



## **Security Authorizations Guide**

# **SAP Compliance Calibrator by Virsa™ Systems**

**Document Version 1.0 - March, 2005**



Copyright 2004-2005, Virsa Systems, Inc. All rights reserved. Virsa, Compliance Calibrator, FireFighter, Risk Enforcer, Role Expert, Access Enforcer and Continuous Compliance Suite are trademarks owned by Virsa Systems, Inc., which may be registered in certain jurisdictions. All other trademarks belong to their respective owners.

Neither this documentation nor any part of it may be copied or reproduced in any form, or by any means translated into another language, without prior written consent of Virsa Systems, Inc. It is provided to you "AS IS".

Virsa Systems makes no warranties or representations with respect to the content hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Virsa Systems assumes no responsibility for any errors that may appear in this document. Virsa Systems reserves the right to make any changes to the documentation without obligation to notify any person of such revisions or changes.



## Contents

Compliance Calibrator Role Definitions.....	5
1 Z_CC_Administrator.....	5
2 Z_CC_Security_Admin.....	6
3 Z_CC_User_Admin .....	8
4 Z_CC_Business_Owner.....	9
5 Z_CC_Reporting .....	11
Authorization Object Definitions .....	13
6 ZVRAT_0001 – Table Maintenance.....	13
7 ZVRAT_0002 - Execution .....	15
8 ZVRAT_0003 – User Groups.....	16
9 ZVRAT_0004 – Organizational Rule ID .....	17
10 ZVRAT_0005 – Alerts .....	18
11 ZVRAT_0006 – Mitigation by Business Unit ID .....	19
12 ZVRAT_0007 – Mitigation by Risk ID .....	20
13 ZVRAT_0008 – Mitigation by Role Name.....	21
14 ZVRAT_0009 – Mitigation by HR Object ID.....	22
15 ZVRAT_0010 – Function Maintenance.....	23
16 ZVRAT_0011 – Risk Maintenance.....	24
17 ZVRAT_0012 – Rules Display .....	25
Table Maintenance Authorization Groups .....	6
Virsa Tool Box Reports and Utilities Authorization Groups.....	7
SU24 Data Values .....	5
/VIRSA/ZVRAT.....	5
/VIRSA/ALERTGEN .....	6
/VIRSA/ZVRAT_C01 .....	7
/VIRSA/ZVRAT_D01 .....	8
/VIRSA/ZVRAT_P01 .....	9
/VIRSA/ZVRAT_S16 .....	10
/VIRSA/ZVRAT_U05.....	11
/VIRSA/ORGUSRMAPPING.....	12
/VIRSA/ZVRAT_M01.....	13
/VIRSA/ZVRAT_M02.....	14
/VIRSA/ZVRAT_M03.....	15
/VIRSA/ZVRAT_M04.....	16
/VIRSA/ZVRAT_R01 .....	17
/VIRSA/ZVRAT_S01 .....	18
/VIRSA/ZVRAT_S06 .....	19

/MIRSA/ZVRAT_S07 .....	20
/MIRSA/ZVRAT_S08 .....	22
/MIRSA/ZVRAT_S09 .....	23
/MIRSA/ZVRAT_S10 .....	24
/MIRSA/ZVRAT_S11 .....	25
/MIRSA/ZVRAT_S13 .....	26
/MIRSA/ZVRAT_S14 .....	27
/MIRSA/ZVRAT_S15 .....	28
/MIRSA/ZVRAT_U01 .....	29
/MIRSA/ZVRAT_U02 .....	30
/MIRSA/ZVRAT_U03 .....	31
Line-Oriented Authorizations .....	5



## Technical Support

### SAP Global Support Centers

<b>Global and EMEA</b> Service time: 08.00 - 18.00 CET	SAP Active Global Support SAP AG Raiffeisenring 45 68789 St. Leon - Rot, Germany	Phone: +49 (0)180/5 34 34 3-1
<b>Americas</b> Service time: 08.00 - 20.00 US EST	SAP Active Global Support Center SAP America 3999 West Chester Pike Newtown Square, PA 19073	Phone: +1 800 – 677 7271
<b>Asia Pacific including Japan</b> Service time: 08.00 - 18.00 local time SGP	SAP Active Global Support Center SAP Asia Pte. Ltd. 47 Scotts Road #16-00 Goldbell Tower Singapore 22 82 33	Phone +65 6768 6363 Fax +65 6768 5050
Open a Call with SAP by accessing to SAP call tracking system or via SAP Service Marketplace <a href="http://service.sap.com">http://service.sap.com</a>		





## COMPLIANCE CALIBRATOR ROLE DEFINITIONS

### 1 Z\_CC\_ADMINISTRATOR

The Compliance Calibrator Administrator Role has complete access to all programs and tables. Those Users assigned to the Compliance Calibrator Administrator Role can access Rule Architect, Mitigation Controls, Alerts, Configuration Options, the Compliance Calibrator Tool Box Reports and Utilities, and all Risk Analysis reports and simulations in foreground or background.

#### 1.1 Virsa Authorization Objects

Authorization Object	Field Name	Field Value
ZVRAT_0001	Action	*
ZVRAT_0002	Activity	*
ZVRAT_0003	User group in user master main	*
ZVRAT_0004	Org. Rule ID	*
ZVRAT_0005	Mitigating Control ID	*
	Risk ID	*
ZVRAT_0006	Business Unit ID	*
ZVRAT_0007	Risk ID	*
ZVRAT_0008	Role Name	*
ZVRAT_0009	Object ID	*
ZVRAT_0010	Activity	*
	Function	*
ZVRAT_0011	Activity	*
	ID	*
ZVRAT_0012	Risk ID	*

#### 1.2 Additional Authorization Objects

Authorization Object	Field Name	Field Value
S_TCODE	Transaction	/VIRSA/ZVRAT, /VIRSA/ZVRAT*, /VIRSA/ALERTGEN, /VIRSA/ORG*
S_DATASET	Activity	33, 34
	Physical file name	*
	ABAP program name	/VIRSA/*
S_TABU_DIS	Activity	*
	Authorization Group	ZC*, ZV*
S_Program	User Action ABAP/4 program	*
	Auth Group ABAP/4 program	ZVRAT*

## 2 Z\_CC\_SECURITY\_ADMIN

Security Administrators assigned to the Compliance Calibrator Security\_Admin role have the following abilities and access –

- Access to perform User and Role Analysis
- Access to perform Rule Maintenance
- Ability to display Alerts
- Ability to maintain Mitigating Control References & Approvers
- Ability to assign Mitigation Controls to Roles and Profiles
- Ability to execute Tool Box Utilities
- Ability to display all tables in Authorization Groups ZC\* and ZV\* [S\_TABU\_DIS]
- Ability to maintain select tables in Authorization Groups ZC\* and ZV\* [S\_TABU\_DIS]
- Read/Write Access to /VIRSA/\* ABAP Programs [S\_DATASET]
- Execute programs in Authorization Group ZVRAT\* [S\_PROGRAM]

### 2.1 Virsa Authorization Objects

Authorization Object	Field Name	Field Value
ZVRAT_0001	Action	AOBJ, ATCD, CAUT, CPAR, CPRF, CROL, CTCD, MBUA, MBUS, MHRO, MMAP, MMON, MPRO, MREF, MREP, MRIS, MROL, OBJT, ORGR, TCOD, V*
ZVRAT_0002	Activity	16, 37, 48
ZVRAT_0003	User group in user master main	*
ZVRAT_0004	Org. Rule ID	*
ZVRAT_0005	Mitigating Control ID	Inactive
	Risk ID	Inactive
ZVRAT_0006	Business Unit ID	*
ZVRAT_0007	Risk ID	*
ZVRAT_0008	Role Name	*
ZVRAT_0009	Object ID	*
ZVRAT_0010	Activity	*
	Function	*
ZVRAT_0011	Activity	*
	ID	*
ZVRAT_0012	Risk ID	*

