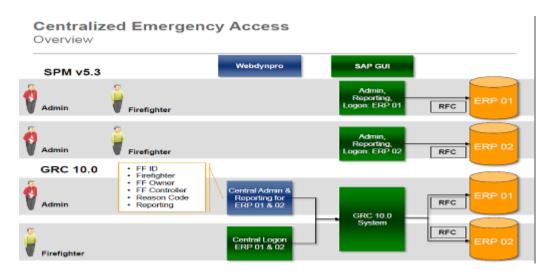
SAP GRC 10.0 – Super User Management

INTRODUCTION

Centralized Emergency Access: The purpose of Emergency Access Management is to allow users to take responsibility for tasks outside their normal job function. This component allows temporary access for users when assigned with solving a problem, giving them provisionally broad, but regulated access. This temporary access is monitored and recorded in this application.

New in 10.0

Access Control 10.0 has been enhanced in the area of Emergency Access Management with the ability to manage and utilize firefighting activities centrally from the Access Control 10.0 application. Also the log file can be distributed to controllers and owner via workflow for additional approval.



Feature and Benefits

- Simplified management and firefighting activities.
- Reduces repetitive assignments, easing administration.
- Improves log review efficiency by capturing previously undocumented activity.
- Improves log report navigation.
- Enables documented account of the controller's review.
- Administrators centrally manage firefighter assignments, controllers, and other master data.
- New options for group owners and controllers and improved provisioning.
- Firefighters centrally access their assignments.
- New ability for firefighters to update the activity log with unplanned firefighting tasks
- Access specific log reports from transaction report

- New workflow driven firefighter log report.
 - New categorization of firefighter access signifies criticality and drives workflow logic.

TERMINOLOGY

<u>Firefighter:</u> User requiring emergency access.

<u>Firefighter ID:</u> User ID with elevated privileges; it can only be accessed in the GRC server using transaction **GRAC_SPM**.

Firefighting: The act of using a firefighterID

Owner: User responsible for a firefighterID and the assignment of controllers and firefighters.

<u>Controller:</u> Reviews and approves (if necessary) the log files generated by a firefighter.

Configuration:

Activating BC Sets:

BC Set= Buisness Configuration settings which contains standard data for each component and the stnadard data is required to configure the components.

We can Use transaction SCPR20 to activate BC Sets.

Path: SPRO--> SAP Reference IMG--> Click on "Existing BC Sets"--> GRC--> General settings--> Key attributes--> Go-to--> Activate transaction--> activate

BC sets for EAM:

GRAC_SPM_CRITICALITY_LEVEL Criticality Level

Maintain connectors and connection types:

In this Customizing activity, you define connection types, which are then used while connecting to other systems.

Path: SPRO-->SAP Ref IMG--> GRC--> Common component settings--> Integration frame work--> Maintain connectors and connection types

Connection types:

EP Enterprise Portal

FILE File system for legacy extraction

LDAP Ldap Connectors

LOCAL Local Data Source
SAP System
SPML1 SPML1
SPML2 SPML2
WS Web service

- 1. Define connector and maintain connection type
- 2. Define Connector group and assign respective SAP system into connector group.

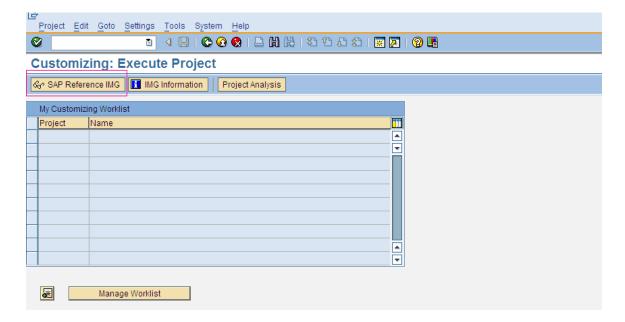
Maintain connection settings:

Integration scenarios:

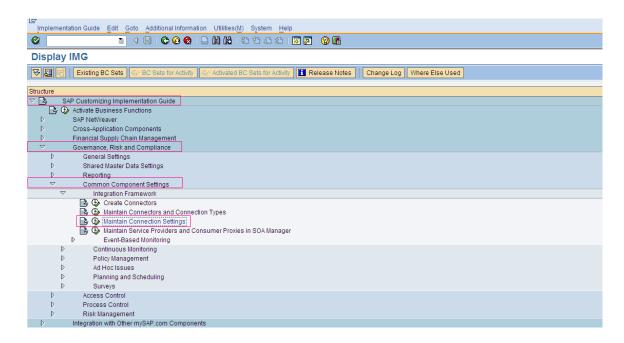
To create access requests it is required to have the SUPMG scenario linked to the connector, which is done via IMG in the GRC box:

Execute transaction SPRO =>Click on SAP Reference IMG

In this Customizing activity, you assign connectors to an integration scenario. The application uses the connectors to communicate with other systems in your landscape.

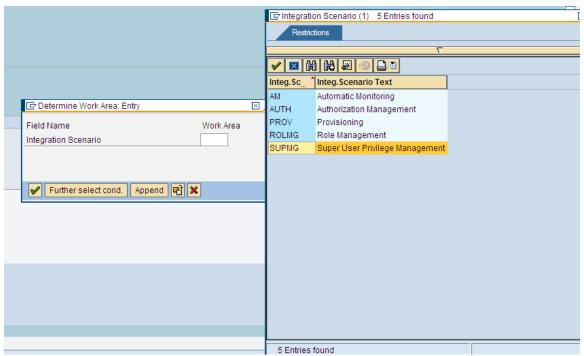


Expand SAP Customizing Implementation Guide =>Governance, Risk and Compliance => Common Component Settings => Execute Maintain Connection Settings

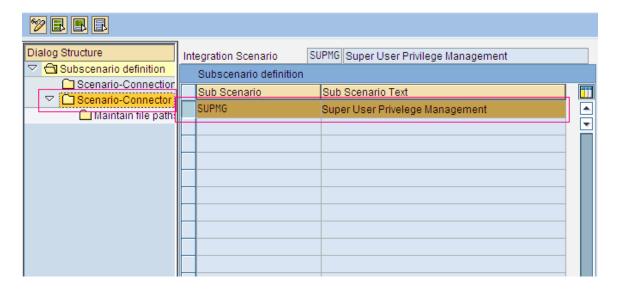


<u>Use:</u> In this Customizing activity, you assign connectors to an integration scenario. The application uses the connectors to communicate with other systems in your landscape. For example, if you have an ERP integration scenario, you assign the connectors of the ERP systems to the integration scenario.

