# Create and populate Dimension of TIME DW – Layer

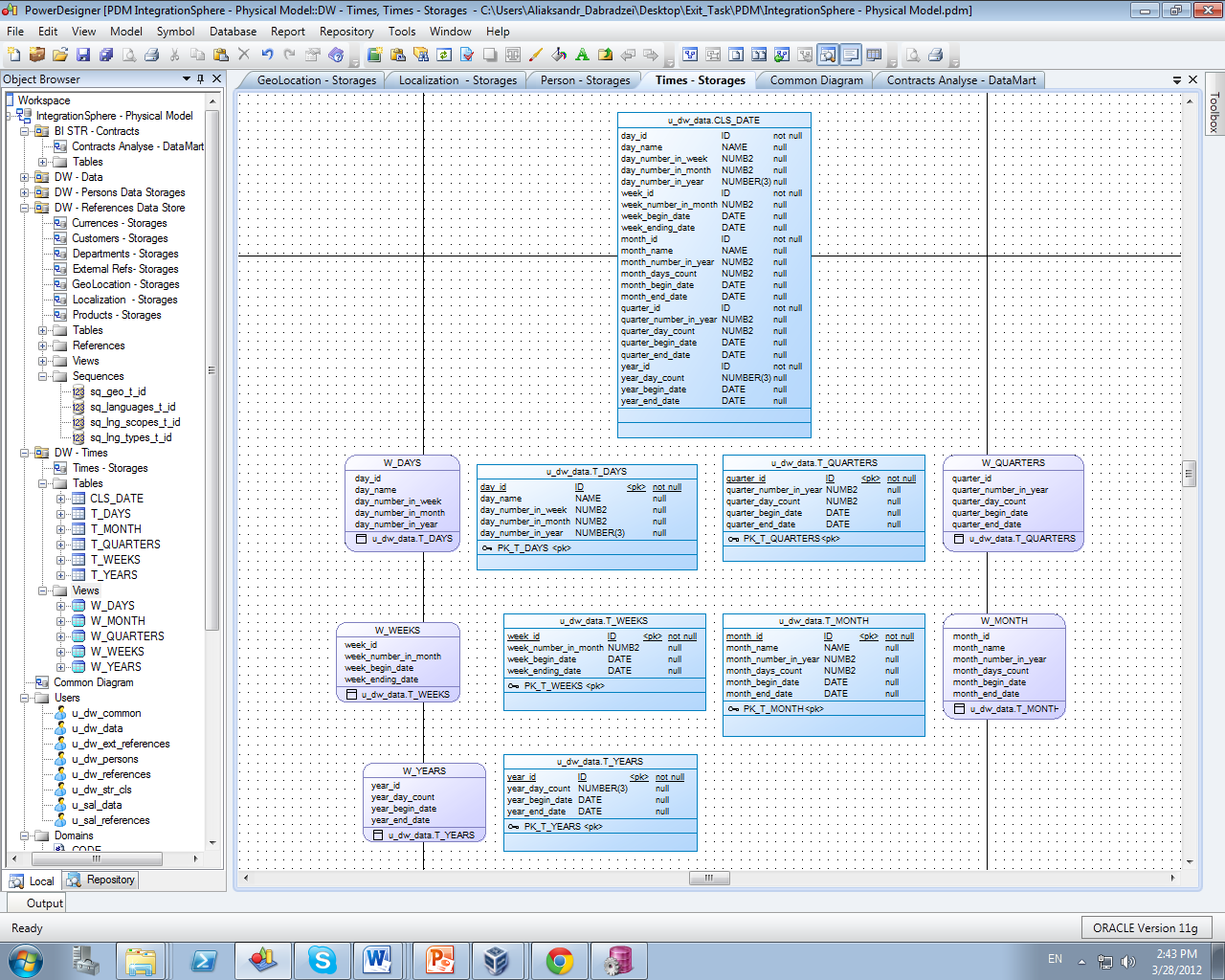
## Task 01: CREATE DW.T\_DAYS

## Task 02: CREATE DW.T\_WEEKS

## Task 03: CREATE DW.T\_MONTHS

## Task 04: CREATE DW.T\_QUARTERS

## Task 05: CREATE DW.T\_YEARS



<https://github.com/MinskLab2012-March/Module6_Labs/blob/master/Exit_Task/Aliaksandr_Dabradzei/lab_scripts/u_dw_data/Packages/pkg_load_times-def.sql>

<https://github.com/MinskLab2012-March/Module6_Labs/blob/master/Exit_Task/Aliaksandr_Dabradzei/lab_scripts/u_dw_data/Packages/pkg_load_times-impl.sql>

