BC - Namespaces and Naming Conventions (BC-CTS-NAM)

Release 4.6C

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Namespaces and Naming Conventions (BC-CTS-NAM)

SAP has reserved name ranges for customer objects and SAP objects. Use these customer name ranges to make sure that your objects are not overwritten by SAP objects during the import of corrections or an upgrade.

This documentation lists the customer name ranges for the different system objects.

> Only use the customer name ranges. If you do not keep to the name ranges for customer objects you may lose your development objects.

> SAP delivers a few system objects with names that fall within the customer name range. These objects already existed when the customer name range was extended from YY*/ZZ* to Y*/Z*. These objects are listed in table TDKZ.

You can reserve and use exclusive namespaces based on the SAP standard for central group development or for the development of your own products (see).

Customer Name Ranges

This section contains an overview table of customer name ranges. This table shows:

- the name lengths
- a description of the standard naming conventions

The initial characters "Y" and "Z" are reserved for customers. The following recommendation applies to companies that develop at several locations within the group:

- Z for a branch office
- Y for the head office

If no group exists and you do not need to distinguish between branch and head office developments, you can use both reserved characters without restriction.

> You can only use special characters in names if these are explicitly allowed.

Object	Length	Customer name range
Application log		
Object	20	Y* Z*
Subobject	20	Y* Z*
Authorization object	10	Y* Z*
Authorization object class	4	Y* Z*
Authorization object group	30	Y* Z*
Authorization/authorization profile	12	No "_" as the second character
CATT procedure	30	Y* Z*
Change document object	10	Y* Z*
Class	30	Y* Z* (Underscore allowed)
Code page	4	9000-9999
Context	20	Y* Z* (Underscore allowed)
Data element	30	Y* Z*
Development class	30	Y* Z*
Dialog module	30	Y* Z* RP_9* RH_INFOTYP_P9*

Documentation modules		
General text (TX)	28	Y* Z*
Authorization object	10	Like object name
Authorization profile	12	Like object name
Document: Description of a test run	20	Y* Z*
Main chapter of a structure (BOOK)	20	Y* Z*
Chapter of the Implementation Guide	20	Y* Z*
Chapter of a structure (CHAP)	20	Y* Z*
Note on a chapter of a structure (NOTE)	26	Y* Z*
Release Note	20	Y* Z*
Text in dialog	28	Y* Z*
Domain	30	Y* Z*
EDM		
Data model	10	Y* Z*
Entity	10	Y* Z*
Enhancement	8	Y* Z*
Enhancement project	8	*
Function Builder		
Function module	30	Y_* Z_*
Function group	26	Y* Z*
User exit function module	26	XZ*
User exit function module (customer-specific)	26	*
IDOC development		
Segment type	27	Z1*
Segment name	30	Z2*
Basis IDOC type	30	Y* Z*
Enhancement type	30	*
Logical message	30	*
Info type number	4	9000 - 9999
Interface	30	Y* Z* (Underscore allowed)
LIS		
Event	2	Y* Z*
Unit	2	Y* Z*

Customer Name Ranges

Lock object	16	EY* EZ*
Logical database	20	Y* Z*
Maintenance and transport object	31	Y* Z*
Menu	20	Y* Z* +*
Message		
Message ID	20	Y* Z*
Message number	3	900 - 999
Module pool		
Module pool for dialog	30	SAPDY* SAPDZ*
INCLUDES	30	DY* DZ*
Module pool for screens	30	SAPMY* SAPMZ*
INCLUDES	30	MY* MZ*
Module pool for info types	30	MP9*
INCLUDES	30	MP9*
Module pool for subroutines	30	SAPFY* SAPFZ*
INCLUDES	30	FY* FZ*
Module pool for update programs	30	SAPUY* SAPUZ*
INCLUDES	30	UY* UZ*
Number range document object	10	Y* Z*
Pool name/cluster name	10	Y* Z*
Printer macro	-	Y* Z* 9*
R/3 Analyzer: Identifier	20	Y* Z*
Relation ID	2	Y* Z*
Report	30	Y* Z*
Report category	4	Y* Z*
Report variant		
Transportable, global	14	X* CUS&*
Transportable, local	14	Y*
Not transportable	14	Z*
Report Writer		
Report	8	First character not numeric
Report group	4	First character not numeric
Library	3	First character not numeric
Standard layout	7	First character not numeric

