

# Open Data Warehousing

**Lothar Henkes, Rainer Höltke**  
**SAP Portals**

## Agenda

### **Overview SAP BW**

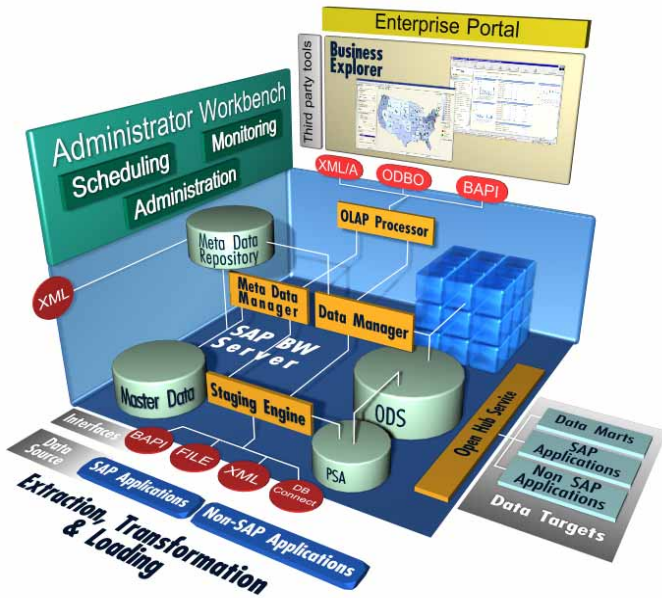
### **Loading data from any source system**

### **The Open Enterprise Data Warehouse**

- Architectural layers
- Information access
- Information distribution



# Open Data Warehouse Architecture



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## Agenda

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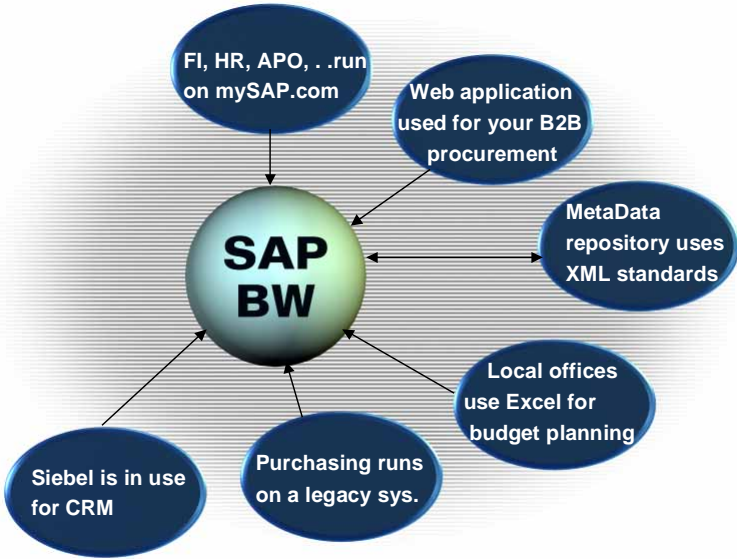
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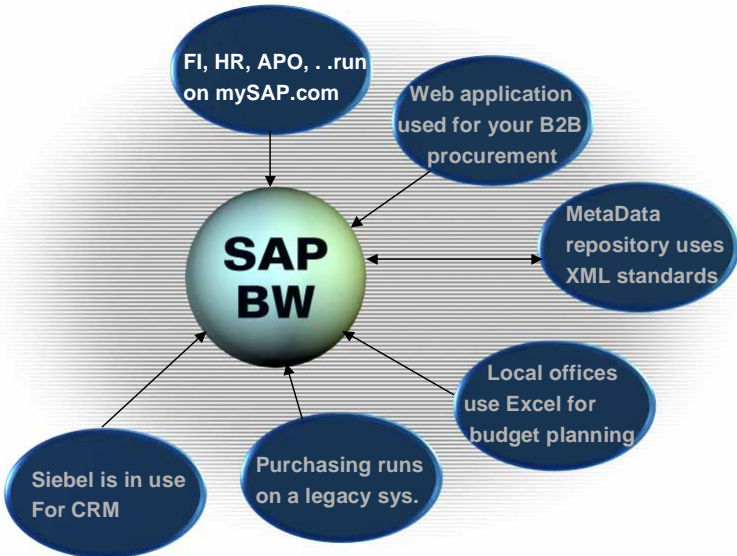
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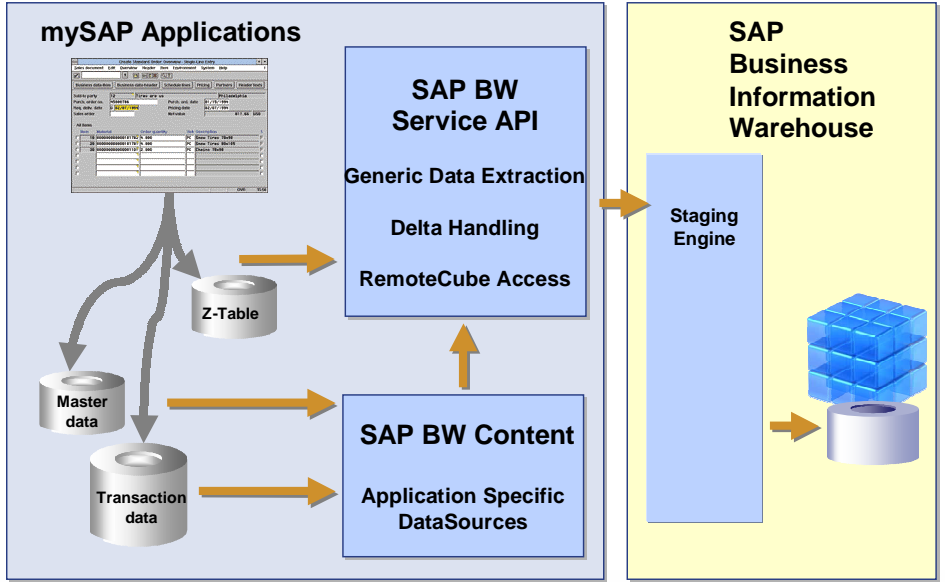
## Scenarios



