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SAP NetWeaver2004s /NetWeaver2004s BI Content Add-On 3

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SAP NetWeaver 2004s / NetWeaver2004s BI Content Add-On 3

BI Business Content List

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1 ERP

1.1 ERP Operations

1.1.1 Enhancement of Master Data '0material'

Abstract of the business solution
Describe the business solution that is supported by BI Business Content. It is necessary, especially for BI BCT enhancements, to know the context in which the BI Business Content is embedded so that the reader is able to understand and assign the (new or enhanced) BI Business Content correctly. Customers who use the industry add-on DIMP (Discrete Industries & Mill Products) have the option of switching on the functionality for long material number (IS-A-LMN) or manufacturer part number (IS-A-MPN). When they use this functionality, the standard material number becomes an internal key and the end user works with LMN or MPN instead. With this development, LMN/MPN is now also supported in BI. That means that the end user works with LMN/MPN only, instead of the short (internal) material number.

Description of the (new/enhanced) BI Business Content scenario
List and explain in keywords the new/enhanced developments for BI Business Content in the specific release. In the case of a BW BCT enhancement, start with a short introduction to the complete existing BI Business Content! Standard BI Content consists of a large number of extractors which contain the material number. All the extractors and InfoCubes in BI should support the new functionality without modifications. Therefore the following parts have been developed: ❑ Extractor for transferring the content of table MATERIALID from ERP (layer ECC DIMP) to SAP Business Information Warehouse. It is also taken into account that the same MPN/LMN can be created in different ERP systems with different internal keys. ❑ Predefined data models, including • 1 DataStore object for table MATERIALID To activate the functionality, the customer has to extend the length of the material number field in BI in data object 0MATERIAL. He has also to modify the transfer rules for 0MATERIAL. All InfoCubes referring to data object 0MATERIAL can remain unchanged.

For details, see SAP Note 906913.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario
This development closes a functionality gap that has long existed and which leads to escalations and on-going problems both for customers and SAP.

1.1.2 Business Content for Agency Business

Abstract of the business solution
In the pooled payment process of agency business, the agency negotiates, for example, purchase price conditions and payment processing between the vendor and customer. The agency takes a commission from the customer and/or the vendor for services rendered. For payment processing and calculating commission, the agency enters *incoming invoices* and *remuneration settlements* in agency documents. The BI Content analyzes the payment process against the vendor and customer with particular emphasis on the business volume.
Description of the (new) BI Content
With BI Content 7.02, the infrastructure for the delta handling of the transaction data for the pooled payment process was developed. With the BI Content 7.0.3, SAP delivers two predefined scenarios for the pooled payment process: ❑ Pooled payment process with posting lists • 1 DataStore object (0AB_DS04) which contains the vendor and customer side documents on document item level on the basis of a single settlement request with posting lists on the debit side • 1 InfoCube (0AB_C02) enabling the evaluation of the pooled payment process on an aggregated level (vendor / customer….) ❑ Pooled payment process with customer settlement • 1 DataStore object (0AB_DS05) which contains the vendor and customer side documents on document item level on the basis of a single settlement request with customer settlements on the debit side • 1 InfoCube (0AB_C01) enabling the evaluation of the pooled payment

process on an aggregated level.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario
The new BI Content for pooled payment allows an analysis of business against customer and vendor, with particular emphasis on the payment process: ❑ Status analysis: which business transactions are already settled / opened ❑ Detailed pricing condition analysis: commission fee The main benefit of integrating SAP Agency business into SAP BI is the increased visibility throughout the whole payment process between vendor and customer; it allows you to monitor all partners involved in the payment process.

2 X-Apps

2.1 BI Content for Resource and Program Management (xRPM)

Abstract of the business solution
SAP xApp Resource and Portfolio Management (SAP xRPM) is a comprehensive solution designed to improve the selection, scoring, monitoring and review of portfolio items, such as concepts, project proposals, projects, R&D programs, IT activities and professional services. SAP xRPM 4.0 integrates information from existing project management, human resource and financial systems to provide a complete overview of an organization's project portfolio. Executives, portfolio managers and resource managers can easily drill down from this high-level information to view more detailed information. SAP xRPM extracts and uses existing application assets from project management, financial, and human resource systems to provide an enterprise-wide overview of the portfolio. Unlike conventional reporting tools, SAP xRPM adds new transactional capabilities for managing portfolio items, capacity, risk and expected across the portfolio. SAP xRPM embraces and extends the hidden value in existing systems by enabling new portfolio management processes without disrupting the base systems of records.

SAP xRPM provides role-based functionality for a wide range of users to collaborate on portfolio performance and human and financial resources planning. It includes features specifically tailored to meet the various needs of management decision makers.

Description of the (new/enhanced) BI Content scenario

SAP xRPM provides predefined analysis scenarios that are ready-to-go to better identify, select, prioritize, and manage a portfolio of projects and to quickly monitor the status of portfolio items.

BI Content 7.0.3 contains the following enhancements to existing Business Content for xRPM with regard to the following new functions provided with xRPM 4.0:

Capacity Management: Existing reports in xRPM 2.0 will be re-activated: Comparison of demand and availability with current allocations to projects:

- Availability vs. Allocation
- Availability/Allocation of Resources
- Demand vs. Allocation
- Demand, Allocation and Availability
- Demand, Allocation and Availability by Months
- Hardbooked/Softbooked Allocation vs. Demand
- Resource Allocation and Availability for Selected Portfolio Item

Cost Analysis: Operational financial data are uploaded to the portfolio and prepared for the comparison of plan and actual data. The retrofitted reports from xRPM 2.0 include:

- Actual vs. Planned Cost by Portfolio Item: displays tabular information about the actual and planned costs of the portfolio item and the variances.
- Details Actual Cost by Portfolio Item: tabular cost data for selected portfolio items by cost object type

Financial Planning – Version information: With xRPM 4.0, different versions of portfolio items can be created. Portfolio items and their version information will be available for reporting in the financial planning report: Version ID, version type, version name and baseline item.

Capacity Planning – Version information: With xRPM 4.0, different versions of portfolio items can be created. Portfolio items and their version information will be available for re-

porting in the capacity planning report: Version ID, version type, version name and baseline item.

Collections: A new DataStore object for a collection of portfolio items will support reporting at collection level.

Reviews: A new DataStore object for reviews containing portfolio items will support reporting based on reviews.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario
The enhanced BI Content provides substantial benefits in terms of portfolio visibility and transparency throughout the entire organization, decision support for the overall portfolio, and it also facilitates management reporting. The portfolio pipeline and portfolio items can be analyzed on the basis of various key performance indicators (e.g. risk, cost, budget, revenue). It is also important to look at the long-term portfolio: What were the planned values and what are the actual values and how does the revenue/cash flow develop along the timeline? Some projects might have low revenue right now, but have high forecasted revenue at the end of the project. In order to make the proper decisions, portfolio managers need to have the cost/revenue/cash flow information along the timeline.

Business scenarios (how the solution can be used)
Project and portfolio management supports various scenarios such as New Product and Introduction (NPDI), Product Innovation Management, IT Portfolio Management, Project and Resource Management for Professional Services, and many others. In all these scenarios, portfolio transparency and analytical applications play an important role in enabling decisions based on prioritizations, costs, or resources, and achieving successful projects.

2.2 BI Content for SAP Global Trade Service

Abstract of the business solution

The main goal of SAP Global Trade Services (SAP GTS) is to help companies manage all the complexities of international trade, including full regulatory compliance, interactions with customs and mitigating risk, while trading on a global basis. SAP GTS consists of the following separate modular components that enable companies to improve their supply chain and comply with international legal regulations:

- SAP Compliance Management manages international trade compliance issues in the areas of sanctioned party list screening, embargos and license management.
- SAP Customs Management facilitates interaction between companies and customs authorities or agencies, driving the efficient movement of goods and information across international borders.
- SAP Risk Management provides mechanisms to increase the competitive advantage by applying preference agreements on cross-border trade as well as to ensure that all parties involved meet their contractual obligations, and it also helps mitigate financial risks while trading on a global basis.

In addition, SAP GTS supports companies in evaluating their global trade activities using SAP NetWeaver Business Intelligence (BI). With the new BI Content 7.0.3, detailed information is made available to company employees who specialize in customs processing for customs procedures with economic impact, namely the customs warehouse procedure. These experts can analyze the information available to them for planning and reporting purposes in the company.

Description of the (new/enhanced) BI Content scenario

With the BI Content for SAP GTS 7.0, the following are available:

- Enhanced data extractors for transferring data from SAP GTS to BI
- Predefined data models including:
  - 1 enhanced and 1 additional DataStore object to collect relevant transaction data from import and export customs declarations in SAP GTS
  - 1 enhanced InfoCube to enable the evaluation of import and export-related data from SAP GTS

Predefined queries are delivered to enable an analysis of the savings made due to using the customs warehouse procedure by product or customs ID, the company's repository for customs procedures with economic impact.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario

SAP GTS 7.0 provides importers and exporters who trade across customs territories with a flexible global trade solution. When transferring duty-unpaid goods into customs procedures with economic impact such as the customs warehouse procedure, companies can benefit from the economic and financial benefits of these customs procedures:

- Save customs duties when re-exporting the same goods or
- Postpone the payment of customs duties until the goods enter the economic chain in your country or in the customs union.

The main benefit of integrating SAP GTS into SAP BI is the increased visibility of the benefits in using the customs warehouse procedure and the savings gained in customs duty. It allows you, for example, to monitor the benefits of a customs procedure for individual products.

Business scenarios (how the solution can be used)

Imports and exports are the main business processes that you can map using SAP GTS. The business scenarios that are currently covered by SAP GTS include the following:

- Export Management
- Import Management
- Trade Preference Management
- Restitution Management

Business Content in BI is available for SAP Customs Management. This covers the analysis of transfers of goods into the customs warehouse procedure and the end of that customs procedure based on creating a sales or purchase order, changing the data in the customs declaration, and transferring the relevant data to the data warehouse, where it is analyzed.

