SAP BW

Lesson 09: Enterprise Reporting Part 3 RRI

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BI Enterprise Reporting… Contd…

BI Document Integration

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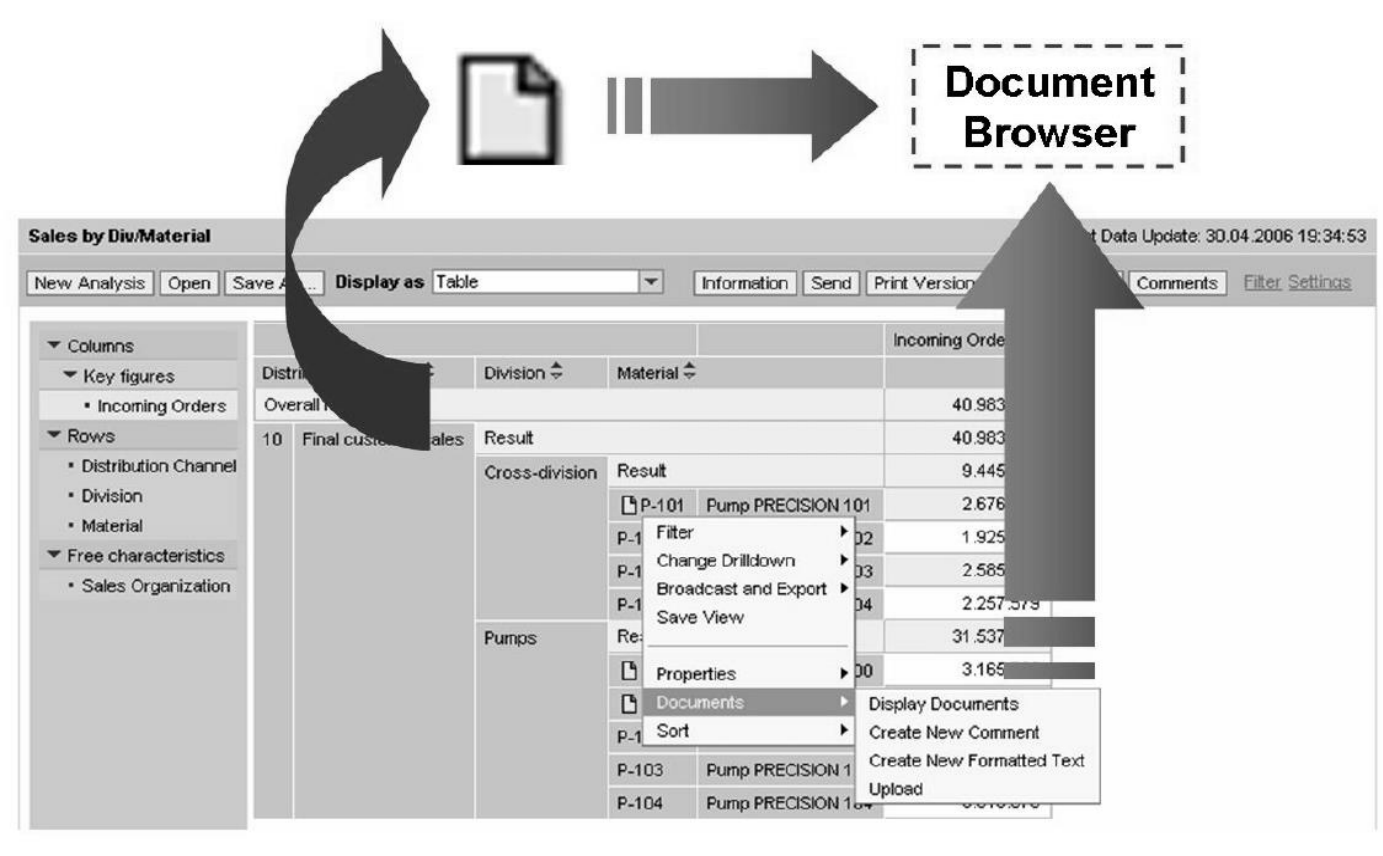
Introduction

- It is of an enormous advantage to be able to access additional documentation within a report.
- Additional information about the query, individual characteristic values, as well as combinations of characteristic values is extremely useful.
- When defining characteristic values, it is often desirable to link technical drawings, detailed pictures or other files as documentation.

Document Browser

- Documents of all types can be created and edited from the Document Browser



Document Integration

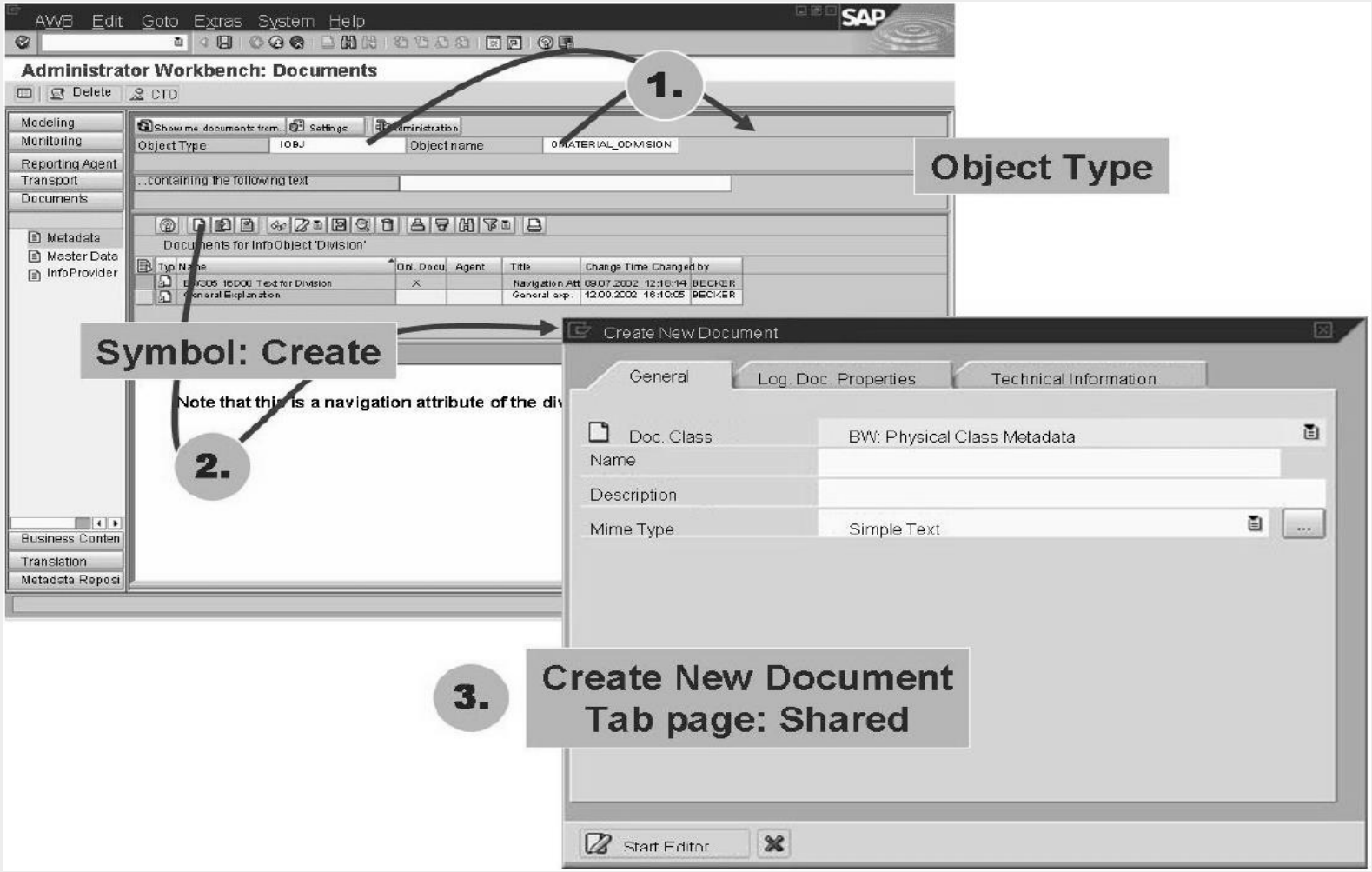
- For metadata, master data and transaction data, you can define and even link one or more documents in various formats, versions and languages.
- SAP distinguishes between logical documents, which are linked to BI objects using attributes (for example, object type and object name), and physical documents which belong to a specific logical document as individual characteristic values (versions) and which present meta-descriptions for individual files using their attributes (for example, language and format). You can store the individual files either on an SAP database or on an external content server using an HTTP interface.
- In the *Administrator Workbench, you choose Documents to reach the navigation* window for the three document classes *Metadata, Master Data, and InfoProvider Data*