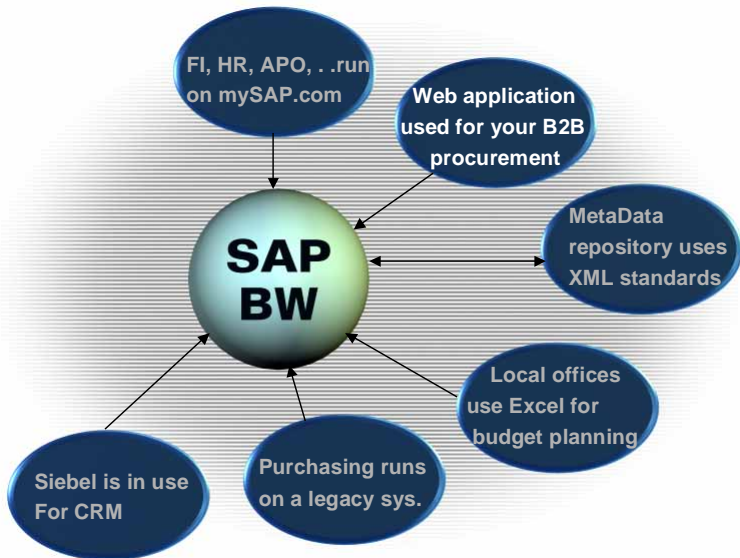
## Scenarios



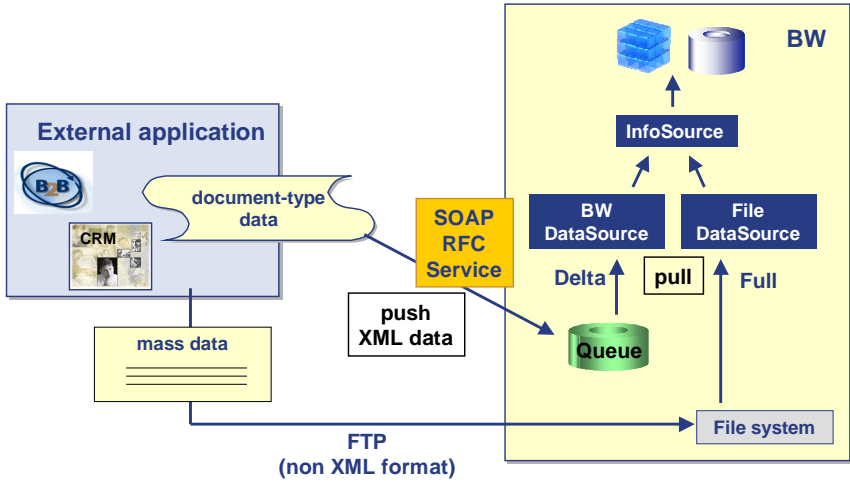
# Solution: Service API in mySAP.com Applications



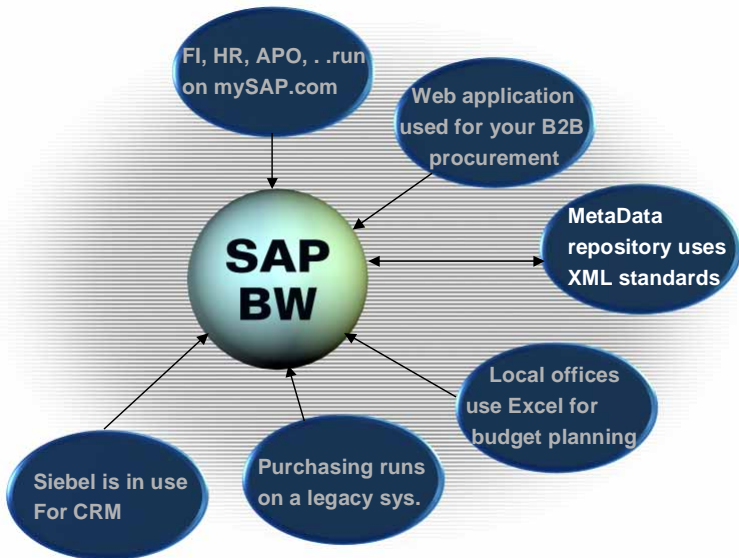
## Scenarios



# Solution: BW DataSources for XML Data



# Scenarios

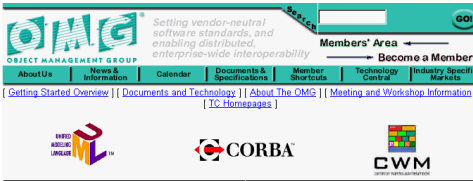


# Solution: Using the BW XML Metadata Interchange

## CWMI: Common Warehouse Metadata Interchange



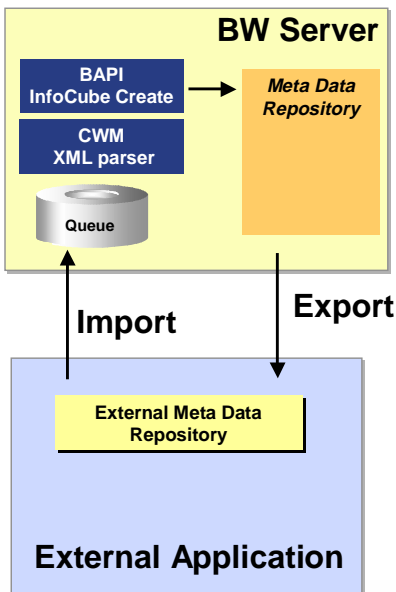
- Semantic Layer for XML Metadata
- Standard recommended by OMG (Object Management Group)



### Supported by (October 2000):

- Deere & Co., Dimension EDI, Hewlett-Packard, Hitachi, Hyperion, IBM, Microsoft, NCR, Oracle, SAP, Sun Microsystems, UBS AG, Unisys, .....