2.3 BI Content for Production and Exploration (xIEP)

Abstract of the Business Solution
"The main goal of xIEP is to enable and improve visibility into asset delivery as well as asset maintenance processes, both in planning and in execution for upstream oil & gas business processes. The solution enables companies to map, manage, and monitor all the business processes required. It uses targeted, active notification to make users aware of situations, and thus improves response times to exceptional situations. This, in turn, means a better service for the customer. In addition, xIEP supports companies in evaluating results – using data warehouse systems such as SAP Business Information Warehouse, for example – to obtain detailed information about the cost variance in the planning and execution phase, and how to minimize these. xIEP enables external and internal parties to be integrated equally in the evaluation by allowing the data from disparate systems to be integrated, thus providing a global view of processes across company boundaries."

Description of the (new/enhanced) BI Business Content Scenario
"SAP delivers predefined scenarios (viz. Asset Delivery and Asset Maintenance scenarios) that are ready-to-go so you can put the solution to work right away. Each scenario contains pre-configured packages based on business scenarios. The SAP Business Information Warehouse part in these visibility scenarios contains: ❑ Predefined Data Models, including • 8 ODS objects, collecting data about planned and actual events, cost related data of actual and planned events • 2 InfoCubes, enabling the evaluation of the current processes as well as past events. The Asset Delivery scenario covers the project delivery process from creating a new asset to analyzing how the current assets are progressing and the cost variance as compared to previous years. For this, also predefined Queries are delivered, which provides information about the planned and actual cost incurred in different phases for an asset, the planned and actual depth as well as other analysis information"

Main business benefit / main question answered with the (improved/enhanced) Business Content Scenario

xIEP (Integrated Exploration & Production) addresses the business needs of upstream Oil & Gas industry. It provides an unified role based interface and templates which could be adapted further by customers for their specific business processes using capabilities of guided procedures as a modeling tool.

xIEP – Integrated Exploration & Production, adds business value because it:

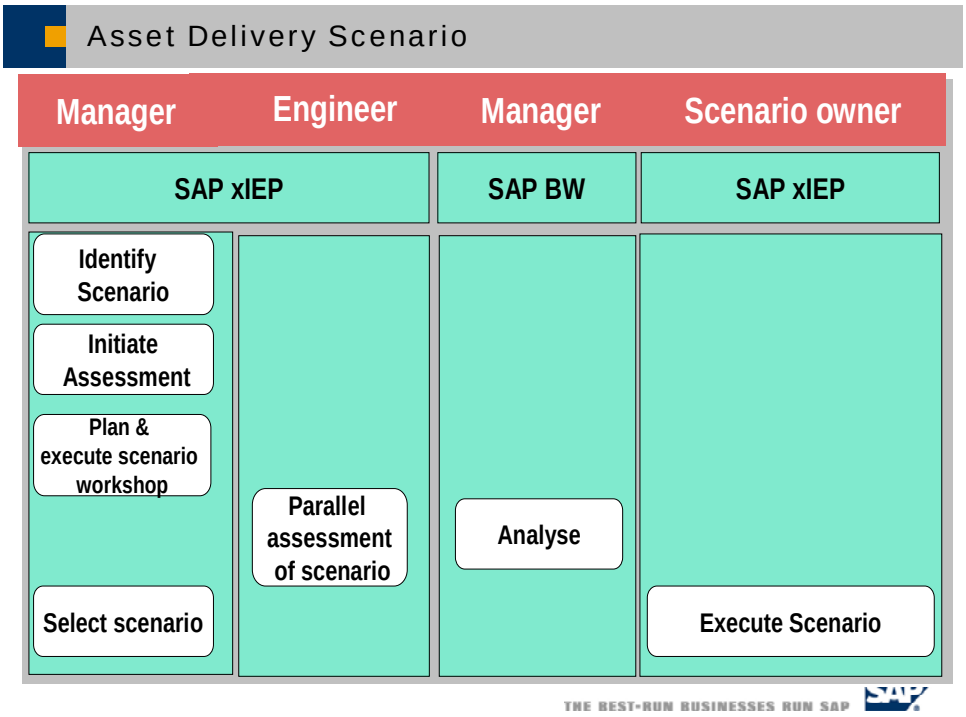
- Brings Transparency of work processes & its status that are running for the asset across locations
- Reduces costs as a result of the ability to showcase the variance in costs and helping in decision making to deploy efficient equipment for assets.
- Enhances operating efficiency, from downtime reduction and proactive response to plan breakdowns.

The main benefit of integrating SAP xIEP2.0 (Integrated Exploration & Production) into SAP BI is the **operational efficiency & transparency** & facilitates decision making throughout a company's Asset Delivery processes. In addition to standard key performance indicators (KPIs) it allows you to **monitor the efficiency of equipments used & the yield of these assets.**

Business scenarios (how the solution can be used)

Asset Delivery is one of the main application areas in Upstream process management. SAP has therefore focused in a first scenario on a Asset delivery process for which the Business Content in SAP BW will be developed.

This scenario covers the project delivery process from creating a new asset to analyzing how the current assets are progressing and the cost variance as compared to previous years. The following graphic shows the business partners involved and their role in the scenario



2.4 BI Content for Cost and Quotation Management (xCQM)

Abstract of the Business Solution
SAP xApp Cost and Quotation Management (SAP xCQM) is a packaged composite application –powered by SAP NetWeaver— that addresses critical pain points of manufacturers in almost any industry in which processing quotes is a crucial piece. Manufacturers need to optimize the processes by which they respond to market requirements for new products. They must align the disparate functions of design, sourcing and costing to enable profit maximizing decisions. Often the lack of streamlined processes and reliance on obsolete data leads to lost opportunities and profit erosion. By leveraging its domain expertise in manufacturing, SAP has provided this closed loop solution; SAP xCQM. SAP xCQM combines the best of both worlds, a collaborative process platform which allows companies to quickly determine lifecycle product costs tightly integrated with sourcing capabilities.

Description of the (new) BW Business Content
SAP xCQM provides tree pre-defined analysis scenarios that allow manufacturers to easily identify areas for process, costing and forecasting improvements within the organization.

BI 7.0.3 Content Add-on contains the following showcase analysis reports provided through the Business Content for SAP xCQM. As follows is a short description of the new functions:

Accumulated Expected Launch: Portfolio is a bar chart showing accumulated size of portfolio items adjusted for risk (NPV*risk) compared to the new product development financial objective over a timeframe.

Profitability Analysis: is a new chart which allows users to retrieve a forecasted profitability for a product. The forecasted profitability analysis is based on figures such as target quantities, estimated profits, target costs and prices currently available for a given opportunity.

Impact Analysis: is a new chart based on the supplier responses. This analysis allows users to evaluate the impact of a particular sourcing loop by providing information such as; past pricing, new pricing, previous costs of procurement, in addition to the new costs of procurement.

Cost Estimate Analysis: allows users to quickly and efficiently compare multiple Bill of Material Cost Estimates utilizing values provided for the totals of particular Cost Buckets (cost categories: i.e. Non-reoccurring engineering or Labor)

Main business benefit / main question answered with the (improved/enhanced) solution

The enhanced BW business content provides substantial benefits in terms of the financial impact a particular quote will have on both current and future business opportunities. The analyses result in enhanced visibility and transparency throughout the entire organization, decision support for the overall process, and eases management reporting.

Business scenarios (how the solution can be used)

SAP xCQM business scenarios support various integration scenarios such as Supplier Resource Management (SRM), Sales and Distribution (SD), Material Management (R/3 MM), Universal Work List (UWL) and many others. In all these scenarios, cost, profitability and supplier response impact play an extremely important role to enable decisions based on prioritizations, costs, or pricing, and achieve quotations with the highest margins available to the organization.

3 Technology Platforms

3.1 Analysis of System Performance Issues

Abstract of the Business Solution
With SAP NetWeaver '04, SAP provides a solution for systems performance and availability reporting using SAP Business Intelligence. Often performance problems need to be analyzed further. Typically, statistics workload data collected in the respective systems is used for analysis. Each action within an SAP Application Server is recorded; for example, the start of a transaction, the functions a user performs within a transaction, RFC calls and database accesses that were made, etc. Technically, the detailed statistics records both from the ABAP stack and the Java stack of an SAP Application Server are written to files which are overwritten after a few days. Data is aggregated and aggregated data is stored in the local database. Detailed and aggregated statistics data of a landscape can be viewed from a central system. However, no link exists between performance and availability data and statistics data in a central monitoring system. No function is available to allow reporting on statistics data. Transferring statistics data to a BI system enhances systems performance reporting by offering navigation options for root-cause analysis due to a correlation of this data.

Description of the (new/enhanced) BI Content scenario
The CCMS-specific BI Content enhances reporting on monitoring data from an SAP landscape with statistical information as described below: **Extraction of Statistics Records from Satellite Systems** The statistic records of the satellite systems to be monitored are collected by an extractor and then sent to a BI system. The extractor is part of the Basis Plug-In. One single extractor in the central monitoring and administration system gets single statis-

tics records from all satellite systems.

It is not necessary to install extractors in the satellite systems.

Storage and Processing of Statistics Records in BI

To be able to store and process statistics records within BI, the following CCMS-specific Content is delivered:

Detailed statistics records such as CPU utilization, disk space and memory per physical server, response time, and database records processed are stored in the DSO.

In addition, aggregates are calculated from the single statistics records. The aggregates are stored in InfoCubes.

Query definitions let you access the data. Ad hoc reporting on statistics data is provided.

Current Limitations:

- The current release does not support the transfer of Java-distributed statistics records (DSRs) to BI.
- No Web reports are available so far.