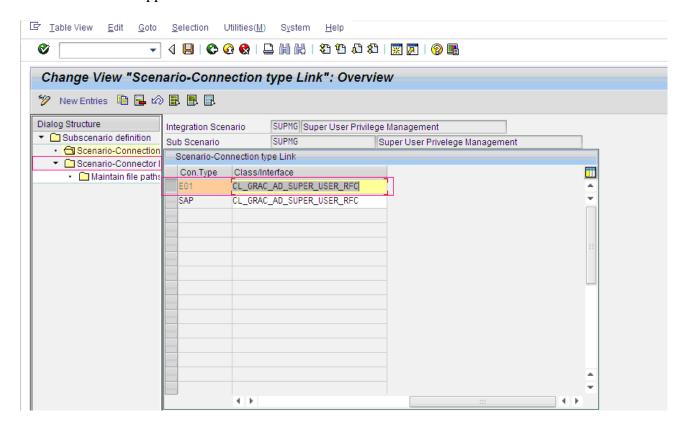
After execution, a pop-up appear prompting for Integration Scenario. We need to select the Integration Scenario as "SUPMG".



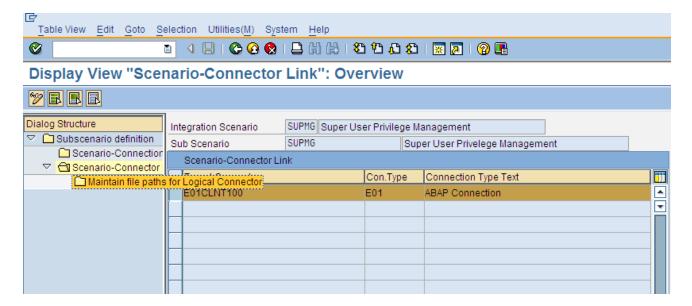
Below screen will appear. We then need to select the Sub Scenario SUPMG and double click on *Scenario-Connector Link*.



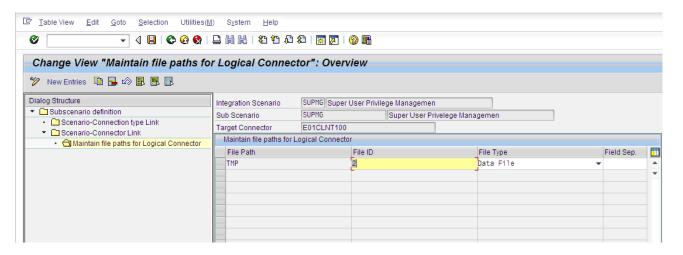
Below screen will appear:



We then need to select the Con. Type E01 (as in this case) and double click on *Scenario-Connector Link*.



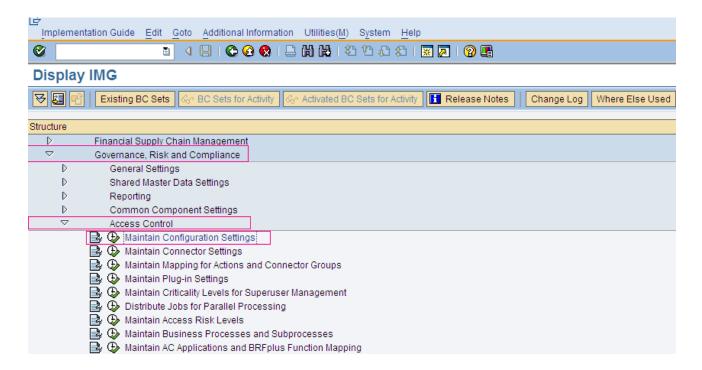
Select Target Connector and double click on "Maintain file paths for Logical Connector". Below screen will display.



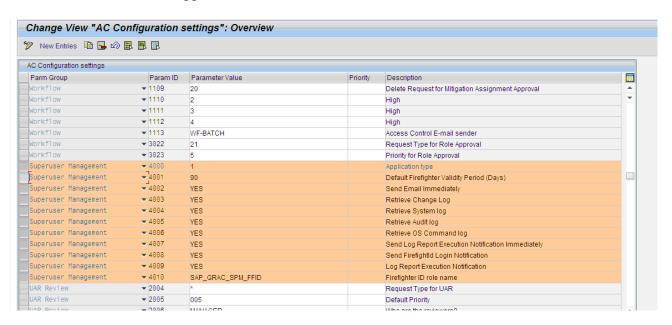
We then need to maintain the above entries.

Once above activity is completed, we need to go back in SPRO screen and execute *Maintain Configuration Settings*.

Governance, Risk and Compliance => Access Control => Execute Maintain Configuration Settings



<u>Use:</u> In this Customizing activity, you maintain the general configuration settings and parameters used in the access control application.

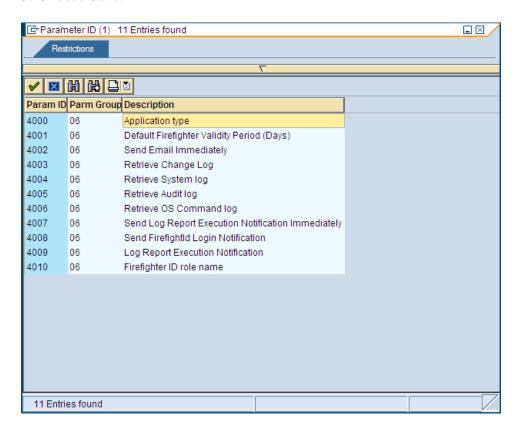


Here in the above screen, we need to select the *Parm Group* as "Superuser Management" and can configure below *Param Ids* accordingly.