SAPscript		
Form	16	Y* Z*
Standard text ID	4	Y* Z*
Standard text name	32	Y* Z*
Style	8	Y* Z*
Screen	4	9000 - 9999
		If the screen does not belong to a module pool in the customer name range.
Search helps	30	Y* Z*
Set	12	First character not numeric
SPA/GPA parameter	20	Y* Z*
Spool		
Layout type	16	Y* Z*
Font group	8	Y* Z*
Device type	8	Y* Z*
Page format	8	Y* Z*
System barcode	8	Y* Z*
Standard role	8	9*
Standard task	8	9*
SYSLOG message ID	2	Y* Z*
Table		
Pooled tables and cluster tables	10	Y* Z* T9* P9* PA9* PB9* PS9* PT9* HRT9* HRP9* HRI9*
Transparent tables		
Table field	16	YY* ZZ* (in the append structure, if possible)
	16	If included using the append structure: YY* ZZ*
Transaction code	20	Y* Z* +*
Types in the ABAP Dictionary		(Underscore allowed)
Data element	30	Y* Z*
Structure	30	Y* Z*
Table type	30	Y* Z*

Customer Name Ranges

View		
Database view, projection view, maintenance view	16	Y* Z*
Help view	16	H_Y* H_Z*
View cluster	16	Y* Z*
View maintenance data		
View content	-	reserved in TRESC
Table content	-	reserved in TRESC
Workflow object type	10	Y* Z*

Development in Reserved Namespaces

All SAP customers can use the customer name range [Page 6] for their development work. All SAP customers who coordinate their development work centrally and only develop for their use have enough room in the customer name range for numerous tools and enhancements (using naming conventions [Page 20], if necessary).

However, if a company also has decentralized local development projects alongside the central development group it becomes more difficult to agree on and monitor naming conventions for the distribution of central development work to local offices.

When SAP partner consultants and SAP Solution Providers develop customer-specific solutions, they find it increasingly difficult to use naming conventions to avoid naming conflicts at the customer end.

To solve this problem, SAP offers its customers and partners exclusive namespaces. These are used to develop enhancements and solutions independently on the basis of SAP standard applications, and then to deliver this development work without risking naming conflicts: SAP had the following target groups in mind during the development of these namespaces:

- Customers with their own large development projects; particularly functional enhancements that are developed centrally and then delivered to the whole group, or additional industry-specific functions.

- the many SAP partners who enhance SAP applications and functions with their add-on developments

The namespaces are **not** intended for:

- smaller tool and test development work

  All users of the ABAP Workbench can use the general customer name range for small and local development projects.

- Individual projects

  A namespace offers enough space for developing several different products or components on the basis of the SAP standard.

  You do not need to reserve a separate namespace for each project. Organize your projects by assigning development objects to development classes.

  To avoid naming conflicts, even when projects are developed at different locations, you can define naming conventions [Page 20] and distribute them across all development systems.

Reservation of Namespaces

Reservation procedure

Any customer or partner with a development system which has Release 4.0A or later can use SAPNet - R/3 Frontend to apply for a reservation for their own development namespace. You need to give the following information:

- Namespace name (recognizably connected to your company)

- Purpose of the namespace (for example, central group development, or the name of a planned specific enhancement to SAP)

- Installation numbers of the SAP Systems in which you want to develop

Available Names

Names for namespaces are selected freely from the pool of names that have not yet been reserved and should have a recognizable reference to the company making the reservation. The names must have at least 5 characters and can be up to 10 characters long. The first and last character is a slash "/". Names beginning with "/SAP" or "/n" (n = digit) are not available. Only individual names are given.

- Development of a specific SAP solution by the system reseller ABCD

    Reserved namespace: "/ABCD/"

- SAP enhancements by SAP customer ABC123

    Reserved namespace: "/ABC123/"

Licenses for Reserved Namespaces

The use of namespaces is protected by a license check in the SAP System. When you reserve a namespace, you are given the authorization to obtain namespace license keys from SAP in SAPNet - R/3 Frontend for installations of your customer number (and optionally also for installations of other customer numbers organizationally assigned to you). These license keys allow you to release the namespace [Page 13] for use.

Releasing Namespaces

You assign objects in the ABAP Workbench to a namespace by adding the reserved namespace ID as a prefix to the object name. To make sure that a namespace can be used exclusively by its owner, the namespace ID can only be used as a prefix in the object name if the namespace is maintained in the namespace table in the R/3 System, and has a valid development license. External systems (for example, customer systems of the SAP partner to whom the namespace belongs) into which objects with a prefix were imported, only allow changes to namespace objects if a repair license was entered. This is a repair license that the namespace owner has received from SAP and can pass on to customers, if necessary.

