



IBM Cognos Forum

Ignite knowledge, ideas, connections

Best Practices with IBM Cognos Framework Manager & the SAP Business Warehouse

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Information Management

Cognos.
software

Agenda

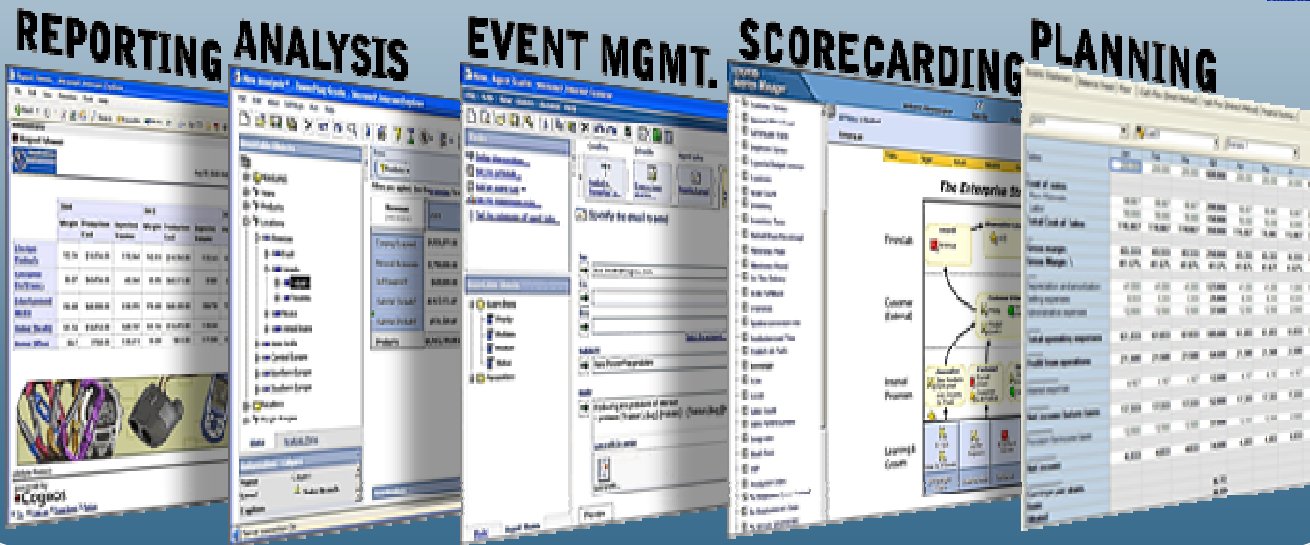
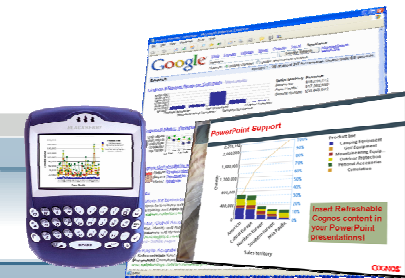
- Objective
- Interoperability
- Prerequisites
- Where to model and leverage SAP BW
 - i. Cognos Framework Manager
 - ii. SAP BW Queries
- How to simulate SAP BW Hierarchy selection variable
- Summary

Objective

- General tips and tricks to improve use of metadata from SAP BW with IBM Cognos 8 Framework Manager
 - Like any general guidance not everything is black & white
 - The context & specificity always dictates the ‘proven practice’

Interoperability

WEB, OFFICE, MOBILE, SEARCH...

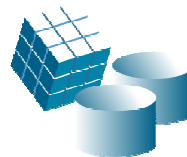


FRAMEWORK MANAGER

Information Management



Transaction Systems



SAP BW



Flat, Legacy or Modern

Cognos.
software

Prerequisites

- General familiarity with terminology and use of IBM Cognos 8
 - Framework Manager
 - Cognos 8 Studios

- General familiarity with the SAP Business Information Warehouse
 - InfoProviders
 - BW Queries

Where to model and leverage SAP BW

Where is Metadata Modelling done?

