⑤ software AG

Entire Connection

Overview of Object Properties

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ADABAS & NATURAL

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Preface

All object types are available from the Configuration Manager. If you are not an administrator, the allowed object types depend on the user group you belong to.

The following topics describe the object-specific dialog boxes.

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For general information on the above listed object types, see *About the Object Types* in the *Configuration Manager* section.

1 System Preferences and Settings

This dialog box is only available to the administrator.

General
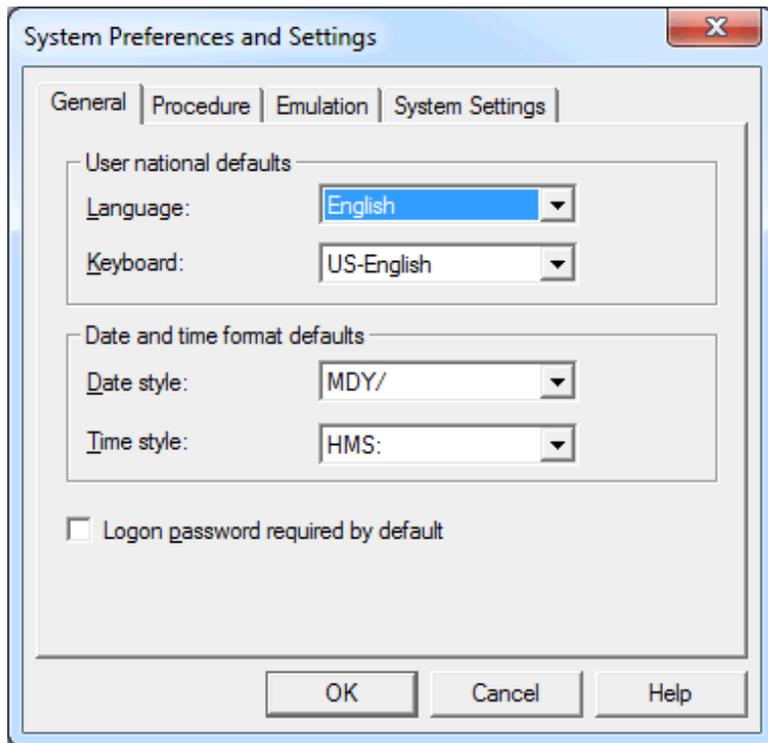
Language

Select the default language in which the user interface is to be displayed. The drop-down list box contains all languages that are available at your installation. This default is used in the **user properties**.

Keyboard

Select the default keyboard table. The drop-down list box contains all **national keyboards** that are available at your installation. This default is used in the **user properties**.

Date style

Select a default date format to be used throughout Entire Connection. This default is used in the **user properties**.

Time style

Select a default time format to be used throughout Entire Connection. This default is used in the **user properties**. The delimiter character A in HMSA means that the time is shown in the AM/PM format (e.g. 01:30 PM).

Logon password required by default

If this check box is marked, the password must be supplied at logon. This default is used in the **user properties**.

Procedure
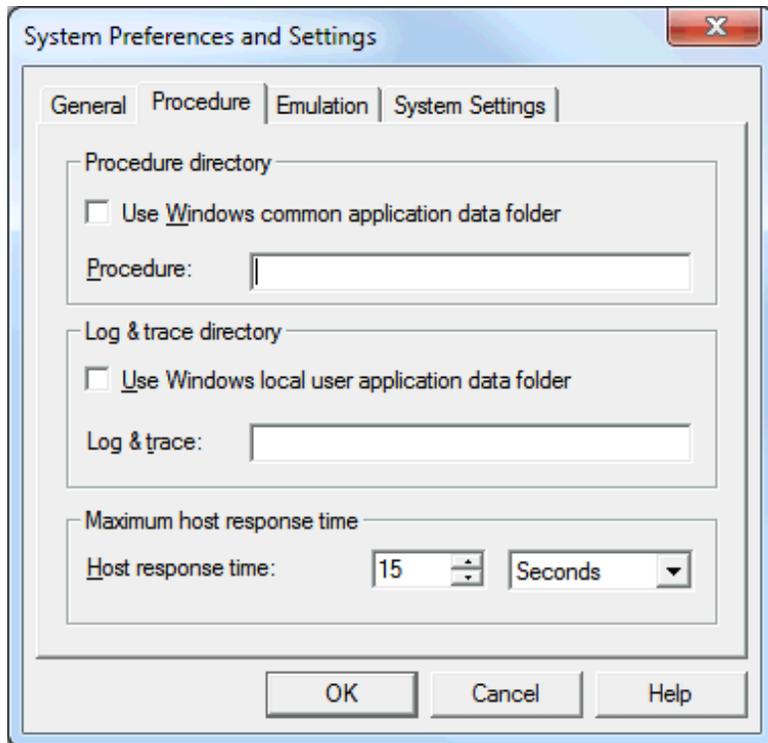
> **Notes:**

1. The defaults for the directories are set at installation time. The corresponding parameters set defaults that are used in the **user properties**.

2. When no fixed paths are defined (that is, when the Windows *Application Data* folder is used), you can easily transport the share file to another machine.

Use Windows common application data folder

When this check box is selected, Entire Connection locates the procedure files in the *Application Data* folder of Windows if they cannot be found in the current directory.

Procedure

Only available when **Use Windows common application data folder** is not selected. You can specify the directory where Entire Connection locates the procedure files if they cannot be found in the current directory. Any drive and path are valid.

Use Windows local user application data folder

When this check box is selected, Entire Connection writes log and trace files to the local Windows application data folder of the user.

Log & trace

Only available when **Use Windows application data folder** is not selected. You can specify the directory to which Entire Connection writes log and trace files.

Host response time

This parameter specifies the length of time Entire Connection will wait for a host response before canceling the processing of a procedure file. You can either specify seconds or minutes. Select the desired unit from the corresponding drop-down list box. This default is used in the **session properties**.

Emulation
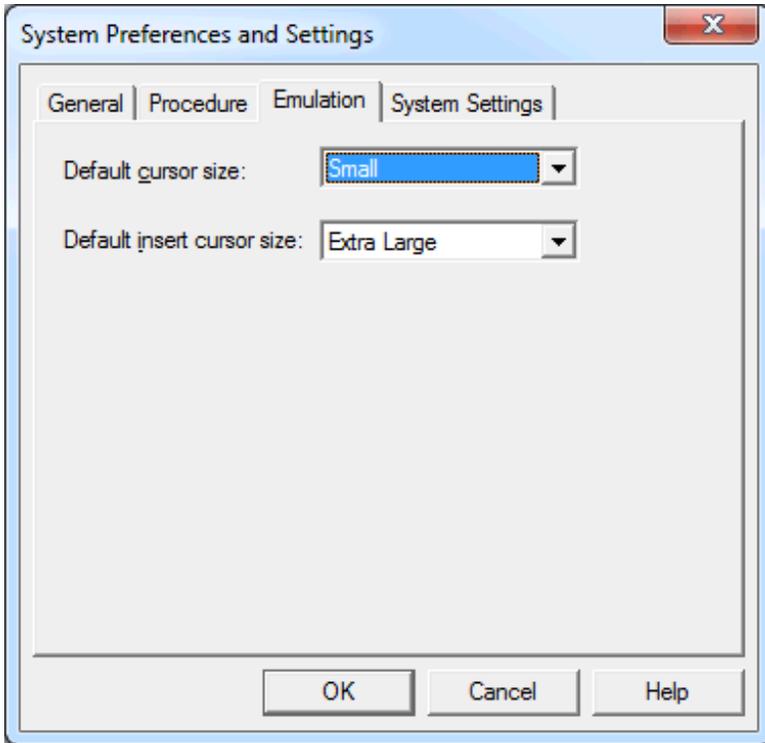
Default cursor size

Select the default cursor size from this drop-down list box. This default is used in the **user properties**. This parameter applies only to Entire Connection and does not affect other Windows applications.

This specification has no effect on the cursor size if the INS key is pressed.

Default insert cursor size

Select the default size of the insert cursor from this drop-down list box. This default is used in the **user properties**. This parameter applies only to Entire Connection and does not affect other Windows applications.

This specification only has effect on the cursor size when the INS key is pressed. If the INS key is not pressed, the value specified for the **Default cursor size** option is used to display the cursor.

System Settings
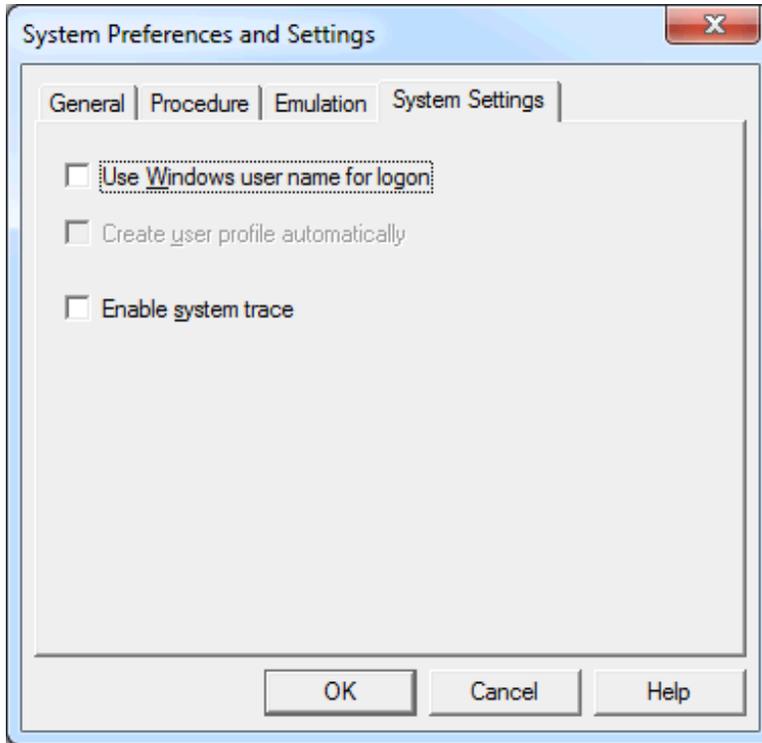
Use Windows user name for logon

When this check box is selected, the Windows user name is used to log on to Entire Connection. A logon dialog box does not appear in this case. However, if the terminal application is started using user ID and/or password as startup parameters, this option is ignored.

When this check box is not selected, Entire Connection's user information is required (either in the **Entire Connection Logon** dialog box or as a startup parameter).

Create user profile automatically

This check box is only available when the **Use Windows user name for logon** check box is selected.

When this check box is selected, a dialog box appears if a Windows user name is used to log on to Entire Connection for which a user profile does not yet exist. This dialog box asks whether you want to create a user profile for the current user name.

Enable system trace

This parameter is intended for problem analysis. It should be used only under supervision of your technical support.

2   Users

Parameters 1
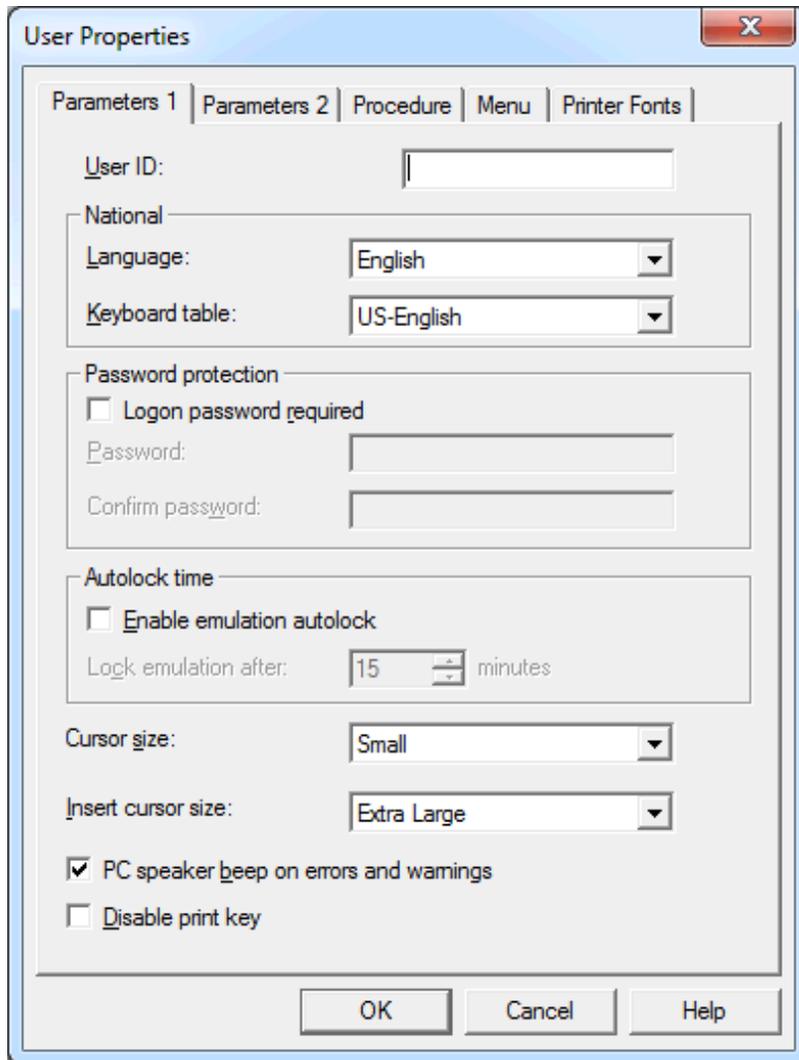
User ID

A user ID can be up to 16 alphanumeric characters long and may contain blanks. It must not already exist. This can only be specified when adding a new user. Later, this text box cannot be modified.

Language

From this drop-down list box, select the language in which the user interface is to be displayed. The user interface of an Entire Connection application (e.g. Configuration Manager or Terminal) is not shown in the selected language until you quit this application and start it once more. The default is set in the **system preferences**.

Keyboard table

From this drop-down list box, select the national **keyboard** to be used. The default is set in the **system preferences**.

Logon password required

If this check box is marked, the password must be supplied at logon. The default is set in the **system preferences**.

Password

The password ensures the security of the user's Entire Connection environment. It consists of 1 to 16 alphanumeric characters. It is used in the logon procedure to Entire Connection. In a procedure file, the variable *PASSWORD refers to the current password.

Confirm password

Repeat the password in this text box to confirm it.

Enable emulation autolock

Mark this check box to enable the autolock feature.

Lock emulation after

Specify the length of time, in minutes, that the terminal application can be inactive before the session is locked. Valid input is any integer from 1 through 60.

When the session is locked, "locked" appears in the title bar of the terminal application. If you choose **Lock/Unlock Session** from the **Utilities** menu, the **Entire Connection Logon** dialog box appears. To unlock your session, enter your password, if required, and choose the **OK** button.

Cursor size

Select the cursor size from this drop-down list box. This parameter applies only to Entire Connection and does not affect other Windows applications. The default is set in the **system preferences**.

This specification has no effect on the cursor size if the INS key is pressed.

Insert cursor size

Select the size of the insert cursor from this drop-down list box. This parameter applies only to Entire Connection and does not affect other Windows applications. The default is set in the **system preferences**.

This specification only has effect on the cursor size when the INS key is pressed. If the INS key is not pressed, the value specified for the **Cursor size** option is used to display the cursor.

PC speaker beep on errors and warnings

When this check box is marked, the PC speaker beeps when an error occurs or when a warning is issued.

Disable print key

When this check box is marked, the PRINT-SCREEN key on the keyboard is disabled.

Parameters 2
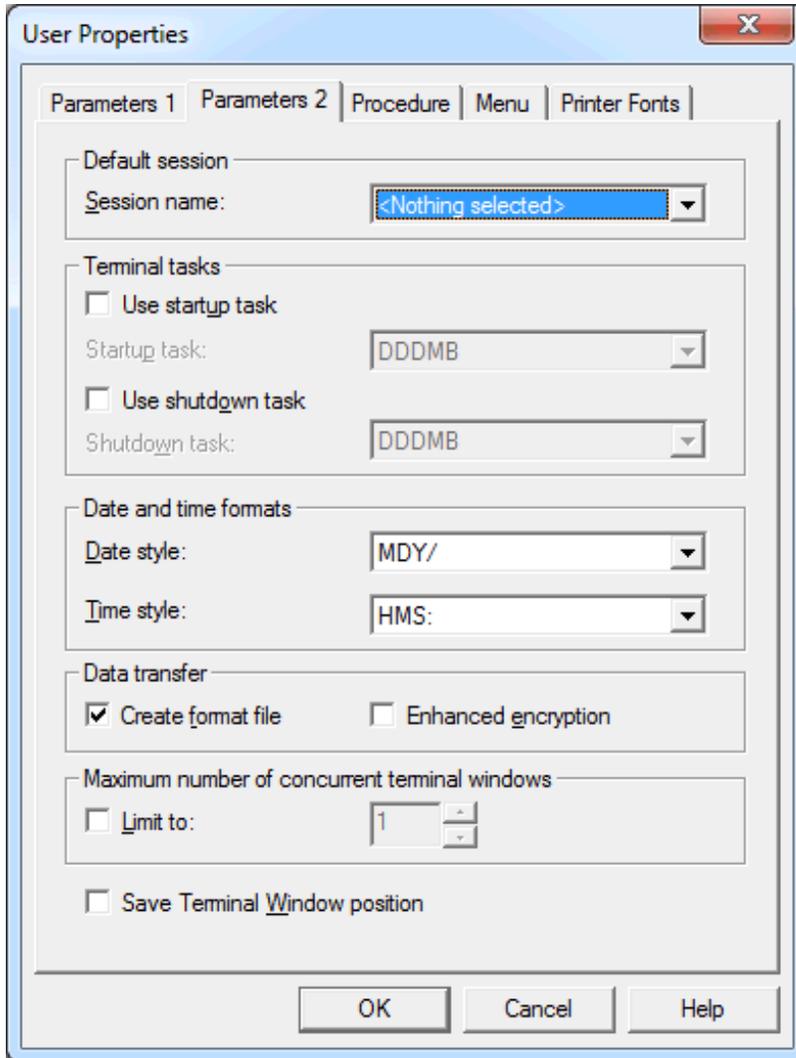
Session name

From this drop-down list box, select the default host session. This session name is then automatically highlighted in the **Open Session** dialog box.

In a procedure file, the default session is opened whenever a statement accessing a session is encountered but there is no open session. This allows existing procedures to be used without code change.

Use startup task

Mark this check box, if you want to use a startup task.

Startup task

From this drop-down list box, select the task to be executed immediately after you log on to the terminal application. This drop-down list box contains a list of all defined tasks (except Software AG tasks).

Use shutdown task

Mark this check box, if you want to use a shutdown task.

Shutdown task

From this drop-down list box, select the task to be executed when the last terminal application is closed. This drop-down list box contains a list of all defined tasks (except Software AG tasks).

Date style

From this drop-down list box, select the date format to be used throughout Entire Connection. The default is set in the **system preferences**.

Time style

From this drop-down list box, select the date format to be used throughout Entire Connection. The default is set in the **system preferences**. The delimiter character A in HMSA means that the time is shown in the AM/PM format (e.g. 01:30 PM).

Create format file

When this check box is marked, Entire Connection creates a format file (extension *ncf*) whenever you download data from the host.

A format file contains a format description of the transferred data. In addition, it contains information such as the number of records sent, name of the Natural program, name of the Natural library, host user ID and data format. This information is useful if you plan to convert data using the Format Converter.

Enhanced encryption

When this check box is marked, the user is prompted for an encryption key when downloading and uploading files. The key is not stored anywhere, so the user must remember it.

Maximum number of concurrent terminal windows

When the check box **Limit to** is marked, you can limit the number of terminal windows that may be open at the same time for this user. Valid input ranges from 1 to 255.

Save terminal window position

When this check box is marked, the position and size of the terminal window is saved under the session name when the terminal is closed. The next time a session with this name is opened, the window will be opened with the saved position and size.

Procedure
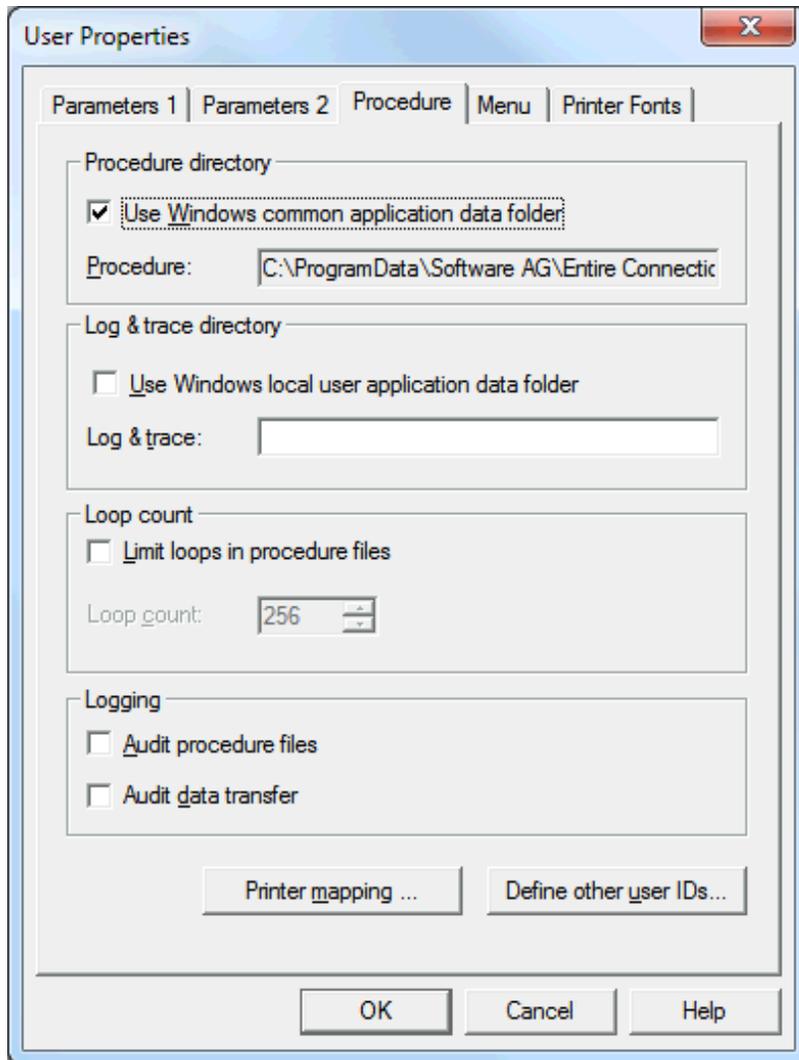
Notes:

1. The default for the user directories are set in the **system preferences**.

2. When no fixed paths are defined (that is, when the Windows *Application Data* folder is used), you can easily transport the share file to another machine.

Use Windows common application data folder

When this check box is selected, Entire Connection locates the procedure files in the *Application Data* folder of Windows if they cannot be found in the current directory.

Procedure

Only available when **Use Windows common application data folder** is not selected. You can specify the directory where Entire Connection can locate the procedure files if they cannot be found in the current directory. Any drive and path are valid.

Use Windows local user application data folder

When this check box is selected, Entire Connection writes log and trace files to the local Windows application data folder of the user.

Log & trace

Only available when **Use Windows local user application data folder** is not selected. You can specify the directory to which Entire Connection writes log and trace files.

Limit loops in procedure files

Mark this check box, if you want to limit the number of loops in a procedure file.

Loop count

This parameter specifies the number of times a jump statement can be executed in a procedure file. It is used to avoid endless processing loops. Valid input is from 1 to 32767.

Audit procedure files

If this check box is marked, Entire Connection writes information about all executed procedure file statements to a log file in the log/trace directory. The log file contains each statement and the time at which it was executed. This is useful for debugging procedure files.

The name of the log file is ⟨*username*⟩.*log*. If the log file does not yet exist, it is created. Otherwise, statement execution information is appended to an existing log file.

Audit data transfer

If this check box is marked, Entire Connection writes data transfer information to a log file in the log/trace directory. The log file contains information such as the number of records sent, host user ID, data format, start time, status, etc.

The name of the log file is ⟨*username*⟩.*log*. If the log file does not yet exist, it is created. Otherwise, data transfer information is appended to an existing log file.

Printer mapping

When you choose this command button, the **Printer Mapping** dialog box appears. You can now choose one of the **Select** buttons to select a defined Windows printer from a list. This mapping corresponds to the following command:

```
SET PCFILE x DOWN DATA LPTn
```

where *x* is a valid work file number between 1 and 32, and *n* is a number between 1 and 3. The download is then performed on the corresponding printer.
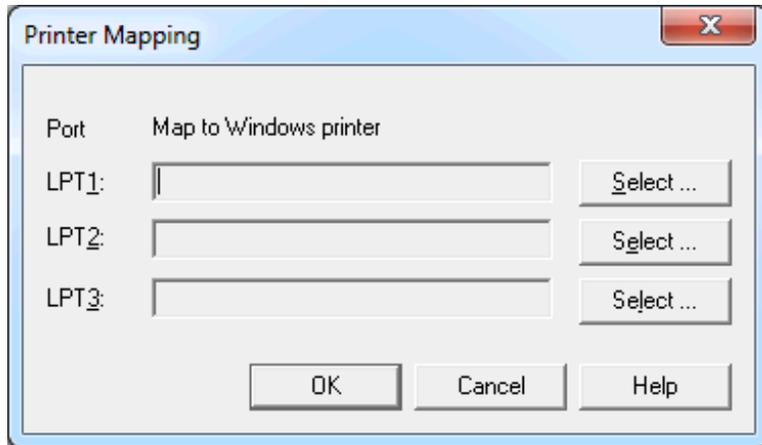
Define other user IDs

When you choose this command button, the **Define other User IDs** dialog box appears.
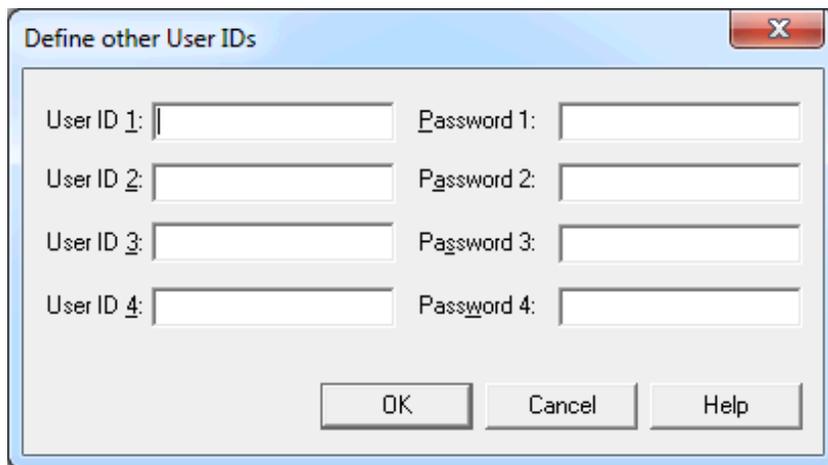
These user IDs are especially useful in logon sequences that require logging on to several different host systems. You can either leave these text boxes empty or fill them with user IDs and passwords. Each user ID or password consists of 1 to 16 alphanumeric characters. User IDs and passwords are not case-sensitive. They can contain embedded blanks.

You use these parameters in procedure files where you can reference them as `*USERID1`, `*USERID2`, etc. and `*PASSWORD1`, `*PASSWORD2`, etc. See also *Dynamic Variables*.

