

SM30 Record Level Authorizations

Please call transaction /TFTO/SM30_SETTINGS:



Double click on SM30 Record Level Authoriz. and the following selection screen shows up:

C Authorizations Edit Goto Inf	fo System Help		
	1 🖯 I 😋 😧 I 🗅 Hi Ha	I 🖏 🖞 🖧 🎗 I 🔀 🗷 I 🕲 🛛	
top flow SM30 Reco	ord Level Authoriza	tions - Version 1.0	В
			top <i>flow</i>
Selection			
Authorization object	0	to	•
Authorization field		to	
Table name		to	<u> </u>
Field name		to	
Activity			
	Display	Maintain 🖶	Transport
			V///.

Authorized are the users which have one of the following roles assigned to them:

/TFTO/SM30_GLOB_MAINT	SM30 Global Settings	Maintenance
/TFTO/SM30_GLOB_DISPL	SM30 Global Settings	Display
/TFTO/SM30_AUTH_MAINT	SM30 Record Level Authorizations	Maintenance
/TFTO/SM30_AUTH_DISPL	SM30 Record Level Authorizations	Display

Instead of the roles, authorization objects /TFTO/S3GL or /TFTO/S3AU may be assigned (please refer to SM30 Roles and Authorization Objects).

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After pressing the <u>Maintain</u> button for the first time the following dialog window pops up :

ē	ATTENTION	\mathbf{X}
	No authorizations have been defined up to now. There exists a series of standard entries which can be used as a reference.	
?	Should these standard entries be copied?	
	Yes No X Cancel	

If desired it is possible to restrict the entries to be copied:

C SM30 Standard Entries		
Auth.Object(s) Auth.Field(s)	•	फे फे
Auth.Table(s)		\$
Table Held(s)		
✓ ×		

It is recommended to copy the reference entries in order to have a starting point for the ensuing definitions. The entries are copied with state ", inactive" – in this way they do not interfere with any possible authorization checks.

Should you ignore this offer for the moment, you can still copy the reference entries at a later time. The corresponding function can be found in the menu *Authorizations*:

Authorizations	Edit	Goto	System	Help
Select all row	I	F7		
Select <u>b</u> lock	I	F9		
Deselect all n	Ctrl+I	F7		
Sort ascendi	Ctrl+I	F5		
Sort descen		Ctrl+F6		
Display <->	ge	Ctri n Fi	12	
Merge stand	ard au	Ithoriza	tions	
Print	Ctrl	P		
E <u>x</u> it			Shift+I	F3



In case the reference entries have been copied, the maintenance screen has the following appearance:

¢,	Authorizations	Edit Goto Sy	/stem Help					_ 0 ×	SAP
0	8		1 📙 😋 😧 🚱 昌	1 🕃 🗘 🗗 🥵 1 🖏 🕅	💥 🛃] 🔞 🖪			
Ľ	Define SM	30 Autho	rizations at Re	cord Level					
67		87.	🗴 📔 New Entries						
	Auth.Object	Auth.Field	Table name	Field name	active	changed on	at	by	
	A_PERI_BUK	BUKRS	ACCRCUST	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	AAACC_OBJ	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ACCRAC	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ACCRCUST	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ACE_SOP_HRFI	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ACE_SOP_INDTYPE	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ACE_SOP_SCRT_FRF	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	ANLBZW	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	AT10B	BUKRS		06.04.2016	16:08:08	TOPFLOW	
	F_BKPF_BUK	BUKRS	AT200	BUKRS		06.04.2016	16:08:08	TOPFLOW	
		E	Position	Entry 1 of 228	2				
		<u>\$-</u>	r osidott		5				
									4 ///

The screen is similar to a standard maintenance dialog – taking a closer look you detect functions (for example sort) which are not available in the standard.

To begin with a quick look at the involved columns:

Column	Description		
Auth.Object	Authoritazion object – for example <i>V_VBAK_VKO</i>		
Auth.Field	Authoritazion field – for example VKORG		
Table name	Database table – transparent / Pool / Cluster Views are not accepted. The authorization checks for views are based on the underlying database tables.		
Field name	Field of the database table		
active	Flag – only active entries are taken into account for the checks		
changed on	Date of the last change		
at	Time of the last change		
by	Logon name of the user that made the last change		



Available Functions

The application toolbar in maintain mode is as follows:



Jede Funktion wird nun kurz beschrieben.