i. Cognos Framework Manager

ii. SAP BW Queries

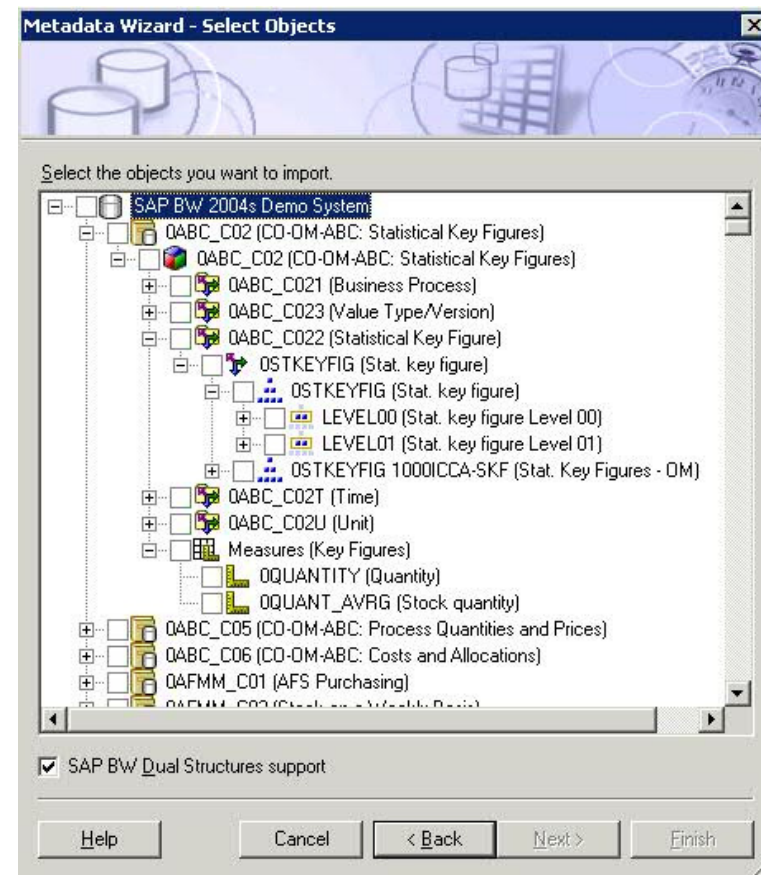


**Not all Metadata Modelling is done in Framework Manager*

I. Cognos Framework Manager

Makes Metadata available for C8 Studios:

1. Connection to BW data source
2. Content to be included in a Cognos package from BW Queries
3. Package to be published for use by user community



I. *Framework Manager – Import Guidelines*

Select All vs. Select “Just What you Need ”

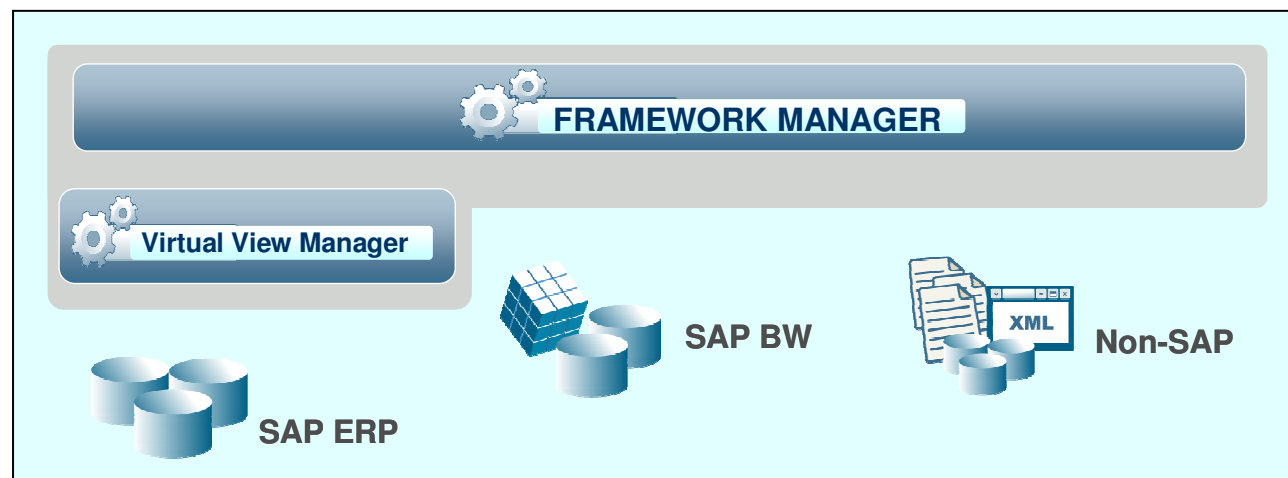
- ✓ Limit selection just to what is needed
- ✓ Size import based on probable use cases
- ✓ Start small

I. *Framework Manager – Database View modelling tool*

Think of BW Query Designer as Database View modelling tool for SAP BW data

Exceptions:

- Virtual View Manager to manage SAP ERP data
- Framework Manager to manage non-SAP data



