SmartTranslator 2.1
User's Guide

Release 2.1

Contents:

1. Introduction

The SmartLogger™ product has been developed especially for handling events and alarms from equipment in the process industry, but can be used for many other purposes as well. It is designed to handle data from all kinds of text based data sources.
Where the SmartLogger program itself logs events directly from the source via a serial or TCP/IP connection, SmartTranslator™ reads events from text files.
These text files are then “translated” into database tables.

To view the tables created by SmartTranslator, the SmartClient™ program can be used.
SmartClient is developed especially for viewing and analysing tables created by the SmartLogger/SmartTranslator applications.
The SmartClient is not a part of the SmartTranslator product.

1.1 Conventions & definitions

	Important note
ADO	ActiveX Data Objects. A Microsoft technology for accessing data in a database.
Alias	Database alias specifying database parameters like path and database driver.
BDE	Borland Database Engine. A set of DLLs and support files that allow programs to access databases.
Control	The term 'control' is used when describing the user interface. A 'control' is a common name for edit boxes, push buttons and other items on a dialog.
Event	A common name in the process industry for an occurrence, which is reported to the operator and/or a printer. An event in the SmartLogger terminology means a sequence of characters normally sent to the printer followed by a carriage return.
Field	A field corresponds to a column in a database table.
MDI	Multiple Documents Interface.
PDF	(Adobe) Portable Document Format. This is the format

	used for the online User's Guide.
Record	A record is one row of data (one event) in a database table.
SQL	Structured Query Language. Standard language for accessing databases.
Template	Describes the structure of the destination table and how data are to be decoded. Templates are designed with the SmartBuilder™ program.

1.2 Templates

A template in the SmartLogger philosophy defines:

- How incoming events are to be decoded and split up.
- The table structure of the destination table.

The SmartTranslator is shipped with a number of standard templates. Please refer to the Release Description for a complete list of all standard templates included in this program release.

It is possible to customize templates, in order to adapt the SmartTranslator to specific demands and requirements. This customisation is described in the SmartBuilder's User's Guide.

A template defines how events are to be decoded and split up. It also specifies the table structure of the destination table.

2. Installation and Set-up

2.1 System requirements

Computer: A IBM PC compatible computer with a Pentium III 400 MHz processor and 512 MB RAM.

Operating system: Windows 2000/XP/2003

Disk space
15 MB free space for system files.

2.2 Installation

The SmartLogger installation package is provided as a downloadable zip file. When downloaded execute the following:

1. Unzip all content to a temporary folder
2. Locate the SmartTranslator21.msi file and run it.
3. Follow the instructions on screen.

3. Basic Operations

The SmartTranslator main screen is shown in Figure 3-1.
This screen shows the files ready to be translated and all the messages generated by the SmartTranslator when translating files. The "Files" list is updated when a translation is started or when a manual refresh is chosen from the menu item *File* | *Refresh File List*.

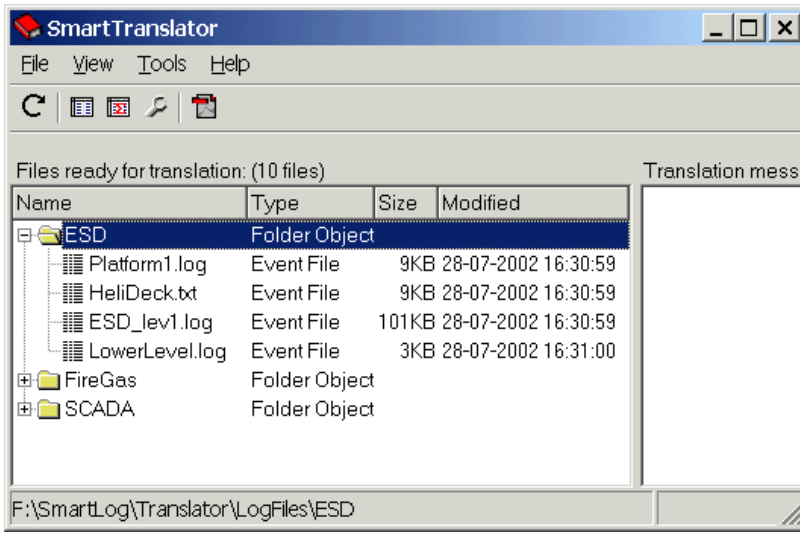

Figure 3-1

Main window	
Menu	Please refer to section 3.1 "Menu overview" for an overview of the menu layout.
Left window	Shows a tree list of the files ready to be translated.
Right window	Shows all the information/warning/error messages that the program generates. Only the latest 2000 lines of messages are shown.
Status bar	The status bar will show the time for the next translation, if auto translation is enabled. If enabled, the time for the next statistic

notification is also shown (refer to section 4.3.4 "Statistics/Notification").

3.1 Menu overview

Menu	Item	Description
File	Manual Translation	Forces an instant translation of all the available files in the configured watched folders.
	Translate Folder	Translates all files in the currently selected watched folder in the tree list [1)].
	Translate File	Translates the file currently selected in the tree list [2)].
	Refresh File List	Updates the list of files shown in the tree list.
	Exit	Program exit.
View	Utility Server...	Shows Utility Server communication messages [3)].
	System Log...	Opens the System Log.
	Statistics Log...	Opens the Statistics Log.
	Clear Messages	Clears the message window.
Tools	Alias Manager...	Opens the Alias Manager dialog.
	Options...	Opens the Options dialog.
	Send statistics...	Sends all logged statistics for the current day.
Help	User's Guide	Shows this User's Guide in PDF format.
	About...	Shows the credits and the release version.

1) Only available if the currently selected item is a watched folder.
2) Only available if the currently selected item is a file.
3) Only available if remote access has been allowed (refer to section 4.3.5 "System").

