ADVANTA 2.0

Advanta allows companies using project management techniques to implement their projects and initiatives well, directing them to the objectives and business strategy.

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Setting up OLAP cubes

Using OLAP-cubes, you can build such types of reports:
- · «OLAP-reports» – are basic for themselves.
- · «Projects and tasks» – here values of OLAP-indicators are used.
- · «Bubble diagram» – here values of OLAP-indicators from different OLAP-cubes are used.

Creating OLAP-cube consists of 3 steps:
1. Create OLAP template
2. Create OLAP dimensions
3. Create different types OLAP indicators:
   Query;
   Formula;
   Graphic indicators
   Increase (accretion)
   System indicator.

To create OLAP-cube, go to Administration>Database structure and fill required fields.
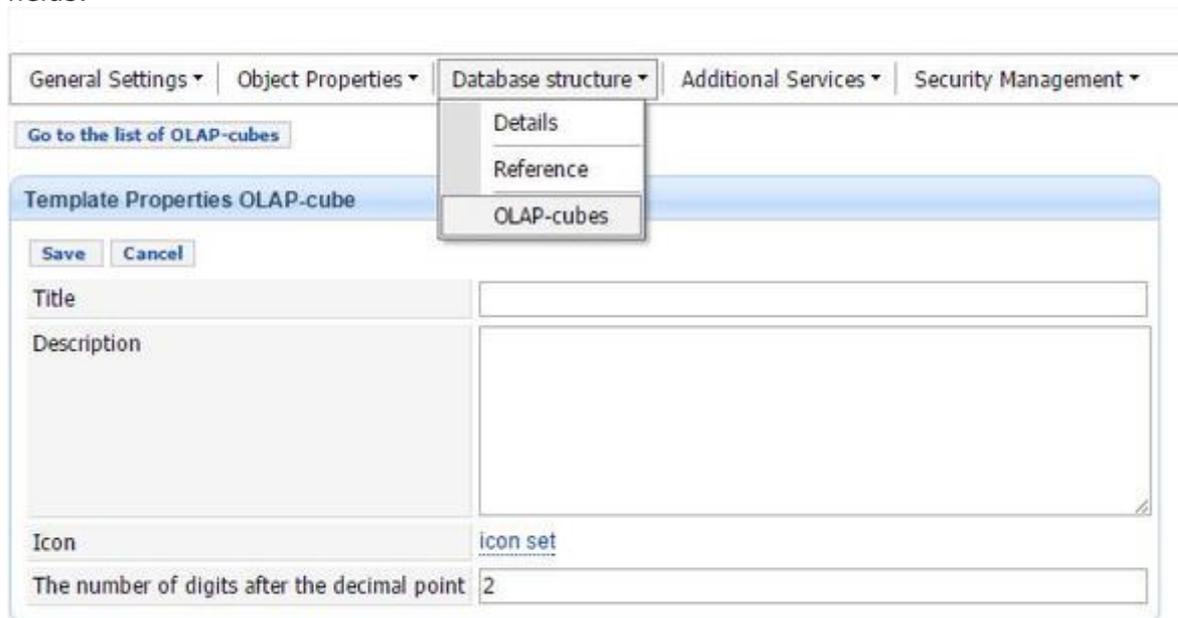
Why and how to create OLAP dimensions

Dimensions are attributes-classifiers of the object or reference book, they are basis for query-type indicators. There is one required Dimension, which should be created in each OLAP cube - date.

Creating dimensions based on attributes-classifiers of the object or tabular reference book is required, if the OLAP contains an indicator based on object or reference book in which attributes-classifiers exist. If this dimension is not to be created, the indicator will not work correct.

So, when you create an OLAP, first define - what objects and tabular reference books will be used as indicators, then view their attributes-classifiers and then create the desired dimension.

To create dimension go to the page of OLAP and press the button Create. The properties page of the dimension opens and you should name the dimension and choose connected attribute-classifier (from a dropdown list). Than:
1. Create required dimension - date. Save it.
2. Create needed dimension based on attributes-classifiers of the object or tabular reference book.
3. Save it.