## 2.2 Additional Authorization Objects

Authorization Object	Field Name	Field Value
S_TCODE	Transaction	/VIRSA/ALERTGEN, /VIRSA/ORGRULES, /VIRSA/ORGUSERS, /VIRSA/ORGUSRMAPPING, /VIRSA/ZVRAT, /VIRSA/ZVRAT_C01, /VIRSA/ZVRAT_M01, /VIRSA/ZVRAT_M02, /VIRSA/ZVRAT_M03, /VIRSA/ZVRAT_M04, /VIRSA/ZVRAT_P01, /VIRSA/ZVRAT_R01, /VIRSA/ZVRAT_RB3, /VIRSA/ZVRAT_S01, /VIRSA/ZVRAT_S05, /VIRSA/ZVRAT_S06, /VIRSA/ZVRAT_S07, /VIRSA/ZVRAT_S08, /VIRSA/ZVRAT_S09, /VIRSA/ZVRAT_S10, /VIRSA/ZVRAT_S11, /VIRSA/ZVRAT_S13, /VIRSA/ZVRAT_S14, /VIRSA/ZVRAT_S15, /VIRSA/ZVRAT_S16, /VIRSA/ZVRAT_U01, /VIRSA/ZVRATU02, /VIRSA/ZVRAT_U03, /VIRSA/ZVRAT_U05
S_DATASET	Activity	33, 34
	Physical file name	*
	ABAP program name	/VIRSA/*
S_TABU_DIS	Activity	03
	Authorization Group	ZC&*, ZV&*
	Activity	02
	Authorization Group	ZC&A, ZC&B, ZC&C, ZC&D, ZC&E, ZC&F, ZC&G, ZC&H, ZC&I, ZC&J, ZC&K, ZC&L, ZC&M, ZM&O, ZV&A, ZV&B, ZV&C, ZV&D, ZV&E, ZV&G, ZV&I, ZV&J, ZV&K, ZV&L, ZV&M, ZV&N, ZV&Q, ZV&R, ZV&S
S_Program	User Action ABAP/4 program	*
	Auth Group ABAP/4 program	ZVRAT*

### 3.1 Virsa Authorization Objects

## 3 Z\_CC\_USER\_ADMIN

User Administrators assigned to the Compliance Calibrator User\_Admin role have the following abilities and access –

- Ability to perform User and Role Analysis
- Ability to assign Mitigation Controls to Users
- Ability to perform simulations and Role assignment from simulation
- Ability to maintain tables in Authorization Groups ZV&H [S\_TABU\_DIS]
- Access to display all tables in Authorization Groups ZC\* and ZV\* [S\_TABU\_DIS]
- Execute programs in Authorization Groups ZVRAT\* [S\_PROGRAM]

### 3.1 Virsa Authorization Objects

Authorization Object	Field Name	Field Value
ZVRAT_0001	Action	MUSR, UASG, V*
ZVRAT_0002	Activity	16, 37, 48
ZVRAT_0003	User group in user master main	*
ZVRAT_0004	Org. Rule ID	Inactive
ZVRAT_0005	Mitigating Control ID	Inactive
	Risk ID	Inactive
ZVRAT_0006	Business Unit ID	*
ZVRAT_0007	Risk ID	*
ZVRAT_0008	Role Name	*
ZVRAT_0009	Object ID	*
ZVRAT_0010	Activity	Inactive
	Function	Inactive
ZVRAT_0011	Activity	Inactive
	ID	Inactive
ZVRAT_0012	Risk ID	Inactive

### 3.2 Additional Authorization Objects

Authorization Object	Field Name	Field Value
S_TCODE	Transaction	/VIRSA/ZVRAT
S_TABU_DIS	Activity	03
	Authorization Group	ZC&*, ZV&*
	Activity	02
	Authorization Group	ZV&H
S_Program	User Action ABAP/4 program	*
	Auth Group ABAP/4 program	ZVRAT*

## 4 Z\_CC\_BUSINESS\_OWNER

Business Owners assigned to the Compliance Calibrator Business\_Owner role have the following abilities and access –

- Ability to perform User and Role Analysis
- Ability to execute select reports in the Tool Box
- Access to display Rule Architect and Mitigation Controls
- Access to display all Compliance Calibrator tables
- Access to display select tables in Authorization Groups ZC\* and ZV\* [S\_TABU\_DIS]
- Execute programs in Authorization Group ZVRA\* [S\_PROGRAM]

---

### NOTE

If Business Owners are to clear alerts, the Business Owner role needs to have object ZVRAT\_0005 included but it is not included as a default.

---

### 4.1 Virsa Authorization Objects

Authorization Object	Field Name	Field Value
ZVRAT_0001	Action	V*
ZVRAT_0002	Activity	16, 37, 48
ZVRAT_0003	User group in user master main	*
ZVRAT_0004	Org. Rule ID	Inactive
ZVRAT_0005	Mitigating Control ID	Inactive
	Risk ID	Inactive
ZVRAT_0006	Business Unit ID	Inactive
ZVRAT_0007	Risk ID	Inactive
ZVRAT_0008	Role Name	Inactive
ZVRAT_0009	Object ID	Inactive
ZVRAT_0010	Activity	Inactive
	Function	Inactive
ZVRAT_0011	Activity	Inactive
	ID	Inactive
ZVRAT_0012	Risk ID	Inactive

**4.2 Additional Authorization Objects**

Authorization Object	Field Name	Field Value
S_TCODE	Transaction	/VIRSA/ZVRAT, /VIRSA/ZVRAT_C01, /VIRSA/ZVRAT_D01, /VIRSA/ZVRAT_M02, /VIRSA/ZVRAT_P01, /VIRSA/ZVRAT_R01, /VIRSA/ZVRAT_S01, /VIRSA/ZVRAT_S08, /VIRSA/ZVRAT_U01, /VIRSA/ZVRAT_U03, /VIRSA/ZVRAT_U05
S_TABU_DIS	Activity	03
	Authorization Group	ZC*, ZV*
S_Program	User Action ABAP/4 program	*
	Auth Group ABAP/4 program	ZVRA*

## 5 Z\_CC\_REPORTING

Business Owners assigned to the Compliance Calibrator Business\_Owner role have the following abilities and access –

- Ability to perform User and Role Analysis
- Ability to display Rule Architect, Mitigation Controls, and Alerts

---

### NOTE

There are no security restrictions for creating Business Processes. All other Rule Architect features are limited to display only.

---

- Ability to execute select reports in the Tool Box
- Access to display select tables in Authorization Groups ZC\* and ZV\* [S\_TABU\_DIS]
- Execute programs in Authorization Groups ZVRAT\* [S\_PROGRAM]

### 5.1 Virsa Authorization Objects

Authorization Object	Field Name	Field Value
ZVRAT_0001	Action	V*
ZVRAT_0002	Activity	16, 37, 48
ZVRAT_0003	User group in user master main	*
ZVRAT_0004	Org. Rule ID	Inactive
ZVRAT_0005	Mitigating Control ID	Inactive
	Risk ID	Inactive
ZVRAT_0006	Business Unit ID	Inactive
ZVRAT_0007	Risk ID	Inactive
ZVRAT_0008	Role Name	Inactive
ZVRAT_0009	Object ID	Inactive
ZVRAT_0010	Activity	Inactive
	Function	Inactive
ZVRAT_0011	Activity	Inactive
	ID	Inactive
ZVRAT_0012	Risk ID	Inactive

**5.2 Additional Authorization Objects**

Authorization Object	Field Name	Field Value
S_TCODE	Transaction	/VIRSA/ZVRAT, /VIRSA/ZVRAT_D01, /VIRSA/ZVRAT_M02, /VIRSA/ZVRAT_P01, /VIRSA/ZVRAT_R01, /VIRSA/ZVRAT_S01, /VIRSA/ZVRAT_S08, /VIRSA/ZVRAT_U01, /VIRSA/ZVRAT_U03, /VIRSA/ZVRAT_U05
S_TABU_DIS	Activity	03
	Authorization Group	ZC*, ZV*
S_Program	User Action ABAP/4 program	*
	Auth Group ABAP/4 program	ZVRA*



## AUTHORIZATION OBJECT DEFINITIONS

### 6 ZVRAT\_0001 – TABLE MAINTENANCE

Authorization object ZVRAT\_0001 controls the maintenance of Compliance Calibrator tables.