3.2 Translation

The SmartTranslator has two modes of operation: Manual Translation mode and Automatic Translation mode. The difference between these two modes is explained below.

3.2.1 Manual Translation

In manual translation mode the watched folder directories must be scanned manually by choosing “Refresh file list” in order to detect files ready for translation. Files that match the predefined filter are listed in the tree list as shown in Figure 3-1.
How to set up the filters for each folder is described in section 4.3.2 "Watched folders".
If any files are detected, a manual translation can be performed by selecting the menu item *File* | *Manual Translation*.

3.2.2 Automatic Translation

In automatic translation mode, the watched folder directories are scanned with an interval set by the user. If any files are found, they will be automatically translated when the scanning is finished.
When all available files have been translated, the program waits the interval specified before another scan is performed.
How to specify the scan interval is described in section 4.3.1 "Translation".

3.2.3 Translation sequence

When a translation is started a number of steps are executed.

Step 1: Database logon
At first the SmartTranslator tries to connect to the database. If "auto login" is enabled, this operation is performed automatically - otherwise the user will be prompted for a user name and a password.

Step 2: Translating text file.
The file with the oldest timestamp in the pending list will be translated first. If the translation is set up *not* to use Stored Procedures, the destination table will get the same name as the text file without extension.
If the table already exists, it will be overwritten.

During the translation, all events in the file are decoded according to the associated template. If an event does not match the template settings, it is regarded invalid and is discarded [1)].
An invalid event could, for example, be an event with invalid date/time or an event with text in a place where there should be an integer number. Invalid events are reported in the message window on the main screen.

Step 3: Validation of translation.
Depending on the result of the translation, the SmartTranslator handles the text files in one of the following three ways:

A. If the translation was successful, the text file is deleted from the source directory.
B. If there were too many warnings encountered during the translation, the text file is moved to another directory: *<Application directory>\BadFiles\<Watched Folder name>*. This ensures that the user is given a chance to correct the errors in the text file and then retranslate the file.
   The number of warnings accepted per text file can be configured as described in section 4.3.1 "Translation".
C. If the translation is cancelled by the user or by the application/system shutting down, the text file remains in the source directory.

Steps 2 and 3 are executed until all pending text files have been translated.

1) The SmartTranslator can also be set up to adapt events containing errors, instead of just discarding them (refer to section 4.3.1 "Translation".).

4. Maintenance

4.1 System Log

The System Log keeps track of all configuration changes and incidents, which may be of interest to an operator or system responsible. The messages are classified in the following severity levels:

Information	Standard messages indicating that the application has been started, options has been changed etc.
Warning	Appears when the SmartTranslator has detected an invalid event.
Alert	A serious warning that requires action.
Error	Serious error has occurred. Could be that the SmartTranslator could not log on to the database or could not create/open the destination table
Fatal	A serious error that immediately stops translation. SmartTranslator will wait fro one minute and then try again to translate.

The system log can be viewed from the menu item *View* | *System Log.*

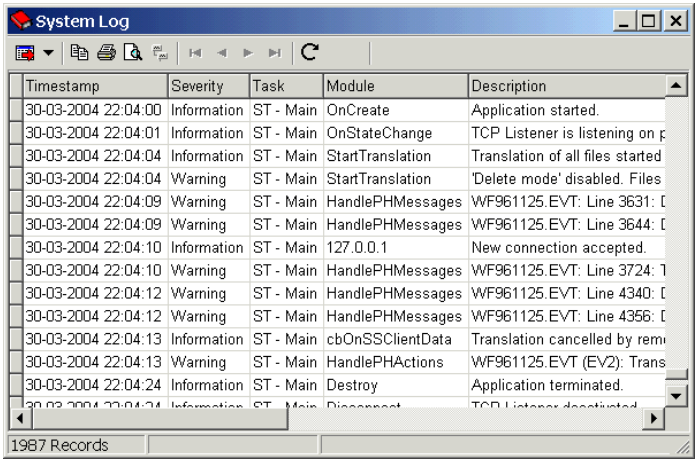

Figure 4-1

The features of the grid are discussed in section 6.1 "Grid Functionality".

4.2 Statistics Log

The Statistics Log keeps track of all translations. The log gives an overview of all events translated for each watched folder each day. The log has the following fields:

Field name	Description
StatDate	The date that the statistics are concerning.
WatchedFolder	Name of the watched folder.
Received	The number of events received (processed). For translations one line in a file equals one event.
Committed	Events that have actually been written to the database.
Discarded	Events that had to be completely discarded because they did not fit the chosen template.
Adapted	Events that contained errors that the application was able to "correct", so that they could be stored in the database.
IndexViolations	The number of duplicate events that was processed.
FatalErrors	The number of fatal errors that have been encountered.
TotalFiles	The total number of files processed.
BadFiles	The number of files that contained so many warnings that they were marked as "bad". This limit can be set in the Options dialog (refer to section 4.3.1).

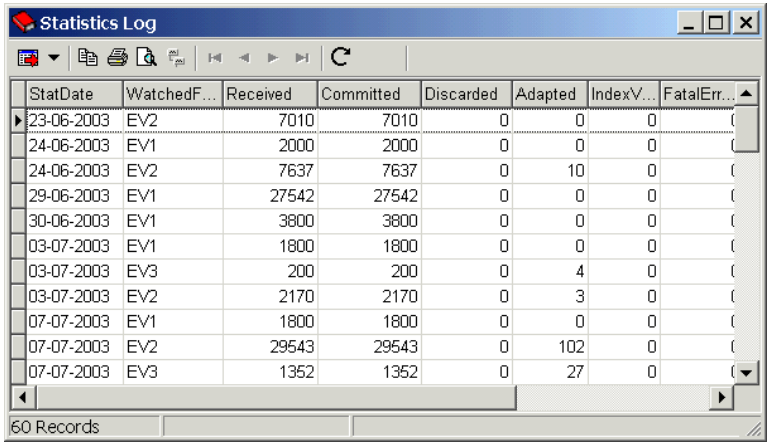

Figure 4-2

The features of the grid are discussed in section 6.1 "Grid Functionality".