Creating OLAP query-type indicators based on Tabular reference book (directories)

This indicator collects data from the numeral attribute of tabular reference book (this attribute is the source of the query).

To create an indicator, click "Create" in portlet "Indicators". This will open the indicator's properties page. Than:
1. Enter the name of indicator
2. In the field Type select "Query" (selected by default).
3. In the Source field, select "Directory" (tabular reference book) and from the drop-down menu, select the name of the directory, which will be the source for the query.
4. In the "Numeric props" (attributes) select attribute which values will be collected in the indicator.
5. In column "Dimension of the OLAP cube" should automatically get the appropriate dimensions that were created as dimensions. If any of the fields were empty, it means that the dimension was not created.
6. In the column "date OLAP cube" you must specify the date type OLAP cube used for the calculation:
   • Date (exact)" - used for most situations, when you just need to take a specific date from attribute.
   • Date (relative)" - used when you want to get the last value of the numeric attribute, on a date table cell OLAP cube.
7. The option "Aggregation" – for query-type indicators aggregation sums up the results for the selected dimension and hierarchy of projects.
8. The option "Hidden" - if this option is enabled, when you build the report on this indicator by default is hidden. This is used for the auxiliary

indicators used for intermediate calculations. the option "Inherit subprojects" - this option inherits the value of the indicator on the child objects of the hierarchical tree structure.
9. Save it.

Creating OLAP query-type indicators based on Objects

This indicator collects data from the numeral attribute of any kind Object (this attribute is the source of the query).

To create an indicator, click "Create" in portlet "Indicators". This will open the indicator's properties page.

For this indicator type points 1-5 and 7-9 are similar to the previous. Except for point 6 - In the column "date of source" select a date of the object that will be used for calculations and output values of the attribute in the report:

- "Creation date" - date and time, when you input attribute value in the object.
- "Planned start date" - the planned start date of the object (project, task)
- "Planned finish date" - planned finish date of the object (project, task)
- "Actual start date" - the actual date object (project, task)
- "Actual finish date" - the actual end date of the object (project, task).

Creating OLAP query-type indicators based on existing OLAP-cube

This indicator collects data from the other, existing OLAP-cube. This format can be used when other OLAP already have the indicator needed for calculations in the generated OLAP cube.

To create indicator, click "Create" in portlet "Indicators". This will open the indicator's properties page.

For this indicator type points 1-5 and 7-9 are similar to the Creating OLAP query-type indicators based on Tabular reference book. Except for point 6 - In the column "date OLAP cube" select a predefined date dimension.

Creating OLAP formula-type indicators

This type of OLAP indicator allows to configure various formulas that use other types of indicators. For example, it is possible to calculate earned value metrics. Creating formula-type indicators requires that the cube has already at least one indicator based on the query, otherwise there won't be any variables to calculations.

To create indicator, click "Create" in portlet "Indicators". This will open the indicator's properties page.
1. Enter the name of indicator
2. In "Type" select "Formula". To create a formula, follow these steps:
   - • in portlet Formula, in the drop-down menu, select one of the existing indicators needed for your calculations.
   - Click "Add" to add a new formula line.

- In the drop-down menu, select an arithmetic operation.
- Click "Add" to add a new formula line.
- Select the next indicator / constant / operation etc.
  If necessary, enable the option "Aggregation
3. Save it

Creating graphic indicators

This type of OLAP indicator allows to display in the OLAP report graphical indicators (icons) of different colours corresponding to the numeral value of other indicators. The graphic indicator displays specified arithmetic or logical expression, similar to (but without logic) creating formula-type indicators

To create graphic indicator, click "Create" in portlet "Indicators". This will open the indicator's properties page.
1. Enter the name.
2. In "Type " select "Indicator"
3. Configure logical formulas for all three types of indicators.
4. Save it.