I. Framework Manager – Overrides SAP BW Variables

Sometimes default settings are not appropriate, Framework Manager allows to override certain variable settings

- Showing Key & Caption (useful for compound characteristics)
- Prompt Type
- Default Values

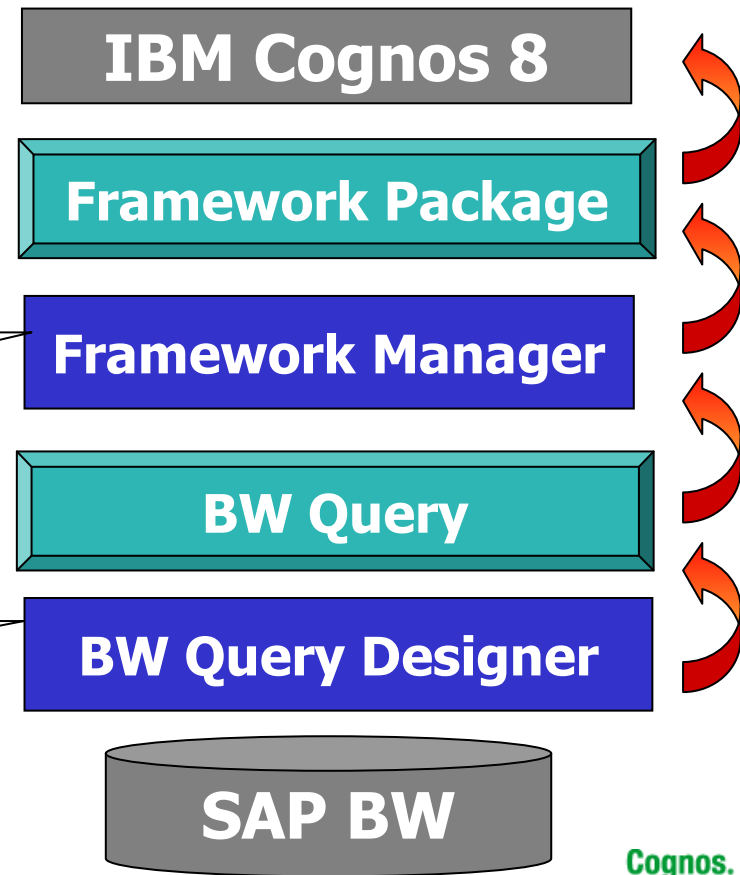
<input type="checkbox"/> SAP BW Variables	
<input type="checkbox"/> OSALEORG(Sales organization)	
Name	[OSALEORG]
<input checked="" type="checkbox"/> Caption	
Selection Type	complex
Entry Type	optional
Default Low Value	
Default High Value	
Description	
SAP BW Variable Type	characteristic
Prompt Type	pickList
Use Default Value	false
Show Key and Caption	false
Initial Number of Pick List Values	0
Use As Key Date	false
<input checked="" type="checkbox"/> ODIVISIO(Division)	
<input checked="" type="checkbox"/> OS_MAT(Material (Selection Options, Optional))	
<input checked="" type="checkbox"/> OS_CUSTO(Sold-to party (optional entry))	
<input checked="" type="checkbox"/> OI_CALMO(Calendar Month/Year)	

I. *Framework Manager – Database View*

Think of BW Query as the database view of SAP BW

Metadata publishing tool – select and publish content from one or multiple data sources

Acts as a form of “data base view” to filter / pre-process data from “Select All” to “Select What You Need”.

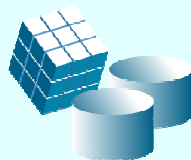


II. SAP BW Queries

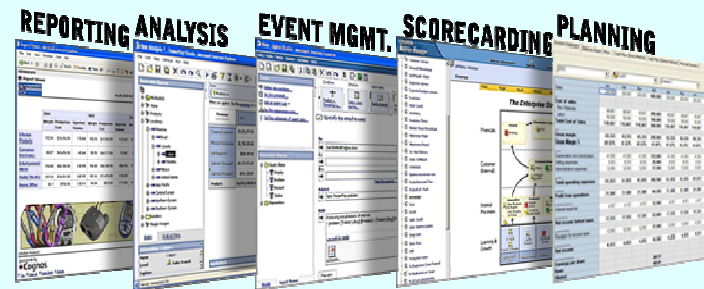
Modelling from the BW Query / Database View perspective:

- Database modelling completed during InfoProvider design.
- Expose BW characteristics & key figures for Framework Manager.

Goal: 1 BW Query for N Cognos Reports.