Metadata Document Class

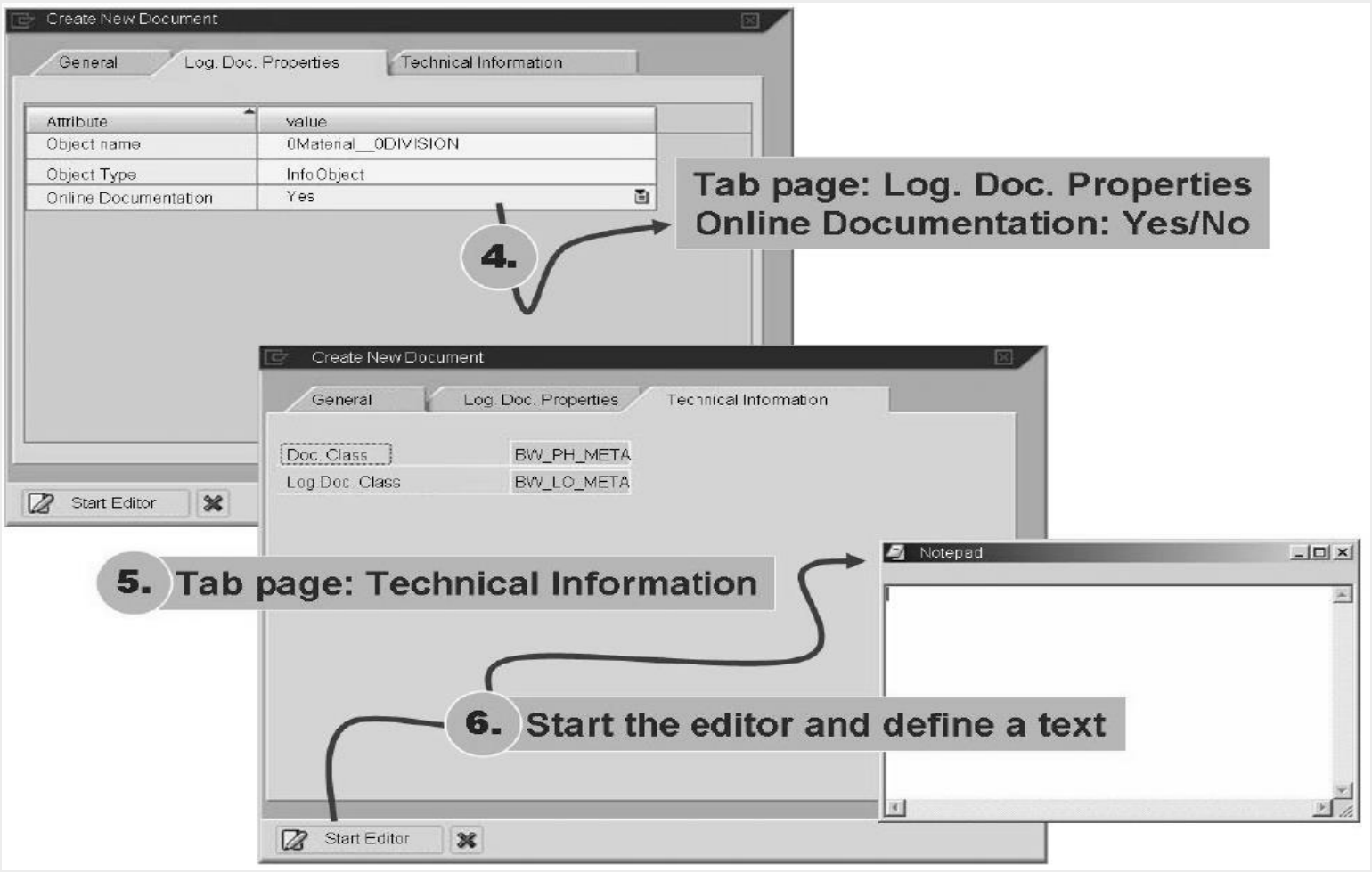
- You can define documents for metadata for the following BW objects:
- You can define additional explanations for individual structural components, for changes that have been made and the reasons for the changes, for historical developments and so on here.

