

Contents at a Glance

1	Process-Oriented Authorization Concept	21
2	General Authorization Check	41
3	Structural Authorization Check	115
4	Context-Dependent Authorization Check	141
5	Authorization Roles in SAP HCM Components	151
6	Implementing an Authorization Concept	225
7	Reports for the Authorization System	245
8	Authorizations in Programming	259
9	Troubleshooting	275
10	Selected Problem Areas and Their Solutions	287
A	Transactions for Authorization Management	315
B	Authorization Objects of the SAP HCM System	317
C	Authorization Switches	319
D	Business Add-Ins	321
E	Glossary	323
F	Recommended Reading	327
G	The Authors	329

Contents

Acknowledgments	13
Introduction	15

1 Process-Oriented Authorization Concept 21

1.1 Requirements for Authorization Concepts	22
1.1.1 Interest Groups	22
1.1.2 Content Requirements	24
1.2 Process Analysis	26
1.3 Role Definition	34
1.4 Naming Conventions	35
1.5 Critical Success Factors	38

2 General Authorization Check 41

2.1 Elements	41
2.2 Role Maintenance	43
2.2.1 Role Assignment	48
2.2.2 Composite Roles	53
2.2.3 Reference Roles	55
2.3 Authorization Objects	60
2.3.1 Transaction Authorizations	61
2.3.2 Infotype Authorization in Personnel Administration	64
2.3.3 Additional Authorization Objects for Master and Time Data	69
2.3.4 HR: Cluster – Cluster Authorization Object (P_PCLX)	72
2.3.5 Personnel Planning (PLOG)	74
2.4 Required System Authorizations	77
2.4.1 Checks when Calling Reports	77
2.4.2 Access to InfoSets and Queries	81
2.4.3 Table Maintenance	83

2.4.4	Customizing Authorizations in the Implementation Guide (IMG)	85
2.4.5	Batch Input Authorizations	86
2.4.6	Authorization for Download and Upload	86
2.4.7	Number Range Maintenance	87
2.4.8	HCM-Specific Authorizations for System Administrators	87
2.5	Customizing the Profile Generator	88
2.6	Period of Responsibility and Time Logic	94
2.7	Test Procedures (Infotype 0130)	99
2.7.1	Necessity and Functionality	99
2.7.2	Customizing	101
2.7.3	Authorization Assignment	102
2.7.4	Automatic Writing of the Test Procedure Infotype	103
2.8	Extensions	104
2.8.1	The Authorization Object P_NNNNN	104
2.8.2	Customer-Specific Authorization Object	107
2.8.3	BAdI for General Authorization Checks	108
2.9	Critical Success Factors	113

3 Structural Authorization Check 115

3.1	Structural Authorization Check in Organizational Management	116
3.2	Maintaining the Structural Profiles	118
3.3	Function Modules	121
3.4	Transfer to Other Structures in SAP ERP HCM	123
3.5	Use in Personnel Administration	125
3.6	Assigning Structural Profiles to Users	126
3.7	Period of Responsibility and Time Logic	128
3.8	How the Structural Authorization Check Handles Nonintegrated Persons	133
3.9	Performance Optimization	134
3.10	Extensions	137
3.11	Critical Success Factors	140

4 Context-Dependent Authorization Check 141

4.1	Functionality	141
4.2	Setup and Maintenance	145
4.3	Other Context-Dependent Authorization Objects	148
4.4	Critical Success Factors	149

5 Authorization Roles in SAP HCM Components 151

5.1	Payroll and Subsequent Activities	152
5.1.1	Authorizations for Controlling Payroll and Its Subsequent Activities	153
5.1.2	Authorizations for Maintaining and Displaying Forms	156
5.1.3	Authorizations for Auditors	157
5.1.4	Authorization for Deleting Payroll Results	157
5.2	Appraisal System	158
5.3	Position Budgeting and Control	160
5.4	Cross Application Time Sheet (CATS)	163
5.5	E-Recruiting	166
5.5.1	SAP Roles	166
5.5.2	Authorization Objects	168
5.5.3	User Types	174
5.6	SAP Expert Finder	176
5.7	HR Administrative Services	178
5.8	Management of Global Employees	180
5.9	Manager's Desktop	181
5.10	Organizational Management (OM)	182
5.11	Performance Management	184
5.12	Personnel Administration and Time Management	190
5.13	Recruitment (Classic)	194
5.14	Shift Planning	198
5.15	Personnel Development	201
5.16	Human Resources Information System/Reporting	207
5.16.1	Logical databases	207
5.16.2	SAP Reports Without Logical Database	208
5.16.3	The Authorization Object P_ABAP	209
5.16.4	Reporting Basics	210

5.17	Personnel Cost Planning	211
5.18	Self Services	212
5.19	Travel Management	215
5.20	Training and Event Management/SAP Learning Solution	218
	5.20.1 Overview of the Authorization Objects	218
	5.20.2 Important Standard Roles	223
5.21	Summary	224

6 Implementing an Authorization Concept 225

6.1	Preparations in the System	226
	6.1.1 Central User Administration	226
	6.1.2 Authorization Administrators	229
	6.1.3 Initial Installation of the Profile Generator	233
	6.1.4 Creating Organizational Levels	237
6.2	Creating and Testing Roles	237
6.3	Transport	238
6.4	Documentation and Redesigning	241
6.5	Critical Success Factors	243

7 Reports for the Authorization System 245

7.1	Analysis of Users with Critical Authorizations	246
7.2	Overview of the Most Vital Authorizations of a User	250
7.3	Overview of all Authorization Objects of a User	251
7.4	Roles by Complex Selection Criteria	253
7.5	Assignment of Single Roles to Composite Roles	256
7.6	Additional Reports	257
7.7	Critical Success Factors	258

8 Authorizations in Programming 259

8.1	Authorizations in Reports Without Logical Databases	259
	8.1.1 SAP Function Modules with Authorization Check	260

8.1.2	Deactivating the Authorization Check using SAP function modules	260
8.1.3	Authorization Check Directly in Coding	264
8.2	How the Logical Databases Handle Missing Authorizations	266
8.3	Enterprise-Specific Database with Own Authorization Check	267
8.4	Authorizations for Programmers	269
8.5	Downloading from Reports	270
8.6	Critical Success Factors	272

9 Troubleshooting 275

9.1	Troubleshooting in General Authorizations	275
9.1.1	Authorization Error Analysis Using Transaction SU53	275
9.1.2	Authorization Trace	277
9.1.3	Manual Troubleshooting	280
9.2	Troubleshooting in Structural Authorizations	282
9.3	Troubleshooting in Context-Dependent Authorizations	284
9.4	Summary and Critical Success Factors	285

10 Selected Problem Areas and Their Solutions 287

10.1	Authorizations from Organizational Management (Schaeffler KG)	287
10.2	Starting Reports via Customer Programs (ThyssenKrupp Steel AG)	292
10.3	Minimizing the Number of Roles and Decentralized Assignment (B. Braun)	295
10.4	Hiding Specific Fields in Infotypes	300
10.5	Supporting the Workflow with the Double-Verification Principle	302
10.6	Authorization-Relevant Switches in Queries	304
10.7	Transaction Variants	306
10.8	Summary	312

A	Transactions for Authorization Management	315
B	Authorization Objects of the SAP HCM System	317
C	Authorization Switches	319
D	Business Add-Ins	321
E	Glossary	323
F	Recommended Reading	327
	F.1 Books	327
	F.2 Websites	327
G	The Authors	329
	Index	331