Language Transport (BC-CTS-LAN)

Release 4.6C
Copyright

© Copyright 2001 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft®, WINDOWS®, NT®, EXCEL®, Word®, PowerPoint® and SQL Server® are registered trademarks of Microsoft Corporation.

IBM®, DB2®, OS/2®, DB2/6000®, Parallel Sysplex®, MVS/ESA®, RS/6000®, AIX®, S/390®, AS/400®, OS/390®, and OS/400® are registered trademarks of IBM Corporation.

ORACLE® is a registered trademark of ORACLE Corporation.

INFORMIX®-OnLine for SAP and Informix® Dynamic Server™ are registered trademarks of Informix Software Incorporated.

UNIX®, X/Open®, OSF/1®, and Motif® are registered trademarks of the Open Group.

HTML, DHTML, XML, XHTML are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

JAVA® is a registered trademark of Sun Microsystems, Inc.

JAVASCRIPT® is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

SAP, SAP Logo, R/2, R/3, ABAP, SAP ArchiveLink, SAP Business Workflow, WebFlow, SAP EarlyWatch, BAPI, SAPPHIRE, Management Cockpit, mySAP.com Logo and mySAP.com are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other products mentioned are trademarks or registered trademarks of their respective companies.
## Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Caution Icon]</td>
<td>Caution</td>
</tr>
<tr>
<td>![Example Icon]</td>
<td>Example</td>
</tr>
<tr>
<td>![Note Icon]</td>
<td>Note</td>
</tr>
<tr>
<td>![Recommendation Icon]</td>
<td>Recommendation</td>
</tr>
<tr>
<td>![Syntax Icon]</td>
<td>Syntax</td>
</tr>
<tr>
<td>![Tip Icon]</td>
<td>Tip</td>
</tr>
</tbody>
</table>
Contents

Language Transport (BC-CTS-LAN) ........................................................................................................ 5
What’s New in Release 4.6C .......................................................................................................................... 6
General Information About Language Transports ...................................................................................... 7
Lock Management ........................................................................................................................................ 8
R/3 Support Packages .................................................................................................................................. 9
Customizing Tables ..................................................................................................................................... 10
Preparing to Import a Language .................................................................................................................. 12
Language Transport Notes ........................................................................................................................... 13
Delivered Languages ................................................................................................................................... 15
Classifying a Language ................................................................................................................................. 16
Authorizations ............................................................................................................................................. 17
Importing a Language ................................................................................................................................. 18
Language Import During the Upgrade ........................................................................................................ 19
Language Import with Transaction SMLT .................................................................................................. 20
Restarting an Action .................................................................................................................................... 22
Post-Import Actions ..................................................................................................................................... 23
Checking Log Files ...................................................................................................................................... 24
Starting Language Supplementation ........................................................................................................... 25
Checking the Current Status of a Language ............................................................................................... 27
Special Actions when Transporting Languages ........................................................................................ 28
Creating Language Packages ..................................................................................................................... 29
Technical Background ................................................................................................................................. 30
  Objects with Object Directory Entries .................................................................................................... 32
  Text Tables ............................................................................................................................................. 33
  Special Language-Specific Objects ........................................................................................................... 34
  Generic Option .......................................................................................................................................... 35
Transaction SMLT_EX ................................................................................................................................. 36
Logs .............................................................................................................................................................. 40
Troubleshooting .......................................................................................................................................... 41
Language Transport (BC-CTS-LAN)

Purpose
This documentation tells you how to import languages into an SAP System. It also tells you how

to create language packages.

This documentation is only available in English and German.
What's New in Release 4.6C

The language transport function has been changed completely in Basis Release 4.6C. Languages are now transported with the SAP transport program R3trans.

R3trans [Ext.] works with the transport control program tp to export objects from a source system in a transport request, and then import this request into one or more target systems.

This switch to using the tools of the Change and Transport System means that you can record translations in transport requests, and also use transport requests to transport a complete language.