See also:

Setting Up a Namespace for Development Work [Page 14]

Releasing a Namespace for Repairs [Page 17]

Setting Up a Namespace for Development

Use

As soon as you have reserved the namespace at SAP and obtained the namespace license key for your SAP Systems you can enter the namespace. When you do this, the validity of the license is checked.

Prerequisites

Use the maintenance view V_TRNSPACE to maintain the namespaces. To do this, you need the authorization S_CTS_ADMIN.

Procedure

To maintain the namespaces, proceed as follows:

1. Go to the Transport Organizer (Transaction SE09).

2. Choose *Goto → Transport Organizer tools*.

3. Go to *Administration* and choose *Display/Change Namespaces*.

   The screen *Display View "Repository Namespaces": Overview* appears. Only those namespaces relevant to you appear in this maintenance view.

4. To maintain the namespaces, choose *Table view → Display → Change*.

5. Confirm the information box.

6. To enter new namespaces, choose *New entries*.

   Detail maintenance appears.

7. Fill out the fields as follows. Save your entries each time.

   – *Namespace*

   Enter the namespace ID that you have reserved. It begins and ends with a slash ("/") and has a maximum length of 10 characters.

   – *Namespace role*

   Keep the default "P" if you want to develop in this namespace. The role of the namespace can have one of two values:

   - "P" (producer)

     Originals are created when you create objects. Choose this setting in the development system of the namespace owner to enable development work if there is a valid development license key.

   - "C" (recipient)

     Choose this setting if the namespace (namespace entry and the objects in the namespace) have been imported into this system. You can use the functions installed with the import. You cannot develop in this namespace in the SAP System. You can make repairs if you have a valid repair license key [Page 17] . When you create objects, the original system is set to "SAP".

−   *Develop.license*

Enter the 20-character development license key given to you by SAP for your development system. You cannot transfer development license keys to other SAP Systems. Instead you need a new key for each installation number.

−   *Repair license*

If you enter the 20-character repair license key given to you by SAP for your namespace in your development system, then it is imported into all subsequent systems, unlike the development license key.

In subsequent systems you can allow repairs by setting the namespace role to "C".

Repair license keys are not installation-specific. The namespace owner can deliver the keys or pass them on for solving errors if there are any serious problems.

If you do not want your repair license key to be delivered to a third-party, delete the repair license key before the delivery export.

−   *SSCR popup*

This flag is only relevant to SAP namespaces (repairs require an object license key). You cannot set this flag in a customer system.

−   *SAP standard*

This flag is only relevant to SAP namespaces (standard SAP applications handle some objects in a standard SAP namespace differently to objects in other namespaces). You cannot set this flag in a customer system.

−   *Only gen. objs*

This flag is only relevant to SAP namespaces (namespace reserved for applications that generate objects). You cannot set this flag in a customer system.

−   *Last changed by*

You cannot fill out this field yourself. It is automatically filled with the name of the user who is making the license entry.

−   *Date*

You cannot fill out this field yourself. It is automatically filled with date on which the namespace is entered.

−   *Short text*

Enter a short text for the namespace. You can include the following information:

•   Purpose of the namespace

•   the product developed on the basis of SAP applications

•   the SAP components developed in this namespace

−   *Owner*

Enter the namespace owner registered by SAP.

Setting Up a Namespace for Development

Result

Your changes are recorded in a change request. When you transport this request into all subsequent systems, the namespace will also be transported. If there is a repair license, this is also transported. However, the development license is not transported.

Releasing a Namespace for Repairs

Use

You have installed another namespace owner's namespace in your SAP System (you have imported the namespace entry and the namespace objects). When you used the new functions you encountered a problem that you need to solve with a repair.

When you attempt to repair the faulty object you are told that your repair license key is missing or that it does not exist. You can request the repair license key that you need from the namespace owner and then enter it in the namespace table.

Prerequisites

Use the maintenance view V_TRNSPACE to maintain the namespaces. To do this you need administration authorization for the Transport Organizer (S_CTS_ADMIN).

Procedure

To enter the repair license key, proceed as follows:

1. Go to the Transport Organizer (Transaction SE09).

2. Choose *Goto → Transport Organizer tools*.

3. Expand the *Administration* node.

4. Choose *Display/Change Namespaces*.

   The screen *Display View "Repository Namespaces": Overview* appears. Only those namespaces relevant to you appear in this maintenance view.