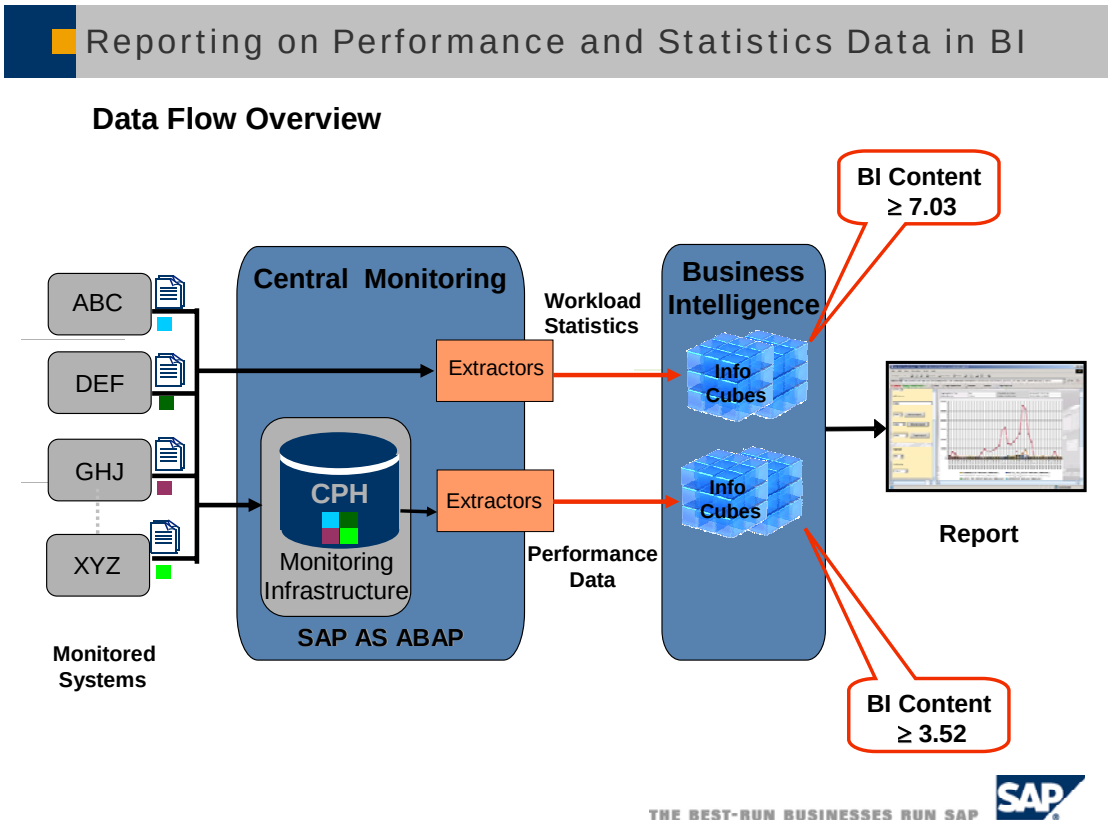
Main business benefit / main question answered with the (improved/enhanced) BI Content scenario

Reporting on landscape-wide statistical data in BI will provide the following benefits:

- Reduces administrators' workload due to assisted root-cause analyses
- Increases reporting capabilities based on correlations between performance and statistics data
- Reduces costs due to increased reporting efficiency.

Business scenarios (how the solution can be used)

Performance analysis, accounting and service level reporting can be considerably improved.



3.2 BI Content for Solution Manager

Abstract of the business solution
Scope of the SAP Solution Manager for BI Reporting: ❑ Customers with specific reporting needs or interest in history and detailed analysis of the system, database, server or performance data ❑ Option for SAP customers to build their own reporting in BI for more than one system, for several key performance indicators, and several time intervals The source data of BI reporting is the SAP EarlyWatch Alert data which provides a large data pool of key performance indicators, system parameters and other information and will be combined with the Solution Manager Landscape Data (SMSY) in BI for more than one system.

One special feature is that the customer can put their own key performance indicators in the extraction tool (fills data in transparent tables) that is running in the SAP Solution Manager. A transparent table will be filled with these parameters. After the definition phase, the customer has to create their own InfoObjects and InfoProviders in the BI system in the same way as the delivered objects. Customers can cover all their individual reporting needs in this way.

Description of the (new/enhanced) BI Content scenario

SAP delivers a predefined scenario and predefined InfoCubes and workbooks which are ready-to-use if the customer activates the BI Content for SAP Solution Manager in the BI system (which can be also the SAP Solution Manager system). The BI Content comes from the SAP EarlyWatch Alert service and the solution landscape data (transaction SMSY).

The following list contains the new objects in BI that are shipped with the new BI Content Add-On 703:

- Extractor: Standard BI extractor for transparent tables. The namespace for the transparent tables in the SAP Solution Manager system is *DSWPBI*
- Data model contains the following objects:
  - 12 DSO objects, collecting system, server, module, performance and database data
  - 12 InfoCubes, collecting system, server, module, performance and database data
  - 1 MultiProvider (MultiCube) on the top of all delivered InfoCubes
  - 26 process chains (2 process chains with init and delta load for each InfoCube and 2 process chains with init and delta load in order to fill all data targets)

The visible workbooks (queries) cover the specified parameters from the DSAG. There are 2-4 queries for each InfoProvider and all are accessible via the SAP menu. For that we have delivered role SAP_BW_SOLUTION_MANAGER.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario

SAP Solution Manager BI reporting provides a solution for customers and solution providers that offers them an overview of key performance indicators in order to accomplish soft-

ware level agreements (SLA). The solution allows long term analysis of key performance and strategic indicators (response times, database grows and so on). The target groups are administrators and solution managers. The main benefits of using SAP Solution Manager BI reporting are:

- Increases control and offers detailed analysis of key performance indicators, for example of CPU utilization, memory utilization, database growth, response times
- Increases customer satisfaction resulting from quicker access to important data, and the ability to provide managers with accurate data about SAP systems.
- Working with the SAP Solution Manager reduces TCO of administrating SAP solutions and other software components.
- Enhances operating efficiency to detect performance bottlenecks in systems, servers or databases.

The main benefit of SAP Solution Manager BI reporting is the increased visibility of key performance indicators. In addition to standard key performance indicators (KPIs), it allows customers to establish individual reporting too.

Business scenarios (how the solution can be used)
The solution can be used by system administrators or SAP service providers who have SL agreements with their customers to monitor the entire SAP Solution. The following graphic (picture 1) shows the parameters involved in that solution for one typical example (DB size and monthly growth). The last table (table 1) shows the key performance indicator and parameters which are available in BI reporting.

4 Industry Units

4.1 Defense and Security

4.1.1 Business Content for Defense

Abstract of business solution
One of the key elements of the Defense & Security solution is flexible and integrated organizational management. It enables the integration of an often changing organizational

management with related processes in HCM, SCM, PLM and Financials.

It contains functions for:

- Authorized and actual personnel and the integration into my SAP ERP HCM.
- Authorized and actual material and the integration into mySAP SCM and mySAP PLM
- Provision and integration into mySAP SCM and mySAP PLM.
- It also contains functions to facilitate maintenance of large assets (e.g. weapon systems) and flight operations.

The solution supports missions in all phases of deployed operations, taking into account the particular conditions and challenges of a possibly hostile environment with a restricted (IT) infrastructure.

Description of the (new) BW Business Content

"SAP delivers **predefined scenarios** that are ready-to-go so that you can implement the solution right away. Each scenario contains **pre-configured packages** based on business scenarios. The SAP NW BI part of these visibility scenarios contains:

- **Extractors** for transferring data from ECC / EA-DFPS to SAP NW BI (BI Content Defense)
- **Predefined data models,** including
  - **62 DataStore objects** that collect data about structures, materials, personal, plant maintenance and line maintenance.
  - **32 InfoCubes** that enable the evaluation of the notification- and execution behavior
  - **Process chains**

The visibility scenario covers planning, support, and processing of force elements in the EA-DFPS solution. The daily military business and operations are transferred to the data warehouse, where they are analyzed. For this purpose, predefined queries are delivered which provide information about material movements and planning, organizational flexibility, plant maintenance, line maintenance and personal planning as well as operations and exercises.

Main business benefit / main question answered with the (improved/enhanced) solution

The new BI Content enables planning and analysis of processes related to the EA-DFPS functionalities of the mySAP ERP solution.

The new content enables you to collect data from the integrated organizational management, e.g. authorized and actual personnel and materiel. The maintenance and supply chain processes and the HCM processes.

The use of pre-planned scenarios reduces reaction times; it also enables a reuse of predefined content.

The content improves the asset visibility. It enables analysis of total stock of total assets, and facilitates the improvement of the supply chain.

HCM processes often rely on the qualification of personnel. The content enables a quick and complete overview of existing qualification profiles and required skills for missions or tasks. It enables a skill-based HCM concept including training and exercises.

