Customizing Cross-System Tools

Release 4.6C
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## Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Caution" /></td>
<td>Caution</td>
</tr>
<tr>
<td><img src="image2" alt="Example" /></td>
<td>Example</td>
</tr>
<tr>
<td><img src="image3" alt="Note" /></td>
<td>Note</td>
</tr>
<tr>
<td><img src="image4" alt="Recommendation" /></td>
<td>Recommendation</td>
</tr>
<tr>
<td><img src="image5" alt="Syntax" /></td>
<td>Syntax</td>
</tr>
<tr>
<td><img src="image6" alt="Tip" /></td>
<td>Tip</td>
</tr>
</tbody>
</table>
Contents

Customizing Cross-System Tools.............................................. 5
Customizing Cross-System Viewer........................................... 8
Perform Comparison.................................................................. 12
  Create Object Overviews....................................................... 15
Edit Comparisons..................................................................... 17
Delete Comparisons................................................................. 18
Display Comparison Overviews ................................................ 19
Cross-System Viewer Functions ................................................ 20
Customizing Transfer Assistant ............................................... 22
Create Worklist........................................................................ 27
Process Worklist........................................................................ 28
Delete Worklist......................................................................... 29
Display Worklist Overviews..................................................... 30
Transfer Assistant Functions.................................................... 31
Individual comparison.............................................................. 34
Compare Individual Objects...................................................... 37
Using Single Object Comparison Functions.............................. 38
Customizing Cross-System Tools

Purpose
Customizing Cross-System Tools control Customizing changes across several systems and clients in the R/3 System infrastructure.

Customizing Cross-System Tools:
- manage Customizing changes effectively
- distribute Customizing changes transparently
- checks and copies Customizing changes

Implementation notes
A large number of people are involved in the development of a system, and transporting and testing changes, so you need to be able to trace and check changes exactly.

Customizing Cross-System Tools were developed to support this process.

The R/3 System infrastructure usually comprises at least three R/3 Systems. These are:
- Development system
  For development and Customizing
- Quality assurance system
  For testing changes in the development system
- Production system
  The live R/3 System

Apart from the production system, each system can contain several clients. A client is a logical system, an organizational unit with its own data.

The quality assurance system usually has three customer-defined clients:
- quality assurance test client
- user training client
- Customizing and development production client

All infrastructure systems are linked by the Change and Transport System, which transports changes between the systems. Changes are usually transported from the development system via the quality assurance system into the production system.

The following graphic shows a typical scenario:

Scenario
This scenario shows the relationships between the Customizing Cross-System Tools and other implementation tools.

**Integration**

Although Customizing Cross-System Tools are designed for interaction, you can also call them individually.

The most important tools are:

- **Customizing Cross-System Viewer [Page 8]**
  
  Compares Customizing objects in two logical systems (clients in either the same R/3 System or different ones).

- **Customizing Transfer Assistant [Page 22]**
  
  Transfers client-specific Customizing changes between clients. This tool is based on the Customizing Cross-System Viewer, providing additional processing and transfer functions.

Both tools can compare the contents of Customizing tables and views. See [Individual comparison](Page 34).

The following implementation tools are also used for making changes across several systems:

- **Business Configuration Sets**
  
  Set of Customizing settings which define a particular aspect of business

- **Change log**
Controls Customizing activity changes
See Logging Customizing objects [Ext.].

- Computer Aided Test Tool (CATT)
  Combines and automates business processes as repeatable test cases.
  See CA - Computer Aided Test Tool [Ext.].
Customizing Cross-System Viewer

Use

Compares Customizing objects in two logical systems (clients in either the same SAP System or different ones).

To compare objects, start the Customizing Cross-System Viewer in the logon client (client of the system in which you are logged on) and then logon in the compare client (client to be compared).

Integration

You can use the Customizing Cross-System Viewer with other Cross-System Tools.

- Customizing Transfer Assistant [Page 22]

  This tool is based on the Customizing Cross-System Viewer, providing additional processing and transfer functions.

The following tool is in the Customizing Cross-System Viewer and the Customizing Transfer Assistant:

- Individual comparison [Page 34]

Prerequisites

Authorizations

You need the following authorizations for the Customizing Cross-System Viewer:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Logon client</th>
<th>Compare client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object comparison</td>
<td>S_TABU_DIS (display authorization)</td>
<td>S_TABU_DIS (display authorization)</td>
</tr>
<tr>
<td></td>
<td>S_TABU_RFC</td>
<td>S_TABU_RFC</td>
</tr>
<tr>
<td>Object processing</td>
<td>S_TABU_DIS (maintenance authorization)</td>
<td>S_TABU_DIS (display authorization)</td>
</tr>
<tr>
<td></td>
<td>S_TABU_RFC</td>
<td>S_TABU_RFC</td>
</tr>
<tr>
<td>Additional authorization for editing cross-client objects</td>
<td>S_TABU_CLI</td>
<td></td>
</tr>
</tbody>
</table>

To compare objects in a system before Release 4.5A, you need authorization S_TABU_CLI not S_TABU_RFC in the compare client.