- InfoObject
- InfoCube
- InfoSet
- ODS Object
- Query

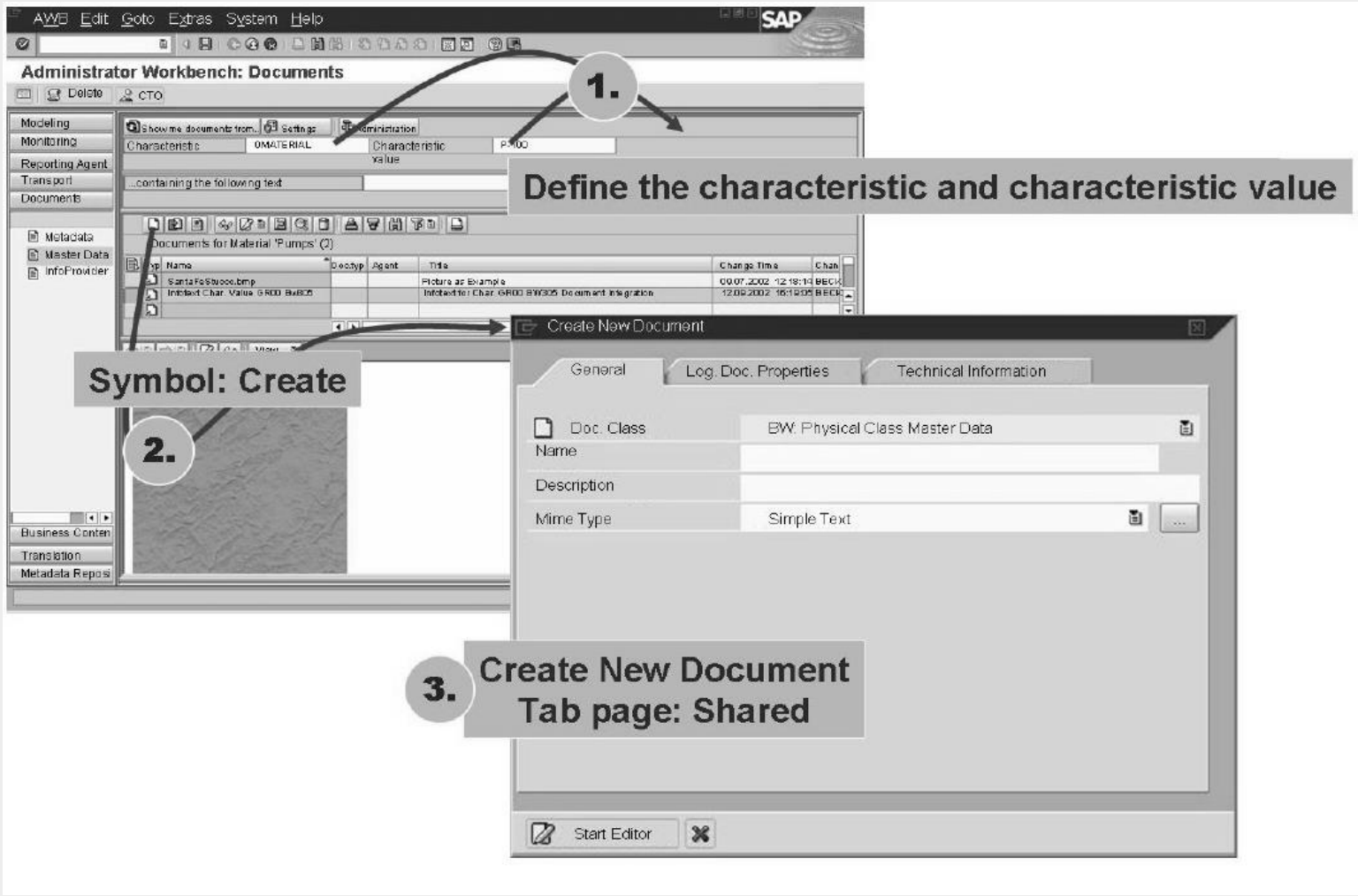
Metadata Document Class



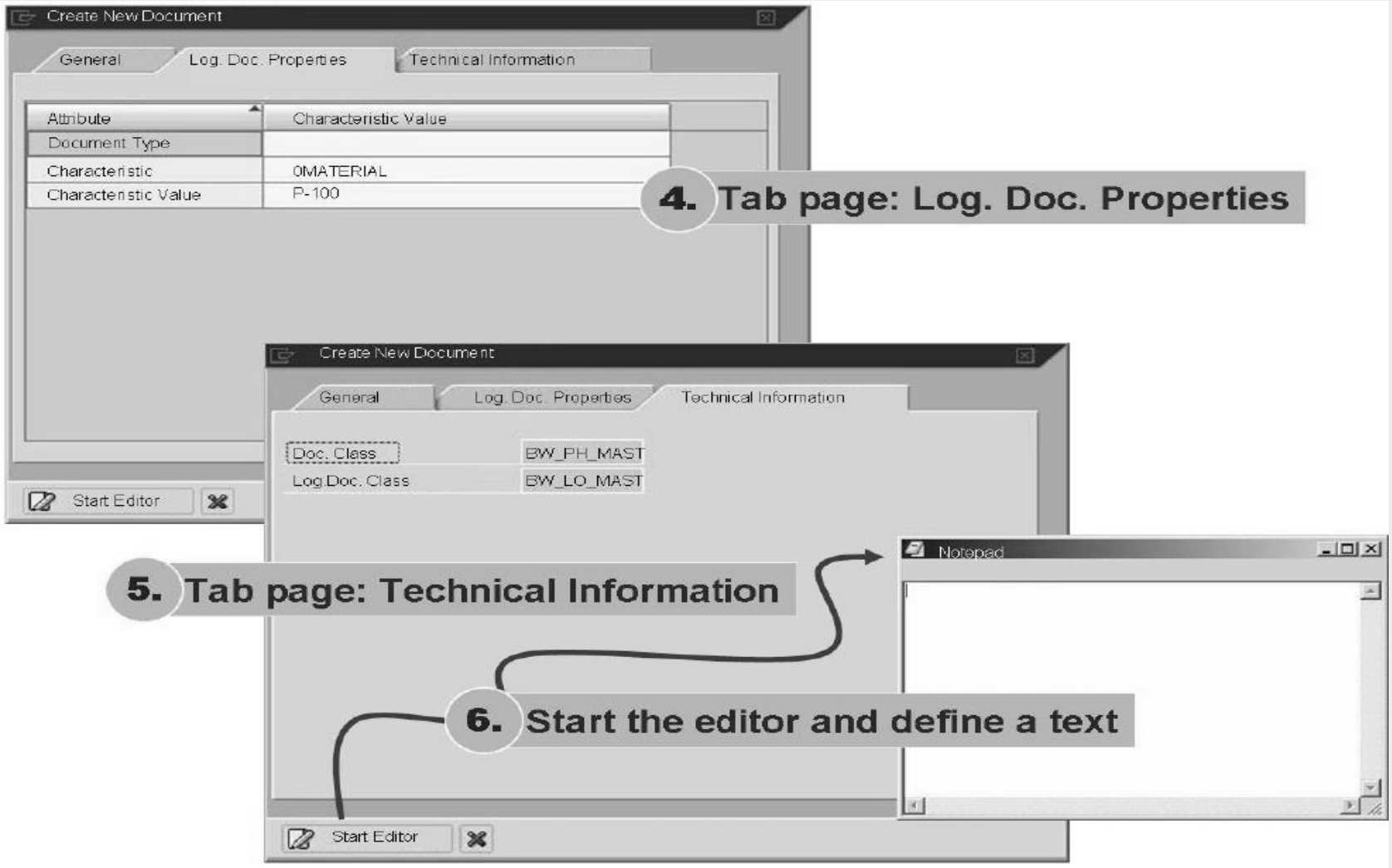
Metadata Document Class



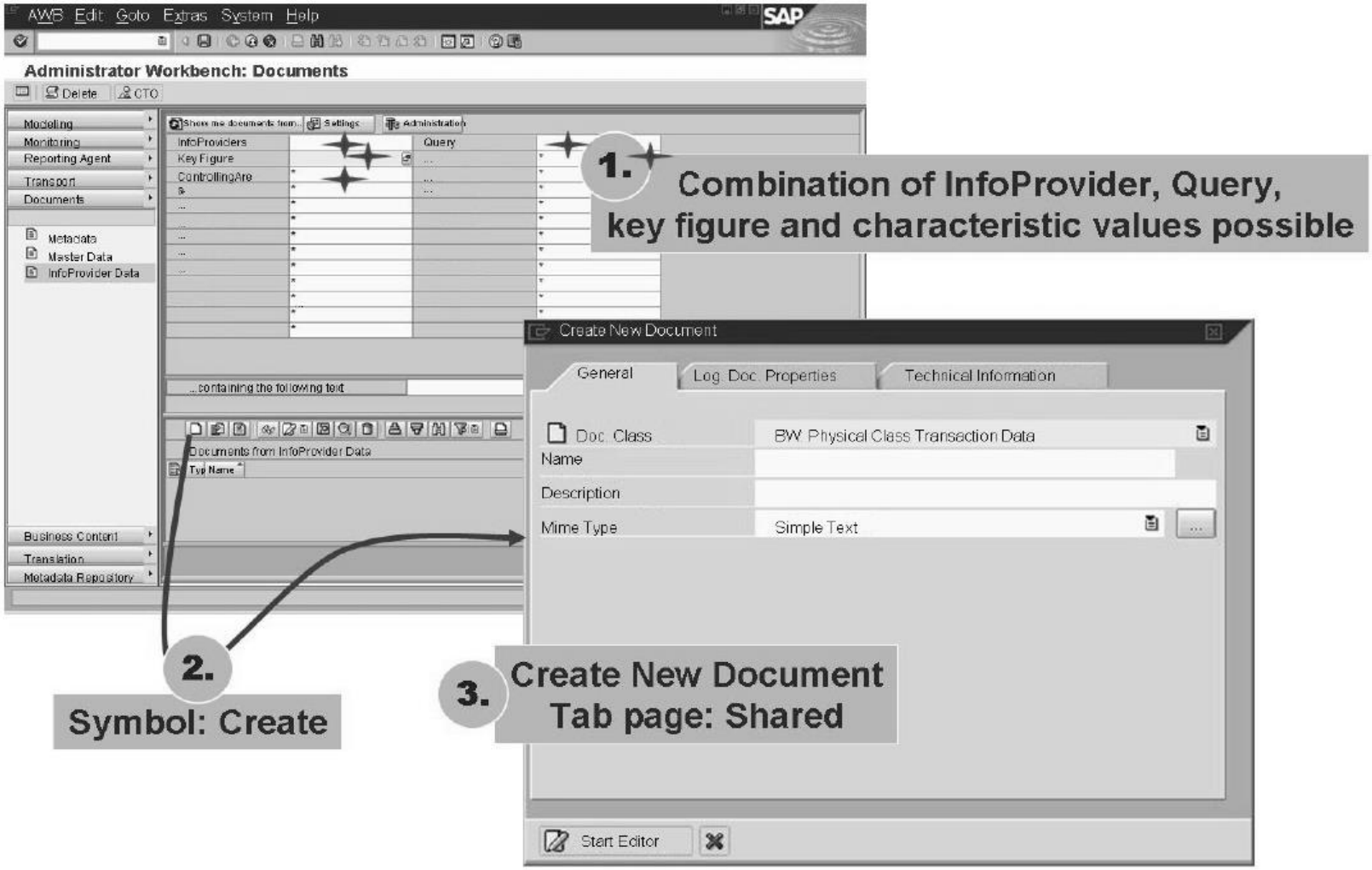
Master Data Document Class



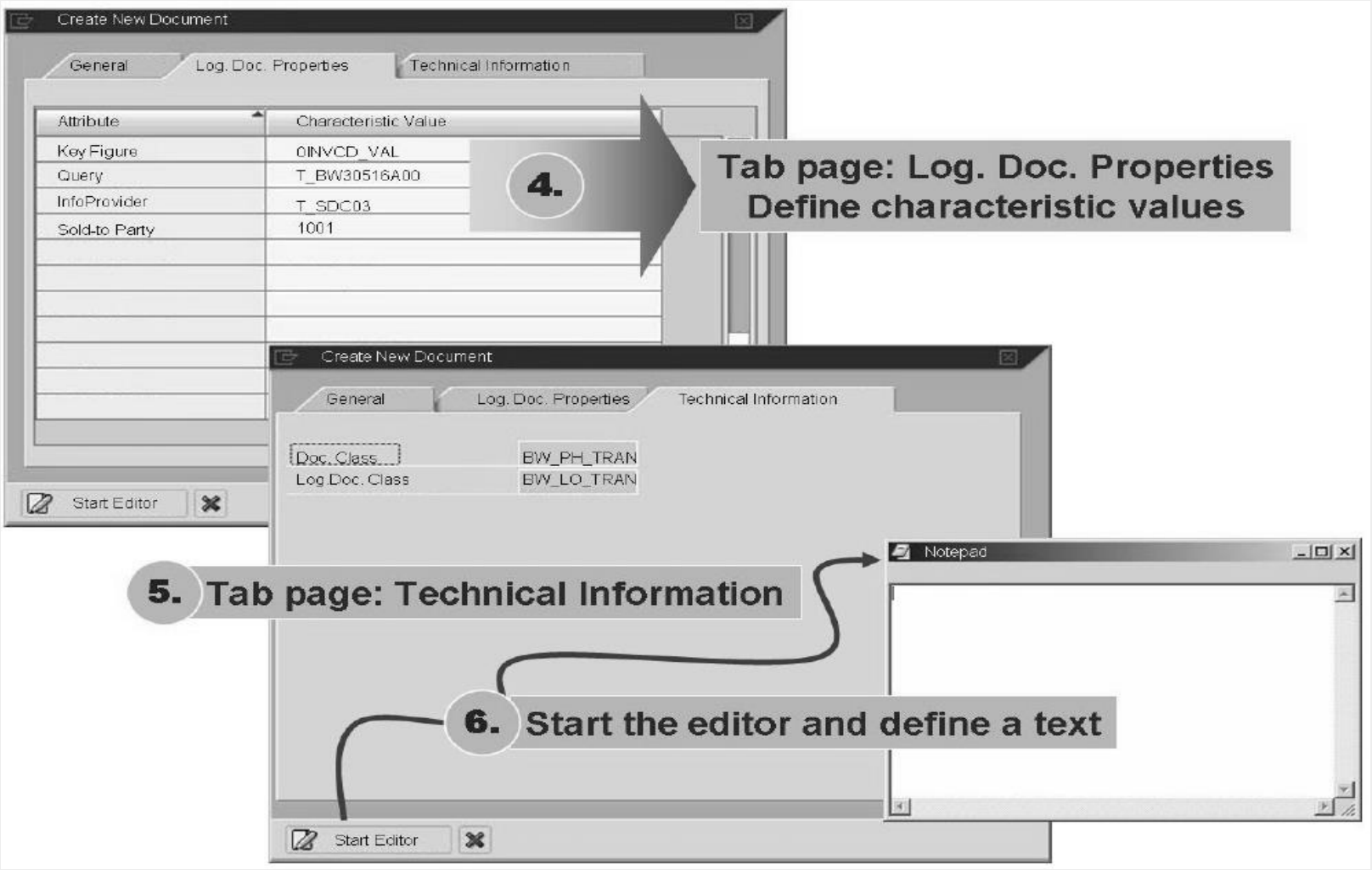
Master Data Document Class



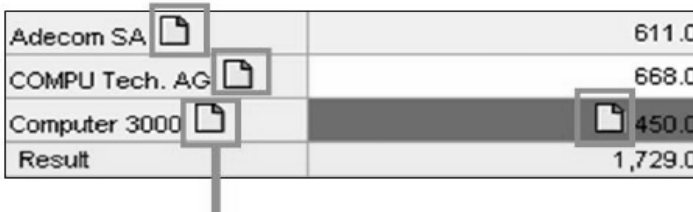
InfoProvider Data Document Class

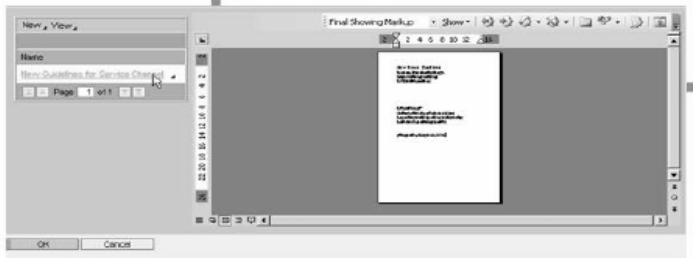


InfoProvider Data Document Class



BI and KM Document Integration Architecture





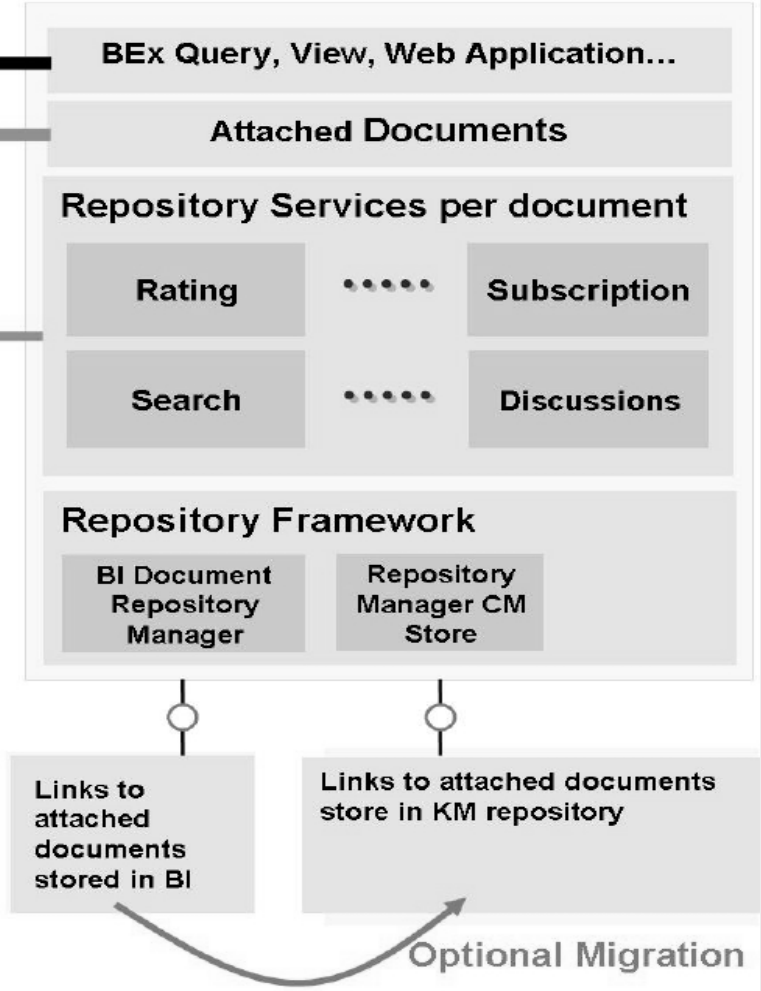
→ Document Browser

Intuitive Access to KM Services for each document attached to BI data

Rich Set of customizable Services for End-Users

→ Unified Information Access

Repository Manager allow access to documents residing in BI or KM



BI and KM Document Integration Architecture

- The BI documents for Metadata, Master Data and InfoProvider Data can be integrated into the portal-based KM in different ways:

- With the Repository Manager for BI Documents. In this case the documents are physically stored on the BI server in the SKWF framework. The Repository Manager for BI Documents is available in the portal as of Release SAP NetWeaver '04.

BI and KM Document Integration Architecture

- With a migration of documents into a CM repository. In this case, the documents are physically stored in the portal. The CM Repository Manager gives access to these documents. This allows the documents for master data and InfoProvider data to be assigned on the hierarchy node level as well (in addition to the characteristic values).