Menu
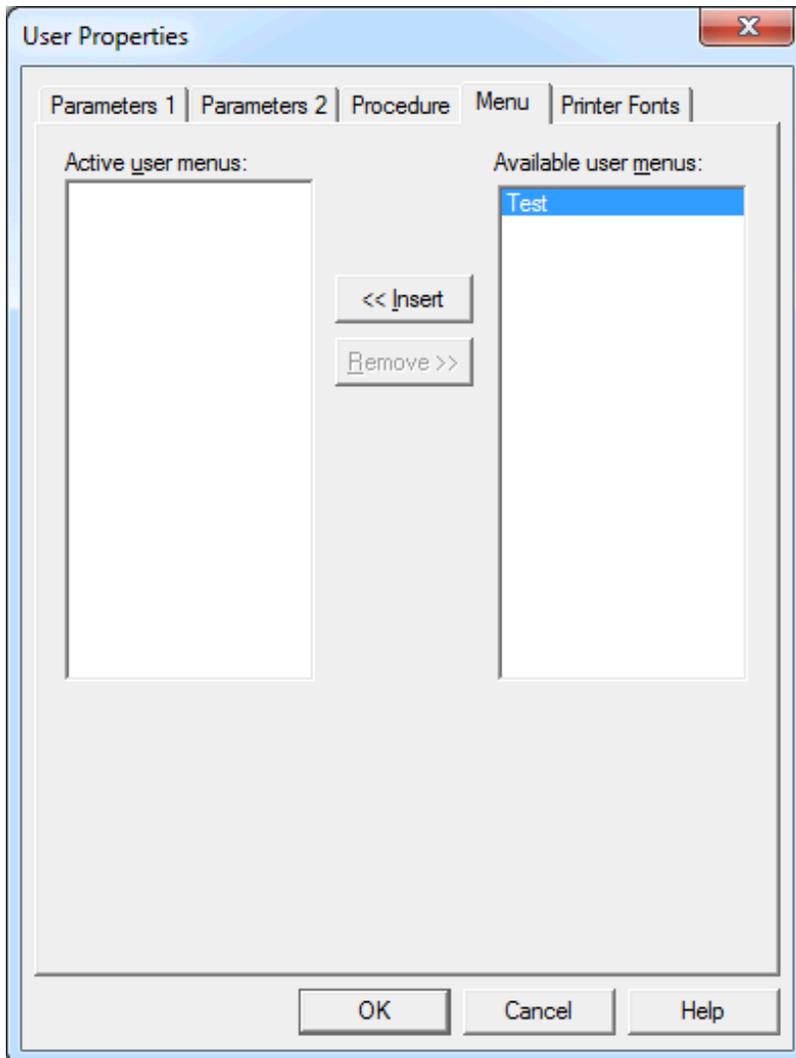
You can make up to 5 user menus available to a user. The menus will be displayed in the menu bar of the terminal application the next time the user logs on.

See the section *Menus* for information on how to create a user menu.

≫ **To activate a menu for the user**

■ Double-click the menu in the **Available user menus** list box.

 Or:

 Select the menu in the **Available user menus** list box and choose the **Insert** button.

≫ **To deactivate a menu for the user**

■   Double-click the menu in the **Active user menus** list box.

Or:

Select the menu in the **Active user menus** list box and choose the **Remove** button.

Printer Fonts
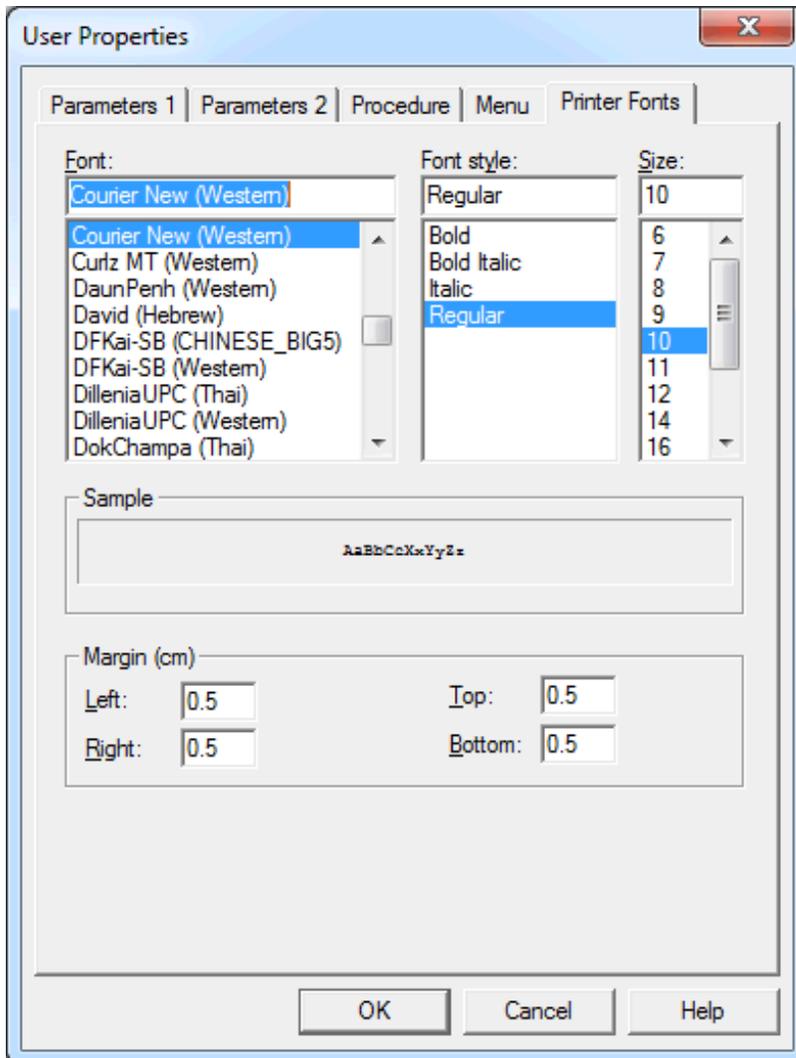
You can define the font, font style and font size to be used for all printouts (for example, when downloading to a printer).

You can set the left, right, top and bottom margins for the printout. The margin determines the distance in centimeters from the paper edge.

≫ **To modify the font and margins for printouts**

1   Select the desired font in the **Font** list box.

The styles and sizes available for the font you have chosen are shown in the **Font style** and **Size** list boxes.

2   Select the desired style.

3   Select the desired size.

4   In the text boxes, specify the desired centimeter values for the margins.

5   Choose the **OK** button.

See also the description of the system variable `PRINTOPTION`.

3   User Groups

This dialog box is only available to the administrator.

Assigning Users to Groups
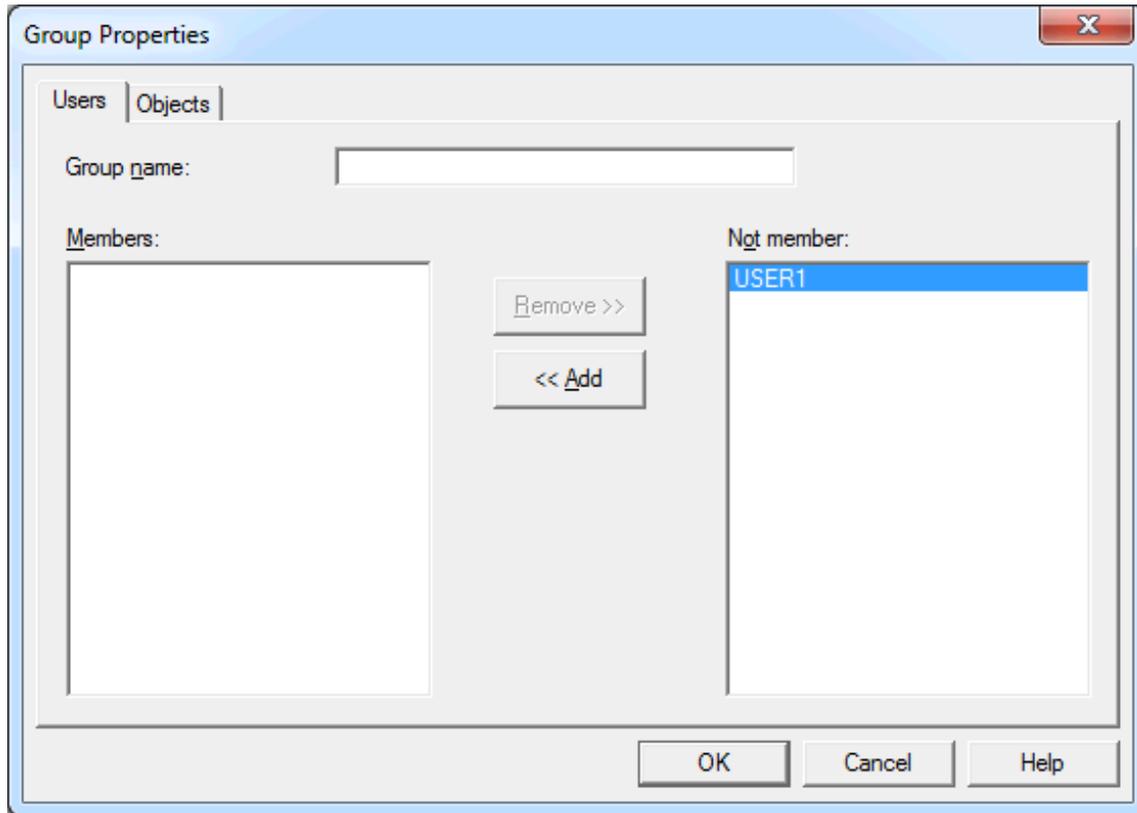
When you create a new user group, specify a name in the **Group name** text box. The name can be up to 32 characters long and may contain blanks. When you modify a user group, this text box cannot be modified.

The **Members** list box shows a list of all members of this group. The **Not member** list box shows a list of all other defined Entire Connection users.

≫ **To define a user as a member of a group**

■   Double-click the user in the **Not member** list box.

   Or:

   Select the user in the **Not member** list box and choose the **Add** button.

> **To remove a member from a group**

■ Double-click the user in the **Members** list box.

Or:

Select the user in the **Members** list box and choose the **Remove** button.

Granting Group Access to Objects
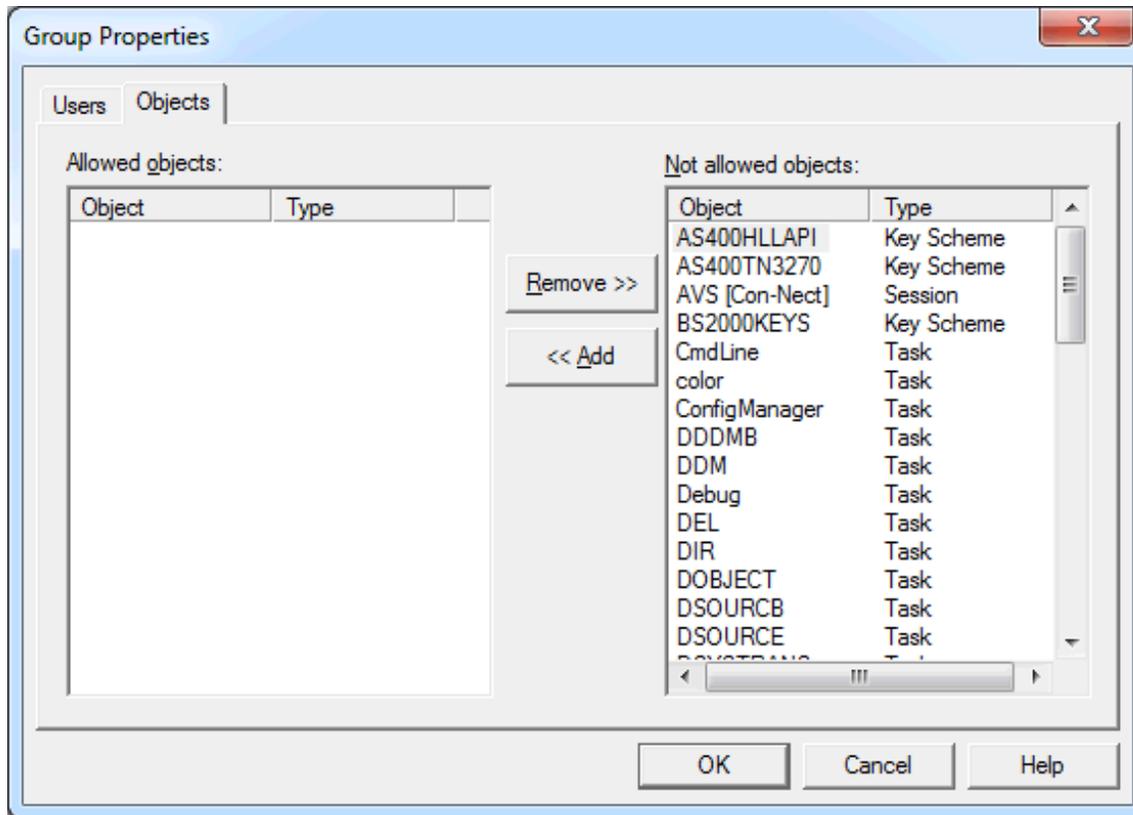
The **Allowed objects** list box shows a list of all objects which the group is allowed to access. The **Not allowed objects** list box shows a list of defined objects.

The allowed objects can be of the following object types:

- **Menu**
- **Task**
- **Session**
- **Color scheme**
- **Key scheme**

≫ **To allow an object for a group**

■ Select the object(s) in the **Not allowed objects** list box and choose the **Add** button.

≫ **To disallow an object for a group**

■   Select the object(s) in the **Allowed objects** list box and choose the **Remove** button.

4 **Menus**

The **Menu** dialog box lets you define the user menus that are to appear in the menu bar of the terminal application. It shows a list of all available tasks.
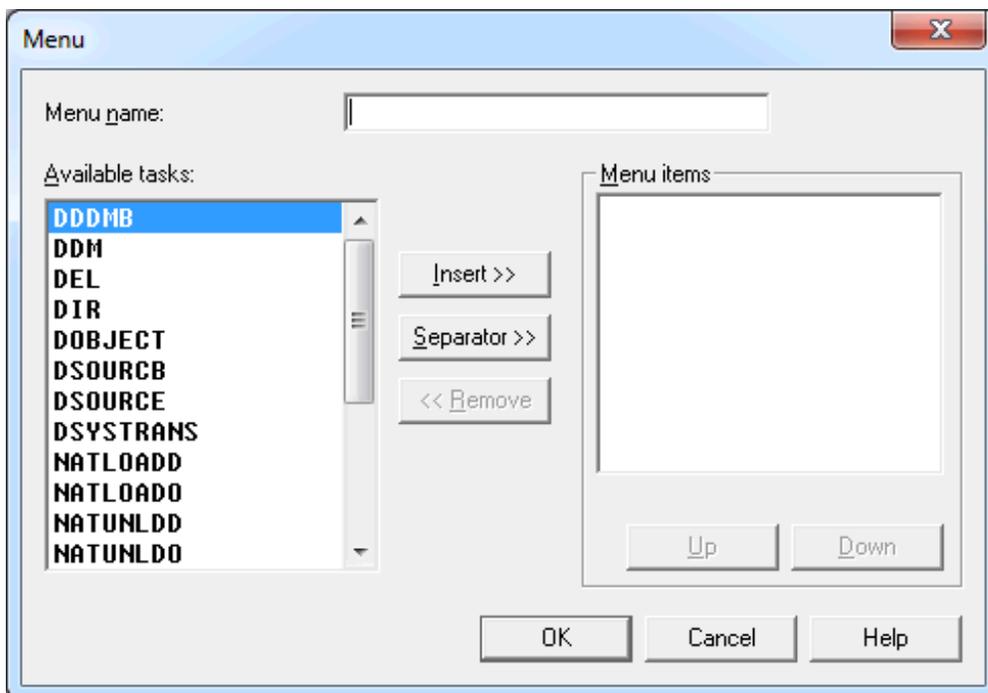
You can make up to 5 user menus available to a user. Each user menu may contain up to 20 menu items (tasks).

The following buttons are provided (in addition to the standard buttons):

Insert	Insert the selected task as a command in the menu.
Separator	Insert a separating line below the highlighted menu item.
Remove	Remove the selected menu item.
Up	Move the selected menu item up.
Down	Move the selected menu item down.

≫ **To define a user menu**

1   When you create a new menu, specify a name in the **Menu name** text box.

The name can be up to 32 characters long and must not contain blanks. When you modify a menu, this text box cannot be modified.

2   In the **Available tasks** list box, double-click the task you wish to include in the menu.

Or:

Select the task and choose the **Insert** button.

The selected task appears in the **Menu items** list box. When this list box contains more than one item, the new task is inserted below the highlighted menu item.

3   Optionally, choose the **Separator** button to insert a separating line below the highlighted menu item.

4   Optionally, choose the **Up** or **Down** button to move the selected menu item.

5   Optionally, double-click a menu item to remove it from the menu.

Or:

Select the menu item and choose the **Remove** button.

6   Repeat the above steps until all required tasks are defined as menu commands.

7   Choose the **OK** button.

After having defined a user menu, the administrator can modify the group properties and add the user menu to the list of allowed objects. The administrator can then modify the user properties to specify which user menus are to be available to a specific user. The user menu will be shown in the menu bar the next time this user starts the terminal application.

A general user only has to define the user menu in the user properties.

5 Tasks

Procedure File Task

This type of task executes a file written in the Entire Connection procedure file language. As a rule, a procedure file has the extension *ncp*. For example:

```
test.ncp
```
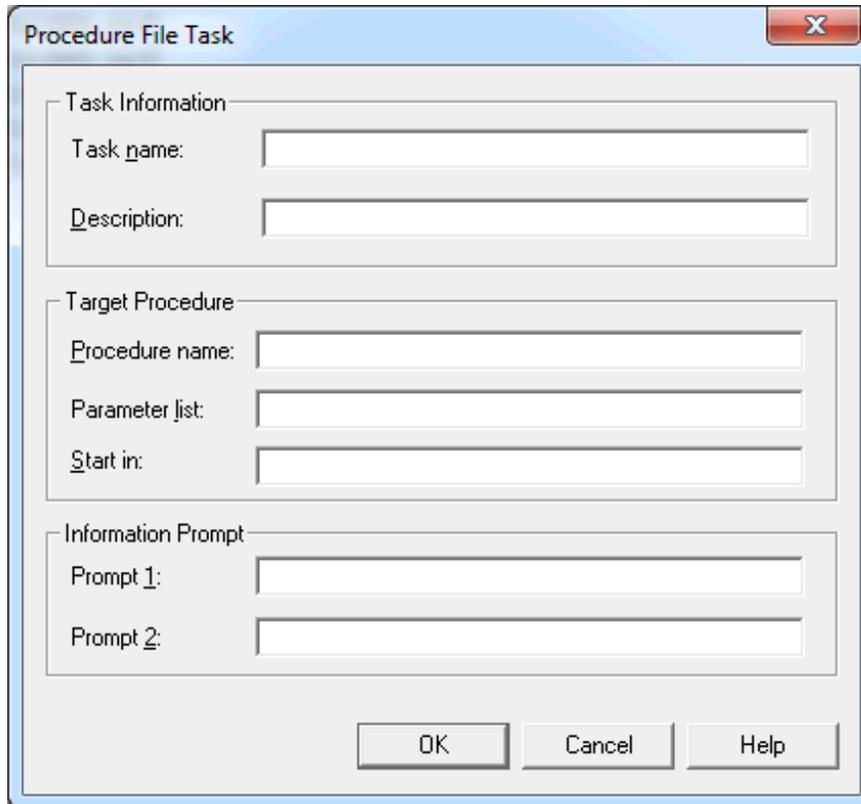

Task name

The name can be up to 32 characters long and must not contain blanks. It can only be specified when adding a new task. Later, this text box cannot be modified.

Description

Enter up to 62 characters of descriptive text for a procedure file task. The description is displayed in the task list (i.e. the **Select Task or Procedure** dialog box of the terminal application).

Procedure name

Enter the name of the procedure file to be executed by this task. Entire Connection searches for the procedure file in the following order:

- specified path name,

- current directory,

- **procedure directory** specified in the user properties.

Parameter list

Enter the **parameters** to be passed to the procedure file at execution time. You may also use parameter substitution here. A maximum of 9 parameters is permitted. You can use the same parameters as for a DOS batch file.

Start in

Enter the name of the directory to which Entire Connection will change before executing the specified procedure file. Entire Connection will not change back to the original directory after the procedure file has been processed.

Prompt 1

Enter one line of text to be displayed to prompt for extra information when the task is executed. For example: "Enter name of file to be deleted".

Prompt 2

Enter one line of text - in addition to the text entered in the **Prompt 1** text box. This text is displayed below the prompt 1 text in the same dialog box.

Application Task

This type of task executes a DOS program or Windows application that has been specified by the user (e.g. Word or Excel). Such an application has the extension *exe* or *com*. For example:

```
Notepad.exe
```

Task name

The name can be up to 32 characters long and must not contain blanks. It can only be specified when adding a new task. Later, this text box cannot be modified.

Description

Enter up to 62 characters of descriptive text for an application task. The description is displayed in the task list (i.e. the **Select Task or Procedure** dialog box of the terminal application).

Program name

Enter the name of the program that is to be executed with this task. The program must have the extension *exe* or *com*. You can also choose the **Browse** button to select the program from a dialog box.

Parameter list

Enter the **parameters** to be passed to the program at execution time. You may also use parameter substitution here. A maximum of 9 parameters is permitted. You can use the same parameters as for a DOS batch file.

Start in

Enter the name of the directory to which Entire Connection will change before executing the specified program. Entire Connection will not change back to the original directory after the program has been processed.

Prompt 1

Enter one line of text to be displayed to prompt for extra information when the task is executed. For example: "Enter name of file to be deleted".

Prompt 2

Enter one line of text - in addition to the text entered in the **Prompt 1** text box. This text is displayed below the prompt 1 text in the same dialog box.

Window State

Select one of the following option buttons:

- **Normal**
  The task is started in a normal window.

- **Minimized**
  The task is started in a minimized window.

- **Maximized**
  The task is started in a maximized window.

- **Hidden**
  The task is not displayed during execution.

Example of an Application Task

The following sample task invokes the Windows Wordpad from a procedure file:
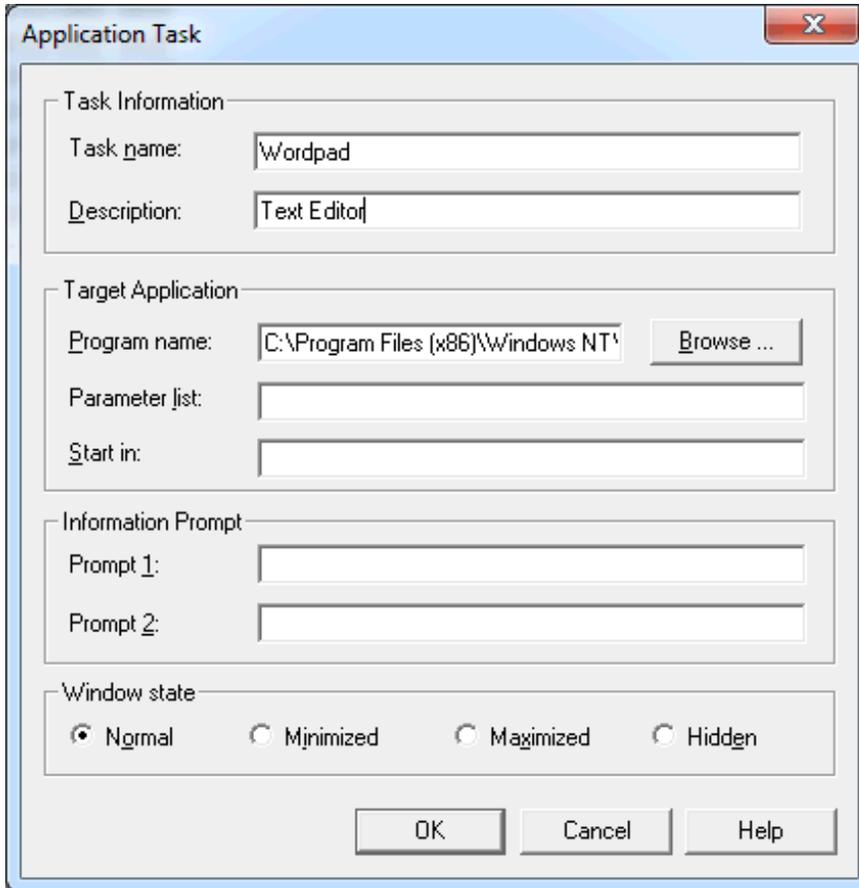
DOS Task

This type of task executes a DOS command (e.g. `DIR` or `COPY`) or DOS batch file (extension *bat*). For example:

```
DIR *.ncp
```

Task name

The name can be up to 32 characters long and must not contain blanks. It can only be specified when adding a new task. Later, this text box cannot be modified.

Description

Enter up to 62 characters of descriptive text for a DOS task. The description is displayed in the task list (i.e. the **Select Task or Procedure** dialog box of the terminal application).

DOS command

Enter the DOS command to be executed by the DOS task. This can also be the name of a batch file. You can include **task parameters**.

Prompt 1

Enter one line of text to be displayed to prompt for extra information when the task is executed. For example: "Enter name of file to be deleted".

Prompt 2

Enter one line of text - in addition to the text entered in the **Prompt 1** text box. This text is displayed below the prompt 1 text in the same dialog box.

Window State

Select one of the following option buttons:

- **Normal**
  The task is started in a normal window.

- **Minimized**
  The task is started in a minimized window.

- **Hidden**
  The task is not displayed during execution.

Software AG Task

Software AG tasks are supplied with Entire Connection and can only be seen by the administrator. The administrator can only modify the description of a Software AG task.
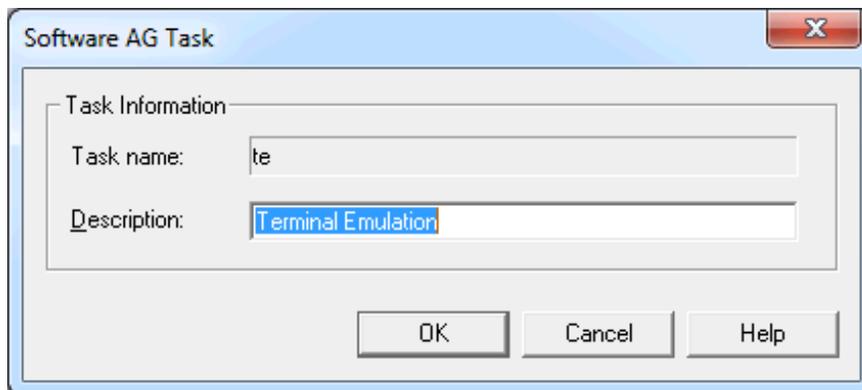
Most Software AG tasks enable the administrator to restrict user rights using the group concept. For example, when the administrator disallows the task `CmdLine` for a group, the users defined for this group cannot use the command line (it appears dimmed). See the section *User Groups* for further information.

The following table lists all Software AG tasks:

Software AG Task	Affects	Restriction when this task is not allowed
CmdLine	Terminal	The command line is dimmed.
		In the **View > Toolbars** menu, **Command Line** is dimmed.