4.3 Options

The Options dialog can be activated from the menu item *Tools* | *Options...* and contains 5 categories: "Translation", "Watched folders", "Database", “Statistics/Notification” and "System”.

4.3.1 Translation

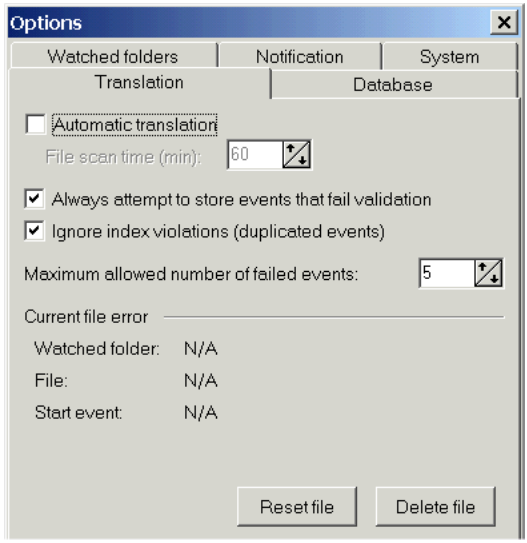

Figure 4-3

Translation	
Automatic translation	If checked, Automatic Translation mode is enabled. Refer to section 3.2.2 "Automatic Translation" for more information.
File scan time	In Automatic Translation mode the watched folder directories are scanned for files with the specified interval.
Always attempt to...	If checked, events are not discarded if they fail validation. If date/time validation fails, the current PC time is used instead. If an integer field does not contain an integer, a '0' is written instead. These "modified" events are called *adapted* events.
Ignore index violations....	During translation the database server might return an index violation error, if it does not accept duplicates. When this option is checked, this specific database error is ignored and not reported

	anywhere.
Maximum allowed number...	Specifies the number of discarded or rejected (by database) events per file that are accepted before a translation is considered as "bad". How "bad" translations are handled is described in section 3.2.3 "Translation sequence".

Current file error

Whenever the translation of a file is interrupted, SmartTranslator remembers how many lines of the current file that has been translated.
The next time the same file is translated, only the remaining events in the file are processed.
Interruption of a translation can be caused by:

- Fatal database error (like connection lost).
- User cancels translation.
- The application is shut down during translation.
- Windows is shut down during translation.

The "Watched folder" / "File" information identifies the file that has been interrupted.
"Start event" shows the line in the file from where SmartTranslator will resume translation.
If all information shows "N/A" it means there is no interrupted translation pending.

The "Reset file" button will reset the file settings meaning that the file in question will be translated from the beginning again.
The "Delete file" button will permanently delete the file in question.

4.3.2 Watched folders

Watched folders define the association between source files and templates.

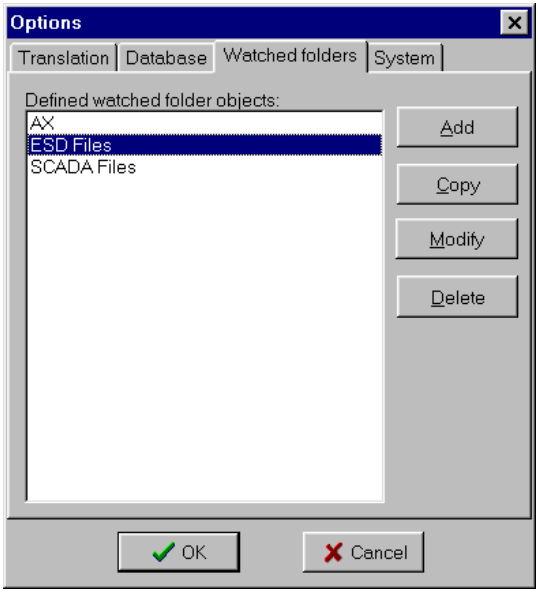

Figure 4-4

Watched folders	
Defined watched folder objects	Shows the configured "watched folder objects".
Add button	Opens the *Add Watched Folder Object* dialog.
Copy button	Opens the *Add Watched Folder Object* dialog, but with default values taken from the watched folder object currently selected in the listbox.
Modify button	Opens the *Modify Watched Folder Object* dialog
Delete button	Deletes the currently selected watched folder.

To add a new "watched folder object", press the Add button and the following dialog will appear:

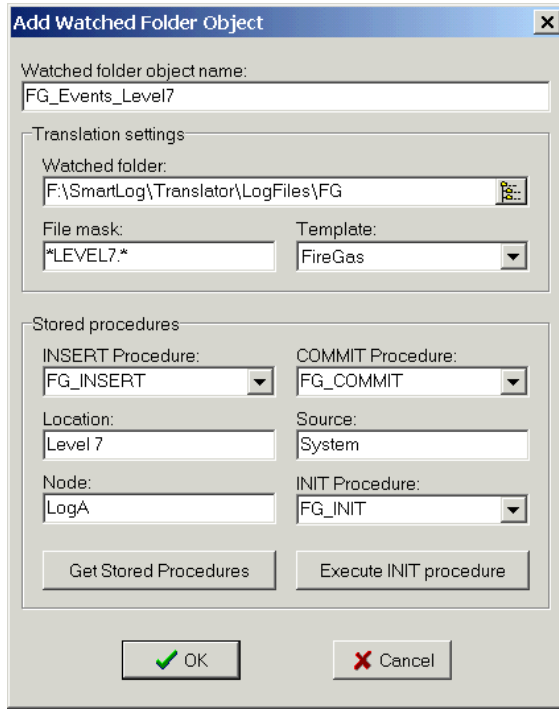

Figure 4-5

Add Watched Folder Object	
Watched folder object name	This is the name that appears in the watched folder list.
Translation settings	
Watched folder	This is the physical directory for any files ready for translation.
File mask	Specifies the file filter to be used when scanning the "Watched folder" directory. Standard wildcards '*' and '?' are allowed.
Template	Specifies the template to be associated with the Watched folder object. Templates can be created / modified with the SmartBuilder program.

