



AUTHORIZATION MANAGER

EASY AND EFFICIENT AUTHORIZATION MANAGEMENT IN SAP®

Throughout the entire lifecycle of an SAP® system a highly sophisticated and consistently complied authorization concept is of significant importance. However, due to the huge variety of authorizations in the system, the implementation of such a concept is often found to be very complex and time consuming. In addition, corporate structures undergo continuous changes and access rights need to be adjusted constantly. Therefore, the authorization management department is facing the following challenges:

- ▶ Requirements of the operating departments must be implemented quickly, without neglecting the existing concept policies
- ▶ Adjustments to current authorizations must not interfere with the settings of the four-eyes-principle in the system
- ▶ Changes to access rights often have to be made during operational hours, without affecting any business processes
- ▶ Documenting security settings and recording changes are vital areas of every authorization concept. But work efforts for this purpose should not get out of control

THE AUTHORIZATION MANAGER IS THE PERFECT SOLUTION

Our ultimate goal is to ensure the protection of sensitive data in the system at any time, while keeping the work effort as small as possible. Therefore, we combined the complexity of authorization maintenance and documentation from SAP® standard with the simplicity and user-friendliness of MS Excel. Your key benefits at a glance:

- ▶ Full integration into the SAP® role concept, in consideration of system performance
- ▶ Easy control of access rights by setting crosses in excel tables
- ▶ Automatic generation of authorization profiles
- ▶ Program-controlled use of SAP® derivation function
- ▶ No impact on users or business processes during authorization adjustments
- ▶ Automatic recording of authorization changes
- ▶ Automatic recording of role changes into transport requests
- ▶ Any time up-to-date documentation of system access rights
- ▶ Transparent design



THE AUTHORIZATION MANAGER OVERVIEW

Components:

The Authorization Manager consists of two different components. On the one hand there is the MS Excel component that is responsible for maintaining and documenting all authorization settings. On the other hand the Authorization Manager consists of a SAP® program that uploads all the changes from the excel file into SAP®.

Excel-Component:

Consolut delivers an MS Excel file that includes all spreadsheets necessary for the creation and maintenance of access rights in SAP®. The following tables are included:

- ▶ Tasks/Functions
- ▶ Organizational Units
- ▶ Mapping

Tasks/Functions Table:

In the row section, this table contains all the existing tasks from the different SAP® modules. The breakdown structure of the row section is in line with the folder structure of the SAP® menu.

Task		
Financial Accounting		
General Ledger		
1	Posting	Post & Park Documents (incl. reversal)
2		Post Recurring entry document
3		Display Recurring entry document
4		Clear items G/L account
5		Post Cash Journal
6		Batch-Input authorization General Ledger
7	Account	Display G/L account
8		Change G/L account
9		Display documents goods receipt
10		Display G/L balances
11	Master Data	Create G/L Master Data Chart of Accounts
12		Create G/L Master Data Chart of Accounts Company Code
13		Mass Maintenance G/L Accounts
14		Display G/L Master Data Chart of Accounts
15		Create Financial Statement Version

In the background, every task is assigned to a single role that contains all the transaction codes necessary to execute its different work steps.

These single roles are also known as the Role Content (please see Role Content product sheet). They were created in a cooperation between basis consultants, developers and module consultants and have been constantly updated and extended. The roles are divided in two different types. The first type is called "transaction roles" and includes only transaction codes and authorization objects that are irrelevant for any organizational authorizations. The second type of roles is called "organizational roles" and contains only authorization objects that are necessary for the organizational authorizations in the system.

The column section of the „tasks/function“ table contains all employee functions in the company. In most cases these functions can be identified by looking into the job descriptions of the employees.

Functions	Accounting	Key User Accounting	General Ledger	Key User General Ledger	Accounting Clerk General Ledger	Accounts Receivables	Key User Accounts Receivables	Accounts Receivables Clerk	Others	Auditor
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In the background, each function is assigned to a composite role. By marking the cell of a row and column combination with an "x", selected tasks can be easily assigned to the employee's functions.

Task			Functions	Accounting	Key User Accounting	General Ledger	Key User General Ledger	Accounting Clerk General Ledger	Accounts Receivables	Key User Accounts Receivables	Accounts Receivables Clerk	Others	Auditor
Financial Accounting													
General Ledger													
1	Posting	Post & Park Documents (incl. reversal)		X		X							
2		Post Recurring entry document		X		X							
3		Display Recurring entry document		X		X			X	X			X
4		Clear items G/L account			X	X							
5		Post Cash Journal		X		X							
6		Batch-Input authorization General Ledger			X								
7	Account	Display G/L account		X	X	X		X	X				X
8		Change G/L account		X	X	X							
9		Display documents goods receipt		X	X	X							X
10		Display G/L balances		X	X	X		X					X
11	Master Data	Create G/L Master Data Chart of Accounts			X								
12		Create G/L Master Data Chart of Accounts Company Code			X								
13		Mass Maintenance G/L Accounts		X	X								
14		Display G/L Master Data Chart of Accounts		X	X	X		X	X				
15		Create Financial Statement Version		X									

During the upload process into SAP®, the consolut program checks all combinations of rows and columns and includes all single roles, marked with an "x", to their selected composite roles from the column section.

