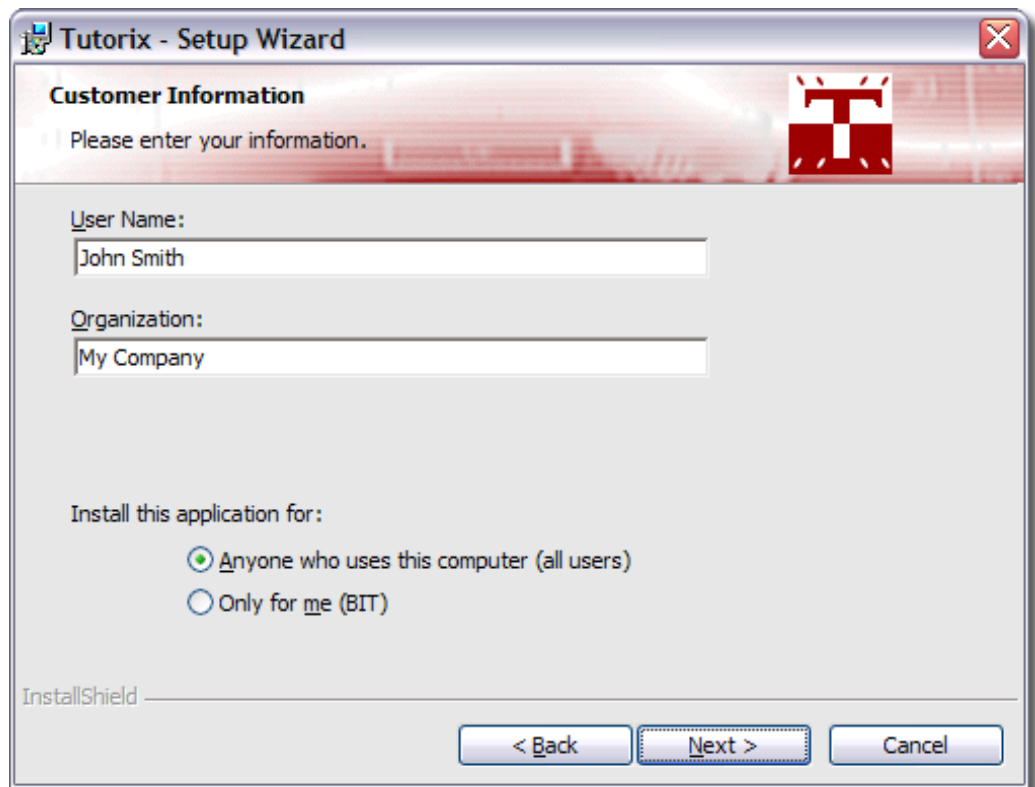
Click *Next* to continue.



3. Enter your full name and organization in the text boxes *User Name* and *Organization*.

In general, Tutorix software is installed for all users. Choose *Only for me* if you want to install Tutorix only for the currently logged on user. This provides program icons in the start menu that are not visible for other users.

Click *Next* to continue.

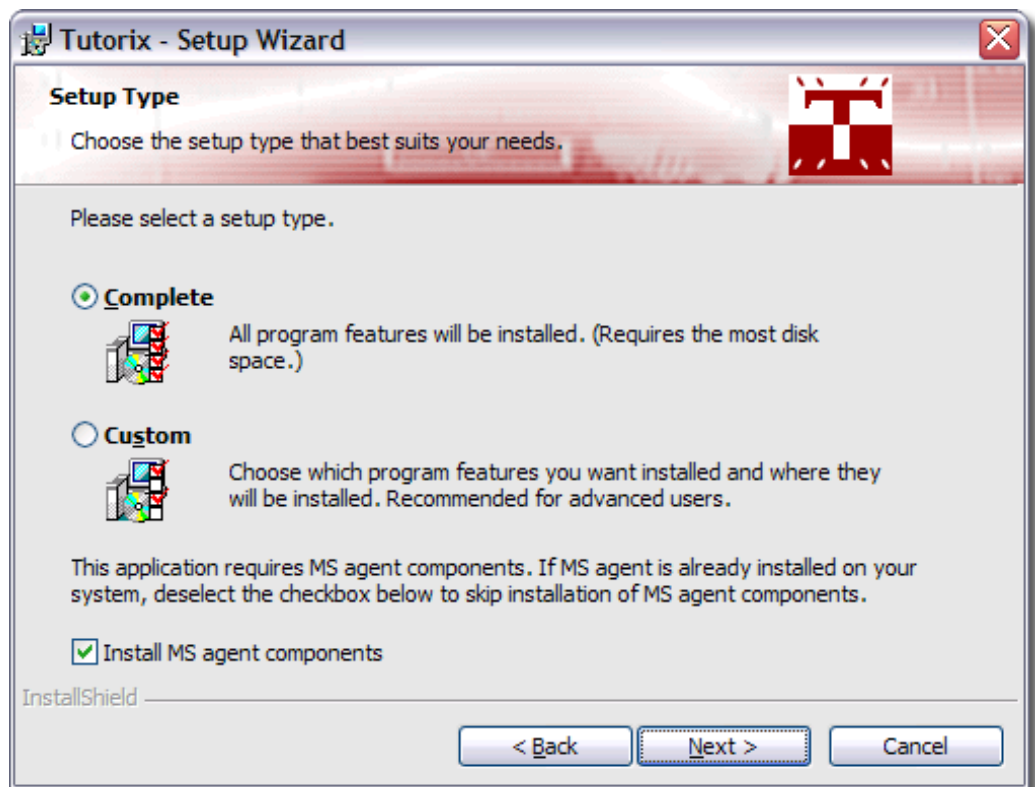
A screenshot of the Tutorix Setup Wizard dialog box. The window title is "Tutorix - Setup Wizard". The main heading is "Customer Information" with a sub-heading "Please enter your information." and a red Tutorix logo. There are two text input fields: "User Name:" containing "John Smith" and "Organization:" containing "My Company". Below these is a section "Install this application for:" with two radio button options: "Anyone who uses this computer (all users)" (selected) and "Only for me (BIT)". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel". The text "InstallShield" is visible in the bottom left corner of the dialog box.

4. You can change the directory in which Tutorix will be installed. The setup program suggests to install Tutorix in your default program files folder.

In order to install Tutorix in a different directory, select *Custom* and enter the path you prefer in the next appearing window.

The installation software installs MS agent components on your system. These are required for the correct function of Tutorix. Deselect the checkbox under *Install MS agent components* if you are sure that they are already installed on your system.

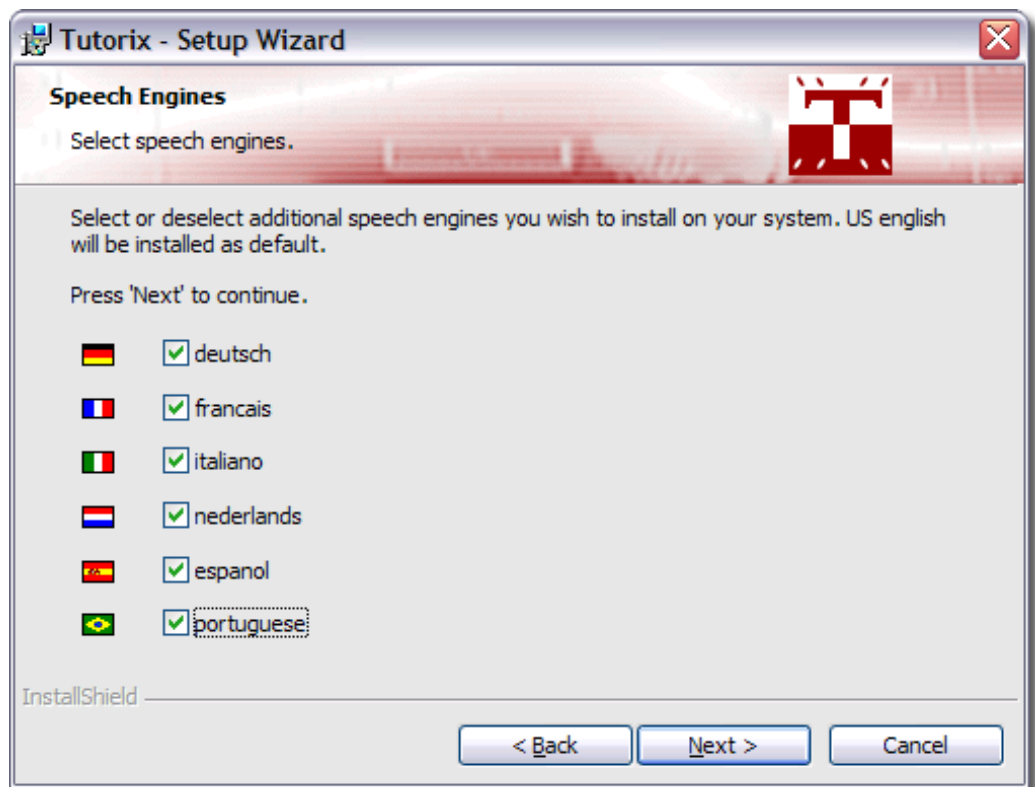
Click *Next* to continue.



5. Select the desired languages which you want to use for speech output. You can install any of the following languages:

- *english* (will be installed as default)
- german
- french
- italian
- spanish
- dutch
- portuguese

Click *Next* to continue.



It may occur, that you will be asked during installation to reboot the system. Click *NO* on all appearing 'Restart Windows' dialogues.

6. Select the agent which you want to install on your system. The 'Genie' Agent will be installed on your system as default. The following agents are available for selection:



Genie



Merlin



Peedy



Robby

Click *Next* to continue.

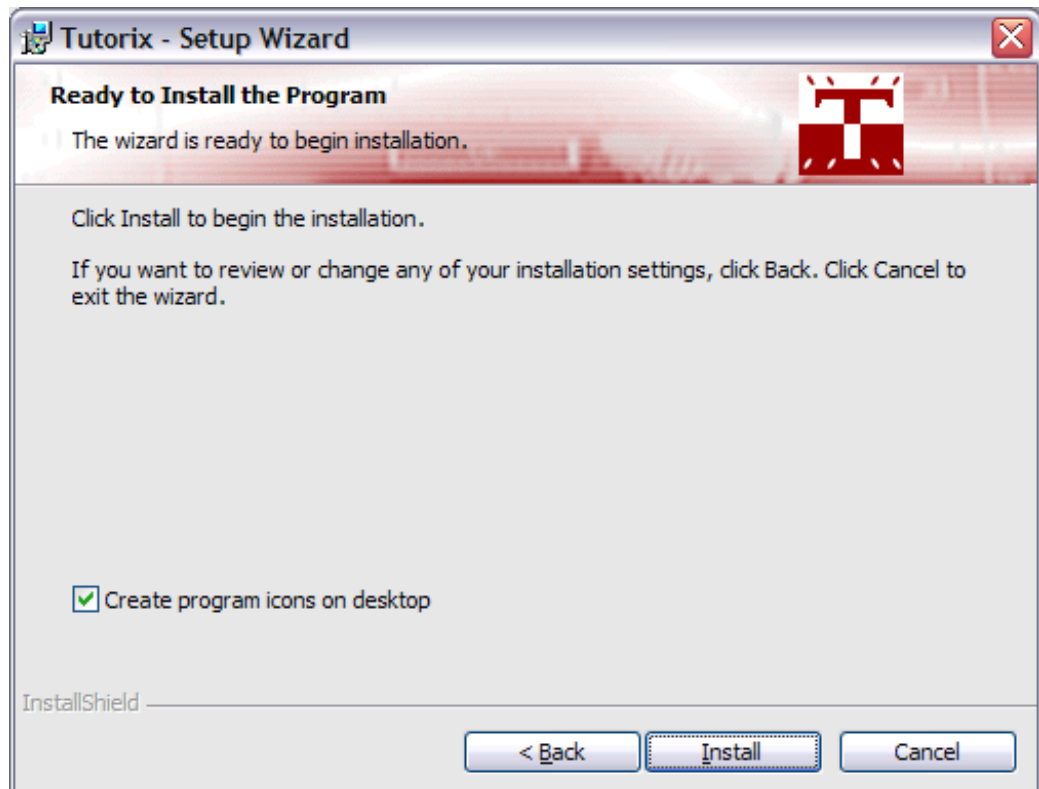


Due to legal license reasons, only four agents are covered in the software. You may install at any time agents from third party vendors and utilize them with Tutorix.

7. The installation software creates program icons on your desktop. However, if you don't wish to have them, clear the checkbox under *Create program icons on desktop*.

