

# 1.10.00 ETL Refactor installation

## Prerequisites:

- Before upgrading to v1.10.00, BI has to be on 1.09.09v version. The V9 ETL has to be run at least once after upgrading to 1.09.09v version.
- Inform TI before starting so they are aware of the changes, check disk space, server performance and system monitoring: [slateam@abslbs.com](mailto:slateam@abslbs.com) and [TI-Team@abslbs.com](mailto:TI-Team@abslbs.com)
- Upgrade ABSOLUTE first (step0) - it's best to do it during the customer's night (ex: US customer's night would be EU morning), so it doesn't impact their performance on absolute.
- Make sure the time zone of the BI machine matches the absolute timezone; contact TI to change it if it's not the same

## Steps:

### Folder: /BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET

0. Upgrade ABSOLUTE: upgrade absolute source schema to version 1.10.00 (install fct views, install new dwh\_dim views, new triggers, etc)
  - upgrade ABSOLUTE: run `upgrade_absolute_1.10.00.sql` on ABSOLUTE schema.
  - NOTE: DO THIS DURING THE EVENING OR NIGHT when the customer is not working, because it is creating some indexes on heavily used tables.
  - file: `0.run_steps_to_upgrade_absolute_1.10.00.txt` /BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET/ABSOLUTE -> `upgrade_absolute_1.10.00.sql`
  - run compatibility views for the error views if it's the case (for LLG the compatibility version needs to be used for: `dwh_fct_wkly_customer_info` and `dwh_fct_wkly_custprod_info`)
  - Compile Invalid Objects
1. Export ABSDATAWAREHOUSE (v9) existing data and import the data into ABSDATAWAREHOUSE\_v10 (v10). The file 1.1.partial\_absdatawarehouse\_v10\_subset4.par displays the tables that will be skipped from the export/import process.
  - copy the file `1.1.partial_absdatawarehouse_v10_subset4.par` from /BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET /ABSDATAWAREHOUSE\_SCRIPTS\_FOR\_DIMKEY\_UPDATE to DATA\_PUMP\_DIR
  - `DATA_PUMP_DIR = /u01/app/oracle/admin/ABS1/dpdump`
  - check available free space on the disk: `df -h`
  - check the free tablespace
    - `select df.tablespace_name "Tablespace", totalusedspace "Used MB", (df.tablespace - tu.totalusedspace) "Free MB", df.tablespace "Total MB", round(100 * ((df.tablespace - tu.totalusedspace) / df.tablespace)) "Pct. Free" from (select tablespace_name, round(sum(bytes) / 1048576) TotalSpace from dba_data_files group by tablespace_name) df, (select round(sum(bytes)/(1024*1024)) totalusedspace, tablespace_name from dba_segments group by tablespace_name) tu where df.tablespace_name = tu.tablespace_name ;`
  - file: `1.2.load_altered_exp_imp_schema` to be executed from DATA\_PUMP\_DIR using `putty/winsstern`
2. Alter ABSDATAWAREHOUSE\_v10 user on the BI database; connect using a user with the sys privileges (that can create schema) in a command window
  - file: `2.alter_absdatawarehouse_v10.pdc`
  - compile invalid objects for ABSDATAWAREHOUSE\_v10
3. Create database links for ABSDATAWAREHOUSE\_v10 to have connectivity to v9 ABSDWHSTAGING and v9 ABSDATAWAREHOUSE. TI takes a dump of V9 schemas and imports it into new OAS machine.