To maintain the configuration settings:

- 1. Choose the New Entries pushbutton and select a parameter group from the dropdown list.
- 2. In the Parameter ID column, select a parameter ID for use with the parameter group. The short description appears on the right-hand side.

- 3. Select a Parameter Value from the dropdown list, or enter values in the field.
- 4. In the Priority field, enter a number for the priority.
- 5. Choose Save.



Below is the brief detail for the Param Ids for Super user Management:

Superuser Management 4000 Application type

You use this parameter to set the firefighting configuration:

Choose 1 for ID-based firefighting.

Choose 2 for Role-based firefighting.

Superuser Management 4001 Default Firefighter Validity Period (Days)

Set the default validity period (in days) of firefighter ID assignments to a firefighter.

Note: This is only the default period. You can override the validity period for each assignment as needed in the front-end.

Superuser Management 4002 Send E-mail Immediately

The application sends e-mail notifications to the controller. Set the value to YES to send the e-mail notifications immediately. Set the value to NO and the application sends notifications only when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE.

The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Superuser Management 4003 Retrieve Change Log

If set to YES then the application fetches the Change Log when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE.

The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Note: Plug-in system must have the O/S time and R/3 time zone matched for the logs to be properly collected. This is because STAD stores the logs in O/S files.

Superuser Management 4004 Retrieve System Log

If set to YES then the application fetches the System Log (debug changes) when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE.

The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Superuser Management 4005 Retrieve Audit Log

If set to YES then the application fetches the audit (security) logs when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE.

The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Note: You can activate Audit Logs using the transaction SM19.

Superuser Management 4006 Retrieve O/S Command Log

If set to YES then the application fetches the O/S Command Log when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE. The O/S Command Log tracks information when O/S commands (SM49) are created, changed, or executed. The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Superuser Management 4007 Send Log Report Execution Notification Immediately

The application can send log reports controllers. The application sends the notifications as e-mails or workflow items based on the configuration of the controllers.

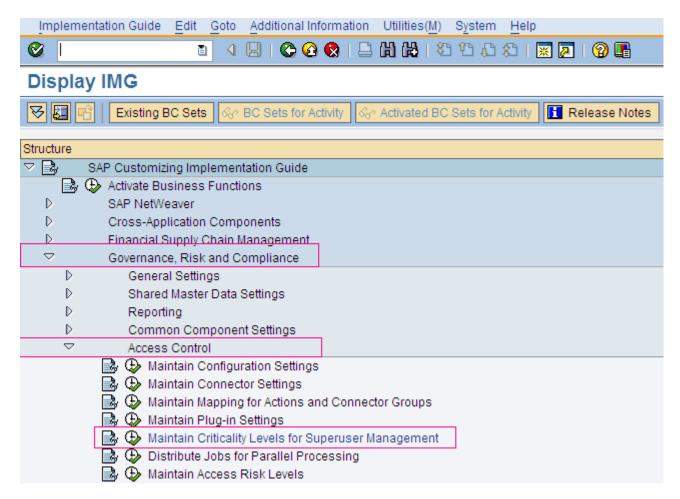
Set the value to YES and the application sends notifications when the user chooses the Update Firefighter Log button or runs the program GRAC_SPM_LOG_SYNC_UPDATE.

The Update Firefighter Log button is available on the Consolidated Log Report under Superuser Management Reports.

Set the value to NO and the application only collects the logs when the user chooses the Update Firefighter Log button or runs the GRAC_SPM_LOG_SYNC_UPDATE program. The application sends the e-mail notifications when the G

RAC_SPM_WORKFLOW_SYNC program is run.

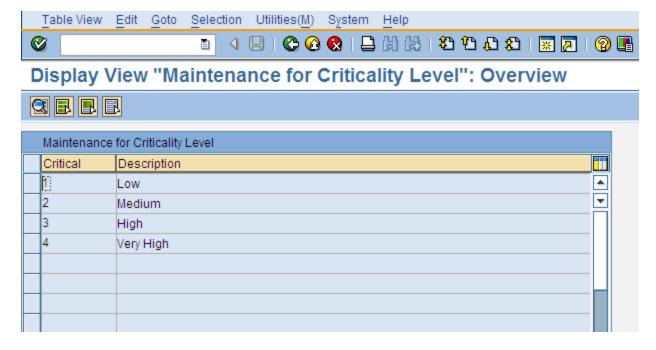
After configuring we need to go back to SPRO IMG and select **Maintain Criticality Levels for Superuser Management**



In this Customizing activity, you can specify the criticality level for the access control application.

To maintain the criticality levels:

- 1. Choose the New Entries pushbutton, and then enter a number between 1 and 99 to define the criticality level.
- 2. In the Short Description column, enter a user-defined description.
- 3. Save the entry.



At this point of time, configuration part has been completed. Now we need to maintain the Owner and Controller for the FF Ids.

Firstly we need to create the Owner and Controller in the GRC box and FireFighter Ids in the R/3 box.

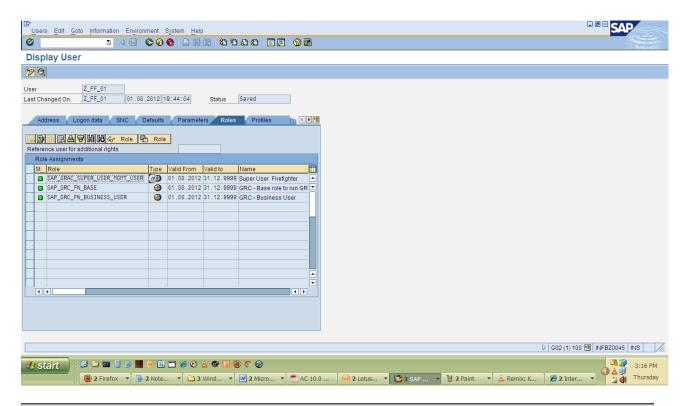
Here in this case **Z_OWNER** is Owner with the role assignment SAP_GRAC_SUPER_USER_MGMT_OWNER.