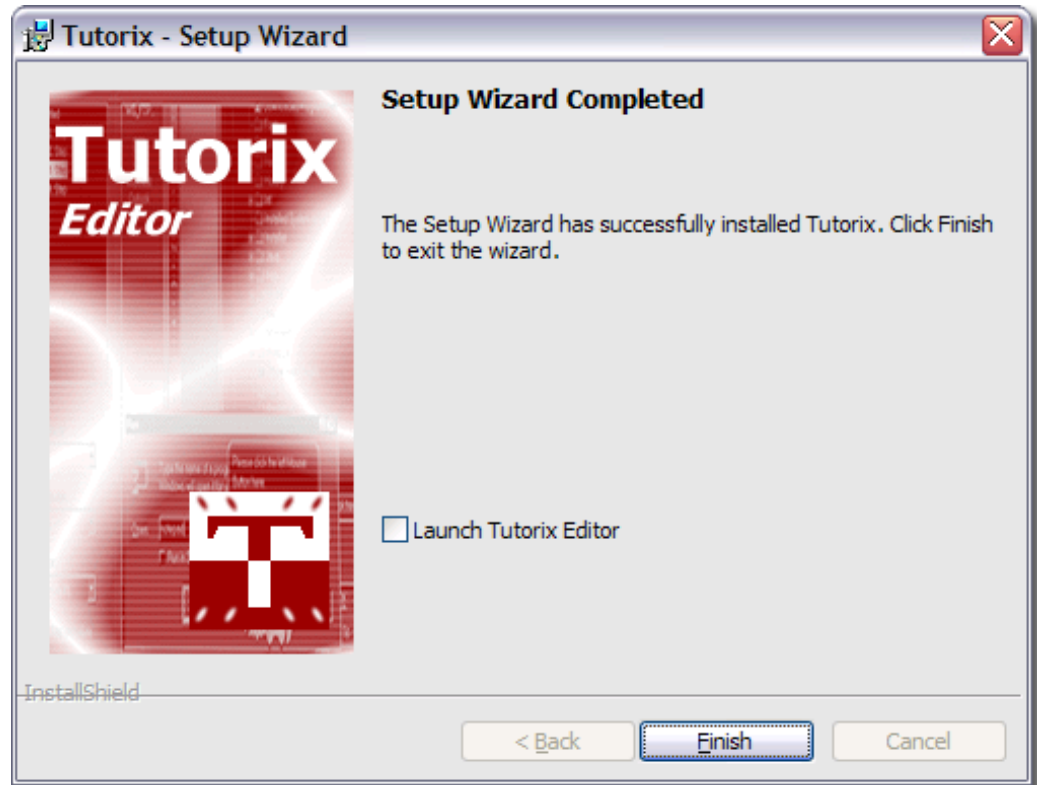
Click on *Install*, to begin with copying data files. Installation may take several minutes.

If the installation program points to a running program, try to close it.



8. Wait until installation has finished and click on Finish.

You now have the choice to start the Tutorix program. In this case select the checkbox *Launch Tutorix Editor* and click on *Finish*.






















## Application of Tutorix

### Getting started

Before you start with recording or editing a tutorial, you shall make yourself familiar with functions of the toolbar icons. They will ease your work with Tutorix, since they can be called directly.

Icons	Description
	<i>New.</i> Closes opened tutorials and prepares Tutorix for the recording of a new tutorial.
	<i>Open.</i> Opens existing tutorials (.tux file).
	<i>Save.</i> Saves newly recorded tutorials and modifications.
	<i>Print.</i> Prints an opened tutorial to the default printer of the system.
	<i>Cut.</i> Cuts a selected (marked) step and copies it into the Tutorix cache.
	<i>Copy.</i> Copies the previously selected step.
	<i>Paste.</i> Pastes the cached step <b>below</b> the selected step.
	<i>Delete.</i> Deletes the previously selected step.
	<i>Record.</i> Prepares Tutorix for the recording of a new tutorial.
	<i>Pause.</i> Interrupts temporarily the current recording of a tutorial. Re-clicking the button continues the recording process.
	<i>Stop.</i> Stops the current recording.
	<i>Play Current Step.</i> Plays the selected step according to defined attributes under <i>Properties</i> .
	Plays the first step of a tutorial (only in <i>Play Mode</i> ).
	Plays the previous step (only in <i>Play Mode</i> ).
	Plays the next step (only in <i>Play Mode</i> ).
	Plays the last step of a tutorial (only in <i>Play Mode</i> ).
	Opens the properties window ( <i>Properties</i> ).

## Edit Mode

The *Edit Mode* serves only for reviewing and editing a tutorial and correcting or upgrading newly created raw versions of tutorials.

In the following paragraphs it is explained, which modifications on tutorials in *Edit Mode* can be done (i.e. copying steps of tutorials, pasting or deleting positions, gestures, fields of interaction, changing text and voice of an agent or naming individual steps of a tutorial).


If you execute steps in *Edit Mode* according to the instruction of an agent, they will not be verified by the agent upon correct execution; this occurs only in *Play Mode*.

## Play Mode

In *Play Mode* the agent verifies if the instruction, which is issued to every step, is executed correctly. Upon correct execution of a step, the agent displays the *Edit Mode* defined *Success Animation* and moves to the next step. If instructions are not executed correctly, the agent displays the *Edit Mode Failure Animation*.

The various gestures of the agent are illustrated in detail in the section *Customizing Gestures of the Agent* on page 25.

If the agent reports that the step wasn't executed correctly, another attempt can be made to execute the instructions correctly.

If you forget the instructions, click the icon *Play current Step* : The agent will advise you, which mouse or keyboard actions you must execute.



Tutorix consists primarily of two components; *Tutorix Editor* and *Tutorix Player*. The editor comprises the *Edit Mode*, which enables recording and editing of a tutorial as well as the *Play Mode*, in which the tutorials can be played. The *Player* serves merely for playing tutorials by the user.

## Record Tutorials

### General

The creation of a tutorial is performed in two major steps:

- Creating raw version (recording)
- Editing raw version (editing)

After recording a raw version, it must be edited and adjusted to satisfy the demands of the user. The single interaction steps could be expanded and the voice output modified and specified.

The fields of interaction which mark the position of a keyboard input or a mouse click, could be adjusted to the extent of the actual requirements. In addition, an individual task description could be added to each of the single steps.

Since the subsequent amendments should not be time consuming, we do recommend before recording a new tutorial the following:



- Make sure that the sequence of the recording is known precisely.
- Go through the entire sequence without Tutorix and note down, if required, where components of the recording are to be located. Start all required applications before you begin with the recording, since during the phase of recording all mouse / keyboard actions should be kept to a minimum.
- Consider recording slowly. If you execute steps too fast, your PC may not have sufficient resources.
- Make sure that your monitor resolution is set for 1024 x 768 pixels, since this resolution is most appropriate for recording a tutorial.
- If you want to create large tutorials (>50 steps), make sure that sufficient disk space is available. Up to 3 MB could be used temporarily per recorded step, i.e. your computer must have, for example, for 100 steps, 300 MB disk space for usage.



Tutorix constantly examines available disk space during recording and interrupts the recording if disk space is insufficient. Recording **cannot** be continued after interruption.

## Recording of Raw Version


Before you start with recording, select a desired agent and language for your new tutorial. If you fail to do so, default language (English) is automatically used and the *Default Agent* defined under program settings [*Extras, Options*] is utilized.



Under 'Agent Character' you can choose the desired agent. By default, four agents are available (*Genie, Merlin, Peedy und Robby*).

In the Menu under [*Extras, Options, Default Agent*] you have the possibility to define one of the four agents as default. The chosen agent appears everytime you start Tutorix. The agent is also used for a new recording. Alternatively, you can select 'no agent' (*No Character*), hence only the bubble is displayed.

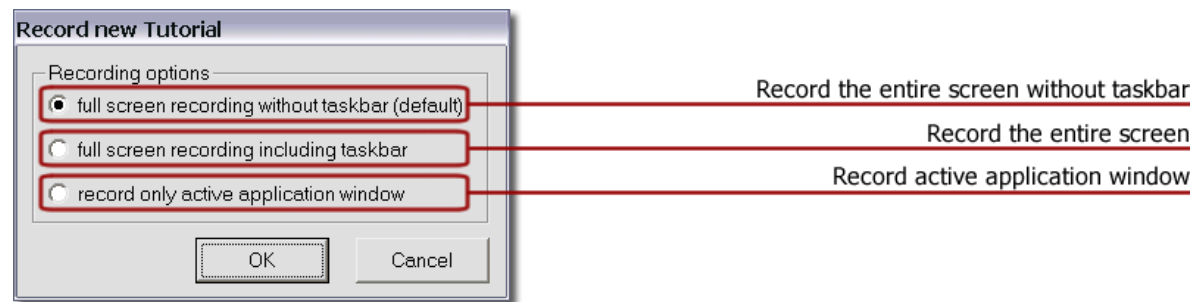
By clicking on *Agent Language*, you can designate the language of the agent (English, German, French, Italian, Spanish, Dutch or Portuguese). Under *Agent Voice* you have the possibility to impart your agent either a male or a female voice. You may even select 'no voice', the speech output follows the bubble of the agent.

Before you begin with recording of a new tutorial, make sure that all open tutorials are closed. Click on the Record icon  or select *Record* in the Menu under *Extras*.





You have the possibility to continue with an open or newly created tutorial. This means, the recording will be appended to the already loaded tutorial. To achieve this, select in the Menu *Extras* the the item *Append*.

The below window appears. You have the following possibilities:








- *Full screen recording without taskbar* records the entire screen without the taskbar.
- *Full screen recording including taskbar* records the entire screen.
- *Record only active application window* records only the used screen, meaning the program which ought to be recorded.

Click on *OK*, to begin recording.

The flashing icon  on the taskbar indicates that the recording phase has started. Once you click the record icon  the Tutorix window is automatically minimized, so that access to the desktop or to open windows can be provided.



Tutorix records **everything** entered by keyboard or mouse from this point on. Therefore, Tutorix records also passwords and codes as clear text! If your tutorial contains passwords, make sure that they can be passed on safely or change them retroactively.

If you want to interrupt your recording, click the left mouse button on the flashing icon on the taskbar and select in the Menu *Pause*. The flashing icon  will be replaced through a Pause icon . During the pause, Tutorix records no mouse or keyboard actions at all. To end the pause, re-click the Pause icon  on the taskbar. If you maximize the Tutorix window during the recording phase of a tutorial, the Pause mode will be activated automatically. After you have recorded the desired production step, click the Stop icon , or click with the left mouse button on the flashing icon  on the taskbar, followed by *Stop*, or select *Stop* in the Menu under *Extras*.

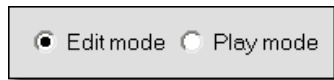
Before you begin post editing, it is recommended to play the newly recorded tutorial to estimate how many corrections, modifications or enhancements must be done.



Numerical inputs may not be entered through the numeric pad (numbers on the right of the keyboard). Use for this purpose the numerical series, located above the alphabet on the keyboard.

## Edit Tutorials

Before you commence editing, make sure that Tutorix is set to *Edit Mode*:



## Rework Raw Version


Reworking of a tutorial comprises primarily of the following:

1. Verify if all steps were executed correctly
2. Adjust the size of fields of interaction
3. Optimize the position of the agent
4. Adjust modified position of gestures of the agent
5. Change text in bubbles
6. Specify steps individually
7. Task description
8. Short description of the tutorial


## Verification of Steps


The steps of your new tutorial are displayed upon completion of recording in a step tree.

Work through the tutorial step by step (by clicking with the left mouse button on the appropriate steps) and verify, if the mouse and keyboard actions are recorded on all steps correctly.

You have the possibility to delete redundant or duplicate steps, by clicking the icon  or by selecting in the Menu under *Step* the item *Delete Step*.

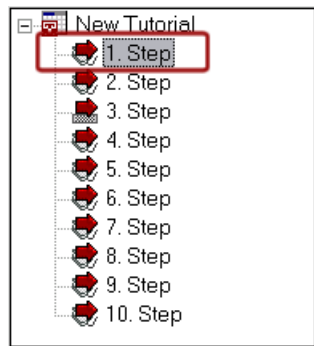
To copy a step, click on the  icon or select in the Menu *Step* the item *Copy Step*.

To cut a step and to copy it into the cache, click on the  icon or select in the Menu *Step* the item *Cut Step*.


To paste a step, a step must be copied previously. To paste, click on the  icon or select in the Menu *Step* the item *Paste Step*.


The newly inserted step appears **below** the selected steps.


Selecting steps:





Before you are able to copy, cut or delete a step, it must first be selected (marked).



To play the current step, click on the  icon or select in the Menu *Navigation* the item *Play current Step*.

To play the next step, click on the  icon or select in the Menu *Navigation* the item *Play next Step*.

To play the previous step, click on the  icon or select in the Menu *Navigation* the item *Play previous Step*.