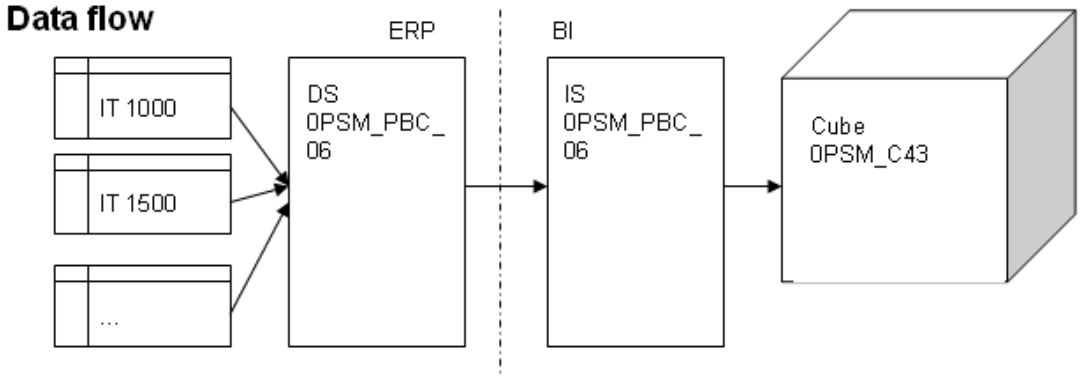
4.2 Public Sector

4.2.1 Position Budgeting and Control

4.2.1.1 Personnel Budget Plan Management

Abstract of the Business Solution
This document covers BI reporting for scenario “PBC Personnel Budget Plan Management”. It completes PBC Analytics which contains the Enterprise and BI reporting solution for all PBC scenarios (Commitment Processor; Organizational Managements for PS; Personnel Budget Plan management). The main goal is the presentation of the position plan. The starting point for reporting (e.g. generating the position plan) is the existing enterprise structure of the Budget Unit (BU) within the Personnel Budget Plan Management. This non- integrated view of budget elements (not integrated in terms of Funds Management and fiscal information) covers the position plan in its own structure. To report on this data, a consistent data collection method is used to provide all the relevant information concerning the BU objects.

Description of the (new) BI Content



Package

Package RS_BCT_FM for BI-Content and PAOC_FPM_FTE_BW for R/3-Content (extractors).

InfoArea

No new InfoArea is needed. For this development, InfoArea 0PSM_PBC is used.

Role

SAP_BW_PBC_03 - Manager Position Plan (Personnel Budget Plan Management)

Query

0PSM_C42_Q0001

0PSM_C42_Q0002

InfoProvider

0PSM_C42 Position Plan (Personnel Budget Plan Management)

InfoCube

0PSM_C42- Position Plan (Personnel Budget Plan Management)

DataSource

0PSM_PBC_06

0BSELEMENT_ATTR

0BSELEMENT_TEXT

0BSELEMENT_HIER

0BUTGR_TEXT

0BUTYP_TEXT

0BSTAT_TEXT

InfoSource

0PSM_PBC_06

0BSELEMENT

0BUTGR

0BUTYP

0BSTAT

Web Template

0TPL_YY_C01_Q0001_V01

APCO: OLTP Application Component

PSM_PBC

Main business benefit / main question answered with the (improved/enhanced) solution
The typical user for the functionality would be somebody who is in charge of managing the current position plan and is controlling and preparing the required actions like lock notes or valuations of positions. A specific role is not defined for this scenario.

Business scenarios (how the solution can be used)
Business case(s) for which the new feature can be applied are not applicable as the solution covers a legal requirement.

4.2.1.2 Personnel Budget Planning

Abstract of the business solution
Personnel Budget Planning supports public sector organizations in easily creating a personnel budget/position plan for a defined planning horizon. It covers capacity (FTE), personnel cost and cost distribution planning for position/employee. In addition, the personnel budget plan is integrated into the overall budget.

Main business benefit / main question answered with the (improved/enhanced) solution
Speed up setup of personnel budget/position plan ❑ Less manual work as existing data/projecting data are reused Increase accuracy of budget projection ❑ Due to more accurate personnel budget Reduce errors ❑ Version concept

Business scenarios (how the solution can be used)
Personnel budget planning is a sub-scenario of the business scenario “budget preparation”.

4.2.2 Enhancement of Business Content for Funds Management

Abstract of the Business Solution
In Funds Management, customers can store customer -specific data in FM updating. This information can be used for specific reporting issues. In order to allow customers to use this information, not only in R/3 but in BI too, FM extractors to BI have been enhanced to include the USERDIM field. Furthermore, the new BI InfoObject 0PU_USERDIM has been defined.

Description of the (new) BI Content
A new InfoObject 0PU_USERDIM has been defined in BI. The InfoObject has no attributes, texts or hierarchies. The object is included in the InfoSources and DataStore objects for commitments, actual and BCS budget. The extractors for commitments, actual and budget (BCS) have been enhanced to include the USERDIM field.

Main business benefit / main question answered with the (improved/enhanced) solution
Facilitate BI reporting for customers in the public sector who work with specific information stored in the USERDIM field.

4.3 Financial Services

4.3.1 Bank Analyzer Basel II

Abstract of the Business Solution
With Bank Analyzer, IBU Financial Services offers a new suite of analytical applications tailored to match the banking industry's need for an integrated back office solution. Bank Analyzer consists of a common data layer – the Financial Database – which provides multiple Analyzers with data. Some of the challenges the banking industry faces today are new risk calculation, risk controlling and disclosure practices as demanded by the Basel II consolidation paper. Bank Analyzer helps banks overcome these challenges by providing BI Content that includes the reports required by pillar 3 (Disclosure and Reporting) of the consolidation paper. The overall scenario includes the following features: ❑ OLTP extractor configuration and generation to flexibly combine and transfer results of the Basel II calculation process (Result Data Base), the Historical Data Base (HDB) and the Financial Data Base (FDB) to the SAP Business Information Warehouse ❑ Complete data staging process including InfoSource and update rules

- DataStore-based line item reporting
- MultiProvider-based analytical reporting
- ready-to-run queries satisfying the disclosure specifications of the SAP Basel II Solution 4.0

Description of the (new) BI Content

SAP delivers ready-to-run reports including the complete data model for reporting and the staging process, the latter is supported by the OLTP generic extractor shipped with the Bank Analyzer 4.0 system.

The following reports are provided:

- a Distribution of Credit Items (Average Values)
- b Distribution of Credit Items (Current Values)
- Geographic Distribution of Credit Positions
- Distribution by Sector/Counterparty Type
- Distribution by Maturity
- Portfolio Report
- LGD Results
- EAD Results
- Risk Mitigation Effects
- Non-Performing Credit Items by Sector / Counterparty Type or by Country
- a Provisions, Recoveries, Write-Offs
- b Comparison of EL and Provisions
- EL for each EL band (expected loss)
- a Credit items by Portfolio / Basel II approach (EAD)
- b Credit items by Portfolio / Basel II approach (RCR)
- Outstanding items per risk category
- Default probability for each retail segment

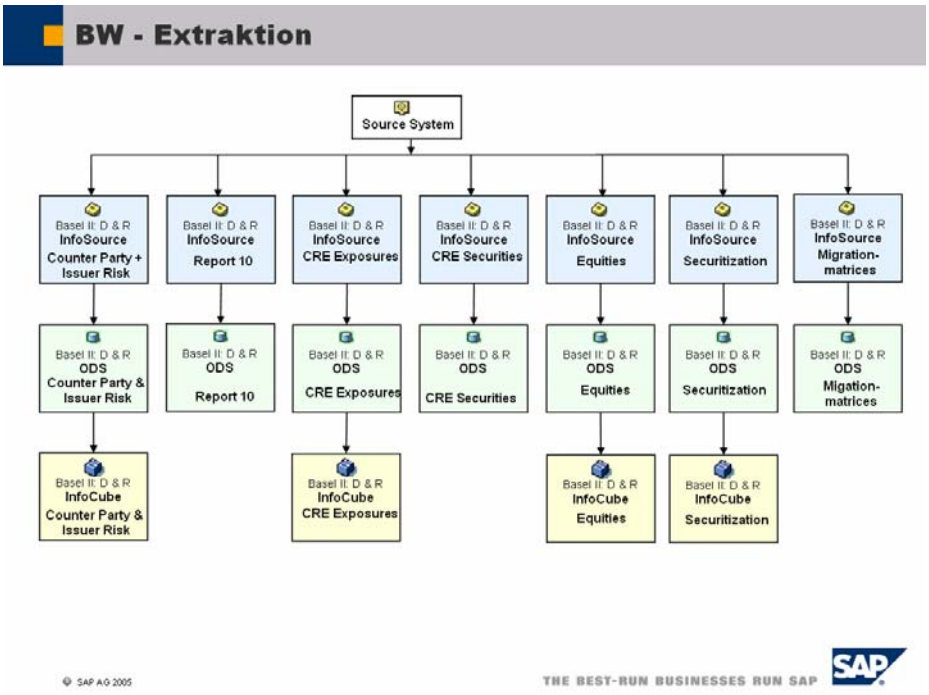
- Comparison between expected and actual defaults
- Comparation of Equity Values
- Equity Results
- Capital Requirements per Equity Groups
- Equity Investments subject to Supervisory Transition
- Outstanding Securitized Exposures by Exposure Type
- Impaired Securitized Exposures and Recognised Losses
- Retained or Purchased Securitisation Exposures by Exposure Type
- a Outstanding Securitisation Exposures Retained or Purchased by Risk Weight Bands
- 23 b Securitisation postions deductible from Capital
- 24 Outstanding Securitized Revolving Exposures
- 24 a Securitization with Early Amortization Clause (EAD)
- b Securitization with Early Amortization Clause (RCR)
- 25 a Securitized Exposures and Recognised Losses by Exposure Type incl. Recognised Gain or Loss
- b Securitized Exposures – Bank as Sponsor
- Operational Risks
- Total Amount and Losses for Commercial Real Estate by Real Estate Type
- Market Value and Loan Value of Commercial Real Estate Loans by
- Real Estate Type
- Customer Migration by Number (Percentage Values)
- Customer Migration by Volume (Absolute Values)
- Customer Migration by Number (Absolute Values)
- Customer Migration by Volume (Percentage Values)

BI InfoProviders

The following InfoSources will be generated to extract data from the Bank Analyzer Core

System:

- Counter Party / Issuer Risk
- Provisions, Recoveries, Write-Offs
- Commercial Real Estate (CRE)
- Securities for CRE
- Equity Investments
- Securitization
- Migration Matrices