Software AG Task	Affects	Restriction when this task is not allowed
color	Terminal, Configuration Manager	Terminal: in the **Session** menu, **Color** is dimmed. The corresponding toolbar button is also dimmed. Configuration Manager: the object type Color Schemes is not shown in the tree structure.
ConfigManager	Terminal	In the **Utilities** menu, **Configuration Manager** is dimmed.
Debug	Terminal	In the **Select Task or Procedure** dialog box (task list) in the list of available procedure files, the **Debug** button is dimmed. Thus, the user cannot debug a procedure file.
font	Terminal	In the **Session** menu, **Font** is dimmed. The corresponding toolbar button is also dimmed.
keypad	Terminal	In the **View > Keypad** menu, all keypad names are dimmed.
menu	Configuration Manager	The object type Menus is not shown in the tree structure.
pkeys	Terminal, Configuration Manager	Terminal: in the **Session** menu, **P-Key** is dimmed. Configuration Manager: the object type BS2000 P-Key Schemes is not shown in the tree structure.
SessionSetup	Configuration Manager	The object type Host Sessions is not shown in the tree structure.
task	Configuration Manager	The object type Tasks is not shown in the tree structure.
Tasklist	Terminal	In the **Utilities** menu, **Task List** is dimmed. The corresponding toolbar button is also dimmed.
te		Opens the default session. It can be used, for example, as a startup task. This task does not restrict user rights.
tekey	Configuration Manager	The object type Key Schemes is not shown in the tree structure.
ua	Terminal	In the **Utilities** menu, **Unattended Workstation** is dimmed. This task can also be defined as a start parameter for *Pccterminal.exe*, if the unattended workstation is to be started automatically when the terminal application is started.
uid	Configuration Manager	The object type Users is not shown in the tree structure.

Task Parameters

You can send a maximum of 9 parameters to an Entire Connection task. These parameters can be a mixture of the following:

- Specific Parameters

■ Substitutable Parameters

Specific Parameters

A specific parameter specifies the actual data to be sent to the task. For example:

```
DIR *.ncp
```

In this example, `*.ncp` is a specific parameter. This DOS task lists all files with the extension *ncp* in the current directory.

Using parameter substitution, specific parameters can be overridden at execution time.

Substitutable Parameters

A substitutable parameter is replaced at execution time by the data entered in the command line or in a dialog box. These parameters are represented by a number from 1 through 9 preceded by a percent sign. For example:

```
DIR %1
```

In this example, you can specify a parameter value when invoking the DOS task. This value substitutes `%1` at execution time.

Parameter Substitution

Task parameters defined in procedure file, application or DOS tasks are substituted or overridden at execution time as follows:

■ If no substitutable parameters are defined in the task, any parameters entered in the command line are passed to the task and override the defined command.

■ If substitutable parameters are defined in the task, any parameters entered in the command line are passed to the task and replace the substitutable parameters in sequence as follows:

■ If the substitutable parameter(s) can be filled in with text entered in the command line, Entire Connection makes the substitution.

■ If the substitutable parameter(s) cannot be filled in with text entered in the command line and there is prompt text available in the task definition, Entire Connection fills in the remaining substitutable parameters with text entered at the prompt.

■ If the substitutable parameter(s) cannot be filled in with text from the command line or prompt, Entire Connection proceeds with the execution of the command, program or procedure file without sending the entire list of parameters.

The following examples are provided below:

Example 1: No Substitutable Parameters and No Prompt Text

A DOS task named `PRINTME` has the **DOS command** text box filled in as follows:

```
PRINT *.ncf *.ncd
```

The following examples illustrate the various ways of executing this task.

- Only the task name is provided:

```
PRINTME
```

Entire Connection invokes DOS with the command `PRINT *.ncf *.ncd`. All files with the extensions *ncf* and *ncd* are sent to the printer.

- The task name and one parameter are provided:

```
PRINTME *.ncp
```

The parameter entered after the task name completely replaces the parameters in the task definition.

Entire Connection invokes DOS with the command `*.ncp`. As a result, a DOS error message appears, indicating an incorrect command or file name.

- The task name and two parameters are provided:

```
PRINTME DIR *.ncp
```

The parameters entered after the name of the task completely replace the parameters in the task definition.

Entire Connection invokes DOS with the command `DIR *.ncp`. All files with the extension *ncp* are listed.

Example 2: Substitutable Parameters and No Prompt Text

A task named PRINT4 has the **DOS command** text box filled in as follows:

```
PRINT %1 *.ncf %2 %3
```

The following examples illustrate the various ways of executing this task.

■ Only the task name is provided:

```
PRINT4
```

Entire Connection invokes DOS with the command PRINT *.ncf. All files with the extension *ncf* are sent to the printer.

■ The task name and three parameters are provided:

```
PRINT4 File1.ext File2.ext File3.ext
```

The substitutable parameters are replaced with the text entered in the command line.

Entire Connection invokes DOS with the command PRINT File1.ext *.ncf File2.ext File3.ext. The files *File1.ext*, *File2.ext*, *File3.ext* and all files with the extension *ncf* are sent to the printer.

■ The task name and only one parameter are provided:

```
PRINT4 File1.ext
```

The substitutable parameter is replaced with the text entered in the command line. However, since only one parameter was provided, only the first substitutable parameter is replaced. Entire Connection continues with the execution of the task even though the remaining two substitutable parameters do not have values.

Entire Connection invokes DOS with the command PRINT File1.ext *.ncf. The file *File1.ext* and all files with the extension *ncf* are sent to the printer.

■ The task name and one parameter too much are provided:

```
PRINT4 File1.ext File2.ext File3.ext File4.ext
```

The substitutable parameters are replaced with the text entered in the command line. However, since more parameters were provided than there are substitutable parameters, Entire Connection discards any extra parameters entered.

Entire Connection invokes DOS with the command PRINT File1.ext *.ncf File2.ext File3.ext. The files *File1.ext*, *File2.ext*, *File3.ext* and all files with the extension *ncf* are sent to the printer.

Example 3: Prompt Text and No Substitutable Parameters

A task named `PRINT2` has the **DOS command** text box and the **Prompt 1** text box filled in as follows:

```
PRINT *.ncf *.ncd
Modify the parameters or press ENTER.
```

The following examples illustrate the various ways of executing this task.

■ Only the task name is provided:

```
PRINT2
```

Because prompt text is available and there are no substitutable parameters, Entire Connection assumes that you want to modify the parameters before executing the `PRINT` command.

Entire Connection displays a dialog box in which the command and its default parameters are provided. You can now modify the parameters. Instead of modifying, you can also press ENTER so that Entire Connection invokes DOS with the command `PRINT *.ncf *.ncd` and thus sends all files with extensions *ncf* and *ncd* to the printer.

■ The task name and one parameter are provided:

```
PRINT2 *.ncp
```

The parameter provided behind the task name completely replaces the parameters in the task description. Since a replacement parameter was provided, any prompt text is ignored. A dialog box is not shown.

Entire Connection invokes DOS with the command `*.ncp`. As a result, a DOS error message appears, indicating an incorrect command or file name.

■ The task name and two parameters are provided:

```
PRINT2 DIR *.ncp
```

The parameters provided behind the task name completely replace the parameters in the task definition and cause the prompt text to be ignored. A dialog box is not shown.

Entire Connection invokes DOS with the command `DIR *.ncp`. All files with the extension *ncp* are listed.

Example 4: Prompt Text and Substitutable Parameters

A task named `PRINT3` has the **DOS command** text box and the **Prompt 1** text box filled in as follows:

```
PRINT %1 *.ncf %2
Enter the names of 2 files to be printed.
```

The following examples illustrate the various ways of executing this task.

- Only the task name is provided:

```
PRINT3
```

Since there are substitutable parameters, but no parameters have been supplied and prompt text is available, Entire Connection displays a dialog box. This enables you to enter the names of the files, other than *.ncf* files, that you want to have printed:

  - If you do not enter any names, Entire Connection sends only the files with the extension *ncf* to the printer.

  - If you enter two names, Entire Connection sends those files and all files with the extension *ncf* to the printer.

  - If you enter more than two names, Entire Connection sends only the first two files and the files with the extension *ncf* to the printer.

- The task name and two parameters are provided:

```
PRINT3 File1.ext File2.ext
```

Entire Connection fills in the substitutable parameters with the text entered in the command line. Since parameters were provided after the task name, a dialog box does not appear.

Entire Connection invokes DOS with the command `PRINT File1.ext *.ncf File2.ext`. The files *File1.ext*, *File2.ext* and all files with the extension *ncf* are sent to the printer.

- The task name and one parameter are provided:

```
PRINT3 File1.ext
```

Entire Connection fills in substitutable parameters with the text entered in the command line. In this case, only one parameter has been supplied. Entire Connection continues with the execution of the task even though one of the two substitutable parameters has not been supplied. Since a parameter was provided after the task name, a dialog box does not appear.

Entire Connection invokes DOS with the command `PRINT File1.ext *.ncf`. The file *File1.ext* and all files with the extension *ncf* are sent to the printer.

- The task name and two parameters too much are provided:

```
PRINT3 File1.ext File2.ext File3.ext File4.ext
```

Entire Connection fills in the substitutable parameters with text entered in the command line. In this case, more parameters have been supplied than there are substitutable parameters to fill. Entire Connection discards any extra parameters. Since parameters were provided after the task name, a dialog box does not appear.

Entire Connection invokes DOS with the command `PRINT File1.ext *.ncf File2.ext`. The files *File1.ext*, *File2.ext* and all files with the extension *ncf* are sent to the printer.

6   **Session Properties**

General

Session name

The name can be up to 32 characters long and may contain blanks. It is only possible to specify a session name, when you are currently adding a new session to the share file. Later, this text box does not allow modifications. It is not possible to define identical names for display sessions and printer sessions; an error message will appear in this case.

Session type

Displays the defined session type. To display the Communication dialog box for this session type, choose the **Communication** button.

Color scheme

Select the desired color scheme from this drop-down list box. To display the dialog box for the color scheme that is currently selected in this drop-down list box, choose the **Setup Scheme** button next to this drop-down list box.

Key scheme

Select the desired key scheme from this drop-down list box. To display the Terminal Emulation Key Scheme dialog box for the key scheme that is currently selected in this drop-down list box, choose the **Setup Scheme** button next to this drop-down list box.

Font

Displays the font defined for terminal emulation. To display the Font dialog box in which you can define another font, choose the **Select Font** button.

Keypads

Defines the keypads that are shown in the terminal emulation. The keypads that are provided on this property page are specific to the current session type.

The behavior in the terminal emulation depends on whether keypads are defined on this property page or not:

■ No keypads are defined

When the user opens the session for the very first time, no keypads are shown in the terminal emulation window. The user can then select the keypads to be shown by choosing the **Keypads** command from the **View** menu. When the user terminates the session, the keypad settings are stored and the keypads will be redisplayed when the session is opened again.

Advantage: The user can redisplay different keypads for different sessions.

■ Keypads are defined

When the user opens the session, only the keypads defined in the session properties are initially shown in the terminal emulation window. The user can then select other keypads to be shown by choosing the **Keypads** command from the **View** menu. The user's keypad settings, however, are not stored. When the user reopens the session, the keypads defined in the session properties are shown again.

Advantage: A fixed set of keypads can initially be shown for different sessions.

See also *Keypad* in the section *Terminal Emulation*.

Display (for all Session Types except VT and BS2000 Types)
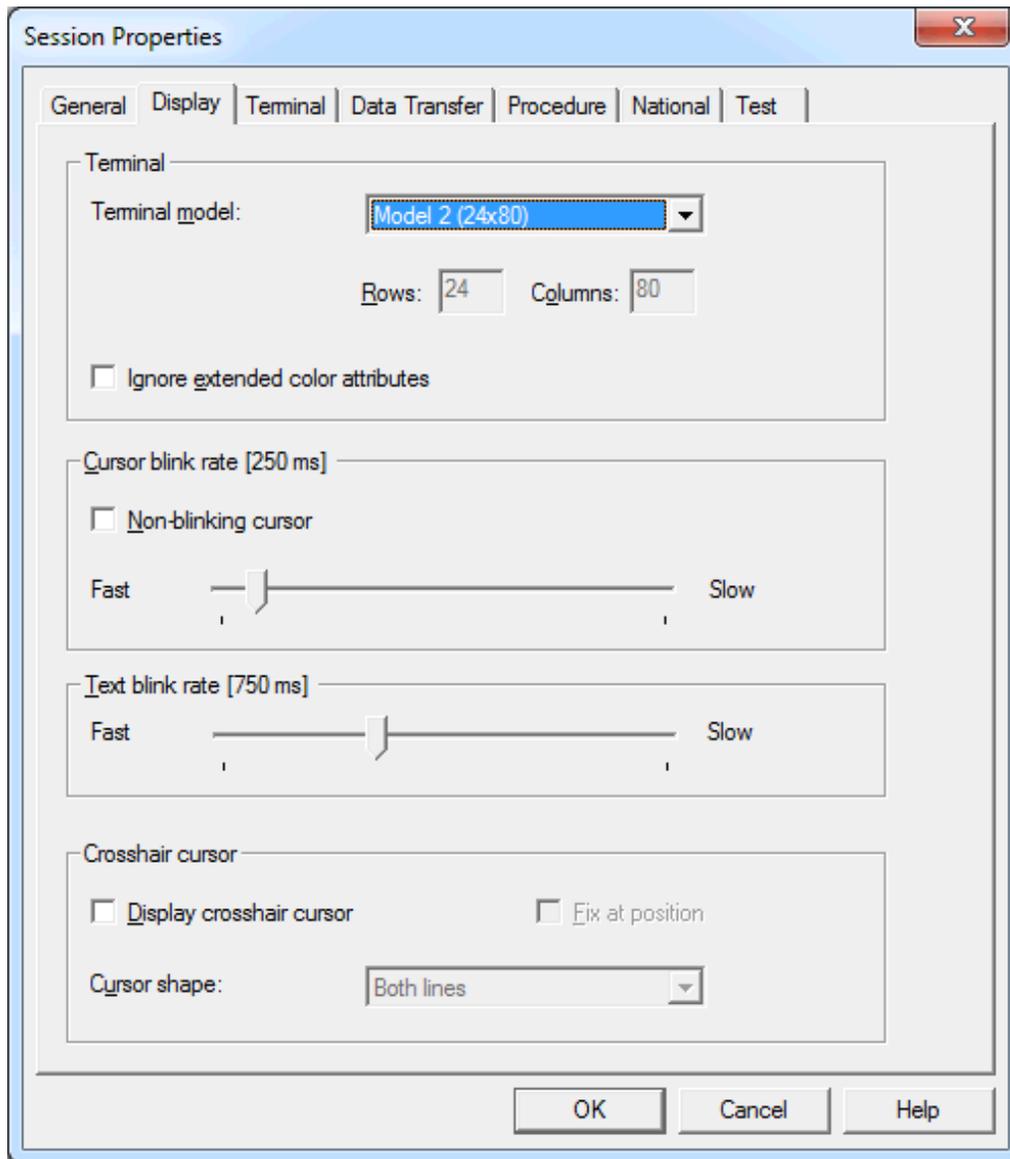
Terminal model

Select the primary terminal model you want to use from this drop-down list box. The terminal model you want to use must be defined or provided by the host system.

Rows/Columns

These text boxes can only be used with the session type TN3270(E) and only when the terminal model **IBM Dynamic** has been selected from the above drop-down list box. In order to use the terminal model IBM Dynamic, you have to use the IBM logmode D4C32XX3 in VTAM.

You can specify the screen size for IBM Dynamic using these text boxes. The maximum size is 80x200.

Ignore extended color attributes

When this check box is selected, the extended color attribute bytes sent by the host are ignored. This means that the colors are not taken from the data stream; only the field colors are used for display. Other extended attributes are displayed (e.g. blinking oder underlined).

Cursor blink rate

When the **Non-blinking cursor** check box is not selected, you can use the slider to specify the cursor blink rate in milliseconds. The currently defined value is shown in the header of the group box.

When the **Non-blinking cursor** check box is selected, the cursor in the terminal application does not blink.

Text blink rate

Use the slider to specify the text blink rate in milliseconds. The currently defined value is shown in the header of the group box.

Display crosshair cursor

A crosshair cursor consists of two thin lines, one horizontal and one vertical, meeting at the lower left corner of the cursor. These lines help to see what is contained in the same line and column.

When this check box is selected, a crosshair cursor is displayed in addition to the regular cursor; it does not replace the regular cursor.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

> **Note:** The color of the crosshair cursor can be changed in the **mainframe color scheme**.

Fix at position

When the display of the crosshair cursor has been enabled, you can additionally define whether the crosshair cursor is to be fixed at the current position.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Cursor shape

When the display of the crosshair cursor has been enabled, you can additionally define whether only the horizontal or the vertical line is to be shown. To do so, select either **Horizontal line** or **Vertical line** from the drop-down list box. By default, **Both lines** is active.

The setting of this option is the default setting for the corresponding menu commands in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Display (for VT Types)
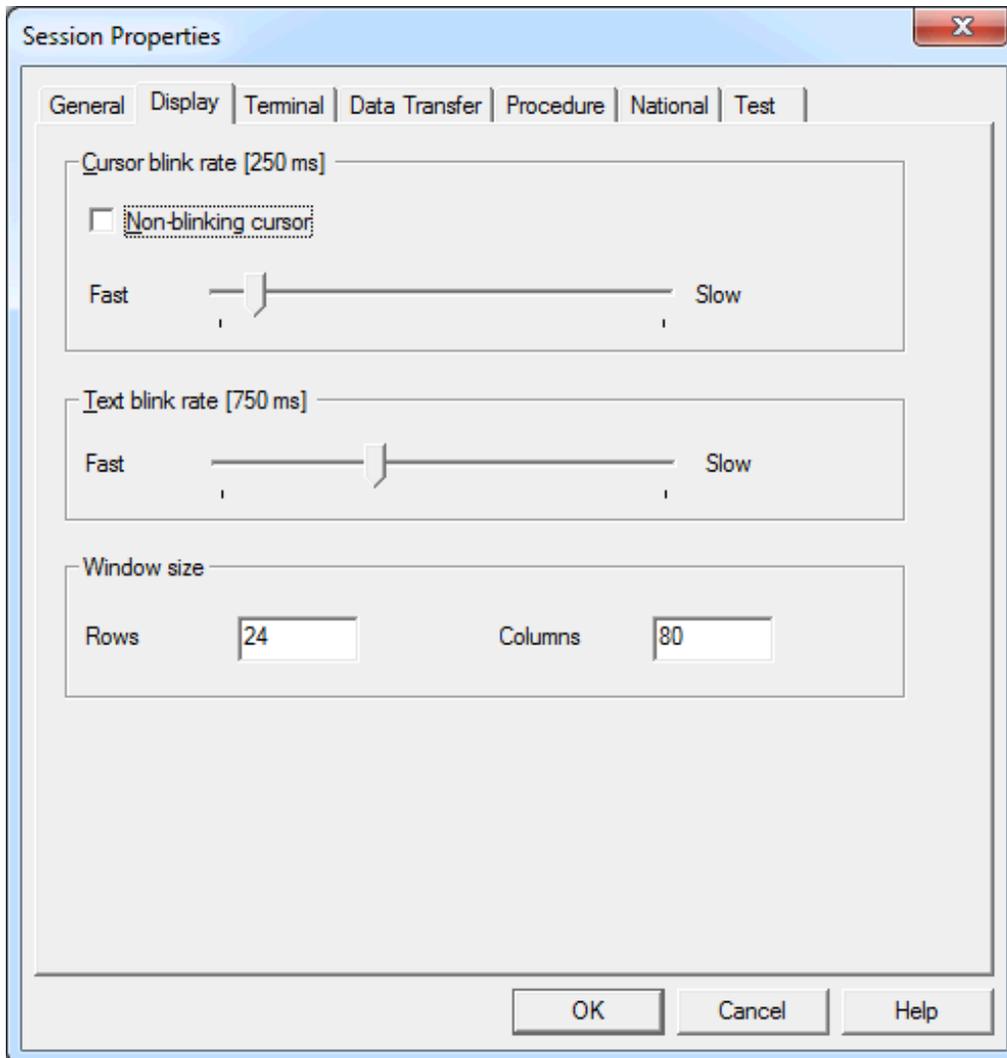
Cursor blink rate

When the **Non-blinking cursor** check box is not selected, you can use the slider to specify the cursor blink rate in milliseconds. The currently defined value is shown in the header of the group box.

When the **Non-blinking cursor** check box is selected, the cursor in the terminal application does not blink.

Text blink rate

Use the slider to specify the text blink rate in milliseconds. The currently defined value is shown in the header of the group box.

Rows/Columns

The window size for the VTxxx display. The default size is 24 rows and 80 columns.

Display (for BS2000 Types)
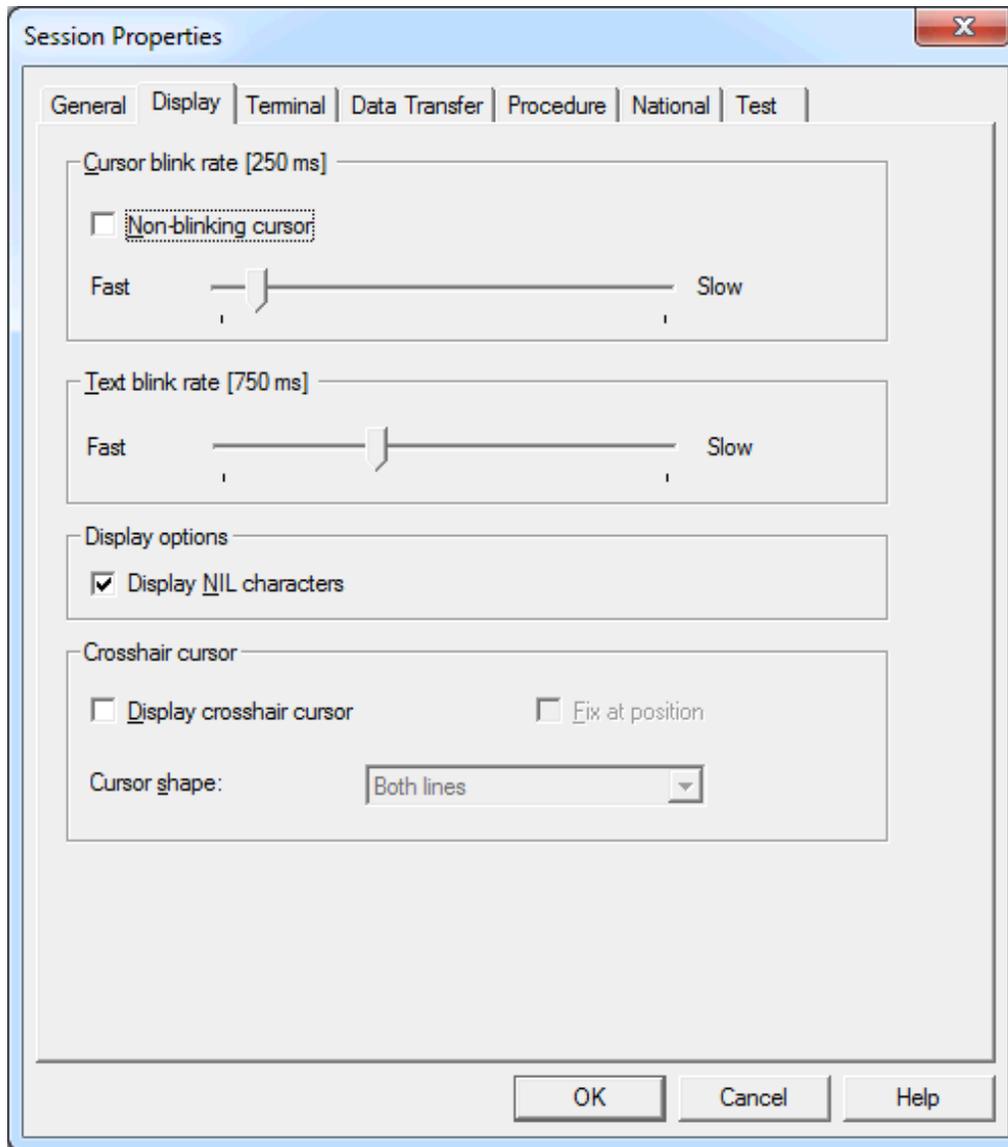
Cursor blink rate

When the **Non-blinking cursor** check box is not selected, you can use the slider to specify the cursor blink rate in milliseconds. The currently defined value is shown in the header of the group box.

When the **Non-blinking cursor** check box is selected, the cursor in the terminal application does not blink.

Text blink rate

Use the slider to specify the text blink rate in milliseconds. The currently defined value is shown in the header of the group box.

Display NIL characters

When this check box is selected, the BS2000 NIL characters (dots) are shown instead of blanks.

Display crosshair cursor

A crosshair cursor consists of two thin lines, one horizontal and one vertical, meeting at the lower left corner of the cursor. These lines help to see what is contained in the same line and column.

If this check box is selected, a crosshair cursor is displayed in addition to the regular cursor; it does not replace the regular cursor.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

> **Note:** The color of the crosshair cursor can be changed in the **mainframe color scheme**.

Fix at position

When the display of the crosshair cursor has been enabled, you can additionally define whether the crosshair cursor is to be fixed at the current position.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Cursor shape

When the display of the crosshair cursor has been enabled, you can additionally define whether only the horizontal or the vertical line is to be shown. To do so, select either **Horizontal line** or **Vertical line** from the drop-down list box. By default, **Both lines** is active.