The authorization S_TABU_RFC is in the authorization profiles S_A.SYSTEM, S_A.CUSTOMIZ and S_CUS_CMP.

Security

The compare client security level must be:
• 0 (unrestricted), or
• 1 (no overwriting)

You can set this in the client maintenance. See Maintain clients [Ext.].

You must logon to the compare client, even if it is in the same system as the logon client. You must create a Remote Function Call link. See Maintain remote destinations [Ext.].

**Features**

The Customizing Cross-System Viewer generates comparisons for selected Customizing objects, which are saved as a worklist in the database.

You can make any number of comparisons with each worklist, in dialog or background. A comparison shows the differences for each object. You can also make an individual comparison for each object.

**Selection conditions for comparisons**

The Customizing Cross-System Viewer compares Customizing objects by the following criteria:

• **Project IMG**
  This option shows changes in your project.

• **Application components**
  This option compares Customizing objects in specified application areas.

• **Business Configuration Sets**
  This option concentrates on Customizing settings which are of particular importance for the processes in your company.

• **Transport requests**
  This option shows the objects which would be overwritten by a transport.

• **Manual selection**
  In this option, you specify which objects are compared.

**Comparison overview lists**

Options:

• **Object overview**
  You can select objects from this list to be compared.

• **Complete comparison in dialog**
• **Complete comparison in background**

The result is an overview of the differences between the two logical systems. You can edit the differences from the overview.

**Status flags**

Each object compared has two status flags:

• **Comparison status**
Customizing Cross-System Viewer

Type of any differences found. Assigned automatically.

- Processing status
  Distinguishes between objects which have been processed and those which have not.
  Processing status can be assigned manually. The next comparison changes the
  processing status of objects with no differences from Open (Open) to Finished (Finished).

The possible status values are:

**Status values**

<table>
<thead>
<tr>
<th>Status</th>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing status</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>!</td>
<td>being processed</td>
</tr>
<tr>
<td></td>
<td>Finished</td>
<td></td>
</tr>
<tr>
<td>Comparison status</td>
<td>Views/tables not yet compared</td>
<td></td>
</tr>
<tr>
<td></td>
<td>=</td>
<td>View/table contents are identical</td>
</tr>
<tr>
<td></td>
<td>( = )</td>
<td>View/table contents are identical and there are structure differences</td>
</tr>
<tr>
<td></td>
<td>≠</td>
<td>View/table contents are not identical</td>
</tr>
<tr>
<td></td>
<td>( ≠ )</td>
<td>View/table contents are not identical and there are structure differences</td>
</tr>
<tr>
<td></td>
<td>!</td>
<td>Cannot be compared (see below)</td>
</tr>
</tbody>
</table>

You can list these values in the worklist Legend.
Comparison may not be possible for the following reasons:

- Process cancelled
- Table/view does not exist in local or remote client
- Table/view is too wide
- User has no display authorization in local or remote client
- There is no extended table maintenance dialog in the remote client
- Communication error (RFC)
Comparison system crash
Key structure not convertable
Field structure not convertable
The table is a system table and excluded from comparison.

**Comparison options**

Comparisons can be performed in various ways:

- **Individual comparison**
  Shows differences between objects

- **Procedures to resolve differences between objects**
  Most procedures are supported by tools

- **Complete comparison**
  In dialog or background

**Utilities and other functions**

Utilities and other functions:

- Determine the overall comparison status
- Determine the processing status of specified objects
- Select or deselect objects for comparison
  
  You can (de)select all objects, some objects or a block of objects.

- Display the IMG activities for specified objects
- Display difference and object type statistics
- Display application components in the application component hierarchy
- Display comparison status, processing status and object type legend
- Filter the display by processing status, comparison status and object type criteria

**General**

Comparisons are made at object level to improve their accuracy.
Perform Comparison

Prerequisites

You want to make a new comparison of a selected group of Customizing objects.

Procedure

   
   or
   
   Tools → Administration → Administration → Client administration → Customizing objects → Cross-System Viewer in the SAP menu.

2. Choose one of the three comparison categories in the New comparison based on group box as the basis of your comparison:

<table>
<thead>
<tr>
<th>Category</th>
<th>Comparison based on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMG activities</td>
<td>Project IMG</td>
</tr>
<tr>
<td></td>
<td>SAP Reference IMG</td>
</tr>
<tr>
<td>Application components</td>
<td>Select components</td>
</tr>
<tr>
<td></td>
<td>All components</td>
</tr>
<tr>
<td>Other selections</td>
<td>Customizing object list/transport</td>
</tr>
<tr>
<td></td>
<td>Business Configuration Set</td>
</tr>
<tr>
<td></td>
<td>Manual selection</td>
</tr>
</tbody>
</table>