## Meta Data Exchange Architecture



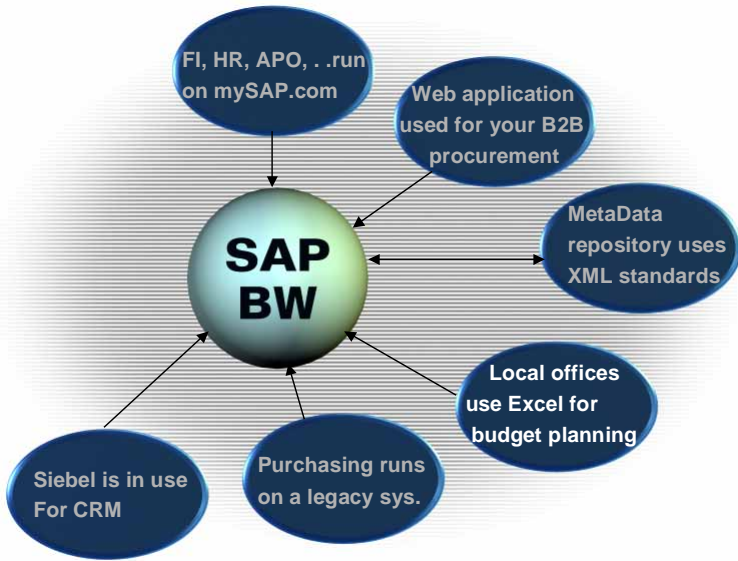
### Export Meta Data from BW

- Result: Description of BW objects
- Request all BW InfoCubes(Objects)
  - ◆ HTTP Request sent to BW
  - ◆ Back: Page in XML with all InfoCubes(Objects)
- Request InfoCube ,Sales Orders'
  - ◆ Back: Page in XML with Meta Data of Sales Orders according to CWM