Z_CNTLR is Controller with the role assignment SAP_GRAC_SUPER_USER_MGMT_CNTLR.

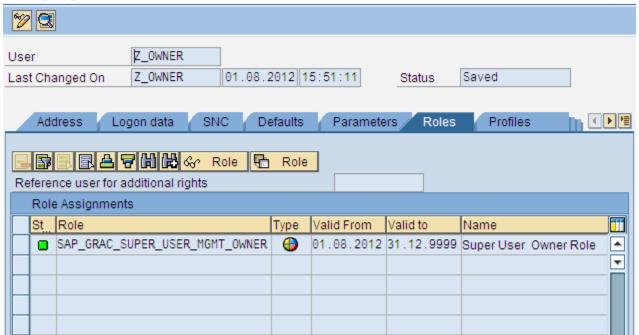
Z_FF_01 is the FireFighter with role assignment SAP_GRAC_SUPER_USER_MGMT_USER, SAP_GRC_FN_BASE, SAP_GRC_FN_BUSINESS_USER.

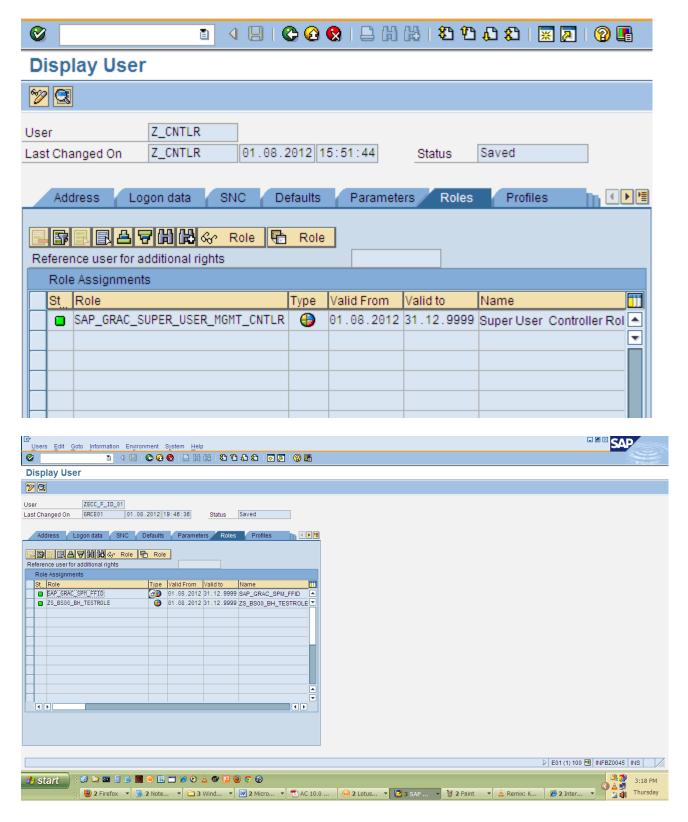
ZECC F ID 01 is the FireFighter Id which we have created in **R/3 Box.**

Refer below screenshots for the above mentioned users.

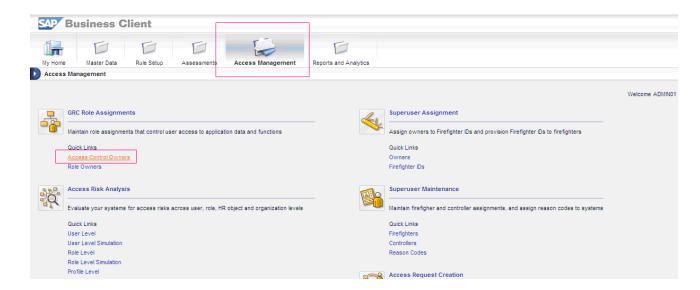


Display User

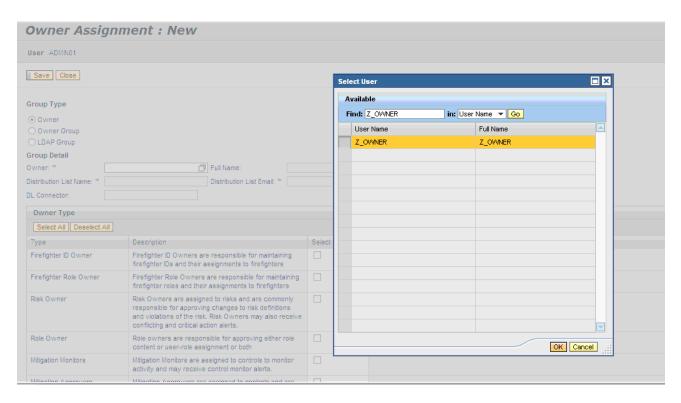




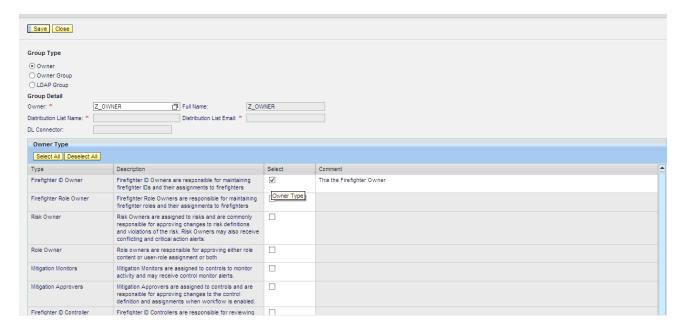
Execute t-code NWBC in GRC box and then click on SAP_GRC_NWBC. You will be redirected to the portal as below screen:



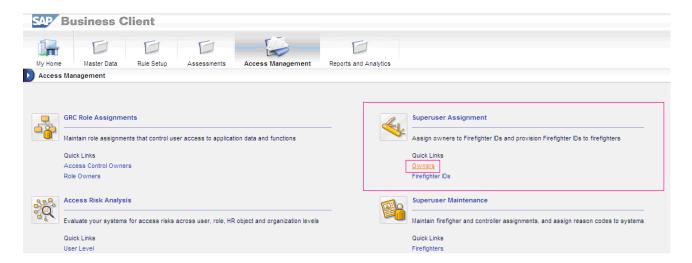
Now click over Access Management and select Access Control Owners. Click create for FireFighter Owner.



