

BWSP EX

MONITOR

Monitor BW/BI dataloads
without compromise

Introduction: Data load errors

- The error most feared by normal users of a BW system:

Data from source system is mangled in some way so that figures are not correct anymore in BW.

- This is a simplistic view on reality, and this single cause of error is 100% covered by advanced error detecting algorithms*. In SAP this type of error is virtually impossible to occur undetected.

* Cyclic Redundancy Check, Parity, Block Parity and Checksum

Introduction: Data load errors

- Real errors regularly experienced in a practical BW system:
 - Data loads that were expected did not run at all.
Scheduling was not correct.
 - Data loads that were expected did run multiple times.
Double scheduling.
- Both errors can not be detected by standard SAP monitor tools because they do not generate a red traffic-light.

* Cyclic Redundancy Check, Parity, Block Parity and Checksum

Introduction: Data load errors

- Dataloads from R/3 to BI are vulnerable to several types of errors
 - Technical
 - Procedural
 - Timing/Performance
 - Scale
 - Custom
- Standard SAP BI has **some** support for technical errors, **limited** support for procedural errors and **no** support for timing, scale and customer related errors

Technical errors

- Technical errors occur in the network, server, database or the technical representation of the data.
 - Source system
 - RFC-connection
 - PSA
 - Technical flag
 - Quality flag
 - Activation
 - Datamart

- Example:
 - Illegal characters in the data
 - Firewall or network problems
 - ALEREMOTE accounts

Procedural errors

- Procedural errors occur during the processing of the data. These include errors that occur in process chains.
 - Overlapping
 - Compression
 - Aggregation
 - Process Chains (metachain)

- Example
 - Two dataloads with the same selection
 - Lock on index tables (Starvation of processes)

Timing and performance errors

- Timing and performance errors occur due to mistakes in scheduling and in cross-linked dependencies between dataloads.
 - Time frame
 - Planning versus actual
 - Date or calendar planning
 - Event triggered

- Example
 - After a transport a process-chain is not scheduled anymore
 - Due to update in R/3 a datasource replication was needed
 - Calendars are not maintained

Scale and custom errors

- Scale errors occur because dataloads depend on processes in other systems
 - Multiple BW systems
- Example
 - Companies with HQ and daughter-plants.
- Customer errors occur because a condition arises that the customer considers an error (but is not generally an error)
 - Customer specific load processes
- Example
 - Flat-file data was not updated, so old version was loaded again
 - Reporting from archives may need specific quality checks

Risks

- Depends on usage of reports:
 - Stockholders
 - Board of directors
 - Executive
 - Management
 - Chief of operation
 - ...
- The risks and costs of unreliable reporting can be huge
- Errors are simply not allowed

BWSPEX Monitor

- Fully automatic detection of all known dataload errors
 - This includes all error types mentioned before
- Fully web-enabled technical, statistical and business grade reporting
 - For end-users, technical staff and management
- Navigation through meta-chain structures
 - Provides insight in complex process chains
- Source code is protected and therefore SOX-compliant

Screenshots

The screenshot displays the 'BW SPEX Dataload Monitor' application window. The title bar includes 'Data Analysis', 'Graphical display', 'Information', 'Information Broadcasting', 'Metachain Details', 'MetaChain Times', and 'Average Re'. The main content area is titled 'Support Report' and shows a table with the following data:

InfoProvider	Status - Overall	Transferred Records	Added Records
ZCCAC11A Cost Center Cost and Allocations Actuals	ERROR	0	0

Additional interface elements include a 'Query View Selection' dropdown set to 'Support Report', and buttons for 'Save View', 'Bookmark', 'Variable Screen', 'Exceptions and Conditions', 'Notes', 'Export to Excel', and 'Export to CSV'. The 'Validity of Data' is noted as 07.09.2005 04:01:32. The 'orbis SYSTEM SOLUTIONS' logo is visible in the top right corner.