Afterwards, the composite roles can be assigned to the users in the system.

This procedure enables:

- ▶ an easy and flexible assignment of single roles to composite roles
- ▶ a fast and very efficient creation of new company functions
- ▶ documentation of the different tasks included in the employee's functions that is up to date at any time

Organizational Units Table:

In the row section, all organizational fields are displayed that have been defined as „Org. unit fields“ in SAP®. Depending on customer requirements, additional fields can be created and added to the spreadsheet. The fields in this table are arranged according to the SAP® modules they belong to.

Fields	Auth. Obj.	Organizational Unit
Finance		
SBUKRS		Company Codes
SBUKRS		
SBUKRS		
SBRGRU	F_BKPF_BES	Account Authorization
SBRGRU		FI Authorization Group
SKOART		Account Type
SGSBER		Business Area
Controlling		
SERKRS		Operating Concern
SKOKRS		Controlling Area
SKSTAR		Cost Elements
SRESPAREA	K_PCA	Profit Center/Groups
SRESPAREA	K_CCA	Cost Center/Groups
SRESPAREA	K_ORDER	Internal Orders
SBRGRU		CO Authorization Group
Logistics		
SWERKS		Plant
SSPART		Division
SVKORG		Sales Organization
SVTWEG		Distribution Channel

In the column section of this spreadsheet, all the company divisions that use different organizational settings are displayed. This table could be divided for example in countries, company sites or departments. Every organizational area is called "Orgset".

Orgsets	ORG1 All Countries	US01 United States	CA01 Canada

By entering an authorization value (for example company code) into the cell that combines Orgsets and Org.fields, the value will be assigned to the authorizations of the specific company division. The table allows to enter either single values or "from" – "to" values or a combination of both.

Fields	Auth. Obj.	Organizational Unit	Orgsets					
			ORG1 All Countries		US01 United States		CA01 Canada	
			from	to	from	to	from	to
Finance								
Company Codes			*		1000	2000	3000	
SBUKRS					5000		4000	
SBUKRS					9000			
Account Authorization			*	*	*	*	*	
SBRGRU	F_BKPF_BES							
FI Authorization Group			*	*	*	*	*	
SBRGRU								
Account Type			*	*	*	*	*	
SKOART								
Business Area			*	BA10		BA20		
SGSBER								
Controlling								
Operating Concern			*	O1000		O1000		
SERKRS								
Controlling Area			*	C1000		C1000		
SKOKRS								
Cost Elements			*	*	*	*	*	
SKSTAR								
Profit Center/Groups			*	HIK1000*		HIK1000*		
SRESPAREA	K_PCA							
Cost Center/Groups			*	KHK1000VGT2*		KHK1000VGT3*		
SRESPAREA	K_CCA							
Internal Orders			*	*	*	*	*	
SRESPAREA	K_ORDER							
CO Authorization Group			*	*	*	*	*	
SBRGRU								
Logistics								
Plant			*	9000		4000		
SWERKS								
Division			*	*	*	*	*	
SSPART								
Sales Organization			*	*	*	*	*	
SVKORG								
Distribution Channel			*	DC1000		DC2000		
SVTWEG								

When uploading this table into SAP®, roles will be created for each orgset and automatically assigned to the composite roles. These roles are derived from the organizational roles in the tasks/functions tab and include all the specific authorization values from the organizational unit table.

This procedure enables:

- ▶ an automatic and program-controlled use of the SAP® derivation function
- ▶ a fast and efficient creation of organizational authorizations for new company divisions
- ▶ a documentation of the organizational authorizations in the system that is up to date at any time

Mapping Table:

This table combines the settings from the two previous tables. In the row section, all functions are displayed from the task/functions tab. The column section consists of the Orgsets, defined in Organizational Unit tab.

	ORG1	US01	CA01
Function Descriptions			
Accounting			
Key User Accounting	X		
General Ledger			
Key User General Ledger	X	X	X
Accounting Clerk General Ledger	X	X	
Accounts Receivables			
Key User Accounts Receivables	X	X	X
Accounts Receivables Clerk			X
Others			
Auditor	X		

By marking cells with an „x“, orgsets can be combined with composite roles (functions). During the uploading process the consolut program identifies through the crosses, which functions need to be created and what type of orgsets to assign. In the system, every composite role will display the orgset in its technical name. Only organizational roles that are derived with the same orgset settings will be included in this roles.

This procedure enables:

- ▶ an easy and flexible assignment of organizational values to composite roles
- ▶ a slim authorization concept that only consists of roles that are really needed
- ▶ a documentation of composite roles and their organizational assignments that is up to date at any time

SAP®-Component:

To upload the settings from MS Excel into SAP®, consolut provides a special upload program. This program can be executed with a transaction code and offers the following options

Selection:

The first section is used to determine which authorization concept will be uploaded. This can be done by choosing a role prefix. Every authorization concept consists of a prefix that is integrated in the first 4 characters of the technical role names. This procedure allows maintaining different authorization concepts in one system, completely independent from each other. It is very often used, if a company decides to create a special reporting authorization concept (for example cost center reporting) in addition to the regular concept.