The object has only one field 'ZACTION' (Action). Table maintenance is controlled by the action values of authorization object ZVRAT\_0001.

This Authorization object also controls the type of analysis that can be performed using Compliance Calibrator. The action codes shaded gray control analysis types.

#### 6.1 Defined Fields – ZACTION

Action Code	Description	Table
*	All Activities (Complete Access)	
TCOD	SOD Transaction Code Table	/VIRSA/ZSODTC
CTCD	Critical Transactions Table	/VIRSA/ZCRTRAN
OBJT	SOD Authorization Object Level Table	/VIRSA/ZCRAUTH
CROL	Critical Roles Table	/VIRSA/ZCRROLES
CPRF	Critical Profiles Table	/VIRSA/ZCRPROF
CNFG	Configuration Table	/VIRSA/ZVRATCNFG
MUSR	Mitigating Control User Table	/VIRSA/ZMITCNTL
MREF	Mitigating Controls Table	/VIRSA/ZMITREF
MROL	Mitigating Control Role Table	/VIRSA/ZMITROLE
MPRO	Mitigating Control Profile Table	/VIRSA/ZMITPROF
MHRO	Mitigating Control HR Object Table	/VIRSA/ZMITHROBJ
MMON	Mitigating Control Monitor Table	/VIRSA/ZMITAPVR
MBUA	Business Unit Approvers	/VIRSA/BUAPPVR
MBUS	Mitigating Business Units	/VIRSA/ZBUSUNIT
MMAP	Monitors and Approvers	/VIRSA/ZMITMON
MREP	Mitigating Reports	/VIRSA/MITREPORT
MRIS	Associated Risks	/VIRSA/ZMITRISKS
CCTC	Custom Critical Transactions Table(Custom Utilities Restricted Transactions)	/VIRSA/ZCRTRANC1
CCSO	Custom SOD Object Table (Custom Utilities Restricted Objects)	/VIRSA/ZCRAUTHC1
CPAR	SOD(Object) level Supp. Table	/VIRSA/ZCRPARAM
CCST	Custom SOD Tcode Table (Custom Utilities SOD Summary)	/VIRSA/ZSODTCC1
CAUT	Critical Authorization Objects	/VIRSA/ZCRAUTHOB
ATCD	Analyzed Transactions	/VIRSA/ZANALTRAN

6.1 Defined Fields – ZACTION

---

AOBJ	Analyzed Authorization Objects	/VIRSA/ZANALOBJT
ORGR	Organizational Rule ID	/VIRSA/ORGRULES
VJOB	Job Level Execution	
VORG	Organization Level Execution	
VPOS	Position Level Execution	
VPRF	Profile Level Execution	
VROL	Role Level Execution	
VUGP	User Group Level Execution	
VUSR	User Level Execution	
UASG	Role assignment to Users	

## 7 ZVRAT\_0002 - EXECUTION

Authorization Object ZVRAT\_0002 restricts the execution of the Compliance Calibrator transaction and the ability to upload and download Compliance Calibrator tables.

This object has one field ZVRATACTVT (Activity). Defined Fields – Activity

### 7.1 Object Values

Activity Code	Description
16	Execute (foreground)
37	Schedule in Background
48	Simulation
DL	Download
UL	Upload

## **8 ZVRAT\_0003 – USER GROUPS**

Authorization Object ZVRAT\_0003 is used to restrict Compliance Calibrator users to certain user groups.

This object has only one field, CLASS.

### **8.1 Defined Fields**

CLASS - User group in user master maintenance

## **9 ZVRAT\_0004 – ORGANIZATIONAL RULE ID**

Authorization Object ZVRAT\_0004 is used to restrict Compliance Calibrator analysis by Organizational Rule ID

This object has only one field, ZORGRULEID.

### **9.1 Defined Fields**

ZORGRULEID - Org. Rule ID values defined in the /VIRSA/ORGRULES table

## 10 ZVRAT\_0005 – ALERTS

Authorization Object ZVRAT\_0005 is used to restrict clearing Alerts.

This object has two fields, Mitigating Control ID and Risk ID.

### 10.1 Defined Fields

Mitigating Control ID – Mitigation Control ID values stored in the /VIRSA/ZMITREF table

Risk ID – Risk ID values defined in the /VIRSA/ZCRTRAN table (Critical Transactions) and  
Risk ID values stored in the /VIRSA/RISKS table

## **11 ZVRAT\_0006 – MITIGATION BY BUSINESS UNIT ID**

Authorization Object ZVRAT\_0006 is used to restrict Mitigation by Business Unit ID.

This object has one field, ZBUSUNIT.

### **11.1 Defined Fields**

ZBUSUNIT - Business Unit ID values stored in the /VIRSA/ZBUSUNIT table

## 12 ZVRAT\_0007 – MITIGATION BY RISK ID

Authorization Object ZVRAT\_0007 is used to restrict Mitigation by Risk ID.

This object has one field, ZRISKID.

### 12.1 Defined Fields

ZRISKID - Risk ID values stored in the /VIRSA/ZMITRISKS table



## 13 ZVRAT\_0008 – MITIGATION BY ROLE NAME

Authorization Object ZVRAT\_0008 is used to restrict Mitigation by Role Name.

This object has one field, ZROLEID.

### 13.1 Defined Fields

ZROLEID - Role Name

## 14 ZVRAT\_0009 – MITIGATION BY HR OBJECT ID

Authorization Object ZVRAT\_0009 is used to restrict Mitigation by HR Object ID.

This object has one field, ZOBJECTID.

### 14.1 Defined Fields

ZOBJECTID - HR Object ID

## 15 ZVRAT\_0010 – FUNCTION MAINTENANCE

Authorization Object ZVRAT\_0010 is used to restrict Function maintenance by Function ID.

This object has two fields, ACTVT and ZFUNCTION.

### 15.1 Defined Fields

ACTVT - Activity

ZFUNCTION - Function ID values stored in the /VIRSA/FUNCTION table

## 16 ZVRAT\_0011 – RISK MAINTENANCE

Authorization Object ZVRAT\_0011 is used to restrict Risk maintenance by Risk ID.

This object has two fields, ACTVT and ZRISK.

### 16.1 Defined Fields

ACTVT - Activity

ZRISK - Risk ID values stored in the /VIRSA/RISKS table

## **17 ZVRAT\_0012 – RULES DISPLAY**

Authorization Object ZVRAT\_0012 is used to restrict Rules Display by Rule ID.

This object has one field, ZRISKID.

### **17.1 Defined Fields**

ZRISKID - Risk ID values stored in the /VIRSA/RISKS table

## TABLE MAINTENANCE AUTHORIZATION GROUPS

S\_TABU\_DIS is checked when maintaining these tables. Each table is protected with a unique authorization group. The mapping of authorization groups to tables is shown in the table below.

### NOTE

If you are implementing additional customer-specific functionality you need access to the highlighted tables.