The setting of this option is the default setting for the corresponding menu commands in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Terminal (for all Session Types except VT Types)
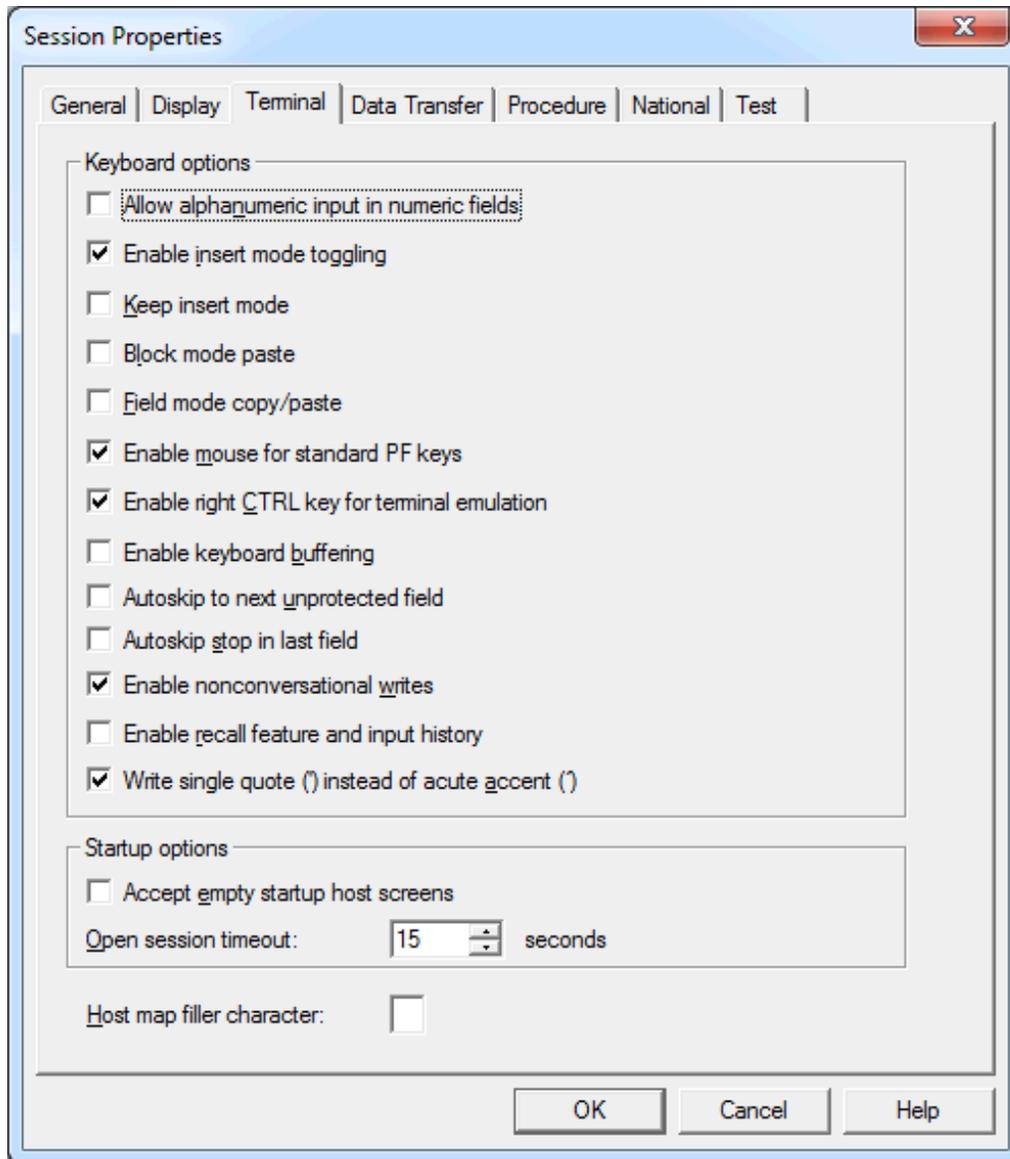
Allow alphanumeric input in numeric fields

If this check box is selected, you can enter alphanumeric characters in numeric entry fields while in terminal emulation (for example, to enable you to enter plus or minus signs).

Enable insert mode toggling

If this check box is selected, the INSERT key in terminal emulation mode acts like the INS key in other Windows applications (such as Word).

This option is affected by the setting of the **Keep insert mode** option. If **Keep insert mode** is enabled, it is recommended that you also enable **Enable insert mode toggling**. Otherwise, it is not possible to revert to overwrite mode.

Keep insert mode

By default, the terminal is in overwrite mode. If you want to insert characters, you have to press the INS key to activate insert mode. The insert mode is always reset to overwrite mode when you press ENTER, a PF key or any other key that sends the screen to the host.

If this check box is selected, the terminal is not reset to overwrite mode after sending a screen to the host.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Block mode paste

This mode is helpful when working with editors. If this check box is selected, the following applies: When you select a block of text and paste it in the middle of a line, the block remains intact. The lines after the first line begin in the same column as the first line. When block mode paste is not enabled, the lines after the first line would start at the beginning of a line.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Field mode copy/paste

If this check box is selected, you can copy the contents of several input fields in a screen to another set of input fields which has the same structure. During the paste operation, the target input fields (which can also be on a different screen) are filled field by field as they were copied from the source fields. Any non-input fields (protected fields and screen areas) that are part of your selection are ignored during the paste operation.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Enable mouse for standard PF keys

If this check box is selected, you can double-click the name of a defined function key (PF key or PA key) on the screen in order to send the corresponding key code to the host.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Enable right CTRL key for terminal emulation

If this check box is selected, the right CTRL key on the keyboard is enabled to be a function key. This function key is mapped to the terminal emulation key TE-ENTER which, by default, sends ENTER to the host.

Enable keyboard buffering

If the terminal emulation screen is locked by the host application, this is indicated in the status line (for example, "X ()") and keyboard input is rejected by Entire Connection. If this check box is selected, keyboard input from the user when the keyboard is locked is buffered by Entire Connection and immediately sent to the host once the keyboard status becomes unlocked.

Autoskip to next unprotected field

When the last possible character has been entered in an unprotected field, further behavior of the cursor depends on the field attribute and this check box. If this check box is selected, the cursor jumps to the next unprotected field. If this check box is not selected, the cursor jumps to the next position or jumps to the next unprotected field if the field contains the skip attribute.

Autoskip stop in last field

This option only applies if the autoskip feature is enabled by the above **Autoskip to next unprotected field** option or if the field contains the skip attribute.

When the last possible character has been entered in the last unprotected field of a screen, further behavior of the cursor depends on this check box. If this check box is selected, the cursor remains in the last unprotected field. If this check box is not selected, the cursor jumps back to the first unprotected field on the screen.

Enable nonconversational writes

If this check box is selected, Entire Connection immediately displays every new screen it receives.

If this check box is not selected, Entire Connection waits for a complete screen from the host and the keyboard unlock condition before displaying a new host screen. This avoids screen flickering. Some host applications, however, send screens to the terminal repetitively or without unlocking the keyboard.

Enable recall feature and input history

If this check box is selected, the following applies:

- **Recall feature**
  Entire Connection stores up to 20 character strings that have been entered by the user. You can recall a previous character string and insert it at the current cursor position, using a terminal emulation key for which the RECALL command has been defined.

■ **Input history**
Entire Connection stores up to 50 user entries. These entries are provided for selection in the input history window which is an element of the Terminal application window. You can then execute a previously entered command once more or insert previously entered text in a field.

Write single quote (') instead of acute accent (´)

If this check box is selected, a single quote (') is written when you press the acute accent key (´).

If this check box is not selected, an acute accent is written when you press the acute accent key.

Accept empty startup host screens

This option is only available for TN3270. Select this check box, if an empty startup screen causes a timeout during the initialization of the session.

Open session timeout

This parameter specifies the number of seconds Entire Connection will wait while opening a session. When the session cannot be opened after the defined number of seconds, opening will be canceled.

Host map filler character

You can specify the character which is used as a filler character in the host maps. In insert mode, this character is treated like a blank character and is thus moved beyond the end of a field.

Terminal (for VT Types)
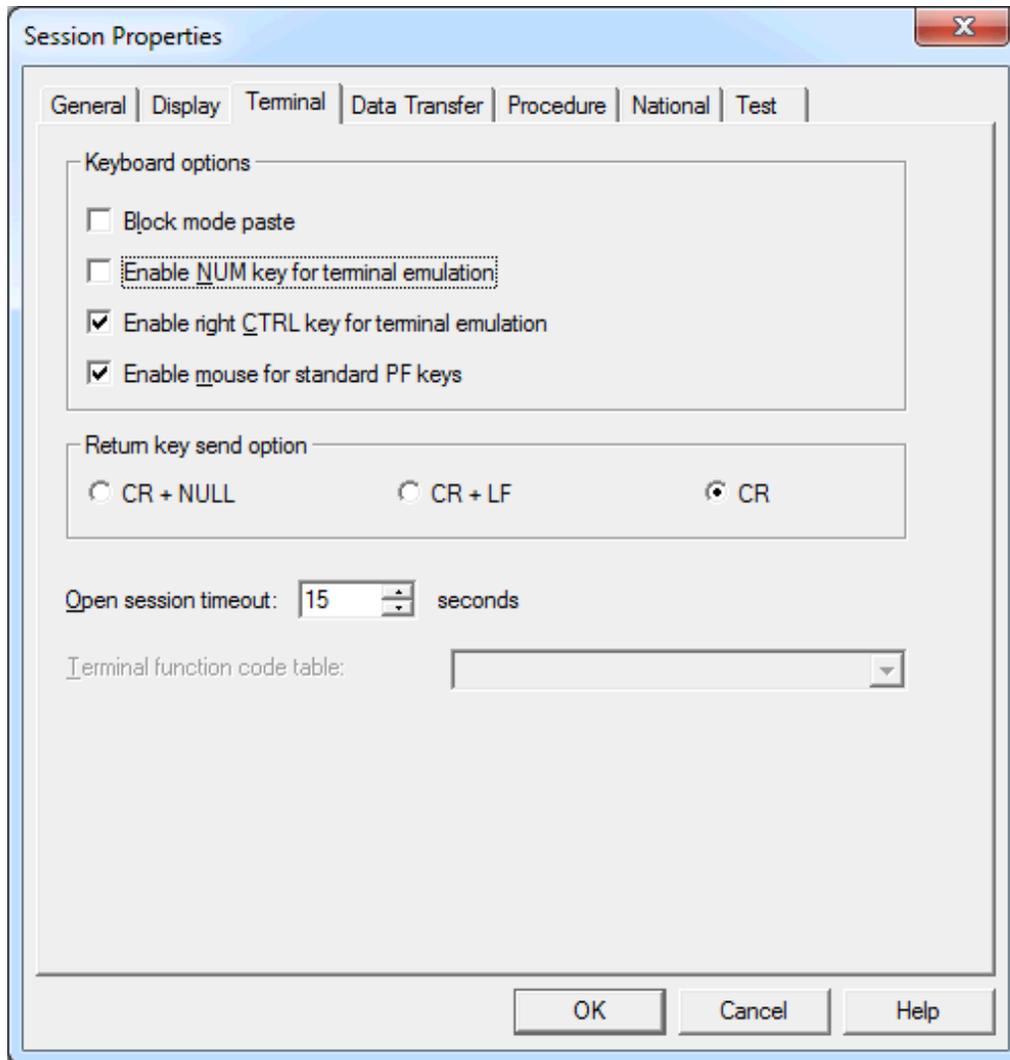
Block mode paste

This mode is helpful when working with editors. If this check box is selected, the following applies: When you select a block of text and paste it in the middle of a line, the block remains intact. The lines after the first line begin in the same column as the first line.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Enable NUM key for terminal emulation

If this check box is selected, the NUM key is used as a function key.

Enable right CTRL key for terminal emulation

If this check box is selected, the right CTRL key on the keyboard is enabled to be a function key. This function key is mapped to the terminal emulation key TE-ENTER which, by default, sends ENTER to the host.

Enable mouse for standard PF keys

If this check box is selected, you can double-click the name of a defined function key (PF key or PA key) on the screen in order to send the corresponding key code to the host.

The setting of this option is the default setting for the menu command with the same name in the terminal application. However, each user can define individual settings in the terminal application; for further information, see *Setting the Options* in the section *Terminal Emulation*.

Return key send option

Select the data that is to be sent to the host when the return key is pressed.

- CR and NULL, or

- CR and LF, or

- CR only.

> ⚠ **Important:** Telnet VTxxx sessions with the connection type SSH require the setting CR. See also *Telnet SSH Support* in the *Installation* section.

Open session timeout

This parameter specifies the number of seconds Entire Connection will wait while opening a session. When the session cannot be opened after the defined number of seconds, opening will be canceled.

Terminal function code table

Optional. This drop-down list box is only available if you have created your own terminal function code table.

To create your own terminal function code table, copy the file *Vtxxx.key* in the *tables* folder of Entire Connection and give the copy a new name (e.g. *Vt_hpux.key*). Edit the new file: modify the table name "WiTeKeyTable VTXXX" (e.g. change it to "WiTeKeyTable VT_hpux") and the key definitions. The table name must start with "VT_" and may be up to 32 characters long. **Import** your terminal function code table using the Configuration Manager. You can then select your terminal function code table from this drop-down list box. When the text box of the drop-down list box is empty, the default terminal function code table *Vtxxx.key* is used.

Data Transfer
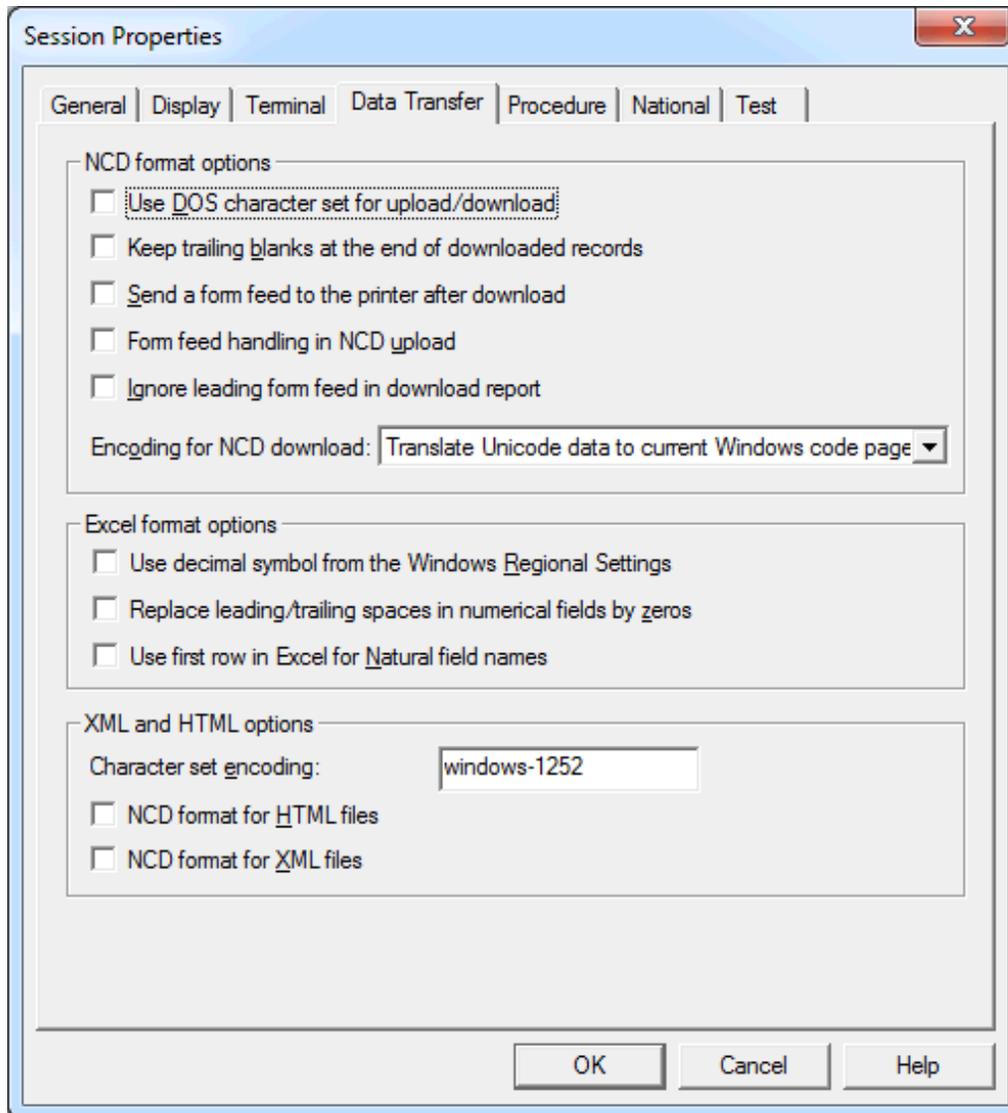
Use DOS character set for upload/download

If this check box is selected, the DOS (OEM) character set is used in the following cases:

▪ for data to be uploaded in NCD format;

▪ for data to be downloaded to NCD format.

If this check box is not selected, the Windows ANSI character set is used.

When data are uploaded or downloaded using a dialog box, the character set that is defined here is used as a default in the dialog box. When a dialog box is not used (e.g. when a file name is specified using the SET command), the character set that is defined here is always used.

Keep trailing blanks at the end of downloaded records

Normally, Entire Connection does not write to disk trailing blanks at the end of downloaded records. However, if this check box is selected, the trailing blanks are also written to disk, thus creating fixed length records in NCD format.

Send a form feed to the printer after download

Normally, Entire Connection routes downloaded data to the printer transparently. However, if this check box is selected, a form feed is sent to the printer at the end of the download.

Form feed handling in NCD upload

When you upload an ASCII file containing the ASCII form feed character (x'12') from the PC to the host, this ASCII character is converted to an EBCDIC space character (x'40).

To convert the ASCII form feed character to something other than a space on the host, you must mark this check box and edit the translation table for the appropriate communication method. The defined form feed character will then be used.

Ignore leading form feed in download report

When you are downloading a report, an empty page precedes the report. However, if this check box is selected, this empty page is not generated.

Encoding for NCD download

Select the encoding for the NCD download from this drop-down list box. The encoding model that you want to use must be defined or provided by the host system. The format of the file that is created by the download depends on the encoding that has been selected here; the following options are available in this drop-down list box:

▪ **Translate Unicode data to current Windows code page**
   If this option is selected in the drop-down list box, the Unicode data that is downloaded will be converted to the current Windows code page that is configured on the PC. Data conversion from Unicode to a Windows code page is subject to data loss, because a given code page might not be able to represent every character used in that particular Unicode data. The format of the file created by the download is ANSI; this is the default setting when a new session is created.

▪ **Download to UTF-16 if record contains Unicode data**
   If this option is selected in the drop-down list box, the format of the file created by the download depends on the data that is downloaded. If there is no Unicode data in the downloaded data, the format is ANSI. If there is Unicode data in the downloaded data, the format of the file is Unicode UTF-16 LE (Little Endian).

- **Always download to UTF-16**

    If this option is selected in the drop-down list box, the data that is downloaded is always stored in a file with the format Unicode UTF-16 LE (Little Endian).

Use decimal symbol from the Windows Regional Settings

If this check box is selected, numbers are downloaded with the decimal symbol that has been defined in the Regional Settings of Windows.

Replace leading/trailing spaces in numerical fields by zero

If this check box is selected, all formats that can be defined in Natural (for example, <X.Y> where X means digits before the decimal symbol and Y means digits after the decimal symbol) appear as cells with a custom format in Excel. According to the field definition on the mainframe, the cell is filled with zeros to its maximum length.

Example	
Definition:	`#field N<3.8>`
Initialization:	`#field = 1.78`
Content of Excel cell:	`001.78000000`

Use first row in Excel for Natural field names

If this check box is selected, the Natural field names are downloaded to the first row of the Excel sheet that is created by the download. In addition, the comment "Natural Field Name" is added to each field in the first row in order to mark it as a Natural field name.

When you upload data from an Excel file, this option determines whether Entire Connection checks for the Natural field names or not. Make sure that the setting of this option corresponds to the data in your Excel file.

Character set encoding

When creating a new session, the character set "windows-1252" is used as the default.

Specify the encoding that is to be

- written to downloaded XML and HTML files,

- used by the XML parser to interpret XML files correctly during upload; if an encoding is not specified, the character set "windows-1252" is used.

For download, the encoding is written to the file exactly as it has been specified it in this text box (including all possible errors). The application that is used to open the downloaded file (for example, Internet Explorer or Excel) uses the defined character set for displaying the contents of the file. The contents of the file (letters, numbers, special characters) are not converted to another format. The encoding is written to the downloaded file as follows:

■ **XML**

The encoding is written to the `encoding` declaration which is part of the XML text declaration. Example:

```
<?xml version="1.0" encoding="windows-1252"?>
```

For further information on character encodings, see *http://www.w3.org/TR/REC-xml/#charencoding*.

■ **HTML**

The encoding is written to the `META` declaration. Example:

```
<meta http-equiv=Content-Type content="text/html; charset=windows-1252">
```

For further information on character encodings, see *http://www.w3.org/TR/html4/charset.html#h-5.2*.

If an encoding is not specified, the character set "windows-1252" is written to the `encoding` declaration (XML) or `META` declaration (HTML) during download.

The following table lists some important character sets:

Character Set	Description
ISO-8859-1	ISO Latin 1
UTF-8	Unicode
windows-1250	Windows Central Europe
windows-1251	Windows Cyrillic
windows-1252	Windows Western Europe
windows-1253	Windows Greek
windows-1254	Windows Turkish
windows-1255	Windows Hebrew
windows-1256	Windows Arabic
windows-1257	Windows Baltic
windows-1258	Windows Vietnamese
windows-874	Windows Thai

NCD format for HTML files

Normally, Entire Connection uses HTML format when uploading HTML files or downloading data to HTML. However, if this check box is selected, uploaded and downloaded HTML data are stored in NCD (ASCII) format.

NCD format for XML files

Normally, Entire Connection uses XML format when uploading XML files or downloading data to XML. However, if this check box is selected, uploaded and downloaded XML data are stored in NCD (ASCII) format.

Procedure
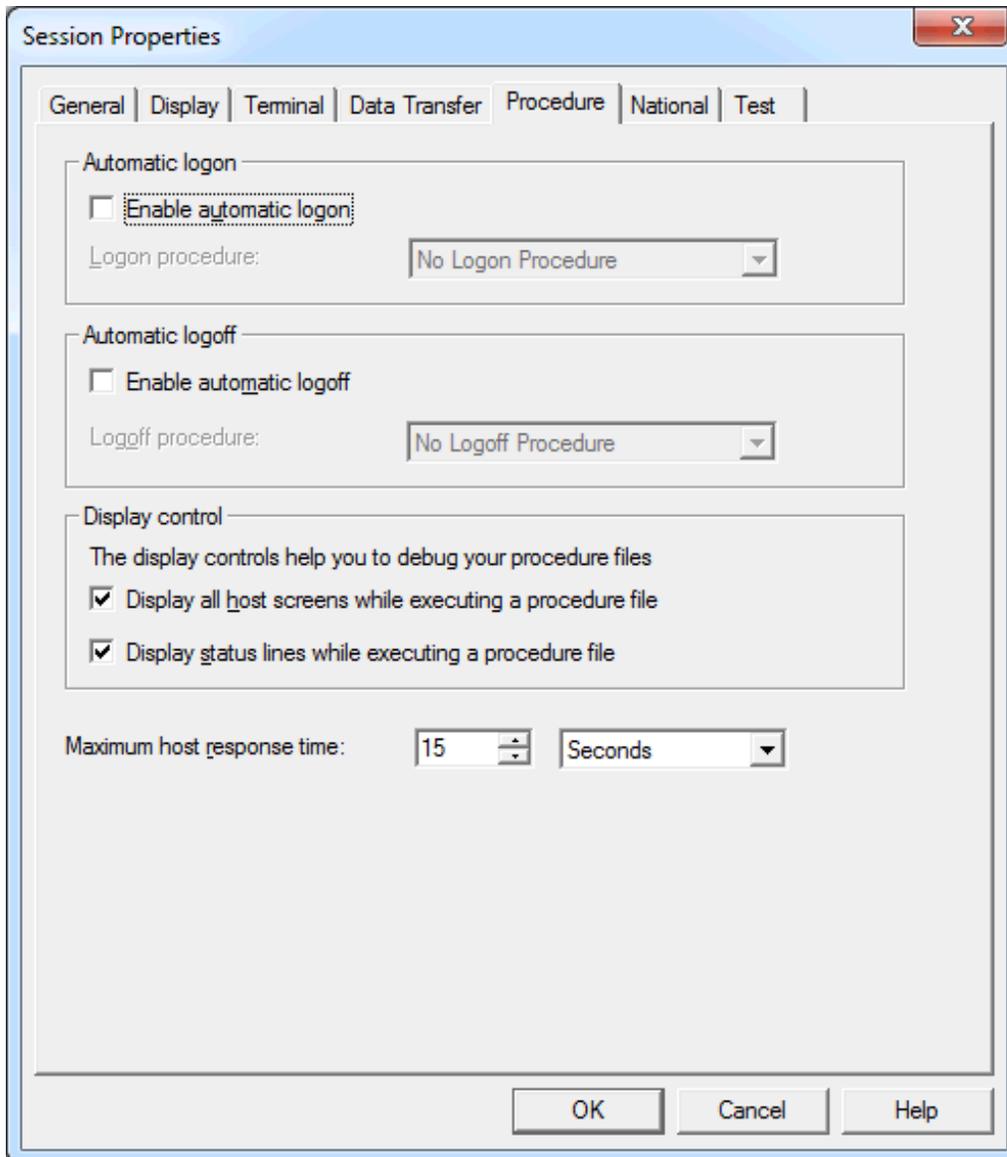
Enable automatic logon

If this check box is selected, Entire Connection automatically executes the procedure file selected in the **Logon procedure** drop-down list box box when you start this host session.

Logon procedure

Select the procedure file containing the necessary keystrokes to begin a host session from this drop-down list box. If the **Enable automatic logon** check box is selected, the procedure file is executed the first time you invoke a function that requires a connection with the host.

Logon procedures must be in the **procedure directory** specified in the user properties. Entire Connection assumes the procedure file has the extension *ncp*. This procedure file must be customized to work in your host environment.

Enable automatic logoff

If this check box is selected, Entire Connection automatically executes the procedure file selected in the **Logoff procedure** drop-down list box when you quit the terminal application. The logoff procedure is executed after your **shutdown task**, if you have one.

Logoff procedure

Select the procedure file containing the necessary keystrokes to end a host session from this drop-down list box. If the **Enable automatic logoff** check box is selected, the procedure file is executed when you quit the terminal application.

Logoff procedures must be in the **procedure directory** specified in the user properties. Entire Connection assumes the procedure file has the extension *ncp*. This procedure file must be customized to work in your host environment.

Display all host screens while executing a procedure file

If this check box is selected, Entire Connection displays rows 1 through 24 of a host screen when executing a procedure file in terminal emulation mode. This parameter is useful for debugging procedure files.

Display status lines while executing a procedure file

If this check box is selected, Entire Connection displays host processing messages in the status line of the terminal emulation screen (this is not the status line of the application window).

Maximum host response time

This parameter specifies the length of time Entire Connection will wait for a host response before canceling the processing of a procedure file. You can either specify seconds or minutes. Select the desired unit from the corresponding drop-down list box. The default is set in the **system preferences**.

National

Use these parameter settings to localize the terminal emulation behavior.
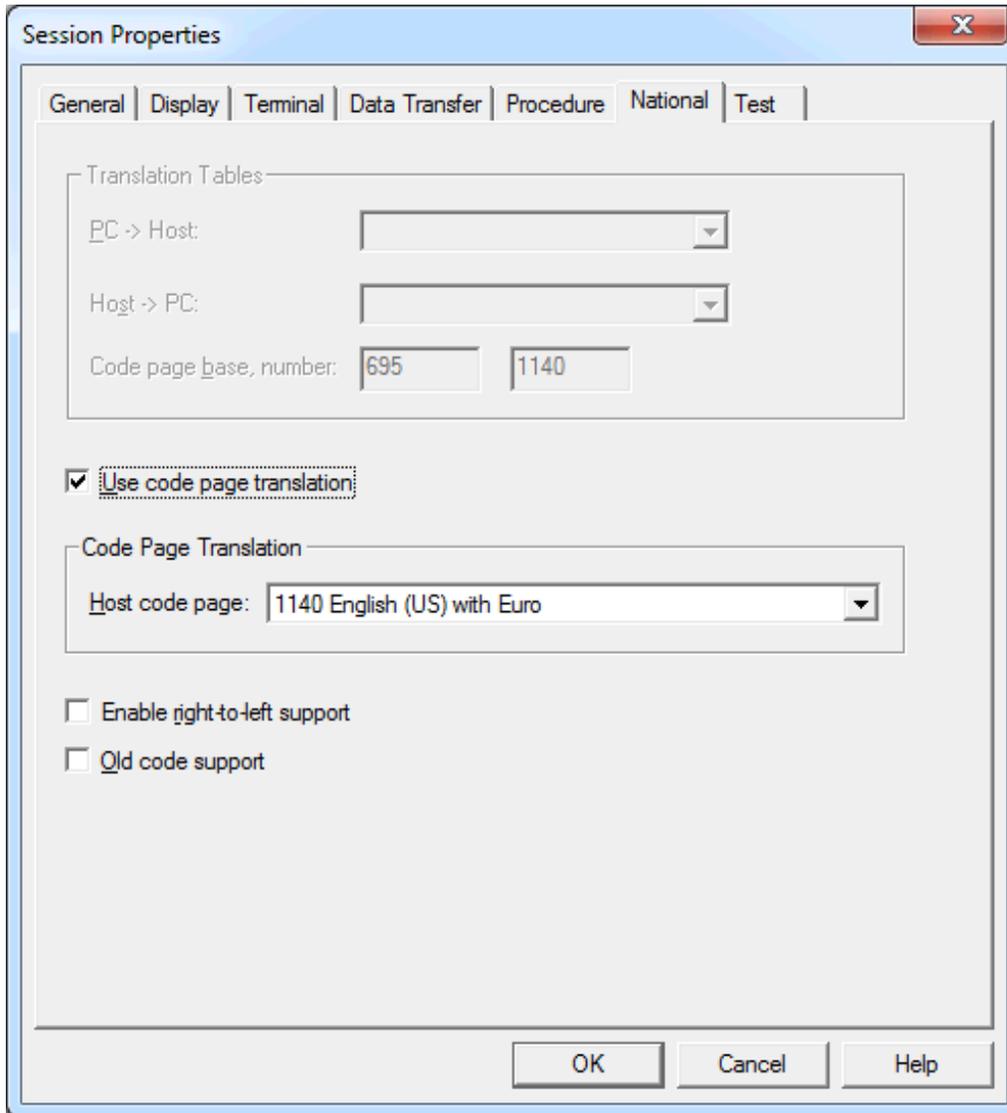
Translation Tables

Only available when the **Use code page translation** check box (not available for all session types; see below) is not selected.