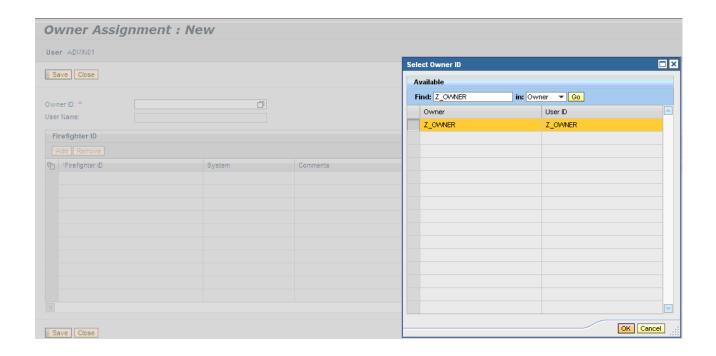
Select FF Owner which you have created in the GRC box and click on OK.

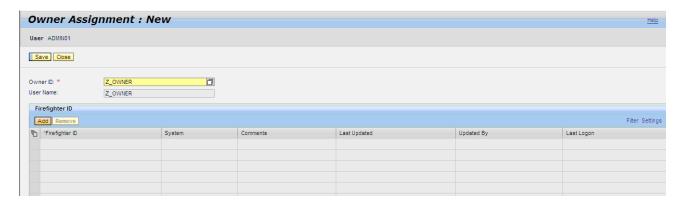


Put your comments if any under FF Id Owner. We then need to select the Owners under Super User Assignment.

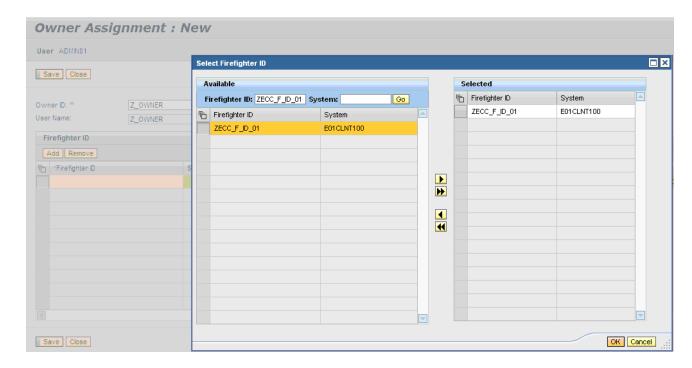


We then need to click on Assign in order to assign the Owner to the FF Id. Select the Owner.

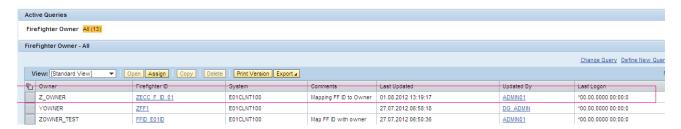




Find the FF Id which we have created in the R/3 box.

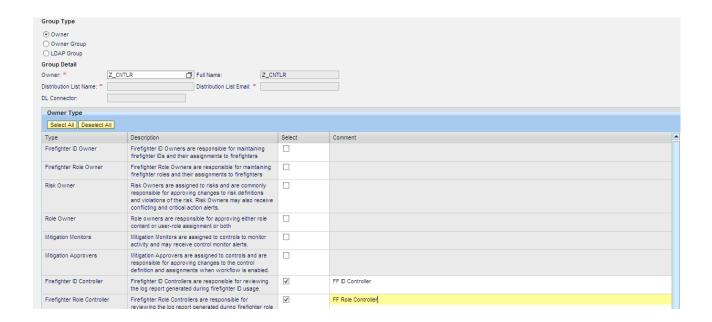


Put your comments and save it.

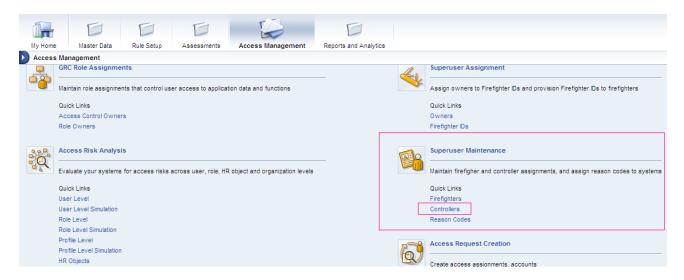


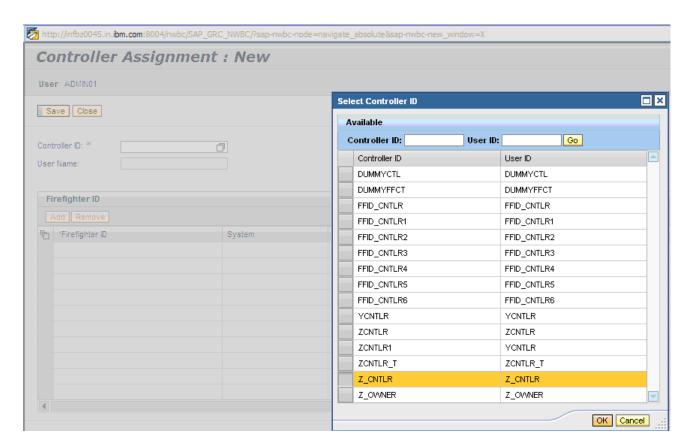
For creating controllers, we need to follow the similar process as we did for OWNER.

Make sure to check the correct boxes for controllers as in below screenshot.

