

SAP Central Process Scheduling and its Integration in SAP's Business Scenarios



SAP AG

Agenda



1. **SAP Central Process Scheduling by Redwood**
2. Why it is a new Generation of Automation
3. Business Scenario Examples with SAP CPS
 1. SAP CPS and SAP Solution Manager
 2. SAP CPS and SAP Financial Closing cockpit
 3. SAP CPS and SAP NetWeaver Business Intelligence
4. Roadmap and Strategy

Principles of SAP Central Process Scheduling by Redwood



SAP Central Process Scheduling by Redwood (SAP CPS) is a workload automation solution, which bases on three principles:

■ Centrality

There is only one central instance of this scheduler which takes control over all background processes in the entire landscape.

■ Event-Driven Scheduling

Dependencies between background processes can be defined not only time based but also event based.

■ Real-time Execution

All information about jobs is stored centrally and transferred to the remote systems immediately before job submission.

Features of SAP Central Process Scheduling by Redwood



Aim of the usage of SAP CPS is to achieve a high level of automation, which makes it possible

- To reduce errors and manual interactions
- To create a link between IT processes and business processes
- To deliver reliable services to partners and customers

Using SAP CPS it is possible to manage

- SAP Background Jobs
- BI process chains
- IS-U mass activities
- Java Message Driven Beans
- Jobs on OS level and on non-SAP applications with a command line interface

It is possible to define dependencies between these single jobs in large job chains, to be able to keep the overview over the structures

How SAP CPS Supports Your Business

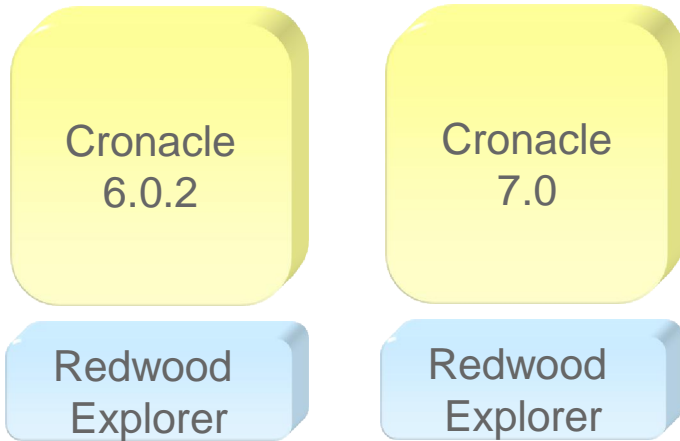


 <p>Automate and Streamline Processes</p>	<p>Event-driven</p>  <p>Dynamic process execution</p>	<p>Central Point of Control</p>  <p>Single view of all processes</p>	<p>Visibility</p>  <p>Contextual Process Monitoring vs. Job Monitoring</p>
 <p>Optimize & Reduce Cost</p>	<p>Efficiency Gains</p>  <p>Centralized IT Process Management</p>	<p>Resource Balancing</p>  <p>Balance IT processes across available resources</p>	<p>Risk Mitigation</p>  <p>Reduce manual interactions</p>
 <p>Improve Strategy & Compliance</p>	<p>SAP NetWeaver Component</p>  <p>Core component of the SAP NetWeaver platform</p>	<p>Part of E/SOA Strategy</p>  <p>Adds asynchronous capabilities to services</p>	<p>Regulatory Compliance</p>  <p>Support for auditability & SAP GRC solutions</p>