To play the last step of a tutorial, click on the  icon or select in the Menu *Navigation* the item *Play last Step*.

To play the first step of a tutorial, click on the  icon or select in the Menu *Navigation* the item *Play first Step*.

In the step tree you see under the red arrows a figure of a mouse , if a mouse interaction is stipulated, and an illustration of a keyboard , if a keyboard interaction has been anticipated.

In this example of a step tree, steps are nominated by default as *1. Step*, *2. Step* etc. In the paragraph *Individual Nomination of Single Steps* on page 37 you will learn, how you can rename the steps.

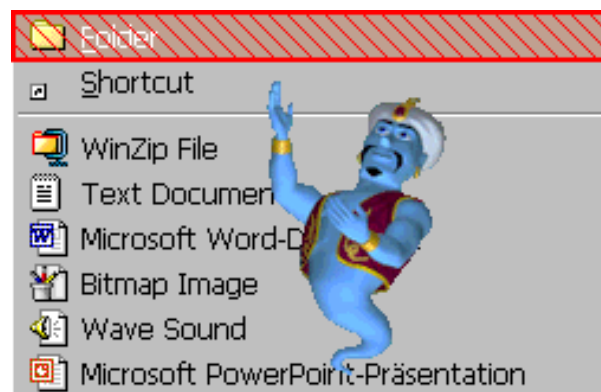
## Field Size of Interaction

Tutorix attempts to automatically measure the movement of a mouse or keyboard input. If unsuccessful, the default size is used, and the size of the field of interaction must be reworked. Example:



You have the possibility to click with the mouse on the pages or edges (below red marked) of the field of interaction and to drag it into the desired length and width.

To move the fields of interaction as a whole, click on it and hold the mouse button. Drag the field of interaction with the mouse to the desired position.



It is recommended to arrange the size of the mouse or keyboard field of interaction, to correspond with the measures of the recorded (inactive) area.

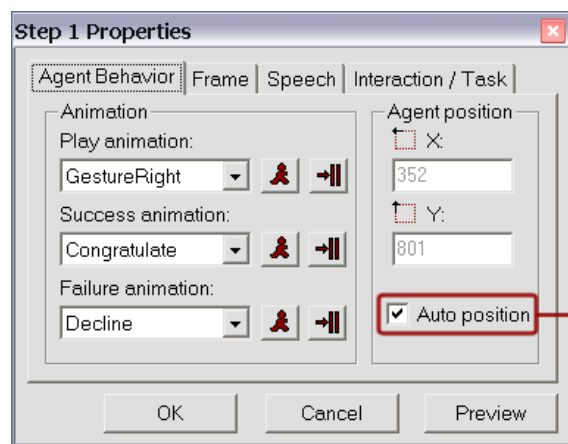
In the example above, the field of interaction contains now the entire marked menu item.



### Adjust Position of Agent

The default position (auto position) of your agent is located on the right hand side of the field of interaction. However, you have the possibility to change the position of the agent through individual steps.

To change the position of the agent, click with the left mouse button on the agent and drag it to the desired position. The *Auto Position* (default position) of the agent is automatically switched off and you can now choose the new position of the agent. To restore *Auto Position*, select the checkbox *Auto Position*.



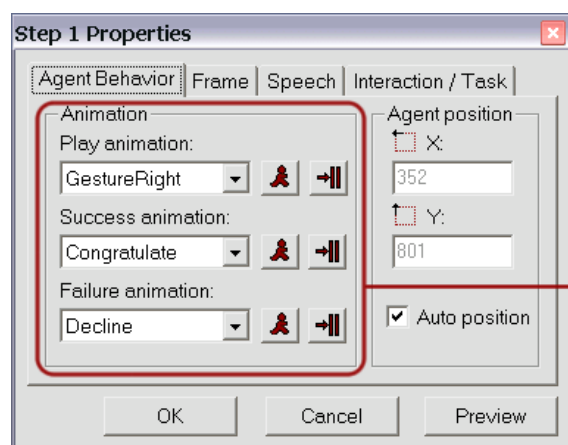
Position agent automatically



Don't forget to fit the gestures of the agent to its new position.

### Adjust Gesture Right of Agent

The default gesture of your agent (*Gesture Right*), i.e. pointing with the right arm to the field of interaction) will be utilized automatically by each step, unless you change it. If the default gesture does not fit the current position of the agent or you wish to insert in the individual steps different gestures, click on the *Properties* icon of the relevant step and choose the tab *Agent Behavior*.



Adjust gestures

1. Under **Play Animation** select the gestures of the agent, that refer the user in *Play Mode*.

Below are some of the most used gestures of *Play Animation*:



**GestureRight**  
(gesture right)



**GestureLeft**  
(gesture left)



**GestureUp**  
(gesture up)



**GestureDown**  
(gesture down)



**Announce**  
(announce)



**Explain**  
(explain)



**-None-**  
(no gesture)

2. Under **Success Animation** select the gesture of agent that should notify the user, when the requested action from the agent in *Play Mode* has been successfully executed.

Below are some of the most used gestures of *Success Animation*:



**Congratulate**  
(congratulate)



**Greet**  
(greet)



**Wave**  
(wave)

3. Under **Failure Animation** select the gesture of agent that should notify the user in *Play Mode*, when the requested action from the agent has not been executed correctly.

Below are some of the most used gestures of *Failure Animation*:



**Decline**  
(decline)





**Confused**  
(confused)



**Sad**  
(sad)

The *Success-* and *Failure* gestures of the agent are only executed upon playing a tutorial in *Play Mode* from Tutorix Editor or by playing a tutorial with Tutorix-Player.

If you wish to test how a gesture will appear in *Play Mode*, click the button  (*Play Animation*).

To apply the selected gesture to all other steps of the tutorial, click the button  (*Apply to all Steps*).

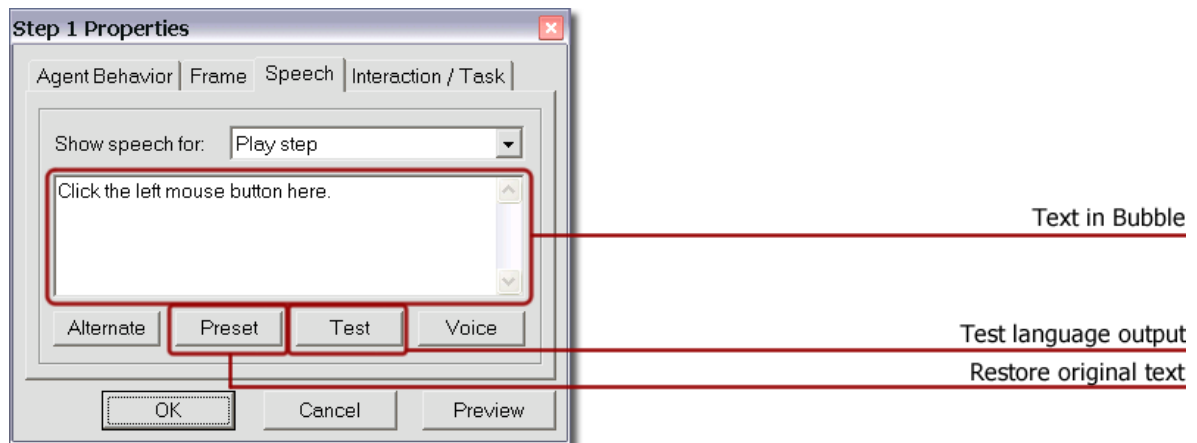


Not all agents from third party vendors have the same animations in their 'repertoire'. By selecting the agent, the list of available animations is automatically updated. If you use an agent from a third party vendor, it is possible that not all animations are available.

## Changing Text in Bubbles

You may customize default texts that are utilized during recording of a tutorial according to your demands.

Click on the properties icon  and select the tab *Speech*.



You can now change the text that is displayed in the bubble. If you then click *Test*, you can review the new speech output directly. By clicking *Preset*, the original text (default template) of the bubble is restored.

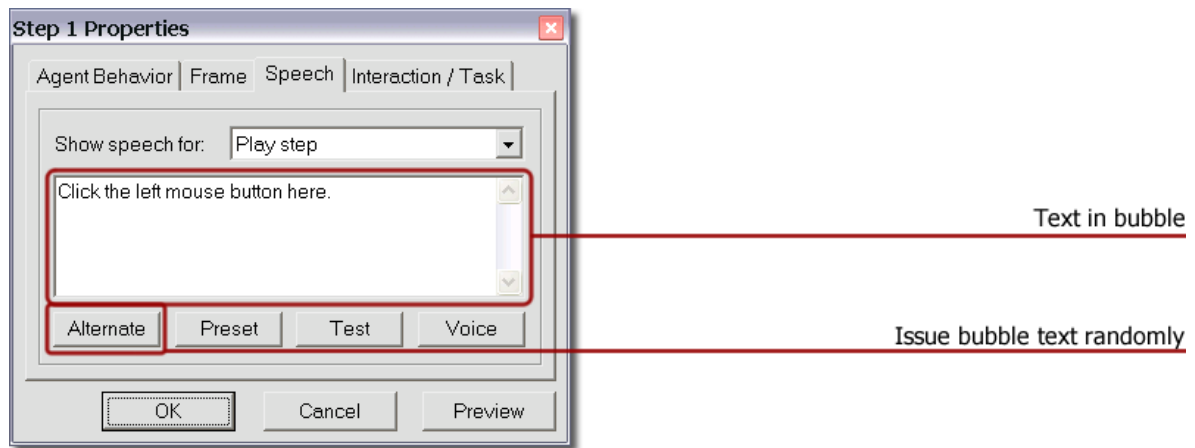
**Caution:** The selected agent **and** the chosen language are stored in the .tux file when the tutorial is saved. This means that the default agent and default language are used automatically if the .tux file is opened on a computer where the selected language **has not** been installed.

If you created and saved a tutorial for example in German and the user of the tutorial has not installed 'German', the users speech output will be in English (default language).



However, only default texts in bubbles are translated automatically. If you have made changes in bubbles in 'Edit Mode', they will (if saved language in .tux file has not been installed on the users computer) **not** be translated in default language. This means that you must translate changed bubble texts into English, if the user of the tutorial has not installed your chosen language.

## Dispense Bubble Text Randomly



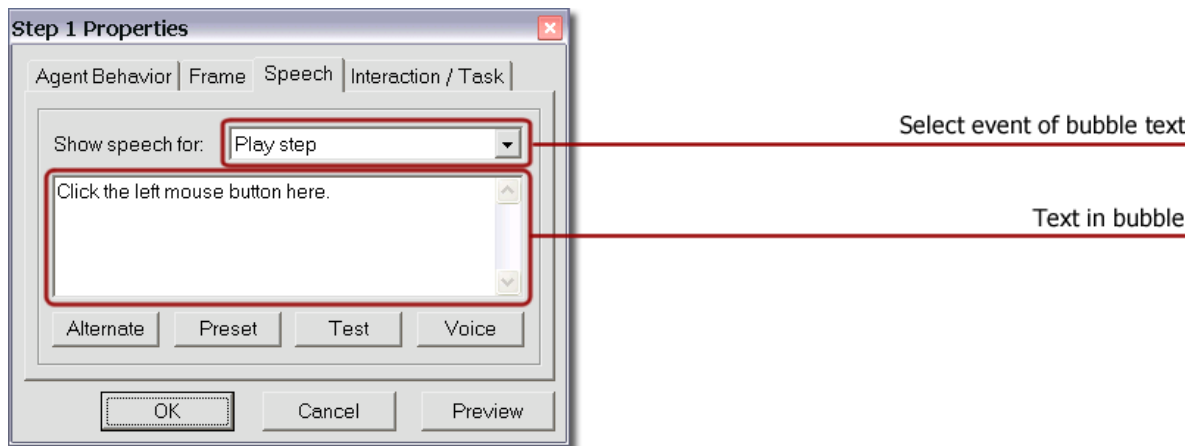
With the *Alternate* button you can add multiple, diverse texts to the same bubble text. The texts are separated with the `'|'` symbol. By playing the bubble text, a text is played randomly. This is to provide the user more variety in the speech output; i.e. the agent appears 'lively'.

**Example:** Click on the continue button to begin with installation. | To begin with installation click on the continue button.

According to the example above, one of the following texts are issued randomly:

- 1) Click on the continue button to begin with installation.
- 2) To begin with installation click on the continue button.

## Bubble Events



The texts in bubbles are event-dependent. According to the action of the user, various events are being generated, leading to diverse speech outputs of the agent. Switch to *Play Mode*, to test the user defined bubble texts.