Stored procedures [1]	
INSERT procedure	The name of the INSERT procedure.
COMMIT procedure	The name of the COMMIT procedure.
Location	Identifies the location of the equipment from where the events originate [2].
Source	Identifies the event source [2].
Node	Used in redundant configurations to further identify the location [2].
INIT procedure	The name of the INIT procedure.
Get Stored Procedures	Retrieves a list of available procedures from the database server.
Execute INIT procedure	Executes the specified INIT procedure. If implemented on the database server, this can be used to automatically create a database environment based on the settings specified for this watched folder. For a complete list of parameters transferred, refer to section 7.2 ”Stored Procedures (initialising database)”

1) Stored procedures can only be used against server-based databases like Oracle or MS SQL Server.
The configuration of stored procedures is only available if the option "*Use stored procedures*" is enabled (refer to section 4.3.3 "Database" below).

2) These parameters are used in the INSERT procedure and can be used by the remote database to identify the origin of the event. This is especially useful when the remote database handles events from several source and even locations.

For more information about creating stored procedures, please refer to section 7 "Appendix".

4.3.3 Database

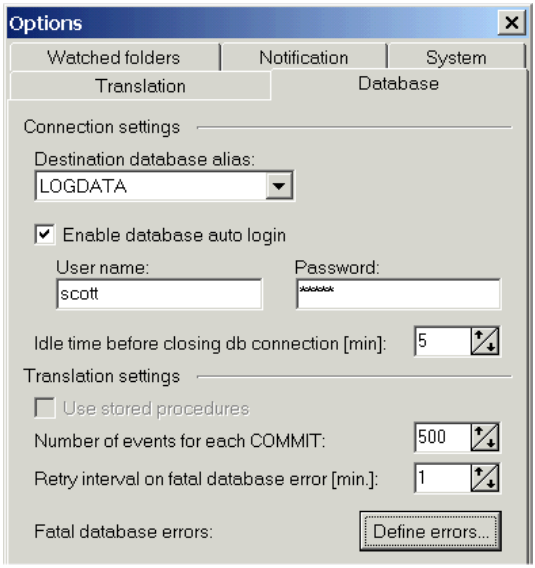

Figure 4-6

Connection settings	
Database alias	Defines the database alias to be used. If no aliases are available, a new one can be created with the alias manager tool as described in section 5.1 "Database Alias Manager".
Enable db auto login [1)]	If checked, database login is automatically performed with the specified user name and password.
User name *Password* *Idle time...*	User name to be used for auto login. Password to be used for auto login. When the watched folders are scanned and there are no files to translate, it is checked how long time it has been since the last file translation. If this time exceeds the specified allowed "Idle time", the database connection is closed.
Translation settings	
Use stored procedures [2)]	If checked, the translation does not use the default "one file to one table" translation. Instead

	it uses some predefined stored procedures located on the database server. Refer to section 7.1 "Stored Procedures" for a description of the stored procedures.
Number of events for each COMMIT [2)]	This number specifies the number of events posted to the database before a COMMIT is executed. A higher number will reduce the load of the database server.
Retry interval...	Specifies the time to "wait" after a fatal error (see below) has occurred. After waiting, the SmartTranslator resumes the translation it was currently executing. A fatal error might be when the network is disconnected or the remote database server is not responding.
Fatal database errors	Refer to description below.

1) If database auto login is disabled, the program will prompt for a user name and password every time a translation is started.
2) This setting is only available/used when translating to a server-based database (Oracle / MS SQL Server).

If the SmartTranslator is configured for automatic translation, auto login should always be enabled.

Fatal database errors
It is possible to define certain database errors that must cause the SmartTranslator to stop translation for a while.
The advantage of this is, that SmartTranslator does not continue processing files and reporting lots of errors in case of a database error.

When the button "Define errors" is pushed, the following configuration dialog is shown.

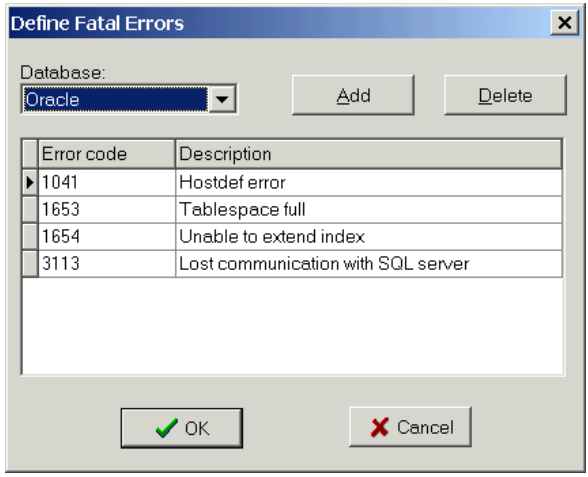

Figure 4-7

Define Fatal Errors	
Database	Defines the database used. Allowed values are "Oracle", "MS SQL Server" and “ADO (all)”.
Add button	Adds a new line to the grid.
Delete button	Deletes the selected error code.
Grid	Shows all defined error codes.