💡 **Tip:** It is recommended to use code page translation instead of translation tables.

Select the translation tables to be used for data transfer from the following drop-down list boxes:

■ **PC -> Host**

Translation tables for PC-to-host transfer. The last two characters in the name indicate the language. For example, ASC2(Ansi)EBCDICUS is US English and ASC2(Ansi)EBCDICGR is German.

■ **Host -> PC**

Translation tables for the host-to-PC transfer. The characters preceding "2ASC" indicate the language. For example, EBCDICUS(Ansi)2ASC is US English and EBCDICGR(Ansi)2ASC is German.

English and German default tables for the different session types:

Session Type	PC -> Host	Host -> PC
HLLAPI	ASC2HLLAPIUS ASC2HLLAPIGR	HLLAPIUS2ASC HLLAPIGR2ASC
BS2000 TCP/IP	ASC2BS2TCPUS ASC2BS2TCPGR	BS2TCPUS2ASC BS2TCPGR2ASC
TN3270	ASC2(Ansi)EBCDICUS ASC2(Ansi)EBCDICGR	EBCDICUS(Ansi)2ASC EBCDICGR(Ansi)2ASC
VTxxx	ASC2VTXXUS ASC2VTXXGR	VTXXUS2ASC VTXXGR2ASC

Code page base, number

These text boxes only shown for the session type TN3270(E). They are only available when the **Use code page translation** check box (not available for all session types; see below) is not selected.

When the the **Translation Tables** group box is *not* dimmed, the values for the code page base and number receive default values which are derived from the table names. However, this is only correct in the case when the customer has not changed the table in order to use a different code page and when the names have been kept. The values can/must be changed by the user.

For future use, Software AG recommends that you always use code pages and that you abandon the use of translation tables. For this reason, a code page is automatically used as the default setting when you create a new session (1141 when German has been selected as the user language; otherwise 1140).

However, if you want to continue using translation tables, you can manually enter the code page number that is to be sent to the host. The code page consists of a base and a number. Default values are automatically provided for the 3270 standard translation tables ASC2(Ansi)EBCDICxxx and EBCDICxxx(Ansi)2ASC.

The following page on the internet provides an overview of several standard CDCSGIDs (Coded Graphic Character Set Global Identifiers):

http://publibz.boulder.ibm.com/cgi-bin/bookm-gr_OS390/BOOKS/CN7H6001/5.1.1?DT=19940512144120

Use code page translation

This check box is only shown for the session type TN3270(E). When it is selected, the information in the **Translation Tables** group box is dimmed.

If this check box is selected, ASCII is translated to EBCDIC using a standardized code page (instead of a translation table). Select the required code page from the **Host code page** drop-down list box. The Windows code page is taken from the Windows character set of the font which has been defined for the session.

Enable right-to-left support

This check box is only shown for the session type TN3270(E). If this check box is selected, right-to-left mode is supported in terminal emulation.

Old code support

This check box is only shown for the session type TN3270(E). If this check box is selected, IBM's "Old Code" for Hebrew is supported in terminal emulation.

Test

These parameters are intended for problem analysis. They should be used only under supervision of your technical support.
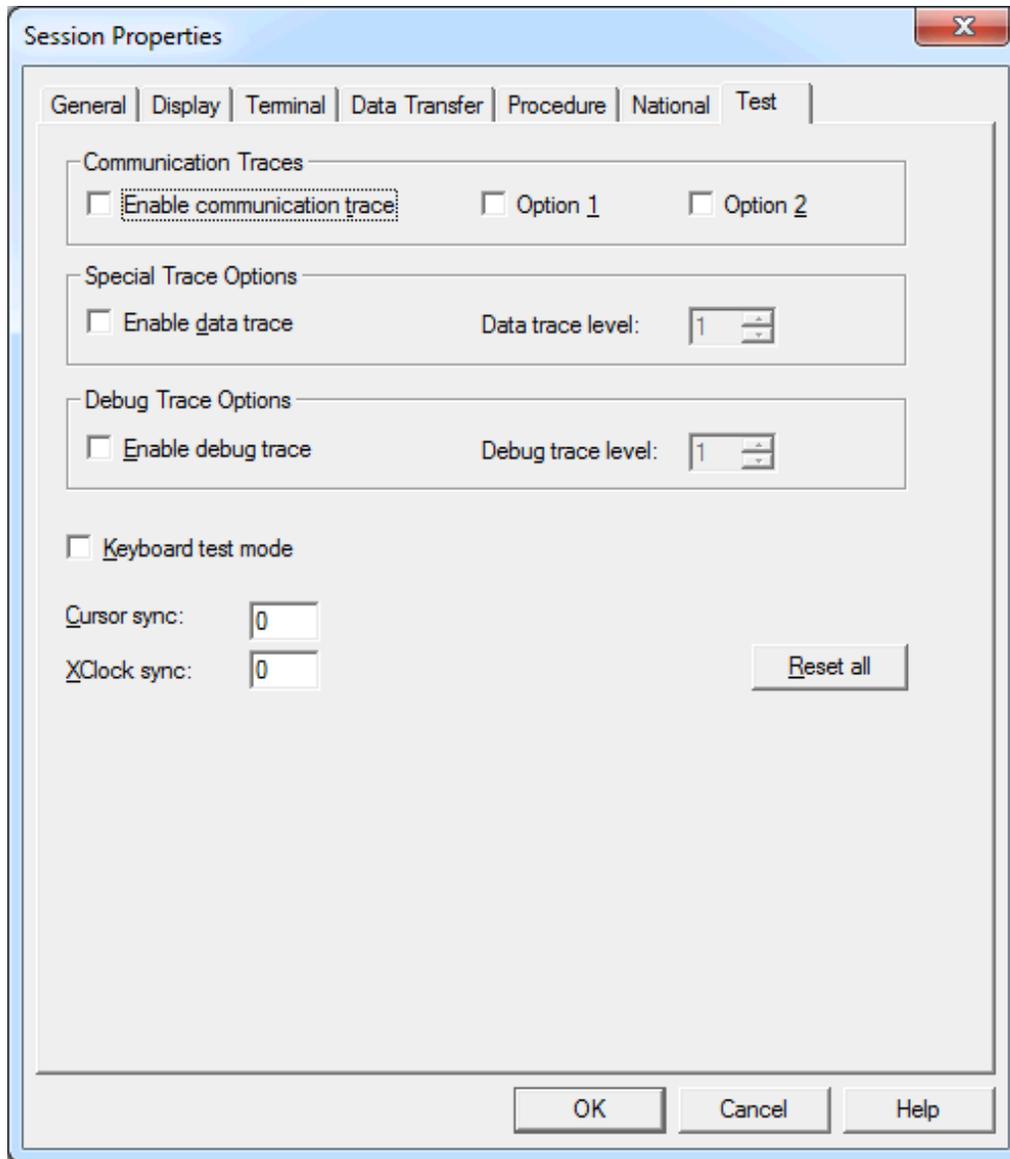
Enable communication trace

Enables the communication trace for the selected session type. Output is written to a file named *Mon‹nn›.trc* which is placed in the **log/trace directory**.

Option 1

Selects a trace option depending on the session type.

Option 2

Selects another trace option depending on the session type and enables memory-buffered trace.

Enable data trace

Select this check box, if you want to turn on a trace of the data layers.

Data trace level

When data trace has been enabled, you can specify a trace level. You can specify a value between 1 and 4. The higher the trace level, the more trace information is provided.

Enable debug trace

Select this check box, if you want to turn on a debug trace.

Debug trace level

When debug trace has been enabled, you can specify a trace level. You can specify a value between 1 and 6. The higher the trace level, the more trace information is provided.

Keyboard test mode

Turns on a keyboard test mode that helps you to adapt new or local keyboard types. Keyboard raw data is displayed in the output window (**Messages** pane) of the terminal application window. It is not passed to the terminal emulation. For details, see the file *Keyboard_us.kyb* in the *tables* directory of Entire Connection.

Cursor sync

Specifies the loop counter to be used when checking the controller to see if Entire Connection and the mainframe are in sync with the location of the cursor on the screen.

XClock sync

Specifies the loop counter to be used when checking/waiting for the keyboard lock condition after a function key has been sent to the host.

Reset all

When you choose this command button, all options on this property page are reset to their default values (i.e. switched off).

Printer LU

This property page is only shown when associated printing has been enabled in the communication parameters for a **TN3270E** display session. Make sure that **Printer** is defined as the print destination.

For further information on the options on this property page, see the description of the property page **Printer LU** in the section *Host Printer Sessions*.

7 Communication Parameters

The **Communication** dialog boxes for the different session types appear when you choose the **Communication** button in the **Session Properties** dialog box or in the **Host Printer Session** dialog box.

TN3270(E) for Display Sessions

The following property pages are provided:

- General
- Extended
- Security

See also: *TN3270(E)* in the *Installation* section.

General

Host name / IP address

Specify the name of the host to which you want to connect.

Alternatively (for example, if a name server is not installed in your network), you can specify the TCP/IP address of the host. You can specify the address in either of the following formats:

■ **Internet Protocol Version 4 (IPv4)**
 The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

■ **Internet Protocol Version 6 (IPv6)**
 The TCP/IP address format is s:t:u:v:w:x:y:z, where s, t, u, v, w, x, y and z are hexadecimal numbers which can have 1 to 4 digits. An address is thus 128 bits long and consists of eight 16-bit hexadecimal values, separated by colons. Example: 2010:4711:0000:0000:0000:0000:000B:0010.

Default TCP port

Select this option button, if you want to use the default TCP port (23).

Custom TCP port

Select this option button, if you want to use another TCP port. Specify the desired port ID in the corresponding text box. The TCP/IP port ID must be the same as the Telnet port ID defined on the host.

Extended attribute support in data stream

If this check box selected, this session supports extended attribute bytes (EABs).

End-of-screen delay

This option only applies to line mode. It determines the length of time in tenths of a second that Entire Connection will delay before assuming that the screen is complete (end-of-screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end-of-screen, since no physical data signals the end-of-screen.

Extended
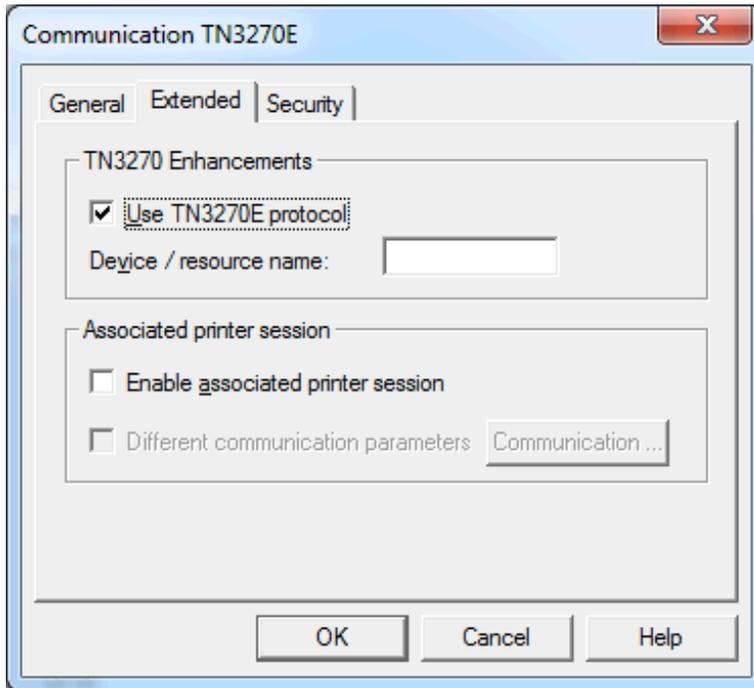
Use TN3270E protocol

When this check box selected, TN3270E is used for communication. A prerequisite is that the Telnet server is capable of processing TN3270E. Otherwise, the TN3270 protocol is used.

Device/resource name

Only available when the **Use TN3270E** check box is selected. Specify one of the following:

- **Display LU name**
  When a display LU has been specified, it is used when the terminal application of Entire Connection tries to open a session. If this LU is already used, an error message is shown.

- **Resource name**
  When a resource (e.g. an LU pool) has been specified, the terminal application of Entire Connection tries to open any LU from the specified LU pool.

When you specify a name, a "specific" session is created. Sessions that have been defined as specific on the Telnet server are only available for those sessions for which you have defined a display LU or resource name.

When you leave this text box empty, a "generic" session is created. In this case, any generic display LU of the Telnet server is used. A prerequisite is that at least one generic session has been defined on the Telnet server.

Enable associated printer session

This function can only be used when **Host Printer LU Support** has been selected during installation. This feature can only be installed with the setup type **Custom**. However, it is possible to install this feature at a later point in time.

This function is only available for TN3270E servers. When you attempt to use this function on a TN3270 server, an error message appears when the display session is opened.

This check box is available to the administrator (default name: SYSTEM) when the **Use TN3270E** check box is selected. It is not available to other users (it is always dimmed in this case).

When this check box is selected, associated printing is enabled for this session. In this case, the **Session Properties** dialog box contains an additional property page: **Printer LU**. See the description of this property page for further information.

When associated printing is enabled, a TN3270E printer session is automatically started when a display session is opened. The printer session uses the communication parameters that have been defined for the display session, i.e. host address (host name or IP address) and port. The display LU, which is returned when connecting to the display session on the Telnet server, is used to open a print LU. The print LU is opened using the ASSOCIATE command (see *TN3270E for Printer Sessions*). The actual association of printer sessions and display sessions must be configured on the Telnet server.

An associated printer session is automatically closed when the display session is closed.

Different communication parameters

Only available when the **Enable associated printer session** check box is selected.

When this check box is selected, you can define different communication parameters for your associated printer session (for example, another port number or different security settings). To do so, choose the **Communication** command button next to this check box. The resulting dialog box is the same as for a regular printer session (see *TN3270E for Printer Sessions*) with the following exceptions: The host name cannot be edited; this text box always contains the name of the display session. The connection type cannot be edited; it is always "Associate terminal device".

Security
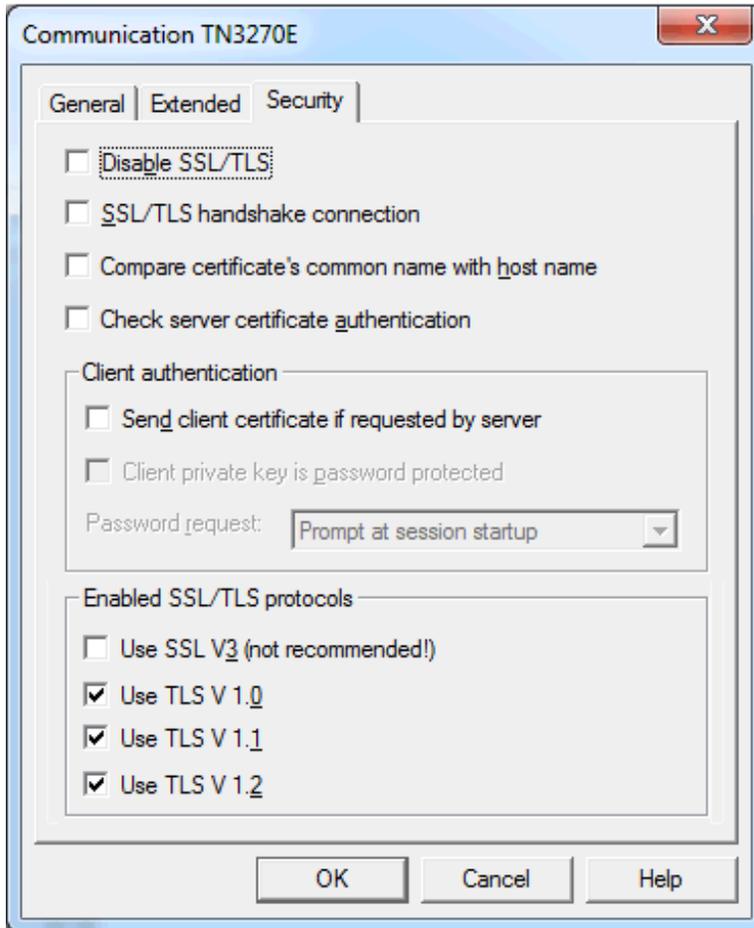
Disable SSL/TLS

When this check box is selected, SSL is disabled. The other options on this page are not available in this case. When SSL is disabled, a connection with Telnet negociated security (see below) is not possible.

SSL/TLS handshake connection

For an SSL/TLS handshake connection, this check box must be selected. This session is then defined as a secure session. You need to have a certificate on the TN3270 server. The port of the session to which you are connecting should be defined as secure.

For a connection without SSL or a for a connection with Telnet negociated security, this check box must not be selected.

For further information, see *TN3270 SSL/TLS Support* in the *Installation* section.

Compare certificate's common name with host name

When this check box is selected, the value in the **Host name / IP address** text box of the **General** property page is compared with the common name (CN) value of the certificate.

Check server certificate authentication

When this check box is selected, the server certificate is checked on the client (that is, server authentication is enabled). When server authentication is enabled, you have to make sure that the certificates on the clients are correctly installed. See *Checking Server Certificates in Entire Connection* the *Installation* section for further information.

When this check box is not selected, the server certificate is not checked on the client (that is, server authentication is disabled).

Send client certificate if requested by server

When this check box is selected, client authentication is enabled. This is only necessary, if your TN3270 server wants to check the identity of the users connecting to it. See *Client Authentication* in the *Installation* section for further information.

Client private key is password protected

Only available when the **Send client certificate if requested by server** check box has been selected.

Select this check box when the private key of the client is protected with a password. This protection is defined when generating the private key of the client. See also the document *keys.txt* in the *certs* folder.

Password request

Only available when the **Client private key is password protected** check box has been selected.

The following options are available from this drop-down list box:

- **Prompt at session startup**
  When the session is opened in the Terminal application, a dialog box will appear and you have to enter the password for the private key.

- **User password**
  The password that has been defined on the **Parameters 1** property page of the user properties will be used. The user password and the password for the private key must be identical. See the description of the Parameters 1 property page for further information.

- **User password 1-4**
  One of the passwords that has been defined on the **Procedure** property page of the user properties will be used. The user password and the password for the private key must be identical. See the description of the Procedure property page, option **Define other user IDs**, for further information.

When one of the user passwords has been defined, the dialog box in which you have to enter the password for the private key does not appear. Security is still guaranteed since the private key of the client is protected by the Entire Connection password.

When a wrong password is provided, the session is not opened and an error message appears, indicating that the private key could not be loaded. This can mean either that the password is wrong, or that the private key is invalid or not known to the server.

Enabled SSL/TLS protocols

You can define the SSL/TLS protocols that are allowed during the initial handshake between the TN3270 server and Entire Connection. By default, all supported TLS protocols are activated.

The following protocols can be activated:

■ SSL V3

> **Caution:** It is not recommended to use the SSL V3 protocol because of the "Poodle" vulnerability which exploits a weakness in this protocol. Therefore, the SSL V3 protocol is disabled by default. See also the *Poodle Note* at *https://empower.software-ag.com/Products/Security/poodle.asp* (Empower login required). You should only activate SSL V3 if the TN3270 server does not support TLS 1.0 and above.

■ TLS V 1.0

■ TLS V 1.1

■ TLS V 1.2

TN3270E for Printer Sessions

The following property pages are provided:

- General
- Security

See also: *TN3270(E)* in the *Installation* section.
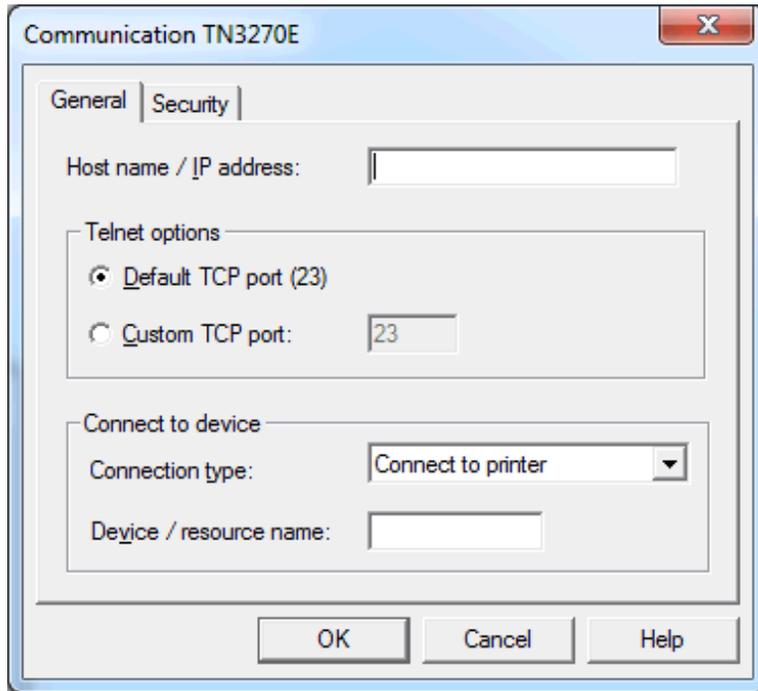
General

The communication parameters for printer sessions are the same as for **TN3270(E) for display sessions**. With printer sessions, however, the check box **End-of-screen delay** and the property page **Extended** are not available. The following drop-down list box is shown instead:

Connection type

Select one of the following:

▪ **Connect to printer**
This option is also known as the `CONNECT` command. When you select this option, you can define a specific or generic session as described above for the **Device/resource name** text box for **TN3270(E) for display sessions**.

▪ **Associate terminal device**
This option is also known as the `ASSOCIATE` command. When you select this option, you must specify the name of a display LU in the **Device/resource name** text box. On the Telnet server, a printer LU must be associated with the display LU that you specify.

Security

The communication parameters for printer sessions are the same as for **TN3270(E) for display sessions**. With printer sessions, however, the option **Prompt at session startup** is not available in the **Password request** drop-down list box.

Telnet VTxxx

The following property pages are provided:

- General
- Security
- Data Transfer

See also: *Telnet VTxxx* in the *Installation* section.

General

Host name / IP address

Specify the name of the host to which you want to connect.

Alternatively (for example, if a name server is not installed in your network), you can specify the TCP/IP address of the host. You can specify the address in either of the following formats:

▪ **Internet Protocol Version 4 (IPv4)**
The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

▪ **Internet Protocol Version 6 (IPv6)**
The TCP/IP address format is s:t:u:v:w:x:y:z, where s, t, u, v, w, x, y and z are hexadecimal numbers which can have 1 to 4 digits. An address is thus 128 bits long and consists of eight 16-bit hexadecimal values, separated by colons. Example: 2010:4711:0000:0000:0000:0000:000B:0010.

Terminal type

Specify the terminal type for terminal emulation. This can be one of the following: VT100, VT220 or VT320.

Connection type

Select the **Telnet** option button, if you want to use normal Telnet connections. Select the **SSH** option button, if you want to use secure connections.

Default TCP port

Select this option button, if you want to use the default TCP port. The default port for Telnet is 23. The default port for SSH is 22.

Custom TCP port

Select this option button, if you want to use another TCP port. Specify the desired port ID in the corresponding text box. The TCP/IP port ID must be the same as the Telnet port ID defined on the host.

End-of-screen delay

This option determines the length of time in tenths of a second that Entire Connection will delay before assuming that the screen is complete (end-of-screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end-of-screen, since no physical data signals the end-of-screen.

Security

The options on this property page are only enabled when the connection type SSH has been selected on the **General** page.
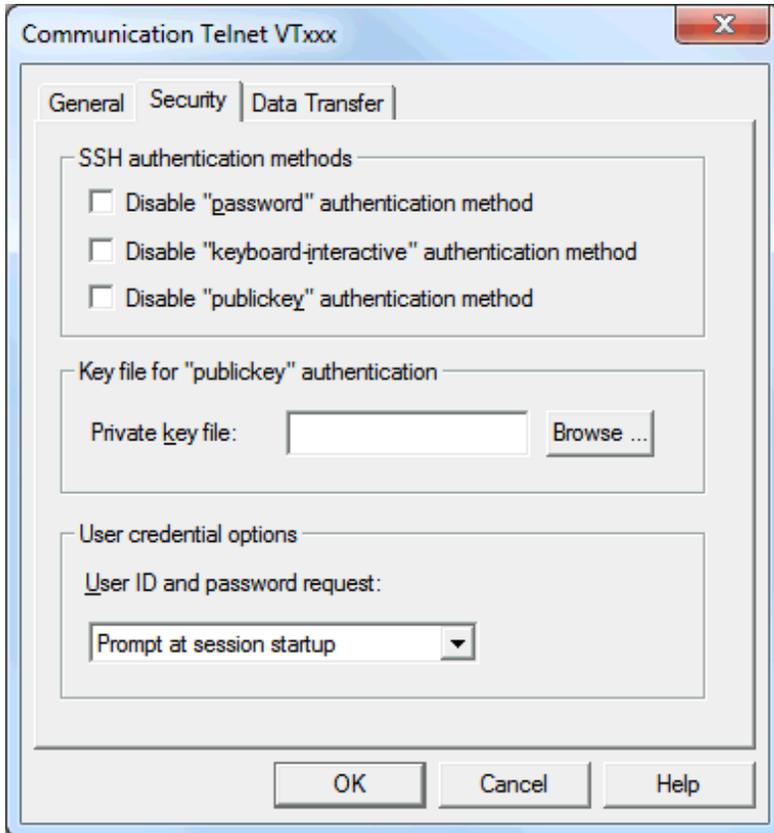
The settings on this property page are used for SSH authentication. For further information, see *Telnet SSH Support* in the *Installation* documentation.

