

## APAR: IV44236

### Symptom: Provide configurable column size for report data sync tables

---

All the reporting related table schemas are stored in the 'ENTITY\_COLUMN' table. The data stored in this table is used to create tables and columns at the time of data synchronization. As part of this fix, the 'ENTITY\_COLUMN' table is altered to add one additional column, 'COLUMN\_LENGTH' to store the length of the column. The default value for all the entries will be 255, same as the current default value. The fix for this APAR provides the ability to the customer to customize the column length values of the tables created during report data synchronization.

The customized column length value can be specified for a particular column by mentioning the entity and attribute name in the \$ITIM\_HOME\data\adhocreporting.properties file. This column length value is used to create the reporting tables. The column length of only those columns is changed, and other columns of the tables are created with default value '255'.

#### Details of the new property introduced in adhocreporting.properties file

- The new property allows the customer to specify the value of the column length to be set while creating reporting tables during data synchronization. These values determine the maximum amount of information that will be stored in the database for that attribute and displayed on the reports.
- List the entity and its attribute names with required column length values in the following format

entity.column.<entity\_name>.<attribute\_name>.length=<length\_of\_column>

Example :

entity.column.systemrole.description.length=500

- The unit of the value specified for the property is in bytes. For Oracle database the unit is as specified for the parameter NLS\_LENGTH\_SEMANTICS.
- The default value for the column length is 255. All the attribute values that are not specified using this property will have a default column length of 255. Permissible values for this property are in the range 1 to 4000. The default value is used for invalid values.
- It is recommended not to set the column length value less than default value (255) unless it is absolutely required. Set less than default value only for the attributes which are manually mapped using the schema mapping and not for implicitly mapped attributes.
- The column length of the **default attributes** that are added in the parent table for each entity such as DN, CONTAINERDN, SUPERVISOR, OWNERDN, SELFDN, TARGETCLASS cannot be configured using this property. The length can be configured for only those attributes, which can be mapped using the report schema mapping. The ACI and AUDIT related reporting tables' column length values cannot be configured.
- The column length value of existing tables for already mapped attributes is not changed during the incremental synchronization. Full data synch must be run to reconfigure the existing tables.

- If you are executing incremental data synchronization or data synchronization utility from a separate system, the values for newly added property in the adhocreporting.properties present on this system should be in sync with the values in adhocreporting.properties file present on the system where ITIM server resides.

### **Brief description of how the fix works**

#### ***A. Full data synchronization:***

a. The value of the particular entry in the ENTITY\_COLUMN table is updated by reading the \$ITIM\_HOME/data/adhocreporting.properties file during the initial step of full data synchronization process.

b. The value of the column length in the ENTITY\_COLUMN table is used to create the reporting tables and the data is truncated while inserting the data into these tables.

#### ***B. Incremental data synchronization:***

a. The column length value in the ENTITY\_COLUMN table is used to truncate the data while inserting the data into these tables.

b. Incremental synchronization does not alter the schema of the existing tables that are already created for **already mapped attributes**. If the schema enforcement property is set to false, it neither creates or alters the table for newly mapped attributes nor updates the ENTITY\_COLUMN table.

c. If the schema enforcement property is set to true, the tables/columns are created/added to the existing reporting tables for **newly mapped attributes** with column length values specified in the property file and ENTITY\_COLUMN table is updated with new column length value. The same column length value is used to truncate the data values while loading the data in the tables.

d. If customer wants the customized value to be used for existing attributes, which are already mapped, they must execute full data synchronization. The subsequent execution of the incremental synchronization will truncate the data appropriately while populating the table.