4.3.4 Statistics/Notification

SmartTranslator can be configured to send miscellaneous notifications to a remote SmartNotification™ server.
To configure notifications use the options dialog shown in Figure 4-8.

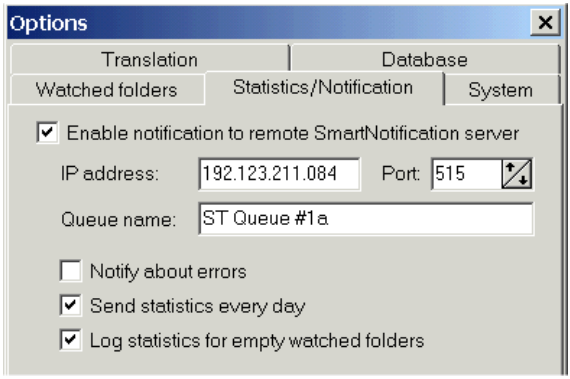

Figure 4-8

Notification	
Enable notification...	Enables/disables the notification feature.
IP address	The IP address of the remote SmartNotification server.
Port	Communication port, which must match the print server settings used in SmartNotification. Typically port 515.
Queue name	Name of the receiving print queue in SmartNotification.
Notify about errors	If enabled a notification is send every time an error in SmartTranslator occurs.
Send statistics...	When enabled, a notification is sent containing detailed statistics about all the previous day's translations. The notification is sent at 02:00 hrs.
Log statistics for...	When enabled, an entry in the statistics log is also made for folders where there have not been any files to translate. These “empty” folders are included in the statistics sent every night.

4.3.5 System

This category contains miscellaneous settings for the SmartTranslator.

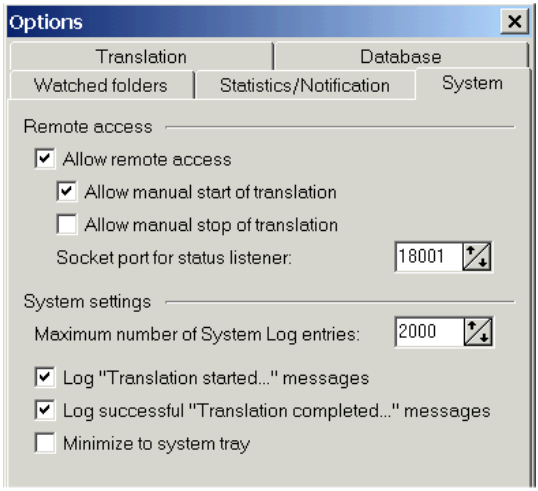

Figure 4-9

Remote access	
Allow remote access	If checked, remote SmartStatus™ applications can connect to the SmartTranslator and receive status information.
Allow manual start of translation	If checked, the SmartStatus clients will have the possibility to start a translation, just like a local SmartTranslator user.
Allow manual stop of translation	If checked, the SmartStatus clients will have the possibility to stop a translation, just like a local SmartTranslator user.
Socket port for status listener	Defines the socket port used for the TCP/IP listener.
System settings	
Maximum number of...	This number specifies the maximum number of entries in the system log. When this maximum is reached, the oldest 50

	entries will be deleted as new entries are being logged.
Log "Translation....	If checked, a "Translated started....." message is logged to the System log for every file that is being translated. Otherwise this message is only shown in the messages window.
Log successful...	If checked, a status message is logged to the System log for every file translated. Otherwise only translations containing errors are logged.
Minimize to system tray	If checked, the SmartTranslator is minimized to the system tray instead of the application bar.

5. Utilities

5.1 Database Alias Manager

A database alias is needed in order to access a database. It defines the database driver, connection parameters and the destination path / database type.
The Alias Manager can be used to add, modify and delete aliases, with the restriction that only the basic settings, like database driver, destination path/database, default user etc. can be changed. Normally the user only needs to access the basic settings, as the Alias Manager automatically configures all advanced settings.

If it is required to access the more advanced alias settings, the BDE Administrator tool has to be used. The BDE Administrator can be started by selecting *Settings* | *Control Panel* | *BDE Administrator* from the Windows start menu.

The Alias Manager dialog is opened from the menu item *Tools* | *Alias Manager...* and it is divided into two sections.
The upper part, as shown in Figure 5-1, is common for all database types.
The lower part contains individual settings for a specific database driver and is described later in this section.

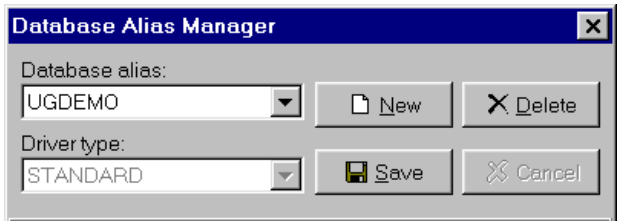

Figure 5-1

Alias Manager controls	
Database alias	Lists all aliases supported by the Alias Manager.
Driver type	Lists all database drivers available.

5.1.1 Database driver settings

Paradox 7 (STANDARD driver)

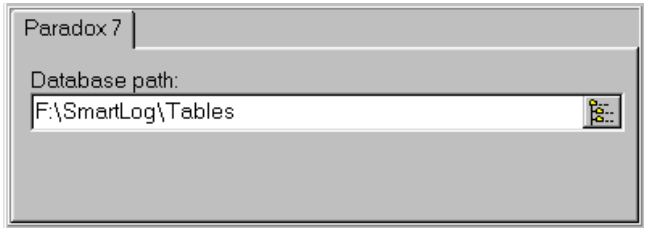

Figure 5-2

Paradox 7 settings	
Database path	Defines the location (directory) where the tables are stored.