The events correspond to either a mouse or keyboard interaction. The events are characterized through appropriate symbols. Tutorix is acquainted with the following events:

- **Play Step** (*Play Step*)  
This text is being used for playing a step. Its purpose is to inform the user, what action will be performed by the appropriate step.
- **Outside of Field of Interaction** (*Outside of Frame*)  
This text appears in the bubble, if the user has operated the mouse button outside the field of interaction.
- **Left Mouse Button Expected** (*Left mouse button expected*)  
The user has made a mouse click within the field of interaction, but clicked the wrong mouse button. The left mouse button is expected.
- **Right Mouse Button Expected** (*Right mouse button expected*)  
The user has made a mouse click within the field of interaction, but clicked the wrong mouse button. The right mouse button is expected.
- **Double- Click Expected** (*Double-click expected*)  
The user has made a mouse click within the field of interaction; however, a double click is required.

- **Incorrect Input** (*Incorrect input*)

The input in the field of interaction is not correct. The event is caused, when the input does not correspond with the *Interaction / Task | Expected User Input* field. A variable may be used to utilize the text that the user has entered into the bubble text field of the agent.

Example: You have entered %input% instead of notepad.exe

In the example above, the text in the bubble is adjusted according to the input of the user. If the user has entered word.exe, the output would be:

You have entered word.exe instead of notepad.exe

- **Upper and Lower Case Invalid** (*Case-sensitive input*)

This event is caused, if the user has entered input correctly; however, he has not adhered to case sensitivity. Refer to the paragraph *Configure Fields of Interaction*.

- **Completing Input** (*Finish input*)

This text appears in the bubble if an input must be completed with a triggerkey. For example it will be indicated upon (correct) input of notepad.exe, that the user must press the Enter key for completion.

- **Wrong Pressing of Triggerkey** (*Wrong triggerkey pressed*)

This event is caused when the user has hit the wrong triggerkey. You may use the variable %key%, to let the wrong input flow into the bubble text. The users pressed button will automatically be translated into the particular language. Example:

You have pressed the %key% key instead of the Enter key, try it once again.


If the user pressed the Escape button for completion, the text in the bubble would be the following:

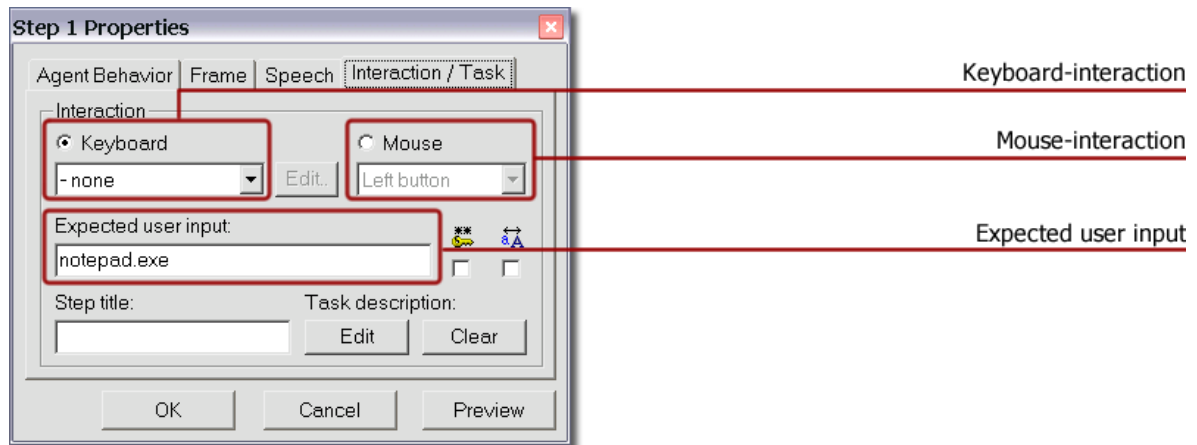
You have pressed the Escape key instead of the Enter key, try it once again.

## Configure Fields of Interaction

In *Edit Mode* you can configure the fields of interaction of single steps.

This means you can change the requested mouse or keyboard interaction that must be executed when playing the tutorial in *Play Mode*.

Click on the icon *Properties*  and select the tab *Interaction / Task*.




## Keyboard Interaction

If the current step requires a keyboard interaction (user input and/or triggerkey), the field keyboard is activated (labeled black button). In the example above, no triggerkey is required.

The field *Keyboard* is set for 'None'. In contrast, in the field *Expected User Input* text is written, and must be entered through the keyboard by this step of the tutorial into the designated field.

You can now modify both the nature of the triggerkeys, as well as the input text to be entered by the user. This is useful for example if misspellings have occurred during recording or if you have forgotten parts of the text or the application of the triggerkey during recording.

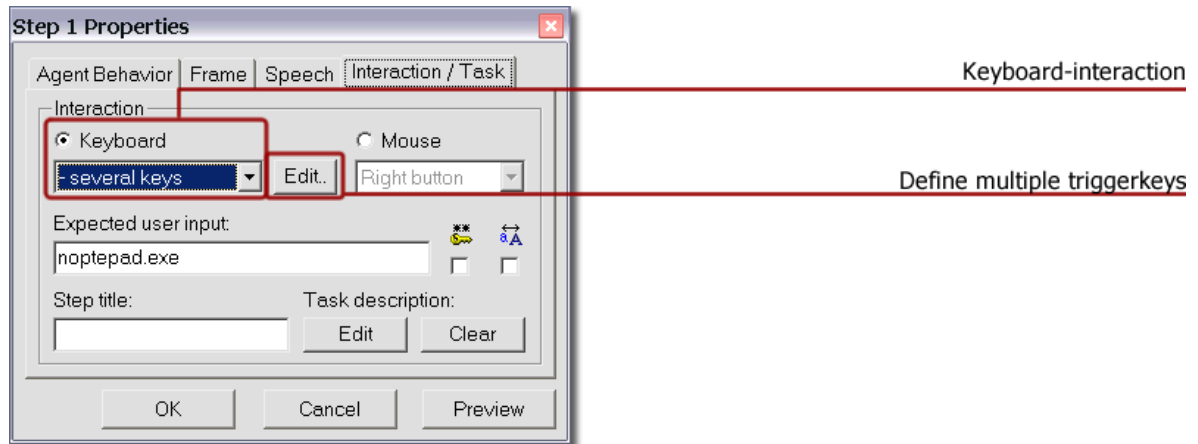
 By a keyboard interaction, either a triggerkey must be selected or text must be entered or both.

You can define the following triggerkeys:

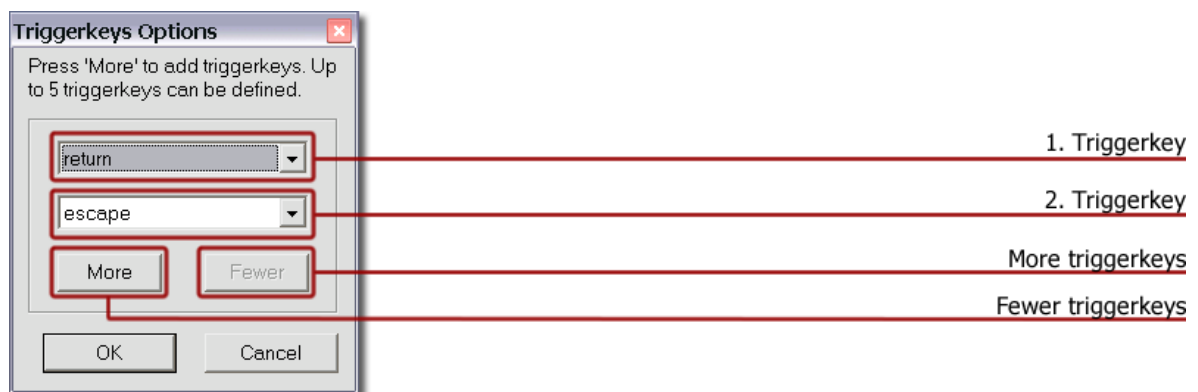
Escape, Return, Tab, Insert, Delete, Home, End, Page Up, Page Down,  
CtrlA – CtrlZ, Ctrl0 – Ctrl9, F1 – F12



## Defining Multiple Triggerkeys



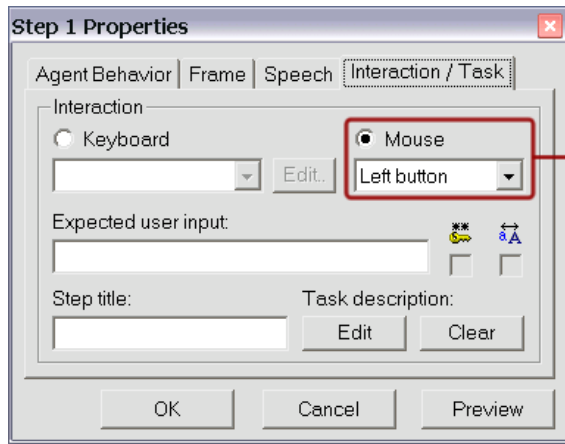
You have the possibility to define multiple triggerkeys, so that the next step can be played if one of the triggerkeys has been hit. Choose 'Define Several Keys' and click on the *Edit* button. The following configuration window appears:



In the example above, two triggerkeys are defined: *Return* and *Escape*.

Click on the 'More' button or 'Fewer' to expand or reduce the configuration window. You can define up to five different triggerkeys.

## Mouse Interaction



Mouse-interaction



In the example above, a mouse interaction (left mouse button, right mouse button, double click) is demanded, therefore the field *Mouse* is activated. You have the possibility to modify or correct the demanded mouse action.

Example: During recording you have executed a double-click, although only one click with the left mouse button was required. This can be corrected easily: Click on the field 'Mouse' and select *Left click*. By playing of tutorials in *Play Mode* a mouse click with the left mouse button will now be expected by the relevant step.




### Additional Options for Keyboard Field of Interaction

If you select in *Edit Mode* under *Properties*  and *Interaction/Task* in the checkbox  *Password Field*, the input of the text *Expected User Input* in *Play Mode* will be starred i.e. ( *\*\*\*\*\** ).

By default, in *Play Mode* the expected text inputs in the tutorials can be entered in either upper or lower case. If the input of *NOTEPAD* is expected, the *Success-Animation* of the agent could also be made through the input of *notepad* or *nOtePad*. The input case sensitivity could be enforced optionally.

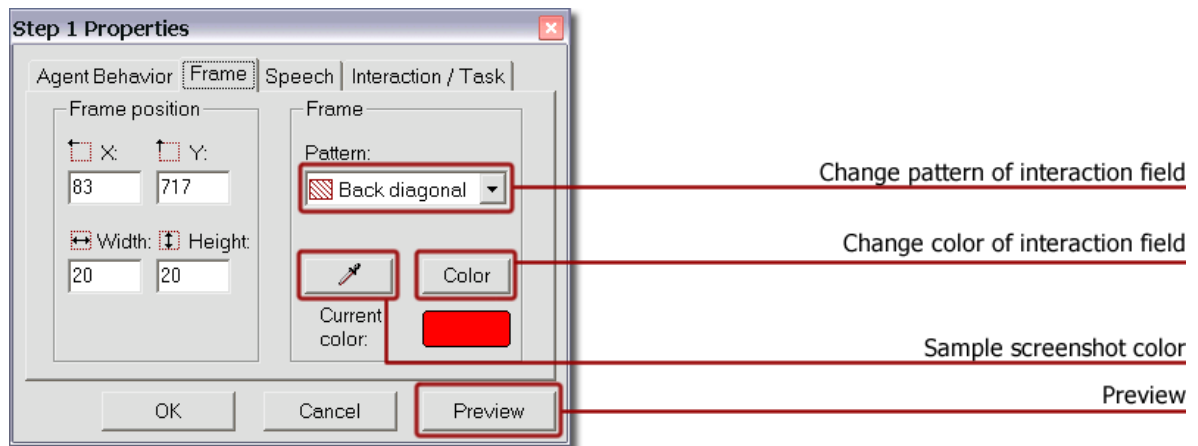
Select in *Edit Mode* under *Properties*  and *Interaction / Task* the checkbox  (*Case Sensitive*). The user must enter the text of the relevant step in the predetermined upper and lower case, to provoke the success animation of the agent.



If the *Case Sensitive* function  is clicked, for the current step it is activated exclusively. All other steps of the tutorial, in which text inputs are expected, the function remains switched off. The option *Password Field*  and *Case Sensitive*  could only be clicked, if in the relevant step a keyboard input is expected. In contrast, if a mouse click is expected, these options are deactivated.

## Change Color and Pattern of Field of Interaction

The fields of interaction in the tutorial may be further modified. Click on the icon *Properties*  of a step and select the tab *Frame*.




Under *pattern* a different pattern may be chosen, to mark the field of interaction. If you don't wish a patterned field of interaction, select 'None'. The field will be bordered but not patterned.