Selection	
Role prefix	CON_ Consolut authorization concept
Execution Date	08.04.2015
Execution Time	18:59:02
Reason for changement descr.	

This section also contains a field that can be used to enter change descriptions. A helpdesk ticket number could be entered for example. This way, all the changes that are made to the authorizations by uploading the excel file will be documented in the system including execution time/date, executing user and reason for the change.

File Selection:

The second section is used to enter the file name and path of the MS excel file. Consolut delivers a control table, where file names and paths (for each authorization concept) can be saved for future uploads.

File selection	
EXCEL file and path	<input type="checkbox"/>
Change excel	Submit Batch Job
Transport request	<input type="text"/>

The upload can be executed in dialog or background process. In addition, the field „Transport Request“ can be filled with a transport request. During the uploading process, all roles that have been changed will be included automatically into this request.

General Information:

The third section displays the current version of the upload program and the names of the excel tabs that are used to upload the authorization settings into SAP®.

General information	
Version	3.65
Release date	26.11.2014
Worksheet for roles	Tasks/Functions
Worksheet for OrgSets	Orgsets
Worksheet for composite role -> OrgSets	Mapping
Execution protocol	Error Messages

Additionally an execution protocol can be opened to check the previous upload dates.

Test Run:

To make sure that no errors will occur during the upload, the whole process can be simulated. By marking the “Test Run“-field in this section, the simulation mode will become activated.

Test run	
<input type="checkbox"/> Test run	
<input type="checkbox"/> Display upload table	

The field „Display Upload Table“ can be used to let the program produce a list of all the roles that have been changed during the upload process.

Composite Roles:

The last section displays the maximum amount of single roles that can be assigned to a composite role. This is important since SAP® only allows a maximum of 312 profile assignments per user in the system. Each single role consists of at least one profile.

Composite Roles	
Maximum count of single-roles per composite role	312
Compress to single role when limit is exceeded	X

If the maximum amount is reached, the consolut compress function becomes activated. This function takes all the authorization objects that are included in the single roles of a composite role and compresses them into one single role. Afterwards, this compressed role can be assigned to the users in the system.

Additional Functions of the Authorization Manager:

Besides the upload program, consolut provides a few more programs that will make working with authorizations in SAP® a lot easier.

Compress Function:

The role compress function can also be started manually in the system. This function allows you to select and compress specific composite roles of an authorization concept and to include the compressed roles into a transport request.

Compress composite roles to single roles	
Selection and Transport	
Role prefix	CON_
Select following C_roles	<input type="text"/> to <input type="text"/>
<input type="checkbox"/> Actualize E_Roles only	
max. Single Roles	312
Request/Task	<input type="text"/>

Deletion Function:

Deleting roles in SAP® is very hard and time consuming. With the consolut deletion function, all roles of an existing authorization concept can be deleted automatically.

Select Deletion Information

Role prefix Consolut authorization concept

Derived/Composite Roles

Delete user assignment

Expert Mode

All roles of prefix incl. Mst.

Delete CADEL Entries

Easy Authorization Trace:

This function enables an easy and efficient evaluation of the SAP® authorization trace. It displays all the objects that were checked, while the trace was active, in an ALV-Grid table. Furthermore, it allows a preselection of objects and users and suppresses double checked rows.

ADDITIONAL INFORMATION

- ▶ The authorization manager can be implemented at any time into the SAP® system
- ▶ No pre-knowledge of SAP® authorization management is required to control and use the authorization excel file
- ▶ After the implementation, users can switch between the SAP® menu and their own user menu
- ▶ During the upload process, only roles are loaded that have been changed previously to the upload in MS Excel or in SAP® (delta load)
- ▶ Customer-specific enhancements are always possible
- ▶ Easy translation of role descriptions in different languages possible

OUR SERVICES

- ▶ Check of system requirements
- ▶ Installation of consolut programs
- ▶ Customizing
 - ▶ Adjustment of authorization settings
 - ▶ Set up of control tables
 - ▶ Adjustments to user menu settings
- ▶ Evaluation of the current authorization situation in the system
- ▶ Definition of the authorization concept
 - ▶ Evaluation of required tasks, functions and organizational units
 - ▶ Creation of a customer-specific authorization concept
- ▶ Implementation
 - ▶ Creation of missing single roles in SAP®
 - ▶ Integration of customer-specific authorizations
 - ▶ Complete maintenance of the MS Excel file
 - ▶ Assignment of Composite roles to users in SAP®
- ▶ Functional testing
- ▶ Training
- ▶ Active support during go-live

OUR EXPERTISE

- ▶ Many years of experiences in authorization management through numerous authorization projects and SAP® implementations
- ▶ Cross-module know-how of our consultants
- ▶ Customer-specific solutions for individual customer requirements
- ▶ Continuous development of our services and products
- ▶ Fast and cost saving implementation
- ▶ Consulting and support after implementation project

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