### Table Authorization Groups

Table Name	Description	Auth Group
/VIRSA/ALMAILIDS	Compliance Calibrator Alert Email IDs	ZC&N
/VIRSA/BUAPPVR	Business Unit Approver	ZC&M
/VIRSA/ORGRULES	Organizational values	ZC&I
/VIRSA/ORGUSERS	Mapping between users and the organizational values	ZC&J
/VIRSA/ZANALOBJT	Analyzed authorization objects	ZV&Q
/VIRSA/ZANALTRAN	Analyzed transactions	ZV&I
/VIRSA/ZBUSUNIT	Business Units	ZC&L
/VIRSA/ZCRAUTH	Authorization Objects	ZV&C
/VIRSA/ZCRAUTHC1	Restricted Critical Authorizations	ZV&M
/VIRSA/ZCRAUTHL1	SOD Authorization Object	ZC&C
/VIRSA/ZCRAUTHL2	SOD Authorization Object	ZC&D
/VIRSA/ZCRAUTHL3	SOD Authorization Object	ZC&E
/VIRSA/ZCRAUTHL4	SOD Authorization Object	ZC&F
/VIRSA/ZCRAUTHL5	SOD Authorization Object	ZC&G
/VIRSA/ZCRAUTHOB	Critical Authorization Objects	ZV&J
/VIRSA/ZCRPARAM	SOD (Object Level) Supp.Table	ZV&O
/VIRSA/ZCRPROF	Critical Profiles	ZV&D
/VIRSA/ZCRROLES	Critical Roles	ZV&E
/VIRSA/ZCRTRAN	Critical Transactions	ZV&B
/VIRSA/ZCRTRANC1	Restricted Transactions	ZV&L
/VIRSA/ZMITAPVR	Mitigating Control Monitors	ZV&N
/VIRSA/ZMITCNTL	Mitigating Control - Users	ZV&H
/VIRSA/ZMITHROBJ	Mitigating Control - HR Object	ZC&H
/VIRSA/ZMITMON	Mitigating Monitors and Approvers	ZV&S
/VIRSA/ZMITPROF	Mitigating Control - Profile	ZC&B
/VIRSA/ZMITREF	Mitigating Controls	ZV&G
/VIRSA/ZMITRISKS	Mitigating Risks	ZV&R
/VIRSA/ZMITROLE	Mitigating Control - Role	ZV&K
/VIRSA/ZSODMIT	SOD Group Id and Mitigating Reference Number Relationship	ZC&K
/VIRSA/ZSODTC	SOD (TCode)	ZV&A
/VIRSA/ZSODTCC1	Restricted SOD at Tcode Level	ZV&P
/VIRSA/ZVRATCNFG	Compliance Calibrator Configuration	ZV&F

## VIRSA TOOL BOX REPORTS AND UTILITIES AUTHORIZATION GROUPS

All reports and utilities in the Virsa Tool Box are assigned authorization groups. This means that a User needs authorization for object S\_PROGRAM to execute the report. The following authorization groups have been assigned to the reports/utilities –

### Program Authorization Groups

Program Name	Description	Auth Group
/VIRSA/ALERTGEN	Activity Monitoring	ZVRATAL
/VIRSA/ORGUSRMAPPING	Program to maintain ORGUSERS table	ZVRATOR
/VIRSA/ZVRAT	Compliance Calibrator	ZVRAT
/VIRSA/ZVRATBAK	Compliance Calibrator	ZVRAT
/VIRSA/ZVRATBAKC1	Custom Reports	ZVRAT
/VIRSA/ZVRAT_C01	Security & Controls Policies and Procedures	ZVRATC01
/VIRSA/ZVRAT_D01	Download Spool Requests by Job Name	ZVRATD01
/VIRSA/ZVRAT_DOWNLOAD	Download a table	ZVRATUPL
/VIRSA/ZVRAT_M01	Upload/Download Compliance Calibrator Tables	ZVRATM01
/VIRSA/ZVRAT_M02	Where Used list for Mitigating Control Id / Monitor.	ZVRATM02
/VIRSA/ZVRAT_M03	Analyze disabled sod tcodes and objects	ZVRATM02
/VIRSA/ZVRAT_M04	Optimizer for SOD Data Table	ZVRATM03
/VIRSA/ZVRAT_P01	Display changes to Profiles	ZVRATP01
/VIRSA/ZVRAT_R01	Count authorizations in roles	ZVRATR01
/VIRSA/ZVRAT_RB2	Rule Architect Wizard	ZVRATS05
/VIRSA/ZVRAT_RB3	SOD Rule Builder Wizard	ZVRATS05
/VIRSA/ZVRAT_S01	Monitor actual usage of Conflicting & Critical Transactions	ZVRATS01
/VIRSA/ZVRAT_S02	Identify Transactions executed by User(s)	ZVRATS02
/VIRSA/ZVRAT_S03	Download Authorization Objects for the SOD Transaction Codes	ZVRATS03
/VIRSA/ZVRAT_S04	Build SOD Object Level Rules from SOD TCodes & Auth. Objects	ZVRATS04
/VIRSA/ZVRAT_S05	SOD Rule Builder Wizard	ZVRATS05
/VIRSA/ZVRAT_S06	SOD Rule Validation Tool	ZVRATS06
/VIRSA/ZVRAT_S07	Non Reference Report - Tcodes by Roles/Profiles, not in SOD tables	ZVRATS07
/VIRSA/ZVRAT_S08	User Access Report	ZVRATS08
/VIRSA/ZVRAT_S09	Comparing different SOD Matrices	ZVRATS09
/VIRSA/ZVRAT_S10	Tcodes by Roles/Profiles, never executed in a specific time period	ZVRATS10
/VIRSA/ZVRAT_S11	Authorization Object by Roles/Profiles Report ( not in SOD Tables)	ZVRATS11
/VIRSA/ZVRAT_S13	Comparing Critical Transaction Matrices	ZVRATS13
/VIRSA/ZVRAT_S14	Comparing SOD Authorization Objects	ZVRATS14
/VIRSA/ZVRAT_S15	Compare SOD Tcode Matrix with SOD Authorization Object Tcodes	ZVRATS15
/VIRSA/ZVRAT_S16	Compliance Calibrator Data Maintenance	ZVRATS16
/VIRSA/ZVRAT_U01	Count authorizations for Users	ZVRATU01
/VIRSA/ZVRAT_U02	Analysis of called transactions in Custom Code	ZVRATU02

**Program Authorization Groups**

/VIRSA/ZVRAT_U03	Management Report for SOD Remediation	ZVRATU03
/VIRSA/ZVRAT_U05	List Expired and Expiring Roles for Users	ZVRATU05
/VIRSA/ZVRAT_UPDOWNLOAD	Program for Upload and Download of data	ZVRATUD
/VIRSA/ZVRAT_UPLOAD /VIRSA/ZVRAT_CONV	Upload a table Conversion of CC Tables, Old to New	ZVRATUPL ZVRATCN

**Example:** To execute report 'Upload/Download Compliance Calibrator tables', a User needs the following authorizations:

Object: S\_PROGRAM

Field: User Action

Value: SUBMIT

Field: Auth Group

Value: ZVRATM01



## SU24 DATA VALUES

The following tables contain the SU24 values for each Compliance Calibrator executable.

### /VIRSA/ZVRAT

This is the main program for Compliance Calibrator.

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBGROUP= ▲ JOBACTION=
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRAT	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE=
S_TCODE	TCD=/VIRSA/ZVRAT	
ZVRAT_0001	*	→ ZACTION=
ZVRAT_0002	*	⇒ ZVRATACTVT=
ZVRAT_0003	*	➔ CLASS=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a "" field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

⇒ - Virsa delivers a "" field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

➔ - Virsa delivers a "" field value to be populated by the customer according to their organizational security strategy. See section 8.1, *ZVRAT\_0003 – User Groups* for field descriptions.

## /VIRSA/ALERTGEN

This is *Activity Monitoring*, a Tool Box utility, and can be found in the following location –  
*Virsa Utilities & Reports > Monitoring*

Object	Virsa SU24 Values	Additional Required Objects
S_OC_DOC		▲ ACTVT=
S_OC_ROLE		▲ OFFADMI=
S_OC_SEND		▲ COM_MODE= ▲ NUMBER=
S_PROGRAM	P_GROUP=ZVRATAL	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ALERTGEN	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_C01**

This is *Security & Controls Policies*, a Tool Box utility, and can be found in the following location –

*Custom Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATC01	▲ P_ACTION=
S_TCODE	/VIRSA/ZVRAT_C01	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_D01**

This is *Download Spool Requests by Job Name*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Miscellaneous*

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=
S_BTCH_ADM		▲ BTCADMIN=
S_ADMI_FCD		▲ S_ADMI_FCD=
S_DOKU_AUT		▲ DOKU_ACT= ▲ DOKU_DEVCL= ▲ DOKU_MODE=
S_TRANSLAT		▲ ACTVT= ▲ TLANGUAGE= ▲ TRANOBJ=
S_SPO_ACT		▲ SPOACTION= ▲ SPOAUTH=
S_RFC		▲ RFC_TYPE= ▲ RFC_NAME= ▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATD01	▲ P_ACTION=
S_TCODE	/VIRSA/ZVRAT_D01	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_P01**