- With the Repository Manager for BI Metadata. In contrast to manually created documentation for metadata, the HTML-based documentation for the BI metadata will continue to be generated automatically from the metadata repository as needed. The Repository Manager for BI Metadata is available in the portal as of Release SAP NetWeaver 2004 (with SAP BW 3.5).

Report – Report Interface

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Introduction

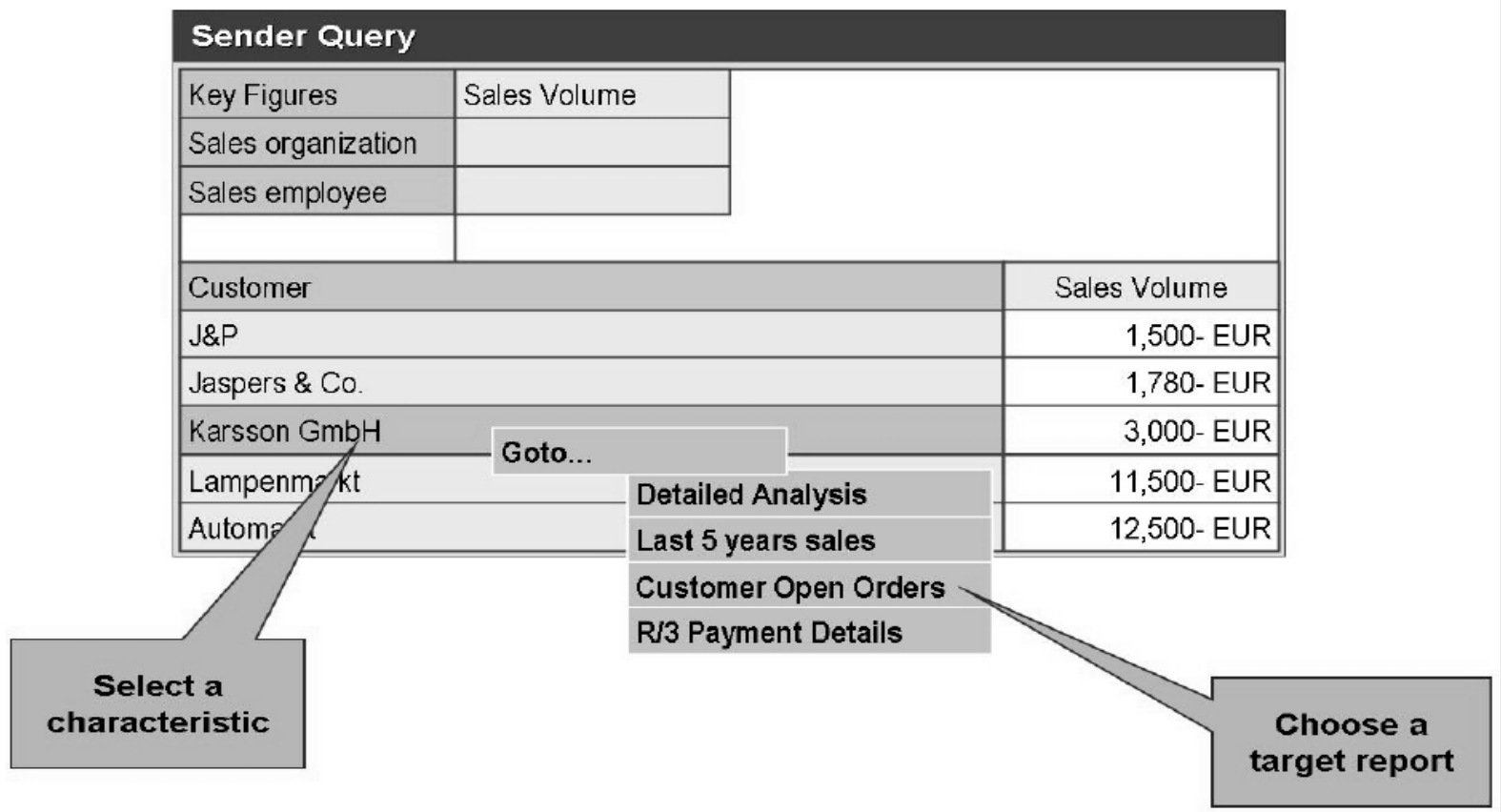
- To call further reports or transactions from a report,
- In order to get more detailed information out of SAP BI itself, out of other attached systems and even out of the internet.
- It gives the user the ability to jump from one report into another report that supplies further information. In SAP BI, you can arrive at branch destinations within and outside of the BI system.
- Transaction Code - RSBBS

Jump targets

- From a query, the destination to which you branch is called a Jump Target.
- Depending on the report types you have selected for a query in the sender/receiver assignment, you can leave the query and:
- - Start another query where the entry variants are filled by the selection conditions and element definitions of the selected cells of the sender query
- - Start reports, functions, and transactions inside and outside of SAP BI

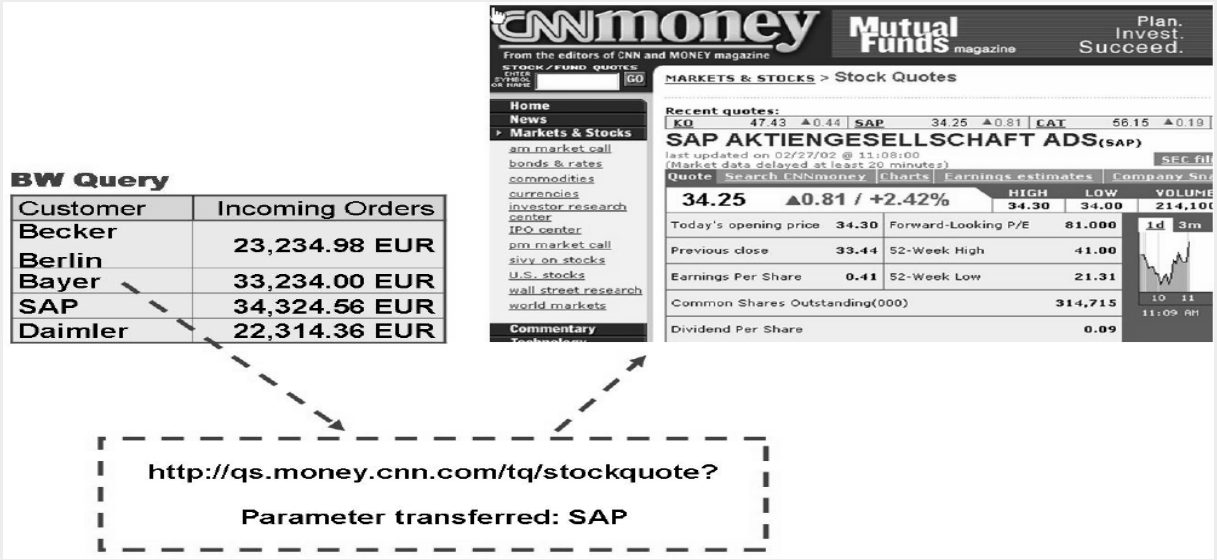
Jumping Reports

In order to start a jump highlight a characteristic value and then use the context menu to launch the Goto option.