The MultiProvider 0BADRMC01 combines data from the following InfoCubes and makes it available for reports 1 - 15:

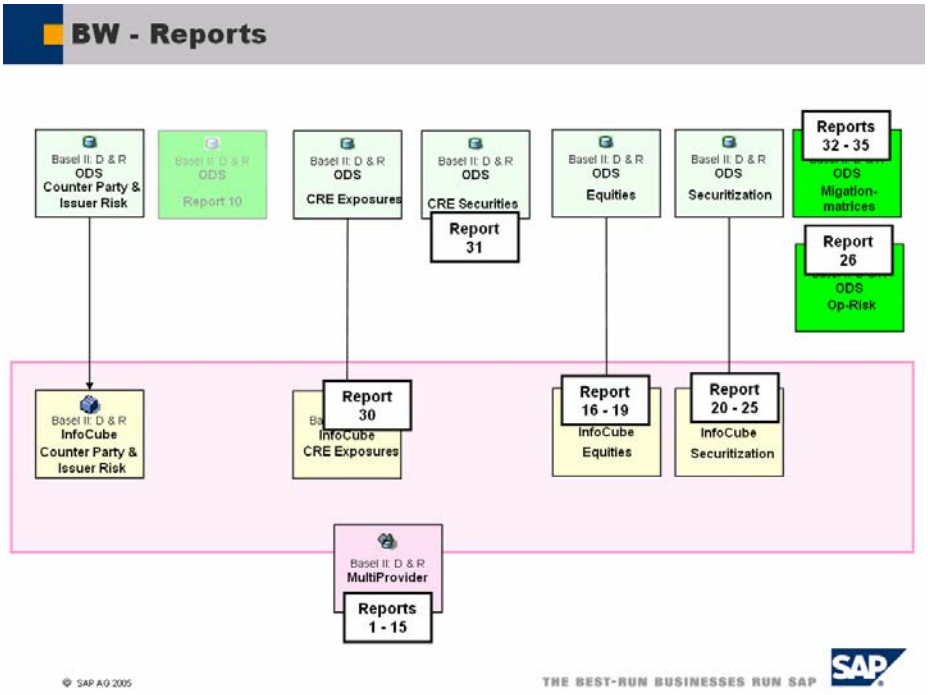
Basel II: Disclosure & Reporting InfoCube Counter Party Risk (0BADR_C01)

Basel II: Disclosure & Reporting InfoCube Commercial Real Estate Exposures (0BADR_C04)

Basel II: Disclosure & Reporting InfoCube Equities (0BADR_C06)

Basel II: Disclosure & Reporting InfoCube Securitization (0BADR_C07)

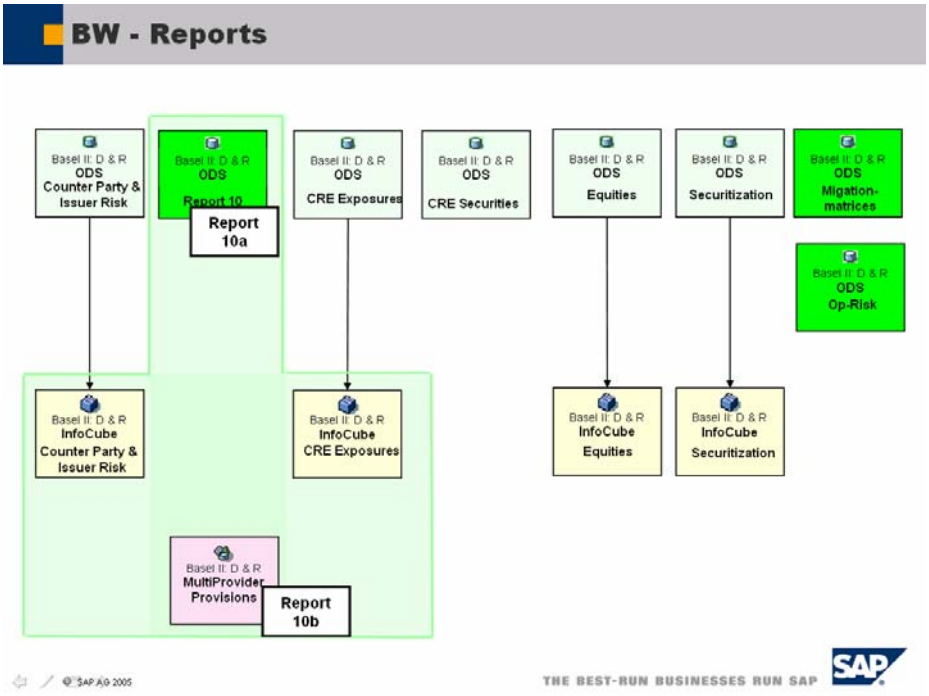
Reports 16 – 19	will be solely based on the InfoCube for Equity Investments.
Reports 20 – 25	will be solely based on the InfoCube for Securitization.
Report 26	will be solely based on the the DataStore for Operational Risk. This DataStore does not appear in the diagram for the data flow because data extraction from the Bank Analyzer core system is not planned. Staging of data for this InfoProvider will most likely be done from an external file.
Report 31	will be solely based on the InfoCube for CRE Securities.
Reports 32 – 35	will be solely based on the DataStore for migration matrices.



Report 10a	will be based on either an InfoCube (if necessary) or the DataStore object for provisions, recoveries and write-offs.
Report 10b	will be based on a MultiProvider 0BADRMC02, which accesses data from the following InfoProviders: • ODS 0BADRDS03 for provisions, recoveries and write-offs • InfoCube 0BADR_C01 for counter party and issuer risk

- InfoCube 0BADR_C02 for commercial real estate exposures

Report 10b 'Comparison of EL and Provisions' is based on data for general and specific provisions. It is assumed that the general provisions are stored broken down by country / industry / portfolio and approach, as a comparison of expected losses and eligible provisions is valid only for the IRB approaches.



The scenario is rounded off with DataStore objects

- 0BADRDS01 ODS for Counter Party / Issuer Risk
- 0BADRDS04 ODS for Commercial Real Estate Exposures
- 0BADRDS06 ODS for Equities
- 0BADRDS07 ODS for Securitization

which may be used for both detailed line item reporting on financial transaction level and as a possible source for drill-down navigation. The DataStore objects contain the necessary information to allow for drill-through scenarios to the Bank Analyzer OLTP system.

process, which originates in the Bank Analyzer OLTP system: The extractor reads, merges and transports results from the calculation process (RDB), the Historical Data Base (HDB) and the Financial Data Base (FDB) of the Bank Analyzer. The data can be staged using the pre-defined InfoSources.

Main business benefit / main question answered with the (improved/enhanced) solution

The Bank Analyzer Basel II disclosure and reporting business content has been set up following the Basel II regulations specified in the final Accord (Pillar 3).

The BI Content considerably shortens implementation time and effort for BI reporting by providing ready-to-run queries, a fully developed data model and close integration with the Bank Analyzer OLTP processes.

Reports on a high aggregation level satisfy the disclosure and reporting requirements determined by management and supervisory authorities.

The BI Content can be easily enhanced to meet extended requirements for internal reporting using freely definable drill-down paths.

The Bank Analyzer Basel II solution including the data extraction process can be extended with freely definable customer reporting criteria and key figures.

Business scenarios

The following Basel II process shows the data flow for disclosure and reporting in the SAP Bank Analyzer Core and SAP BI:

Bank Analyzer calculates key figures relevant for Basel II and stores pre-calculated and historic results in the Historical Data Base (HDB). The calculation results and the historical data can be merged and transferred to *SAP Business Information Warehouse*, where they can be analyzed on financial transaction level or higher.

Data Extraction

The source systems are SAP systems. A generic extractor can be used to generate DataSources for the required extraction streams.

Example

The following example illustrates the *Geographic Distribution of Credit Items* report.

The underlying transaction includes a loan with an annual repayment amounting to EUR 1

million to a company headquartered in Germany, which was valued on 06/01/2006.

Step 1: The transaction data for the loan is entered, processed and stored in the bank's own operational systems.

Step 2: The necessary transaction data (for example: exposure, collaterals, guarantees and maturity) for the loan is transferred to the FDB.

Step 3: The costing objects for the loan are determined during the costing process, which reads the input data (Step 2) from the FDB. The results - EAD (exposure at default), LGD (loss given default), PD (probability of default) and others - are stored in the Result Data Base (RDB).

Step 4: The calculation results (Step 3) can be merged with other information in the data extraction process and analyzed in the Business Information Warehouse.

SAP Analytics Project

Dashboard: Defaulted Exposures

Business Process Scenario

Banks calculate EAD (Exposure at Default) for all of the credit risks based on certain factors. This key figure is shown with the EAD for defaulted exposures over 6 periods in order to illustrate the development of the credit risks and the defaulted exposures within the bank. A breakdown of the figures by portfolio and country for selected periods can also be displayed.

New Queries and Views

Query: 0BADRMC01_Q00S3

This query displays the EAD and default values for the previous periods. The data in the test system has been loaded in 3-monthly periods; this results in an offset of 500 being necessary to cover 6 periods. The customer can change this offset, depending on the period frequency that is relevant.

View: 0BADRMC01_Q00S3_V1

The query view displays the key figures and periods vertically. This display mode is necessary for a line chart in the Visual Composer.

Query: 0BADRMC01_Q00S4

This query displays the EAD and default key figures by portfolio for a selected period. The relationship of default to EAD, the % proportion of EAD and default per portfolio are also calculated.

View: 0BADRMC01_Q00S4_V1

This query view displays the EAD and default key figures per country. The relationship of default to EAD, the % proportion of EAD and default per portfolio are also calculated.

Dashboard: Regulatory Capital Requirements

Business Process Scenario

Basel II regulates the calculation of credit risks and the determination of regulatory capital requirements - how much capital the bank must hold to cover the credit risks incurred by loans, equity holdings, etc. The dashboard shows the development of the regulatory capital requirements (RCR) over the previous 6 periods and a breakdown of the figures according to portfolio or country for selected periods.