This is *Display changes to Profiles*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Role/Profile Administration Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBGROUP= ▲ JOBACTION=
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATP01	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE=
S_TCODE	TCD=/VIRSA/ZVRAT_P01	
S_USER_PRO		▲ ACTVT= ▲ PROFILE=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## /VIRSA/ZVRAT\_S16

This is *Compliance Calibrator Data Maintenance*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_BDS_DS		<p>▲ CLASSNAME=</p> <p>▲ CLASSTYPE</p> <p>▲ ACTVT=</p>
S_DATASET	PROGRAM=/VIRSA/ZVRAT_S01 ACTVT=34 ACTVT=33	<p>▲ FILENAME=&lt;pathname&gt;</p>
S_DOKU_AUT		<p>▲ DOKU_ACT=</p> <p>▲ DOKU_DEVCL=</p> <p>▲ DOKU_MODE=</p>
S_OC_DOC		<p>▲ ACTVT=</p>
S_OC_ROLE		<p>▲ OFFADMI=</p>
S_OC_SEND		<p>▲ COM_MODE=</p> <p>▲ NUMBER=</p>
S_TRANSLAT		<p>▲ ACTVT=</p> <p>▲ TLANGUAGE=</p> <p>▲ TRANOBJ=</p>
S_GUI		<p>▲ ACTVT=</p>
S_PROGRAM	P_GROUP=ZVRATS16	<p>▲ P_ACTION=</p>
S_SPO_DEV		<p>▲ SPODEVICE=</p>
S_TCODE	TCD=/VIRSA/ZVRAT_S16	
ZVRAT_0001	*	<p>→ ZACTION =</p>

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a "\*" field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

## **/VIRSA/ZVRAT\_U05**

This is *Expired and Expiring Roles for Users*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities and Reports > User Administration Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATU05	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_U05	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

**/VIRSA/ORGUSRMAPPING**

This is *Maintain ORGUSERS table*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Miscellaneous*

Object	Virsa SU24 Values	Additional Required Objects
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBGROUP= ▲ JOBACTION=
S_PROGRAM	P_GROUP=ZVRATOR	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE=
S_TCODE	TCD=/VIRSA/ORGUSRMAPPING	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.



**/VIRSA/ZVRAT\_M01**

This is *Upload/Download Compliance Calibrator Tables*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Miscellaneous > Virsa Upgrade Tools*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATM01	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_M01	
ZVRAT_0001	*	→ZACTION=
ZVRAT_0002	*	⇒ZVRATACTVT=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a "" field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

⇒ - Virsa delivers a "" field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

## /VIRSA/ZVRAT\_M02

This is *Where Used list for Mitigating Control ID / Monitor*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Miscellaneous*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATM02	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_M02	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

### **/VIRSA/ZVRAT\_M03**

This is *Analyze disabled SoD TCodes and Objects*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SoD Audit Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATM03	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_M03	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_M04**

This is *Optimizer for SOD Data Table*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_TCODE	TCD=/VIRSA/ZVRAT_M04	
S_DATASET	PROGRAM=/VIRSA/ZVRAT_M04 ACTVT=34 ACTVT=33	▲ FILENAME=<pathname>

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_R01**

This is *Count authorizations in roles*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Role/Profile Administration Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_BDS_DS		▲ CLASSNAME= ▲ CLASSTYPE= ▲ ACTVT=
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBGROUP= ▲ JOBACTION=
S_OC_DOC		▲ ACTVT=
S_OC_ROLE		▲ OFFADMI=
S_OC_SEND		▲ COM_MODE= ▲ NUMBER=
S_PROGRAM	P_GROUP=ZVRATR01	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE=
S_TCODE	TCD=/VIRSA/ZVRAT_R01	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## /VIRSA/ZVRAT\_S01

This is *Monitor actual usage of Conflicting & Critical Transactions*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports > Monitoring & Analysis of Transactions Actually Executed By Users*

Object	Virsa SU24 Values	Additional Required Objects
S_BDS_DS		▲ CLASSNAME= ▲ CLASSTYPE= ▲ ACTVT=
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBGROUP= ▲ JOBACTION=
S_DATASET	PROGRAM=/VIRSA/ZVRAT_S01 ACTVT=34 ACTVT=33	▲ FILENAME=<pathname>
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATS01	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE=
S_TCODE	TCD=/VIRSA/ZVRAT_S01	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_S06**

This is *Validate SOD TCode Data*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATS06	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_S06	
S_DATASET	PROGRAM=/VIRSA/ZVRAT_S06 ACTVT=34 ACTVT=33	▲ FILENAME=<pathname>

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## /VIRSA/ZVRAT\_S07

This is *Non Reference Report*, a Tool Box utility, and can be found in the following location –  
*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=
S_BDS_DS		▲ ACTVT= ▲ CLASSNAME= ▲ CLASSTYPE=
S_DOKU_AUT		▲ DOKU_ACT ▲ DOCU_DEVCL ▲ DUKU_MODE
S_GUI		▲ ACTVT=
S_OC_DOC		▲ ACTVT=
S_OC_ROLE		▲ OFFADMI=
S_OC_SEND		▲ COM_MODE= ▲ NUMBER=
S_PRO_AUTH		▲ PROJAUTH= ▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATS07	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE
S_TABU_DIS	ACTVT=02 ACTVT=03 DICBERCLS=ZV&I	
S_TCODE	TCD=/VIRSA/ZVRAT_S07	
S_TRANSLAT		▲ ACTVT= ▲ TLANGUAGE= ▲ TRANOBJ=
S_USER_PRO		▲ ACTVT= ▲ PROFILE=
ZVRAT_0001	*	→ ZACTION=
ZVRAT_0002	*	⇒ ZVRATACTVT=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a “\*” field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.



⇒- Virsa delivers a “ \* “ field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

## **/VIRSA/ZVRAT\_S08**

This is *User Access Report*, a Tool Box utility, and can be found in the following location –  
*Virsa Utilities & Reports > User Administration Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBACTION= ▲ JOBGROUP=
S_PROGRAM	P_GROUP=ZVRATS08	▲ P_ACTION=
S_PRO_AUTH		▲ PROJAUTH= ▲ ACTVT=
S_TABU_DIS	ACTVT=02 ACTVT=03 DICBERCLS=ZV&J	
S_TCODE	TCD=/VIRSA/ZVRAT_S08	
ZVRAT_0001	*	→ ZACTION=
ZVRAT_0002	*	⇒ ZVRATACTVT=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a “\*” field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

⇒ - Virsa delivers a “\*” field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

## /VIRSA/ZVRAT\_S09

This is *Comparing different SOD Matrices*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=
S_BDS_DS		▲ ACTVT= ▲ CLASSNAME= ▲ CLASSTYPE=
S_GUI		▲ ACTVT=
S_OC_DOC		▲ ACTVT=
S_OC_ROLE		▲ OFFADMI=
S_OC_SEND		▲ COM_MODE= ▲ NUMBER=
S_PRO_AUTH		▲ PROJAUTH= ▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATS09	▲ P_ACTION=
S_SPO_DEV		▲ SPODEVICE
S_TCODE	TCD=/VIRSA/ZVRAT_S09	
S_TRANSLAT		▲ ACTVT= ▲ TLANGUAGE= ▲ TRANOBJ=
S_USER_PRO		▲ ACTVT= ▲ PROFILE=
ZVRAT_0001	*	→ ZACTION=
ZVRAT_0002	*	⇒ ZVRATACTVT=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a “ \* ” field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

⇒ - Virsa delivers a “ \* ” field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

## /VIRSA/ZVRAT\_S10

This is *TCodes by Roles/Profiles*, never executed in a specific time period, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_BDS_DS		<ul style="list-style-type: none"> <li>▲ CLASSNAME=</li> <li>▲ CLASSTYPE=</li> <li>▲ ACTVT=</li> </ul>
S_BTCH_ADM		<ul style="list-style-type: none"> <li>▲ BTCADMIN=</li> </ul>
S_BTCH_JOB		<ul style="list-style-type: none"> <li>▲ JOBGROUP=</li> <li>▲ JOBACTION=</li> </ul>
S_GUI		<ul style="list-style-type: none"> <li>▲ ACTVT=</li> </ul>
S_PROGRAM	P_GROUP=ZVRATS10	<ul style="list-style-type: none"> <li>▲ P_ACTION=</li> </ul>
S_SPO_DEV		<ul style="list-style-type: none"> <li>▲ SPODEVICE=</li> </ul>
S_TCODE	TCD=/VIRSA/ZVRAT_S10	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