External URL as Jump Target

- You can indicate an URL address as a jump target as well. In the Allocation Details function in the Query Jump Targets, you define the parameter to be passed to the URL.
- In order to determine the necessary parameter on the Internet side, extensive HTML knowledge is necessary. The Internet source code must be interpreted.



Managing Query Objects

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Introduction

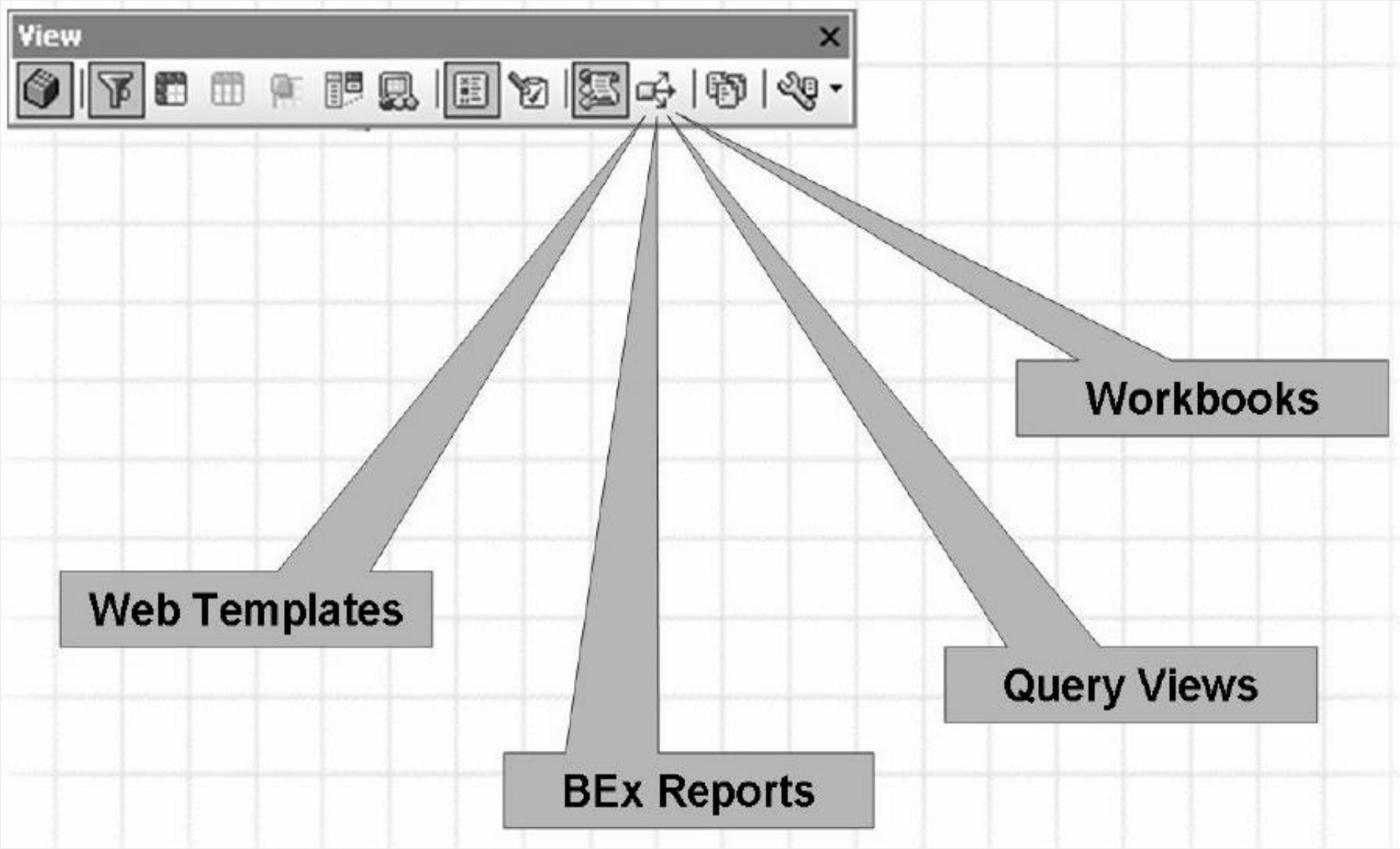
To manage a huge amount and diversity of query objects.

- For example: The defined query objects have to be translated to support multi language.

<u>Functionalities available:</u>

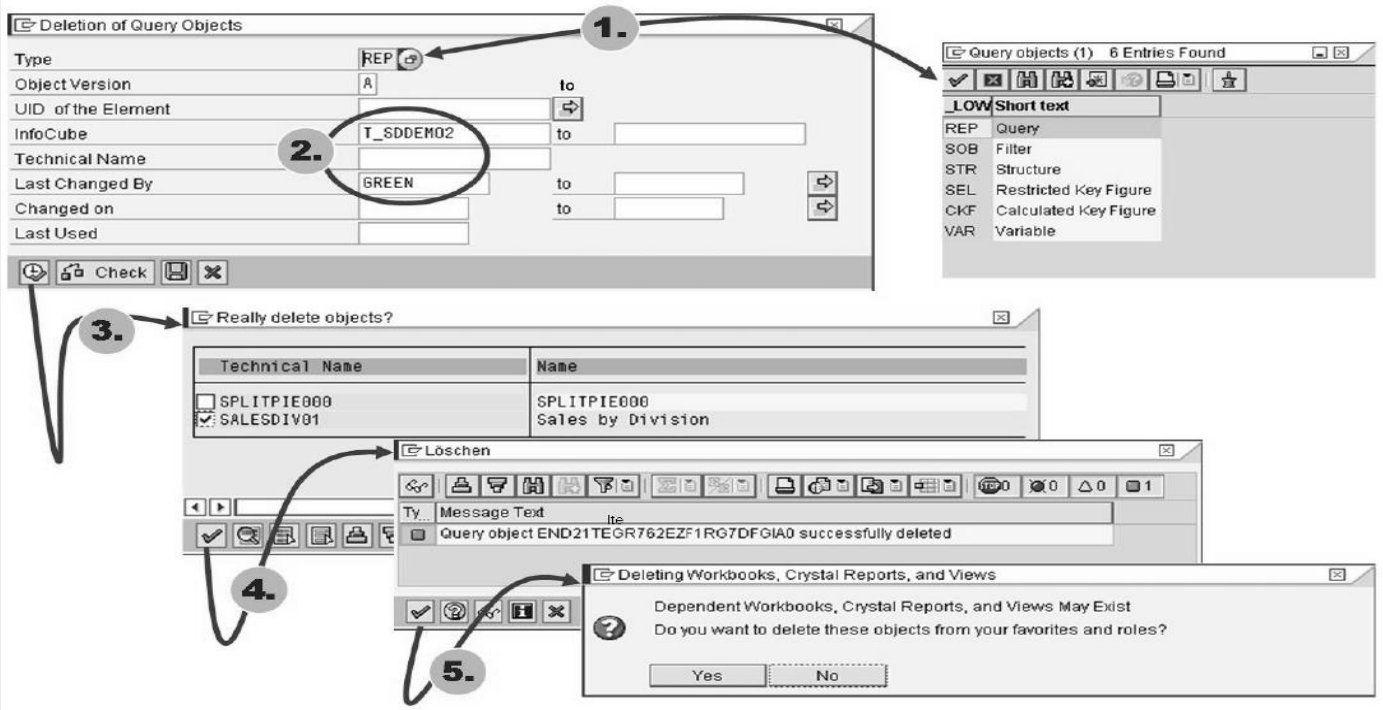
- Query Where Used List
- Deleting Query Objects
- Copying Queries
- Translating Queries
- Performance Aspects