For more information on the transport programs, see the SAP Library under Help → SAP Library → Basis → Change and Transport System → Transport Tools.

The section Creating Language Packages [Page 29] contains more details about the new transport technology.

One major new feature is the link between the translation environment (transaction SE63 [Ext.]) and the Change and Transport System. This means that, as of Basis Release 4.6C, translation work can be saved in transport requests in the same way as development work, and then distributed in the system landscape.

Languages no longer need to be imported into a system completely (Full Import), instead they are imported using language packages. Each language package contains multiple transport requests. A package can contain the translation of an application component of the SAP System (such as HR), or the translation of an Industry Solution or mySAP.com component. This enables the languages of different types of components to be handled in the same way.

The transaction SMLT (Language Management) has been completely revised. It now includes object-oriented functions for each language:

For reasons of compatibility, the old language administration transaction used until Release 4.6B has been retained and renamed SMLT_OLD. It is fully functional and can be used, for example, to import language data that was created with the old language export program RSLTEXPO.
General Information About Language Transports

This section contains information on the following topics:

- Lock management [Page 8]
- R/3 Support Packages [Page 9]
- Customizing tables [Page 10]
Lock Management

During a language import or language supplementation, the system locks all language management activities for that language, and rejects any attempts to carry them out. Other languages are not affected, so you can perform any actions on these languages at the same time as the import or supplementation.
R/3 Support Packages

As of Release 3.0D, SAP delivers R/3 Support Packages to remove any errors that appear in important transactions.

R/3 Support Packages may contain language-dependent data, such as message texts, ABAP texts or GUI texts. Once you have used transaction SPAM to import an R/3 Support Package, the translated texts for these objects are up-to-date for all languages in the system.

Problems can occur if you want to import another language from the standard language CD into a system into which R/3 Support Packages have already been imported. The language CD is created before the first Support Packages and the objects in the Support Packages are only translated into the languages already imported into the system. This means that when you then import another language, you affect the translations of the objects in the Support Packages. Texts may be outdated and incorrect or missing altogether.

For more detailed information and an overview of solution strategies in different releases, see SAP Note 352941.

To clean up your translation problems, use the program RSTLAN_IMPORT_OCS. For information on how to use this program, see SAP Note 195442.
Customizing Tables

Definition

The Customizing data in a customer client is not overwritten by a language import or an upgrade. Data is only imported into client 000.

This is because Customizing data is the responsibility of the customer and cannot be overwritten by data from SAP. This also applies, without restrictions, to translations.

However, customers may occasionally want to update their sample data and default settings with the latest translations from SAP.

Only copy the clients from client 000 after all the languages you need have been imported into client 000.

You can solve this problem in one of the following ways:

1. Use Customizing or client copy tools
2. Manual translation
3. Use language transport tools

Customizing/Client Copy Tools

Use the report RSREFILL and a reference language to update translations in a customer client.

For more information about this program, see the documentation on RSREFILL and SAP Note 48047.

The link between the translation environment and the Change and Transport System enables you to create translations for texts in one system, record them in transport requests, and then distribute them to other systems in your system landscape.

To translate Customizing data, proceed as follows:

1. Use transaction SMLT to import the language packages you need. This imports the SAP data into client 000 according to the specifications in the SAP Notes mentioned above.
2. Create the Customizing data in the customer client.
3. Use the report RSREFILL to synchronize as many of the translations as possible with client 000. Read the documentation on RSREFILL before doing this.

Manual Translation

The link between the translation environment and the Change and Transport System enables you to create translations for texts in one system, record them in transport requests, and then distribute them to other systems in your system landscape.

Use transaction SE63 to translate any other Customizing texts. Record your translation work in transport requests and then use the Change and Transport System to distribute them in the system landscape.
Language Transport Tools

Support Packages give you two options:

1. Import Customizing text data into the target client
2. Copy Customizing text data from client 000 into the target client

For descriptions of both procedures, see SAP Note 211226.
Preparing to Import a Language

Purpose
The following describes all the preparations you need to make for a successful language import.