**/VIRSA/ZVRAT\_S11**

This is *Authorization Object by Roles/Profiles Report*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_ALV_LAYO		▲ ACTVT=23
S_BTCH_ADM		▲ BTCADMIN=
S_BTCH_JOB		▲ JOBACTION ▲ JOBGROUP
S_GUI		▲ ACTVT=
S_OC_DOC		▲ ACTVT=
S_OC_ROLE		▲ OFFADMI=
S_OC_SEND		▲ COM_MODE= ▲ NUMBER=
S_PRO_AUTH		▲ PROJAUTH= ▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATS11	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_S11	
S_SPO_DEV		▲ SPODEVICE=
S_USER_PRO		▲ ACTVT= ▲ PROFILE=
ZVRAT_0001	*	→ ZACTION=
ZVRAT_0002	*	⇒ ZVRATACTVT=

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

→ - Virsa delivers a “\*” field value to be populated by the customer according to their organizational security strategy. See section 6.1, *Defined Fields – ZACTION* for action code descriptions.

⇒ - Virsa delivers a “\*” field value to be populated by the customer according to their organizational security strategy. See section 7, *ZVRAT\_0002 - Execution* for activity code descriptions.

## /VIRSA/ZVRAT\_S13

This is *Comparing Critical TCode Matrices*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATS13	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_S13	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_S14**

This is *Comparing SoD Authorization Matrices*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SoD Audit Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATS14	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_S14	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## /VIRSA/ZVRAT\_S15

This is *Compare SOD TCode Matrix with SOD Authorization Object TCodes*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SoD Audit Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATS15	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_S15	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.



## **/VIRSA/ZVRAT\_U01**

This is *Count Authorizations for Users*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > User Administration Utilities and Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATU01	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_U01	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

## **/VIRSA/ZVRAT\_U02**

This is *Analysis of Called Transactions in Custom Code*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > SOD / Audit Utilities & Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_PROGRAM	P_GROUP=ZVRATU02	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_U02	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.

### **/VIRSA/ZVRAT\_U03**

This is *Management Report for SoD Remediation*, a Tool Box utility, and can be found in the following location –

*Virsa Utilities & Reports > Management Level Reports*

Object	Virsa SU24 Values	Additional Required Objects
S_GUI		▲ ACTVT=
S_PROGRAM	P_GROUP=ZVRATU03	▲ P_ACTION=
S_TCODE	TCD=/VIRSA/ZVRAT_U03	

▲ - Virsa delivers blank SU24 field values to be populated by the customer according to their organizational security strategy.



## LINE-ORIENTED AUTHORIZATIONS

This section discusses the use and implementation of line-oriented authorizations in SAP. Line-oriented authorizations are used to restrict Users to modifying SoD Object and Mitigation Controls at line level.

### Use

Access to customizing tables can be controlled at the row level for display or maintenance using line-oriented authorizations. So far, this access can only be controlled at the table level i.e. a User can either have access to the entire table or not at all. Authorization object S\_TABU\_LIN is used to control access at the row level. This check is carried out in addition to authorization objects S\_TABU\_DIS and S\_TABU\_CLI. The use of line-oriented authorization is optional.

The new authorization object S\_TABU\_LIN now allows, in addition to the existing authorization concept, client-specific assignment of authorizations for business entities. Organizational criterion in a cross-client table which only allows a User to display and change table contents for one work area, i.e. a country can also be defined. The organizational criterion enables a business concept to be mapped to table key fields.

Please note these authorizations only work with customizing data display and maintenance transactions. It does not work for data browser transactions like SE16, SE17 at this point.

### Implementation

The following steps are executed to implement line-oriented authorization:

- Design Organization Criteria
- Define Organization Criteria
- Define Attributes
- Assign Attributes to Table Fields
- Include Authorizations for S\_TABU\_LIN in Roles
- Activate Organization Criteria

### Design Organization Criteria

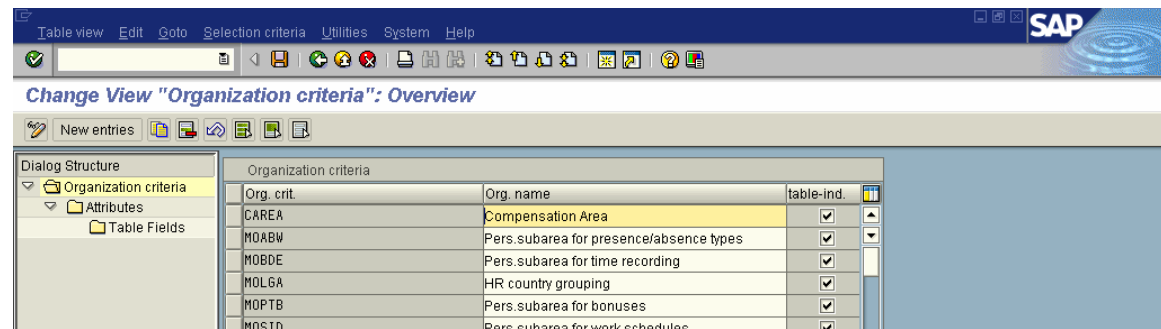
- Analyze requirements
- Identify tables and fields to be protected
- Identify Users & Roles to be impacted
- Review design

### Define Organization Criteria

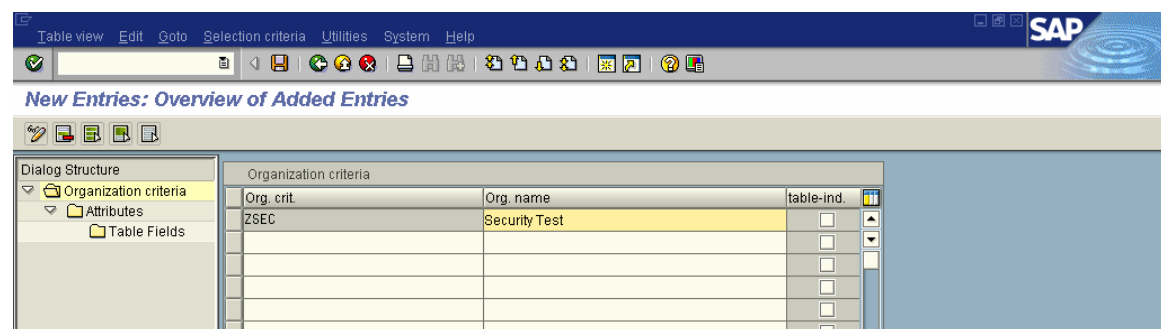
1. Execute transaction SPRO and go to Basis Components → Users and Authorizations → Line-oriented Authorizations → Define Organizational Criteria
2. Click New Entries