If you separate the fields of interaction of the individual steps by color or fit the coloring to the current screenshot, you may appoint on each step of the tutorial the color of the field.

By clicking *Color*, you may provide the field of interaction any color. For compatibility reasons with other computers it is recommended to use one of the 16 default colors.

Besides the 16 default colors, you have under *Custom Colors* the possibility to choose any color of the RGB color range.


You may choose in the screenshot an already used color.

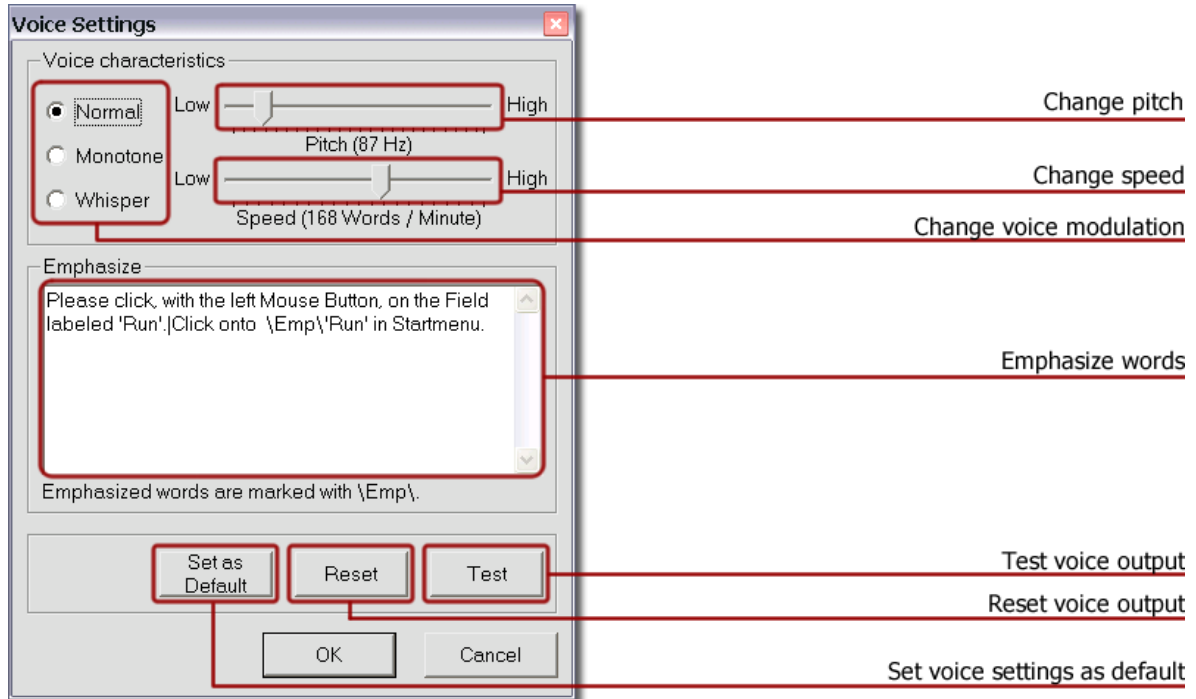
If you click the 'Sample Colors' button , you can define every color of your screenshot as foreground color for the field of interaction. Use your mouse to select a color within the screenshot. In the field *Current Color* you see a preview of the selected color.

With the preview button, the relevant field of interaction receives immediately a new color. This function also serves for previewing the altered settings.

If you don't wish a preview of the color, click directly on the 'OK' button. If you want to restore the settings, use the 'Cancel' button.

## Position Voice Output

Under 'Properties'  select the tab speech and click on the 'Voice' button. The window of voice settings is opened.



You may change the pitch as well as the speed of your agent. The modulation of the voice could also be changed, choose between (*normal, monotone and whisper*).

You may also emphasize individual words. At least two or more words in the field 'Emphasize' must be defined as voice output, separated with space characters. Double click the desired word to be emphasized in the voice output. Emphasized words are displayed graphically through the directory `\Emp\`. Re-click the already emphasized word to revoke the emphasis.

With the 'Test' button, **all** changes performed in this window can be sampled.

With the button 'Set as Default' you may apply changes of the agent voice to **all** steps within your tutorial. Existing voice settings in other steps will be overwritten.

If you click the 'Reset' button, **all** previous changes are reset, i.e. default values are used again for voice output.

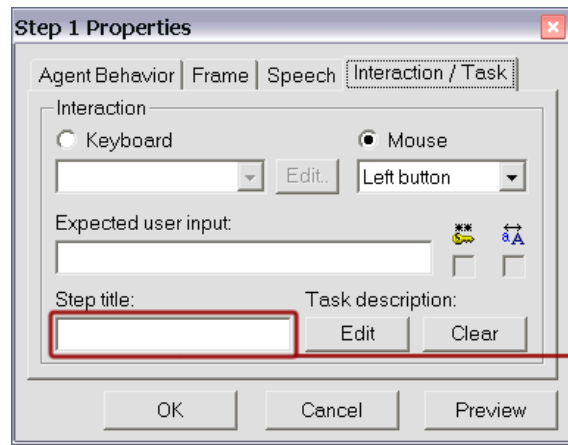


Through the emphasis of words the modulation and understanding of the voice output can be improved. This function is especially useful for longer sentences.

### Individual Nomination of Single Steps

In the default format of a tutorial, individual steps are indicated with *Step1*, *Step2*, etc. It is recommended, to rename the steps in the newly created tutorial with a step title.

You can do that by relicking the button *Properties*  and selecting the tab *Interaction / Task*.




Change step title

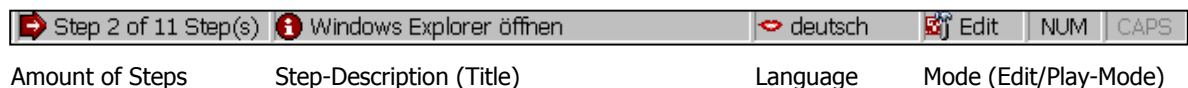
Enter the desired name in the field 'Step Title'. The step tree is automatically updated.

If you print the tutorial, the new title of the step appears instead of the default step description *1. Step*, *2. Step* etc. under the heading *Title* on the print out.



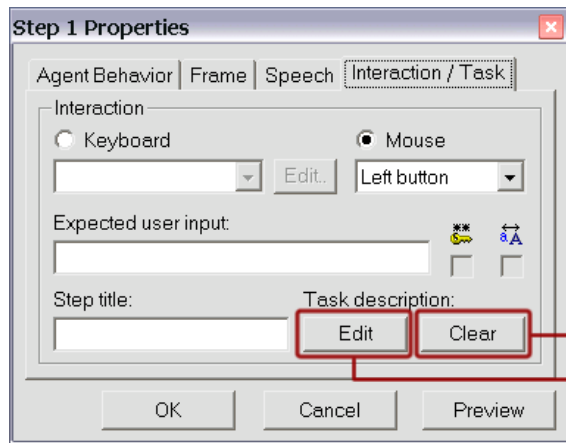
In Tutorix, the changed title of steps appear not only in the step tree, but also in the status bar (symbolized as .

Additional information in the status bar:



## Task Description

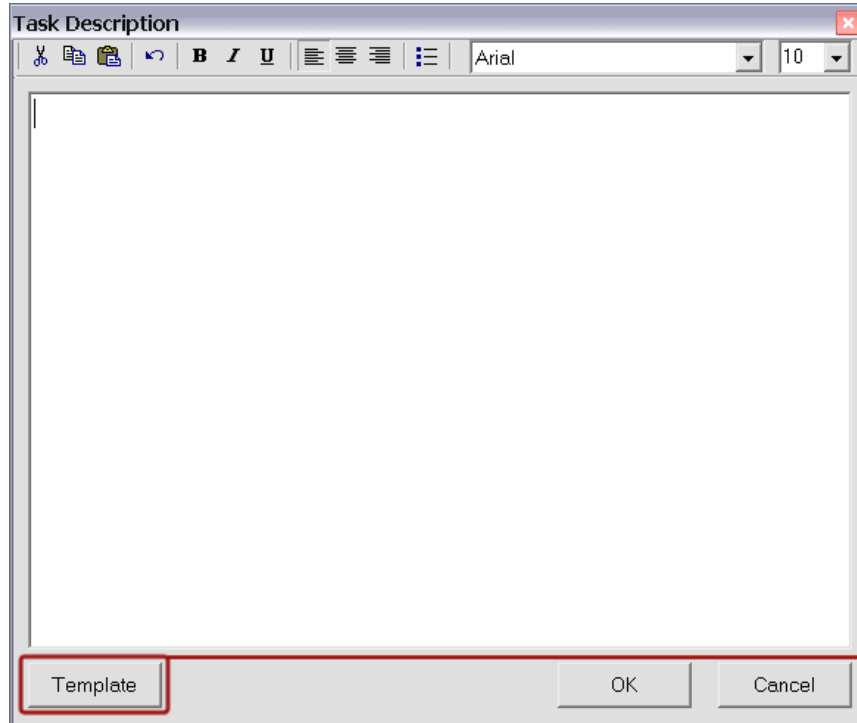
It is recommended to provide the individual steps with a short description of the current task. The user of the tutorial views this description automatically by playing the step. If the tutorial is printed, the short description is viewable under the heading *Task Description* on the print out.



Clear task description

Edit task description

By clicking *Edit*, a new window appears, in which you can enter a short description for the current step. If you wish to clear the content of the window *Task Description*, use the 'Clear' button.














Use task description of previous step



Note the function *Template*. With this function you have the possibility to copy the task description of the previous step into the current description. The copied description can then be modified.

## Meaning of Icons in Task Description Window

---

	Cutting a selected text
	Copying a selected text
	Pasting a previously copied text
	Undo changes
	Bold
	Italic
	Underline
	Text left aligned
	Text centered
	Text right aligned
	Insert numbers

To confirm your new task description, click the *OK* button. To restore the original status, use the *Cancel* button.

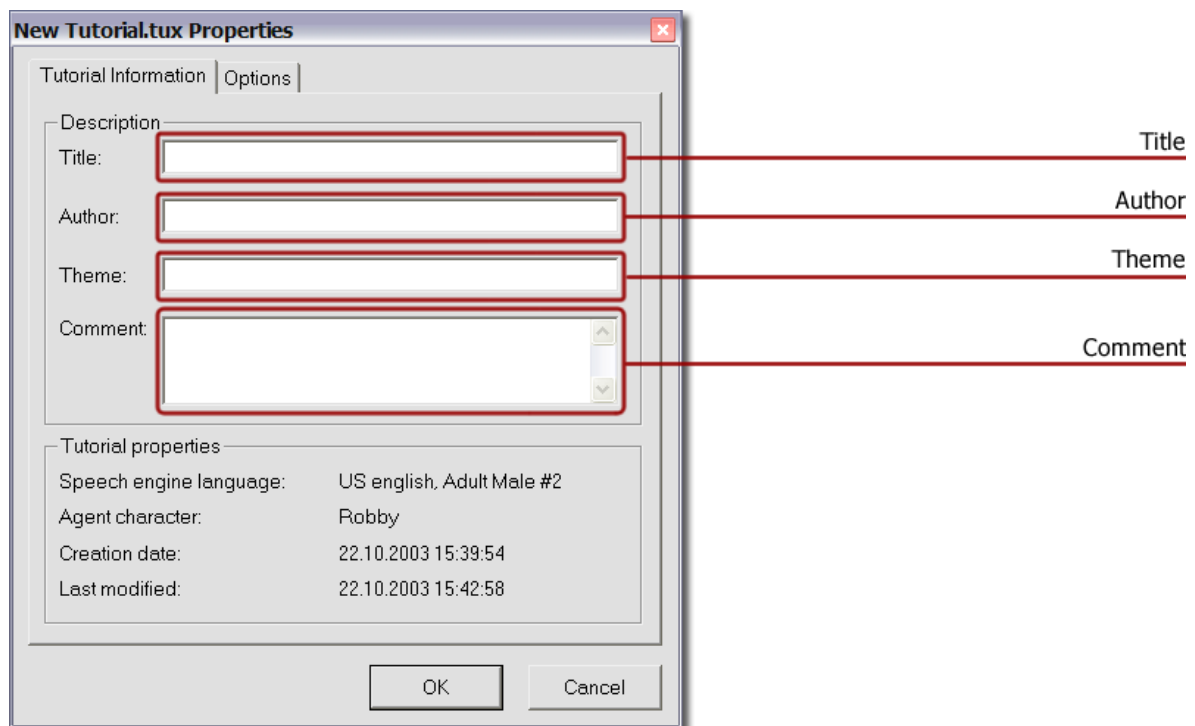
## Short Description of Tutorial

Now your created tutorial is almost finished. You can endorse your tutorial with a short description. Thus you have at any time an overview of the title, agent, language, author and creation and modification date of the tutorial.