Process flow
1. Request the necessary SAP Notes [Page 13].
2. Find out which languages are delivered [Page 15].
3. Classify each language [Page 16].
4. Check whether you have the correct authorizations [Page 17].
Language Transport Notes

Procedure

Always request the following SAP Notes from SAPNet before you start a language import. If you do not have a connection to SAPNet, use the request fax form in the software package.

Required SAP Notes

<table>
<thead>
<tr>
<th>SAP Note No.</th>
<th>Title</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>195443</td>
<td>Current Information on Language Import 4.6C</td>
<td>Information on installation</td>
</tr>
<tr>
<td>195446</td>
<td>Space Requirements for the 4.6 Language Import</td>
<td>Information on installation</td>
</tr>
<tr>
<td>97476</td>
<td>Language Availability 4.0x - 4.6x</td>
<td>Release planning information</td>
</tr>
<tr>
<td>73606</td>
<td>R/3 Language Combinations</td>
<td>Recommendations / additional information</td>
</tr>
<tr>
<td>15023</td>
<td>Initializing Table TCPDB</td>
<td>Information on installation</td>
</tr>
</tbody>
</table>

Recommended SAP Notes

<table>
<thead>
<tr>
<th>SAP Note Number</th>
<th>Title</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>18601</td>
<td>Frequently asked questions on language transport</td>
<td>Recommendations / additional information</td>
</tr>
<tr>
<td>43853</td>
<td>Consulting: Language-dependent and client-specific Customizing tables</td>
<td>Consulting</td>
</tr>
<tr>
<td>352941</td>
<td>Consulting: Languages and Support Packages</td>
<td>Consulting</td>
</tr>
<tr>
<td>211226</td>
<td>Processing of Customizing in language transport</td>
<td>Recommendations / additional information</td>
</tr>
<tr>
<td>195442</td>
<td>Language import and Support Packages</td>
<td>Recommendations / additional information</td>
</tr>
<tr>
<td>211218</td>
<td>Language import hangs without system activity</td>
<td>Recommendations / additional information</td>
</tr>
</tbody>
</table>
Delivered Languages

For information on delivered languages, see SAPNet - Web Frontend at http://service.sap.com/languages. For more detailed information on mySAP.com components, see the same address under mySAP.com Business Applications. Note that the proportion of the system that is actually translated into a language can differ. This depends on national requirements. There may be multiple language deliveries in a single release. Pay attention to any official announcements about language deliveries.
Classifying a Language

Use

You must classify each language so that the system can recognize it. Otherwise you will not be able to import a language package, nor supplement the language.

Procedure

1. Click Classify language or choose Language → Classify.
2. On the following dialog box, choose the language you want to import, and the corresponding supplementation language.
3. Note that the imported languages (whether imported with transaction SMLT or in an upgrade) must be defined in the instance profiles so that you can log on in these languages. The relevant parameter is zcsa/installed_languages.

SAP recommends that you supplement every language that has not been translated completely (languages other than English and German) after successfully importing it. This guarantees you correct texts for all texts in the system. You can check how much of a language has been translated by going to the transaction SMLT and clicking Information, or by choosing Language → Information.

The following rules apply when you define the supplementation logic:

- You cannot supplement a language that has a complete translation.
- You must define a supplementation language for each language in the system that does not have a complete translation.
- You can only supplement from a language with a complete translation, or from a language that itself has been supplemented from a language with a complete translation.

Displaying or changing information about a language

Click the Information button at any time to display the settings that apply to a particular language. If you did not specify a supplementation language when you classified the language, you can follow this up here at any time.
Authorizations

Use

Users need the following authorizations in the field CTS_LANFKT of the authorization object S_CTS_LANG to perform the corresponding activities:

<table>
<thead>
<tr>
<th>Authorization</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMI</td>
<td>Language transport administration; particularly for classifying additional languages</td>
</tr>
<tr>
<td>INST</td>
<td>Import of a language package</td>
</tr>
<tr>
<td>SUPL</td>
<td>Language supplementation</td>
</tr>
<tr>
<td>SHOW</td>
<td>Display authorization; you cannot call transaction SMLT without this authorization</td>
</tr>
</tbody>
</table>

All authorizations needed for language transports are in the SAP role SAP_BC_TRANSPORT_ADMINISTRATOR.
Importing a Language

Purpose
This section contains all user input and actions needed for importing a language.
In the following, <Rel> stands for Basis Release 4.6C.