Depending on the situation:

- create the db links on the localhost (new OAS server) - default scenario; so the dim\_key conversion converts the data for V10 on the same server and not over the network

- Check the ip and port number if v10 is on the different host than v9 located, and then run the following create db links:

- file: `3.create_database_link_org_locations.sql`
2. Upgrade ABSDATAWAREHOUSE\_v10

step 4a: upgrade ABSDATAWAREHOUSE\_v10 : run `4.upgrade_absdatawarehouse_1.10.00.sql` on ABSDATAWAREHOUSE\_v10 schema

- file: `4.run_steps_to_upgrade_absdatawarehouse_1.10.00.txt` /BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET /ABSDATAWAREHOUSE -> `4.upgrade_absdatawarehouse_1.10.00.sql`

step 4b: install package `ABS_DIR_UTILS_run_as_sys_user.sql`

- file: `/BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET/ABSDATAWAREHOUSE -> 4b.Create_Package_ABS_DIR_UTILS_run_as_sys_user.sql`
- file: `/BI/Scripts/1.10.00 ETL Refactor - NOT RELEASED YET/SYS`  
`Give_access_to_ABSEXTERNALDATASOURCEDIR_run_as_sys_user.sql`

step 4c: install packages

- install the packages on ABSDATAWAREHOUSE\_v10 schema in the order below
  - `LOAD_DATE_AND_TIME_DIMS.pck`
  - `LOAD_WAREHOUSE_V10.pck`
  - `LOAD_GLOBE4_DATE_AND_TIME_DIMS.pck`
  - `LOAD_GLOBE4_FACTS_V10.pck`

- pack\_absencrypt\_wh.pck
  - update\_dimkey\_wh.pck
  - chk\_warehouse\_v10.prc
- Compile Invalid Objects

5. Drop indexes, check constraints and rebuild index to move indexes from ABS\_DATA to INDX tablespace on ABSDATAWAREHOUSE\_v10 schema in a Command Window

- file: 5.before\_update\_dim\_key

6. Create check views for v9 against v10 data comparison on ABSDATAWAREHOUSE\_v10 schema in a Command Window

- file: 6.create\_check\_views
- Compile Invalid Objects

7. Update data warehouse keys to have the same key values as in absolute

- Execute via sql plus. Copy the files below to /home/oracle and rename the files to: update\_facts.sql, update\_globe4\_facts.sql, update\_dim.sql
  - file: 7.1.update\_facts.sql rename to update\_facts.sql
  - file: 7.2.update\_globe4\_facts.sql rename to update\_globe4\_facts.sql
  - file: 7.3.update\_dim.sql rename update\_dim.sql
  - sqlplus -s ABSDATAWAREHOUSE\_V10/ABSDATAWAREHOUSE\_V10@ABS1 @update\_facts & sqlplus -s ABSDATAWAREHOUSE\_V10/ABSDATAWAREHOUSE\_V10@ABS1 @update\_globe4\_facts.sql & sqlplus -s ABSDATAWAREHOUSE\_V10/ABSDATAWAREHOUSE\_V10@ABS1 @update\_dim.sql &
  - Wait for each process to finish and run them sequentially in order; Check the v\_log to check for any errors. On OCI env, it takes approx 15 min for 10GB of data.

8. Re-create the indexes after the dimkey\_update:

- file: 8.after\_update\_dim\_key.sql

9. Update ETL Timestamp in ABSDATAWAREHOUSE\_V10 settings table

- file: 9.update\_etl\_timestamp\_dwh.sql

10. Create programs and scheduler jobs for daily, hourly, 10 minutely, 5 minutely and minutely loads

- file: 10.create\_scheduler\_jobs
- Check and adjust the repeat\_interval according to the customer

11. Unlock table stats and gather schema stats

- file: 11.unlock\_tables\_and\_gather\_stats.sql

12. Run the check scripts (after the dim key conversion) run job CHK\_WAREHOUSE\_V10\_JOB

- check v\_log: select \* from v\_log where src = 'X' and severity >1;

13. Run the v10 ETL load.

- check absolute\_last\_etl\_timestamp.settings
- run job CALL\_LOAD\_ETL\_DAILY job. Check v\_log for ETL logging times and messages.
- Re-run the checks after the ETL load has finished (V9 and V10 should be run simultaneously - 1h diff when the absolute schema is not updated)
  - Make sure that you compare the checkscript results (step no9) after both v9 and v10 ETL has run at the same time.
  - select \* from v\_log where src = 'X' and severity >1;