To create a short description, click in the Menu on *File* and select *Tutorial Properties* or double click in the step tree the title of the tutorial (in the figure below red framed).



The window below appears. Important attributes of your tutorial can be entered or reviewed.



Additional information:

- The language in which your tutorial was composed
- The agent that you selected
- The date when the tutorial was created
- Date and time of the last modification on the tutorial

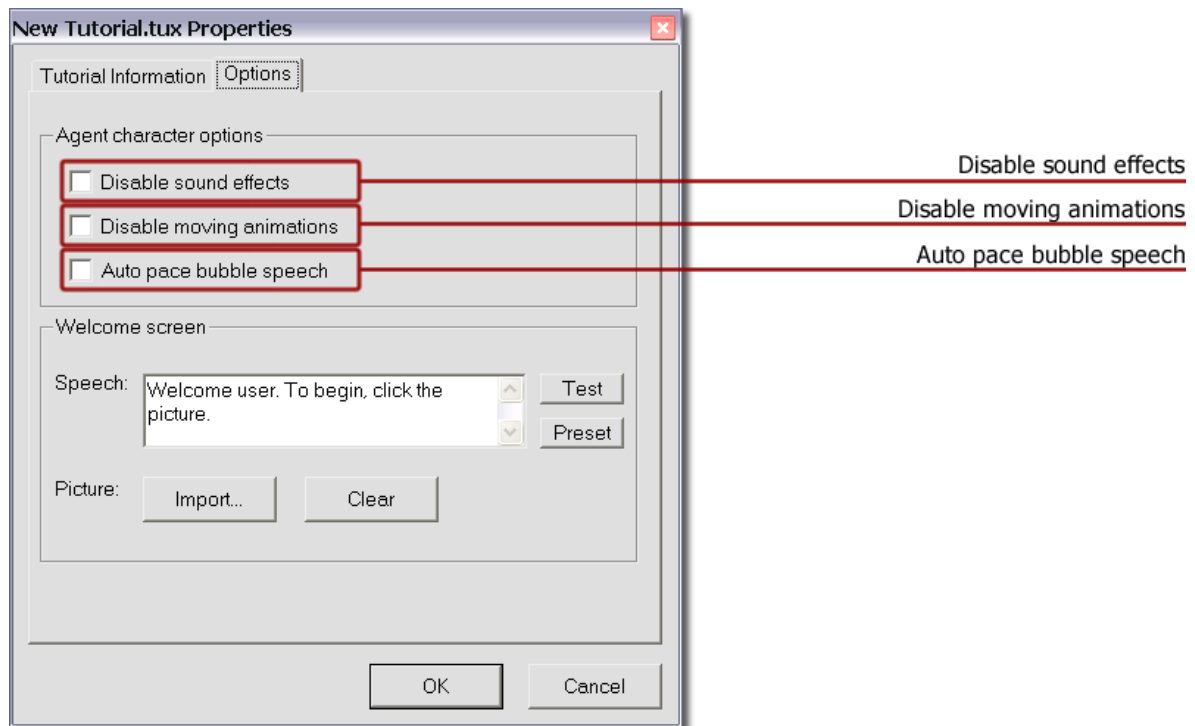


This additional information is only available once your tutorial is saved. It is recommended to give every saved tutorial a title.



## Global Agent Options

You may expand your tutorial with extended settings. These are applied to the entire tutorial. Select the tab *Options*.



### Disable sound effects

These settings disable all effects of the agent. The speech output remains.

### Disable moving animations

With this setting the moving animation of the agent is disabled, the agent 'jumps' between positions.

### Auto pace bubble speech

If this option is enabled, the speech output is synchronized with the appearance of the text in the bubble.

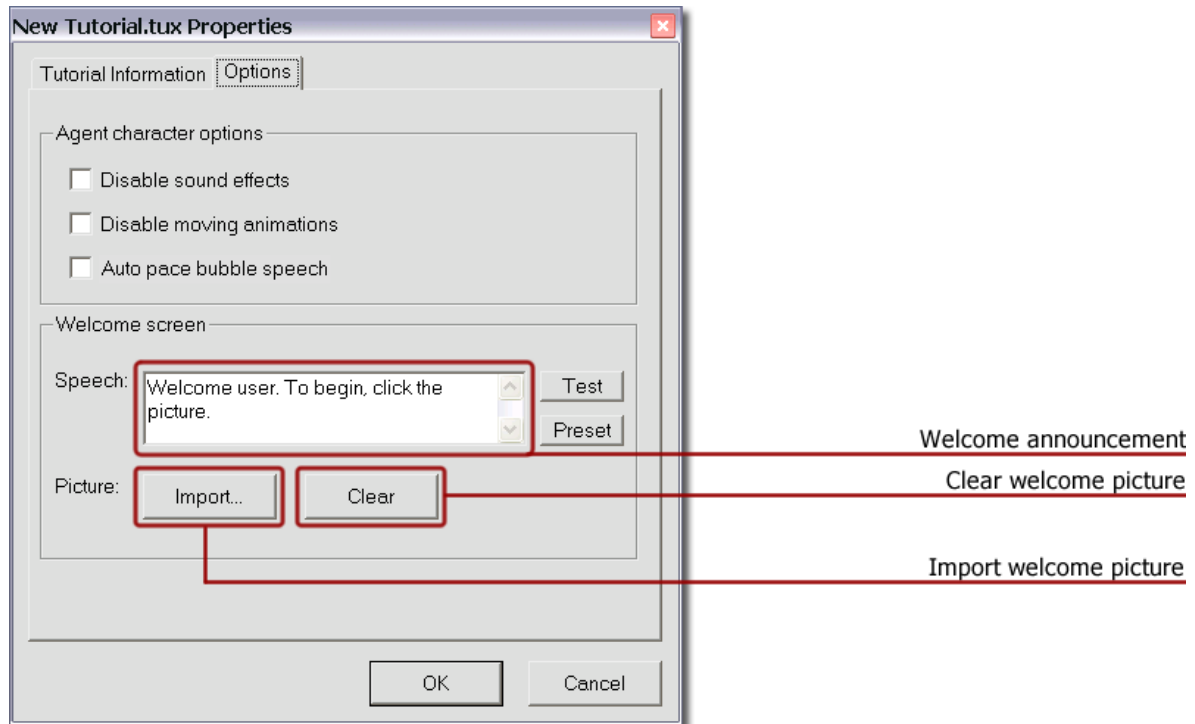


These settings are saved permanently in the tutorial and used by *Tutorix Player*.

## Welcome Picture / Set Welcome Announcement

You tutorial can be enhanced with a picture and/or an announcement.

### Welcome Picture



Click the *Import* button to import a picture to be used as start screen upon opening a tutorial. With the *Clear* button you can delete this picture. The imported picture file size may not be less than 200 x 100 pixels.

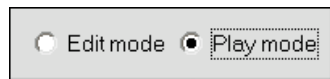
Switch to Play Mode to test the welcome picture.

### Welcome Announcement

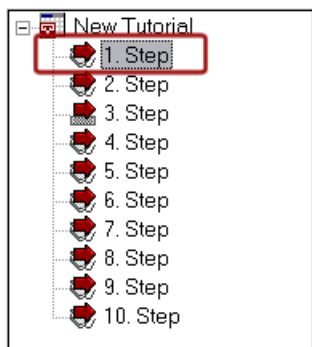
In the field *Speech* an additional welcome announcement can be entered to be displayed in conjunction with the welcome picture of the agent. The text entered must be language specific, i.e. input the text in the language that is defined in the tutorial as speech output. With the *Test* button the welcome announcement can be tested. Click on *Preset*, to return to the default value of the particular language.

## Playing Tutorials

Before you play the newly created tutorial, ensure that Tutorix is set to *Play Mode*. Once switched to *Play Mode*, Tutorix plays the first step automatically.



The individual steps of the tutorial are displayed in a step tree (see figure below). Above the *1. Step* the title of the tutorial (.tux file) is mapped.



The individual steps are mapped in the step tree either by default as *1. Step*, *2. Step* etc. or under the title, that was defined in *Edit Mode* under *Interaction / Task, Step Title*.

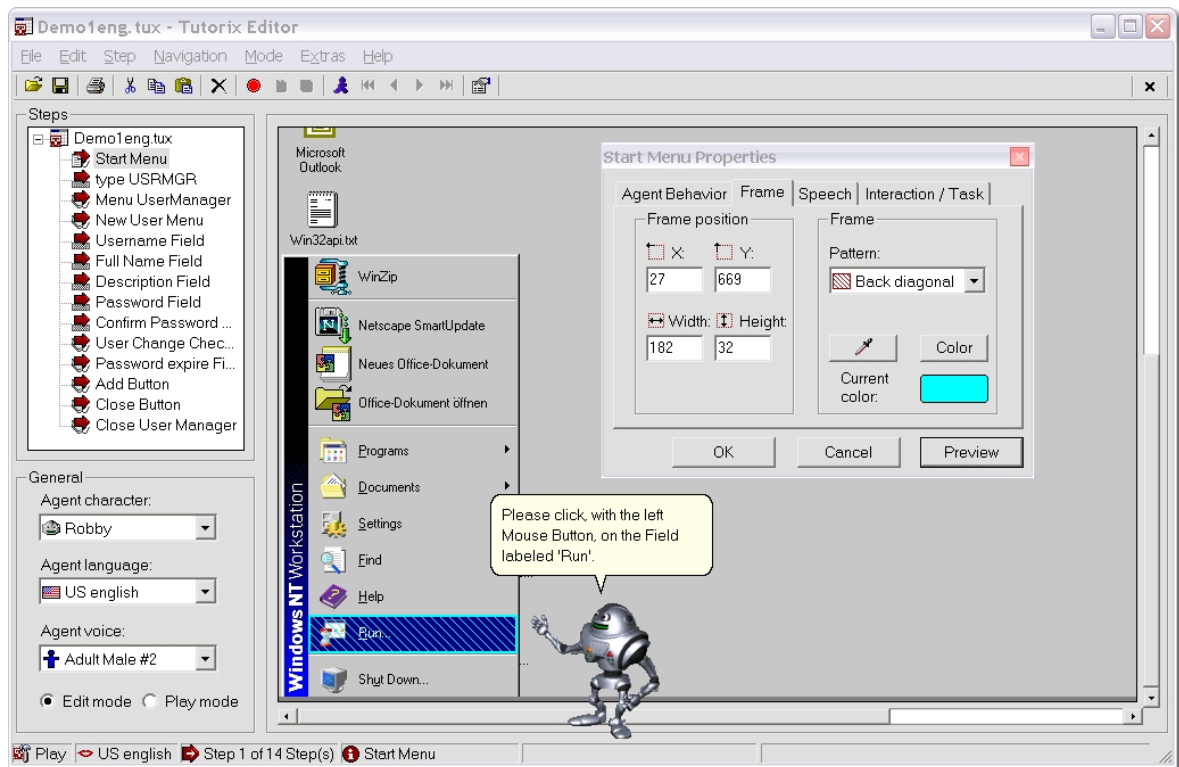
To play the tutorial, switch Tutorix to *Play Mode*. *1. Step* of the tutorial is played automatically. Follow the instructions of the agent.

If the stipulated action is executed successfully, the agent displays the *Success Animation* defined gesture and moves to the next step.

If the agent stipulated action was not executed successfully, the agent displays the *Failure Animation* defined gesture.

You may execute the called action directly adjacent or if you forgot what is to be done, click directly on the relevant step in the step tree.

The agent will announce action required.




The figure above depicts the overall surface of the Tutorix Editor. Under *Steps* can be seen the individual steps of a demonstration tutorial (Demo1eng.tux). On the current screenshot the agent demonstrates, the action anticipated from the user by the 1. Step (Start Menu) of the demonstration tutorial.

The opened *Properties* window of the 1. Step (*Start Menu Properties*) depicts the pattern (*Back Diagonal*) and color (under *Current color*) the current field of interaction shows. Under *General*, the properties of the current selected agent are shown.

## Printing Tutorials

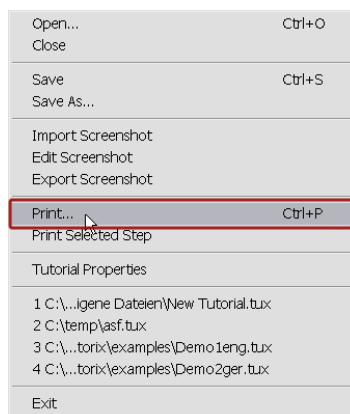
The learning units (tutorials) can be printed.

To print your tutorials, click  (*Print*) in the Tutorix Editor toolbar. All steps of the tutorial are successively printed on the default printer of your system.