Funktion	Beschreibung			
2	Toggle between maintain and display mode			
	Select all entries			
	Select block of entries			
B	Deselect all entries			
A	Sort in ascending order			
8	Sort in descending order			
*	Activate selected entries			
Ď	Deactivate selected entries (better than delete)			
New Entries	Define new entries			
	Copy selected entries as templates for new ones			
	Delete selected entries			
	Save changes to the database			
	Print. A list of the entries is output by means of ALV. This list can then be printed.			
Position	Position on a given entry			



Definition of new entries

After pressing <u>New Entries</u> an empty screen appears for creating new entries:

C	Create new SM30 authorization entries								
	Auth.Object	Auth.Field	Table name	Field name	active	changed on	at	by	
		B					00:00:00		
							00:00:00		
							00:00:00		
							00:00:00		
							00:00:00		
							00:00:00		

Transaction SM30 makes mostly use of **maintenance views**. The present definition dialog, however, requires a **real table**. Question: Is it necessary for the user to find out each time by means of **SE11** on which database tables a given maintenance view is based? **The answer is no**. When the name of a maintenance view is entered into column "Table name", a popup window for choosing one of the involved tables shows up as soon as ENTER is pressed, like in the following example for view **V_064S_1**:

Auth.Field	Table name	Field name				
	V_0645_1	a				
•••						
🖙 Choose a t	table of the maintenanc	e view (1) 5 Entries fo	ound 🗵			
Restric	tions					
		v.				
🖌 🖂 開						
Table Name	Short Description					
T001L	Storage Locations					
T001W	Plants/Branches					
T064B	T064B Stock Types and Texts for Physical Inventory					
T064S	Stock Mngmt Levels for Inventory Sampling					
T134T Material Type Descriptions						
E Entrice f	E Estate found					
S Entries Iouna						

If only **one** table is involved in the maintenance view, the program replaces the name of the view with the name of the basis table **automatically**:

Example: Entering $V_{001}D \rightarrow$ results in T001

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In this way the first step of the definition process has been carried out.

This is usually followed by the choice of a field of the specified table. It is the content of this field that is examined during the authorization check. The F4 help is ideal for choosing the table field:

ect	Auth.Field	Table name	Field name	act change
		Т001		ð

•••

Please choose a	a table f	ield (1) 7	76 Entries found	
Restrictions				
				∇
🖌 🛛 🕅 🖓				
Field Name	DТур	Length	Data element	Short Description
MANDT	CLNT	000003	MANDT	Client
BUKRS	CHAR	000004	BUKRS	Company Code
BUTXT	CHAR	000025	BUTXT	Name of Company Code or Company
ORT01	CHAR	000025	ORT01	City
LAND1	CHAR	000003	LAND1	Country Key
WAERS	CUKY	000005	WAERS	Currency Key
SPRAS	LANG	000001	SPRAS	Language Key
76 Entries foun	d			

In our example we choose BUKRS:

oject	Auth.Field	Table name	Field name	active	chan
		T001	BUKRS	ð 🗌	

Now a suitable authorization object can be looked for. Also using the F4 help:

	/	/	
Auth.Object	Auth	Table name	Field name
	3	Т001	BUKRS
•••			

Please choose	an authorization object (1) 299 Entries found				
Restriction	s				
	∇				
🖌 🖂 🗒 🛱					
Object	Text				
F_KK_ODBUK	FI-CA Request: Company Code Authorization				
F_KNA1_BUK	Customer: Authorization for Company Codes				
F_KK_ODBUK FI-CA Request: Company Code Authorization F_KNA1_BUK Customer: Authorization for Company Codes F_KNB1_ANA Customer: Authorization for Account Analysis					
F_LFA1_BUK	Vendor: Authorization for Company Codes				
299 Entries fou	Ind				



We choose for example F_KNA1_BUK:

B	Auth.Object	Auth.Field	Table name	Field name
	F_KNA1_BUK	æ	т001	BUKRS

Only the matching authorization field is missing for the definition to be complete. We make use once more of the F4 help:

l	₿	Auth.Object	Auth.Field	Ta ame	Field name
l		F_KNA1_BUK		e ³ 01	BUKRS

•••

🖙 Please cho	oose an authorization field (1)	2 Entries found	
Restric	tions		
_	_		
	∇		
🖌 🛛 🕅			
Field Name	Short Description		
BUKRS	Company Code		
ACTVT	Activity		
2 Entries	found		_///

BUKRS is the only suitable authorization field:

₿	Auth.Object	Auth.Field	Table name	Field name
	F_KNA1_BUK	BUKRS	T001	BUKRS

Now the new entry is complete.

NOTE:

The above described sequence is not mandatory. You can also begin by entering an authorization object, followed by an authorization field, and finally a database table with one of its fields. Or you specify first an authorization field like for example VKORG, and look after that for a matching authorization object.

The F4 help takes the already entered values into account – it is thus much easier to find matching entries.