14. Disable the scheduled jobs and contact TI to schedule the Unix scripts for ETL and cache purging.

15. Check real time views mechanism: [BI Realtime Mechanism](#)

Drop and re-create the programs to modify the program\_action from ABSDATAWAREHOUSE to ABSDATAWAREHOUSE\_V10. Check also the program actions for the jobs.

change from:

```
begin
  sys.dbms_scheduler.create_program(program_name => 'ABSDATAWAREHOUSE_V10.RESET_REALTIME_DATA_TABLES_PROG',
    program_type => 'STORED_PROCEDURE',
    program_action => 'ABSDATAWAREHOUSE.RESET_REALTIME_DATA_TABLES',
    number_of_arguments => 0,
    enabled => true,
    comments => '');
end;
/
```

change to:

```

begin
sys.dbms_scheduler.create_program(program_name => 'ABSDATAWAREHOUSE_V10.RESET_REALTIME_DATA_TABLES_PROG',
                                program_type => 'STORED_PROCEDURE',
                                program_action => 'ABSDATAWAREHOUSE_V10.RESET_REALTIME_DATA_TABLES',
                                number_of_arguments => 0,
                                enabled => true,
                                comments => '');
end;
/

```

!!! After running the file upgrade\_absdatawarehouse\_1.10.01.sql in ABSDATAWAREHOUSE\_v10, it will add INSERT\_TIME\_STAMP, UPDATE\_TIME\_STAMP to a number of fact tables. The new columns are not present in UPDATE\_DIM\_KEY package, so it will give an error.

!!! Always upgrade to base version 1.10.00 and run the ETL and then go to the next minor versions.

### Folder: /BI/Scripts/1.10.01 merchandise requirements

0. Upgrade ABSSOLUTE upgrade\_abssolute\_1.10.01.sql. Compile Invalid Objects

1. ABSDATAWAREHOUSE\_v10

- upgrade\_absdatawarehouse\_1.10.01.sql
- load\_warehouse\_v10.pck
- LOAD\_PRESENTATIONCATALOGTRANS.pck
  - the translation key file: do this step even though customer is EN language only
    - copy to the translation key file presentationcatalog\_1.10.01.csv to ABDUMPDIR = /u02/oracle/dumpfiles
    - truncate table presentationcatalog;
    - begin

```

: result := load_presentationcatalogtrans.load_translationkeyfile
(
fp_versionstr => '1.10.01');

```
    - end;
    - check select \* from presentationcatalog;
  - for other languages (Dutch/French/German/Danish)
    - copy presentationcatalog\_da\_1.10.01.csv, presentationcatalog\_de\_1.10.01.csv, presentationcatalog\_fr\_1.10.01.csv, presentationcatalog\_nl\_1.10.01.csv to ABDUMPDIR = /u02/oracle/dumpfiles
    - begin

```

: result := load_presentationcatalogtrans.load_translationfile
(
fp_versionstr => '1.10.01', fp_language_code => 'nl');

```
    - end;
    - check select \* from presentationcatalog\_desc;
- Compile Invalid Objects
- check abs\_subjectarea\_visibility for duplicates:
  - select subjectareaname, count(\*)

```

from abs_subjectarea_visibility
group by subjectareaname
having count(*)>1;

```
- run the ETL

!!! After running the file upgrade\_absdatawarehouse\_1.10.01.sql in ABSDATAWAREHOUSE\_v10, it will add INSERT\_TIME\_STAMP, UPDATE\_TIME\_STAMP to a number of fact tables. The new columns are not present in UPDATE\_DIM\_KEY package, so it will give an error.

!!! Always upgrade to base version 1.10.00 and run the ETL and then go to the next minor versions.

### Folder: /BI/Scripts/1.10.02 fields added for fact deliveries

0. Upgrade ABSSOLUTE upgrade\_abssolute\_1.10.02.sql. + generatedeptcost.prc. =====>Compile Invalid Objects

1.ABSDATAWAREHOUSE

- upgrade\_absdatawarehouse\_1.10.02.sql
- LOAD\_WAREHOUSE\_V10.pck
- Compile Invalid Objects

Run the ETL.