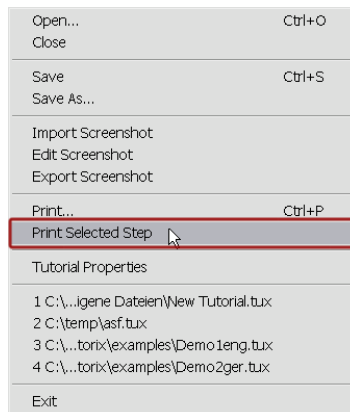
The printout of every step of the tutorial comprises the following information:

- Under the *Title* you see the *Edit Mode* defined title of the respective step. If you did not name the steps in *Edit Mode* individually, the steps will be described on the print out as *1. Step*, *2. Step* etc.
- Under *Balloon Text* the *Edit Mode* defined instructions of the agent are shown. If you did not change the text in the bubble in *Edit Mode*, the default text is printed.
- Under the title *Screenshot*, the screenshot of the current steps is printed.
- If in *Edit Mode* a task description of the current step was created, this will appear under the title *Task Description* on the print out.

If you want to print the tutorial on another printer, click in the Menu on *File* and select the item *Print*.



Individual steps of the tutorial can also be printed separately: Select the desired step of the tutorial and click in the Menu *File* the item *Print Selected Step*.



The commands *Print*, *Edit* and *Play* can be used directly by clicking in Windows Explorer or on the Desktop with the right mouse button on the desired .tux tutorial file.

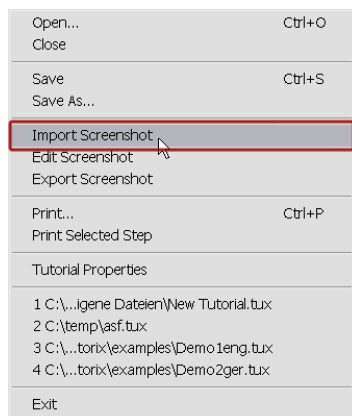
## Extended Tutorial Settings

### Import Screenshot

You can import the screenshot of a step into Tutorix Editor or substitute it with a picture of your choice.

Select the desired step and choose in the Menu (*File*) the item *Import Screenshot*. The following file formats are permitted:

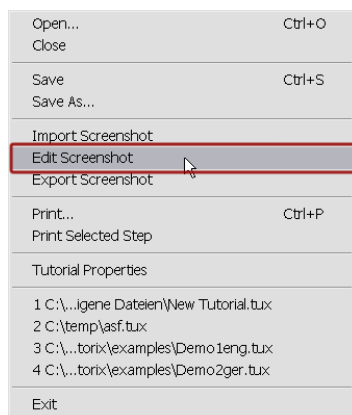
Bitmap (.bmp), JPEG graphic (.jpg), Metafiles (.emf, .wmf), GIF graphic (.gif).




The picture that will replace the current screenshot may not be less than the minimum size of 640 x 480 pixels, and not greater than 1600 x 1200 pixels.

### Edit Screenshot

You may modify or amend the current screenshot with help of a graphic editing tool according to your needs. Select in the Menu (*File*) the item *Edit Screenshot*.



The graphic editing tool 'Paint' is opened automatically. After completing the desired amendment, click on the 'Close' symbol  in the corner of the 'paint' window.

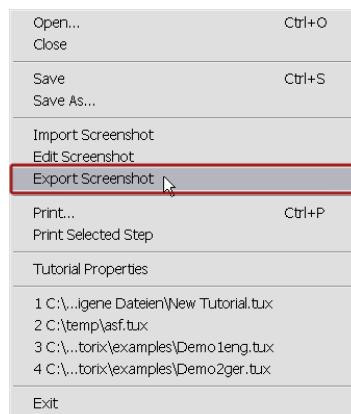
The 'paint window' is closed and a small window opens with the request to save. Confirm the modifications on the screenshot with 'Yes'.



Note that after saving the modified screenshot the original screenshot is no longer available. However, you have the possibility to back up the original screenshot **before** editing in 'Paint' with the 'Export' function, saving it under a name of your choice as .bmp file.

## Export Screenshot

With the 'Export'-function you may save the current screenshot as graphic file (Windows Bitmap .bmp) in the file system. The screenshot can also be used independently from Tutorix program.



By this means you have the possibility to modify or amend the screenshot with graphic editing tool of choice.

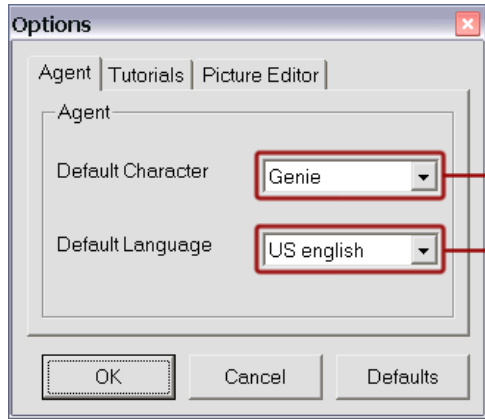


With the above described *Import* function you can paste the modified screenshot into Tutorix.



## Program Settings

Click in the Menu *Extras* and select *Options*, for the Program-Settings window.



Define default agent

Set default language

### Define Default Agent

Select in the tab *Agent* the default agent (*Default Character*), to load automatically after every start of Tutorix. If no third party vendor agents are installed, the choice is limited to the four default agents (Genie, Merlin, Peedy, Robby or 'No Agent'), distributed with Tutorix software.



To exercise this function thoroughly, you must have all four default agents installed on your system. You may install missing agents at any time by inserting the Tutorix CD-ROM and executing the installation file.

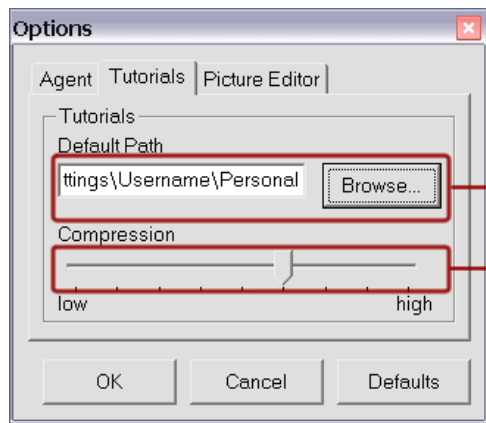
### Set Default Language

Under *Default Language* set the language used upon starting Tutorix. Only installed languages are possible. Add further languages at any time by inserting the Tutorix CD-ROM and executing the installation file.



Click on the *Defaults* button to return to the default settings.

Select the tab *Tutorials* for the below settings.



Default path for tutorials

Adjust compression

## Default Path for Tutorials

In the field *Default Path*, the folder in which tutorials are to be opened or saved is displayed. Use the *Browse* button to search for other folders.

## Adjust Compression

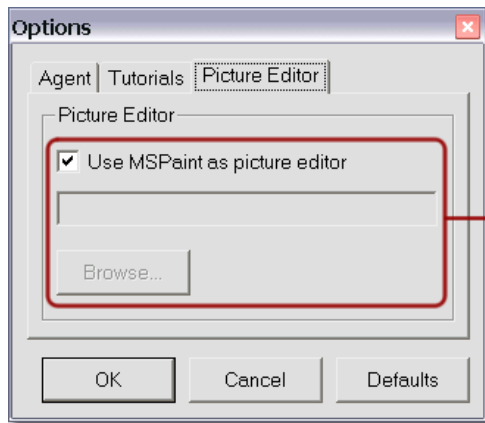
Saved tutorials are heavily compressed. The compression is adjusted under *Compression*. Adjust the compression range between 1 – 9. The default value is 6.

If you have a slower computer, changing compression to '1' or '2' will save tutorials considerably faster, but the saved file will be larger.

To obtain smaller files, you may adjust compression to '8' or '9'. The time to save tutorials varies according to each computer. With setting '9', up to 35% smaller files can be attained, compared to the default-setting '6'.

## Configure Picture Editor

Select the tab *Picture Editor* for the image editor settings.



Configure picture editor

In this configuration window the image editor program that will be used for editing screenshots is configured. By default, the operating system's preinstalled program 'Microsoft Paint' is utilized for editing screenshots.

If you would like to use another graphic editing tool for editing image files, remove the check mark under *Use MSPaint as picture editor*. Use the *Browse* button to search for the desired graphic editing tool in the file system.

## Technical Information

### File Format

Tutorix utilizes its own file format with the extension `.tux`. These files can **only** be edited and used with Tutorix Editor and Tutorix Player.

The file could comprise from a few kilobytes (KB) up to several megabytes (MB). The size of the file depends on the following factors:

- Amount of steps
- Image information
- Images in the step specifications
- Images in recorded program/programs
- Background image on the Desktop
- Used screen resolution
- Compression



You obtain noticeable smaller files, if you remove an elaborate background image from the Desktop.

### Command Line Parameters

The following command line parameters are available:

<code>/o &lt;.tux File&gt;</code>	opens a tutorial in Edit Mode
<code>/l &lt;.tux File&gt;</code>	opens a tutorial in Play Mode, plays the first step
<code>/p &lt;.tux File&gt;</code>	prints a tutorial
<code>/?</code>	calls command lines help dialog

Example:

```
"C:\Program Files\Mindleads Technology\Tutorix\TutorixEditor.exe"  
/o c:\Files\Tutorials\Tutorial1.tux
```



If the quoted file path contains space characters, the path must be denoted in quotes `<"Path">`.

## Change Default Voice Output

You may change the default language defaults that are used for recording a tutorial and customize it according to your needs.

Open the registry database editor *regedit.exe*.

[START / Run / regedit.exe]

The speech output defaults are saved under the following key:

```
HKEY_LOCAL_MACHINE
\SOFTWARE\Mindleads Technology\Tutorix\SpkPresets\<Language>
```

The format is the following:

```
[<Language>]
0 = <Tutorial salutation-text>
1 = <Keyboard interaction, input announcement> 1.part
2 = <Keyboard interaction, input announcement > 2.part
3 = <Keyboard interaction, input announcement with triggerkey> 2.part
4 = <Keyboard interaction, only triggerkey> 1.part
5 = <Mouse interaction, announcement left mouse button>
6 = <Mouse interaction, announcement right mouse button>
7 = <Mouse interaction, announcement double click>
8 = <Keyboard interaction, input announcement with triggerkey / only
   triggerkey> 2.part
9 = <Mouse interaction, error: outside field of interaction>
10 = <Mouse interaction, error: left mouse button expected>
11 = <Mouse interaction, error: right mouse button expected>
12 = <Mouse interaction, error: double click expected>
13 = <Keyboard interaction, error: invalid input> 1.part
14 = <Keyboard interaction, error: invalid input> 2.part
15 = <Keyboard interaction, error: case insensitivity> 1.part
16 = <Keyboard interaction, pointer input closure> 1.part
17 = <Keyboard interaction, pointer input closure> 2.part
18 = <Keyboard interaction, error wrong triggerkey> 1.part
19 = <Keyboard interaction, error wrong triggerkey> 2.part
20 = <Keyboard interaction, error: case insensitivity> 2.part
```

Customize the paragraph of the desired language accordingly. Some entries have dependency on others; they are quoted above with *1. Part* or *2. Part*.



A faulty alteration of the speech output could lead to incorrect function of Tutorix. The default can be restored by the 'Repair' option of the Tutorix installation program.

## Required Files

Files that are required for starting and utilizing Tutorix software:

File Name	Path	Version
Agentctl.dll	<C>:\system\Msagent	2.00.0.2115
Asycfilt.dll	<C>:\system\system32	3.50.5007
Comcat.dll	<C>:\system\system32	4.71
Comdlg32.ocx	<C>:\system\system32	6.00.8418
Imagehlp.dll	<C>:\system\system32	4.00
Mskomct2.ocx	<C>:\system\system32	6.00.8804
Mskomctl.ocx	<C>:\system\system32	6.00.8862
Msderun.dll	<C>:\system\system32	6.00.8804
Msvbvm60.dll	<C>:\system\system32	6.00.8964
Oleaut32.dll	<C>:\system\system32	3.50.5007
Ole32pro.dll	<C>:\system\system32	5.0.5007
Riched32.dll	<installation directory>	4.00.993.4
Richtx32.ocx	<C>:\system\system32	6.00.8804
Shlwapi.dll	<C>:\system\system32	6.00.2462.0000
TuxAcknow.dll	<installation directory>	1.0.0.0
Stdole2.tlb	<C>:\system\system32	3.50.5007
TutorixEditor.exe	<installation directory>	<current>
TutorixPlayer.exe	<installation directory>	<current>
TuxCompress32.dll	<installation directory>	2.3
TuxDecompr32.dll	<installation directory>	5.41
TuxHook.dll	<installation directory>	<current>
Vb5db.dll	<C>:\system\system32	6.00.8169

## Registry Settings

### Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Tutorix\maxsteps]

Format: "<Value>"  
Default: 1000  
Type: DWORD

With this registry entry, the maximum number of steps can be specified. The greater the value, the greater the resources required by your computer. The smallest possible value is 100, the greatest possible 10'000. By default, the value is set for 1000. Increase the value only if you want to record over 1000 steps in a tutorial.