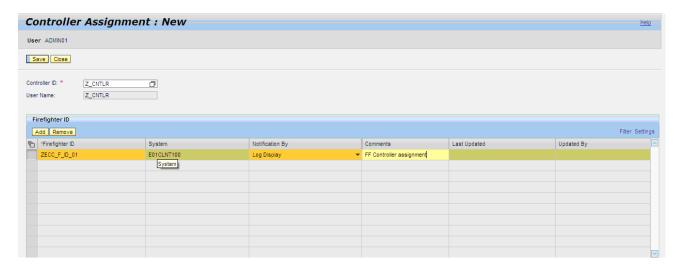


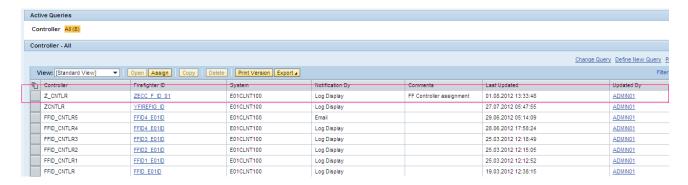
Now for Controller Assignment, we need to click on Controllers as in below screenshot.





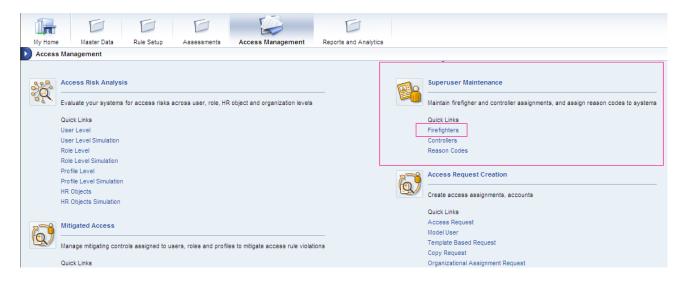
Add FireFighter to the controller



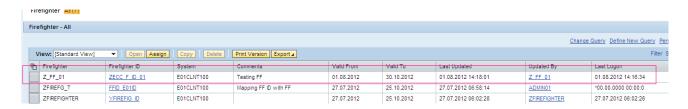


As of now, we have assigned controllers to the FF Id.

Now for FireFighter mapping, we need to click on FireFighters under superuser maintenance.



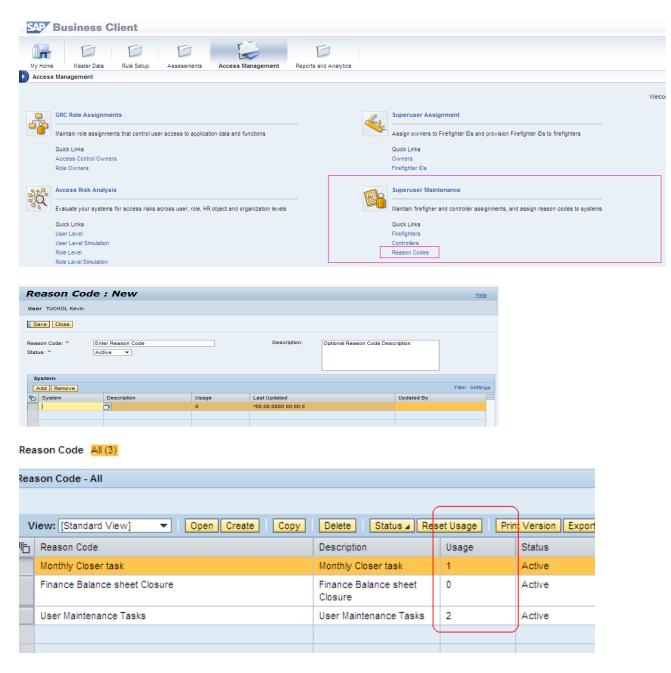
We then need to populate the FF Ids and map it with the Fire Fighter.



FF Assignment has been completed now.

CREATE REASON CODES

Whenever a firefighter starts a firefighter session the reason code needs to be specified and maintained. A Reason Code can be created and assigned multiple remote systems. This reduces the amount of duplicated administration across systems.



Frequency of usage is tracked by reason code, by system. In the Reason Code list, you will see the total usage of the reason code across all systems to which it is assigned.

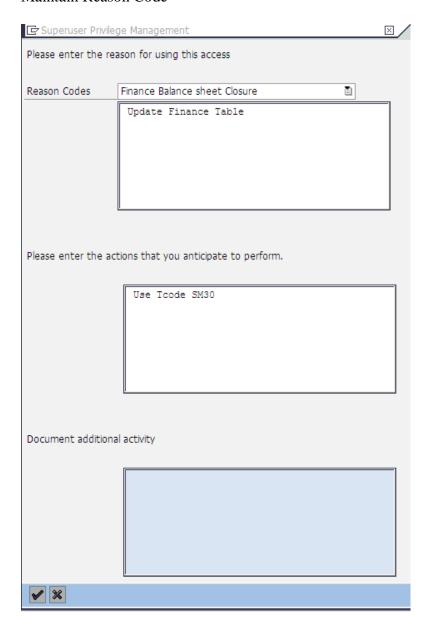
HOW TO ACCESS FIREFIGHTER ID

Logging into GRC box.

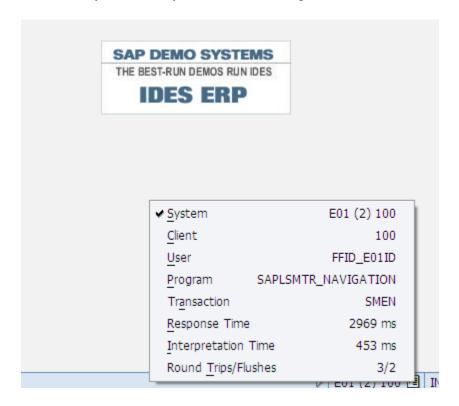
Use Tcode GRAC_SPM to login to SPM.



Maintain Reason Code



It will take you to R/3 system with FFID logon



Moreover the status will change to Red.