3. Choose Create.

4. Continue as for your comparison type:

   **IMG activities**

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project IMG</td>
<td>1. Enter a project.</td>
</tr>
<tr>
<td></td>
<td>2. Choose among:</td>
</tr>
<tr>
<td></td>
<td>- All activities</td>
</tr>
<tr>
<td></td>
<td>- Select views</td>
</tr>
<tr>
<td></td>
<td>- Select activities</td>
</tr>
<tr>
<td></td>
<td>3. Choose Continue.</td>
</tr>
</tbody>
</table>
### SAP Reference IMG

1. Choose among:
   - All activities
   - Select activities
2. Choose *Continue*.

### Application components

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select components</td>
<td>1. Choose component(s) from the application</td>
</tr>
<tr>
<td></td>
<td>component hierarchy.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>All components</td>
<td></td>
</tr>
</tbody>
</table>

### Other selections

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customizing object list/transport</td>
<td>1. Enter the Customizing object list/transport.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>Business Configuration Set</td>
<td>1. Enter a Business Configuration Set.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>Manual selection</td>
<td>1. Enter object name(s) and type(s).</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
</tbody>
</table>

5. Enter a comparison description.
6. Specify *Client-specific* or *Cross-client*.
7. Specify an R/3 connection.
8. Specify comparison type:

<table>
<thead>
<tr>
<th>To...</th>
<th>Choose...</th>
</tr>
</thead>
<tbody>
<tr>
<td>perform complete comparison</td>
<td><em>Complete comparison</em></td>
</tr>
<tr>
<td>in dialog</td>
<td></td>
</tr>
<tr>
<td>perform complete comparison</td>
<td><em>Complete comparison in background</em></td>
</tr>
<tr>
<td>in the background</td>
<td>Run large jobs in the background and view the</td>
</tr>
<tr>
<td></td>
<td>results later.</td>
</tr>
</tbody>
</table>

### Table fields with value prompt at activation in Business Configuration Sets

If table fields were given the attribute *Value prompt at activation* when a Business Configuration Set was created (see Create BC Set via IMG hierarchy [Ext.]), a window containing all variable table fields with their proposal values opens at the start of the comparison. You can change these values before the comparison. You can compare Business Configuration Sets variably for various organizational units, e.g. company codes 0000 and 0001 in this way.
Perform Comparison

If the value of a table field with the attribute Value prompt at activation in the Business Configuration Set is changed in a comparison, the most recent value is the proposal in the next comparison of the BC Set.

**Result**

The comparison shows for each object:

- The total number of entries in the logon system
- The number of entries only in the logon system
- The number of changed entries
- The number of entries only in the comparison system

Both processing status and comparison status are displayed.

If no differences were found, the processing status of objects which were Open is set to Finished.

**Business Configuration Set comparisons**

The graphical display of Business Configuration Set comparisons differs from that of those based on other criteria.

The comparison fields show:

- The total number of entries in the Business Configuration Set
- The number of changed entries (cannot be changed after activation)
  
  The constants in a view are the values which were defined as constants in the Business Configuration Set. They cannot be changed.

- The number of changed entries (proposals)

  The proposals in a view are the values which were defined as proposals in the Business Configuration Set. They can be changed.

- The number of entries, which are **only** in the Business Configuration Set (and not in the logon client)
Create Object Overviews

Prerequisites
You want to generate a list of Customizing objects for a comparison.

Procedure
5. Choose Tools → Customizing objects → Cross-System Viewer in Edit Customizing Project or Customizing Project Management.
   or
   Tools → Administration → Administration → Client administration → Customizing objects → Cross-System Viewer in the SAP menu.

2. Choose one of the three comparison categories in the New comparison based on group box as the basis of your object overview:

<table>
<thead>
<tr>
<th>Category</th>
<th>Comparison based on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMG activities</td>
<td>Project IMG</td>
</tr>
<tr>
<td></td>
<td>SAP Reference IMG</td>
</tr>
<tr>
<td>Application components</td>
<td>Select components</td>
</tr>
<tr>
<td></td>
<td>All components</td>
</tr>
<tr>
<td>Other selections</td>
<td>Customizing object list/transport</td>
</tr>
<tr>
<td></td>
<td>Business Configuration Set</td>
</tr>
<tr>
<td></td>
<td>Manual selection</td>
</tr>
</tbody>
</table>

3. Choose Create.
4. Continue as for your object overview type:

**IMG activities**

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project IMG</td>
<td>1. Enter a project.</td>
</tr>
<tr>
<td></td>
<td>2. Choose among:</td>
</tr>
<tr>
<td></td>
<td>All activities</td>
</tr>
<tr>
<td></td>
<td>Select views</td>
</tr>
<tr>
<td></td>
<td>Select activities</td>
</tr>
<tr>
<td></td>
<td>3. Choose Continue.</td>
</tr>
</tbody>
</table>
Create Object Overviews

SAP Reference IMG

3. Choose among:
   - All activities
   - Select activities

4. Choose *Continue*.

**Application components**

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select components</td>
<td>1. Choose component(s) from the application component hierarchy.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>All components</td>
<td></td>
</tr>
</tbody>
</table>