Oracle 8 (ORACLE driver)

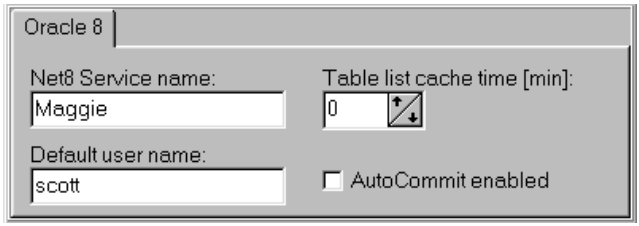

Figure 5-3

***Oracle 8* settings**	
Net8 Service name	Defines the Oracle Net8 service name. Must be defined in advance by using the appropriate Oracle tool.
Default user name	The default user name that is used, if automatic database login is disabled.
AutoCommit enabled	If enabled, the BDE automatically commit records to the table after each post. If disabled, the application decides when to commit the

	records. Please note that this setting is only relevant for applications that actually ***write*** to the database, like SmartLogger or SmartTranslator.
Table open list, cache time [1)]	Defines how long the table list is cached in memory. A new table list is not fetched from the database server until the cache time expires.

1) This setting can have "three" values:

Value	Description
-1	The table list is cached as long as the program is running. This can only be used for static databases, where no tables are added, after the program is started.
0	The table list is never cached. This will increase network traffic, as the table list is fetched directly from the database server every time it is requested.
>0	The table list is cached the number of minutes specified.

MS SQL Server 7 (MSSQL driver)

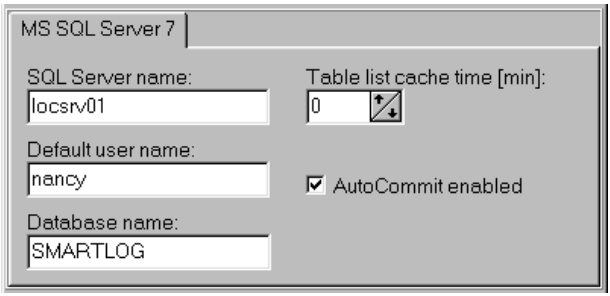

Figure 5-4

***MS SQL Server 7* settings**	
SQL Server name	The registered name of the SQL Server where the database is running. This registration can

	be performed using the MS SQL Server Enterprise Manager.
Default user name	The default user name that is used, if automatic database login is disabled.
Database name	The name of the database containing the SmartLogger tables.
Table open list, cache time [1)]	Defines how long the table list is cached in memory. A new table list is not fetched from the database server before the cache time expires.
AutoCommit enabled	If enabled, the BDE automatically commit records to the table after each post. If disabled, the application decides when to commit the records. Please note that this setting is only relevant for applications that actually ***write*** to the database, like SmartLogger or SmartTranslator.

1) This setting can have one of three values:

Value	Description
-1	The table list is cached as long as the program is running. This should only be used for static databases, where no tables are added, after the program is started.
0	The table list is never cached. This will increase network traffic, as the table list is fetched directly from the database server every time it is requested.
>0	The table list is cached the number of minutes specified.

OLEDB/ADO

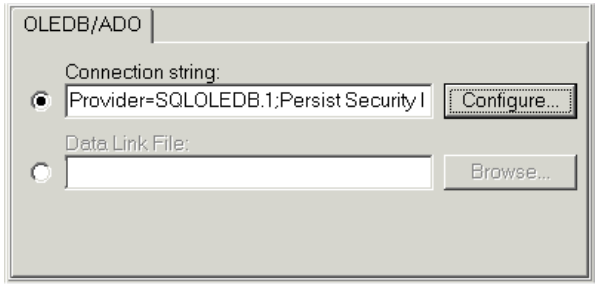

Figure 5-5

***OLEDB/ADO* settings**	
Connection string	The database connection string. When clicking the "Configure" button, the standard Windows dialog for defining connection strings is activated [1)].
Data Link File	A file containing a connection string. When clicking the "Browse" button, the Data Link File can be located [1)].

1) Either a connection string *or* a Data Link File must be specified.

5.1.2 Standard alias operations

Create an alias
The following describes how to create a new standard alias.

1. Press the "New" button.
2. Type in the name for the new alias
3. Set driver type to "STANDARD".
4. Select the database path using the controls browse button.
5. Save the alias.

Modify an alias
To modify an alias, select the desired alias and change the settings applicable to that driver type.
To store the changes, press the save button.

If the settings are disabled, it is because the alias is currently in use and can therefore not be modified. This can also be verified by looking just above the database alias where a red text with "(Active)" appears.
If the database driver has to be changed, you will have to create a new alias and delete the old one.

Delete an alias
To delete an alias, select the alias and press the delete button.
If the delete button is disabled, it is because the alias is in use and can therefore not be deleted.

Aliases that are currently in use cannot be modified or deleted.

5.1.3 Remote Paradox aliases

It is possible to let Paradox aliases point to locations on other computers in a network and thereby accessing databases located on remote computers. This feature is especially useful in configurations where multiple users (SmartClients) must access the same event tables generated by the SmartLogger/SmartTranslator.
The procedure for creating a remote alias is the same as for creating a local one. Just use the browse button to specify a network path instead of a local path.

When using remote aliases with Paradox databases the following must also be ensured

- The client computer must have full access to the network destination. I.e. the directory specified in the destination path must not be write protected.
- All BDE programs (SmartLogger, SmartClient) must use the same NET DIR path. This setting can be changed/verified from Control Panel | BDE Administrator | Configuration tab sheet | Drivers | Native | Paradox.

6. General Functionality

6.1 Grid Functionality

The data grid features are valid for both the system log and the statistics log.

The grid features can be chosen from either the toolbar as shown in Figure 6-1 or from the popup menu (right click in the grid) as shown in Figure 6-2.
The features are described in the next sections.