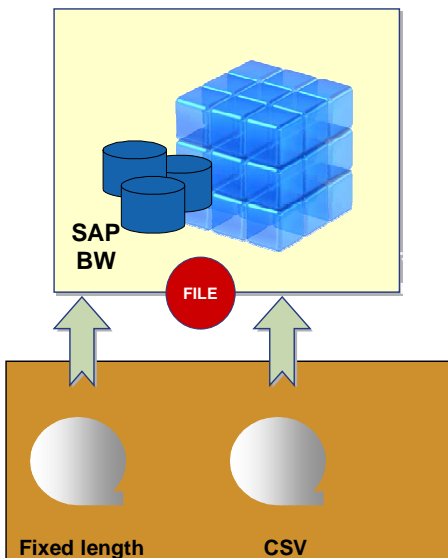
### Import Meta Data to BW

- Stored in a queue
- XML parser reads queue
- XML parser calls BAPI

## Scenarios



## Solution: Using the BW file interface



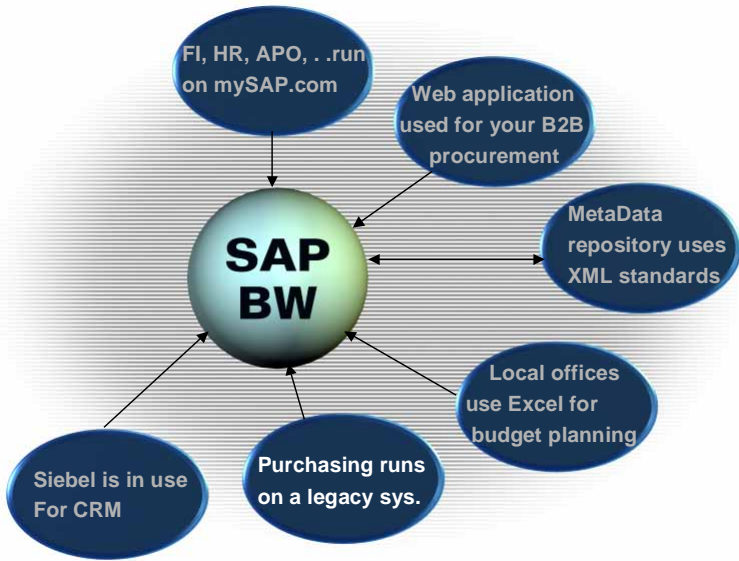
■ Formats: Fixed length, CSV

■ Fully integrated in Administrator Workbench