New Queries and Views

Query: 0BADRMC01_Q00S1

This query is used to access key figure '0BA_1RCR' for the last 6 periods. In the test system, a period is 3 months – therefore the offset used in the query is 500 days. The customer may have to change this offset if other periods – for example months – are relevant.

View: 0BADRMC01_Q00S1_V1

This query view shows the period and the key figure in a vertical display. This display is necessary to produce a line chart in the Visual Composer – normally the display created in query '0BADRMC01_Q00S1' is sufficient to create the chart (Excel, Web Application Designer).

Query: 0BADRMC01_Q00S2

This query displays the regulatory capital requirements by portfolio for a given period. The query is used to display both a table and a pie chart and is also executed twice within the model, once for the current period and once for the period selected by the user, who has made a selection in the table displayed to the right of the line chart.

View: 0BADRMC01_Q00S2_V1

This query view displays the RCR by country and supplies these values to a table and a pie chard. This view is also executed twice within the model, once for the current period and once for the period selected by the user.

Query: 0BADRMC01_Q00S2B

This query displays the RCR values for the current and the selected period per portfolio and calculates the difference between the 2 values. The current period is evaluated automatically; the selected period is passed on from the user selection to the table to the right of the line diagram. The difference is displayed as a percentage and expresses the difference in relation to the current period.

View: 0BADRMC01_Q00S2B_V1

This query view displays the RCR values for the current and selected period, broken down by country.

Dashboard: Collaterals and Guarantees

Business Process Scenario

Credit risks are secured to a certain extent by collaterals or guarantees. This means that the bank is sure of a certain recovery on losses, should a borrower default on payment. This dashboard shows the spread of collateralized, guaranteed and unsecured portions of the credit risks and analyzes the development of the unsecured exposures over 6 periods.

New Queries and Views

Query: 0BADRMC01_Q00S5

This query displays the collateralized, guaranteed and unsecured exposures by portfolio for the previous 6 periods. As the data in the test system is loaded in a 3-monthly cycle, the offset of 500 is necessary in order to display 6 periods. This query is used as the basis for the query view, needed to determine the current period.

View: 0BADRMC01_Q00S5_V1

This query view displays the periods vertically and is used to support the selection of a period.

Query: 0BADRMC01_Q00S5A

This query displays the collateralized, guaranteed and unsecured exposures by portfolio for a given period – in the model, this is the current period, which is evaluated automatically.

Query: 0BADRMC01_Q00S5B

This query passes on two parameters – portfolio and current period – to the following queries, and is used as a basis for the query view, which displays the values by portfolio and date vertically.

View: 0BADRMC01_Q00S5B_V1

This query view displays the collateralized, guaranteed and unsecured exposures by portfolio and period. The current period is passed to the query view the user selects a portfolio for further displays.

Query: 0BADRMC01_Q00S6

This query displays the collateralized exposures by collateral type for the current period and a selected portfolio.

Query: 0BADRMC01_Q00S7

This query displays the guaranteed exposures by guarantee type for the current period and a selected portfolio.

Query: 0BADRMC01_Q00S9A

This query displays the EAD and default exposures for a selected maturity band and for the previous 6 periods.

View: 0BADRMC01_Q00S9A_V1

This query view displays the EAD and default values by period vertically – necessary for the line chart in the Visual Composer.

Query: 0BADRMC01_Q00S9B

This query displays the total, defaulted and non-defaulted EAD for the previous 6 periods, broken down by maturity band. The input parameters to the query are the current period and the selected portfolio.

4.3.2 Business Content for FS-CM

Abstract of the business solution
The main goal of the enhancements contained in BI Content 7.03 for Insurance Claim Management is to support insurance companies in analyzing their claim data gathered within FS-CM Claims Management. Claims Analytics enables insurance companies to analyze their costs regarding indemnities and expenses occurring from the settlement of claims resulting from insurance policies. FS-CM Claims Management allows you to capture several characteristics. Extracting conclusions from analyses based on these characteristics influences product development and product prizing, organizational structure, claim handling guidelines and rules, fraud management, and much more. Thus, the overall processes within insurance companies can be streamlined.

Description of the (new/enhanced) BI Content scenario
List and explain in keywords the new/enhanced developments of the BI Content for the specific release. If this is a BW BCT enhancement, start with a short introduction to the complete existing BI

Content!

The existing Business Content before 7.0.3 comprises the following areas :

- coverage (or subclaims)
- claim items
- payments
- reserves
- coverage referrals
- claim activities
- diagnosis
- procurements (item grouping)
- participant occurrences
- claim bundle
- tasks in claim bundle

SAP delivers an extension of the Business Content for Insurance Claims Management (FS-CM) for some new or previously unconsidered topics:

- Litigation
- Negotiation
- Subrogation/Recovery
- Special Rights
- Link in Sub-Object
- Role-Based Performer
- Distribution Plan
- Within SAP Business Information Warehouse, insurance companies will find in this BI Content release:
- DataSources with delta functionality 'AIMD' for transactional data (4 new / 8 changed)
- Master data extractors (18 new and 15 changed)
- InfoSources for all new data sources (flexible update: 12 new; direct update: 32 new)
- DataStore objects for transactional data (12 new)
- New InfoObjects for the new InfoSources and DataStore objects (103 new**)**

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario
The main benefit of integrating SAP Claims Management into SAP BI is to make claims data available in BI. Because of the huge data volume in insurance companies, a further benefit is the delta capability of the claims extractors. The enhanced Business Content allows the implementation team of a Business Information Warehouse project to reduce time and costs when building content for Claims Analytics. Insurance companies can flexibly design queries using the database in BI.

Business scenarios (how the solution can be used)
Special Investigation Unit Insurance companies increasingly need to measure their efforts in special investigation units during the claims handling process. The new objects litigation, negotiation, subrogation/recovery allow them to measure their success in financial terms. Subrogation By capturing all of the activities that take place around subrogation, an insurance company can quickly identify the costs associated with this process. Further analysis allows them to determine if the amount received via subrogation offsets the costs, thus defining whether subrogation is profitable. An insurance company can then use this information to identify which claims are worthwhile subrogation targets.

4.3.3 Business Content for Collateral Management

Abstract of the Business Solution
The CMS collateral management is part of the solution portfolio of SAP Core Banking and responsible for management and processing of collateral objects and agreements. It is an operational application, which supports the life cycle of collateral contracts. Central task is

the management and processing of collateral agreements and their relationship as to the collateral object as to the receivable to be collateralized.

In addition, CMS Collateral Management systems supports banks in evaluating results using data warehouse systems such as SAP Business Information Warehouse, for example to obtain information on operational data of collateral management and to generate reports.

Description of the (new) BW Business Content

SAP delivers **predefined scenarios** (visibility scenarios) that are ready-to-go so you can put the solution to work right away. Each scenario contains **pre-configured packages** based on business scenarios. The SAP Business Information Warehouse part in these visibility scenarios contains:

- **Extractors** for transferring data from Collateral Management System to the SAP Business Information Warehouse
  - Master data as dynamic data of the collateral object, collateral agreement and the receivable (based on data feed from the receivable management system)
  - Based on SAPI Technology
- Predefined Data Models, including
  - **App. 200 InfoObjects,** collecting application and customizing data about different collateral objects and collateral agreements as receivables
  - **App. 70 Key figures**, for example, collateral object value, lending value, lending limit, assessment amount, collateral value, loan to value ratio, free collaterals receivable current risk …
  - **15 DataSources**, collecting data about collateral objects, charge, collateral agreement, collateral scope and receivable, link to business partner
  - **11 Data Store Objects**, collecting data about collateral objects, charge, collateral agreement, collateral scope and receivable link to business partner
  - **1 InfoCube**, enabling the accumulation of collateral values
  - **5 InfoSets,** enabling reporting based an multiple ODS objects

Predefined **Queries** are delivered, which provide information on collateral constellations based on real estates or based on receivables, overview of collateral agreement of administration organizational units as overviews on guarantees of organizational units and guarantors.

Main business benefit / main question answered with the (improved/enhanced) solution
The Collateral Management system with its standard query customizing, offers a general operational and statistical analysis of the collateral constellations and collateral agreements managed. The information supports employees in collateral processing, controlling, bank examination and auditing. The main benefit of integrating CMS Collateral Management System into SAP BW is: ❑ The relevant CMS data are transferred into SAP BW and modeled in BW ❑ Banks can flexibly define additional queries using the supported database in SAP BW as define additional Business Content ❑ Collateral Data are available for upload into ETL Layer of SAP Bank Analyzer Solution for Basel 2 risk mitigation

4.4 Retail

4.4.1 SAP Forecasting and Replenishment Analytics

Abstract of the business solution
The main objective of SAP Forecasting and Replenishment (SAP F&R) is to help retailers balance the scale between increased customer service levels and overall lower merchandise inventory. It uses sophisticated forecasting algorithms that take all known demand influencing factors into account as well as highly automated replenishment methods to generate optimized order proposals. In case manual intervention is required, the creation of alerts in conjunction with exception management and intuitive workbenches helps a replenishment planner to handle the high number of product location combinations. The operational part of SAP Forecasting and Replenishment is a modular solution based on SAP's Supply Chain Management platform and is an integrative component of SAP for Retail. The management of the forecasting and replenishment processes requires useful and insightful information in order to effectively monitor investment in merchandise inventory. The analytical part of SAP Forecasting and Replenishment, together with SAP BI, provides a number of retail-specific reports that help to control and evaluate the quality of the solution.