Superuser Privilege Management



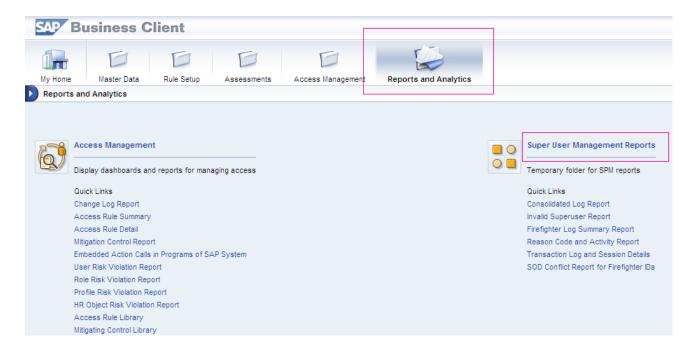
While a firefighter session is open the status of the firefighter ID will turn to red A firefighter can click Additional Activity any time to enter more information.

If a firefighter ID is in use by another firefighter, then notification can be sent to the other firefighter by clicking Message.

Unlock can be used to unlock the firefighter ID in the event it is locked.

REPORTING

The reports can be accessed using the NWBC or the Portal and are located under Reports and Analytics →Superuser Management Reports



Consolidated Log Report: This report provides information based on the following logs from the remote system.

Transaction Log: Captures transaction execution from transaction STAD

Change Log: Captures change log from change document objects (tables CDPOS and CDHDR)

System Log: Captures Debug & Replace information from transaction SM21.

Security Audit Log: Captures Security Audit Log from transaction SM20

OS Command Log: Captures changes to OS commands from transaction SM49.

Invalid Superuser Report: This Report gives the details of all the users (firefighter, controller, owner, firefighter ID) who are Expired, Locked or Deleted. In the case of Role Based Firefighter, it gives the details of whether the role has been generated or not.

Firefighter Log Summary: Provides details of the session the firefighter logged into the remote system using the FFID for the ID based FF Application.

Reason Code and Activity Report: This Report provides the details of information of Reason and Activity used by the firefighter.

SOD Conflict Report for Firefighter ID: When the firefighter logs in to the remote system using the FFID in to the remote system and performs certain transactions which violates access risk rules.

Log Collection Overview: The details of the transaction executed by the firefighter lies in the remote system in the CDHDR, CDPOS, STAD, SM19, SM49, and debug & replace information. The data from the remote system can be fetched using the Log Collector which can be executed as a foreground or background job.

Foreground Job: The foreground Job for Log Collection can be executed from the Update firefighter log button which can be found in the Consolidated Log Report

Consolidated Log Report			
Update Firefighter Log Close			
Saved Variants:	▼ Delete]	
Report Name	is ▼	All system logs ▼	
System ▼	is ▼	▼	⊕ ⊡
Firefighter ▼	is •		⊕ ⊝
Owner ▼	is •		⊕ ⊝
Firefighter ID ▼	is •		⊕ ⊝
Transaction ▼	is •		⊕ ⊝
Reason Code ▼	is 🔻		⊕ 😑
Date ▼	is •	[
Clear		Save Variant As:	Save
Resultset size: 100 Run in foreground Run in background			

Background Job: The Background Job for log collection can be scheduled from SM36which can be scheduled on a periodic basis. The status of the background job can be checked from the SM37 transaction.

The program name for the background job is: GRAC_SPM_LOG_SYNC_UPDATE

Consolidated Log Report Transaction Log: The consolidated log report allows filtering criteria like System, Firefighter, FFID, Reason Code, Transaction, Date or Owner.

System Log: The System Log can also be found in the consolidated Log Report by choosing the Report type as System Log.

Audit Log: The Audit Log is also contained in the consolidated Log Report as Report type as Audit Log. This audit function will show the details of the user(s) subject to auditing. The user(s) to be audited are configured/selected in transaction SM19.

OS Command Log: An OS Command Log can be retrieved from the consolidated Log Report by selecting the Report type as OS Command.

This logs tracks the changes which the user makes in SM49 for OS Command.

Invalid SuperuserReport: The Invalid Superuser Log is launched by the according link from the Super User Management Reports area.

This Log is used to analyze the users who are expired, locked or deleted.

FireFighter Log Synch:

In this Customizing activity, you can get the logs of firefighter activities from the back-end system and store them in the GRAC repository. The synchronization gets data for firefighter activities from the time the activity was last executed to the current time.

The activity performs the log synchronization in the background and does not display any screens. The cursor spins to indicate the application is performing the task. Once the cursor stops spinning, the task is done.

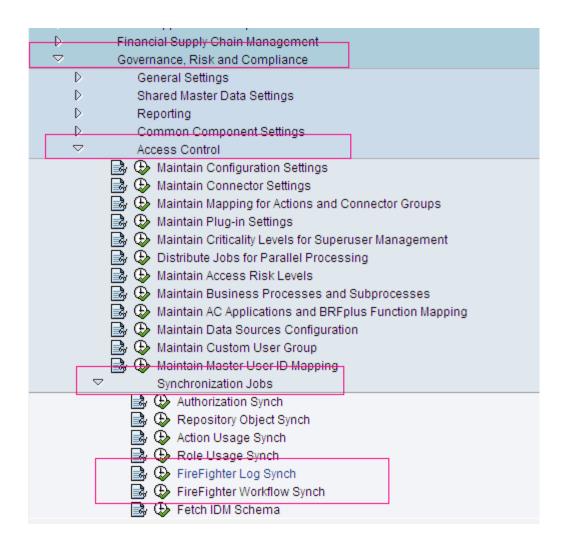
The following tables are updated:

GRACAUDITLOG GRACCHANGELOG GRACOSCMDLOG GRACSYSTEMLOG GRACFFLOG

This log is only updated during FireFighter Log synch if you have maintained the Send Log Report Execution Notification Immediately parameter as Yes, or else it is updated during Firefighter Workflow Synch. You maintain this in the Customizing activity Maintain Configuration Settings, parameter ID 4007.

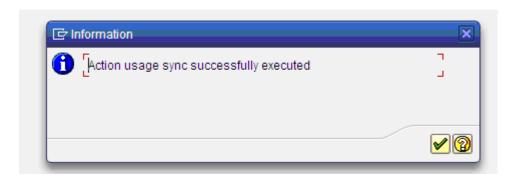
GRACROLEFFLOG

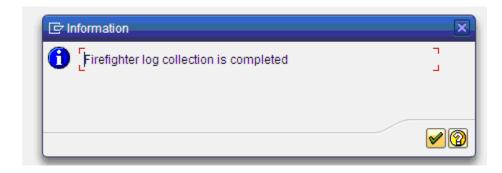
This log is updated for role based applications. You can set whether an application is Role or User based in the Customizing activity. This log is updated for role based applications. You can set whether an application is Role or User based by using the Customizing activity Maintain Configuration Settings, parameter ID 4000 - Application Type.