Query Where Used List – From Query Designer



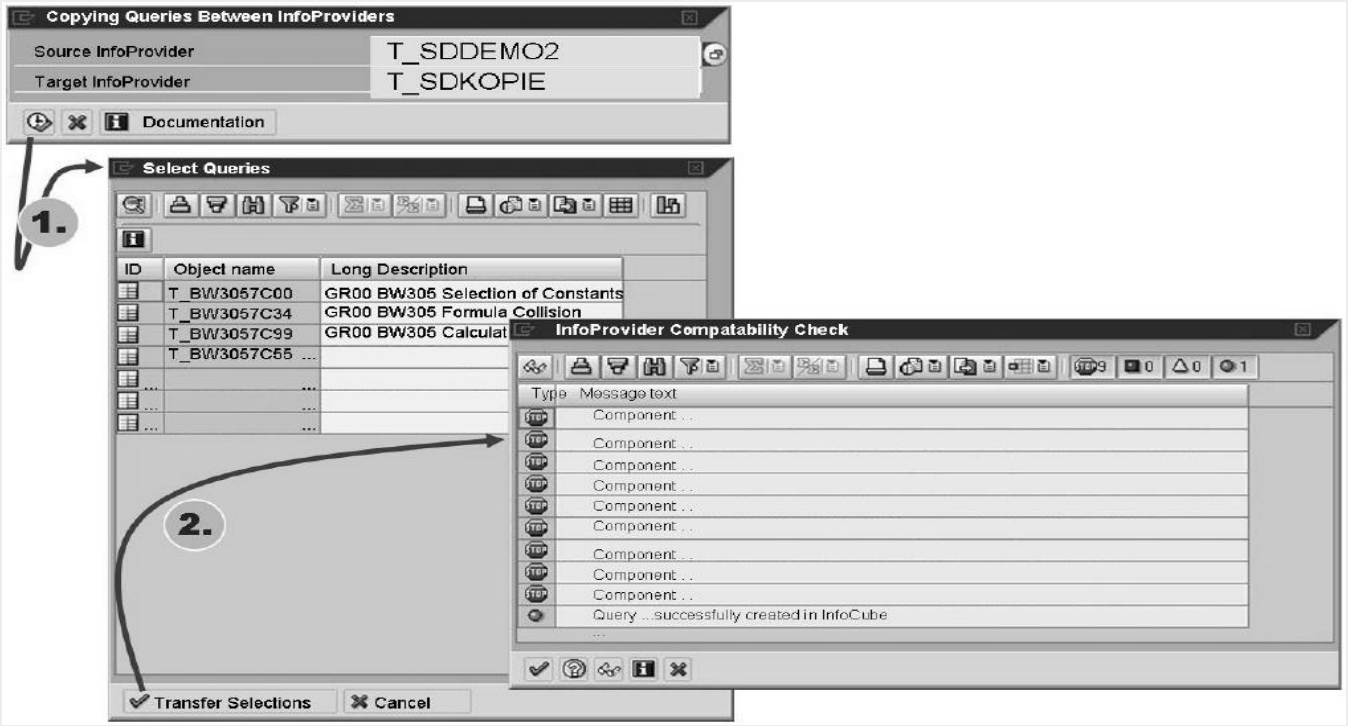
Deleting Query Objects

- From Query Designer
- Using Menu option from SAP, using the path Business Explorer → Query → Delete Objects.



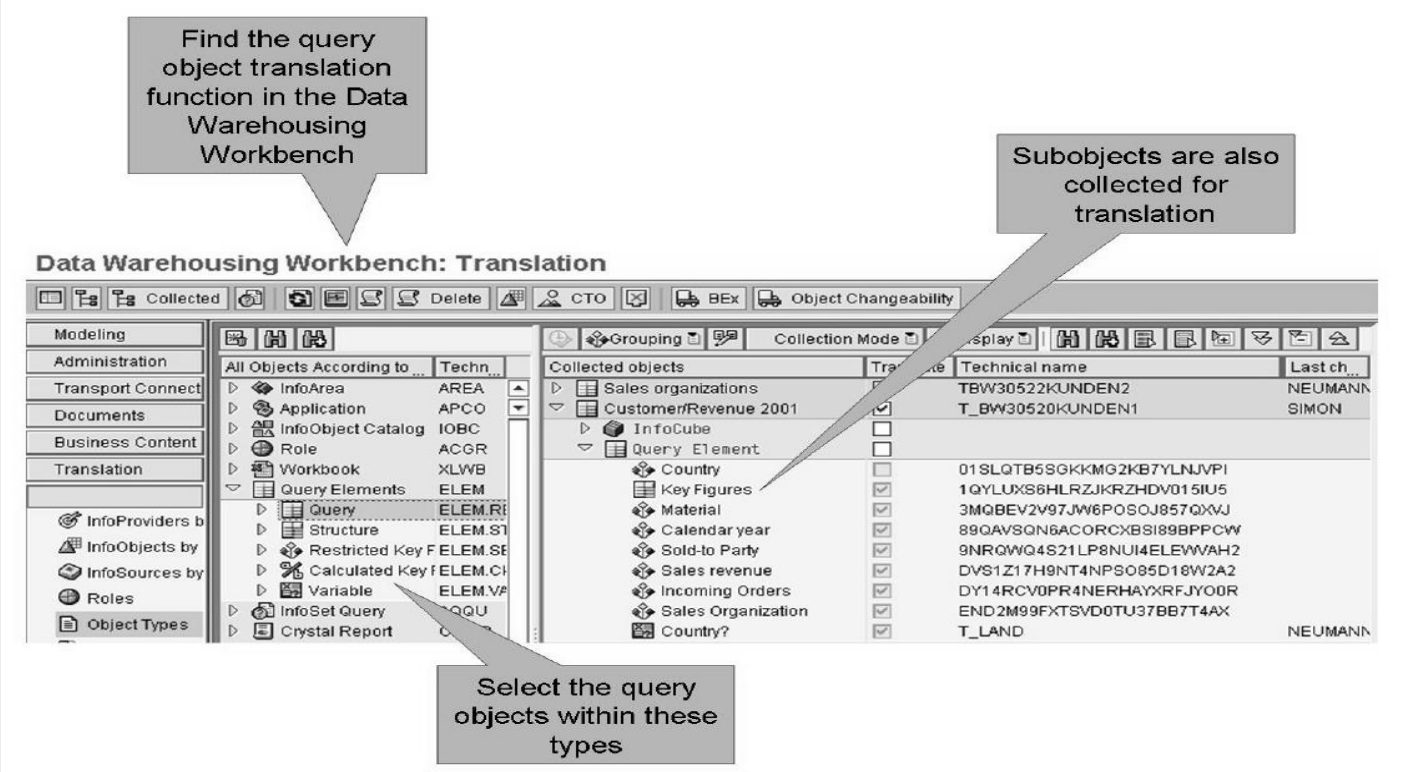
Copying Queries Between InfoProviders

- In the SAP menu under Business Explorer, you find a Copy function that enables you to copy queries and their subobjects (structures, calculated key figures, restricted key figures) between different InfoProviders.



Translating Query Objects

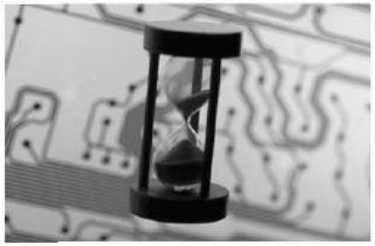
- In the Translation function area in the Data Warehousing Workbench, you can translate short and long texts for BI objects, this includes query objects.



Performance Aspects of Query Definition

Common query design mistakes :

- Overlapping filters
- Too many drill down characteristics in initial view
- Over-use of exclude function



Have you considered…

- Design aggregates aligned to common filter requirements
- Make use of precalculated web templates
- Make use of value sets
- Switch BEx Analyzer workbook refresh mode to manual
- Use query performance monitoring tools
- Ensure the read mode of the query is set appropriately
- Warm up query cache via broadcaster
- Implement BI Accelerator