History of SAP CPS

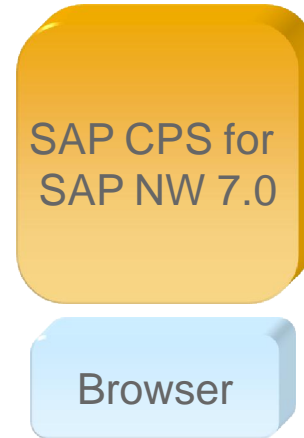


Standalone Version



Supports multiple OS
Database: Oracle only

SAP NW integrated Version



Supports all OS and all Databases
listed in SAP NW Product Availability
Matrix

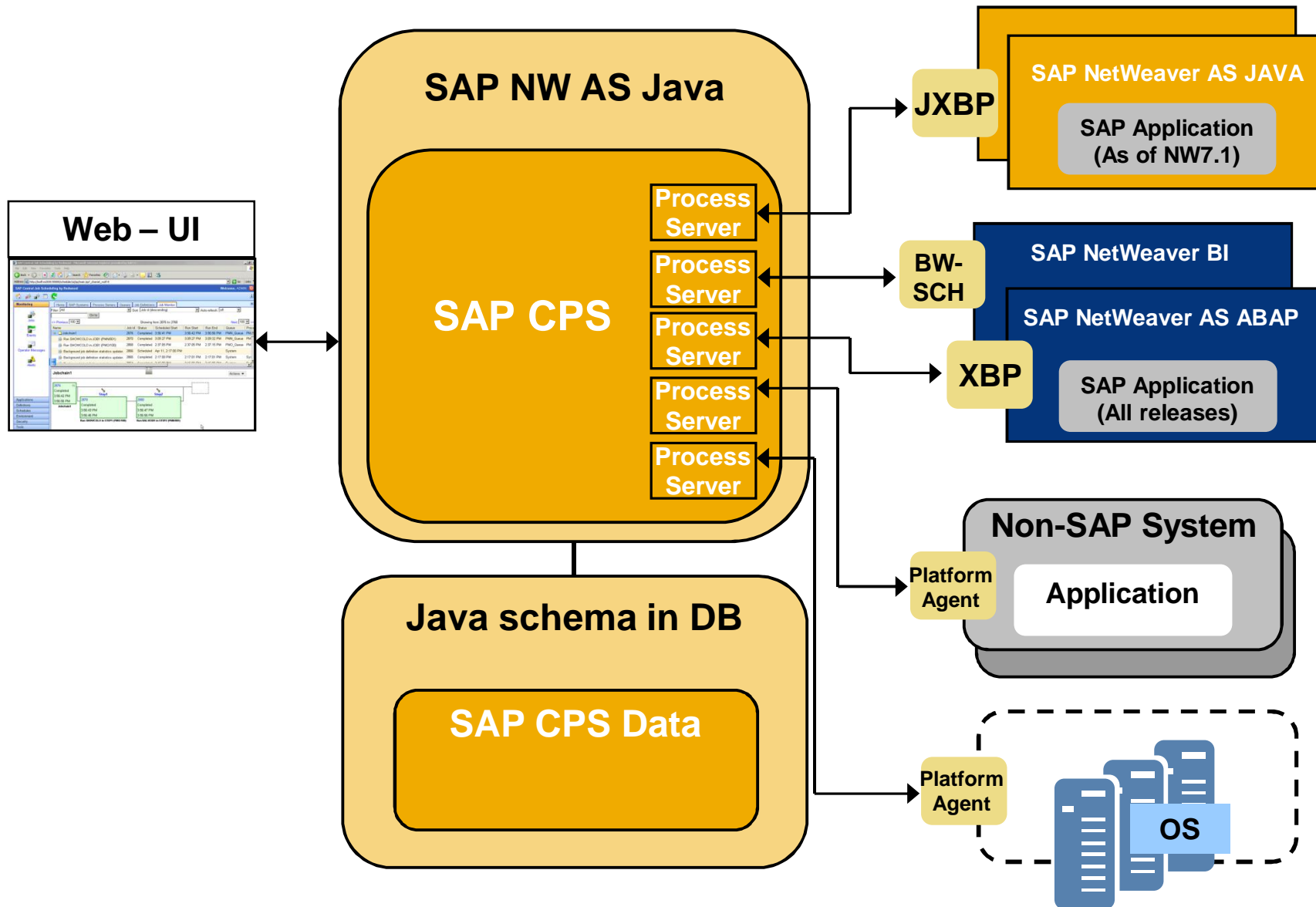
Availability

2006

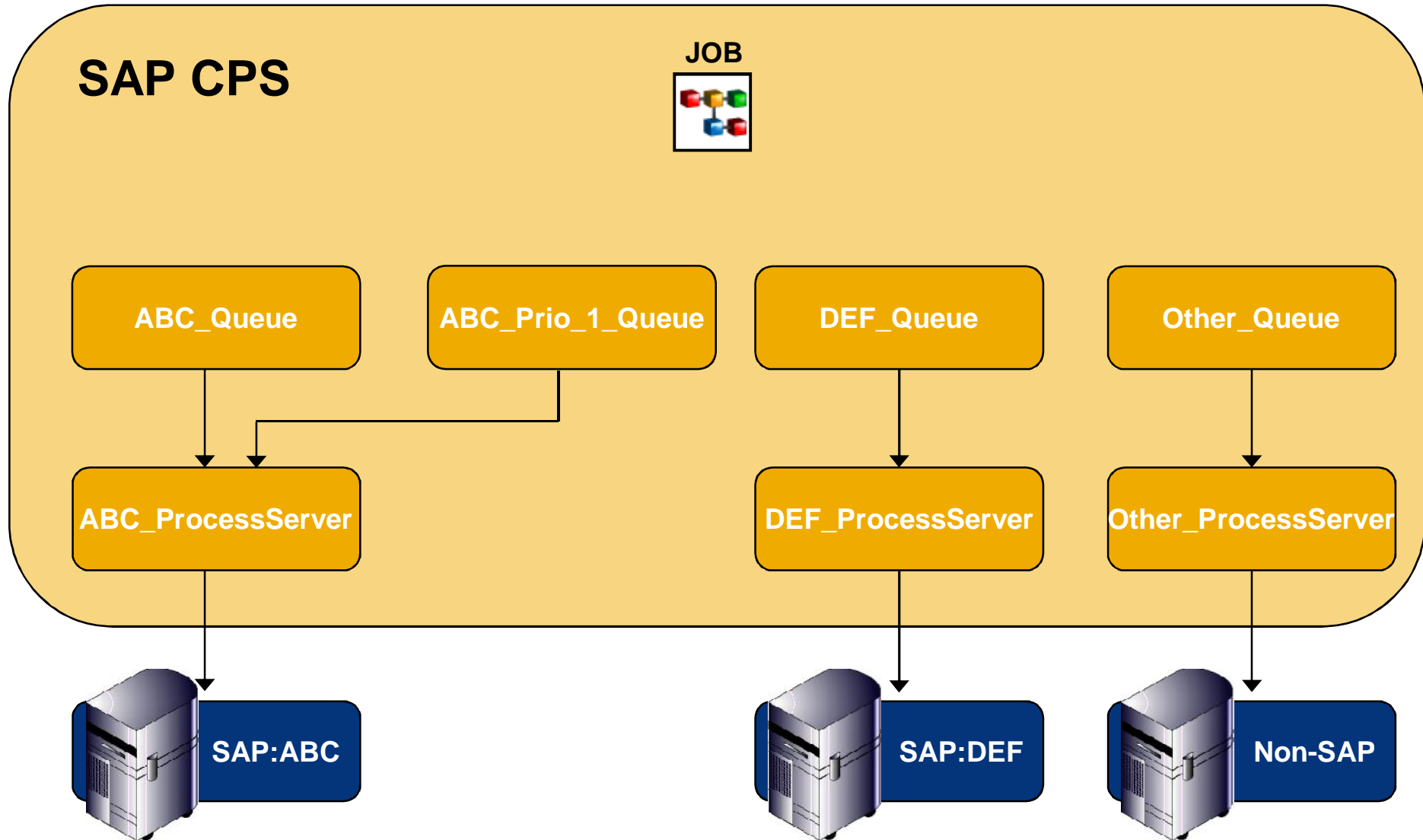
2007

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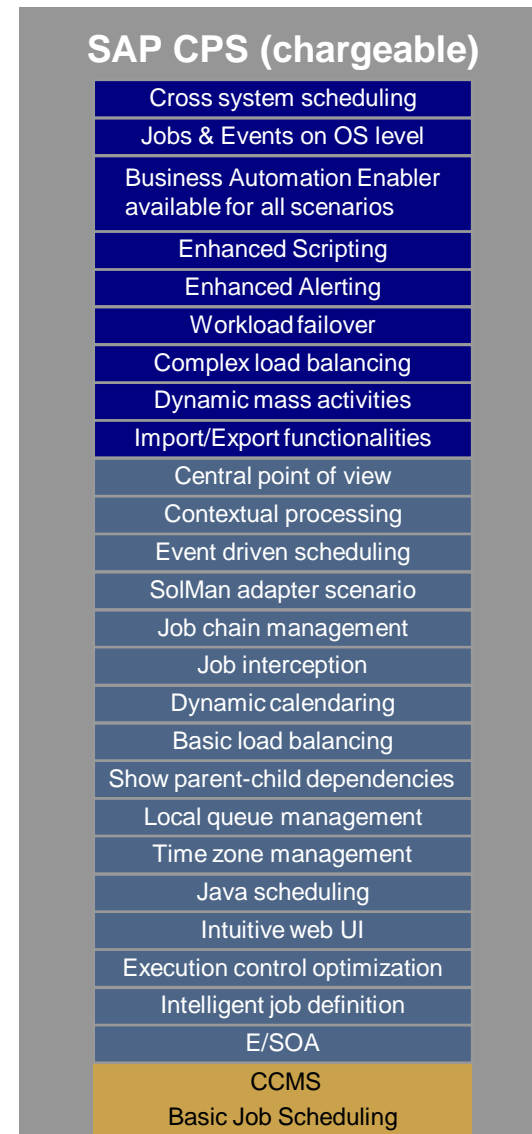
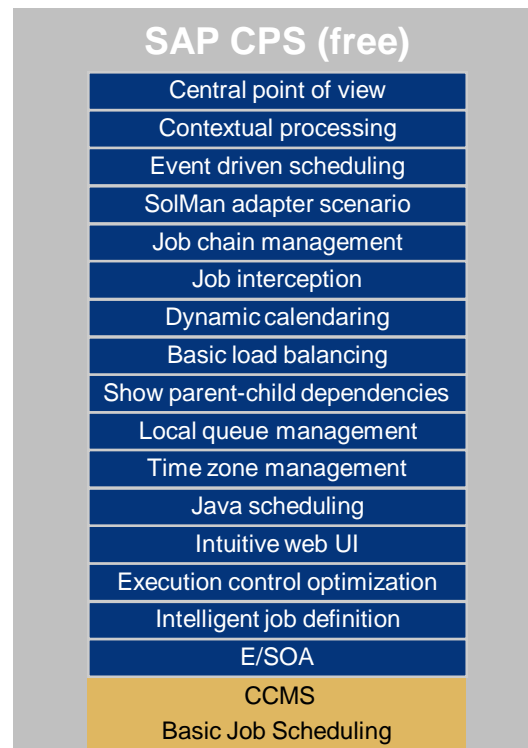
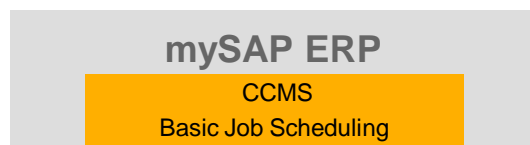
Architecture of SAP CPS



Scheduling Jobs using Queues



SAP CPS for SAP NetWeaver 7.0 compared to CCMS job scheduling



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Why is SAP CPS different?



- **SAP CPS is fully integrated into the SAP NetWeaver application platform**
- **SAP CPS plays a strategic role in SAP's Application development.**
- **SAP CPS is an SAP product, which means that it is validated, shipped and supported by SAP.**

Features available with the NetWeaver integration



SAP Central Process Scheduling by Redwood is written in Java, thus fully integrated in SAP NetWeaver AS Java. Only SAP CPS has and will have an unbeatable collection of integration capabilities:

Available Integration Features:

- Covers the full SAP NetWeaver Product Availability Matrix (PAM)
- Benefits from NetWeaver HA scenario
- Maintaining security only once: Security Integration Aspects
- Full integration into SAP Monitoring
- Integrated Database and Backup mechanisms