Creating OLAP Increase (accretion)-type indicators

This type of OLAP indicator is used to show the relative difference of the selected indicator values for individual intervals of the dimension. For example, the relative change of the budget plan for different time periods (year, quarter, month, day). This indicator can also be displayed in the form of graphic indicators.

In the settings of the indicator is the indicator itself selects, which values for different periods of dimension are compared, and the method of comparison is simply the ratio of the values to each other or the difference values for the first indicator.

To create Increase (accretion)-type indicator click "Create" in portlet "Indicators". This will open the indicator's properties page.

1. Enter the name
2. In "Type " select "Increase (accretion)"
3. In The Metric for comparison, select the indicator (already added to the OLAP cube) whose values will be compared for different dimension intervals.
4. In the parameter "Method comparison" select the type of relationship for comparing:
   - "quotient" - <Value 2> / <Value 1> - the division of the second value of the indicator in the first, the result is displayed in absolute terms.
   - "Ratio percentage" - <Value 2> / <Value 1> * 100 - dividing the second value of the indicator in the first and multiplying the division result by 100, the result is displayed in percent.
   - "The Difference" - (<Value 2> - <Value 1>) / <Value 1> - the difference between the second and the first value divided by the first value, the result is displayed in absolute terms.
   - "Percentage difference" - (<Value 2> - <Value 1>) / <Value 1> * 100 - the difference between the second and the first value divided by the first value and multiplied by 100, the result is displayed in percent.

5. Turn on the option "View indicator", if you want to display the index of the increment in the form of indicators. After it is enabled, configure the logical formulas for all three types of indicators.
6. Save it.

Creating OLAP system-type indicators

System indicators collect information associated with deadlines of tasks and projects and with percentage completion.

For correct work of the system of indicators you should:
1. Create and add to the types of objects (that will construct system indicators), numerical attribute "Index".
2. Attribute "index" must be "hidden" and not required in the configuration attributes of the object.
3. Then create the query-type OLAP indicator "Index" (based on object, from which in the future we need to receive data in the system indicator).

To configure the following system indicators are available:
1. "Actual (real) duration" - shows how long (in days) the task/project goes from the beginning to the current date, or until completion.
2. "Scheduled duration" shows the planned duration of the task/project.
3. "Actual percent complete" - shows the actual percent complete for the task/project.
4. "Planned percent complete" shows, what should be the percentage of the project complete of the task/project, if there were no delays.
5. "Work"(hours) - shows the planned work on the task/project.
6. "The deadline deviation" - shows the time delay for overdue (deadline missed) tasks. The value is negative if the task is done ahead of time. The indicator has the following features:
   • Calculates only for the day (24 hours), cannot be fractional. If the deviation is "for today" it is equal to zero.
   • If the actual finish date is specified, the value can be either positive or negative. For example, "-3 days" is the actual finish date is three days earlier than estimated date; "2 days" - the actual date is later than the estimated date for two days.
   • if the task is not finished (there is no finish date), and the current date does not exceed the estimated date, the deviation is zero.
   • if the task is not finished (there is no finish date), and the current date exceeds the estimated date, the deviation comes from the current date (you can only have a positive value).
7. "The time before the scheduled completion" - shows how much time is left before the planned finish of the task. The value is negative, if the task is overdue. If the task is done, then the value is empty.
8. "Deviation from baseline" - displays the difference in days between the planned finish of the tasks and the last saved Basic plans.

To create system-type indicator click "Create" in portlet "Indicators". This will open the indicator's properties page.
1. Enter the name
2. In "Type " select "System"
3. In the drop-down list parameter "Data" select the needed type system indicator.
4. Save it.

Order services for configuring the system

This booklet highlights key questions regarding setting up solutions based on system Advanta.

Additionally, you can always order from us advice on how to configure solutions for your enterprise.

Our contacts

KOMIX s.r.o.
Telephone: +420 257 288 211
E-mail: sales@komix.cz

The demo version of the system and a description of other functional solutions are available at: **http://www.advanta-group.cz**