Process flow
There are two ways you can import a language into an SAP System:
1. Language import during the upgrade [Page 19].
2. Language import with Transaction SMLT [Page 20].
If an action terminates for technical reasons, you can restart it. For more information on this function, see Restarting an Action [Page 22].
Language Import During the Upgrade

Process flow

The upgrade has its technical basis in the Repository Switch procedure. This procedure imports Repository and development environment data into so-called shadow tables. The data is merged with customer object data, and only then is made available to the new runtime environment. This also applies to any corresponding language-dependent tables, making the language import part of the upgrade. At the start of the upgrade, the system asks you whether you want to import all installed languages during the upgrade.

The languages English and German are always imported in the upgrade. Any languages that you choose not to import in the upgrade must be imported afterwards with the transaction SMLT.

A language import during the upgrade consists of the following phases:

- **Phase LANG_SELECT**
  
  This phase analyzes the available language CDs and unpacks the language packages that can be used in the upgrade into the upgrade directory. You are asked which languages you want to update with the language packages during the upgrade.
  Logs are made of the language CD analysis. The `PEVALLAN.<SID>` file is created in the upgrade log directory. This file contains information about the analyzed packages which can be helpful in troubleshooting problems.

- **Phase JOB_RSTLANUPG**
  
  This phase sets the SMLT control information for the language packages imported during the upgrade.

The phases LANG_IMP1, LANG_IMP2 and LANG_IMP3 are obsolete. The languages are imported into the system with the same procedure as the Support Packages. For example, this is how translations are loaded into the Repository in the phase SHADOW_IMPORT.

The fact that the language data is always imported before any Support Packages in the upgrade means that there are no sequence problems.

After the upgrade you must use the transaction SMLT to supplement the imported languages.
Language Import with Transaction SMLT

Procedure

You can use transaction SMLT to import extra language packages.

The languages **English** and **German** are complete in all newly installed systems. You do not need to import them into installed systems.

1. Go to the language for which you want to install extra packages and click ![Language](language_icon) or choose **Language → Import package**.

2. In the following dialog box, enter the path for the language packages. Choose **Find package(s)** to search for any available packages in the path you have entered.

3. The **green**, **yellow** and **red** lights next to the packages indicate whether you can import them. Click the lights to display extra information. A **green** light indicates that all import conditions have been met, a **yellow** light indicates that there are warnings, and a **red** light indicates that the package cannot be imported because checks have detected errors.

4. Select one or more language packages with green or yellow lights for import.

5. After you have specified a start time and (optional) target server, choose **Execute** to import the language package(s) you have selected. This action schedules a background job that performs the import.

6. An import action is created for the appropriate language on the overview screen of transaction SMLT. There are various functions in the overview for managing and monitoring the import. These functions are represented by the following icons:

   - ![Display transport logs](display_icon)
   - ![Display job information](job_info_icon)
   - ![Display job log](job_log_icon)
   - ![Restart the action if it has terminated for technical reasons](restart_icon)
   - ![Display more information about the package](more_info_icon)

7. The icon at the start of the line indicates the status of the import.

   The icons have the following meanings:

   - ![The import was completed without errors.](status_green)
   - ![The import was completed, however, there are warnings. For more information about these warnings, see the transport logs.](status_yellow)
   - ![The import was completed, however, transport errors occurred in the objects. For more information about these errors, see the transport logs.](status_red)
   - ![The import is scheduled. Click ![to display job information, such as the start time and target server.](status_scheduled)
8. If an action terminates for technical reasons, you can restart it. For more information on this function, see Restarting an Action [Page 22].