Screenshots

Support Report

Business Report

Statistical Report

BW SPEX Dataload Monitor



Data Analysis
Graphical display
Information
Information Broadcasting

Load Times
Validity of Data: 08.09.2005 19:29:08

Save View
Bookmark
Variable Screen
Exceptions and Conditions
Notes
Export to Excel
Export to CSV

	MetaChain	MetaChain Start Time	InfoPackage ID	Load Time MetaChain	Load Time InfoPackage	
<div style="border: 1px solid gray; padding: 5px; margin-bottom: 5px;">▶ Rows</div> <div style="border: 1px solid gray; padding: 5px; margin-bottom: 5px;">▶ Columns</div> <div style="border: 1px solid gray; padding: 5px;">▶ Free Characteristics</div>	62 & 63 CO / EC daily Meta Chain	31.08.2005 22:01:15	OCO_OM_CCA_1_PLAN_2005_FULL	00:05:39	00:03:17	
			DEC_PCA_1_DELTA	00:05:39	00:00:27	
			OCO_OM_CCA_1_COMMITMENTS_FULL	00:05:39	00:00:31	
			Result	00:05:39	00:04:15	
		30.08.2005 22:00:25		OCO_OM_CCA_1_PLAN_2005_FULL	00:04:25	00:02:30
				DEC_PCA_1_DELTA	00:04:25	00:00:16
				OCO_OM_CCA_1_COMMITMENTS_FULL	00:04:25	00:00:17
				Result	00:04:25	00:03:03
		29.08.2005 22:00:30		OCO_OM_CCA_1_PLAN_2005_FULL	00:05:05	00:03:12
				DEC_PCA_1_DELTA	00:05:05	00:00:18
				OCO_OM_CCA_1_COMMITMENTS_FULL	00:05:05	00:00:17
				Result	00:05:05	00:03:47
27.08.2005 22:04:45		OCO_OM_CCA_1_PLAN_2005_FULL	23:59:24	00:02:05		
		DEC_PCA_1_DELTA	23:59:37	00:00:26		
		OCO_OM_CCA_1_COMMITMENTS_FULL	23:59:24	00:00:15		
		Result	23:59:24	00:02:46		
	27.08.2005 22:00:58		OCO_OM_CCA_1_PLAN_2005_FULL	00:04:00	00:02:16	

Screenshots

Support Report

Business Report

Statistical Report

BW SPEX Dataload Monitor



Data Analysis

Graphical display

Information

Information Broadcasting

Statistical Report (Quantities)

Validity of Data: 08.09.2005 04:03:54

Save View | Bookmark | Variable Screen | Exceptions and Conditions | Notes | Export to Excel | Export to CSV