## Line-Oriented Authorizations

### Define Organization Criteria

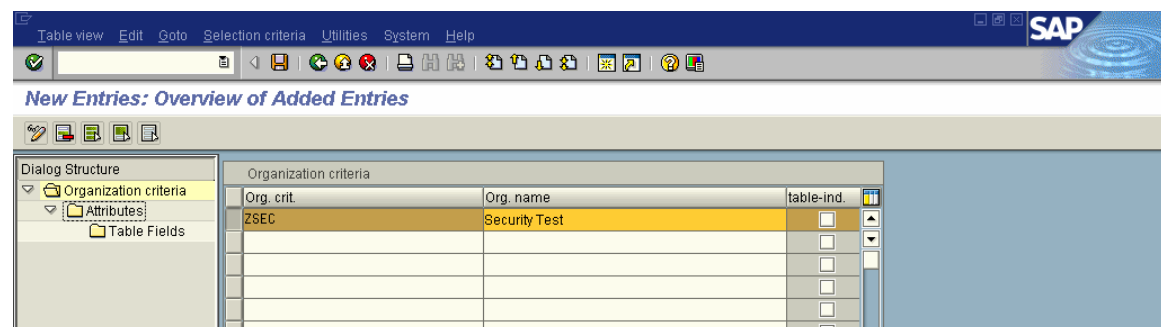


3. Enter the technical name and description of the Org. Criteria

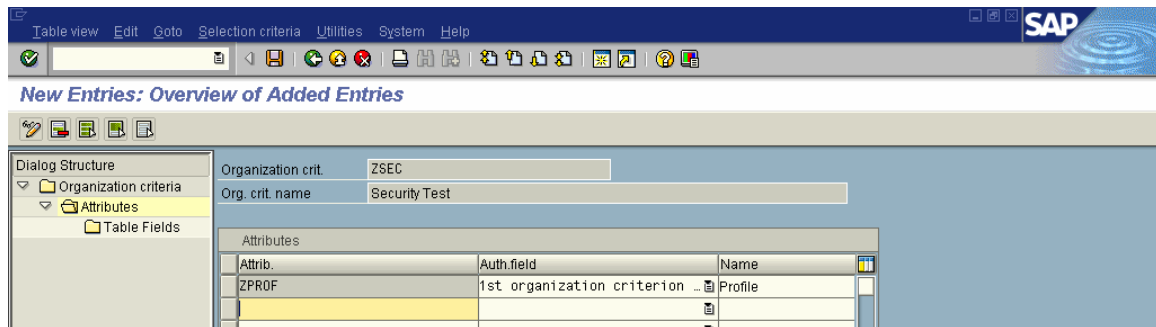


### Define Attributes

4. Select the org criteria and double click on the Attributes

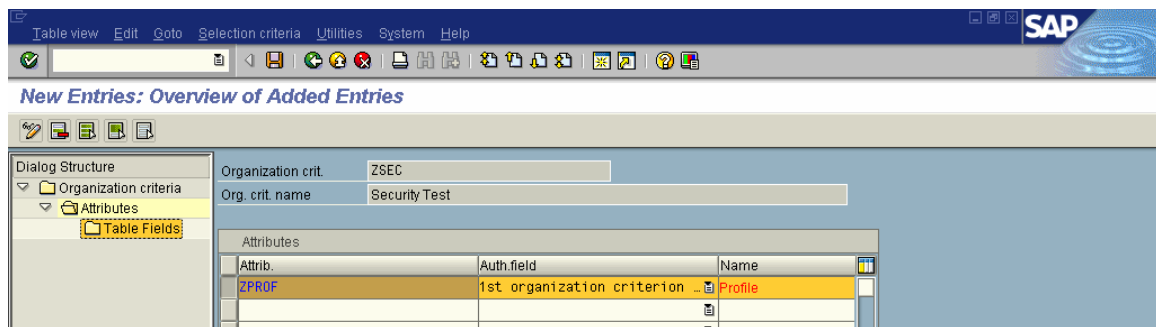


- Click New Entries, enter the attribute name, assign the field to the authorization field and enter description for the field. Click Save when finished.

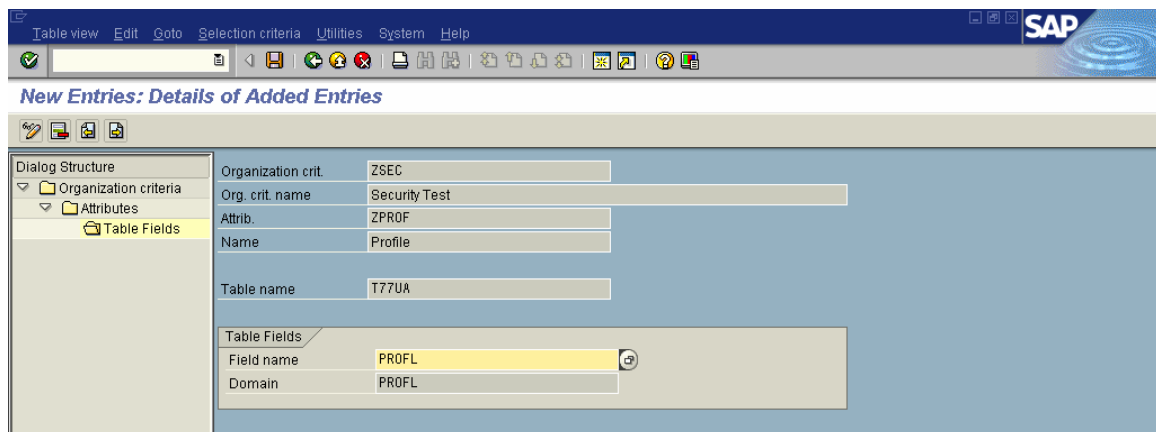


### Assign Attributes to Table Fields

- Select the attribute and double click on the Table Fields



- Click New Entries. Enter the table name and field name to be protected.