5. To enter the repair license key, choose *Table view → Display → Change*.

6. Confirm the information box.

7. Position the cursor on the appropriate namespace.

8. Choose *Goto → Details*.

   Detail maintenance appears.

9. Enter data in the fields as follows:

   – *Repair license*

     Enter the 20-character repair license key given to you by the namespace owner.

   – *Last changed by*

     You cannot fill out this field yourself. It is automatically filled with the name of the user who is making the license entry.

   – *Date*

     You cannot fill out this field yourself. It is automatically filled with date on which the namespace is entered.

   Leave all the other fields unchanged.

10. Save your entries.

Releasing a Namespace for Repairs

Development in Namespaces

Note the following points when you develop in reserved namespaces:

- System change option

    To be able to change objects in namespaces you must set the system change option [Ext.] of your system to *modifiable*.

- Development Classes

    Objects in your namespace must be assigned to a development class that begins with the namespace ID. Before you begin development work, create development classes [Ext.] with namespace prefixes for your projects.

    You can also assign local objects and test objects in your namespace to local ($*) and test (T*) development classes. Later on you can reassign them to one of the transportable development classes in your namespace, if necessary.

- Objects

    You assign objects to a namespace by placing the reserved namespace ID in front of each object name as a prefix.

    For more information, see Note 104010 in SAPNet - R/3 Frontend.

Definition of Naming Conventions

As long as you carry out your development work in an SAP System, the object directory of the SAP System makes sure that each object name can only be used once for a particular object type.

Once you distribute your development work to multiple SAP Systems, however, there is a risk that different objects with the same object type will be created in different SAP Systems under the same name.

It is not until these objects are transported to a common consolidation system and your development work is tested, that errors resulting from this naming conflict occur.

⚠️

If you import two different objects into an SAP System under the same name, the object imported first is overwritten by the second object.

If you try to import an object into an SAP System in which you have already created another object under the same name, this object is not imported (originals are not overwritten). You find an appropriate error message in the transport log.

Because naming conflicts may not be noticed until your development work is transported, you have to resolve them at a fairly late stage by renaming objects (including all references to these objects, such as external performs, includes). To prevent this happening, you can define naming conventions, which can be stored in your development systems and monitored by the Transport Organizer. In this way, you can avoid the same names being used in a development system landscape from the very start.

Protection of Naming Conventions in the ABAP Workbench

The protection of naming conventions in the ABAP Workbench is based on the assignment of a convention to a development class.

If a developer wants to assign an object he or she has created with this naming convention to a development class other than the one you have specified, then the Transport Organizer prevents him or her from creating this object.

The start of an object's name defines which naming convention it belongs to in the ABAP Workbench. There are no other conventions.

> You are developing in the SAP System DA1 for a project within the development class ZPROJECT1. You have chosen the naming convention ZPROJ1 for this project and maintained it in all your development systems. A developer in the SAP System DB2, working on another project within another development class, now tries to create a program with the name ZPROJ1PROGRAM. The developer is told that this name is reserved for the development class ZPROJECT1. The developer is prevented from assigning the object to another development class. The developer has to choose a different name to assign the object to his development class. This avoids naming conflicts right from the start when objects are created.

For complete naming protection, you must reserve the naming conventions in **all** of your development systems and enter them for **all** object types you require as part of your project.

- You can reserve naming conventions for development namespaces (with reserved namespace prefix) for all object types (compliant with namespaces) using the new maintenance view CTSRESNAME.

- You must use the maintenance view V_TRESN to reserve naming conventions for the general customer name range Y*/Z* individually for each object type.

Maintaining Naming Conventions

As well as the existing view maintenance with V_TRESN, you can also use the simplified CTSRESNAME view maintenance.

The SAP System now offers you view maintenance with CTSRESNAME as a default- This lets you maintain naming conventions for all object types [Page 23] for development namespaces in the ABAP Workbench. You do not need special knowledge about the transport object types (PGMID, OBJECT) for this maintenance. Cross-object type reservations make it easier to organize development work distributed across multiple SAP Systems within a namespace, since only one entry is made and distributed for each project (development class).

However, due to the required name lengths, the check on cross-object type reservations can only be made for namespace-compliant object types. This means that you can only use the new view maintenance for development namespaces (with reserved namespace prefix). You can only use object type-specific view maintenance [Page 24] to reserve naming conventions for the general customer name range Y*/Z*.