SAP Query

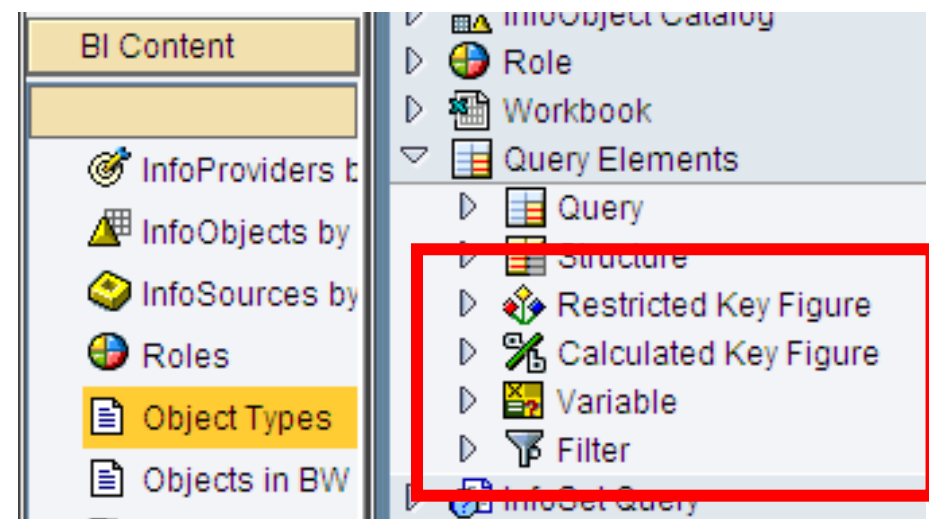


Cognos Reports

II. *Leveraging SAP BW Queries – Points to Think About*

Leveraging BW Query allows use of:

- Calculated Key Figures
- Restricted Key Figures
- Variables
- Filters



II. Leveraging SAP BW Queries – Calculated and Restricted Key Figures

- Not stored at InfoProvider level
- Push query processing back to SAP BW server
- Reduce result set sent back to Cognos Server

II. Leveraging SAP BW Queries – Variables and Filters

BW Variables and Filters:

- Use as much as possible
- Processing will be done by SAP BW server

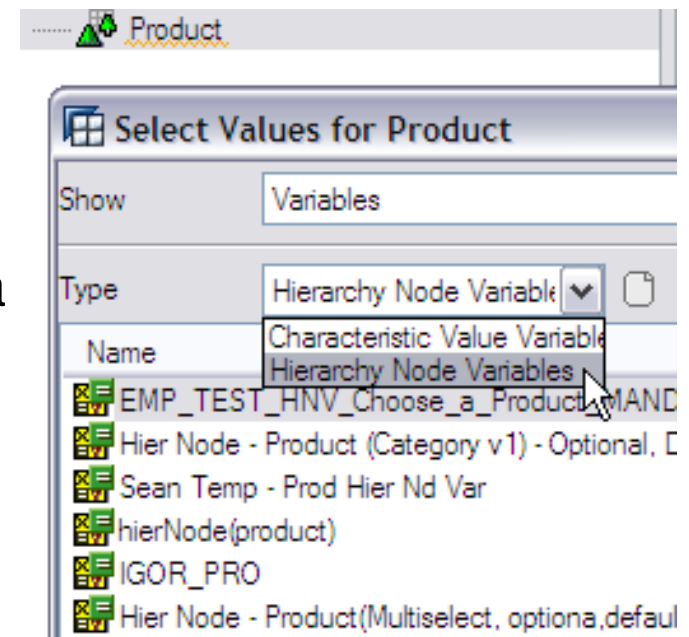
BW Variables

- Mandatory or Optional BW Variables
 - If optional in BW Query they can still be set as mandatory in the Cognos report
- BW Variables will automatically generate prompts in Cognos.
- Hierarchy Selection Variables are not supported but can be simulated.

How to simulate SAP BW Hierarchy selection variable

What is SAP BW Hierarchy selection variable

- Defined at the level of BW characteristic
- Aggregate and group the characteristic data in different ways
- Allow users to choose a specific hierarchy node from a dynamically generated list

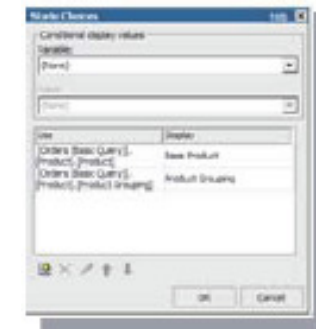


How to emulate SAP BW Hierarchy selection variable

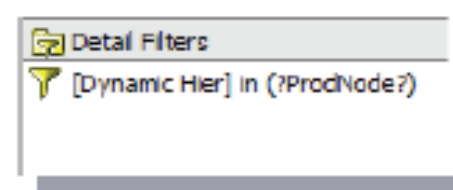
1. Create a Calculation using Prompt Tokens