As described above, you can import multiple languages in parallel. However, remember that each import takes up a separate background job for the entire duration of the import. Problems can occur if there is no free background job for the transport control program tp and the system cannot execute the import actions. If this is the case, the background processes lock each other. When you schedule the language imports, make sure that there is always at least one background process free for the transport control program tp. Also read the information in SAP Note 211218.
Restarting an Action

Sometimes an action may terminate for technical reasons. The transaction SMLT indicates this with the icon 🚹.

Possible causes include technical problems in the transport programs (such as file system problems), or data entries not being inserted due to tablespace (Dbspace) problems. If you encounter any of these problems, you can reschedule the action with the restart function.

To do this, choose 🔄.

⚠️

Always use transaction SMLT to restart an action.
An action can only be restarted by the user who started it the first time.

When you use transaction SMLT to restart an action, you make sure that the entries in the control tables are updated.

You also make sure that the action is restarted and continued at the exact phase where it terminated.
Post-Import Actions

Purpose
The following describes the actions you need to perform after the language import.

Prerequisites
The language import was successful.

Process flow
1. Check the log files [Page 24].
2. Start the language supplementation [Page 25].
3. Check the status of the language [Page 27].
Checking Log Files

Use
When you import the requests, several log files are created in the transport directory of the system. You can use transaction SMLT to view these files.

Procedure
1. Start transaction SMLT.
2. Go to the language whose import logs you want to view and expand its node to see the packages that have been imported.
3. Check the status of the action, indicated by the icon at the start of the line.
4. To go to the overview of all requests that belong to a package, click or double-click the name of the main transport request.
5. The logs that you display are standard transport logs.
Starting Language Supplementation

Use

⚠️

The supplementation actions are client-specific. The language is supplemented in the client in which you are logged on. If you use multiple clients, you must supplement the language in each client.

Use the language supplementation function to fill in the gaps in a language that has not been translated completely.

Procedure

1. Go to the language that you want to supplement and click or choose Language → Supplement language.

2. On the next screen you can enter a description of your supplementation. This is not part of the function, but does help you to recognize the supplementation you have started in the transaction SMLT overview.

3. In the center of the screen you can enter conditions that control which tables are selected for supplementation. These fields are set with SAP defaults, however, you can change them by choosing Change.

4. The tables that you want to supplement appear at the bottom of the screen, according to the selection you made by choosing Select. Each table is shown with its table class, a description, the supplementation mode and the client in which the table will be supplemented. You can use the appropriate pushbuttons to change this table, however, we recommend this for experienced users only.

Read the long texts of the dialog boxes that appear when you change the defaults.

5. Enter a start time and (optional) target server, and then supplement the language by choosing Execute. This action schedules a background job that performs the supplementation.

6. A supplementation action is created for the appropriate language on the overview screen of transaction SMLT. There are various functions in the overview for managing and monitoring the supplementation. These functions are represented by the following icons:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>Display supplementation log (in table)</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Display job information</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Display job log</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Restart the action if it has terminated for technical reasons</td>
</tr>
</tbody>
</table>

7. The icon at the start of the line indicates the status of the import. The icons have the following meanings:
Starting Language Supplementation

- The selected table was supplemented without errors.
- There were warnings during the supplementation. Analyze these warnings by displaying the supplementation log. To do this, click or double-click the name of the supplementation action.
- There were errors during the supplementation. Analyze them as described above.
- The action is scheduled. Click to display job information, such as the start time and target server.
- The action is currently running.
- The action has terminated for technical reasons. To find out the cause of the error, see the job log (click ).

8. The supplementation log can give you detailed information about the table that have been supplemented. Each line of the log contains the name, class, description and other information about a supplemented table. The status, client and supplementation mode appear first, followed by statistics about how many rows in the table have been processed, inserted and modified. You can also see a return code. All tables that have been processed fully are given a status based on the return code. This status is indicated by a green, yellow or red light. For information about the meaning of the return codes, display the F1 help for the return code (RC) column.
Checking the Current Status of a Language

Use
Log on to the system to check the current status of a language. If the language is not up-to-date, a dialog box appears immediately, informing you that you have logged on in a language that is not installed correctly.