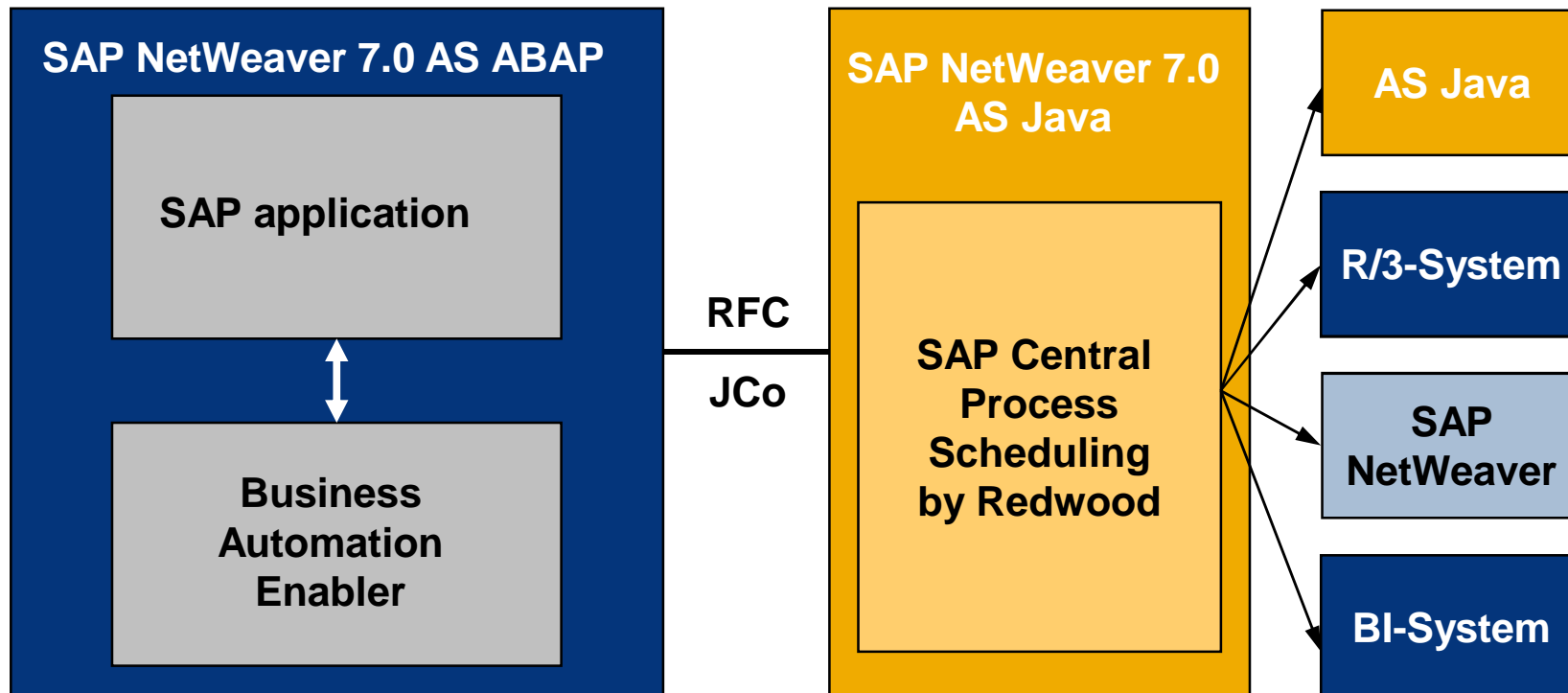
Planned Integration Features

- Statistical records passport tracking
- Integration with Business User (Business Objects)

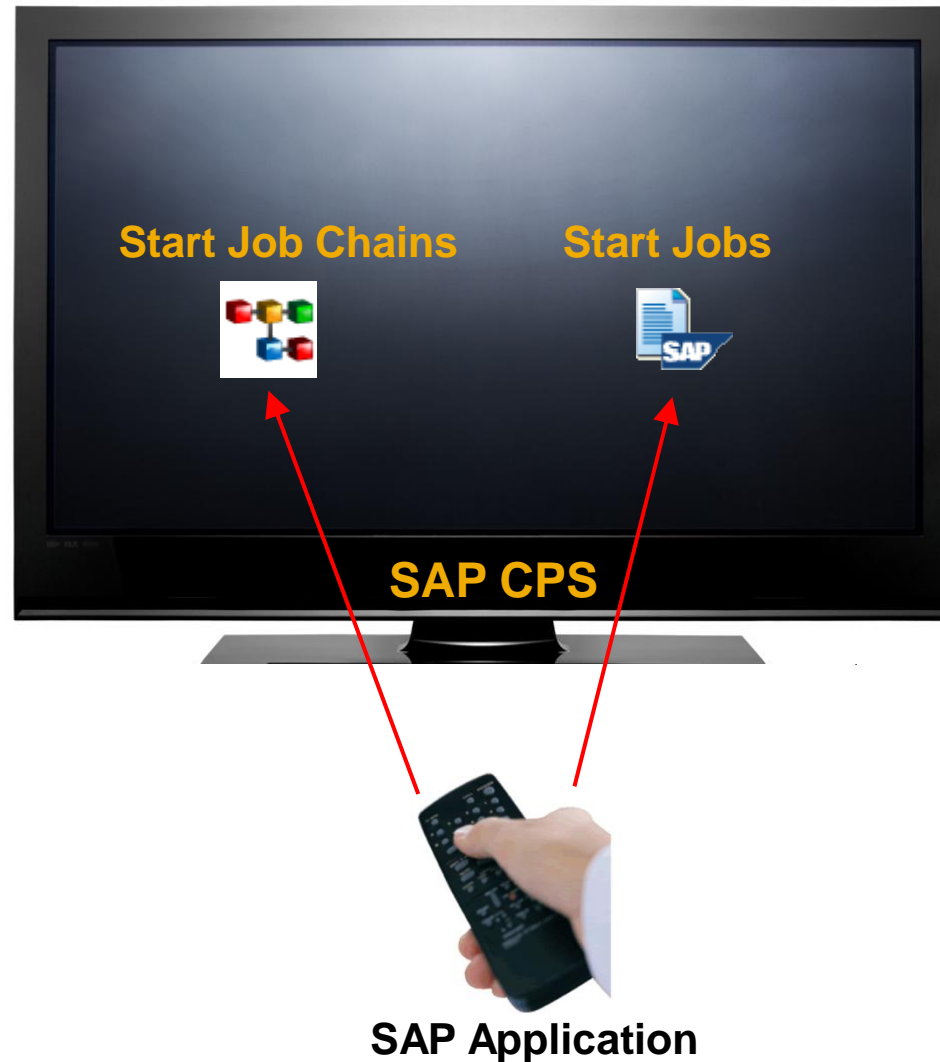
Business Automation Enabler (BAE)