2. Create a Value Prompt Page with Static Choices

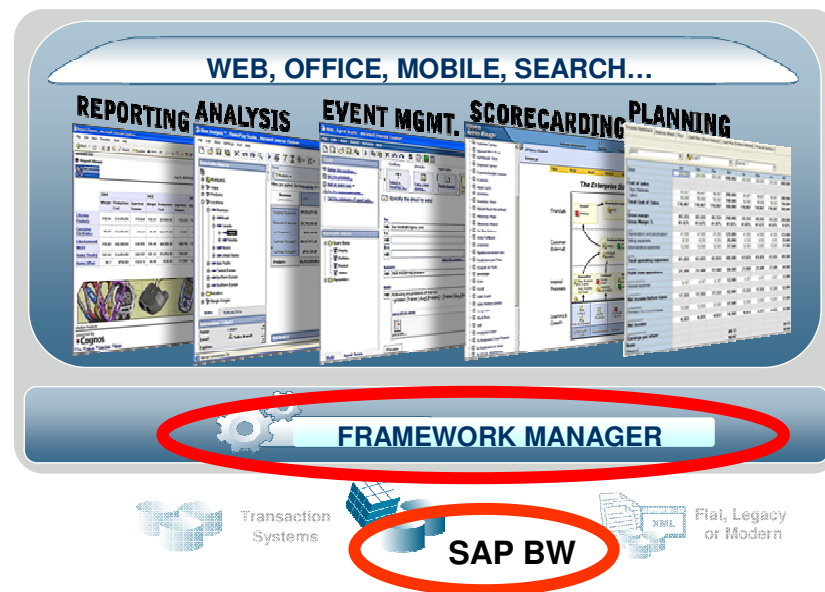


3. Create a Filter on the Hierarchy



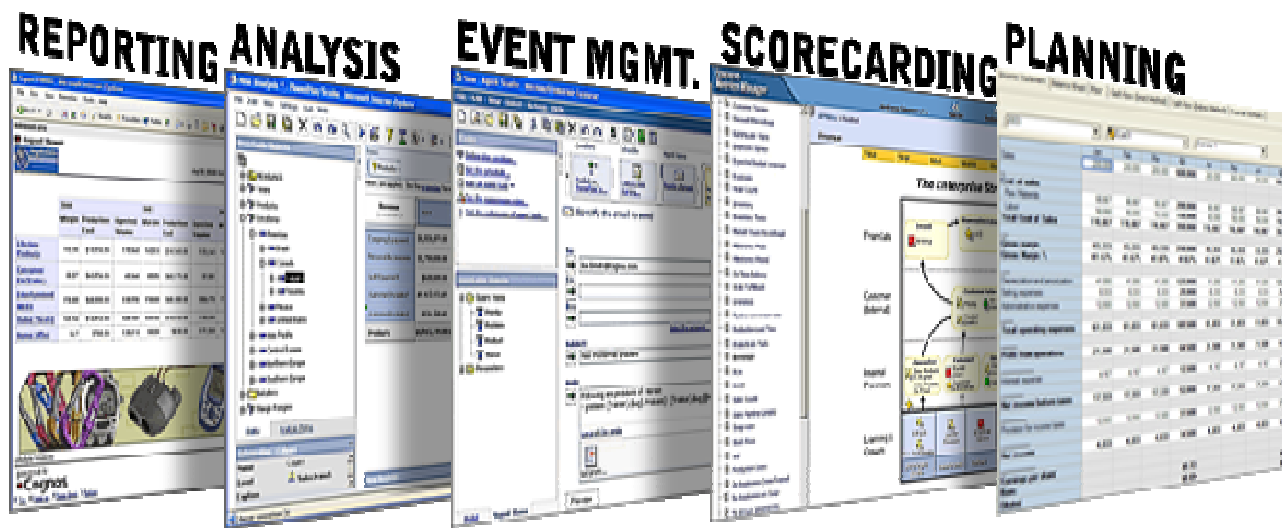
Summary

- Cognos Framework Manager
 - Minimal modelling for SAP BW as opposed to other relational data sources
- SAP BW Query Design Considerations
 - Variables, filters, calculated/restricted key figures, etc



Next Step . . .

- *Start small with one subject area*
- *Expand what you have learned in your environment to other subject areas*



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