Figure 6-1

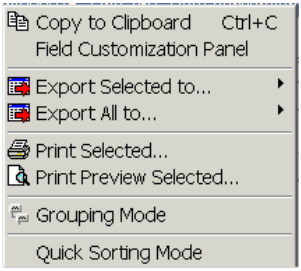

Figure 6-2

6.1.1 Multiple record selection

To select multiple records in the grid, do one of the following:

- Press and hold down the SHIFT key while pressing the up/down key.
- Press and hold down the SHIFT key while pressing the Page Up/Down key.
- Press and hold down the SHIFT + CTRL keys while pressing the Home or End key.
- Press and hold down the CTRL key while selecting records with the mouse.

- Select a record with the mouse, hold down the SHIFT key and select another record. All records in between these two selections will now be selected.

6.1.2 Field customization panel

When selected, a panel is shown to the left of the table grid.

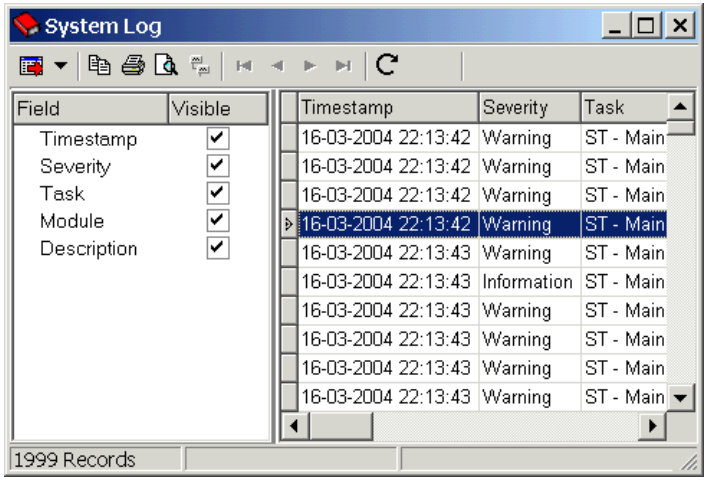

Figure 6-3

The Field Customisation Panel can be used to hide, show or rearrange the fields in the grid.
This is especially useful when irrelevant fields should be excluded from a printed report.

Fields can be dragged and dropped from the table grid to the panel and the other way around.

6.1.3 Export records to file

All or selected records can be exported to a file in 4 different formats as described below.

Text

The records are exported to a text file where each field in the grid is separated by a TAB character.

MS Excel
The records are exported to a MS Excel worksheet. The layout of the worksheet will be the same as shown in the grid. I.e. the order of the fields and the size of each field, will be as shown in the grid.
The file can be read by all MS Excel versions from 4.0 and up.

HTML
The records are exported to one HTML file containing a table with all or selected records.

XML
The records are exported to a XML/XSL file.

6.1.4 Copy to clipboard

Copies the selected events to the clipboard

6.1.5 Print

SmartTranslator uses an advanced printing system with a lot of features. This User's Guide only describes the use of the most essential parts on the printing system, but the user is encouraged to experiment with all the other features it offers.

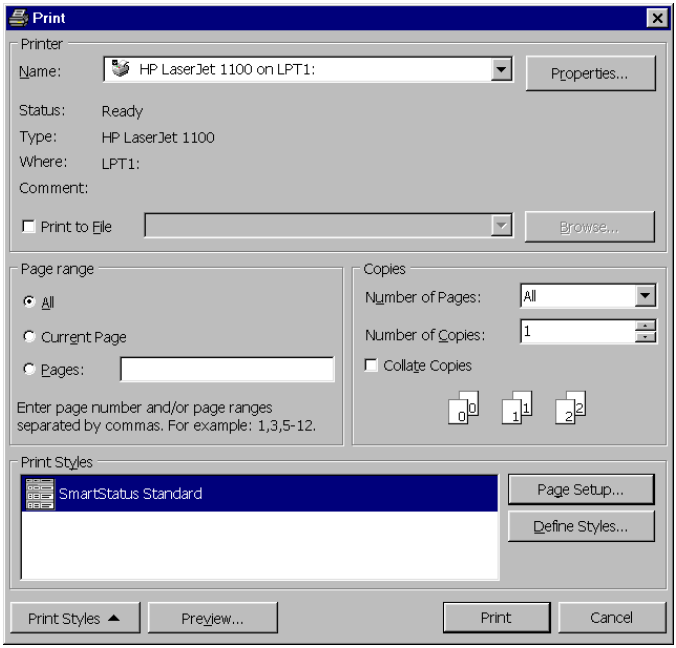

Figure 6-4

Page Setup

Determines the layout of the printed page, like:

- Page sizes, print orientation, print order
- Margins
- Header/footer texts
- Report scaling