Increasing this key greatly increases resource consumption. A value of 10'000 would require a minimum of 256MB Ram.

### Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Tutorix\recinterval]

Format: "<Value>"  
Default: 600  
Type: DWORD

The Tutorix software overrides an internal system power monitor. Recording tutorials requires a lot of resources, (both hard disk and memory).

If your computer reaches its resources limit during recording, you receive a message to record slower.

With the registry entry 'recinterval' you can adjust the minimum time in milliseconds (ms) between generation of screenshots, to avoid this message. By default, the value is at 600 ms. It is recommended to retain this value. However, on fast computers the value could be reduced.

The possible range is 250 (¼ second) to 3000 (3 seconds)

### Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Tutorix\AgentPath]

Format: "\\<Path>"  
Default: "\\msagent"  
Type: String

Normally the MS Agent software is installed in the subdirectory 'msagent' of the Windows system folder. To install in a different location, alter this registry entry.

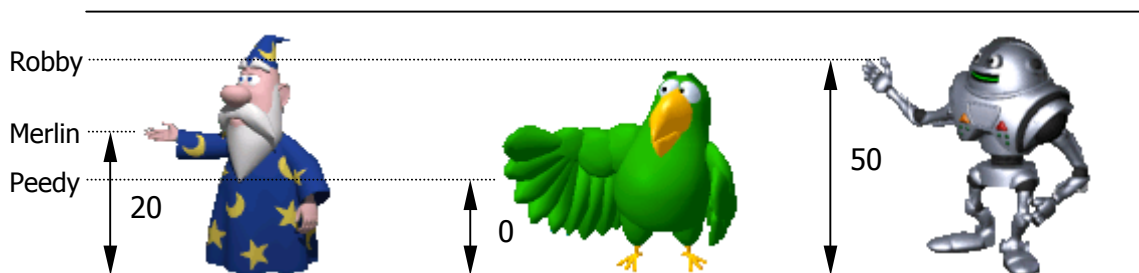


The defined path must be a subdirectory of the Windows system folder (for example 'C:\windows').

**Key: [HKEY\_LOCAL\_MACHINE\SOFTWARE\Tutorix\Characters\]**

Format: "<Name of Agent>"  
 Default: "Al", Value 5  
           "Athena", Value 36  
           "Charlie", Value 25  
           "Check", Value 5  
           "Claude", Value 5  
           "Gar", Value 24  
           "Genie", Value 45  
           "Hanz", Value 25  
           "Merlin", Value 20  
           "Oscar", Value 15  
           "Ozzar", Value 10  
           "Plany", Value 14  
           "Robby", Value 50  
           "Santa", Value 10  
           "Wartnose", Value 45  
 Type: String

According to size and form of the agent, the movement of the hand may not point to the same position. The following illustration depicts this:



The agents are preset so they point automatically to the correct position. According to the agent, corrections necessary are calculated by Tutorix automatically. This is 'y-Axis Offsetting'.

In the list above you will see the agents stored in the registry database. The four agents distributed with the Tutorix software (Robby, Peedy, Merlin and Genie), are already configured optimally. If you have installed agents from a third party vendor, you must enter an entry in the registry database for the desired agent. In the list above, settings for some third party vendors agents are displayed.

If an agent from a third party vendor **does not** point to the right position and the name of the agent is not yet recorded in the registry database, you could relate this to an existing registry entry. The maximum value is 100 pixels. The offset will be made on the y-Axis relative to the boundary above, i.e. if you change an existing agent from the setting 10 to 20, Tutorix will move the agent upon the next start 10 pixels further **down**.



## Support codes and their Significance

Note: To obtain technical support for Tutorix, select in the Menu *Help* item *Online Support*. You require a connection to the internet to make use of this function.

### Support code: Tx500

Reason: No .acs file in MS Agent path was located [..\chars\].

Solution: Start the installation file *TutorixEditor20EN.exe*, select the checkbox item *Repair*. Ensure that in the path [..\windows-folder\msagent\chars\] a minimum of one .acs file is located.

### Support code: Tx501

Reason: The selected assistant was unable to load. The relevant .acs file may be damaged.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. Reinstall the assistant. If it is an assistant of a third party vendor, reinstall it.

### Support code: Tx502

Reason: The speech engine 'American English TTS' was unable to load.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Remove*. Start a new installation of Tutorix. Ensure that the 'L&H TruVoice American English TTS Engine' is correctly installed.

### Support code: Tx503

Reason: Unable to load speech engine presets.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*.

### Support code: Tx504

Reason: The selected assistant was unable to load.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. Ensure that the MSAgent 2.0 software is installed correctly.

### Support code: Tx505

Reason: A screenshot file may be damaged.

Solution: Import a new image file.

### Support code: Tx506

Reason: The interaction control was not compiled correctly.

Solution: Check all settings in your tutorial. Pay special attention to the bubble and interaction settings.

**Support code: Tx507**

Reason: During copy-paste function an error occurred.

Solution: Copy an arbitrary step and paste the newly created step onto any step. Save the tutorial and reopen it.

**Support code: Tx508**

Reason: The tutorial was not able to be saved in the specified path: The path may be invalid or the appropriate path authorization is missing, or in the temporary folder there is insufficient hard disk space.

Solution: Ensure that in the temporary folder (usually [C:\windows\temp] or [C:\temp]) and the specified path has sufficient space. Check the path is valid. Try to save the file in a different location.

**Support code: Tx509**

Reason: Another application monopolizes the temporary folder of Tutorix.

Solution: Close all programs that could use the temporary folder. Close 'Windows Explorer'.

**Support code: Tx510**

Reason: An error has occurred during initialization of the tutorial. The file could be damaged.

Solution: If this is a newly recorded tutorial, compile it again.

**Support code: Tx511**

Reason: An attempt to record an invalid function was made.

Solution: Start a new recording and try to record it more slowly.

**Support code: Tx512**

Reason: The selected file may be invalid or damaged.

Solution: Select a valid tutorial file.

**Support code: Tx513**

Reason: The interactions control file could not be located in the cited tutorial file.

Solution: Select a valid tutorial file.

**Support code: Tx514**

Reason: The interactions control file or the global characteristics could not be initialized. The tutorial may be faulty.

Solution: Select a valid tutorial file.

**Support code: Tx515**

Reason: The speech output presets file could not be initialized.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. Reattempt after restarting your system.

**Support code: Tx516**

Reason: By attempting to open the selected tutorial an error has occurred.

Solution: Contact the Mindleads Technology support team.

**Support code: Tx517**

Reason: The selected tutorial was not able to be overwritten due to write protection or the required authorizations are missing.

Solution: Ensure that the file is not write protected and sufficient authorization is enacted to overwrite the file.

**Support code: Tx518**

Reason: The selected tutorial was not able to be overwritten due to write protection or the required authorizations are missing.

Solution: Ensure that the file is not write protected and sufficient authorization is enacted to overwrite the file.

**Support code: Tx519**

Reason: Unable to copy the selected step. It is possible that there is insufficient disk space.

Solution: Ensure that on the hard disk where the temporary folder is located, sufficient hard disk space is available.

**Support code: Tx520**

Reason: Unable to delete the selected step.

Solution: Save the changes and close the tutorial. Reattempt after opening the tutorial.

**Support code: Tx521**

Reason: Unable to insert the selected step. It is possible that there is insufficient disk space.

Solution: Save the tutorial and reopen it. Ensure that in the temporary folder there is sufficient disk space.

**Support code: Tx522**

Reason: The file passed as a parameter, was not located.

Solution: Ensure that the file exists in the specified path. If it is a networking resource, confirm the UNC path is quoted correctly. Example:

```
TutorixEditor.exe /o "\\server\share\folder\file.tux"
```

**Support code: Tx523**

Reason: The available disk space in the temporary folder has fallen below the 10 MB limit.

Solution: Delete the files that are no longer required or use a temporary folder on a different partition where more disk space is available. To change the path of the temporary folder, do the following:  
Adjust in [Start/Settings/Control Panel/System/Environment] the variable 'TEMP' and 'TMP' accordingly.

**Support code: Tx524**

Reason: The selected image file is not supported by Tutorix or may be damaged.

Solution: Ensure that files to be imported are either .jpg, .gif, .bmp, .wmf or .emf. To verify whether it is a valid image file, open it in Microsoft Paint. [Start/Programs/Accessories/Paint]

**Support code: Tx525**

Reason: An error has occurred during the import of an image.

Solution: Ensure that no other program is using the import file.

**Support code: Tx526**

Reason: The image file could not be overwritten, because it is write protected or is still in use by another program.

Solution: Ensure that no other program is using the image file to be overwritten. Confirm that the file is not write protected and sufficient authorization is enacted to overwrite the file.

**Support code: Tx527**

Reason: An error has occurred when exporting an image file.

Solution: Close Tutorix and all opened programs. Reattempt it after restart of Tutorix.

**Support code: Tx528**

Reason: Microsoft Paint could not be located. The key in the registry to MS Paint does not exist or invalid.

Solution: Ensure that MS Paint was installed correctly. Confirm that the registry entry in  
[HKEY\_CLASSES\_ROOT\Paint.Picture\protocol\StdFileEditing\server\  
(Default)] exists and the path to 'mspaint.exe' is valid.

**Support code: Tx529**

Reason: 'mspaint.exe' could not be located.

Solution: Ensure that MS Paint was installed correctly and that the registry entry in [HKEY\_CLASSES\_ROOT\Paint.Picture\protocol\StdFileEditing\server\ (Default)] exists. The value must include the complete path to 'mspaint.exe'. Example:  
[C:\WINNT\System32\mspaint.exe]

**Support code: Tx530**

Reason: An error has occurred when attempting to edit an image file.

Solution: Save the tutorial, close Tutorix and retry after restart of Tutorix.

**Support code: Tx531**

Reason: An attempt was made to start Tutorix twice.

Solution: Only one instance of Tutorix can be started.

**Support code: Tx532**

Reason: In the program path of Tutorix (usually [C:\Program Files\Mindleads Technology\Tutorix\]) one or more of the following files are missing or damaged:

- TuxHook.dll
- TuxCompress32.dll
- TuxDecompr32.dll

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. The missing files are automatically copied if required.

**Support code: Tx533**

Reason: The temporary folder was not located.

Solution: Ensure that the environment variable is correct. Do the following: [Start/Settings/Control Panel/System/Environment], customize the variables 'TEMP' and 'TMP' accordingly.

**Support code: Tx534**

Reason: Another application has attempted to use the temporary Tutorix folder.

Solution: Close programs that display the contents of the temporary folder, i.e. 'Windows Explorer'.

**Support code: Tx535**

Reason: There is insufficient disk space.

Solution: To start Tutorix, a minimum of 80MB free disk space is required. Delete unneeded files or see support code 'Tx523'.

**Support code: Tx536**

Reason: The Microsoft agent is not installed correctly. The file 'Agt0409.dll' was not located in the MS agent path.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. Ensure that the file 'Agt0409.dll' exists in the agent path [C:\<windows- directory>\msagent\intl\].

**Support code: Tx537**

Reason: The screen resolution is outside of Tutorix valid range.

Solution: The screen resolution must be a minimum of 800 x 600 pixels and may not exceed 1600 x 1200 pixels.

Restart Tutorix and click 'Yes', if Tutorix requests that you adjust the screen resolution.

**Support code: Tx538**

Reason: Tutorix is not installed correctly. One or more keys in the registry database are missing.

Solution: Start the installation file *TutorixEditor20EN.exe*, select the menu item *Repair*. The missing registry keys are automatically recovered.

**Support code: Tx539**

Reason: The registry database defined *Agent* folder could not be located.

Solution: Attempt a new installation of Tutorix. Verify the registry key [HKEY\_LOCAL\_MACHINE\SOFTWARE\ Tutorix\AgentPath] points to an existing folder. Normally it is <windows dir>\msagent.

**Support code: Tx540**

Reason: The recording environment could not be initialized correctly.

Solution: Restart Tutorix. Close all programs not mandatory for recording. Ensure that the temporary folder on the system partition is not opened with Windows Explorer.

**Support code: Tx541**

Reason: The standard defined agent was not located.

Solution: Confirm the standard defined agent (Extras / Options / Default Agent), in the folder [<Windows-Path>\<MSAgent Path>\Chars] exists and you have the required authorization. Start the installation file *TutorixEditor20EN.exe*, select the Menu item *Repair*. Reinstall the default agent.