SSH authentication methods

Depending on your SSH host configuration, one or more authentication methods are offered from the host. If you do not want to use an authentication method (for example, if priority is to be given to another method), you can select the corresponding check box. The following check boxes are available:

- **Disable "password" authentication method**
- **Disable "keyboard-interactive" authentication method**
- **Disable "publickey" authentication method**

It is recommended that you leave these check boxes with their default values, that is, all authentication methods are enabled. In case of doubt, ask your SSH administrator.

The "publickey" authentication method is the preferred method. It will be used when a private key file has been specified (see below).

Key file for "publickey" authentication

The text box **Private key file** is only available when the **Disable "publickey" authentication method** check box is *not* selected.

The private key file must be located in the *\Software AG\Entire Connection\certs* folder of the user's local *appdata* folder. When you enter the file name, you need not enter a path since Entire Connection searches for the key file in the above-mentioned *certs* folder.

You can also choose the **Browse** button to select the key file from a dialog box.

User ID and password request

Normally, the user password is the password that is used to log on to the UNIX machine. If the "publickey" authentication method is used, however, the password is the pass phrase for the private key.

The following options are available from this drop-down list box:

▪ **Prompt at session startup**
When the session is opened in the Terminal application, a dialog box will appear and you have to enter the user ID and password.

▪ **User ID and password**
The user ID and password that has been defined on the **Parameters 1** property page of the user properties will be used. See the description of the **Parameters 1** property page for further information.

▪ **User ID and password 1-4**
One of the user IDs and passwords that has been defined on the **Procedure** property page of the user properties will be used. If a password or pass phrase is not required for the SSH logon, it is possible to use the password "NIL" for the passwords 1-4. See the description of the **Procedure** property page, option **Define other user IDs**, for further information.

When one of the user ID and password combinations has been defined, the dialog box in which you have to enter the user ID and password does not appear.

When a wrong user ID or password is provided, the session is not opened and an error message appears.

Data Transfer

```
┌─────────────────────────────────────────────────────┐
│ Communication Telnet VTxxx                      ▭ ✕  │
├─────────────────────────────────────────────────────┤
│                                                       │
│  ┌ General │ Security │ Data Transfer ┐               │
│                                                       │
│    Preferred TCP port:        │22333  │               │
│                                                       │
│    Local IP address:                                  │
│    ┌──────────────────────────────────────┐ ▼        │
│    │                                      │           │
│    └──────────────────────────────────────┘          │
│                                                       │
│                                                       │
│            ┌──────┐  ┌────────┐  ┌──────┐             │
│            │  OK  │  │ Cancel │  │ Help │             │
│            └──────┘  └────────┘  └──────┘             │
└─────────────────────────────────────────────────────┘
```
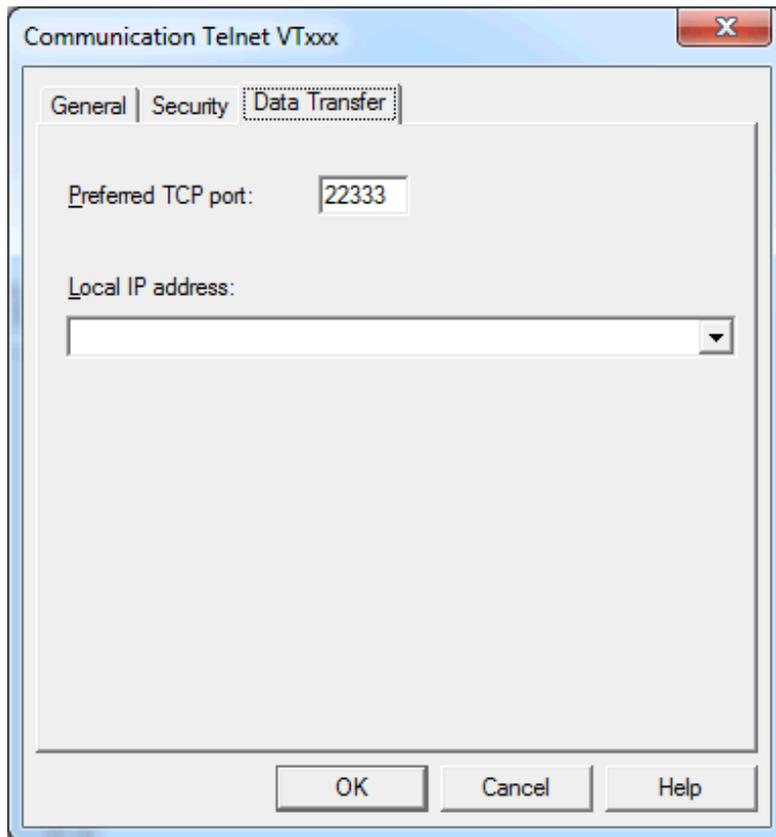
Preferred TCP port

The communication for the data transfer with Natural for UNIX is done using an additional port. When running the data transfer, a second connection will be established from Natural to the client PC. To complete the data transfer successfully, the new connection must be considered in the configuration (for example, firewalls). If the port number is already in use, the data transfer searches for the next free port number by incrementing the preferred port number one by one.

The default port number when creating a new session is 22333.

The range of valid preferred TCP port numbers is from 1024 to 65535. This is because the ports that are numbered from 0 to 1023 are reserved for privileged system-level services and are designated as "Well Known Ports".

Local IP address

When two or more TCP/IP addresses are defined for your PC (for example, one for an Ethernet card and another for a VPN connection), you can select the TCP/IP address that you want to use for data transfer with Natural for UNIX. This drop-down list box provides for selection the available TCP/IP addresses and their friendly names together with the adapter description.

If no local IP address is selected, the default TCP/IP address of your PC is used.

BS2000 TCP/IP

See also: *BS2000 TCP/IP* in the *Installation* section.

Host name / IP address

Specify the name of the host to which you want to connect.

Alternatively (for example, if a name server is not installed in your network), you can specify the TCP/IP address of the host. You can specify the address in either of the following formats:

- **Internet Protocol Version 4 (IPv4)**
  The TCP/IP address format is w.x.y.z, where w, x, y and z are numbers which can have 1 to 3 digits. Example: 23.218.4.90.

- **Internet Protocol Version 6 (IPv6)**
  The TCP/IP address format is s:t:u:v:w:x:y:z, where s, t, u, v, w, x, y and z are hexadecimal numbers which can have 1 to 4 digits. An address is thus 128 bits long and consists of eight 16-bit hexadecimal values, separated by colons. Example: 2010:4711:0000:0000:0000:0000:000B:0010.

Host TCP port

Specify the desired port ID. The TCP/IP port ID must be the same as the port ID defined on the host.

Terminal model

Select the terminal model you want to use. The selected terminal model must be defined or provided by the host system.

Station name

If you do not specify a station name, Entire Connection automatically creates an internal name (e.g. STN1, STN2 etc.) when this session is opened. This is recommended if you want to establish several connections to the BS2000 host using the same host session.

Optional. You can also specify the name of the station which is used to connect to the host. The station name may include the following characters: A to Z, 0 to 9, $, # and @. The first character must not be a number. The name can be up to 8 characters long. When you specify a station name, only one host session with this name can be active. If this host session is opened once more, the previously opened host session is automatically closed.

When using station names, you should create several host sessions with different station names.

BS2000 application

Specify the name of the application on the BS2000 host to which you want to connect. $DIALOG is provided as the default name. The name can be up to 8 characters long. The connection will be established using an "open" command with no parameters.

If this field is empty, you are prompted for a BS2000 application name when you open the host session. You can then enter the "open" command followed by the application name (for example `o $DIALOG`). This is helpful if you want to use different BS2000 applications.

End-of-screen delay

This option only applies to unformatted screens. It determines the length of time in tenths of a second that Entire Connection will delay before assuming that the screen is complete (end-of-screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end-of-screen, since no physical data signals the end-of-screen.

Use P-key scheme

When this check box is selected, you can select a P-key scheme from the drop-down list box. The drop-down list box provides for selection all currently defined P-key schemes. The selected scheme will then be used as the default P-key scheme for this session, i.e. when the session is opened, the contents of the P-keys is automatically loaded into the terminal application.

HLLAPI

See also: *HLLAPI* in the *Installation* section.

DLL name

The name of the third-party DLL providing the HLLAPI interface.

HLLAPI entry name

The name of the HLLAPI function in the third-party DLL.

EAB Support

Extended Attribute Byte support. Select the **None** option button if your particular configuration does not support EABs. Select the **Normal** or **Special** option button if it does.

Use SETCURSOR function

If this check box is selected, the cursor in Entire Connection is moved using the HLLAPI function `SETCURSOR`. Some HLLAPI stacks do not support this function.

SENDKEY function option

If this check box is selected, the HLLAPI function `SENDKEY` is used to pass characters to the interface. For some HLLAPI stacks, this gives better performance.

Notification option

If this check box is selected, Entire Connection tells the HLLAPI stack that notification messages have to be sent for updates on both the presentation space and the operation information area (OIA).

This option should only be used under the supervision of your local technical support. It serves to tolerate special HLLAPI stack implementations.

OEM for receiving

If this check box is selected, Entire Connection assumes characters from the interface are in the DOS (OEM) character set. If this check box is not selected, the Windows ANSI character set is used.

OEM for sending

If this check box is selected, Entire Connection converts characters to the DOS (OEM) character set before passing them to the interface. If this check box is not selected, the Windows ANSI character set is used.

Session short name

The short name (one character) of the session that is defined in the third-party emulation to be used. If you do not specify a short name, the first session that is found will be used.

PSID

Some HLLAPI vendors require a different Presentation Space ID (PSID) format.

Serial, VTxxx

See also: *Serial, VTxxx* in the *Installation* section.
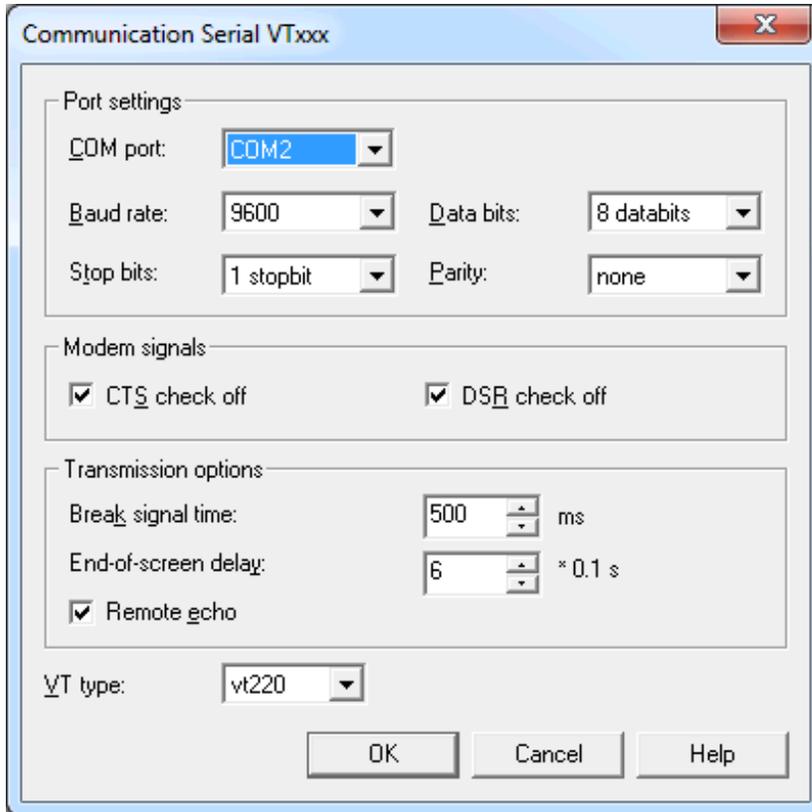
COM port

The port to be used for serial communication. This value is determined by the physical configuration of your PC.

Baud rate

The baud rate to be used for serial communication. In most instances, this rate is determined by your modem.

Data bits

The number of data bits to be used for serial communication.

Stop bits

The number of stop bits to be used for serial communication.

Parity

The type of parity to be used for serial communication.

CTS check off

If this check box is marked, the check for the modem signal CTS (Clear to Send) is disabled.

DSR check off

If this check box is marked, the check for the modem signal DSR (Data Set Ready) is disabled.

Break signal time

The length of the break signal. This applies only to asynchronous operations. You can specify a value between 1 and 1000 milliseconds.

End-of-screen delay

This option only applies to line mode. The length of time in in tenths of a second that Entire Connection will delay before assuming that the screen is complete (end-of-screen). Valid input ranges from 0 to 30. This timer is reset each time data is transmitted from the mainframe. It is used to detect a logical end-of-screen, since no physical data signals the end-of-screen.

Remote echo

If this check box is marked, it is assumed that the host sends back your input (echo). In this case, only the characters received by the host are displayed. If this check box is not marked, all keyboard input is immediately displayed.

VT type

Specify the VT type for terminal emulation. This can be one of the following:

- VT100
- VT220
- VT320

8   Color Schemes

These dialog boxes appear when you manage color schemes in the Configuration Manager, set up a color scheme in the **session properties**, or when you add, modify or duplicate a color scheme in the terminal application.

The color scheme name can be up to 32 characters long and may contain blanks. It can only be specified in these dialog boxes when adding a new color scheme using the Configuration Manager. Later, the name cannot be modified in these dialog boxes.

VT Color Scheme
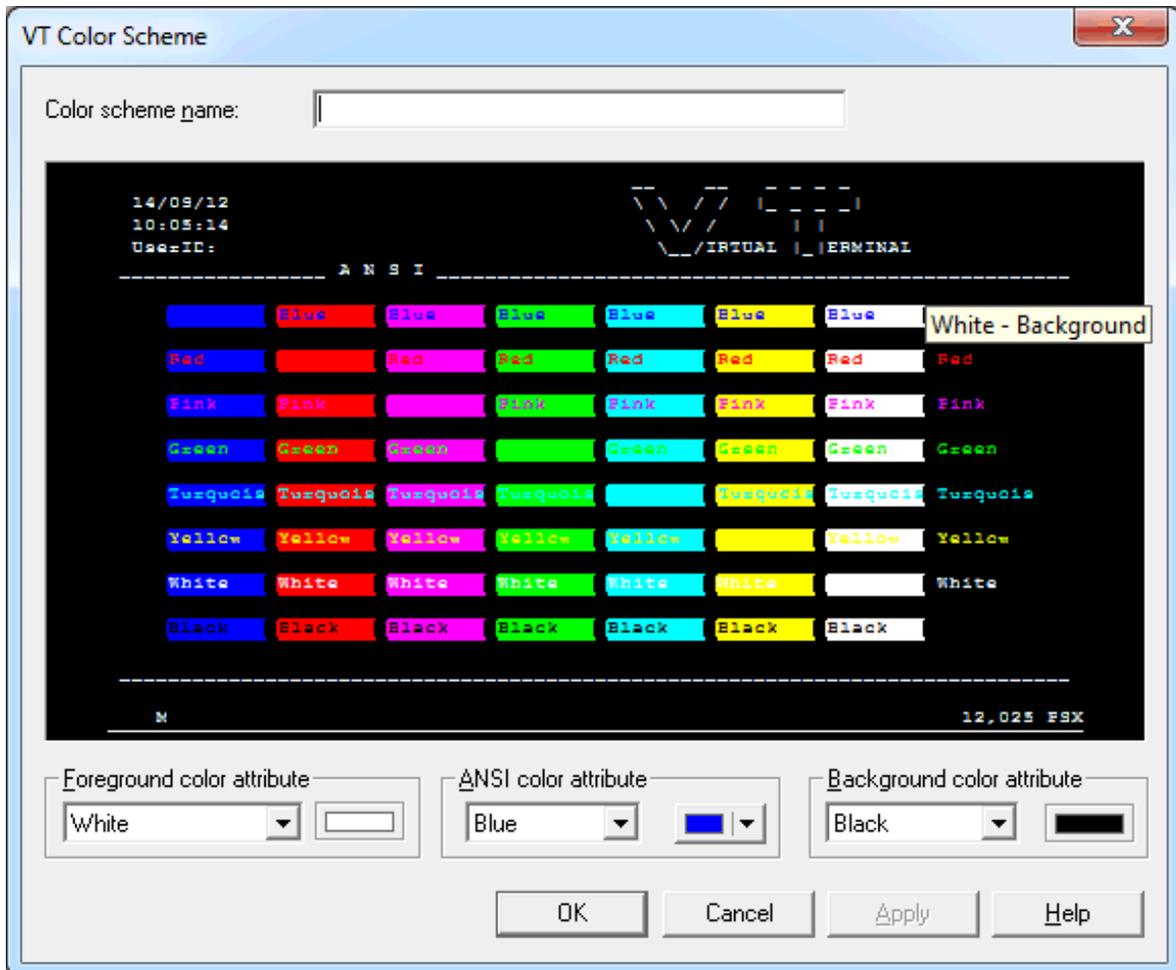
When you move the mouse pointer over the sample screen that is shown in the **VT Color Scheme** dialog box, tooltips appear. The following applies for the ANSI color attributes: the name of the foreground color is shown on the left of the tooltip, and the name of the background color is shown on the right of the tooltip.

> **To define other colors**

1 Select a text entry from the first drop-down list box in one of the following group boxes:

- **Foreground color attribute**
  The foreground color for the terminal emulation screen. The VT terminal type 340+ uses this setting when starting the session and as long as no specific color commands are sent by the host. All other VT terminal types use this setting during the entire session.

- **ANSI color attributes**
  When in Natural on the host the VT terminal type 340+ (color terminal) is set, the host can send color commands for the fore- and background. In this mode, eight color attributes are available. For each possible character position or cursor position, the host can set a fore- and background color. You can modify the colors belonging to the color attributes (see below).

- **Background color attribute**
  The background color for the terminal emulation screen. The VT terminal type 340+ uses this setting when starting the session and as long as no specific color commands are sent by the host. All other VT terminal types use this setting during the entire session.

2   Select the desired color for an ANSI color attribute from the corresponding drop-down list box to the right.

    This drop-down list box also provides the following buttons:

- **Other**: lets you define additional colors.
- **Default**: resets the modified color palette to the default colors.

3   Repeat the above steps until all desired colors have been defined.

    The **VT Color Scheme** dialog box always reflects the current color settings.

4   Optional - choose the **Apply** button to save the current color settings without closing the dialog box.

5   Choose the **OK** button.

Mainframe Color Scheme
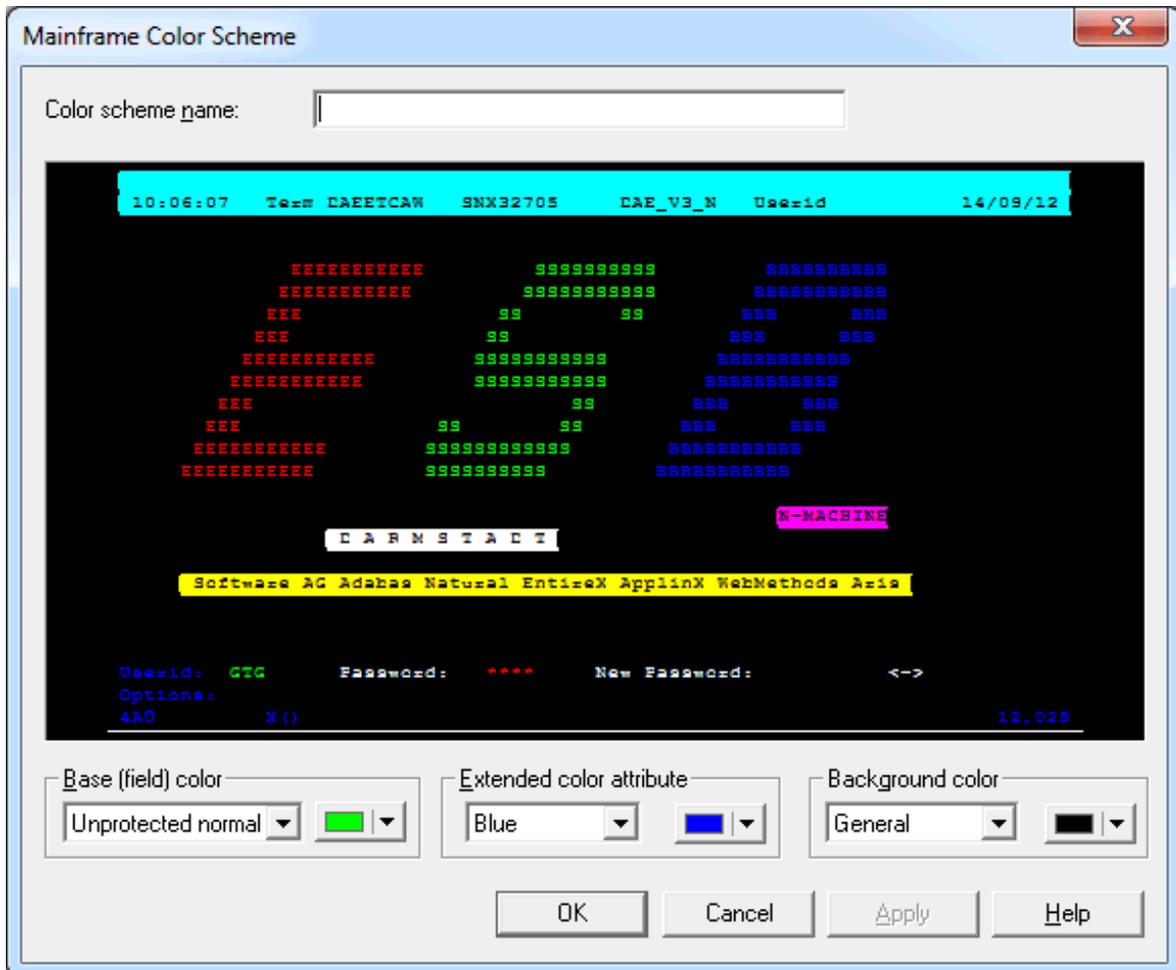
When you move the mouse pointer over the sample screen that is shown in the **Mainframe Color Scheme** dialog box, tooltips appear. The name of the base (field) color or extended color attribute is shown on the left of the tooltip. The name of the background color is shown on the right of the tooltip.

≫ **To define other colors**

1 Select a text entry from the first drop-down list box in one of the following group boxes:

■ **Base (field) color**
The colors for the different field types in a terminal emulation screen and for the crosshair cursor.

■ **Extended color attribute**
The extended colors sent by the host application. For example, you can specify that all fields with the extended color attribute **Green** are to appear blue in the terminal emulation screen.

■ **Background color**
The background colors for specific field types. The background color underlays text. If the field contains no text, the field area is colored with the background color.

2 Select the desired color from the corresponding drop-down list box to the right.

This drop-down list box also provides the following buttons:

■ **Other**: lets you define additional colors.

■ **Default**: resets the modified color palette to the default colors.

3 Repeat the above steps until all desired colors have been defined.

The **Mainframe Color Scheme** dialog box always reflects the current color settings.

4 Optional - choose the **Apply** button to save the current color settings without closing the dialog box.

5 Choose the **OK** button.

9 Fonts

The **Font** dialog box lets you define the font that is to be used for terminal emulation.

This dialog box appears when you choose the **Select Font** button in the **Session Properties** dialog box. It can also be invoked directly from the terminal application.
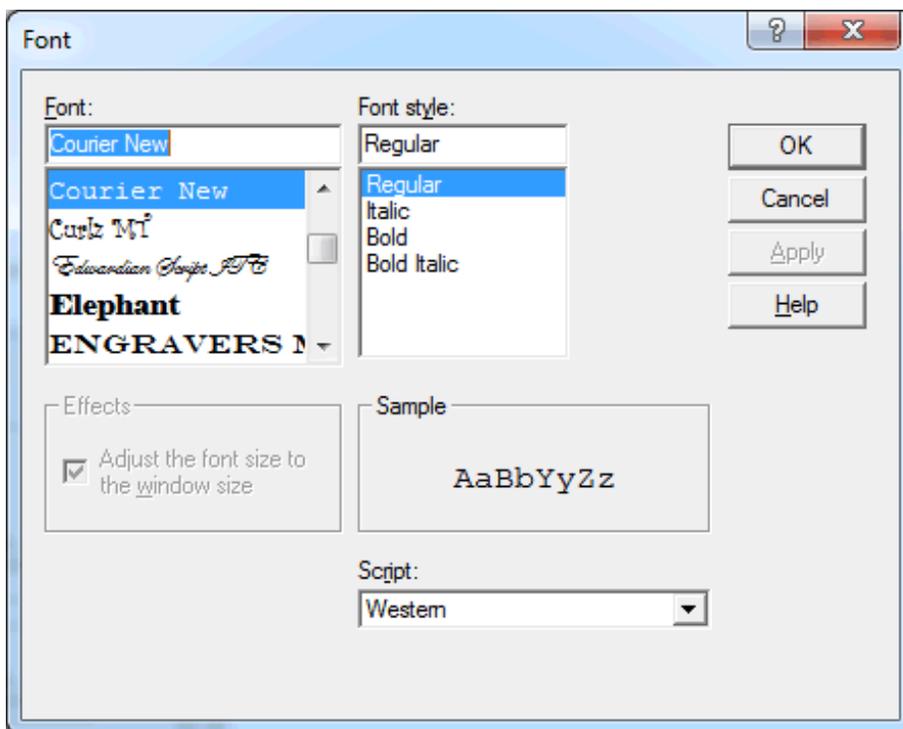
Font / Font style / Size

All installed monospaced fixed fonts and TrueType (scalable) fonts are provided. Select the desired font from these controls.

A size can only be specified for a monospace font. It is only possible to specify a size that is listed the drop-down list box. When you specify another size manually in the text box, this size will not be used.

When you select a TrueType font, it is not possible to specify a size since these types of font are always adjusted to the window size (see below).

Adjust the font size to the window size

This feature applies to raster fonts only. For TrueType fonts, automatic resizing is always enabled.

Select this check box to adjust the size of the selected font to the window size. Adjusting the font size is done by increasing or reducing the spacing between characters and lines. This may result in truncated characters.

Script

This drop-down list box contains a list of all available language scripts for the selected font. Make sure to specify a script that is compatible with the language that has been set up for your computer.

10   Key Schemes

Defining a Key Scheme

The **Terminal Emulation Key Scheme** dialog box lets you define the keys to be used for a specific key scheme. This dialog box appears when you manage a key scheme in the Configuration Manager, set up a key scheme in the **session properties**, or when you add, modify or duplicate a key scheme in the terminal application.