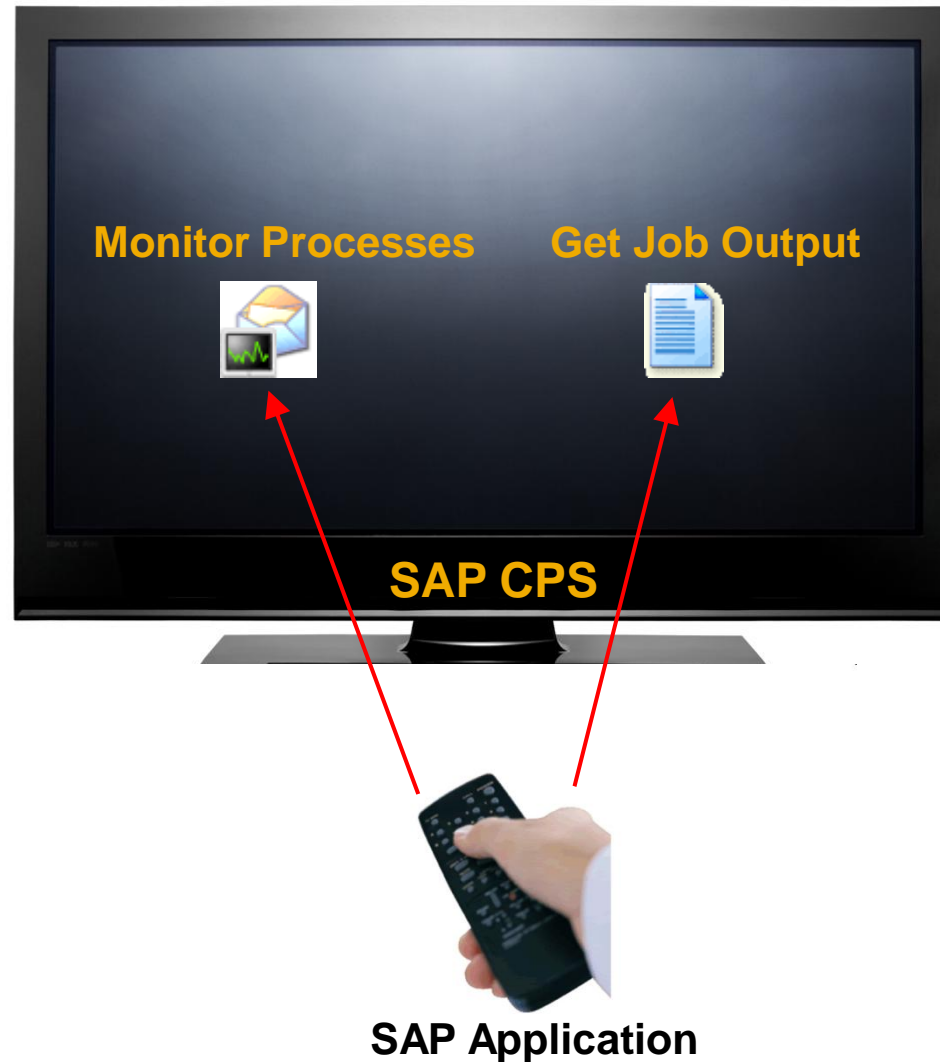
- SAP application uses the Business Automation Enabler (BAE) to create and control jobs in SAP CPS
- SAP CPS controls the jobs of the systems landscape to the right side
- Via the Business Automation Enabler, SAP CPS returns all relevant job information back to the SAP application



SAP Applications using the Business Automation Enabler



SAP Applications using the Business Automation Enabler



Features available with the Business Automation Enabler



Only SAP CPS enables the usage of the Business Automation Enabler. This interface enables SAP Applications to use the infrastructure of SAP CPS to schedule background processes.

Currently scenarios with the following applications are available:

- **SAP Financial Closing cockpit**

Enables to start SAP CPS jobs out of FCc and start close tasks in appropriate remote systems