Procedure
1. To display the status of a language, start transaction SMLT.
2. Click to expand the complete list of languages, or choose Edit → Expand.
   An overview of all languages in your system appears, as well as all actions that have been performed for each language.
Special Actions when Transporting Languages

Making language imports into a system is a standard procedure for all customers who want to use their SAP Systems in different languages. The preceding sections of this guide describe this procedure in detail.

The following information is intended for customers who have special requirements of the language management tools.

Customers who use the translation tools to translate missing texts or to translate their own in-house texts need to distribute these changes within their system landscape. As of Release 4.6C, these customers can make use of new options, discussed in the following section.

The section Creating Language Packages [Page 29] is intended for customers and SAP partners who want to group their translation of a large object list (for example, the whole system) in a language package and then use the transaction SMLT to import the translation into other systems.
Creating Language Packages

Purpose
As of Basis Release 4.6C, languages are imported into the system in language packages. Each language package contains multiple transport requests. The transport requests that form the language export are grouped into a single language package to make them easier to handle. Language packages are technically similar to Support Packages. The process that exports a language includes both the creation of the transport requests and their grouping into a language package.

Process flow
You can export a language in two ways:
1. in a user dialog with Transaction SMLT_EX [Page 36], or
2. by planning report RSTLAN_EXPORT [Ext.] as a background job.
Technical Background

The language transport procedure was switched to the SAP transport program R3trans [Ext.] in Basis Release 4.6C. This means that transport requests are now used to transport languages between systems. One consequence of these changes is that translation work from transaction SE63 can now be recorded in transport requests. The following is a short description of the technical basis of these changes.

New Transport Objects

SAP Systems record all changes to the system in transport requests. Different types of changes are recorded in different types of transport objects. Each transport object consists of three pieces of information: the program ID, the object type and the object name.

The program ID can take the value R3TR, for groups of objects, or the value LIMU, for a subobject of a larger object. For example, the transport object R3TR PROG RSPFPAR represents the transport of the report RSPFPAR, together with all its accompanying information (source code, text elements, attributes,…), whereas LIMU REPT RSPFPAR represents text elements of this report.

A new value for the program ID has been introduced in Basis Release 4.6C, LANG. For example, the transport object LANG PROG RSPFPAR selects all language-dependent elements of the report RSPFPAR in a particular language. LANG REPT RSPFPAR selects just the text elements in that language.

Earlier versions of R3trans could also transport translations of objects. This function is described in SAP Note 45548 and continues to apply. The main new feature is that transport objects with the program ID LANG transport only the language-dependent elements of an object.

The new method of transporting languages splits up the objects that you want to transport in a different way. The new language export splits translations into two groups:

- translations that are assigned to an object with an object directory entry (Repository), and
- translations of texts from other language-dependent tables (text tables).

There are also other types of objects, which are imported into the SAP System using special logic (see Special Language-Dependent Objects [Page 24]).

The following table compares the changes:

<table>
<thead>
<tr>
<th>Language export up to and including Release 4.6B</th>
<th>Language export as of Basis Release 4.6C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development environment and Customizing</td>
<td>The development environment (DE) is part of the Repository, which means that transport objects have an object directory entry. Customizing is a part of the text tables.</td>
</tr>
<tr>
<td>Documentation</td>
<td>Documentation either belongs to an object with an object directory entry, or it has its own object directory entry.</td>
</tr>
<tr>
<td>SAPscript (special texts)</td>
<td>All SAPscript objects have an object directory entry.</td>
</tr>
</tbody>
</table>
Objects with Object Directory Entries

All system objects (such as programs, function groups, table definitions) are managed in an object directory. Each system object is assigned to a development class, which itself is assigned to a software component.

