

NOTE APRIL 2009

Short manual: Analysis authorization

I Introduction

Starting with NetWeaver all users who want to display data from authorization-relevant characteristics or navigation attributes in a query require analysis authorizations. This type of authorization is not based on the standard authorization concept of SAP®. The formerly used reporting authorization concept is basically replaced by the current analysis authorization concept.

The system setting only allows using either one of the concepts.

The analysis authorizations have an individual concept that takes the features of reporting and analysis in BI into consideration. Analysis authorizations are not based on authorization objects. The authorizations are based on BI-objects instead.

The authorization relevant BI objects are the so called info objects. Info objects are the smallest unit within BW for the evaluation of business relevant data.

An info object is divided into certain characteristics [e.g. customer], key figures [e.g. sales], units [e.g. currency], time characteristics [e.g. business year], technical characteristics [e.g. request numbers].

Any BI info object could be check marked as authorization relevant, the objects OTCAIPROV, OTCAVALID and OTCAACTVT are checked by default. Therefore it may be recommended to set them to authorization relevant right from the beginning.

Authorizations are created by including a group of characteristics and restricting them accordingly. The authorizations may include any authorization-relevant characteristics, and treat single values, intervals and hierarchy authorizations in the same way.

- Single value: I EQ A (characteristic value =A),
- Interval: I BT A B (A <= characteristic value <= B)
- Pattern: I CP A* and I CP A+ (Pattern with exactly one place holder wild card (*) or exactly one plus sign (+) after A).
Only pattern with exact one + or a * are allowed
- Aggregation authorization:
Colon (:). Allows an aggregation of a characteristic.
Written as single value I EQ:

The authorizations are then assigned to roles. The role assignment is generally not mandatory, but can be recommended for an aligned conceptual approach.

Some of the key benefits for analysis authorizations are that they are modifiable afterwards and may contain as many info objects as necessary and desired.

Together with that SAP® has introduced the authorization object *S_RS_AUTH*. This is the object that actually contains the BI authorization that is relevant for a role.

Terms:

Info providers is a generic term for objects/views that are reporting relevant and for which in BEx queries can be created and executed.

An info cube is a special type of info provider as a self-contained set of data that consists of business relevant information e.g.

A basic info cube is a special type of info cube that physically stores data.

An info source is a unit that contains summarized information that logically belongs together.

A ODS object is to be regarded as a storage location for consolidated and cleaned-up data [e.g. master data or transaction data]; it therefore basically describes a consolidated dataset of one or more info sources.

Relevant tables:

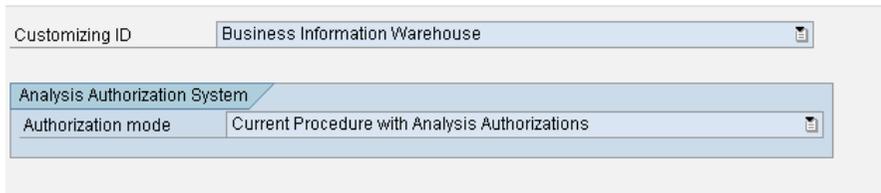
RSECHIE	Status of hierarchy authorizations
RSECHIE_CL	Change log of hierarchy authorizations
RSECTXT	Authorization text
RSECTXT_CL	Change log of authorization texts
RSECVL	Authorization Value Status
RSECVL_CL	Change log of Authorization Value Status
RSECBIAU	Changes to Authorization (Last Changed By]
RSECUSERAUTH	BI Analysis authorization – assignment to users
RSECUSERAUTH_CL	BI Analysis authorization – assignment to users [Change log]

II. Technical prerequisites

Before analysis authorization can be created, the following below prerequisites needs to be completed.

1. In transaction SPRO -> SAP NetWeaver -> Business Intelligence -> Settings for Reporting and Analysis [transaction RSCUSTV23] the selected concept needs to be set to "Current Procedure with Analysis Authorizations".





Customizing ID Business Information Warehouse

Analysis Authorization System

Authorization mode Current Procedure with Analysis Authorizations

To check which info objects are set to authorization relevant you can go to transaction **RSD1**, enter the desired object, and then go to the tab *Business explorer*.

The checkmark needs to be activated for "authorization relevant" if the info object is supposed to be authorization relevant.



AuthorizationRelevant Authorization Field



AuthorizationRelevant

III Maintenance and transport

Analysis authorizations are created, maintained, assigned, transported, and analyzed [error logs] via the new, consolidated transaction **RSECADMIN**.