Reservations in Development Namespaces

To maintain naming conventions in the ABAP Workbench, you need the administration authorization in the Transport Organizer (S_CTS_ADMIN). To maintain the views, first go to the Transport Organizer tools [Ext.]. Go to *Administration* and choose *Display/Change Namespaces*.

To make a new reservation, switch to change mode and make entries in the following fields:

- *Naming convention*

    Enter the start of your chosen name to specify the naming convention for your objects (and protect it for your development class). This name must contain the namespace prefix of the namespace reserved for your development work. The naming convention you enter can have a maximum of 16 characters. This is because the databases supported by SAP do not permit database objects created in the SAP System to have names longer than 16 characters.

- *Development class*

    Enter the development class of the project whose naming convention you want to protect. Remember that the development class you enter must have the same namespace prefix as the naming convention you have chosen.

- *Short text*

    Enter a short description of the naming convention. This could be the name of the project, or the application for which you made the reservation.

The SAP System automatically enters and saves your user name and today's date. When you save your changes, the Change and Transport System records them in a request.

When you have completed the reservation, distribute your changes to all your development systems. You can do this in the following ways:

- manually
- by transporting the request in which your changes were recorded

Reservations in the General Customer Name Range

Maintaining naming conventions for the general customer name range Y*/Z* is a complicated and lengthy procedure which requires special knowledge of the different transport object types. To avoid this, we recommend that you reserve your own development namespace. You can then work on your development projects in your own namespace.

To maintain naming conventions for the general customer name range Y*/Z*, you need the administration authorization in the Transport Organizer (S_CTS_ADMIN). To maintain the views for development namespaces, first go to the Transport Organizer tools [Ext.] (Transaction SE03). Go to *Administration* and choose *Display/Change Namespaces*. Then choose *Object type-specific maintenance (experts only)*. The view maintenance screen for the general customer name range appears.

To make a new reservation, switch to change mode. Choose *New entries* and enter data in the fields as follows:

- *Program ID, Object type*

    Both these fields together form a unique object type ID [Page 25] in the Change and Transport System. When you maintain naming conventions, only use the values **R3TR** and **R3OB** for the program ID.

    The corresponding values that you can enter for the object type are listed in the combined F4 help for both fields.

- *Reserved name range*

    Enter the start of your chosen name to specify the naming convention for all your objects (and protect it for your development class).

- *Development class*

    Enter the development class of the project whose naming convention you want to protect. You cannot make a reservation for multiple development classes (for example, a generic reservation for development classes with the same start to their names).

- *Reservation type*

    Keep the default value **D**. This stands for a reservation for development classes. There is another reservation type, **F**, for internal system generation functions, however this type is only used by SAP.

- *Person responsible*

    Enter the name of the project team leader who is responsible for the reservation of the name range.

- *Change date*

    The system enters today's date automatically.

- *Short description*

    Enter a short description of the naming convention. This could be the name of the project, or the application for which you made the reservation.

For more information, see Namespace Information System [Page 26].

Finding Out the Object Type ID

You can find the most important object type IDs for reserving naming conventions for your development class as follows:

1. Use the ABAP Workbench to create examples of object types (programs, tables, transactions,...).

2. Go to the object list of your request.

3. Position the cursor on an object in the object list.

4. Choose *Utilities → Display object directory entry*.

Result

The dialog box *Change Object Directory Entry* appears. You can find the object type ID that you need for maintaining the naming convention in the field *Object*.

Namespace Information System

To access the Namespace Information System, call the Transport Organizer tools [Ext.] (Transaction SE03 → *Objects*).

You can find information on:

- Namespaces

    You can select and display the namespaces available to a development team:

    You can display a list of namespaces, selected by whether they are modifiable, their role and their license.

    You can choose a namespace from this list. You then see the short text, owner and attributes of this namespace. You can also display a record of changes (requests/tasks) to the namespace.

- Naming conventions

    You can display the naming conventions defined for a development project and search for free name ranges for defining new naming conventions.

    − You can display by development class, object type and naming convention for an object name.

    − Display an object list for a specified naming convention: Use this function to search for free name ranges for new reservations locally and in remote systems. You can exclude the development class for which you have made or want to make a reservation.

    If you want to display naming conventions that apply to all object types, or search for free name ranges for reservations that apply to all object types, enter the object type `ALLE`.

- Object names

    − You can display the name range and the reserved naming convention for an object name

    − You can display the attributes of an object (object directory entry, lock entry, and so on).

    − You can display the object by branching to the object editor.