

Topic

Implementation of planning tools to execute volume planning, as well as ascertaining the data in reports from SAP NetWeaver BI 7.0.

Customer

Siemens AG: Energy Service Division, Oil & Gas, and Industrial Applications Services. Duisburg Plant

Task

Implement planning tools using SAP BI IP (Integrated Planning) in order to map worldwide volume planning for their Service Division. This solution should replace their existing large, inflexible, and unmanageable Excel file approach.

Provision of input templates for manual planning, as well as complex planning functionality to automatically calculate and generate plan data, for example, to consolidate data between various companies or to version plan data.

Implement a set of reports using SAP BW BEx (Business Explorer).

Implementation

The volume planning at Siemens is a global planning of services at all their foreign subsidiaries that must plan revenues and incoming orders for certain products over the next two years. Furthermore, parameters must be defined for consolidation type of values between different parts of the companies. Until now, this had been done with Excel files. This file had grown to an enormous size and required many fixes in the logic, which evidently proved to be an inflexible approach. Therefore, this project aims to implement system-based planning in BW, where all steps in the planning process are optimized and flexible reporting of the data is possible.

In the first step, PIKON delivered a workshop with Siemens' technical representatives to precisely define the requirements. It quickly became apparent that Integrated Planning (IP) in SAP NetWeaver BI was the optimal solution to deliver the requirements. Therefore, all reports will be realized using BEx

(Business Explorer).

Next, PIKON developed the basic objects in the BW modeling stage (InfoCubes, InfoObjects, and MultiProvider).

In the next step, PIKON setup the necessary planning objects (aggregation levels, filters, planning functions, and planning sequences) in the planning modeler. At this point, complex logic within the planning functions was implemented. In the area of characteristic relationships, PIKON created derivation rules to automatically procure certain characteristics via defining custom classes in ABAP objects. For manual entry, ready for input queries were defined.

The legacy data in Excel could be transferred into the BW-System, but this required DataSources, transformation rules, InfoPackages and Data Transfer Processes (DTPs) to be created. The required historic data was loaded into the BW system using these methods.

The workbooks in Business Explorer integrated the planning functions (input layouts and buttons to trigger automatic planning functions and sequences), so that users only need to access their central workbook and therein access all required functionality to execute planning.

For the reports, existing analyses in the former Excel tool were emulated as close as possible. In addition, flexible reports were created, so that the users can precisely ascertain how they want to view and navigate through the data.

For the authorization concept, access to certain InfoProviders and queries was restricted. Users will access workbooks through menu roles. In addition, certain characteristics also became authorization sensitive.

Finally, technical documentation was written for the Siemens I.T. department.

In the first planning session, planning and reporting takes place in SAP GUI (BEx workbooks). However, it's anticipated in the future that planning and reporting will be moved over to a web front-end.

The following activities were carried out by PIKON:

- Delivering a workshop with Siemens' technical representatives to clarify the requirements

- IV-conceptual design and technical documentation
- Conceptual design of the user authorization concept
- Data modeling, design, and process control in SAP BW
- Implementing objects in the planning environment (aggregation levels, characteristic relationships, filters, planning functions and sequences)
- Defining ready for input queries in BEx
- Providing the required planning functionality in BEx workbooks (inc. commands for executing planning functions and sequences)
- Reporting in Business Explorer Analyzer (queries and workbooks)