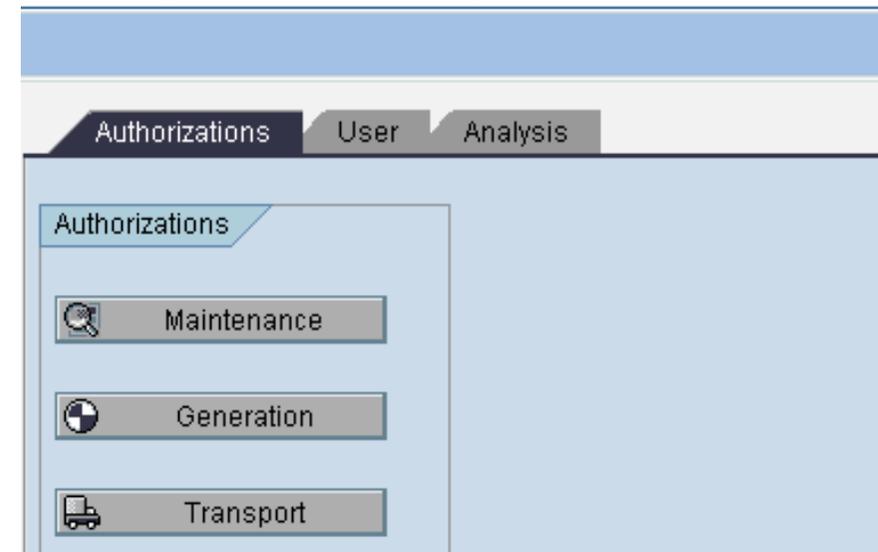
The maintenance of the authorizations is a security task. The Security team needs access to transaction **RSECADMIN** and the corresponding object **S_RSEC** in order to maintain analysis authorizations .

Maintenance access is only required for the development system.

The regular end users need access to the above mentioned object **S_RS_AUTH** in order to execute queries based on analysis authorization.

In order to create analysis authorizations the transaction code **RSECADMIN** is to be called and the *Maintenance* button to be selected.

Management of Analysis Authorizations



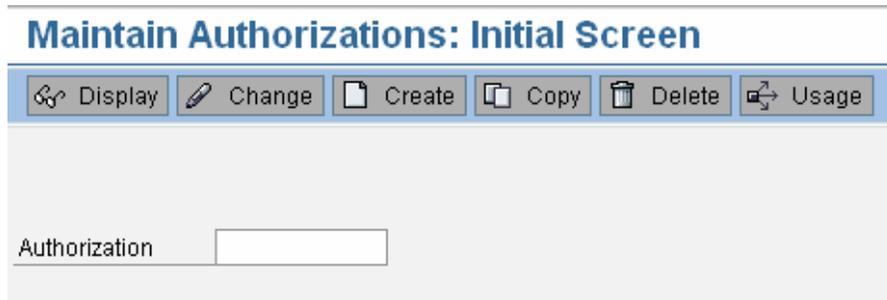
Authorizations User Analysis

Authorizations

Maintenance

Generation

Transport



For the creation of a new authorization a name is to be entered, then the *Create* button is to be activated. The text information is to be filled out.

In order to grant access for newly created analysis authorization, the corresponding authorization needs to be added to the object *S_RS_AUTH* in respective role.

Special case: **OBI_ALL**

OBI_ALL is an automatically generated authorization for all authorization relevant info objects and characteristics. This authorization cannot be maintained manually.

Whenever an info object is changed and the authorization relevance for a characteristic or navigation attribute is changed, the profile is automatically adapted.

Everyone with OBI_ALL has unrestricted data access. This is not to be used for any dialog user in any system.

In order to transport one or more analysis authorizations, the transaction code *RSECADMIN* is to be called and the *Transport* button to be activated as shown below.



In the following screen, select the analysis authorization that need to be transported and click on green *Check* button to add them to a transport.

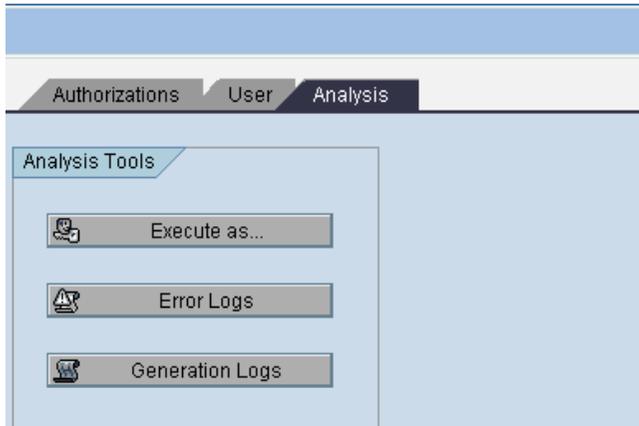
IV Trace and trouble shooting

To identify authorization issues related to standard SAP® delivered BI objects and transaction codes, the standard **ST01** trace can be used.