Using the **Hide** button, you can hide the keyboard in the lower part of the dialog box. The name of the command button then changes to **Show**.
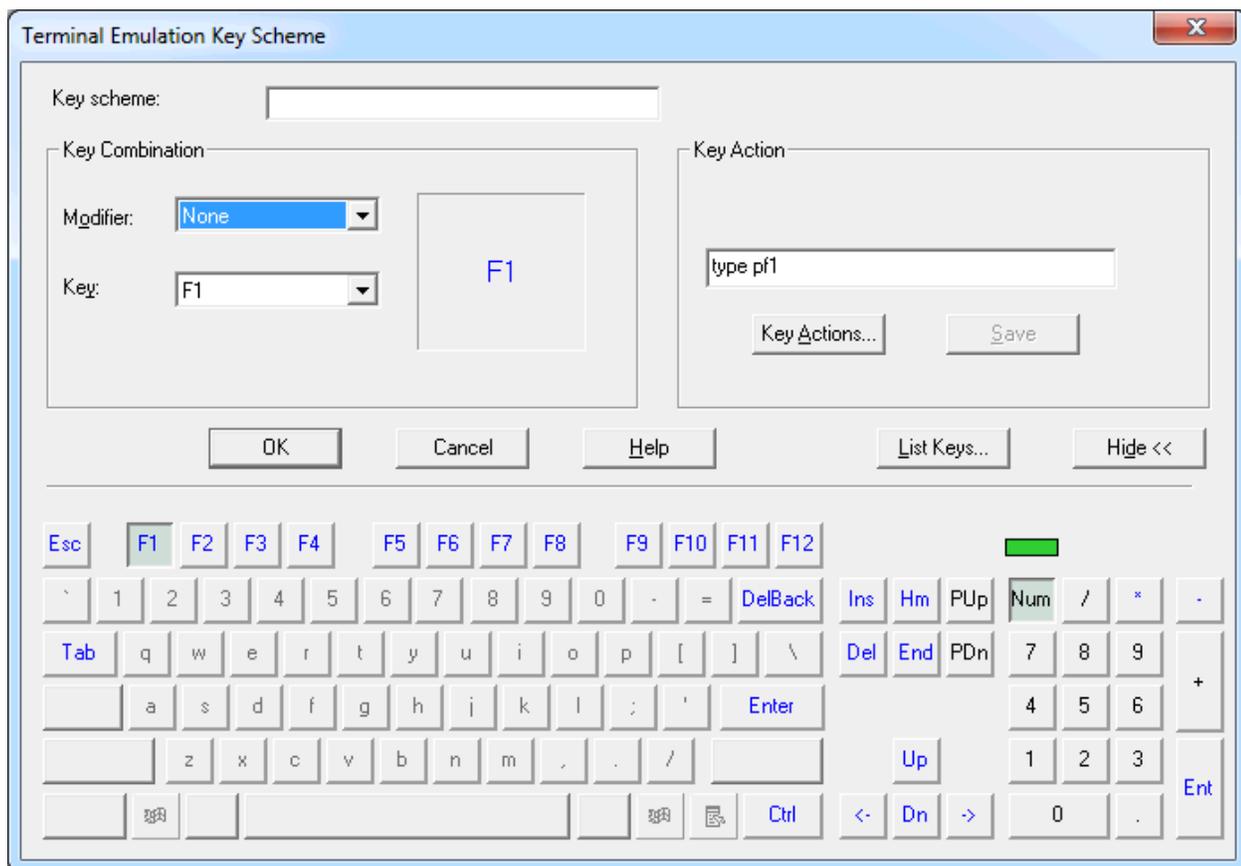
The layout of the keyboard in the lower part of the dialog box depends on the language that is currently defined in your **user properties**. This can be English or German.

Different colors are used for the key names that are shown in the lower part of the dialog box:

Color	Meaning
Black	A key action has not yet been assigned.
Blue	A key action has already been assigned. To view the action, select the key and then use the different options in the **Modifier** drop-down list box. When an action has been assigned for a specific modifier, the corresponding values are shown in the **Key Action** group box. When you move the mouse over a blue key name and when a key action has been defined for the currently selected modifier, the defined key action is shown in a tooltip.
Gray (dimmed)	The key is disabled. Therefore, a key action cannot be assigned. Whether a key is disabled or not depends on the currently selected option button in the **Modifier** drop-down list box.

Notes:

1. The shortcut keys that are displayed next to a menu command in the terminal application (e.g. CTRL+V for pasting text) are not available when the active key scheme uses them for different purposes.

2. The key combinations CTRL+RIGHT-ARROW, CTRL+LEFT-ARROW and CTRL+END have been hardcoded. They are used for jumping to the next word, the previous word, and to the end of the field. These functions are only available in the terminal application if the corresponding key combinations are not defined otherwise in the active key scheme.

≫ **To modify the key scheme**

1   When you add a new key scheme, specify its name in the **Key scheme** text box. The key scheme name can be up to 32 characters long and may contain blanks.

2   Select one of the following options from the **Modifier** drop-down list box:

■ **None**
The selected key is not used in combination with any other key.

■ **Shift**
The selected key is to be used in combination with the SHIFT key.

■ **Ctrl**
The selected key is to be used in combination with the CTRL key.

■ **Alt**
The selected key is to be used in combination with the ALT key.

Depending on the currently selected key, it may be possible that not all options are shown in the **Modifier** drop-down list box. When you deselect the key, all options are available again.

3   In the lower part of the dialog box, select the key that is to be defined. Disabled keys cannot be selected.

If an action has already been defined for the selected key or key combination, this action is shown in the **Key Action** group box. An action represents, for example, a key or string to be

sent to the host. You can define several actions for each key combination. Thus you can define, for example, a logon sequence consisting of several steps that are executed by pressing a single key.

When a German keyboard is shown and you select a special character which is not available on the English keyboard or which has a different position on the English keyboard, the corresponding character from the English keyboard, at that position, is used. For example, when a German keyboard is shown and you select "ü", the **Key** drop-down list box shows you that "[" has been selected.

Or:

Select the desired key from the **Key** drop-down list box. Using this drop-down list box, it is possible to select non-standard PC keys which are only available on special keyboards (for example, F13 through F24).

The name of the selected key is now shown in the **Key Combination** group box. For example:

4   In the **Key Action** group box, enter the command that is to be performed. For example:

Command	Description
EXECTASK DSYSTRANS	Executes the task DSYSTRANS.
EXECUTE LOGOFF	Executes the procedure file *Logoff.ncp*.
TYPE 'SAAAA' CR	Sends the characters SAAAA and CR (ENTER) to the host.

Or:

Choose the **Key Actions** button to specify the action using a dialog box. For further information, see *Selecting a Key Action*.

5   To save the key action which is currently shown in the **Key Action** group box, choose the **Save** button.

📄   **Notes:**

1. If you do not save a changed action and select a different key or modifier, you will be asked whether you want to save your change.

2. If you do not save a changed action and choose the **OK** button, your (last) change is automatically saved.

6   When you have defined all required keys, choose the **OK** button.

The dialog box is closed.

Selecting a Key Action

The following dialog box appears when you choose the **Key Actions** button in the **Terminal Emulation Key Scheme** dialog box which is described above.
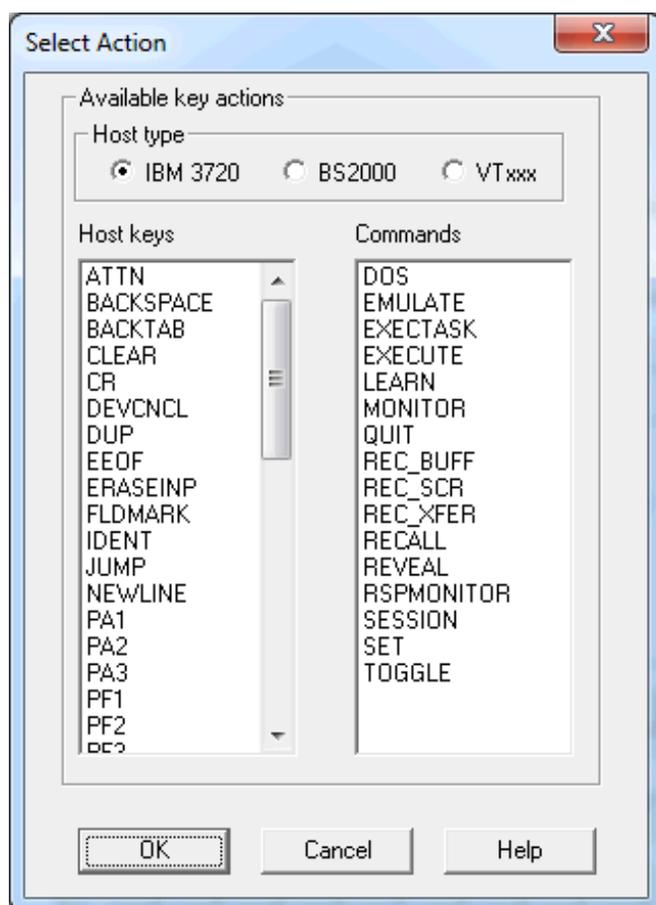
≫ **To select a key action**

1   Select the appropriate host type.

The host keys which are shown when the **IBM 3720** option button is selected also apply for BS2000 and VTxxx hosts. When you select the **BS2000** or **VTxxx** option button, additional host keys are shown which only apply to this host type.

2   Select either a host key or a command.

3   Choose the **OK** button.

When you have selected a host key, the `TYPE` command is written to the **Key Action** group box, together with the selected host key. See also *Terminal Function Keys*.

When you have selected a command, this command is written to the **Key Action** group box. You then have to specify all required parameters manually.

4   Invoke the dialog box repeatedly until the **Key Action** group box contains all required actions.

Listing the Defined Keys

The following dialog box appears when you choose the **List Keys** button in the **Terminal Emulation Key Scheme** dialog box which is described above or in the **Key Scheme Selection** dialog box which is available in the terminal application. It lists the defined keys for the currently selected key scheme.
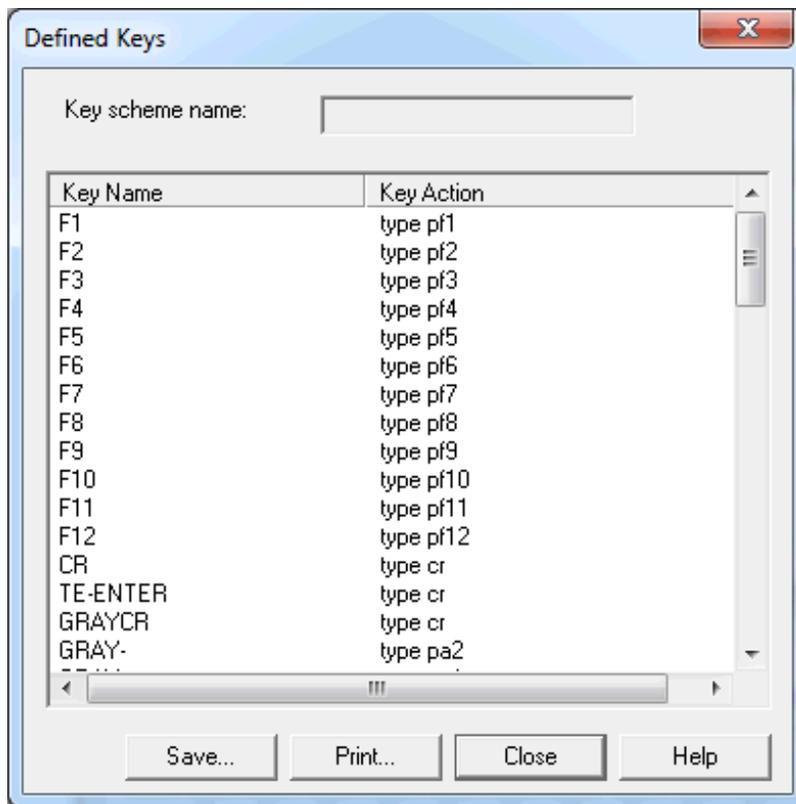
You can write the key actions for the currently shown key scheme to a file or you can directly print them.

> **To write the key actions to a file**

1   In the **Defined Keys** dialog box, choose the **Save** button.

    The **Save As** dialog box appears.

2   Select the desired location and specify a file name.

    The default extension is *txt*.

3   Choose the **Save** button.

> **To print the key actions**

1   In the **Defined Keys** dialog box, choose the **Print** button.

    The **Print** dialog box appears. You can print the key actions on a printer defined under Windows.

2   Choose the **OK** button.

Terminal Emulation Keys

A distinction is made between terminal function keys and physical function keys:

■ **Terminal Function Keys**

This terms refers to all keys that start a terminal function. Different host systems have different terminal functions and associated keys. Examples for IBM 3270 hosts: PF1, PF2, ATTN, PA1. Examples for Siemens hosts: F1, K1, FKT1, DUE1.

The code sequence eventually sent to the host for a given terminal function key is taken from the terminal function code table. The share file contains terminal function code tables for all communication methods. The administrator can modify the terminal function code tables.

■ **Physical Function Keys**

This terms refers to all keys on the physical keyboard that can be used as function keys. Examples: F1, F2, CTRL+F3, CTRL+A, ALT+B. Entire Connection has a unique name for each function key.

Terminal Function Keys

Some terminal function key names are found on all host systems, others are specific to a given host system. Entire Connection supports the following:

- 3270 Function Key Names
- 9750 Function Key Names
- VT Function Key Names

3270 Function Key Names

The following key names can be used with the `TYPE` command to transmit the corresponding 3270 key to the host:

ATTN	DOWN	LEFT	RIGHT
BACKSPACE	EEOF	NEWLINE	SYSREQ
BACKTAB	ERASEINP	PA1 to PA3	TAB
CLEAR	HOME	PF1 to PF24	TEST
CR	IDENT	POR	UP
DELETE	INSERT	PRINT	
DEVCNCL	JUMP	RESET	

If any of the following key names is used with the `TYPE` command, Entire Connection will automatically wait for a response from the host before continuing:

ATTN
CLEAR
CR
POR
PA1 to PA3
PF1 to PF24

9750 Function Key Names

The following key names can be used with the `TYPE` command to transmit the corresponding 9750 key to the Siemens BS2000 host:

AFG	FKT1 to FKT24	P1 to P20	SMU
AFZ	K1 to K14	RU	SNZ
DUE1	LSP	SBA	SZA
DUE2	LVD	SDZ	TABL
EFG	LZE	SML	TABR
EFZ	LZF	SMO	
ENDM	MAR	SMR	

VT Function Key Names

The following key names can be used with the TYPE command to transmit the corresponding VT-type key to the host:

AKEY1 to AKEY15
^A to ^Z (where ^ stands for CTRL)

Physical Function Keys

Physical function keys are all keys and key combinations that can be used as function keys by Entire Connection. In the **Terminal Emulation Key Scheme** dialog box, you can assign the following to a function key:

- a command
- a command string
- an emulation key
- a combination of the above possibilities.

When the function key is pressed, the assigned action is executed.

All physical function keys have symbolic names in Entire Connection. These symbolic names are displayed in the **Key** drop-down list box in the **Terminal Emulation Key Scheme** dialog box and can be used with the commands TYPE and SET TEKEY in a procedure file.

Note that the **Key** drop-down list box in the **Terminal Emulation Key Scheme** dialog box contains more symbolic names than illustrated in the tables below (for example, "XF1"). These symbols can be used with keyboard types that have more keys. See the file *Keyboard_us.kyb* in the *tables* folder of Entire Connection for details.

The following table lists the Entire Connection physical function keys and indicates the combinations in which these keys can be used.

Key	single key	SHIFT	CTRL	ALT
A through Z			X	X
BACKTAB		X		
BKSPC			X	X
CENTER	X		X	
CR	X		X	X
DELBACK	X			
DELETE	X		X	
DOWN	X		X	
END	X		X	
ESC	X			X
F1 to F12	X	X	X	X
HOME	X		X	
INSERT	X		X	
LEFT	X		X	
PGDN	X		X	
PGUP	X		X	
PRTSC			X	
RIGHT	X		X	
TAB	X		X	
UP	X		X	
0 to 9				X
2 and 6			X	
n-0 to n-.	X			
GRAY *	X		X	X
GRAY /	X		X	X
\			X	X
[			X	X
]			X	X
-			X	X
GRAY -	X		X	X
=				X
GRAY +	X			X
;				X
,				X
.				X
QUOTE				X

Overview of Object Properties

Note: The names n-0 to n-. represent the keys on the numeric keypad. You can also transmit these keys by pressing NUM.

Additional key support for IBM 101 enhanced keyboards:

Key	single key	SHIFT	CTRL	ALT
DELETE (gray)	X			
DOWN (gray)	X			
END (gray)	X			
HOME (gray)	X			
INSERT (gray)	X			
LEFT (gray)	X			
PGDN (gray)	X			
PGUP (gray)	X			
RIGHT (gray)	X			
UP (gray)	X			

Processing of Keyboard Input

When you press a function key, the following occurs:

1. Entire Connection takes the keyboard code received from the Windows operating system and scans the physical keyboard table for the name of the physical function key.

2. If the name of the physical function key is found, Entire Connection checks the keys that have been defined for terminal emulation. If the function key is not assigned, the key is passed to Windows for further processing. If the function key is assigned, the key action is passed to the communication modules.

3. The communication modules parse the key action. The key action may consist of several elements, including the name of a terminal function. For example:

```
TYPE 'username' CR
```

4. If the key action contains the name of a terminal function (CR in the above example), Entire Connection scans the current terminal function code table for the code sequence of this terminal function, and passes the code to the host.

11 BS2000 P-Key Schemes

P-keys (programmable keys) are only available for sessions of type BS2000 TCP/IP.

The **BS2000 P-Key Scheme** dialog box appears when you manage P-key schemes in the Configuration Manager, or when you add, modify or duplicate a P-key scheme in the terminal application.

The **BS2000 P-Key Scheme** dialog box lets you define the contents for the P-keys (P1 through P20) to be used for a specific BS2000 P-key scheme. The default P-key scheme is defined in the **communication parameters** of a BS2000 TCP/IP host session.
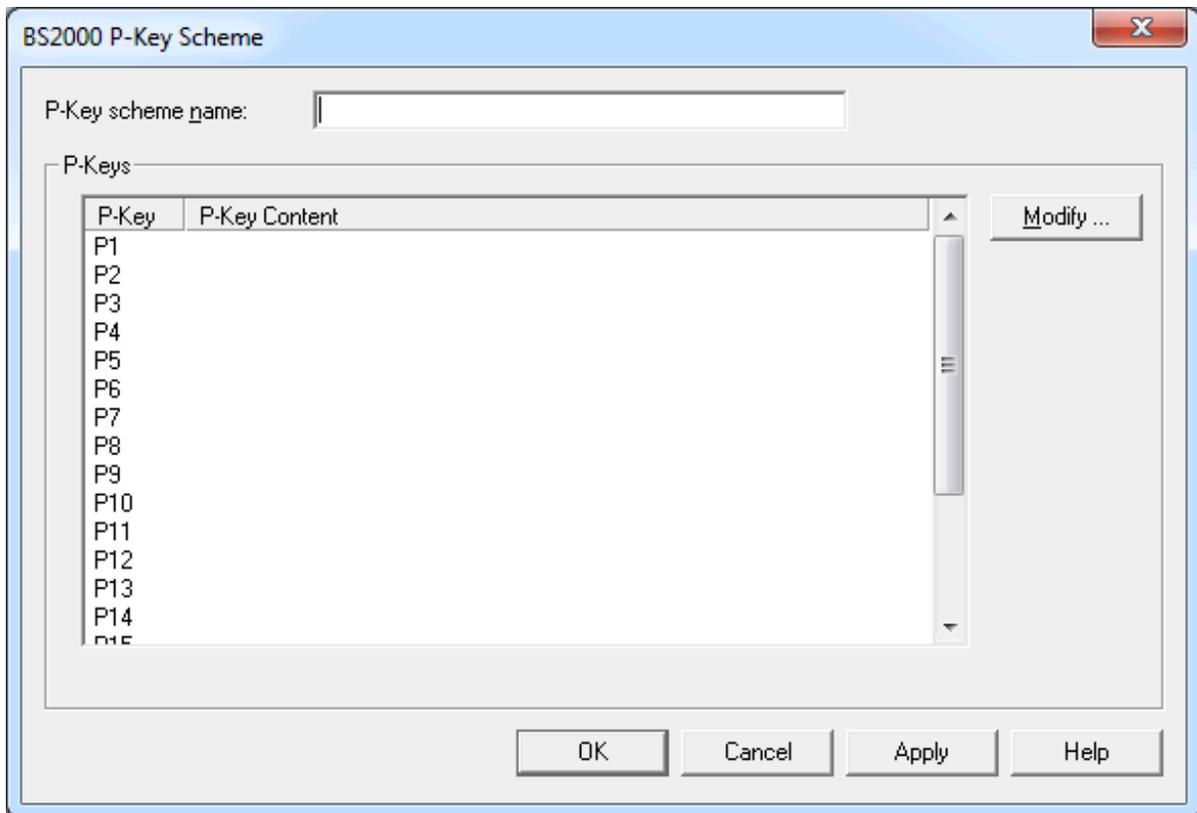
The P-key scheme name can be up to 16 characters long and may contain blanks. It can only be specified in this dialog box when adding a new P-key scheme using the Configuration Manager. Later, the name cannot be modified in this dialog box.

The **BS2000 P-Key Scheme** dialog box provides the following command buttons (in addition to the standard command buttons):

| Modify	Modify the content for the selected P-key.
Save	Write the current P-key content to the share file. The dialog box is not closed. Terminal application: The content of the P-key scheme with the name **Currently defined P-keys**, which is only shown in the terminal application, is not written to the share file. It is temporarily loaded into the current session.

> **To modify the P-key content**

1   Select the desired P-key and choose the **Modify** button.

Or:

Double-click the desired P-key.

The **Edit P-Key** dialog box appears. The name of the current P-key is indicated in the title bar.
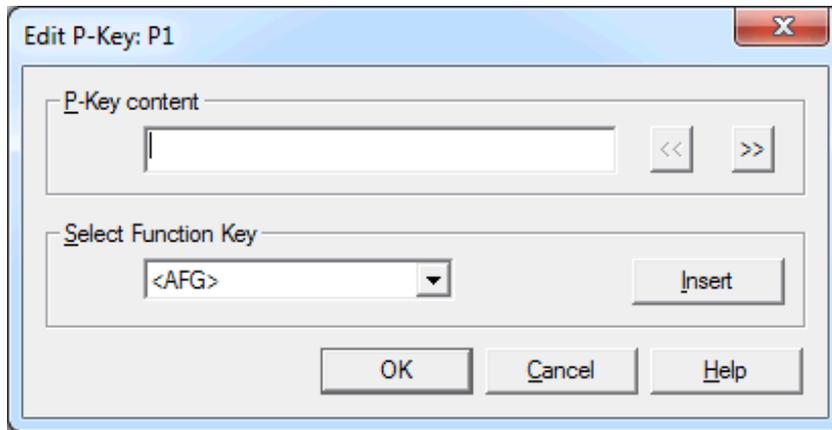
2   Add one of the following to the **P-key content** text box:

- a command string, or
- a 9750 terminal function (see *Terminal Function Keys*), or
- a mixture of both.

You can either enter the string for the terminal function in the **P-key content** text box, or you can select it from the **Select Function Key** drop-down list box. The **Select Function Key** drop-

down list box contains only the most important and most frequently-used 9750 function codes. All other codes have to be entered in the **P-key content** text box, enclosed in brackets. If a code has more than 7 characters (including the brackets), it is treated as pure text.

The P-key content can be up to 500 characters long.

The following command buttons are provided (in addition to the standard command buttons):

<<	Go to the previous P-key. The content of the **P-key content** text box is validated. If this is not a valid command sequence for a P-key, a message appears and you have to correct your input before you can go to the previous key.
>>	Go to the next P-key. The content of the **P-key content** text box is validated. If this is not a valid command sequence for a P-key, a message appears and you have to correct your input before you can go to the next key.
Insert	Insert the selected function key in the **P-key content** text box, at the position of the insertion point.

3   Choose the **OK** button.

The content of the **P-key content** text box is validated. If this is not a valid command sequence for a P-key, a message appears and you have to correct your input.

When your input is valid, the dialog box is closed. The currently defined P-key contents are then shown in the **BS2000 P-Key Scheme** dialog box.

4   In the **BS2000 P-Key Scheme** dialog box, choose the **OK** button to write the current P-key content to the share file (does not apply to the P-key scheme with the name **Currently defined P-keys** which is only shown in the terminal application) and to close the dialog box.

12   **Host Printer Sessions**

The **Host Printer Session** dialog box contains all parameters necessary to handle data which Entire Connection receives from a printer LU.

The **Host Printer Session** dialog box is only available to the administrator.

For further information, see the description of the Host Printer Manager.

General
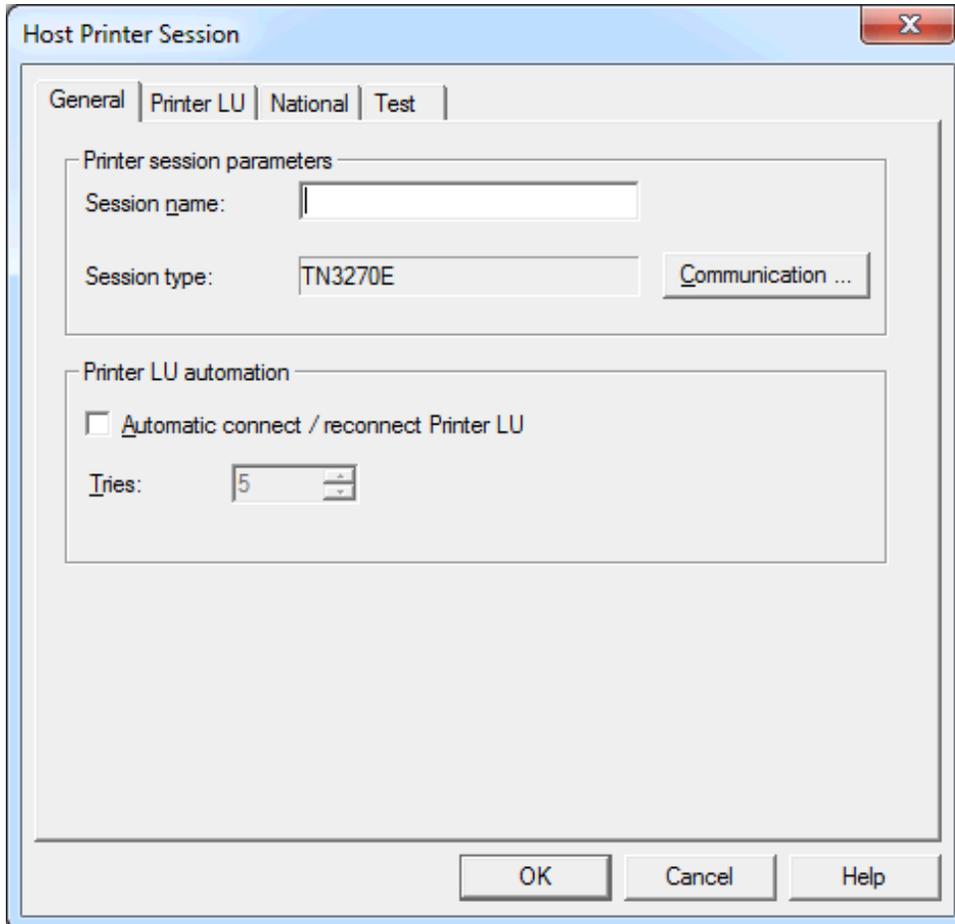
Session name

The name can be up to 32 characters long and may contain blanks. It is only possible to specify a session name, when you are currently adding a new session to the share file. Later, this text box does not allow modifications. It is not possible to define identical names for printer sessions and display sessions; an error message will appear in this case.

Session type

Displays the defined session type (TN3270E). To display the **Communication** dialog box, choose the **Communication** button.

Automatic connect / reconnect printer LU

Select this check box, if the connection to the printer LU on the mainframe is to be established automatically (during startup of the host printer service) for the configured printer session.

Tries

If the connection to the host cannot be established, the number in this spin box determines how often Entire Connection tries to reconnect to the printer LU (in intervals of 5 minutes).