Transport of Entries

It is also possible to transport the defined entries.

The transport functionality has to be chosen on the initial screen:

🗞 Display 🖉 Maintain 🕞 Transport	Activity	_		 _		 /		<u> </u>
		ଟ୍ୟ	Display	Ø	Maintain	₽	Transport	

As soon as you press the Transport button, the program will prompt you for a workbench request:

Prompt for Workbench re	quest 🛛 🗹
Request	Ø
Short Description	
V Own Requests	×

Now a list of the selected entries is displayed. In this list you can choose the entries to be transported. The ones already in the transport request are highlighted:

Authorizations	<u>G</u> oto System	Help						SAP	
Ø	1	4 📙 😋 🙆 🚷 昌	13 C C C C I H H	Ж 🖉] 🔞 🖪				
Transpor	t SM30 Au	thorization En	tries						
🛃 Include in R	equest 🔒 Dele	ete from Request	B B A 7						
Auth.Object	Auth.Field	Table name	Field name	active	changed on	at	by		
A_PERI_BU	BUKRS	ACCRCUST	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	AAACC_OBJ	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ACCRAC	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ACCRCUST	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ACE_SOP_HRFI	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ACE_SOP_INDTYPE	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ACE_SOP_SCRT_FRF	BUKRS		06.04.2016	16:08:08	TOPFLOW		
F_BKPF_BU	BUKRS	ANLBZW	BUKRS		06.04.2016	16:08:08	TOPFLOW		
	RE	Position	Entry 1 of 228	9					
								4	////

The transport request is updated when you press \blacksquare .



How the Authorization Checks are carried out

In order to show how the SM30 Add-on works, an example will be make using table **T683C** in combination with authorization object **V_VBAK_VKO**.

The corresponding entries could be as follows:

¢									SAD
6	Authorizations	Edit Goto Sy	ystem <u>H</u> elp						
				(a) (3) 33) (3	₩ 🖉	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Concession of the local division of the loca
L	Define SM	30 Authol	rizations at Re	cord Level					
Z	> B B B	87							
	Auth.Object	Auth.Field	Table name	Field name	active	changed on	at	by	
	V_VBAK_VKO	SPART	T683C	SPART		06.04.2016	16:08:08	TOPFLOW	
	V_VBAK_VKO	VKORG	T683C	VKORG	 Image: A start of the start of	06.04.2016	16:33:00	TOPFLOW	
	V_VBAK_VKO	VTWEG	T683C	VTWEG		06.04.2016	16:08:08	TOPFLOW	
		81	Position	Entry 1 of 3					
									< ↓ ///

A double click on the authorization object shows its definition:

Object	V_VB	AK_VKO		
Text	Sales	Document	: Authorization for Sales Areas	
Class	SD	Sales and	Distribution	
Author	SAP			
Authorization	fields	/		
Field name	Headi	ing		
VKORG	Sales	Organizatio	n	
VTWEG	Distri	bution Chai	nnel	
SPART	Divisio	on		
ACTVT	Activi	ty		

As may be seen, the object features three normal authorization field. Field **ACTVT** represents the activity – its values are defined in the dialog "SM30 Activity Field Values". For our example we will make use of value '**02**' (change).

Since only the entry for field VKORG has been activated, the SM30 add-on performs the authorization check with only this field. The remaining fields appear in the AUTHORITY-CHECK statement in combination with DUMMY.

In our example we use maintenance view V_T683C, which is based on T683C.



In the generated dynamic coding we find the following authorization check:

```
AUTHORITY-CHECK OBJECT 'V_VBAK_VKO'
ID 'VKORG' FIELD LS_A001-VKORG
ID 'VTWEG' DUMMY
ID 'SPART' DUMMY
ID 'ACTVT' FIELD '02'.
```

Each selected V_T683C entry is subjected to this check.

The authorization check turns out differently, if all three fields (VKORG, VTWEG and SPART) are activated:

AUTHORITY-CHECK OBJECT 'V_VBAK_VKO' ID 'VKORG' FIELD LS_A001-VKORG ID 'VTWEG' FIELD LS_A001-VTWEG ID 'SPART' FIELD LS_A001-SPART ID 'ACTVT' FIELD '02'.

NOTE: Fields that are initial are not checked. If the authorization check involves three fields, all three fields must be filled. Otherwise the authorization check is not performed.

If for a given maintenance view many authorization objects are defined, each record is subjected to an authorization check for each object. A record has to pass all AUTHORITY-CHECKs in order to make it to the result list.

This is not the case for more than one activity field value. If for example the values '01' and '02' have been defined for activity field ACTVT, a given record passes the authorization check if at least one of the values is successful.