- **Process Scheduling Adapter for SAP Solution Manager**

Enables lifecycle management for jobs and best realization of Run SAP standard

- **SAP BW/BI**

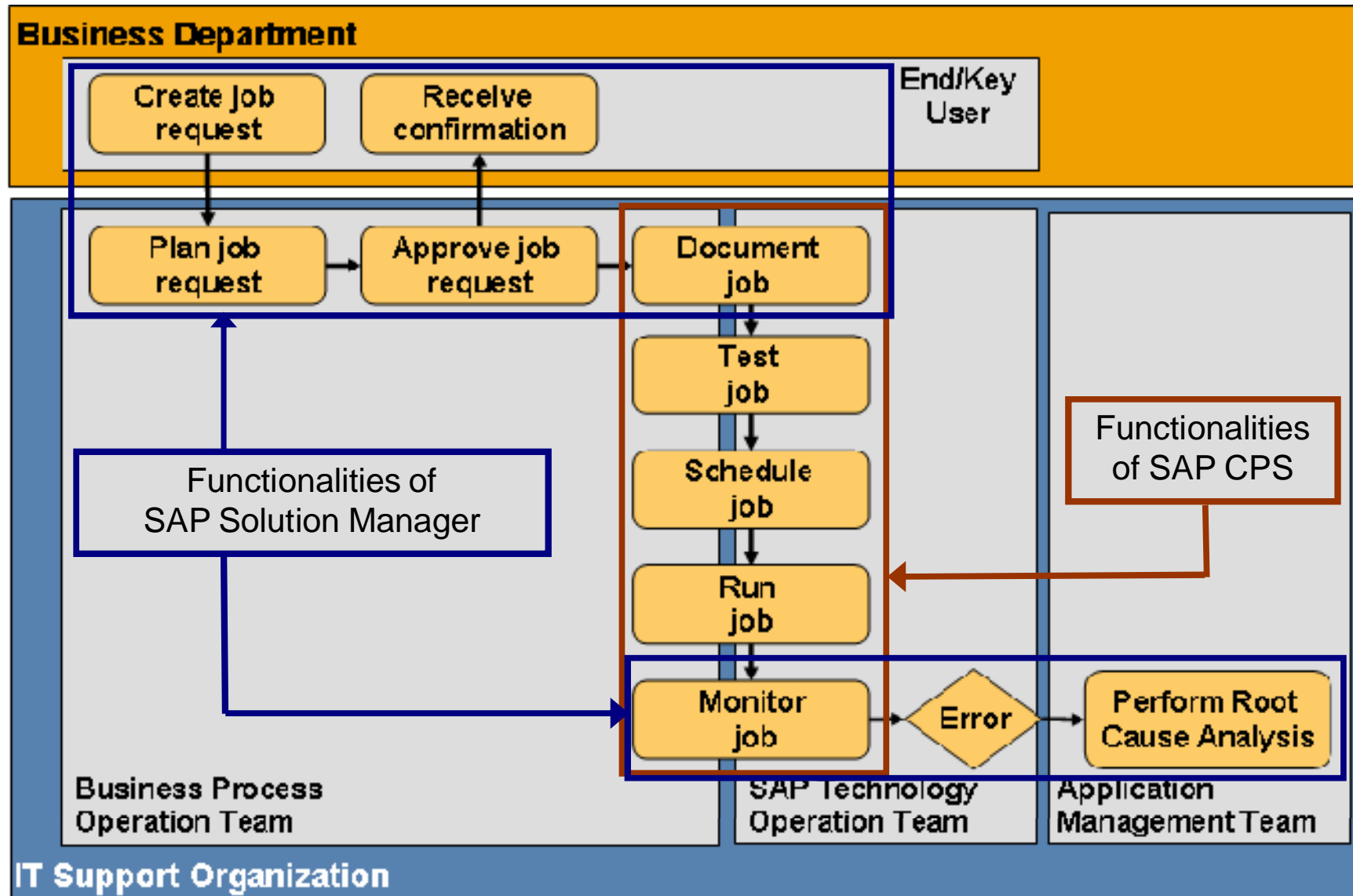
out of BI process chains, Jobs in SAP CPS can be started

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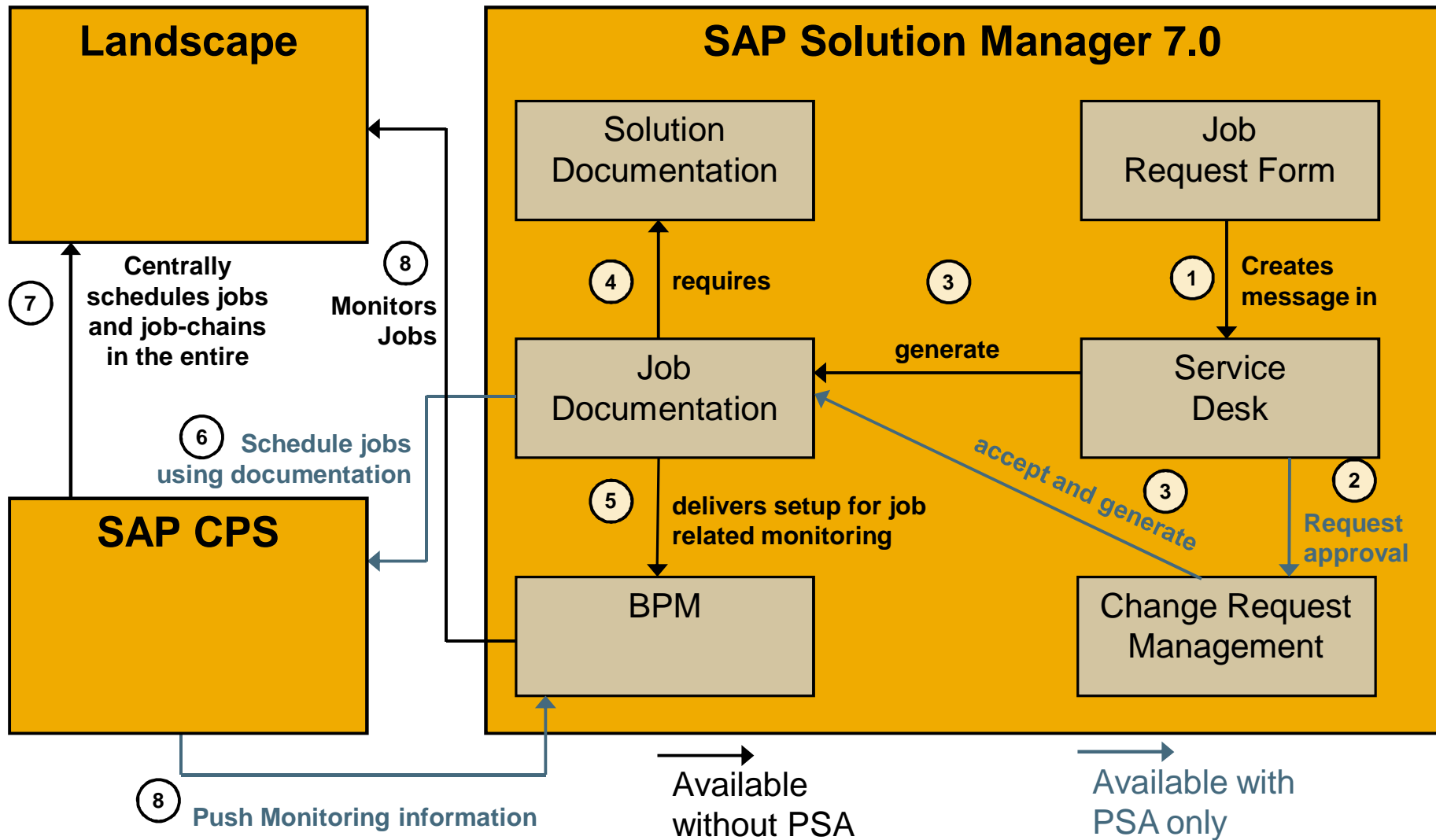