**Other selections**

<table>
<thead>
<tr>
<th>For a comparison based on:</th>
<th>Proceed as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customizing object list/transport</td>
<td>1. Enter the Customizing object list/transport.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>Business Configuration Set</td>
<td>1. Enter a Business Configuration Set.</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
<tr>
<td>Manual selection</td>
<td>1. Enter object name(s) and type(s).</td>
</tr>
<tr>
<td></td>
<td>2. Choose <em>Continue</em>.</td>
</tr>
</tbody>
</table>

5. Enter an object overview description.

6. Specify *Client-specific* or *Cross-client*.

7. Choose *Object overview*.

**Result**

The list created is a simple overview of the objects to be compared:

- The processing status is *Open* ( здоровье), because no comparison has yet been performed.
- The comparison status and all other comparison fields - the total number of entries in the logon system, the number of entries only in the logon system, the number of changed entries, the number of entries only in the comparison system – are empty.
Edit Comparisons

Prerequisites
You want to edit an existing comparison.

Procedure
   or
   Tools → Administration → Administration → Client administration → Customizing objects → Cross-System Viewer in the SAP menu.
2. Enter a comparison ID in the Existing comparisons group box, or choose one from the possible entries help.

   The possible entries help lists comparisons by:
   - User and/or client
   - Comparison system and/or comparison client
   - Processing status
   - Last change
3. Choose Edit.
   To see a comparison without changing it, choose Display.

Result
The comparison displayed is one of:

- Object overview
  List of objects to be compared.
  The processing status is displayed in this list, the comparison status and all other comparison fields are empty.

- List of objects compared
  List of objects compared
  Both the processing status and the comparison status and the comparison result for each object are displayed in this list.
Delete Comparisons

Prerequisites
You want to delete an existing comparison.

Procedure
   or
   Tools → Administration → Administration → Client administration → Customizing objects → Cross-System Viewer in the SAP menu.
2. Enter the comparison to be deleted, in the Existing comparisons group box, or choose one from the possible entries help.
3. Choose Delete.
   A deletion confirmation dialog box appears.
4. Choose Yes to confirm the deletion.

Result
The comparison is deleted.
Display Comparison Overviews

Prerequisites
You want to display a list of existing comparisons by specified criteria.

Procedure

   or

Tools → Administration → Administration → Client administration → Customizing objects → Cross-System Viewer in the SAP menu.

2. Choose Comparison → Overview.
3. Enter your selection criteria.

   Possible criteria are user, logon client, comparison system, comparison client, processing status and last change.

4. Choose Continue.

Result
The result is a list of existing comparisons by your criteria. Select a comparison for further information.
Cross-System Viewer Functions

Use

You can work in several modes and use numerous functions with the comparisons created by the Cross-System Viewer.

- Processing functions
  - Comparisons and adjustments.

- Comparison functions
  - Manage comparisons.

- Utilities and other functions

Procedure

Go to the following functions from the change mode of a comparison.

**Processing functions**

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual comparison</td>
<td><em>Edit</em> → <em>Compare / Compare</em></td>
<td>Comparison of individual object.</td>
</tr>
<tr>
<td>Interactive copy</td>
<td><em>Edit</em> → <em>Interactive Copy</em></td>
<td>Adjust the differences between clients.</td>
</tr>
<tr>
<td>New dialog comparison</td>
<td><em>Edit</em> → <em>Compare new</em></td>
<td>Compare all selected objects in dialog.</td>
</tr>
<tr>
<td>New background comparison</td>
<td><em>Edit</em> → <em>Compare new in background</em></td>
<td>Compare all selected objects in background.</td>
</tr>
<tr>
<td>Set processing status</td>
<td><em>Edit</em> → <em>Set processing status</em></td>
<td>Sets the processing status of the selected objects.</td>
</tr>
<tr>
<td>Select</td>
<td><em>Edit</em> → <em>Select</em> followed by the desired function Choose from: Select all Deselect all Select Deselect Select area</td>
<td>Select/Deselect objects for comparison. You can (de)select all objects, some objects or a block of objects.</td>
</tr>
</tbody>
</table>
## Cross-System Viewer Functions

<table>
<thead>
<tr>
<th>Sort</th>
<th>Edit → Sort / Sort</th>
<th>Specify your object sort criterion in the following dialog box – object name, object type, object description or application component. Specify whether to sort in ascending or descending order.</th>
</tr>
</thead>
</table>

### Comparison functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set total status</td>
<td>Comparison → Total status</td>
<td>Set the total status of the comparison.</td>
</tr>
<tr>
<td>Toggle between change and display mode</td>
<td>Comparison → Display ⇔ Change / Display ⇔ Change.</td>
<td>You can toggle between display and change mode if the comparison is not locked by another user. You can view the comparison even if you are running a comparison in the background.</td>
</tr>
<tr>
<td>Refresh display</td>
<td>Comparison → Display Refresh / Refresh Display.</td>
<td>Refreshes display.</td>
</tr>
</tbody>
</table>