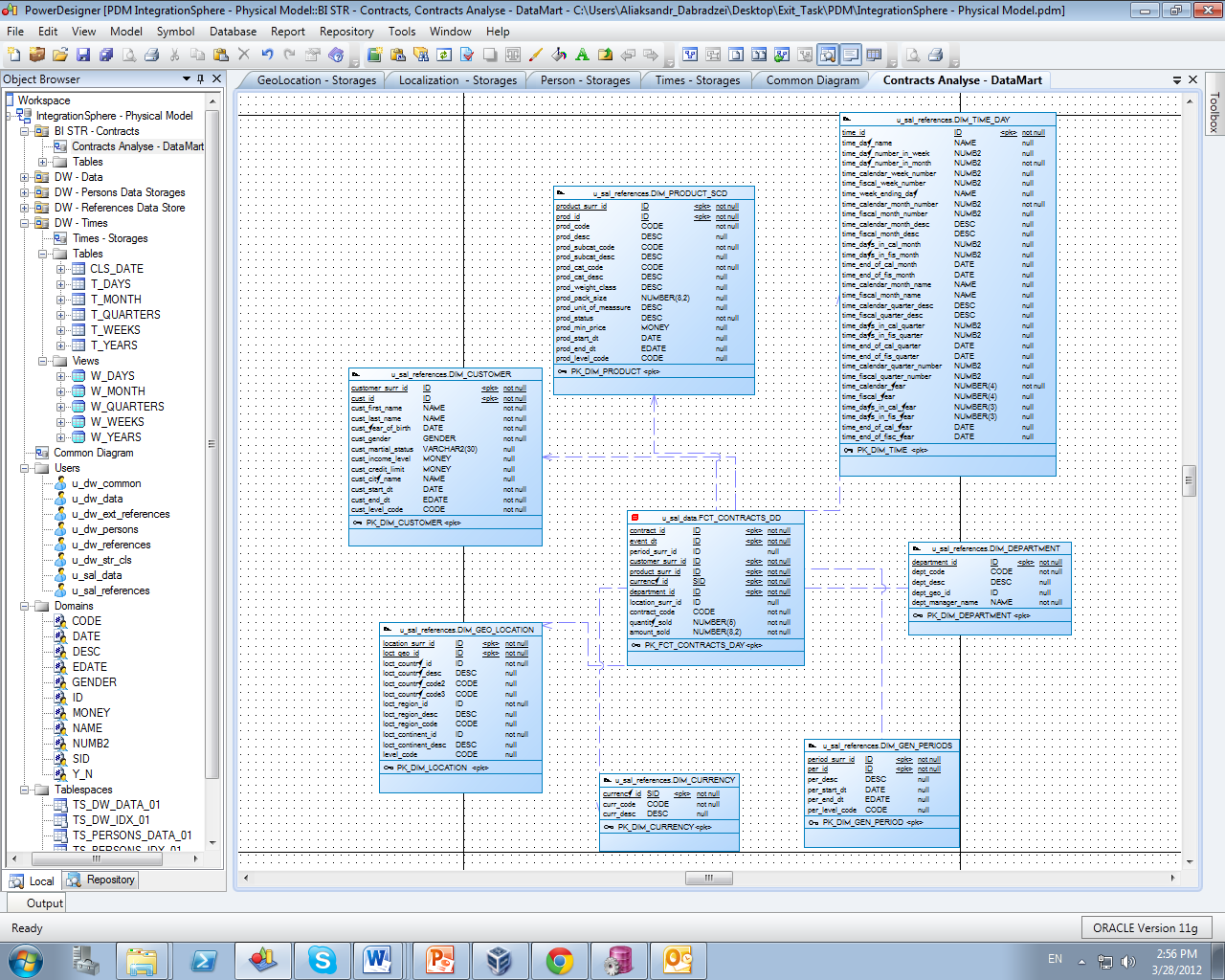
# OLAP – Business analyses task

## Task 06 – Solution concept – Add: Chapter Dimensions Types

**The Main Task** is to create summary table to describe all future STAR Dimensions:

Next points are mandatory:

* Start scheme must use no less one of SCD type 2 Dimension
* Start scheme must use prepared dimensions: DIM\_TIME, DIM\_GEO\_LOCATIONS
* Start scheme must use one of period dimensions: DIM\_GEN\_PERIODS



**Task Results:**

Create document, which contained next chapters:

* + Chapter: Dimensions Types Description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Type | Size | DW – Merged Dimensions | Descriptions |
| DIM\_ TIME\_DAY | SCD1 | BIG | DW.T\_DAYS, DW.T\_WEEKS, DW.T\_MONTHS, DW.T\_QUARTERS,  DW.T\_YEARS | It is a specific type of dimension. Appears at the DWR and contains all the time since the introduction of the project until its completion. |
| DIM\_CURRENCY | SCD1 | SMALL | DW.T\_CURRENCY |  |
| DIM\_CUSTOMER\_SCD | SCD2 | BIG | DW.T\_CUSTOMERS,  DW.T\_CUST\_ADDRESSES,  DW.T\_CUST\_TECHN\_INF |  |
| DIM\_DEPARTMENT | SCD1 | SMALL | DW.T\_DEPARTMENTS |  |
| DIM\_GEN\_PERIODS | SCD1 | SMALL | DW.T\_PERIODS |  |
| DIM\_GEO\_LOCATIONS | SCD1 | BIG | DW.T\_COUNTRIES  DW.T\_CNTR\_GROUPS  DW.T\_CNTR\_SUB\_GROUPS  DW.T\_GEO\_TYPES  DW.T\_GEO\_SYSTEMS  DW.T\_GEO\_PARTS  DW.T\_GEO\_REGIONS  DW.T\_GEO\_OBJECTS  DW.T\_CNTR\_GROUP\_SYSTEMS |  |
| DIM\_PRODUCT\_SCD | SCD2 | BIG | DW.PRODUCTS,  DW.PRODUCT\_SUBCAT  DW.PRODUCT\_CAT  DW.PRODUCT\_SALES |  |

## Task 07 – Solution concept – Add: Chapter Dimensions Hierarchies

**The Main Task** is to create summary table to describe all future STAR Dimensions Hierarchies:

Next points are mandatory:

* Start scheme must use no less one of SCD type 2 Dimension
* Start scheme must use prepared dimensions: DIM\_TIME, DIM\_GEO\_LOCATIONS
* Start scheme must use one of period dimensions: DIM\_GEN\_PERIODS

**Task Results:**

Create document, which contained next chapters:

* + Chapter: Dimensions Hierarchies

**DIM\_GEN\_TIME:**

**Hierarchy DAY-WEEK-MONTH-QUARTER-YEAR**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | LEVEL\_CODE | LEVEL\_DESC | LEVEL\_NATURAL\_KEY |
| DAYs | DAY | Store all day at the calendar | DAY\_ID |
| WEEKs | WEEK | Store all weeks at the calendar year | WEEK\_ID |
| MONTH | MONTH | Store all month at the calendar year | MONTH \_ID |
| QUARTERs | QUARTER | Store all quarters at the calendar year | QUARTER \_ID |
| YEARs | YEAR | Store all years | YEAR\_ID |

**DIM\_PRODUCTS\_SCD:**

**Hierarchy PRODUCTS –-SUBCATEGORY-- CATEGORY**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | LEVEL\_CODE | LEVEL\_DESC | LEVEL\_NATURAL\_KEY |
| PRODUCTS | PROD\_NAME | Store all possible products for each category. | PROD\_ID |
| SUBCATEGORIES | PROD\_SUBCATEGORY | Store all product subcategories for each category. | PROD\_SUBCATEGORY\_ID |
| CATEGORIES | PROD\_CATEGORY | Store all product categories of our company. | PROD\_CATEGORY\_ID |
|  |  |  |  |

**DIM\_GEO LOCATIONS:**

**Hierarchy COUNTRY –-SUBREGION--REGION**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | LEVEL\_CODE | LEVEL\_DESC | LEVEL\_NATURAL\_KEY |
| COUNTRIES | COUNTRY\_NAME | Store all countries for each region. | COUNTRY\_ID |
| REGIONs | COUNTRY\_REGION | Store all regions of the world. | COUNTRY\_REGION\_ID |
| CONTINENTs | COUNTRY\_CONTINENT | Store all continents of the world. | COUNTRY\_ CONTINENT \_ID |

## Task 08 – Solution concept – Add: Chapter Facts Aggregations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Code | Table Name | Additive | Descriptions |
| Counts amount sold products by day | AMOUNT\_SOLD | FCT\_CONTRACTS\_DD | + | Calculate distinct values of Contracts at the event\_dt period. |
| Counts quantity sold products by day | QUANTITY\_SOLD | FCT\_ CONTRACTS\_DD | + | Calculate distinct values of Contracts Products at the event\_dt period. |