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Lifecycle Management for Background Processes (ITIL and Run SAP)



Integration of SAP CPS with the SAP Solution Manager 7.0 Manager using the Process Scheduling Adapter



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SAP Financial Closing cockpit – Concept of the Application



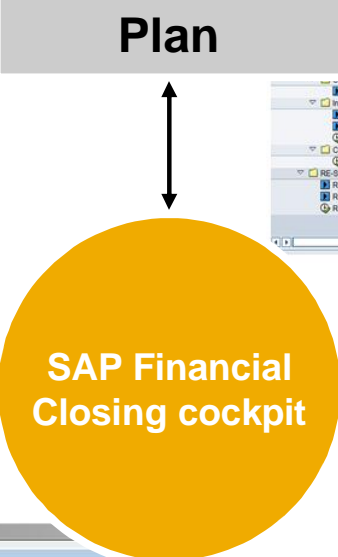
The actual duration of the tasks in a single close can be compared with the planned duration using a BI query and the insight gained used to improve the template for the next close round

Accountant creates template for local close

The template contains all tasks relating to the local close and a default schedule

Close Schedule Analysis

Closing Item	Task Type	Processor	Actual/Plan Start	Planned Duration	Actual Duration	Actual/Plan Duration Deviation	Actual/Plan Duration Deviation
Company 0001	Not assigned	#	04.47.08	05.00.00	1.057.07.13	1.052.07.13	-04.44.08
Accounts Receivable	Not assigned	#	04.47.08	05.00.00	00.14.52	-04.44.08	-04.44.08
Prüfen Debitorenstamm	Transaction	KIND	04.47.23	02.00.00	00.14.45	-01.45.15	-01.45.15
Sperren Stammsatz	Transaction	KIND	04.47.23	01.00.00	00.08.26	-00.51.34	-00.51.34
Accounts Payable	Not assigned	#	03.17.47	01.30.00	00.14.30	-00.45.29	-00.45.29
Kreditoren prüfen	Transaction	#	03.17.47	01.30.00	00.14.30	-00.15.30	-00.15.30
Kreditor sperren	Transaction	#	02.17.59	00.30.00	00.08.01	-00.21.59	-00.21.59
GL Accounting	Not assigned	#	02.17.06	02.30.00	00.15.52	-02.14.08	-02.14.08
Bilanz erstellen	Task	KIND	02.17.06	01.00.00	00.00.19	-00.59.41	-00.59.41
Belege buchen	Transaction	SALMON	01.48.09	02.00.00	00.14.51	-01.45.09	-01.45.09
Asset Accounting	Not assigned	#	00.47.08	01.00.00	00.00.16	-00.59.44	-00.59.44
AtAnrechnen	Task	KIND	00.47.08	01.00.00	00.00.16	-00.59.44	-00.59.44
Company 0001	Not assigned	#	04.47.08	05.00.00	1.057.07.13	1.052.07.13	-04.44.08
Accounts Receivable	Not assigned	#	04.47.08	05.00.00	00.06.00	-01.54.00	-01.54.00
Accounts Payable	Not assigned	#	04.47.08	05.00.00	00.06.00	-01.54.00	-01.54.00
GL Accounting	Not assigned	#	03.17.36	01.30.00	1.056.47.48	1.055.17.48	-00.59.53
Asset Accounting	Not assigned	#	03.17.36	01.30.00	1.054.37.13	1.053.17.13	-00.59.53



Refer. FST_CLOSE2 Display

This screenshot shows the SAP FST_CLOSE2 Display interface. It features a Gantt chart at the top with a timeline from Sunday, 26 Aug 2007 to Monday, 27 Aug 2007. Below the chart, there is a tree view of the organizational structure for "IDES-SALE, Central FI Syst". A task list is displayed at the bottom, including tasks like "Balance Sheet Cash Allocations", "Reverse CO Cycle", and "Reverse FI Accrual".

Closing Cockpit

Month-End Closing Tasks

Task List DEMO_EHP On 27.08.2007

This screenshot shows the SAP Closing Cockpit interface. It displays a task list for "Month-End Closing Tasks" for the date 29.09.2007. The task list includes various tasks such as "Wage and Salary Postings", "Post period related Billing Documents", "Set Billing Indicator for Materials (COPP)", "Standard Cost Estimate", "Financial Accounting Comparative Analysis", "General Ledger - Open Items: Select Documents", "General Ledger - Open Items: Assign Documents", "General Ledger Accounts: Select Documents", "General Ledger Accounts: Assign Documents", and "Last Payment Run".