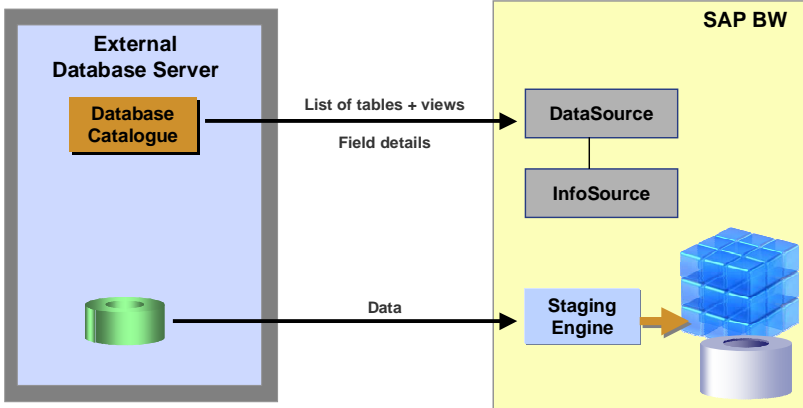
- Scheduling
- Monitoring

■ Used in nearly all customer projects

# Scenarios



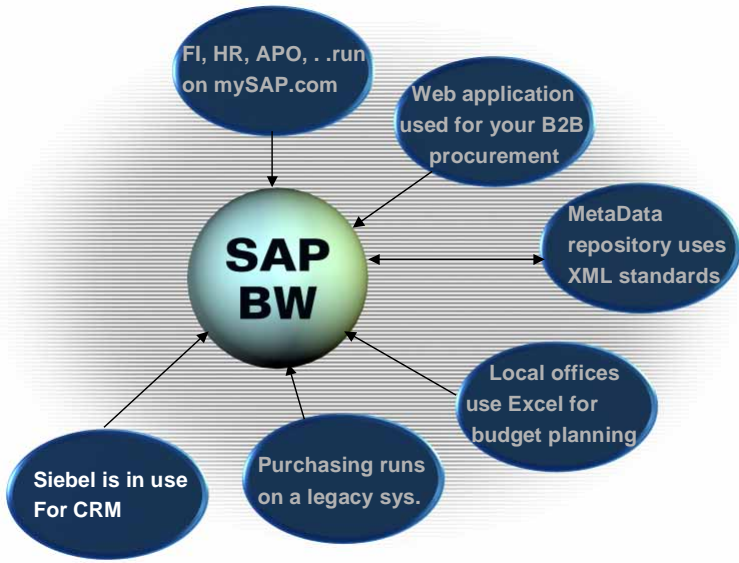
# Solution: Using DB Connect



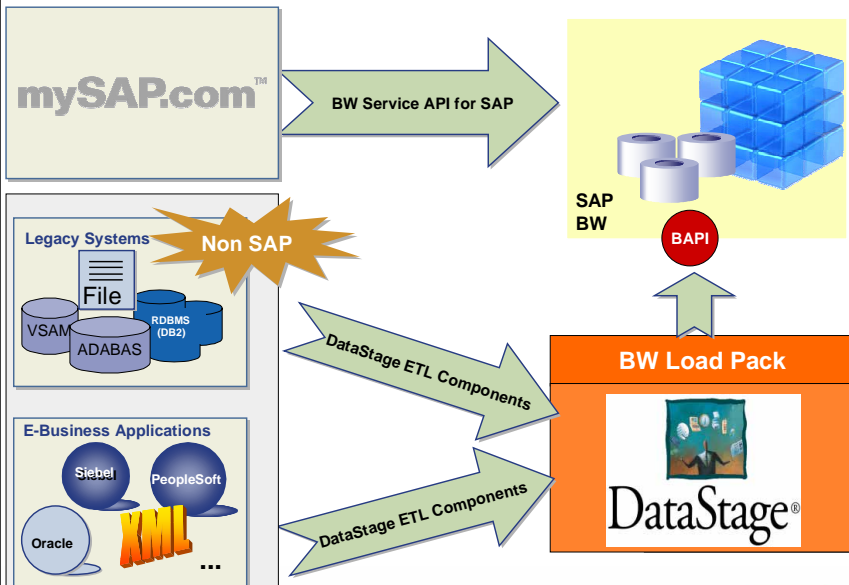
- Direct access to external RDBMS
- Read metadata and data
- Access to all DBs supported by mySAP Technology