Further SAP BI Reporting Tools

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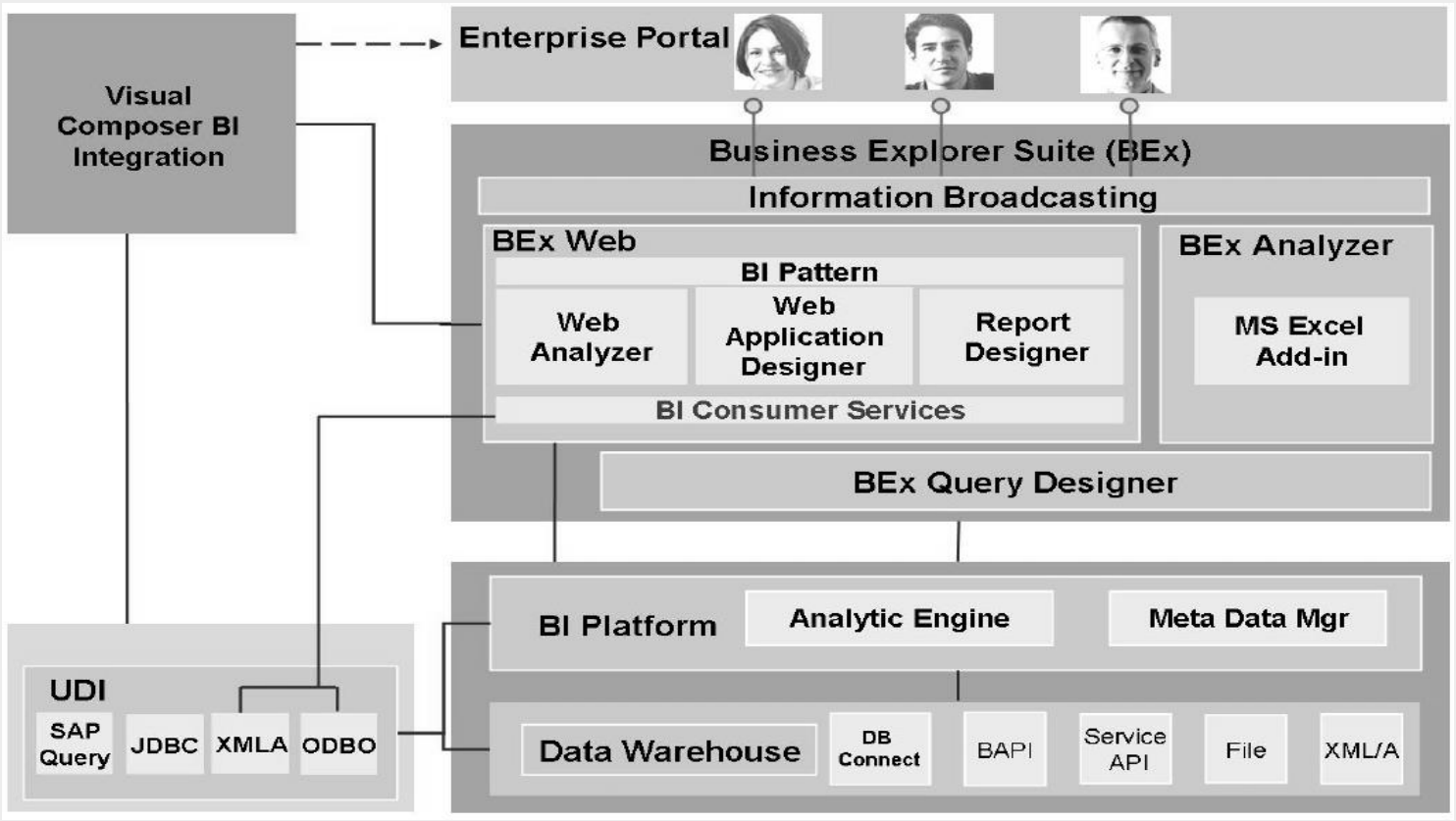
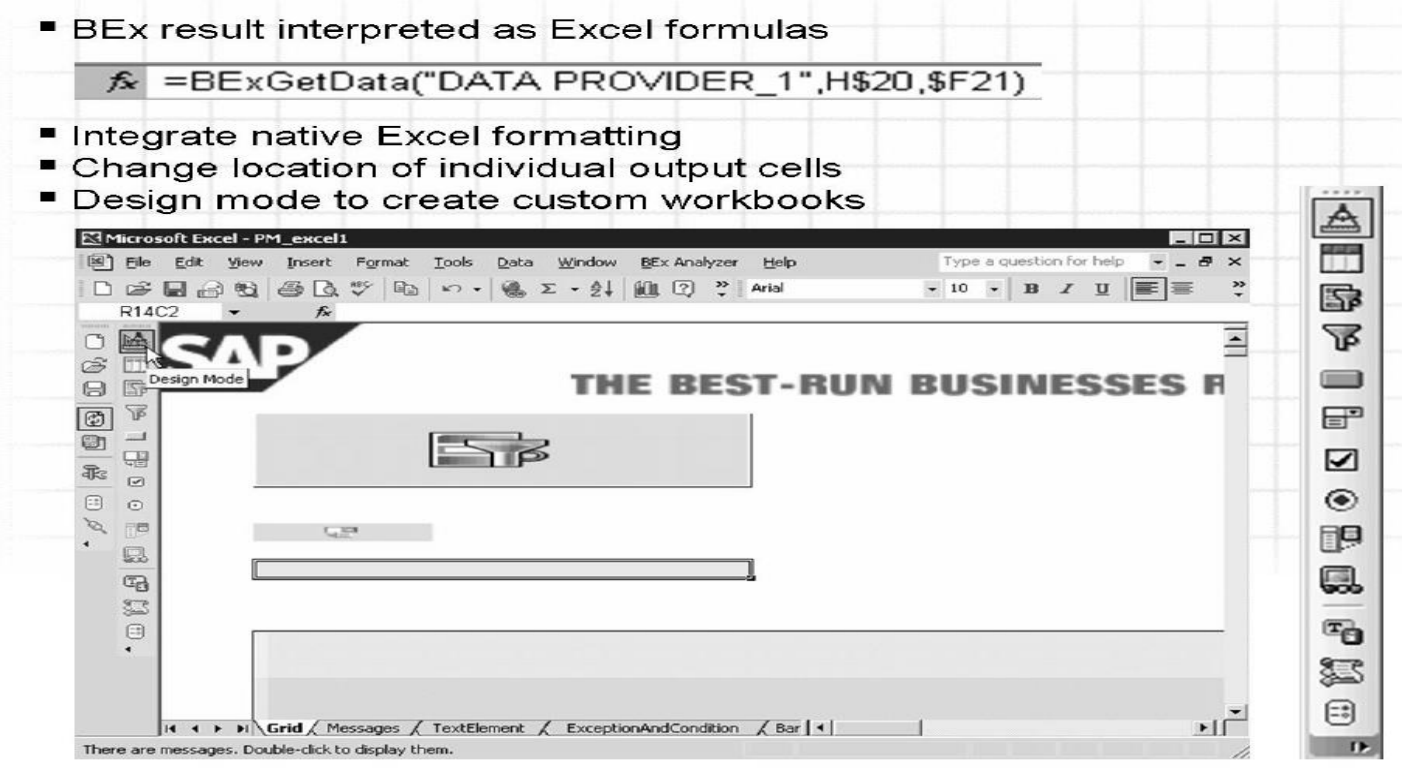
Introduction

- In order to enhance and to adapt layouts to individual needs further reporting tools are available within the Business Explorer.



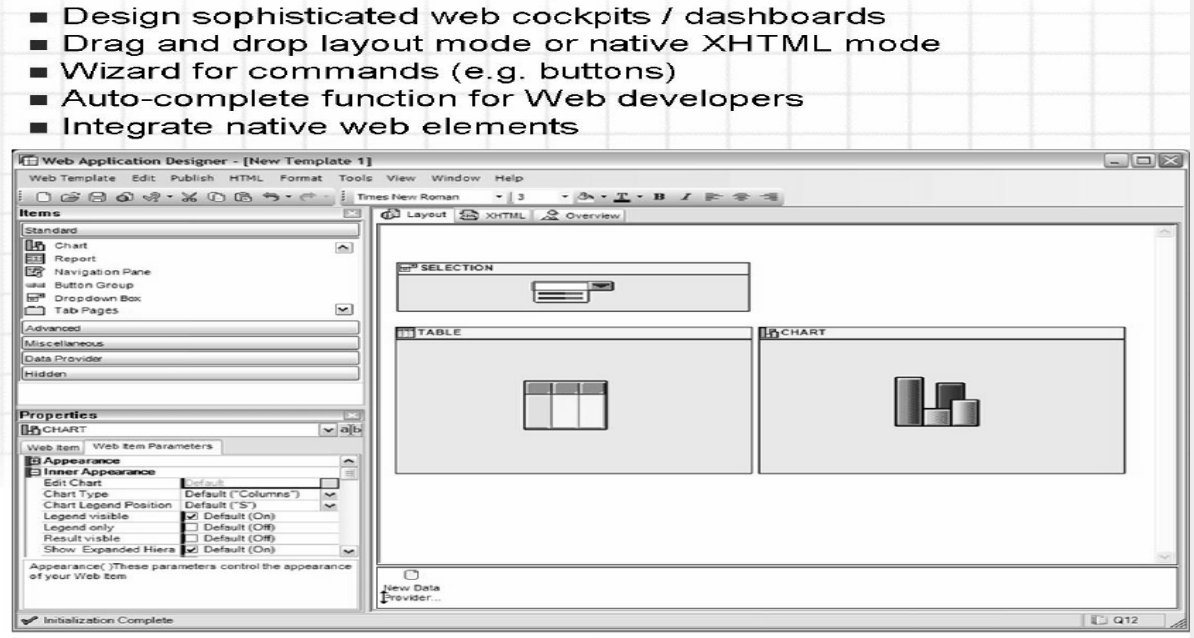
BEx Analyzer : Advanced design options

- The Design Mode of the BEx Analyzer which provides a range of tools to allow an experienced BI developer to create highly customized and sophisticated workbooks.



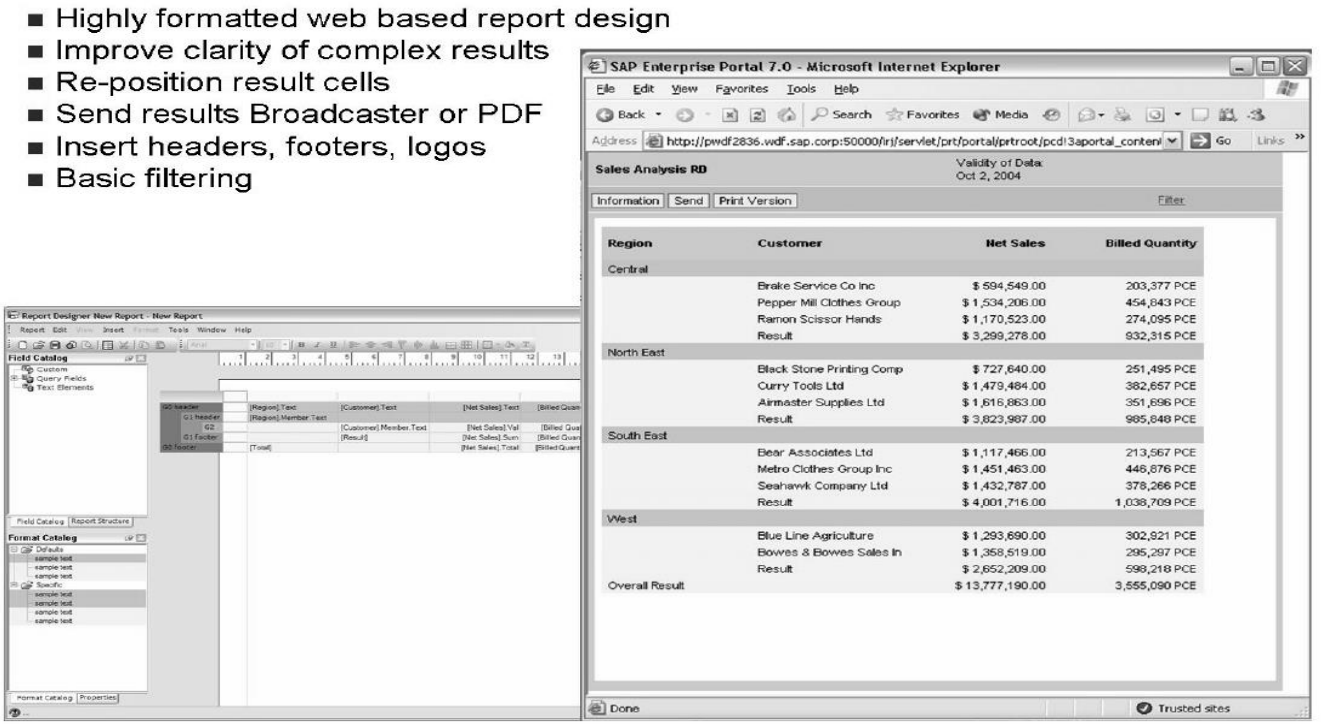
BEx Web Application Designer

- The tool is designed to be used by relative web novices with wizards and auto-prompts to assist in complex areas of development.
- The template can be enhanced with native web languages such as HTML and Java Script.