Description of the (new) BI Content

SAP delivers predefined reports that are ready to use. The goal of these reports is to:

- Provide a set of key performance indicators and reports to evaluate the quality of the forecasting and replenishment solution
- Facilitate improvement of the overall F&R process and enable strategic decisions by measuring past events and providing related key information
- Allow the analysis of the information through many different views (or dimensions) that can be easily tailored to fulfill the user's individual requirements

According to the business objective that is to be measured, different reports are delivered:

- *Inventory Levels*
  Obtain the optimal inventory level at all location/product combinations
  - *Stock exception reports:*
    - Understocks
    - Stockouts and lost sales (Store)
    - Stockouts and undelivered products (DC)
    - Overstocks
  - *Variances on minimum stock*
  - *Stock development*
  - *Service-level development*
  - *Range of coverage development*
  - *Dead stock*
- *Forecast Quality*
  Evaluate the forecast quality by comparing with actual sales
  - *Forecast quality report*
- *Stability of the Solution*
  Analyze KPI's that provide information about frequency and severity of technical and business issues
  - *Analysis of exceptions*
- *Manual Interaction/Level of Automation*
  Measure the amount of manual interaction as well as point out any consequences these interactions might have in supply chain processes
  - *History of manually changed order proposals*
  - *Level of automation*

The SAP BI part contains:

- Extractors for transferring data from the operational processes of SAP Forecasting and Replenishment (SCM platform) to SAP Business Intelligence. Extractors provided by this solution include transactional data extractors as well as master data extractors.
  The transactional data extractors are used to transfer exceptional and statistical data on a daily as well as weekly basis.
  The master data extractors transfer master data, which is unique to SAP Forecasting and Replenishment processes.

- Predefined data models, including

  - InfoCubes:
    A total of 10 InfoCubes and 5 MultiCubes are implemented in the analytical part of SAP Forecasting and Replenishment.
    The InfoCubes for the analytical part are designed to collect exceptions detected during the execution of the forecasting and replenishment processes as well as transactional statistical information. The exceptional type information is collected on a daily basis as they are detected and some statistical information is summarized on a weekly basis to facilitate its analysis.
    The MultiCubes implemented in the solution are designed to combine some of the information collected in the operational processes of the SAP Forecasting and Replenishment as well as POS information previously collected in BI.

  - Queries:
    A total of 14 queries are delivered to support the measurement of the business objectives mentioned above.

With NW2004s BI Content Add-On 3, SAP F&R-specific master data can be retrieved in addition to InfoObject 0MAT_PLANT from DataStore object 0RT_DS01 (retail foundation, BI InfoArea 0RT_FOUND). Two sets of InfoProviders and also queries are provided, the first set is the same as in the previous version (i.e. 3.52 or 7.02) and the second set is a copy of the first set in terms of content, but in these InfoProviders (and queries) the master data information is retrieved from the new DSO instead of 0MAT_PLANT. InfoProviders and queries have been duplicated in this second set, except fore InfoProvider Order Proposal Level of Automation (0FRE_C09) and the corresponding query Order Proposal Level of Automation Report (0FRE_C09_Q0001). The second alternative is especially designed for large retail installations with performance requirements in mind.

As a result, the SAP F&R content in 7.03 will include 29 queries, 10 MultiProviders and 19 InfoCubes. All InfoProviders and queries starting with a number of 21 or higher use DSO 0RT_DS01 to retrieve F&R-specific master data (i.e. 0FRE_C21, 0FRE_MC21).

Main business benefit / main question answered with the (improved/enhanced) solution

SAP Forecasting and Replenishment will significantly optimize the internal logistics of retail companies by greatly improving merchandise replenishment. The following results are what our solution specifically provides retailers:

Reduce overstocking in stores and distribution centers

- Reduce the number of stock out occurrences
- Reduce high levels of manual processing by introducing extensive automated merchandise replenishment planning in the stores and distribution centers
- Increase transparency of the supply chain through insightful and relevant analysis

The main benefit of integrating the analytical part of SAP Retail Forecasting and Replenishment with SAP BI is the increased visibility throughout a company's supply chain processes. The solution provides a set of standard reports designed to supply the replenishment manager with key information to fulfill his/her tactical tasks of evaluating and improving the quality of the replenishment processes.

4.4.2 Business Content for Moving Average Price

Abstract of the business solution
The Moving Average Price (MAP) plays an important role in this formula since the gross margin, the numerator of the GMROI formula, is the difference of sales at retail and sales at cost. The sales costs are evaluated by taking the sales units and multiplying this by the MAP. This means that the MAP has to be available in BI. Two scenarios are possible to get the MAP into BI. Material movements and POS movements may get the MAP directly from the source, which was a given when everything came from R/3. But nowadays more complex system landscapes are likely and hence POS data and inventory data may not come from SAP ERP anymore. This is the case when the new POS DM solution or LIME is used.

Description of the (new/enhanced) BI Content scenario
The storage of the MAP in BI was already designed in the POS DM Project for BW 3.20 and is used in its current design by POS and F&R Analytics. The MAP is currently an attribute of 0MAT_PLANT. POS provides a FM to read the MAP from this InfoObject to enrich the InfoSource 0RPA_TRAN_CONTROL with the sales at cost (which is then used by

POS Analytics and MAP (Merchandise and Assortment Planning) Analytics). F&R uses the InfoObject 0MAT_PLANT itself for reporting purposes, mainly to use its attributes as navigational attributes. Besides that, F&R uses its own FM to read the MAP from 0MAT_PLANT as well. See the F&R Analytics SRS paper for further details.

One challenge is that the MAP is currently designed at 0MAT_PLANT, but there is no extraction scenario to actually fill the values. For this reason, we need to provide a delta-enabled extractor from ERP.

The second challenge deals with a technical flaw in the modeling of the MAP as an attribute of 0MAT_PLANT and the usage of 0MAT_PLANT in reporting. This unveils major problems regarding data reorganization and query performance.

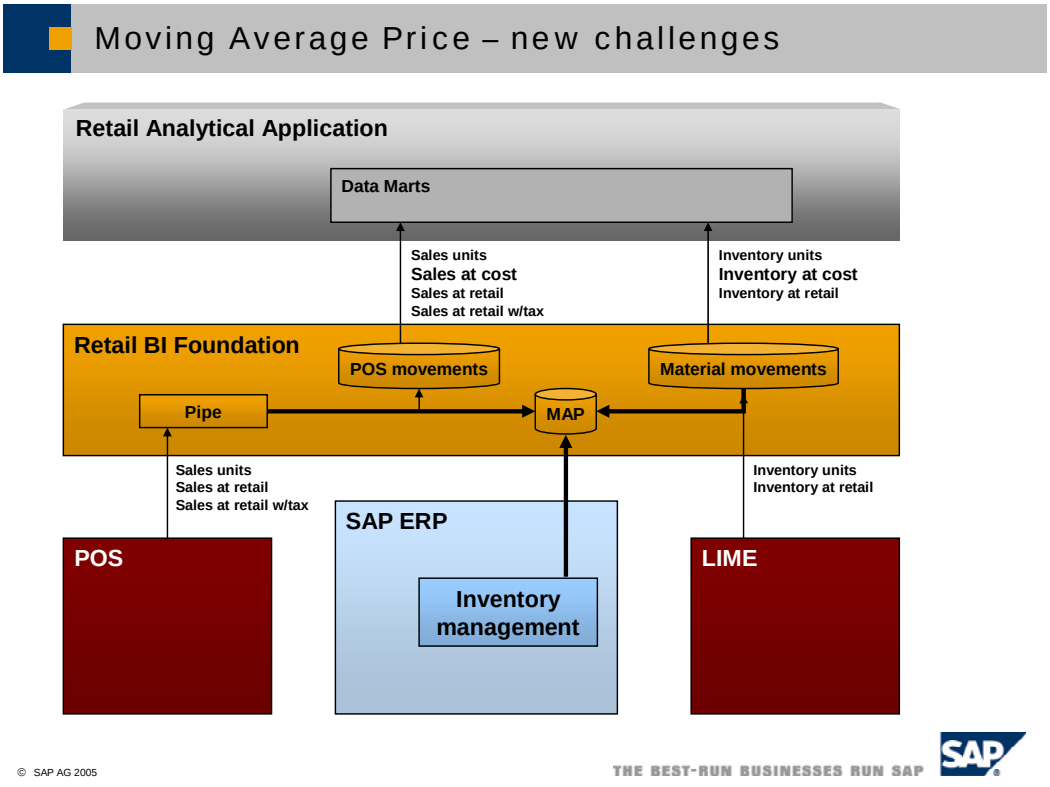
- As a rule of thumb, an InfoObject larger than 500000 entries should not be modeled as an InfoObject
- Performance is bad when deleting due to the fact that the where-used logic is used when records are deleted from InfoObjects
- Navigation attributes of large InfoObjects lead to query performance issues, since these attributes are accessed through the SID table of the InfoObject itself, which can't be partitioned or indexed by default. Even if bitmap indices exist, some DB providers such as Oracle cannot make use of them and need to access the InfoObjects that contain the attributes with a full table scan.

Main business benefit / main question answered with the (improved/enhanced) BI Content scenario
These issues can be addressed by creating DSOs for those InfoObjects that will have a very large number of records. A DSO can have indexes and it is also easy to create (logical) partitions of DSOs. Regarding reporting capabilities, the change from InfoObjects to DSOs will result in some modeling challenges. Replacing the key question here is whether the attributes of the former InfoObject are reported AS-IT-IS or AS-IT-WAS. While AS-IT-WAS can be modeled without problems, the AS-IT-IS requirement reveals some reporting issues.

Business scenarios (how the solution can be used)
Whether it is the inventory manager, a replenishment specialist, a category manager or an assortment specialist, the success of most of the retailer's key role owners will be meas-

ured against their investment.