### Utilities and other functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>Utilities → Statistics / Statistics</td>
<td>A statistical overview of the differences object type lists</td>
</tr>
<tr>
<td>Application component</td>
<td>Utilities → Applic. comp / Applic. comp</td>
<td>The part of the application component hierarchy for the selected objects.</td>
</tr>
<tr>
<td>IMG environment</td>
<td>Goto → IMG environment / IMG environment</td>
<td>The IMG activities for the selected objects.</td>
</tr>
<tr>
<td>Legend</td>
<td>Utilities → Legend / Legend</td>
<td>The possible comparison and processing status values. The legend also contains a list of object types.</td>
</tr>
<tr>
<td>Filter</td>
<td>Utilities → Filter / Filter</td>
<td>Filter the object display by processing status, comparison status or object type.</td>
</tr>
</tbody>
</table>
Customizing Transfer Assistant

Use

This tool supports a fully checked transfer of client-specific Customizing changes

Fully checked Customizing changes transfer

To check the consistency of client-specific Customizing changes in the development system before transporting them from the quality assurance system into the production system, transport them into a temporary import client in the quality assurance system. Start the Customizing Transfer Assistant and logon to the import client. You can then make a completely checked transfer.

Integration

You can use the Customizing Transfer Assistant with other Cross-System Tools:

- Customizing Cross-System Viewer [Page 8]
  The following tool is in the Customizing Cross-System Viewer and the Customizing Transfer Assistant:
- Individual comparison [Page 34]
Prerequisites

Client settings
Before you can use the Customizing Transfer Assistant, you must create an import client in the quality assurance system.

Transport
The transport requests on which Customizing Transfer Assistant worklists are based, must be released and the transported into the import client.

Authorizations
You need the following authorizations for the Customizing Cross-System Viewer:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Logon client</th>
<th>Compare client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object processing</td>
<td>S_TABU_DIS (maintenance authorization)</td>
<td>S_TABU_DIS (display authorization)</td>
</tr>
<tr>
<td></td>
<td>S_TABU_RFC</td>
<td>S_TABU_RFC</td>
</tr>
<tr>
<td>Additional authorization for editing cross-client objects</td>
<td>S_TABU_CLI</td>
<td></td>
</tr>
</tbody>
</table>

To compare objects in a system before Release 4.5A, you need authorization S_TABU_CLI not S_TABU_RFC in the compare client.

The authorization S_TABU_RFC is in the authorization profiles S_A.SYSTEM, S_A.CUSTOMIZ and S_CUS_CMP.

Security
The compare client security level must be:

- 0 (unrestricted), or
- 1 (no overwriting)

You can set this in the client maintenance. See Maintain clients [Ext.].

You must logon to the compare client, even if it is in the same system as the logon client. You must create a Remote Function Call link. See Maintain remote destinations [Ext.].

SAP recommends that you create the RFC user in the comparison client as a CPI-C user with minimum authorization (e.g. S_CUS_CMP).

Features
For a set of selected Customizing objects, the Customizing Transfer Assistant generates worklists, which are based on transport requests and stored in the database.

You can make any number of comparisons with each worklist, in dialog or background.
Support Levels

The Customizing Transfer Assistant provides 3 levels of support for transferring Customizing changes.

Support Levels for Transfer of Customizing Changes

<table>
<thead>
<tr>
<th>Support levels</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>You can transfer most IMG activity Customizing changes automatically and fully checked, in dialog mode or in the background. Errors found are listed in a detailed error log, and can be easily identified and repaired.</td>
</tr>
<tr>
<td>Interactive</td>
<td>You can transfer individual objects interactively. The Customizing Transfer Assistant puts the compared data in the maintenance transaction screen.</td>
</tr>
<tr>
<td>Manual</td>
<td>All other objects (usually those not supported by extended table/view maintenance) must be transferred manually using the comparisons. The Customizing Transfer Assistant gives you direct access to the IMG environment, where you can call the maintenance transaction.</td>
</tr>
</tbody>
</table>

Status flags

Each worklist object has three status flags:

- **Comparison status**
  This status is assigned automatically. It shows the type of any differences found.

- **Processing status**
  Distinguishes between objects which have been processed and those which have not.
  Processing status can be assigned manually. The next comparison changes the processing status of objects with no differences from **Open** to **Finished**.

- **Transfer status**
  This status states whether an object can be copied automatically into the quality assurance client, and the transfer status.