BEx Report Designer

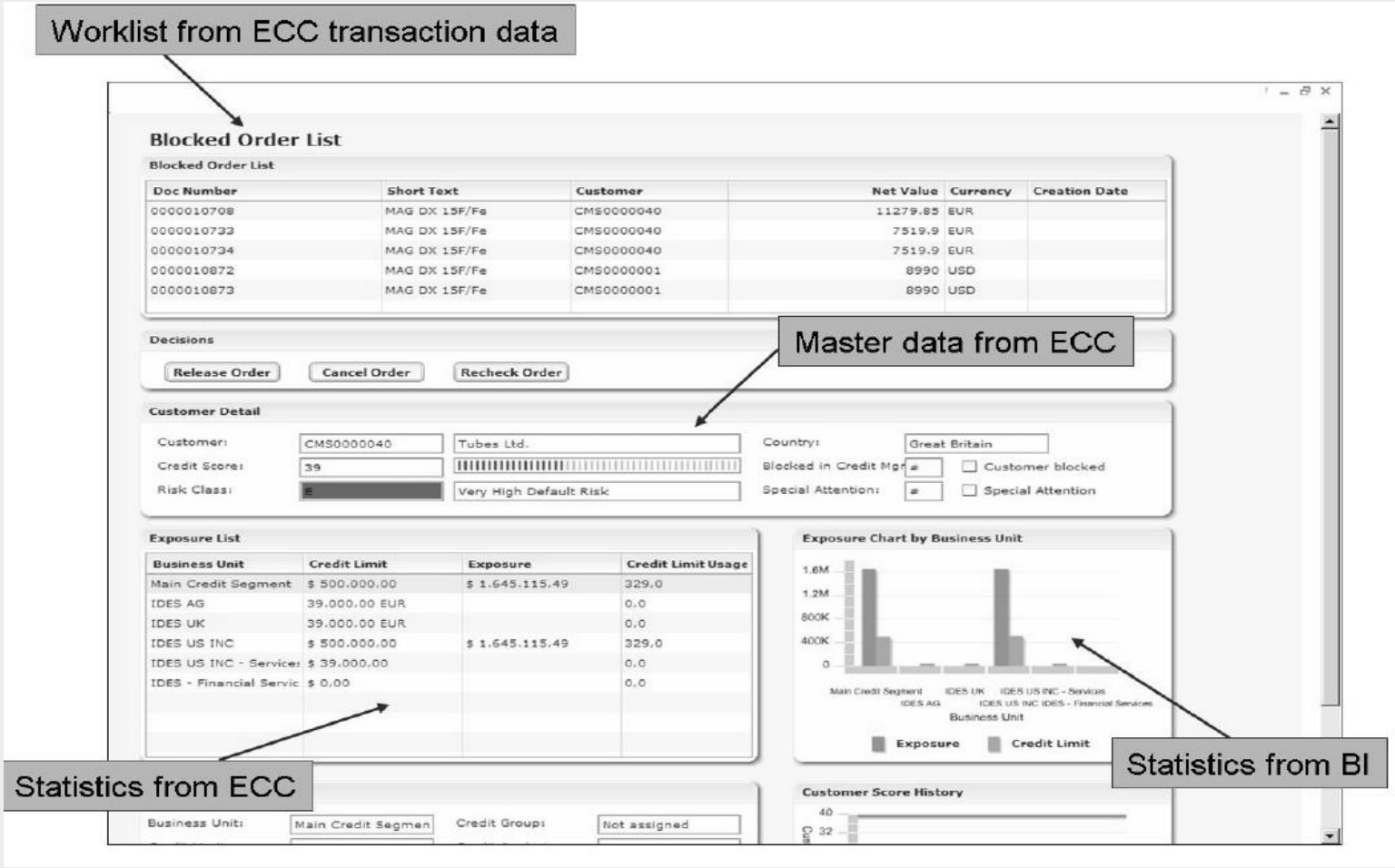
- The BEx Report Designer takes the output from a query or query view and allows you control the precise positioning and formatting of the output. The result can be viewed on the web, broadcast or generated as a PDF to save or print..



NetWeaver Visual Composer

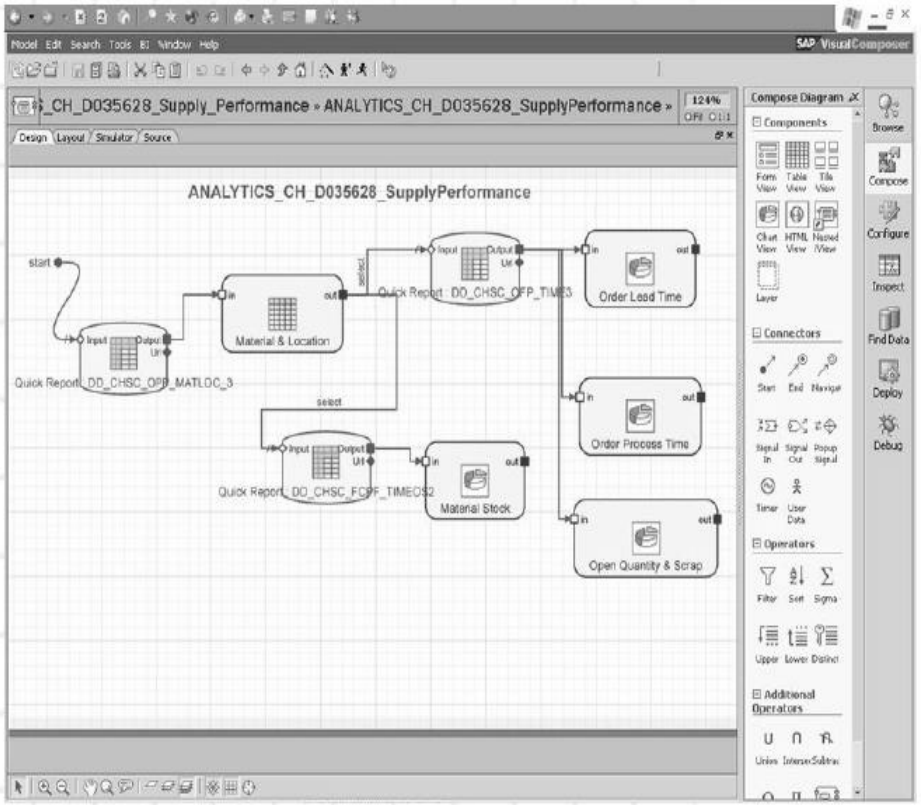
- NetWeaver Visual Composer is not actually part of the BEx Suite, it is part of SAP Analytics.
- Can establish a closed loop analytical application which bring together all the key information required (from transactional and analytical sources) in one place to support my decision making.
- NetWeaver Visual Composer provides the tools to help us build these types of applications. BI content (queries, views, InfoProviders) can easily be integrated into the Visual Composer using a special Wizard.

NetWeaver Visual Composer



NetWeaver Visual Composer

- Design Analytical Applications
- Model driven design
- BI Integration Wizard
- Integrate output from BI and other sources
- Context sensitive embedded applications



BI Migration Aspects

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Migrating to the NetWeaver 2004s BI Environment

- New BEx Tools in SAP NetWeaver 2004s
  - New SAP NetWeaver 2004s frontend features are ONLY available with the new SAP NetWeaver 2004s BEx Tools.
  - Objects that were created with the SAP NetWeaver 2004s BEx tools can no longer be edited with 3.x BEx Tools.
- 3.x Tools on top of SAP NetWeaver 2004s BI
  - To ensure that existing customer scenarios can continue to be edited (mainly for correction purposes), an additional set of 3.x BEx tools is delivered with the SAP NetWeaver 2004s BEx frontend installation.
  - It is possible to work with these 3.x BEx tools in connection with the new SAP NetWeaver 2004s BI Server.
- Transition from BEx 3.x to SAP NetWeaver 2004s BEx Tools
  - Conversion (if possible) occurs when the previous objects are opened in the new tools. This enables transition on an as-needed basis. There is no mass conversion of objects.
  - Converted objects are stored as new objects. Old objects are never automatically deleted.
  - The recommendation is to make the change step by step, because further new features will only be made for the new tools.

Intercompany Elimination

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Inter-Company Elimination

- If company structure is complex, with many international divisions, when profit nters do business internally, that revenue must be eliminated from the totals at higher levels of the reports to avoid overstating revenue.

Example: Profit Center PC0301(UK) has internal revenue of $50.00 from Partner Profit Center PC0102 (DE). This revenue must be eliminated for the European rollup.

Record Number	PartnerProfit Center	Profit Center	Country	Partner Country	Revenue
1	PC0102	PC0181	DE	DE	$ 100.00
2	PC0103	PC0203	DE	DE	$ 200.00
3	PC0102	PC0301	UK	DE	$ 50.00
4	#	PC0201	DE	AT	$ 100.00
5	PC0301	PC0201	DE	UK	$ 300.00
6	PC0201	PC0201	DE	CDN	$ 200.00
7	PC0203	PC0302	UK	US	$ 250.00
8	PC0203	PC0302	SGP	DE	$ 150.00
9	#	PC0201	DE	US	$ 80.00
10	PC0201	PC0201	DE	AT	$ 500.00
Overall Result	**Result**	**Result**	**Result**	**Result**	**$ 1,930.00**