FireFighter Workflow Synch:

In this Customizing activity, you can generate requests for the FFID log and send the workflow to controller. The activity updates the GRACFFLOG and GRACROLEFFLOG tables , triggers the firefighter workflow, and creates firefighter work items.

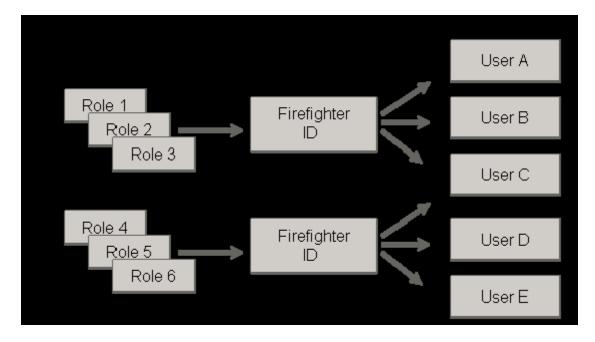




FIREFIGHTER APPLICATION TYPES

ID Based Firefighter:

The firefighterID created in the remote system will be assigned to the user in the GRC system, either manually or via an access request. The firefighter accesses their assigned firefighterID in the GRC server using the SAP GUI and transaction GRAC_SPM. The firefighterID for all remote systems assigned to the firefighter will be accessed from this transaction.



In this scenario:

Each Firefighter ID has its own User Master Record with roles assigned to it.

An SAP End-user (Firefighter) executes a transaction code (/n/virsa/vfat in AC 5.3) and checks out an ID. Multiple users can check-out each Firefighter ID but only one user can have it checked out at any time.

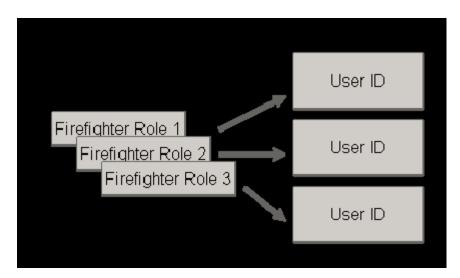
A reason and the expected activity must be documented prior to gaining firefighter access.

Relevant changes in SAP are captured in the change history under the Firefighter ID, not the user's normal ID.

ID-Based Firefighter usage is available in all versions of Superuser Privilege Management (formerly Firefighter). It is used widely by customers for granting emergency and elevated access.

Role Based Firefighter:

The firefighter roles created in the remote system will be assigned to the user in the GRC server. The firefighter directly logs into the remote system using their user ID and performs activities which are provided in the user's role and firefighter role assigned to the user.



In this scenario:

Each Firefighter Role is assigned through Superuser Privilege Management to an SAP end-user. End-users do not check out a separate ID.

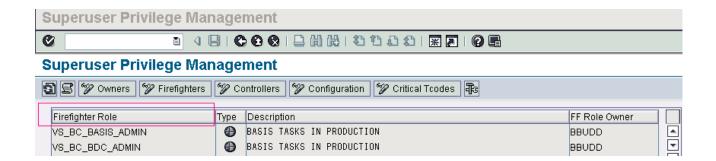
Transaction and change history is logged with the user's own ID.

The end-user is not aware when they are utilizing emergency / firefighter access.

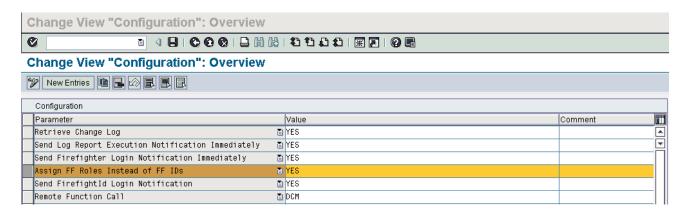
Firefighter role-based usage:

It is available in versions 5.2 and above of Superuser Privilege Management (formerly Firefighter) Was created for customers that did not want users to have access with two IDs.

When role-based firefighter is chosen, the Superuser Privilege Management screen will display the following configuration:



In order for this configuration to be displayed, the configuration parameter Assign FF Roles Instead of FF IDs must be set to YES as shown below.



Steps:

Step 1: Create Firefighter Role:

Role should be created using transaction PFCG with specific security for performing the task assigned to the Firefighter role. Preferred practice is to assign specific security and not to assign access similar to 'SAP_ALL'.

The role(s) should not be assigned to any user via transaction SU01 or PFCG and should only be assigned as Firefighter level access.

Step 2: Assign Firefighter Owner:

Assign an Owner to the Firefighter Role.

Owners can assign Firefighting roles to Firefighters.

Owners cannot assign Firefighter Roles to themselves. Same as above, think they need to have config option turned on to prevent this.

Step 3: Assign Firefighter Controller:

Assign a Controller to the Firefighter Role. Controllers are responsible for reviewing the log report, and can receive e-mail notification of firefighter role use.

Firefighter Role Controllers can also be Firefighter Role Owners.

Step 4: Assign Firefighter:

Assign a Firefighter (existing SAP user ID) to the Firefighter Role. Firefighters can access the roles assigned to them within the validity dates indicated in the Firefighters table, and as defined by Firefighter Owners.

Additional Points:

- 1. One ffid can be assigned to multiple fire fighters but they cannot use at a time.
- 2. In out EAm, Additional activity is one extra tab added to maintain extra activities.
- 3. We can send a message to existing ff if we would like to use the same ffid.
- 4. We can also unlock the ffid which is being used by another ff.
- 5. FF owner can assign ffids which are owneed by him/her to fire fighters and controllers.
- 6. Decentralized fire figthing concept is also available in GRC 10 from Support pack 10 onwards.