Helping Your Business Intelligence Journey

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Oracle Business Intelligence

Enterprise Edition 11g

20 Golden Rules

For

Repository Design

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PHYSICAL LAYER

1. When modelling a star-schema data-model, create aliases for all your physical tables (prefixed with either "Dim_", "Fact_" or "Fact_Agg_"

2. When possible, configure your connection pools to use a "native driver" to connect to your physical databases. For example, use OCI for connecting to an Oracle database rather than ODBC

3. Make sure the "Max Connections" parameter on your connection pools are appropriately set (not too low….not too high!). If in doubt, you can use the following formula which assumes that no more than 4% of your users will ever be logged on and running a report at any one moment:

   Max Connections = Total Users * 0.04 * Max Reports on a Dashboard

   So if you have 1000 users and you have no more than 4 reports on any one dashboard, then your "Max Connections" should be set to 160.

   NOTE: it is easy to exaggerate the number of users who will be using the dashboards simultaneously

BUSINESS MODEL LAYER

4. All Logical Tables should be prefixed with either "Dim – ", "Fact – " or "Fact Compound –"

5. No "physical" column names should ever be seen on the Business Model layer. All naming conventions should be "business oriented". For example use "$ Revenue" rather than "DOLLARS"

6. Physical Primary Keys or Surrogate Keys should not be present on the Business Model layer (unless, for example, you have a Primary Key such as Order Id which will be displayed on reports)

7. Dimension Logical Tables must always have a Logical Key assigned. The Logical Key should be something "business oriented" such as "Employee Login" rather than "EMPLOYEE_PK"

8. Dimension Logical Tables must only contain dimension attributes, they should never contain any measure columns (which have an Aggregate Rule)

9. Fact Logical Tables should never have a Logical Key assigned

10. Every Logical Column within a Fact Logical Table must be a measure column, and therefore have an Aggregation Rule assigned

11. The Business Model should only consist of logical star-schemas, there should not be any snow-flaking

12. Every Dimension Logical Table should have a corresponding Dimension Hierarchy (with "Total" as a Grand Total level, and "Detail" at the lowest level)

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13. Each level of a Dimension Hierarchy should have its "Number of Elements" appropriately set (there is a utility that can do this automatically for you)

14. Every Logical Table Source within every dimension and fact Logical Table should have its "Content Levels" appropriately set. The only time the "Content Level" is not set for a particular dimension is when there is no logical relationship existing

15. Do not merge all your measures into a single Fact Logical Table. For example, you should split "Forecast Sales" and "Actual Sales" measures into two Logical Tables e.g. "Fact – Sales" and "Fact – Forecast"

16. For your Dimension Hierarchies, only enable the "Ragged" and "Skip Level" options if your hierarchies genuinely contain Ragged and/or Skip Levels

PRESENTATION LAYER

17. When you have multiple Subject Areas, list the common dimensions in the same order across all the Subject Areas

18. Presentation Table names within each Subject Area must not begin with "Dim – " or "Fact –" or "Fact Compound –". So remove these prefixes if they are present after creating the Subject Area by dragging Logical Tables directly from the Business Model

19. The "Time" presentation table should be listed as the first Presentation Table in each subject area. The Presentation Table containing your facts should be listed right at the bottom, and the Presentation Table should be called "Measures"

20. There should be absolutely no possibility of a user selecting objects from a Subject Area that have no logical relationship. So, if there are any objects within the same Subject Area that cannot co-exist in the same report, then your Subject Area design is incorrect! (Remember, users can configure an Analysis to source from multiple Subject Areas, so you don't have to cram all your objects in one Subject Area)

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