The success of the investment can be ensured by targeting consumer demand, keeping the costs low and keeping the inventory low throughout the considered time frames. This is typically monitored by analyzing the sales at retail, sales at cost, the gross margin (percentage), average inventory and ultimately the GMROI, which expresses the overall success of your investment.



4.5 Telecommunications

4.5.1 Telecommunications Sales and Order Management

Abstract of the Business Solution
Telecommunications Sales and Order Management offers telecommunications service providers the option to modify their product and service offering on a regular basis in order to gain new market share and achieve revenue growth. Up-to-date monitoring of sales by various characteristics is equally important for the channel manager and the dealer.

Description of the (new) BW Business Content
With the new content, SAP provides ❑ **2 extractors** for telecommunications orders and contracts (CRM) ❑ **3 DataStore objects** for telecommunications order, contract and service object (CRM) ❑ **1 InfoCube** for the analysis of telecommunications contracts ❑ **InfoObjects** for telecommunications contract, service object and various attributes ❑ **2 InfoSets** for a detailed view of telecommunications orders and contracts ❑ **Queries** for an overview and detailed analysis of telecommunications contracts from a channel manager and dealer point of view ❑ **Web templates** for the delivered queries

Main business benefit / main question answered with the (improved/enhanced) solution
The new content supports: ❑ **Telecommunications partner managers (dealers)** in analyzing the number of contracts sold in their shops, which forms the basis of their success. ❑ **Telecommunications channel managers** in monitoring the sales partner programs they are responsible for.

Business scenarios (how the solution can be used)
The new business content is part of the scenario “Sales and Order Management for Tele-communications”.

4.6 Utilities

4.6.1 Load Profiling

Abstract of the business solution

Develops customer baselines from the historical interval readings and other information sources for load forecasting and load analysis, as well as for complex billing processes (such as real-time pricing or time-of-use pricing). Stores load profiles in the central Energy Data Repository.

Tools that enable the utilities to analyze and report their profile data with higher flexibility and better performance are more important than ever before.

Description of the (New) BW Business Content

SAP delivers **predefined InfoProviders** that are ready-to-go and represent the main EDM profile data of IS-U/CCS. The Business Content references the EDW layer (Enterprise Data Warehouse) which means that very granular data is stored within the DSOs (DataStore object).

No reports are delivered, because the market requirements for reporting are still under discussion.

The delivered **extractors** are based on the delta technique to improve loading performance and limit extraction data volume.

The **predefined data models** include:

- 3 DataStore objects representing master data and document data
- 1 RemoteCube representing profile values for selected profiles. This InfoCube is loaded with real-time data from the EDM profile data extractor based on selected profiles

Main Business Benefit / Main Question Answered With the (Improved/Enhanced) Solution

The load profiling content adds business value because it:

- Enables flexible analysis on profiles (not profile values) and their allocation to business master data
- Enables real-time access to profile values via direct access (RemoteCube)

Business Scenarios (How the Solution Can Be Used)

This content is part of the “Energy Data Management” scenario. More information is available in our Solution Map “SAP for Utilities”.

4.6.2 Change of Supplier

Abstract of the Business Solution
Supply registration processes facilitate the start of supply for out-of-area customers and end of supply in case of customer loss. The change of supplier processes must be reported to fulfill regulatory requirements. Tools that optimize change of supplier processes and enable utilities to analyze and report their change of supplier processes are more important than ever before, because this is a prerequisite of the deregulated energy market.

Description of the (New) BI Content
SAP delivers **predefined InfoProviders** that are ready-to-go and represent the main change of supplier data of IS-U/CCS. The Business Content references the EDW layer (Enterprise Data Warehouse), which means that very granular data is stored within the DSO (DataStore object). No reports are delivered, because the market requirements for reporting are still under discussion. The delivered **extractors** are based on the delta technique to improve loading performance and limit extraction data volume. The **Predefined data models** include: ❑ 3 DataStore objects representing document data and transactional data.

Main Business Benefit / Main Question Answered with the (Improved/Enhanced) Solution
The change of supplier content adds business value because it: ❑ Enables the creation of different reports that are required in the deregulated market ❑ Delivers the most granular data in different DataStore objects and thus enables the drill-down in reports from high-level to specific information ❑ The delivered change of supplier content is delivered as the EDW layer and allows the building of different reporting layers (InfoCubes) depending on country-specific market requirements.

Business Scenarios (How the Solution Can Be Used)
This content is part of the “Change of Supplier” scenario, which belongs to the scenario group “Collaborative Services & Inter-company Data Exchange” More information is available in our Solution Map “SAP for Utilities”.

4.6.3 Data Exchange

Abstract of the business solution
Deregulated energy markets are characterized by the freedom of customers to choose their energy supplier. As a result, it has become necessary to automate processes as much as possible. These workflows are designed with respect to the exchange of information between the various market participants. In the deregulated environment, the market participants have to aggregate customer consumption and send this information to other service providers on a regular basis. Based on this information (and on external input parameters such as weather data) the supplier has to provide information about the future consumption of his customers to the independent system operator in order to provide the necessary amount of energy and avoid expensive regulatory energy. Data exchange is part of many different scenarios and must be reported for different authorities and internal organizations. It must also fulfill regulatory requirements. Tools that improve data exchange processes and enable utilities to analyze and report their data exchanges are more important than ever before, because this is a prerequisite of the deregulated energy market.

Description of the (New) BI Content
SAP delivers **predefined InfoProviders** that are ready-to-go and represent the main data exchanges of IS-U/CCS. The Business Content references the EDW layer (Enterprise Data Warehouse), which means that very granular data is stored within the DSO (DataStore object). No reports are delivered, because the market requirements for reporting are still under discussion. The delivered **extractors** are based on the delta technique to improve loading performance and limit extraction data volume.

The **predefined data models** include:

- 2 DataStore objects, representing transactional data

Main Business Benefit / Main Question Answered with the (Improved/Enhanced) Solution

The data exchange content adds business value because it:

- Enables the creation of different reports that are required in the deregulated market
- Delivers the most granular data in different DataStore objects and thus enables the drill-down in reports from high-level to specific information
- The delivered data exchange content is delivered as an EDW layer and allows customers to build different reporting layers (InfoCubes) depending on country-specific market requirements

Business Scenarios (How the Solution Can Be Used)

This content is part of the scenario group “Collaborative Services & Inter-company Data Exchange”

More information is available in our Solution Map “SAP for Utilities”.

4.6.4 Payment Processing

Abstract of the business solution

Payment processing provides functions that support all processes in deregulated markets that concern billing, payment, and the collection of payment between different market participants. Depending on the market rules, market participants (such as distributors and suppliers) send a bill for their commodity (such as distribution charges or energy charges) to other market participants for distribution to the customer or payment. The processing rules can vary significantly for different markets, which makes it impossible to describe all resulting processes.

The payment processing data must be reported for different authorities and internal organizations. It must also fulfill regulatory requirements.

Tools that optimize data exchange processes and that allow utilities to analyze and report on their data exchange payment processes are more important than ever before, because this is a prerequisite of the deregulated energy market.

Description of the (New) BW Business Content

SAP delivers **predefined InfoProviders** that are ready-to-go and represent the main payment processing data of IS-U/CCS. The business content references the EDW layer (Enterprise Data Warehouse), which means that very granular data is stored within the DSO (DataStore object).

No reports are delivered, because the market requirements for reporting are still under discussion.

The delivered **extractors** are based on the delta technique to improve loading performance and limit extraction data volume.

The **predefined data models** include:

- 7 DataStore objects representing transactional data

Main Business Benefit / Main Question Answered with the (Improved/Enhanced) Solution

The payment processing content adds business value because it:

- Enables the creation of different reports that are required in the deregulated market
- Delivers the most granular data in different DataStore objects and thus enables the drill-down in reports from high-level to specific information
- The delivered payment process content is delivered as an EDW layer and allows customers to build different reporting layers (InfoCubes) depending on country-specific market requirements
- Enables the optimization of payment processes that are part of inter-company data exchange scenarios

Business Scenarios (How the Solution Can Be Used)

This content is part of the “Payment Processing” scenario, which belongs to the scenario

group “Collaborative Services & Inter-company Data Exchange”

More information is available in our Solution Map “SAP for Utilities”.

4.6.5 Energy Settlement

Abstract of the Business Solution
The energy settlement processes have become a central component of the deregulated energy market – the market participants have to aggregate customer consumption and send this information to other service providers on a regular basis. Based on this information (and on external input parameters such as weather data), the supplier has to provide information about the future consumption of their customers to the independent system operator in order to provide the appropriate amount of energy and avoid expensive regulatory energy. This settled energy data must be reported for different authorities and internal organizations. It must also fulfill regulatory requirements. Tools that enable the utilities to analyze and report their settlement data are more important than ever before, because this is a prerequisite of the deregulated energy market.

Description of the (New) BW Business Content
SAP delivers **predefined InfoProviders** that are ready-to-go and represent the main settlement data of IS-U/CCS. The business content references the EDW layer (Enterprise Data Warehouse), which means that very granular data is stored within the DSO (DataStore object). No reports are delivered, because the market requirements for reporting are still under discussion. The delivered **extractors** are based on the delta technique to improve loading performance and limit extraction data volume. The **predefined data models** include: ❑ 7 DataStore objects representing master data, document data, and transactional data from energy settlement

Main Business Benefit / Main Question Answered with the (Improved/Enhanced) Solution

The energy settlement content adds business value because it:

- Enables the creation of different reports that are required in the deregulated market
- Delivers the most granular data in different DataStore objects and thus enables the drill-down in reports from high-level to specific information
- The delivered energy settlement content is delivered as an EDW layer and allows customers to build different reporting layers (InfoCubes) depending on country-specific market requirements

Business Scenarios (How the Solution Can Be Used)
This content is part of the “Energy Data Management” and “Reconciliation and Settlement” scenario. More information is available in our Solution Map “SAP for Utilities”.