The possible status values are:

**Status values**

<table>
<thead>
<tr>
<th>Status</th>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing status</td>
<td><img src="icon.png" alt="Open" /></td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td><img src="icon.png" alt="being processed" /></td>
<td>being processed</td>
</tr>
<tr>
<td></td>
<td><img src="icon.png" alt="Finished" /></td>
<td>Finished</td>
</tr>
</tbody>
</table>

April 2001
<table>
<thead>
<tr>
<th>Comparison status</th>
<th>Views/tables not yet compared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>View/table contents are identical</td>
</tr>
<tr>
<td></td>
<td>View/table contents are identical and there are structure differences</td>
</tr>
<tr>
<td></td>
<td>View/table contents are not identical</td>
</tr>
<tr>
<td></td>
<td>View/table contents are not identical and there are structure differences</td>
</tr>
<tr>
<td></td>
<td>Cannot be compared (see below)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer status</th>
<th>Cannot be copied automatically</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Can be copied automatically, not flagged</td>
</tr>
<tr>
<td></td>
<td>Flagged for autom. copy</td>
</tr>
<tr>
<td></td>
<td>Automatically copying</td>
</tr>
<tr>
<td></td>
<td>Copied</td>
</tr>
<tr>
<td></td>
<td>Not copied</td>
</tr>
<tr>
<td></td>
<td>Automatic copy cancelled</td>
</tr>
</tbody>
</table>

You can list these values in the worklist Legend.

Comparison may not be possible for the following reasons:
- Process cancelled
- Table/view does not exist in local or remote client
- Table/view is too wide
- User has no display authorization in local or remote client
- There is no extended table maintenance dialog in the remote client
- Communication error (RFC)
Customizing Cross-System Tools

Customizing Transfer Assistant

- Comparison system crash
- Key structure not convertible
- Field structure not convertible
- The table is a system table and excluded from comparison.

Utilities and other functions

Utilities and other functions:
- determine the overall worklist status
- determine the processing status of specified objects
- Select/deselect objects for comparison
  You can (de)select all objects, some objects or a block of objects.
- display transport request copy log
- Display the IMG activities for specified objects
- Display difference and object type statistics
- Display application components in the application component hierarchy
- Display comparison status, transfer status processing status and object type legend
- Filter the display by processing status, comparison status and object type criteria

General

Comparisons are made at object level to improve their accuracy.

Activities

To check the consistency of client-dependent Customizing changes in the development system before transporting them from the quality assurance system into the production system:

1. Transport objects from the development system into the import client of the quality assurance system.
2. Start the Customizing Transfer Assistant in the quality test client of the quality assurance system.
3. Logon to the import client of the quality assurance system.
4. Create a worklist for each transport request.
5. Perform the transfer.
Create Worklist

Prerequisites
You want to make a new worklist for a selected group of Customizing objects.

Procedure
1. Choose Tools → Customizing objects → Transfer Assistant in Edit Customizing Project or Customizing Project Management.
2. Enter a transport request in the Copy new worklist for Customizing group box, or choose one from the possible entries help.
3. Choose Create.

Result
The worklist created is a completely compared list of objects.
The processing, comparison and transfer statuses for each object are displayed in this list.
Process Worklist

Prerequisites
You want to process an existing worklist.

Procedure
1. Choose Tools → Customizing objects → Transfer Assistant in Edit Customizing Project or Customizing Project Management.
2. Enter a worklist request in the Copy existing worklist for Customizing group box, or choose one from the possible entries help. The possible entries help lists worklists by:
   - User and/or client
   - Comparison system and/or comparison client
   - Processing status
   - Last change
3. Choose Edit.
   To see a worklist without changing it, choose Display.

Result
The worklist created is a completely compared list of objects. The processing, comparison and transfer statuses for each object are displayed in this list.
Delete Worklist

Prerequisites
You want to delete an existing worklist.

Procedure
1. Choose Tools → Customizing objects → Transfer Assistant in Edit Customizing Project or Customizing Project Management.
2. Enter the worklist to be deleted in the Copy existing worklist for Customizing group box or choose one from the possible entries help.
3. Choose Delete.
   A deletion confirmation dialog box appears.
4. Choose Yes to confirm the deletion.

Result
The worklist is deleted.
Display Worklist Overviews

Prerequisites
You want to display a list of existing worklists by specified criteria.

Procedure
1. Choose Tools → Customizing objects → Transfer Assistant in Edit Customizing Project or Customizing Project Management.
2. Choose Worklist → Overview.
3. Enter your selection criteria.
   Possible criteria are user, logon client, comparison system, comparison client, processing status and last change.
4. Choose Continue.
   A list of existing worklists is displayed.
   The information displayed includes worklist number, processing status, user name, logon client, comparison system, comparison client, and description

Result
The result is a list of existing worklists by your criteria. Select a worklist for further information.
Transfer Assistant Functions

Use
You can perform various functions on the worklists created with the Transfer Assistant in several modes.

- **Processing functions**
  - Comparisons and adjustments.

- **Worklist functions**
  - Manage worklists.

- **Utilities and other functions**

Procedure
Go to the following functions from the Customizing Transfer Assistant change mode.