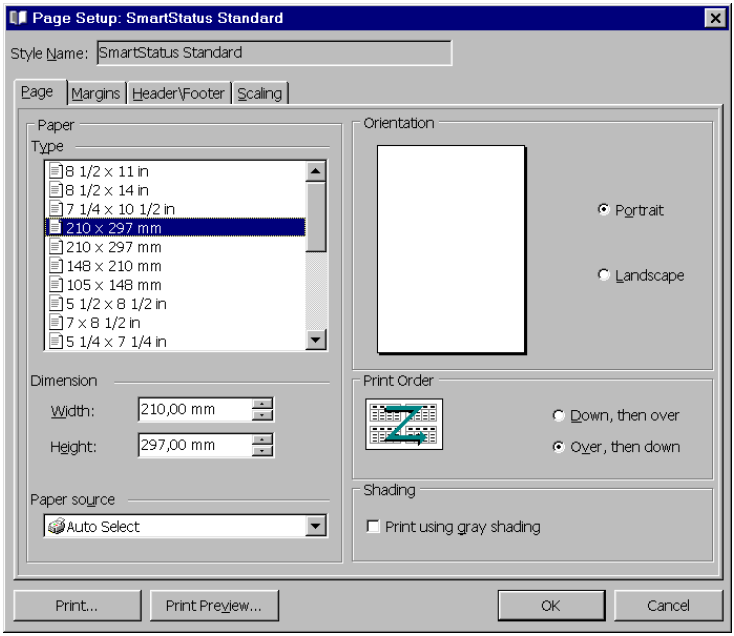
Page Setup: SmartStatus Standard
Style Name: SmartStatus Standard
Page
Margins
Header\Footer
Scaling
Paper
Type
8 1/2 x 11 in
8 1/2 x 14 in
7 1/4 x 10 1/2 in
210 x 297 mm
210 x 297 mm
148 x 210 mm
105 x 148 mm
5 1/2 x 8 1/2 in
7 x 8 1/2 in
5 1/4 x 7 1/4 in
Dimension
Width: 210,00 mm
Height: 297,00 mm
Paper source
Auto Select
Orientation
Portrait
Landscape
Print Order
Down, then over
Over, then down
Shading
Print using gray shading
Print...
Print Preview...
OK
Cancel

Figure 6-5

7. Appendix

7.1 Stored Procedures (inserting data)

Stored Procedures are normally programmed and maintained by the database administrator. When using Stored Procedures it ensures a flexible database interface where the administrator can adapt the database structure to certain requirements.

The SmartTranslator requires two types of Stored Procedures in order to translate event files - one for inserting events and one for committing the translation to the database.
The names of the Stored Procedures are configurable, but the header declaration must observe the following descriptions. Return code other than 0 indicates an error.

1) Returned messages are only handled, if the return code is <> 0.

PROCEDURE: INSERT_V2

Parameter name	Type	Notes
P_LOCATION	VARCHAR(20)	
P_SOURCE	VARCHAR(20)	
P_NODE	VARCHAR(20)	
P_TIMESTAMP	DATETIME	
P_EVENT_MSEC	INTEGER	Milliseconds
P_EVENT_P1	VARCHAR(30)	Event property 1
P_EVENT_P2	VARCHAR(30)	Event property 2
P_EVENT_P3	VARCHAR(30)	Event property 3
P_EVENT_P4	VARCHAR(30)	Event property 4
P_EVENT_P5	VARCHAR(30)	Event property 5
P_EVENT_P6	VARCHAR(30)	Event property 6
P_EVENT_P7	VARCHAR(30)	Event property 7
P_EVENT_P8	VARCHAR(30)	Event property 8
P_EVENT_P9	VARCHAR(30)	Event property 9
P_DISCARDED_RECORD	VARCHAR(250)	Refer to section 7.3.
P_DISCARDED_INFO	INTEGER	Refer to section 7.3.
P_RETURN_CODE	INTEGER	Output[1)]
P_RETURN_MESSAGE	VARCHAR(250)	Output[2)]

1) Return code less than 0 indicates an error. 0=success and 1=Index violation
2) Returned messages are only handled, if the return code is < 0.

PROCEDURE: COMMIT_EVENTS

Parameter name	Type	Notes
P_RETURN_CODE	INTEGER	Output[1)]
P_RETURN_MESSAGE	VARCHAR2	Output[2)]

1) Return code other than 0 indicates an error.
2) Returned messages are only handled, if the return code is <> 0.

Commit errors are regarded as serious errors, which will suspend all translations until the commit has been successfully executed - or the user cancels the translation.

7.2 Stored Procedures (initialising database)

When configuring a watched folder, as described in section 4.3.2 “Watched folders”, it is possible to initialise the remote database. When an initialisation is executed, a stored procedure with relevant information about the watched folder and the table structure is called. This initialisation can be used to create databases with dynamic structures.
The nine field properties (name, type, size) correspond to the nine event properties that can be transferred via the INSERT procedures. If the template contains less that nine user-defined fields, then the remaining field names are left empty.

PROCEDURE: INIT

Parameter name	Type	Notes
P_LOCATION	VARCHAR(20)	
P_SOURCE	VARCHAR(20)	
P_DESCRIPTION	VARCHAR(50)	
P_TEMPLATE_NAME	VARCHAR(30)	
P_FIELDNAME1	VARCHAR(20)	Field name from template
P_FIELDTYPE1	INTEGER	2=Integer, 3=String
P_FIELDSIZE1	INTEGER	Only valid for String fields
P_FIELDNAME2	VARCHAR(20)	
P_FIELDTYPE2	INTEGER	
P_FIELDSIZE2	INTEGER	
…		
P_FIELDNAME9	VARCHAR(20)	
P_FIELDTYPE9	INTEGER	
P_FIELDSIZE9	INTEGER	

P_RETURN_CODE	INTEGER	Output[1)]
P_RETURN_MESSAGE	VARCHAR(250)	Output[1)]

1) Return code other than 0 indicates an error or a warning, which must be described in P_RETURN_MESSAGE.

7.3 Discarded philosophy

There are two ways an event can be marked as discarded: if the date conversion fails or if the time conversion fails.
Depending on the storage type - Stored Procedures or Table storage - the discarded events are handled differently.

Table storage
When using Table storage as storage type, a discarded event is stored in the discarded text log.

Stored Procedures
When using Stored Procedures as storage type, the event is always transferred to the database server with the following adaptations:

- If date conversion fails then P_EVENT_DATE (variant 1) or date part of P_TIMESTAMP (variant 2) is set to current date and the DISCARDED_INFO is set to 1
- If time conversion fails then P_EVENT_TIME (variant 1) or time part of P_TIMESTAMP (variant 2) is set to current date/time and the DISCARDED_INFO is set to 2

In any case the complete event is send as the P_DISCARDED_RECORD parameter.