# Scenarios



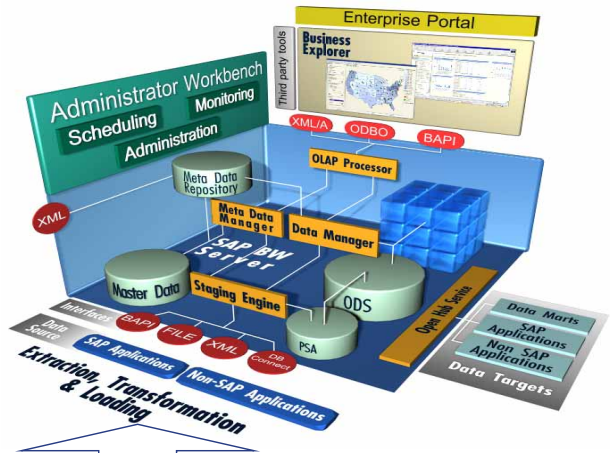
# Solution: SAP BW & Ascential DataStage



## Solution: Staging BAPIs

### Open interface to the staging engine

- For 3rd party extraction tools and
- For customers (for own extraction programs)
- Exchange meta data
- Import of transaction data
- Import of master data



systemfabrik

mercator

INFORMATICA

SEEBEYOND

Information Builders

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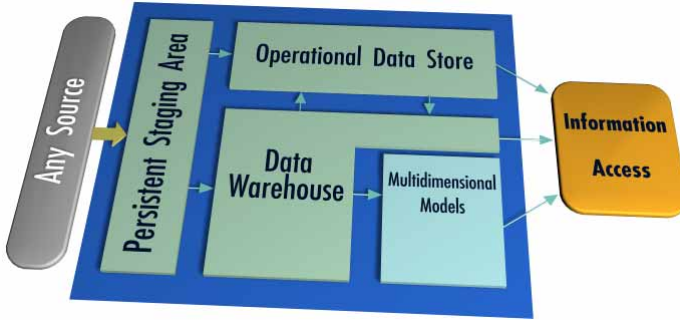
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# BW Architecture: Layers & Accessibility

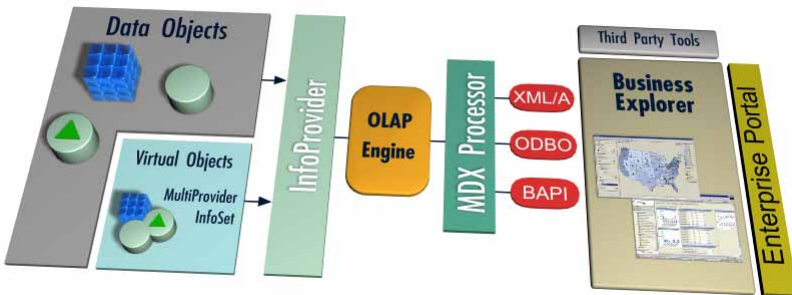


- Operational Data Store**
- Operational Reporting
  - Near Real-Time / Volatile
  - Granular
  - Built with ODS Objects

- Data Warehouse**
- Non volatile
  - Granular
  - Historical foundation
  - Integrated
  - Built with ODS Objects