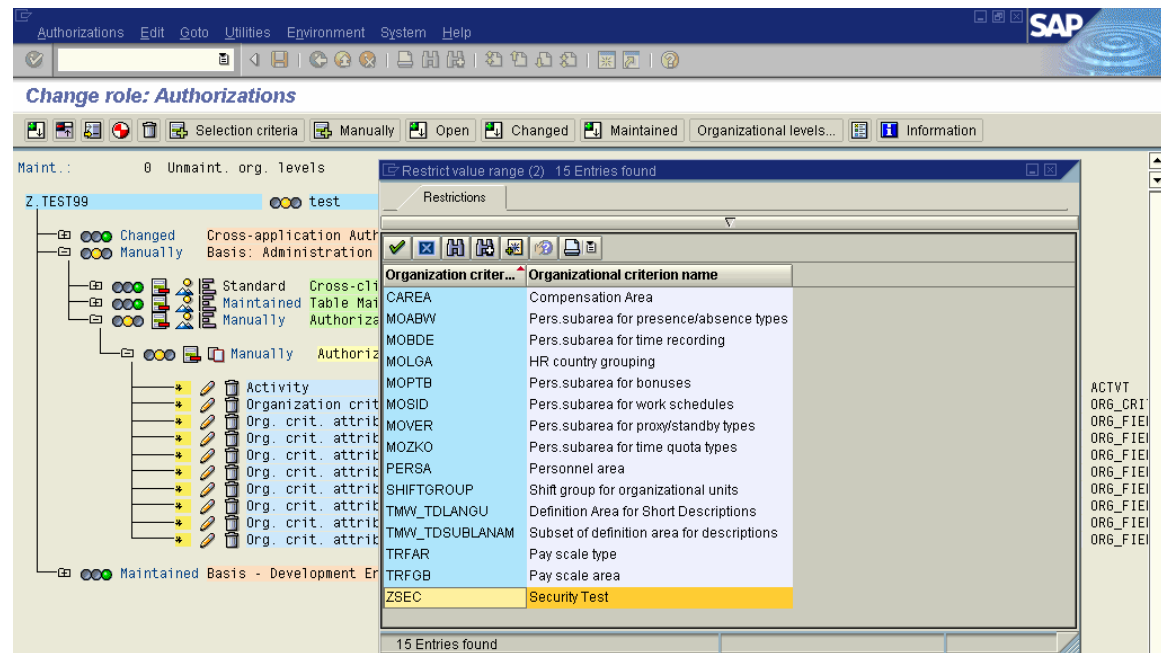


### Include Authorizations for S\_TABU\_LIN in Roles

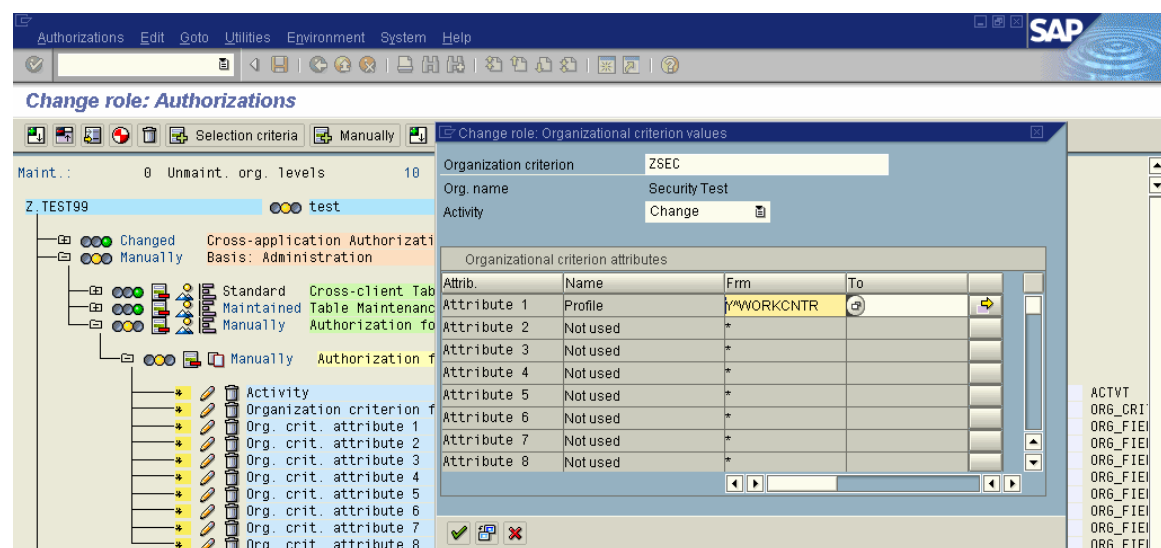
- Enter the authorizations for S\_TABU\_LIN in the appropriate Roles. Insert the object manually, click on any field and select org criteria.

## Line-Oriented Authorizations

### Define Organization Criteria



9. Enter the allowed values for authorizations fields and click Transfer



10. Generate authorizations and assign authorized Users to the Role.

### Activate Organization Criteria

11. Execute transaction SPRO and go to Basis Components → Users and Authorizations → Line-oriented Authorizations → Activate Organizational Criteria. Set the check box to activate the org criteria.



Table view Edit Goto Selection criteria Utilities System Help

Change View "Organizational criteria activation": Overview

Organizational criteria activation

Org. crit.	Org. name	Activ
CAREA	Compensation Area	<input type="checkbox"/>
MOABW	Pers.subarea for presence/absence types	<input type="checkbox"/>
MOBDE	Pers.subarea for time recording	<input type="checkbox"/>
MOLGA	HR country grouping	<input type="checkbox"/>
MOPTB	Pers.subarea for bonuses	<input type="checkbox"/>
MOSID	Pers.subarea for work schedules	<input type="checkbox"/>
MOVER	Pers.subarea for proxy/standby types	<input type="checkbox"/>
MOZKO	Pers.subarea for time quota types	<input type="checkbox"/>
PERSA	Personnel area	<input type="checkbox"/>
SHIFTGROUP	Shift group for organizational units	<input type="checkbox"/>
TMW_TDLANGU	Definition Area for Short Descriptions	<input type="checkbox"/>
TMW_TDSUBLANAM	Subset of definition area for descriptions	<input type="checkbox"/>
TRFAR	Pay scale type	<input type="checkbox"/>
TRFGB	Pay scale area	<input type="checkbox"/>
ZSEC	Security Test	<input checked="" type="checkbox"/>

### Cross-Table Check

12. To make the check for a field for all tables, set the check box table-independent on the Define Org Criteria Screen.

Table view Edit Goto Selection criteria Utilities System Help

Change View "Organization criteria": Overview

New entries

Dialog Structure

- Organization criteria
  - Attributes
  - Table Fields

Organization criteria

Org. crit.	Org. name	table-ind.
CAREA	Compensation Area	<input checked="" type="checkbox"/>
MOABW	Pers.subarea for presence/absence types	<input checked="" type="checkbox"/>
MOBDE	Pers.subarea for time recording	<input checked="" type="checkbox"/>
MOLGA	HR country grouping	<input checked="" type="checkbox"/>
MOPTB	Pers.subarea for bonuses	<input checked="" type="checkbox"/>
MOSID	Pers.subarea for work schedules	<input checked="" type="checkbox"/>
MOVER	Pers.subarea for proxy/standby types	<input checked="" type="checkbox"/>
MOZKO	Pers.subarea for time quota types	<input checked="" type="checkbox"/>
PERSA	Personnel area	<input checked="" type="checkbox"/>
SHIFTGROUP	Shift group for organizational units	<input checked="" type="checkbox"/>
TMW_TDLANGU	Definition Area for Short Descriptions	<input checked="" type="checkbox"/>
TMW_TDSUBLANAM	Subset of definition area for descriptions	<input checked="" type="checkbox"/>
TRFAR	Pay scale type	<input checked="" type="checkbox"/>
TRFGB	Pay scale area	<input checked="" type="checkbox"/>
ZSEC	Security Test	<input checked="" type="checkbox"/>

## Define Organization Criteria

## S\_TABU\_LIN

This object has the following ten fields:

Activity – 02, 03

Organization Criterion – Link to table key fields

Org Criterion Attribute1

Org Criterion Attribute2

Org Criterion Attribute3

Org Criterion Attribute4

Org Criterion Attribute5

Org Criterion Attribute6

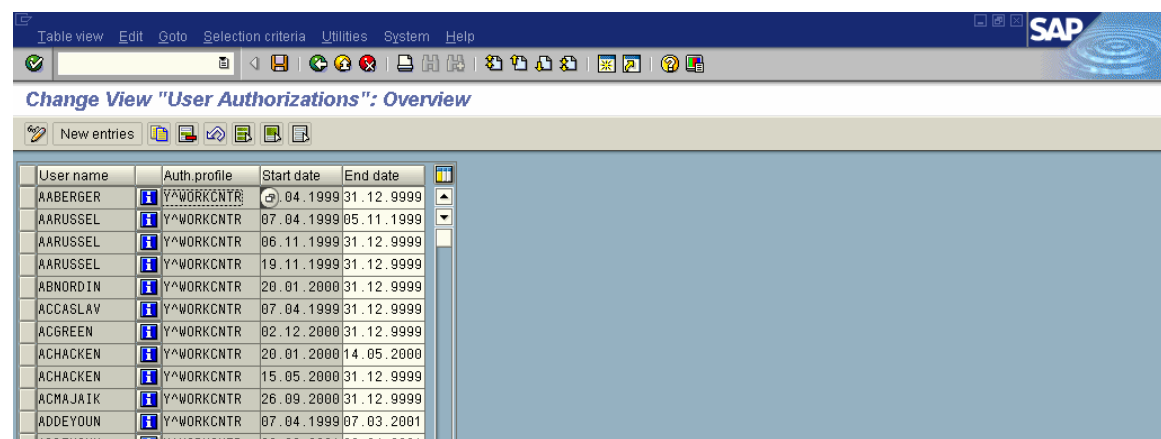
Org Criterion Attribute7

Org Criterion Attribute8

Field Values of  
tables

## Test

13. User is only allowed to maintain/display table T77UA for Work Center Profile Y^WORKCNTR only.



The screenshot shows the SAP 'User Authorizations' Overview table. The table has four columns: User name, Auth.profile, Start date, and End date. The data is as follows:

User name	Auth.profile	Start date	End date
AABERGER	Y^WORKCNTR	04.1999	31.12.9999
AARUSSEL	Y^WORKCNTR	07.04.1999	05.11.1999
AARUSSEL	Y^WORKCNTR	06.11.1999	31.12.9999
AARUSSEL	Y^WORKCNTR	19.11.1999	31.12.9999
ABNORDIN	Y^WORKCNTR	20.01.2000	31.12.9999
ACCASLAV	Y^WORKCNTR	07.04.1999	31.12.9999
ACGREEN	Y^WORKCNTR	02.12.2000	31.12.9999
ACHACKEN	Y^WORKCNTR	20.01.2000	14.05.2000
ACHACKEN	Y^WORKCNTR	15.05.2000	31.12.9999
ACHAJAIK	Y^WORKCNTR	26.09.2000	31.12.9999
ADDEYOUN	Y^WORKCNTR	07.04.1999	07.03.2001
ADDEYOUN	Y^WORKCNTR	07.03.2001	07.03.2001

## NOTE

Security needs to protect the tables that stores configuration of line-oriented authorizations and only the Security team should have the maintenance authorizations.

## Flowchart of Authorization Check