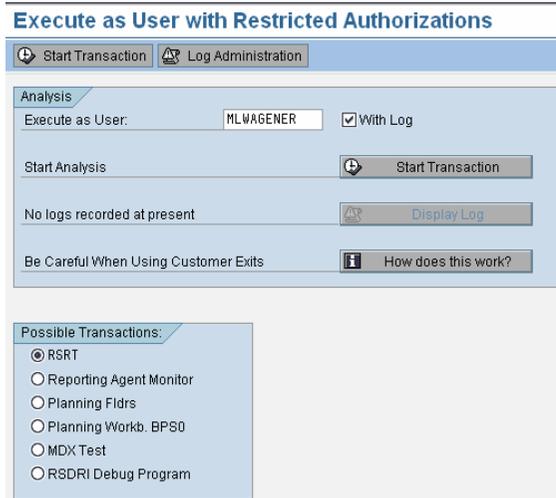
For issues related to analysis authorizations the trace functionality as part of transaction code **RSECADMIN** is to be preferred. Especially in the context of running queries of course.

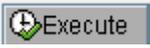
1. Select the *Analysis* tab and then click on the button *Execute as other user* button as shown below

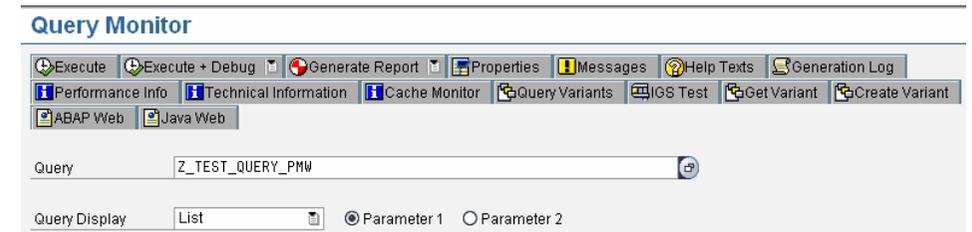
Management of Analysis Authorizations



2. Enter the SAP® user ID that is having issue with running a query e.g. and activate checkmark *with log* and click on button *Start transaction*.



3. Enter the query name to the query monitor that causes the problem for the user and click on  button as shown below and then enter the field values in order to execute the query. The query search is part of *F4*.



4. When the query execution fails you will get a log that contains the corresponding results aside from some additional header and info provider check information.

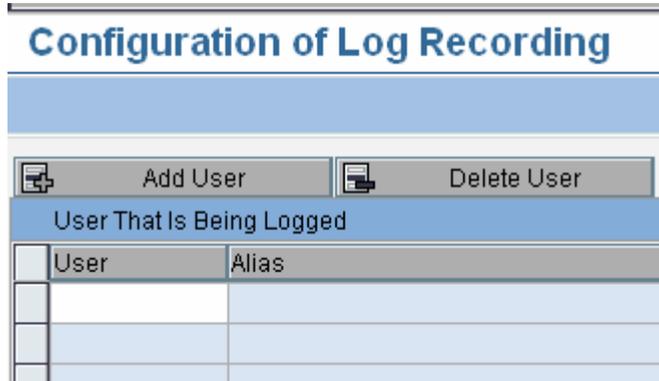
0BILLTOPRTY	Empty
0COMP_CODE	Empty
0PRODH1	Empty
0SOLD_TO	Empty

5. Additionally, a similar analysis authorization trace can be done on one ore more users via **RSEADMIN** by configuring the log recording. By clicking on button



the log configuration is

accessible.



Important Note:

Please be aware that neither **SU53** nor **ST01** will show relevant information related to analysis authorization. Any hint to a missing OBI_ALL authorization is irrelevant. No authorization message requesting OBI_ALL is in any way reliable or correct.

Please also refer to OSS note 820183.

For more information related to analysis authorization you may refer to the following links:

http://help.sap.com/saphelp_nw70ehp1/helpdata/en/66/019441b8972e7be10000000a1550b0/frameset.htm

http://help.sap.com/saphelp_nw04s/helpdata/en/80/d71042f664e22ce10000000a1550b0/frameset.htm