This assignment of system objects to development classes and software components makes it easy to export the translation of one particular software component.
Text Tables

As well as the translations of system objects, there are a great many other language-dependent texts, which are stored in text tables. These text tables are mostly Customizing tables or system tables.

Unlike objects with object directory entries, the contents of these tables cannot be assigned to a development class or software component.

Text table transports involve the following steps:
1. All texts in the relevant language are exported. They are exported in the transport object LANG TABU <table name>.
2. If the table is client-specific, texts are only exported from the client where you started the export.
3. The contents of the text table are assigned to the same development class as the table itself.
Special Language-Specific Objects

For technical reasons, you cannot export the following objects with one of the new LANG transport objects:

- Terminology
- Glossary
- Public holiday calendar
- Balance sheet structures

So that you can transport these objects, a special solution has been found in the form of logical objects. The following table shows which transport object you can use to transport the translations of the above objects:

<table>
<thead>
<tr>
<th>Transport object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminology</td>
<td>R3TR TERM &lt;ISO language&gt;</td>
</tr>
<tr>
<td></td>
<td>Transport of delivered terminology. This object does not delete any entries in the target system. It only makes database Inserts and Updates.</td>
</tr>
<tr>
<td>Glossary</td>
<td>R3TR GLOS &lt;ISO language&gt;</td>
</tr>
<tr>
<td></td>
<td>Transport of the delivered glossary. This object does not delete any entries in the target system. It only makes database Inserts and Updates.</td>
</tr>
<tr>
<td>Public holiday calendar</td>
<td>R3TR CALE &lt;ISO language&gt;</td>
</tr>
<tr>
<td></td>
<td>Transport of translations of the public holiday calendar. This object does not delete any entries in the target system. It only makes database Inserts and Updates.</td>
</tr>
<tr>
<td>Balance sheet structures</td>
<td>R3TR BILA &lt;balance sheet structure (4 characters)&gt;&lt;SAP language&gt;</td>
</tr>
<tr>
<td></td>
<td>Translation of a balance sheet structure</td>
</tr>
</tbody>
</table>

Key:

- <ISO language> 2-character ISO language ID
- <SAP language> 1-character language ID in the SAP System
Generic Option

The generic option saves the transport objects in compressed form to reduce administration data. Instead of writing all programs that need to be transported individually in a transport request, the generic option only writes a placeholder with the name `LANG PROG *`. Space is saved by saving the information about which programs need to be exported in a database table of the export system.

The generic option is activated as a default. It must be activated for full exports to save space in the database, and especially in the import system.
Transaction SMLT_EX

Use the new transaction SMLT_EX to create language packages.

A language package is created in four main steps:
1. Select the objects you want to export.
2. Distribute the objects in requests.
3. Start the language export.
4. Monitor the export.

The objects appear in a screen with two halves. The left half displays the selected objects in a tree, the right side displays the objects themselves.

The tree is structured according to request number, category and program ID. The request number shows you which objects were placed in a transport request. To improve the usability of the screen, the objects have been split into the categories Repository (objects with object directory entries), logical objects (glossary, terminology, calendar, balance street structures), Customizing and system tables.

The column Objects shows the number of selected objects of each type. The screen also totals all categories and requests.

Double-click a node of the tree to display all objects under that node on the right side of the screen.

Language Export Wizard

The transaction SMLT_EX was developed to give you as much flexibility as possible when you export objects. You do not always need to use all the functions of SMLT_EX so a Wizard has been integrated into the tool that takes you through documented selection screens and helps you to make the correct input.

Start the Language Export Wizard with the Wizard button (F8).

Once you have finished making your entries, confirm with Complete. This creates the transport requests, exports them and groups them together in language packages. These actions run as background jobs, possibly very long-running depending on the size of the packages. A new screen appears that displays the export log. Remember to update the display at regular intervals.

Selection of objects

To select objects, choose Fill object list. The following selection screen appears:
Meaning of the selection fields:

Selection area

You can use the first two checkboxes to restrict your selection to objects with object directory entries or text tables. Use the other fields to select objects by software component, development class or transport request.