**Processing functions**

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual comparison</td>
<td><em>Edit</em> → <em>Compare</em> / <em>Compare</em></td>
<td>Comparison of individual object</td>
</tr>
<tr>
<td>Interactive copy</td>
<td><em>Edit</em> → <em>Copy</em> → <em>Interactive</em></td>
<td>Adjust the differences between clients</td>
</tr>
<tr>
<td>Automatic copy in dialog</td>
<td><em>Edit</em> → <em>Copy</em> → <em>Automatic Direct</em> or <em>Automatic Copy direct</em> pushbutton</td>
<td>This function performs an automatic import in dialog</td>
</tr>
<tr>
<td>Automatic copy in background</td>
<td><em>Edit</em> → <em>Copy</em> → <em>Autom. background</em></td>
<td>This function performs an automatic import in the background</td>
</tr>
<tr>
<td>Refresh status</td>
<td><em>Edit</em> → <em>Refresh status</em> or the <em>Refresh Status</em> pushbutton</td>
<td>This function performs another comparison in dialog This refreshes the processing status. If no differences were found, the processing status of objects which were Open (็ด) is set to Finished ().</td>
</tr>
<tr>
<td>Refresh status in background</td>
<td><em>Edit</em> → <em>Refresh status in background</em></td>
<td>This function performs another comparison in the background</td>
</tr>
<tr>
<td>Set processing status</td>
<td><em>Edit</em> → <em>Set processing status</em></td>
<td>Sets the processing status of the selected objects</td>
</tr>
</tbody>
</table>
Transfer Assistant Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select</td>
<td>Edit → Select</td>
<td>Select/Deselect objects for comparison. You can (de)select all objects, some objects or a block of objects.</td>
</tr>
<tr>
<td></td>
<td>followed by the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>desired function</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose from:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select all</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deselect all</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deselect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select area</td>
<td></td>
</tr>
</tbody>
</table>

Worklist functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set total status</td>
<td>Worklist → Total</td>
<td>Sets the total status of the worklist</td>
</tr>
<tr>
<td></td>
<td>status</td>
<td></td>
</tr>
<tr>
<td>Toggle between change</td>
<td>Worklist → Display</td>
<td>You can toggle between display and change mode if the worklist is not locked by another user. You can view the worklist even if you</td>
</tr>
<tr>
<td>and display mode</td>
<td>← Change</td>
<td>are running a comparison in the background.</td>
</tr>
<tr>
<td></td>
<td>/ Display ← Change</td>
<td></td>
</tr>
<tr>
<td>Refresh display</td>
<td>Worklist → Display</td>
<td>Refreshes display</td>
</tr>
<tr>
<td></td>
<td>Refresh / Refresh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Display</td>
<td></td>
</tr>
</tbody>
</table>

Utilities and other functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic copy log</td>
<td>Goto → Auto.copy log</td>
<td>Displays the automatic copy log for the selected transport requests. The automatic copy log contains the result of the automatic copy.</td>
</tr>
<tr>
<td>Statistics</td>
<td>Utilities → Statistics</td>
<td>A statistical overview of the differences object type lists</td>
</tr>
<tr>
<td>Application component</td>
<td>Utilities → Application comp.</td>
<td>The part of the application component hierarchy for the selected objects</td>
</tr>
<tr>
<td>IMG environment</td>
<td>Goto → IMG environment</td>
<td>The IMG activities for the selected objects</td>
</tr>
<tr>
<td>Legend</td>
<td>Utilities → Legend</td>
<td>The possible comparison processing and copy status values. The legend also contains a list of object types.</td>
</tr>
<tr>
<td></td>
<td>/ Legend</td>
<td></td>
</tr>
</tbody>
</table>
Filter | Utilities → Filter | Filter the object display by processing status, comparison status or object type.

The Customizing Transfer Assistant has no sort function because the sort sequence is already optimized for processing.
Individual comparison

Use
Compares Customizing tables and views in two logical systems (clients in either the same SAP System or different ones).
Start the function in the logon client (client of the system in which you are logged on) and then logon in the compare client (client to be compared).

You can compare the entries in client-specific tables or views in different clients in the same system or in different systems.
You can only compare cross-client tables or views in different systems.

Integration
You can make individual comparisons:
• using other Cross-System tools
• independently

Integration with other Cross-System tools
The individual comparison is in the following tools:
• Customizing Cross-System Viewer [Page 8]
• Customizing Transfer Assistant [Page 22]
• Extended table maintenance
  You usually start the individual comparison from the extended table maintenance. You can compare and adjust objects in change mode (in display mode you can only compare). You can select entries and copy or delete their contents in your current table. Copied or deleted entries are returned to the extended table maintenance.

Independent individual comparison
The individual comparison can independently:
• compare tables which are not maintained in the extended table maintenance or maintenance views
  You can only compare because only the extended table maintenance guarantees consistency, performs additional logical checks and records changes (depending on system settings).
• compare non-Customizing tables.
  If the table structure and size allow.

Prerequisites
You must logon to the comparison client to perform comparisons. You must create a Remote Function Call link.
Individual comparison

See Maintain remote destinations [Ext.].

