MDX and BW authorizations

This section discusses the different authorization concepts to be considered when accessing BW via the MDX interface.

(See also SAP note 1412800 MDX and BW authorizations).

- BW MDX and authorizations
- BW uses most of the SAP NetWeaver security mechanisms for user authentication and creation.
- Additionally, the BW has its own concept of the analysis authorizations.
- Step by Step providing access for an MDX user to BW Bex query data

BW MDX and authorizations

Check the NetWeaver Security Guide for an overview on NetWeaver Security topics. SAP NetWeaver has many components and many security relevant topics.

BW uses most of the SAP NetWeaver security mechanisms for user authentication and creation.

Check the SAP NetWeaver BW security guide.

AS ABAP Authorization Concept is the basis for the BW standard authorization.

BW functions use many functions of other NetWeaver components. For these functions ABAP authorizations are required.

Sample authorization objects: S_RFC S_TCODE ...

BW delivers RS authorization objects for different functions:

- S_RS_COMP (BEX reporting)
- S_RS_IOBJ (InfoObject maintainance)
- S_RS_MPRO (multiprovider maintenance) ...

Additionally, the BW has its own concept of the analysis authorizations.

All users who want to display transaction data from authorization-relevant characteristics in a query require analysis authorizations for these characteristics.

Authorizations of this type are not based on the standard SAP authorization concept. They use their own concept based on the BW reporting and analysis features instead.

Transaction RSECADMIN is the entry point for maintaining, assigning and monitoring these authorizations.

Step by Step providing access for an MDX user to BW Bex query data

User connecting to BW via the MDX interface call the BEX query runtime and will need the same authorization for query access as Bex users. For comparing the authorization needs it needs to be checked what BAPI is called and what information this BAPI is requesting to support the following quick step by step:

1. a user needs to be created for connecting to the BW system (SU01)
2. the user needs a role assigned (PFCG)
   1. this role should give him authorization for basis functions:
      1. tools connecting via RFC need an authorization for authorization object S_RFC and function groups like SYST
      2. Best tool for checking what exactly is required is the ST01 authorization trace
   2. the role of a user connecting to BW should give authorization to access BW BEX queries and cubes as required
      1. Authorization objects S_RS_COMP and S_RS_COMP1 are involved
      2. The activities 'Execute' (16) and 'Display' (03) are required
      3. Best tool for checking which authorizations are missing is the ST01 authorization trace tool
3. Analysis authorizations are only important if the customer has decided to switch an infoobject like country or sales organization as authorization relevant in RSD1 and if such an infoobject is contained in the accessed infoprovider.
   1. OB1_ALL is to be assigned, when analysis authorization concept is not really used, but only implicitly active for technical characteristics starting with OTCA*
   2. when the analysis authorization concept is used, relevant analysis authorizations are to be assigned
   3. this is best checked with RSUDO and the authorization protocol described in note 1234567
4. Define filters (with or without variables) in the Bex query or in the MDX statement
1. The most important principle in analysis authorization is that an authorization is not automatically a filter.
2. The request send by a BEX query or an MDX statement should contain a filter that is a subset of the authorized values.
3. Fix filters of the query and filters in the MDX statement are summarized and checked as a complete set.