Other objects

Here you can choose to transport special language-dependent objects.

Run in background

If you enter a name here, the selection is made in the background and saved under this name. Choose Object list → Load to load a selection that has already been made (for example, in the background).

Object lists in the database and in the main memory

Completed selections of objects are first saved in the main memory. Choose Object list → Save to save them in the database, and Object list → Load to load them into the main memory. If you no longer need an object selection that is saved in the database, you can delete it by
choosing Object list → Delete on database.
You can delete the selection currently in the main memory by choosing Edit → Delete.

**Distributing objects in requests**

To save system resources and speed up the import, large amounts of language data are distributed in multiple transport requests.

When you use transaction SMLT together with the Wizard, or use the report to export a language, the objects are distributed in requests automatically. If you make a more complicated selection, you can distribute the objects manually.

Choose Extras → Number of requests to distribute the objects in a specified number of transport requests.

You can use Drag&Drop to redistribute objects, by simply dragging an object type from the tree to a transport request. The screen updates itself automatically.

To create a new transport request, drag an object type to the request New request.

**Release**

When you choose Export another dialog box appears, in which you need to specify more parameters, including which languages you want to export from.

The other parameters are copied from the report variant.

**Expert mode**

Choose Extras → Expert mode to set additional options for the language export. The following describes some of these options:

- Allow for master language
  
  If a selected object has a recognizable master language that is the same as the export language, then this object will not be exported if you select this option.

- Export to instance
The language is exported to the selected instance. If you do not enter a server, the language is exported to the background server with the lowest load.

- **Number of parallel R3trans processes**
  
  You can use this option to control how many parallel R3trans processes are started for the export. Remember that one R3trans process can process only a single transport request.

- **R3trans options**
  
  The parameters specified here apply to the programs tp and R3trans.
The language export writes logs that can help you when you are troubleshooting. The following describes which logs are written and where they are archived:

- **Language export log**
  
  If you export a language with transaction SMLT_EX (using the Wizard), this log appears on the screen. The log is saved as an application log in the database. To display the log, choose Goto Log display in transaction SMLT_EX. Choose Log Other log to select language export logs for running or completed actions. You can also restart unsuccessful actions.

  A language export log is also written when you use a report for the export.

- **Job log**

  Depending on how you are exporting the language, some or all of the export is executed in the background. These actions write job logs under the job name `SAP-LANGUAGE-EXPORT`. The job logs are elements of the language export log.

- **Transport logs**

  Each language package consists of at least one transport request, which is exported with the programs `tp` and `R3trans`. The export log is located at the file system level and can be displayed with the transactions SE01, SE09 or SE10.

You can go from the log display in transaction SMLT_EX to the job log or transport logs by choosing `Goto → …`
Troubleshooting

The language export uses tools that are not part of the SAP System and this can sometimes lead to problems. This section gives you tips on how to avoid problems when you export languages.

- **Authorizations**
  
  To export languages you need the authorizations in the role SAP_BC_TRANSPORT_ADMINISTRATOR.

- **Environment of the Change and Transport System**
  
  Use the Transport Management System (transaction STMS) to check the configuration and functions of the transport tools.

- **Editing the TP_<domain name>.PFL file**
  
  Make sure that the R3trans parameter Compress has the value L. Otherwise, the data files will only have low compression.
  
  All transport requests require a target system. This target system must be specified in the TP_<domain name>.PFL file, even if only as a dummy system.

- **Server problems**
  
  You may be restricted to exporting to one server only. Make sure that you select this server in transaction SMLT_EX under Extras → Expert mode.

- **Restarting a language export**
  
  If an export terminates, you can go to the log display and choose Repeat → Release requests or Repeat → Create package to repeat these actions.
  
  If you have exited transaction SMLT_EX or scheduled the language export as a report, you can choose Goto → Log display to return to this display, and then choose Log → Other log to select an export action. You can now restart a terminated export process as described above.