Query View Selection

Quantity

▶ Rows

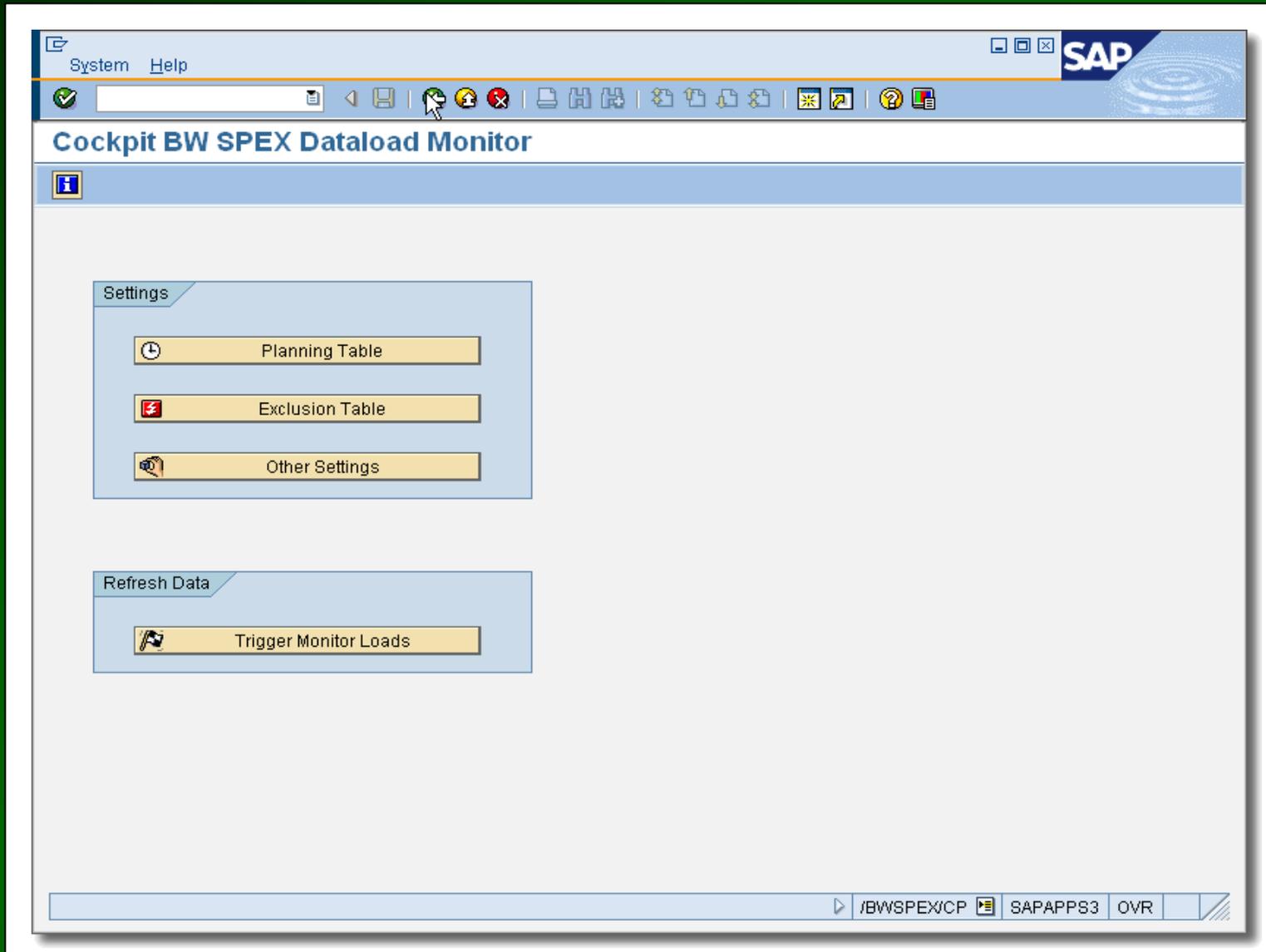
▶ Columns

▶ Free Characteristics

Statistical Report (Quantities)

InfoProvider	Loads	Overall	Technical	Active	Datamart	Executed	On Time	Overlap	Rollup
BWSPEX Test Cube	2	0	0	0	0	0	0	0	0
BW SPEX Test ODS	3	0	0	0	0	0	0	0	0
/BWSPEX/OMCLDS	2	0	0	0	0	0	0	0	0
Activity Allocation	1	0	0	0	0	0	0	0	0
BBP POrder Single	1	1	0	1	0	0	0	0	0
BW Statistics - OLAP	3	0	0	0	0	0	0	0	0
BW Statistics - OLAP	17	1	0	0	0	1	1	0	0
BW Statistics - Aggr	17	1	0	0	0	1	1	0	0
BW Statistics - WHM	16	1	0	0	0	1	1	0	0
BW Data Slice	1	0	0	0	0	0	0	0	0
Requests in the Info	1	0	0	0	0	0	0	0	0
BW Statistics: Conde	17	1	0	0	0	1	1	0	0

Screenshots



Screenshots

System Help SAP

Planning Loads (previous or next load times)

MetaChain	InfoPackag	InfoPackag...	Status	Start date	Start Time	Limit Late	Limit ...	Minutes	Hours	Days	Weeks
/BWSPEX/META_EVENT				05.10.2005	01:00:00			1		3	
/BWSPEX/META_TIME					00:00:00						
/BWSPEX/MONI					00:00:00						
CO_DAILY					00:00:00						
META2_MD_TEST				30.05.2005	02:00:00			2		2	
META_MD_TEST					00:00:00						
ZMC_TCT			A	04.09.2005	01:00:00	1 H					1
ZM_DU_TD_CO_DAILY_META			A	03.09.2005	22:00:00	1 H					1
ZM_DU_TD_MO_META				16.06.2005	20:03:00						1
ZM_DU_TD_MO_META_EV					00:00:00						
ZP_DP_TD_CO_PCP_BOM			A	01.09.2005	22:00:00	2 H					
Z_DS_TD_CO_PCP_BOM					00:00:00						

/BWSPEX/CP SAPAPP33 OVR