Printer LU
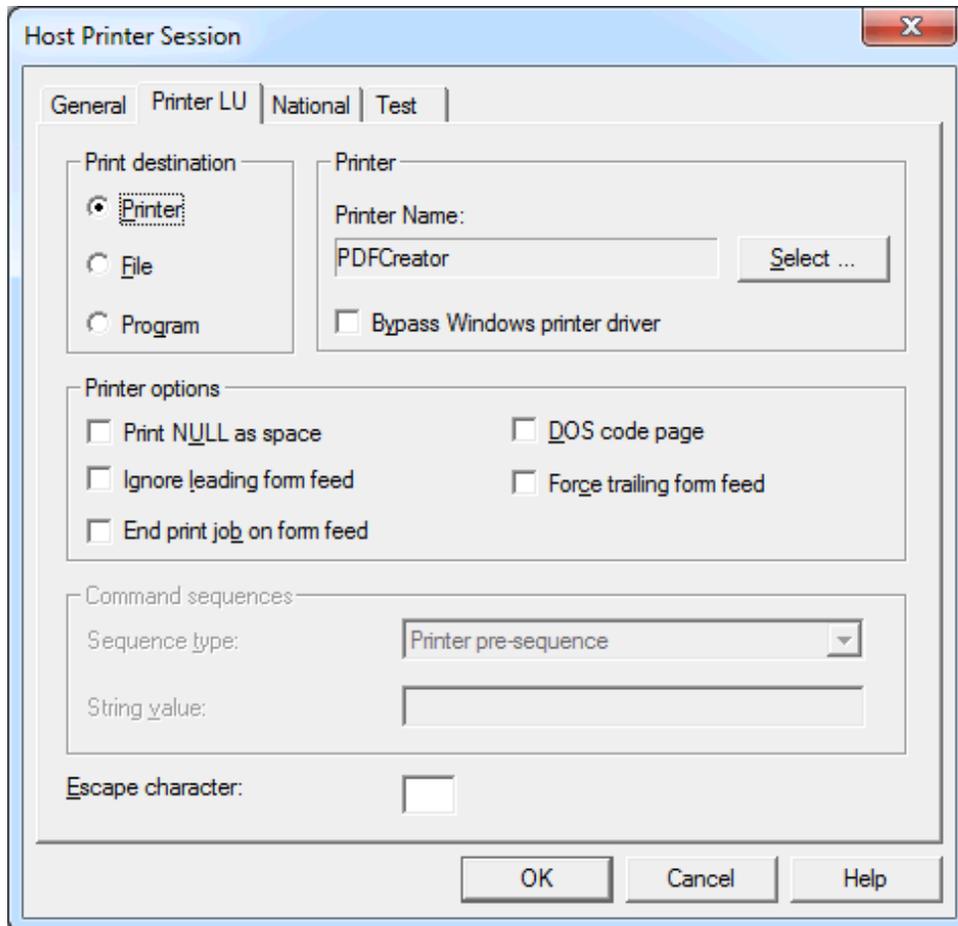
Print destination

Select one of the following option buttons:

▪ **Printer**
Your print data are temporarily buffered in the **log/trace directory**. The name of the resulting file is *Prnt<nn>.pcc* where *nn* is a number starting with 00 and being incremented by one. For successful processing at least 10 MB of free disk space are required.

When the host print process is completed, the data from the temporary file are printed on the specified printer (see below). After successful printing, the temporary file is automatically deleted.

■ **File**

Your print data are routed to a print queue which is a directory on a disk (see below). The name of the resulting file is *Prnt<nn>.ecl* where *nn* is a number starting with 00 and being incremented by one.

After this, Entire Connection has no more control over the print job and the files in the queue. A print application (for example, Software AG's PrintStation) checks whether there are files in this queue and prints them. It is the print application's responsibility to delete the files after they have been printed.

■ **Program**

Your print data are buffered in the log/trace directory. The name of the resulting file is *Prnt<nn>.pcc* where *nn* is a number starting with 00 and being incremented by one.

When the host print process is completed, the user program (see below) is automatically started. The name of the print file as well as drive and directory in which it is stored are passed to the user program as parameters. It is the user program's responsibility to delete the file after it has been processed. This allows you, for example, to print via FTP.

Printer / Directory / Program

The label of this group box changes according to the selected print destination. It shows one of the following text boxes:

■ **Printer Name**

When you choose the option button **Printer**, you must specify the printer name. You can also choose the **Select** button to select the printer from a list.

When the **Bypass Windows printer driver** check box is selected, the Windows printer driver is not used and your print data are sent directly to the printer. When this check box is not selected, the driver of the selected printer is used.

■ **Directory Name**

When you choose the option button **File**, you must specify the name of the print queue which is a directory on a disk.

■ **Program Name**

When you choose the option button **Program**, you must specify the path and name of the user program. You can also choose the **Browse** button to locate the user program.

Print NULL as space

When this check box is marked, binary NULL is mapped to blanks in print data.

Ignore leading form feed

When this check box is marked, Entire Connection ignores a form feed at the start of the print job.

DOS code page

When this check box is marked, print data is translated from the Windows ANSI character set to the DOS (OEM) character set. This is important, for example, for German umlauts when a printer font is used which uses the DOS character set.

Force trailing form feed

When this check box is marked and the print file does not contain a form feed at its end, Entire Connection forces a form feed at the end of the print job.

End print job on form feed

Some host applications do not terminate the print session (i.e. they do not send an unbind). In this case, the data received from the host are not sent to the printer since Entire Connections keeps waiting for the end of the print session. If this check box is marked, the print data received from the host are sent to the printer (i.e. the print job is submitted) whenever a form feed is found at the end of a received data block.

Command sequences

Select one of the following options from the **Sequence type** drop-down list box and specify the corresponding value in the **String value** text box.

◼ **Printer pre-sequence**
This only applies to the to the print destination **Printer**.

When you specify a printer pre-sequence in the **String value** text box, you can define specific printer settings. The sequence is sent to the printer before a print job starts. It may be up to 259 characters long.

◼ **Printer post-sequence**
This only applies to the to the print destination **Printer**.

When you specify a printer post-sequence in the **String value** text box, you can define specific printer settings. The sequence is sent to the printer after the print job has completed. It may be up to 259 characters long.

◼ **Transparent start / stop**
You can specify the start and stop sequences that have been defined on the host in order to indicate the beginning and the end of a transparent block. Each sequence may be up to 47 characters long.

You can either define a start sequence or both start and stop sequence. When you receive data from the host, the following applies:

- **Only a start sequence has been defined**

  The pair of characters that follows the specified start sequence is interpreted as the hexadecimal representation of an ASCII character.

  For example: "(!" was defined as the start sequence and "(!1B" is received from the host. In this case, the hexadecimal byte 1B (ESC) is sent to the printer.

- **Both start and stop sequence have been defined**

  Each pair of characters between the start and stop sequence is interpreted as the hexadecimal representation of an ASCII character.

  For example: "(!" was defined as the start sequence and ")" as the stop sequence. "(!1B2C3A)" is received from the host. In this case, the hexadecimal bytes 1B (ESC), 2C and 3A are sent to the printer.

Escape character

This text box only appears when the print destination **Printer** is selected.

Since the hexadecimal printer escape character 1B cannot be transmitted by IBM hardware, you must specify a printable character which maps the escape character. Entire Connection scans the whole data buffer for the character you specify in this text box. When the character is found, it is translated to the hexadecimal character 1B (ESC).

When you specify a start sequence *and* a printer escape character, Entire Connection first checks for the start sequence and then for the defined escape character.

National
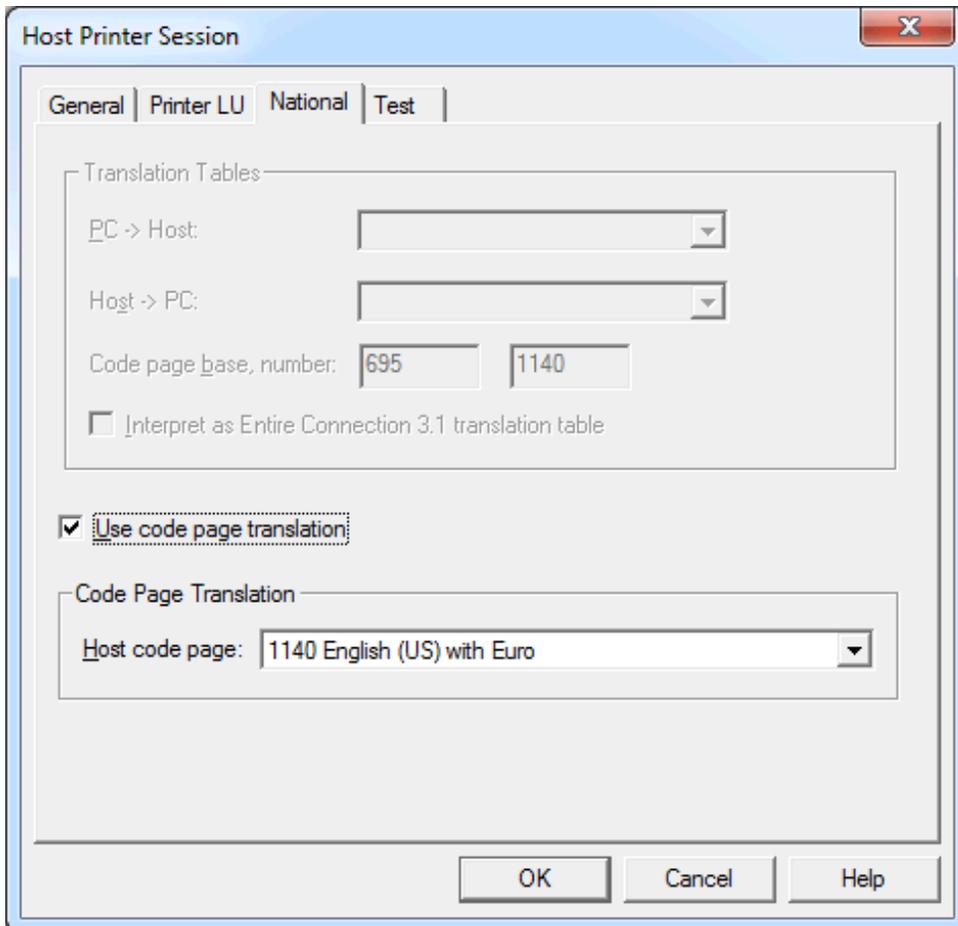
See the description of the **National** property page of the session properties.

Test
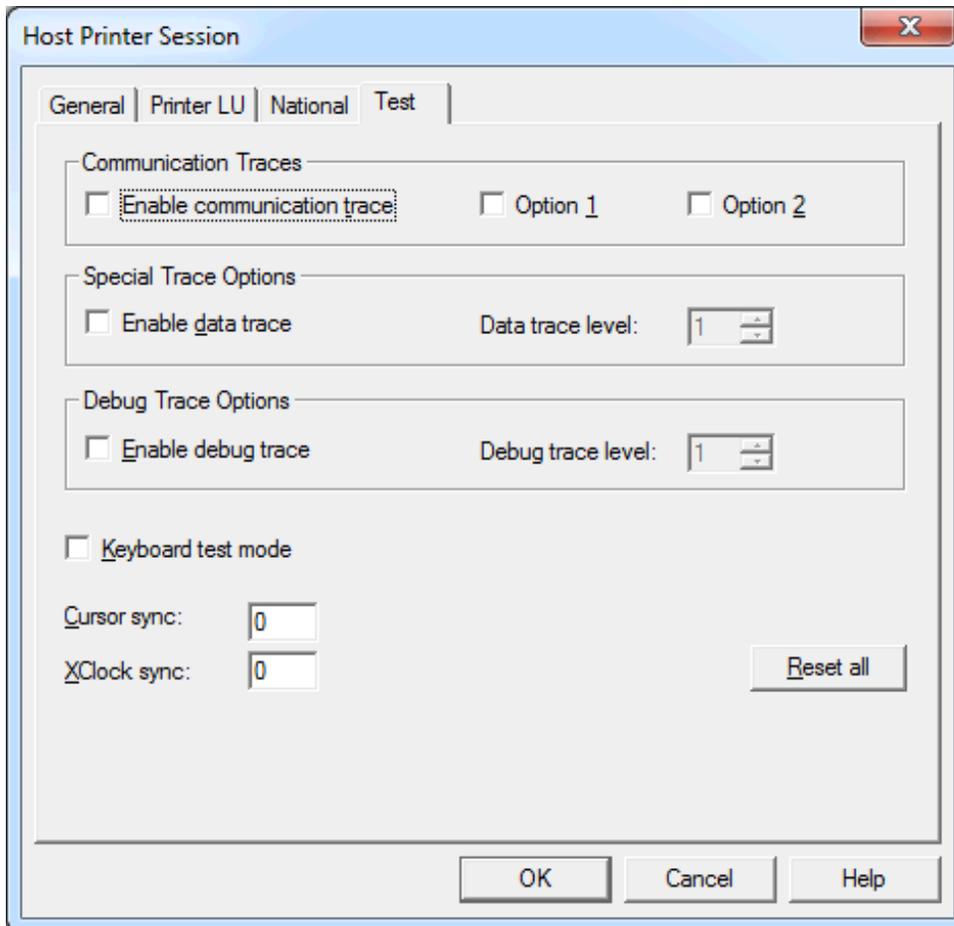
See the description of the **Test** property page of the session properties.

13 Tables

These object types are only available to the administrator.

Translation Tables
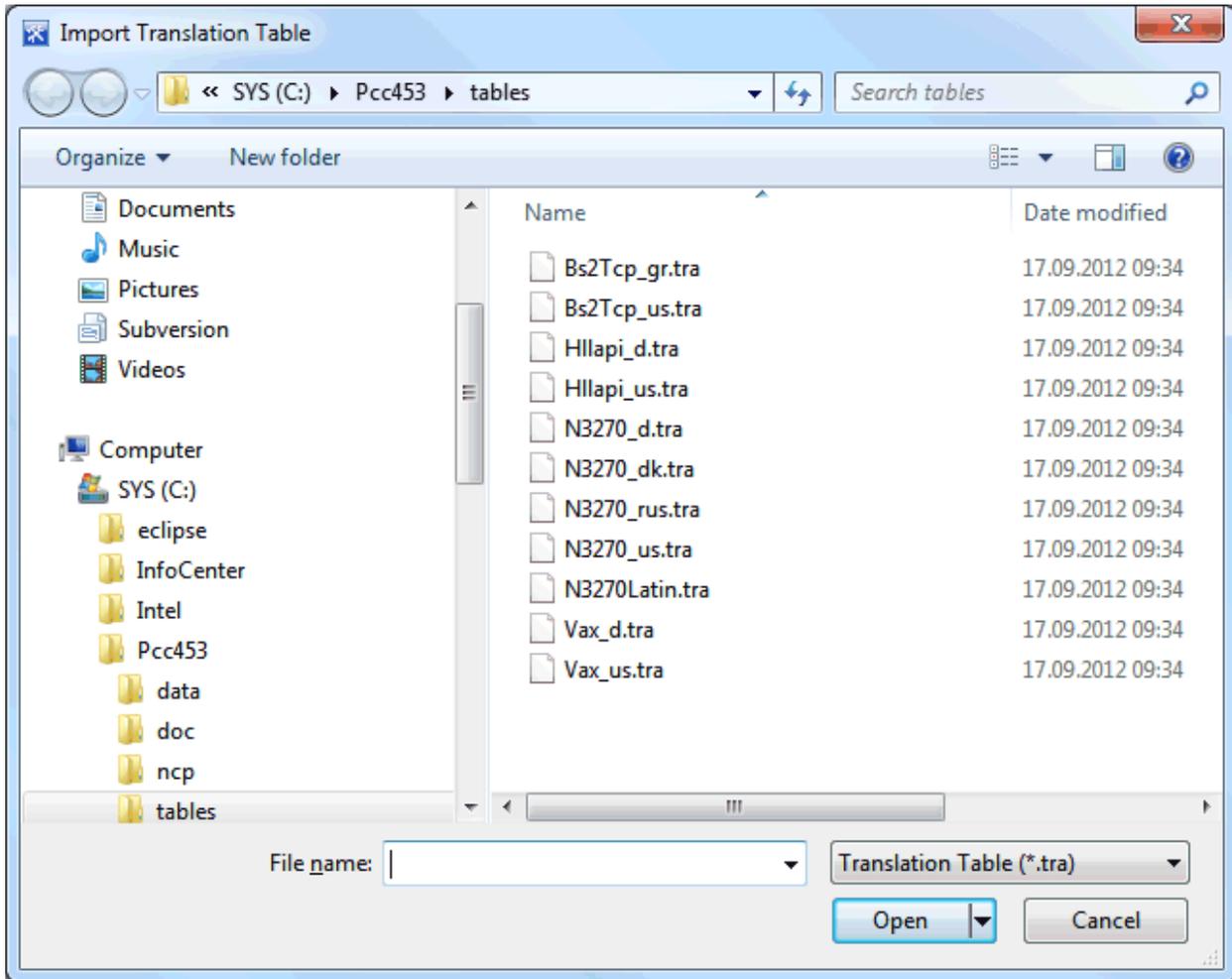
English and German translation tables are supplied as text files in the *tables* folder of Entire Connection. The name of each file containing the translation tables describes the type of communication. The name is followed by a country indicator (for example, "us" or "d"). Translation tables are identified by the extension *tra*. A comment in the top section of each file gives information about its contents.

In a file, there can be two translation tables, one for sending and one for receiving. For example, the file *N3270_d.tra* contains the two German translation tables - ASC2(Ansi)EBCDICGR and EBCDICGR(Ansi)2ASC - which can be used for EBCDIC-type communication with TN3270. The definitions for each translation table are located directly below the name of the corresponding table.

Overview of Object Properties

The following conventions are used for translation table names:

- ASC2*<hostcharacterset><language>*

  Used to translate data from the PC (Windows ANSI) character set to the host character set.

- *<hostcharacterset><language>*2ASC

  Used to translate data from host character set to the PC (Windows ANSI) character set.

hostcharacterset and *language* should be meaningful names. ASC2 or 2ASC as part of the name is interpreted as a keyword.

> **Note:** In the Configuration Manager, the translation tables are only shown in the list of defined tables, when they begin with ASC2 or end with 2ASC.

To import the translation tables, select the corresponding file in the **Import Translation Table** dialog box and choose the **Import** button. If a table already exists, you are asked if you want to replace it. If no errors are found, the names of these tables appear in the list of defined translation tables.

All modifications of existing objects take effect after the host session is restarted.

See the section *About the Object Types* for further information on translation tables.

Physical Keyboard Tables
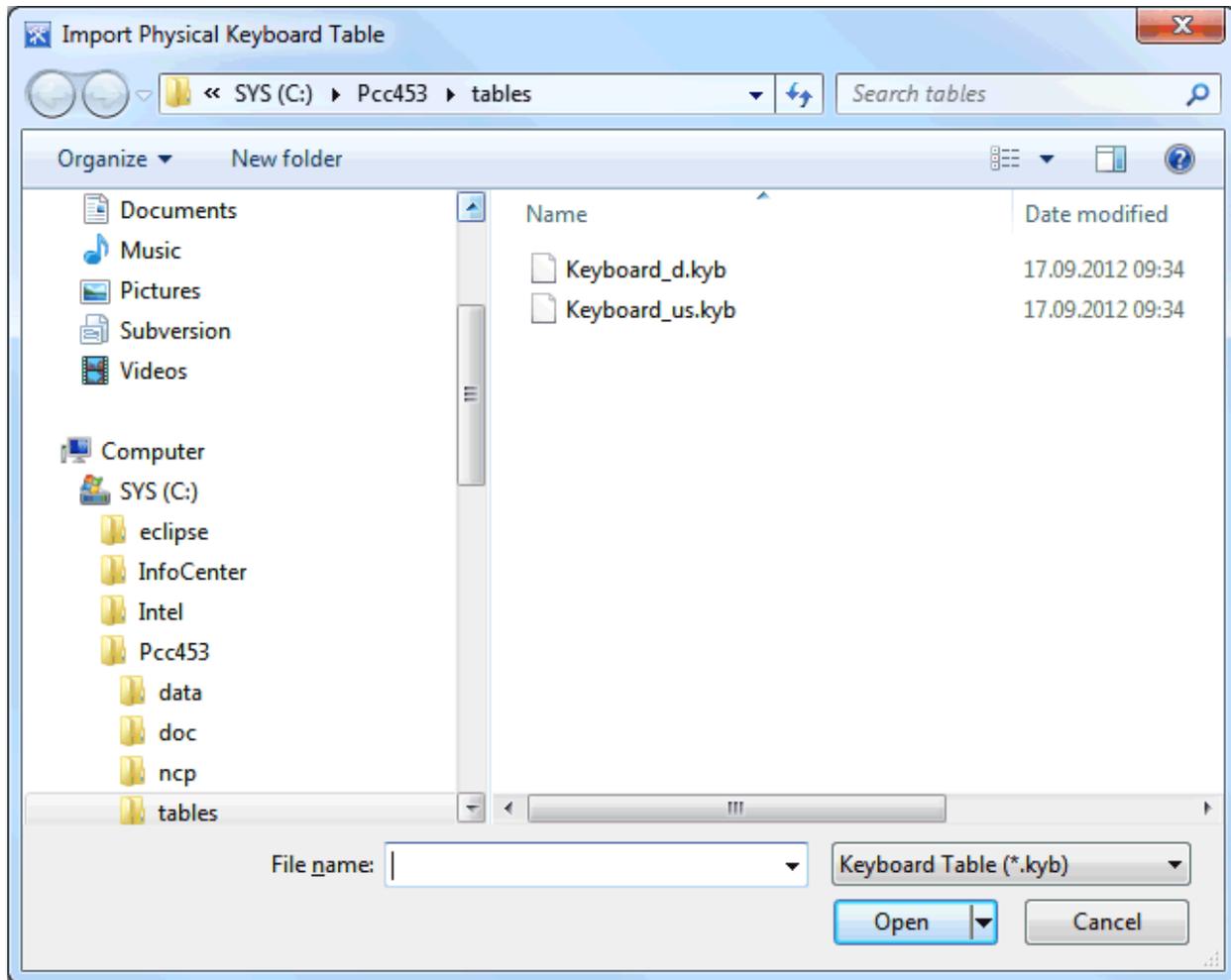
German and English keyboard tables are supplied in the *tables* folder of Entire Connection. The file name is *Keyboard* followed by the country code (either "us" or "d"). Physical keyboard tables are identified by the extension *kyb*.

This feature is intended for experienced users or for use under the direction of your technical support.

If you have a non-standard PC keyboard (for example a 3270 keyboard) or want to change to a different language keyboard layout, you can modify the keyboard tables and then read them into the share file. Use one of the following keyboard tables as a template:

■ *Keyboard_us.kyb* (default for US English)

 This file contains extensive technical documentation of what must be done.

■ *Keyboard_d.kyb* (default for German)

To import a physical keyboard table, select the corresponding file in the **Import Physical Keyboard Table** dialog box and choose the **Import** button. If the table already exists, you are asked if you want to replace it. If no errors are found, the name of the table appears in the list of defined physical keyboard tables.

All modifications of existing objects take effect after the terminal application is restarted.

See the section *About the Object Types* for further information on physical keyboard tables.

Terminal Function Code Tables
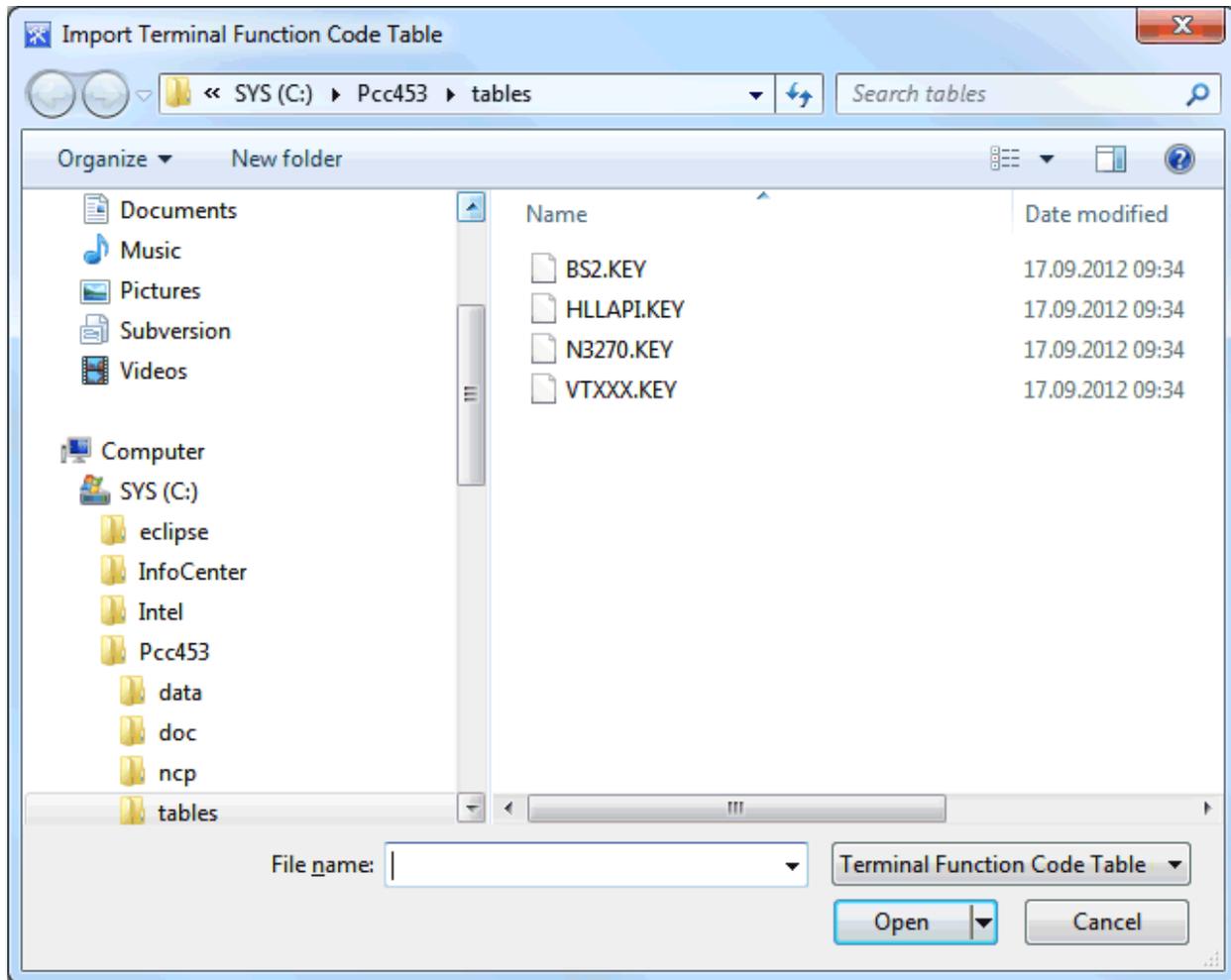
Predefined source files for all kinds of function are supplied in the *tables* folder of Entire Connection. The name of each file describes the type of communication. Terminal function code tables are identified by the extension *key*. You should only modify these files under the direction of your technical support.

To import a terminal function code table, select the corresponding file in the **Import Terminal Function Code Table** dialog box and choose the **Import** button. If the table already exists, you are asked if you want to replace it. If no errors are found, the name of the table appears in the list of defined terminal function code tables.

All modifications of existing objects take effect after the terminal application is restarted.

See the section *About the Object Types* for further information on terminal function code tables.