Authorizations

Individual comparison requires the following authorizations:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Logon client</th>
<th>Remote client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object comparison</td>
<td>S_TABU_DIS</td>
<td>S_TABU_DIS</td>
</tr>
<tr>
<td></td>
<td>(display authorization)</td>
<td>(display authorization)</td>
</tr>
<tr>
<td></td>
<td>S_TABU_RFC</td>
<td>S_TABU_RFC</td>
</tr>
</tbody>
</table>

To compare objects in a system before Release 4.5A, you need authorization S_TABU_CLI not S_TABU_RFC in the compare client.

The authorization S_TABU_RFC is in the authorization profiles S_A.SYSTEM, S_A.CUSTOMIZ and S_CUS_CMP.

Security

The compare client security level must be:

- 0 (unrestricted), or
- 1 (no overwriting)

You can set this in the client maintenance. See Maintain clients [Ext.].

You must logon to the compare client, even if it is in the same system as the logon client. You must create a Remote Function Call link. See Maintain remote destinations [Ext.].

Features

Selection criteria

When you make individual comparisons of Customizing objects you can:

- specify other selection conditions
- display differences only
- make the comparison in the background
- restrict the fields to be compared

List format

The comparison lists created by the individual comparison are displayed in a compact table format which you can adjust to your requirements. You can:

- define your own list format

  You can change various settings, e.g. list width and maximum field length, to optimize your list. You can choose the setting optimal field length or specify the length of each field (column) individually. You can hide columns which you do not need for your comparison.
**Individual comparison**

- filter the display
  - You can display local and remote view entries consecutively to show differences.
  - You can display differences only.
  - You can specify the object types to be displayed.

**Utilities**

There are utilities to:

- display difference and object type statistics
- display an entry type legend
- display a detailed view for each entry
- sort the list in ascending or descending order of each field (column).
Compare Individual Objects

Prerequisites
You want to compare the contents of a table or maintenance view in two clients, in either the same system or two different systems.

Procedure
1. Choose Tools → Customizing objects → Object comparison in Edit Customizing Project or Customizing Project Management.
   
   or
   
   Tools → Administration → Administration → Client administration → Customizing objects → Object comparison in the SAP menu.
2. Enter the table or view which you want to compare.
3. Specify an R/3 connection.
4. Enter other selection criteria for the comparison:
   - Enter selection conditions
   - Only display differences
   - In background
     The comparison result is sent to the spooler.
   - Restrict fields to be compared
5. Choose Comparison → Comparison.
6. Logon to the system in which the objects are to be compared.
   If you have already entered a user and password in the target system, the logon is automatic.

Result
The result of the comparison is a sorted list of the entries on the tables and views in both clients.

- If an entry exists in both views and is different, the two entries are displayed consecutively to show the differences.

- The different entry types are color-coded in the lists. A flag in the first column indicates whether it is a logon or comparison client entry. The colors and flags are explained in the legend.
Using Single Object Comparison Functions

Use

The lists generated for a table or view with Single Object Comparison allow you to compare the entries in two different clients, either in the same system or in different systems.

There are numerous functions available for processing these lists.

Procedure

The functions for processing comparison lists are described in the following table:

<table>
<thead>
<tr>
<th>Function</th>
<th>Menu path/Pushbutton</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Select              | Edit → Select followed by the desired function  
                      Choose from:  
                      Select all  
                      Deselect all  
                      Select block | Select/Deselect objects for comparison. You can select/deselect all objects, or select a block of objects. |
| Sort                | Edit → Sort followed by Ascending order or Descending order. 
                      Alternatively, choose the appropriate pushbutton | By positioning the cursor on the desired field (column), you can use this function to sort the list in ascending or descending order. |
| Detail view         | Goto → Detailed view or choose Detailed view | You use this function to display a detailed view for each entry in the list. If you select more than one entry, you can scroll between the detailed views for each. |
| Maintenance view    | Goto → Maintenance view | You use this function to display the extended maintenance view for a selected object. It is only available when the object comparison is called directly. |
| Structure comparison| Goto → Structure comparison | You use this function to check that the structure of the object for comparison is compatible. If you are comparing objects in two systems with different releases, the structure may vary. |
| List settings       | Settings → List setting or choose List settings | You use this function to change the list format. |
### Using Single Object Comparison Functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter</td>
<td>Settings → Change filter or choose Change filter</td>
</tr>
<tr>
<td></td>
<td>You use this function to filter the display.</td>
</tr>
<tr>
<td>Statistics</td>
<td>Utilities → Statistics / Statistics</td>
</tr>
<tr>
<td></td>
<td>You use this function to get a statistical overview of the comparison list.</td>
</tr>
<tr>
<td>Legend</td>
<td>Utilities → Legend / Legend</td>
</tr>
<tr>
<td></td>
<td>You use this function to display the meaning of the colors and the identifier used for each entry.</td>
</tr>
</tbody>
</table>