- Multidimensional Model**
- Multidimensional analysis
  - Aggregated view
  - Integrated
  - Built with InfoCubes

# Accessibility

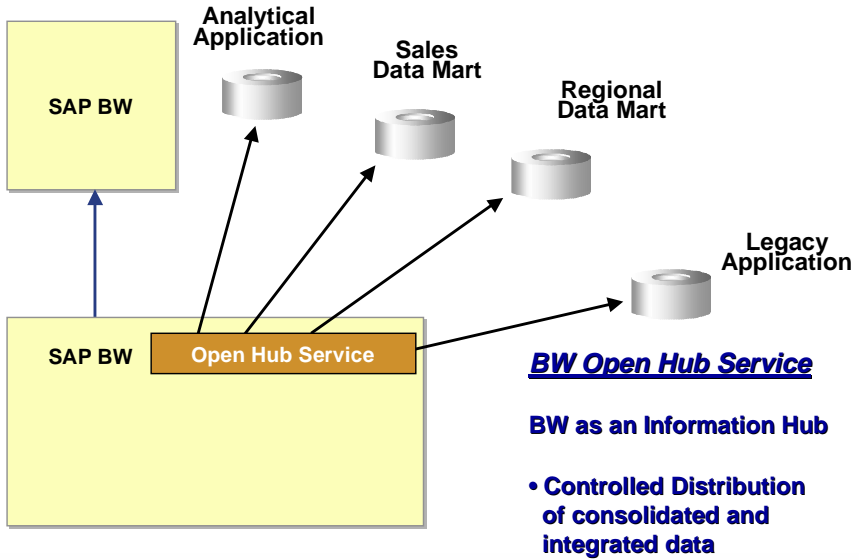


- XML/A**
- XML for Analysis
  - Based on HTTP/SOAP
  - Any platform

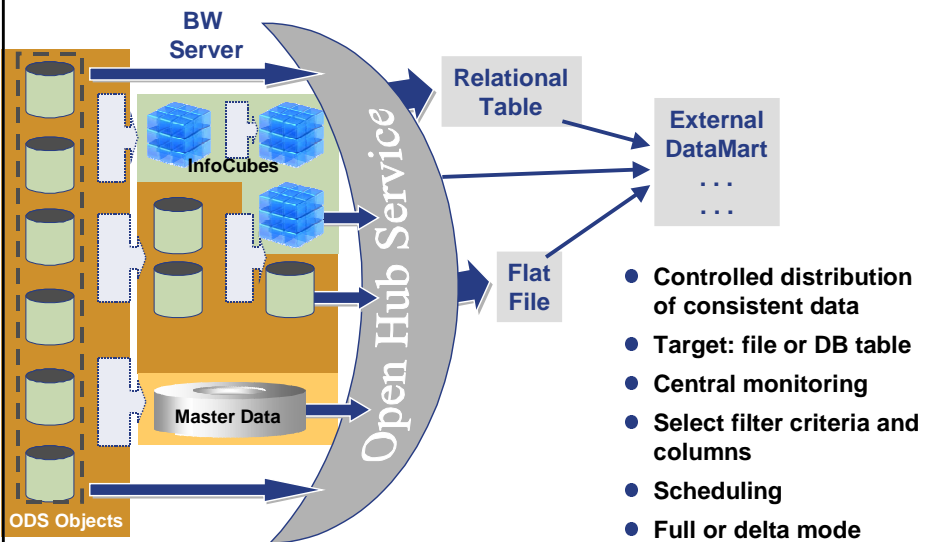
- ODBO**
- OLE DB for OLAP
  - Based on COM
  - Windows platform only

- BAPI**
- OLAP BAPIs
  - Based on RFC
  - Access library on any SAP platform

# Information Distribution - Scenarios



# Open Hub Service - Details



- **Open for SAP- and non SAP systems**
- **Comprehensive Data Warehousing architecture**
- **Information access via open standards**
- **BW as information hub**

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