The status and progress of the local close can be displayed as BI queries that provide real-time access to the close figures

Close Status by Unit

Company code	Task Type	Processor	Task Status
Company 0001	Not assigned	#	Not assigned
Accounts Receivable	Not assigned	#	Not assigned
Prüfen Debitorenstamm	Transaction	KIND	Not assigned
Sperren Stammsatz	Transaction	KIND	Not assigned
Accounts Payable	Not assigned	#	Not assigned
Kreditoren prüfen	Transaction	#	Not assigned
Kreditor sperren	Transaction	#	Not assigned
GL Accounting	Not assigned	#	Not assigned
Bilanz erstellen	Task	KIND	Not assigned
Belege buchen	Transaction	SALMON	Not assigned
Asset Accounting	Not assigned	#	Not assigned
AtAnrechnen	Task	KIND	Not assigned
Company 0001	Not assigned	#	Not assigned
Accounts Receivable	Not assigned	#	Not assigned
Accounts Payable	Not assigned	#	Not assigned
GL Accounting	Not assigned	#	Not assigned
Asset Accounting	Not assigned	#	Not assigned

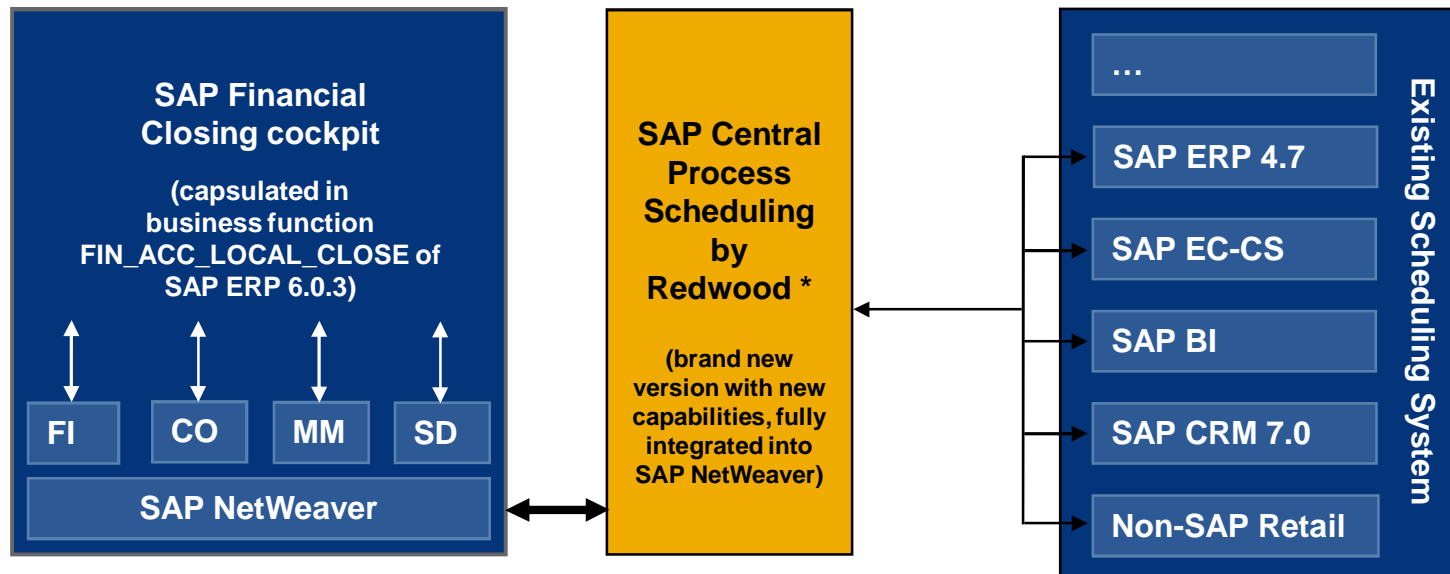
The task list can be accessed by all stakeholders, either via SAP GUI or Web UI application

New authorization object has been created to control template and task related activities

SAP Financial Closing cockpit – A Look under the Hood



Scheduling and Monitoring in heterogeneous IT landscapes



* SAP Central Process Scheduling by Redwood is required for:

Cross-system

Cross-client

Real-time status of remote chains

remote chains

Event-based scheduling

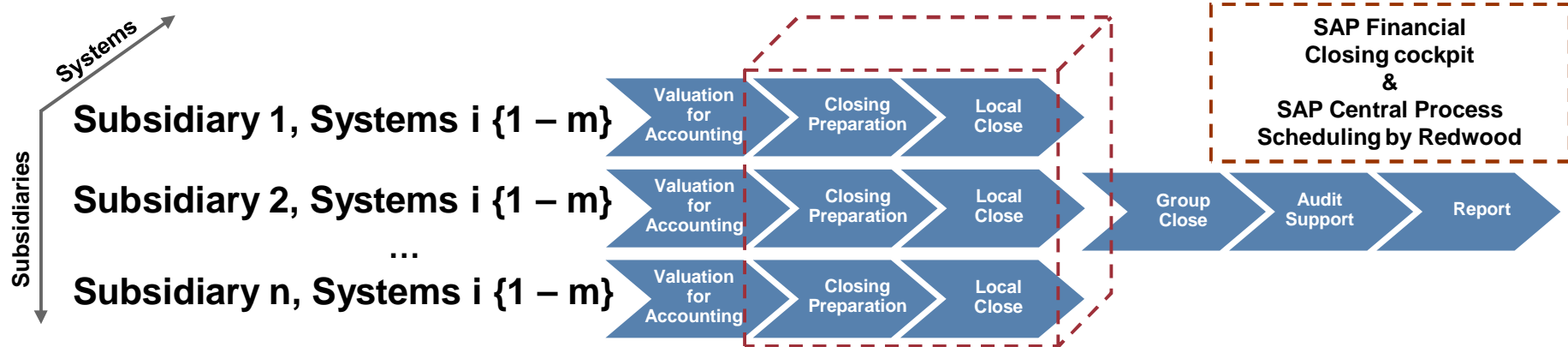
Parallel processing

Statistics and benchmarks

benchmarks



SAP Financial Closing cockpit – Mixed IT Environments enabled by SAP CPS



Together with SAP Central Process Scheduling by Redwood the
SAP Financial Closing cockpit can manage processes across the Enterprise –

Including SAP and non-SAP systems

- Enables enterprise-wide control and monitoring of closing cycle processes
- Reduces latency between dependent processes and data sources
- Increases automation and reduces error-prone manual processes
- Provides more reliability and integrity of results
- Documents process flows for auditing and compliance

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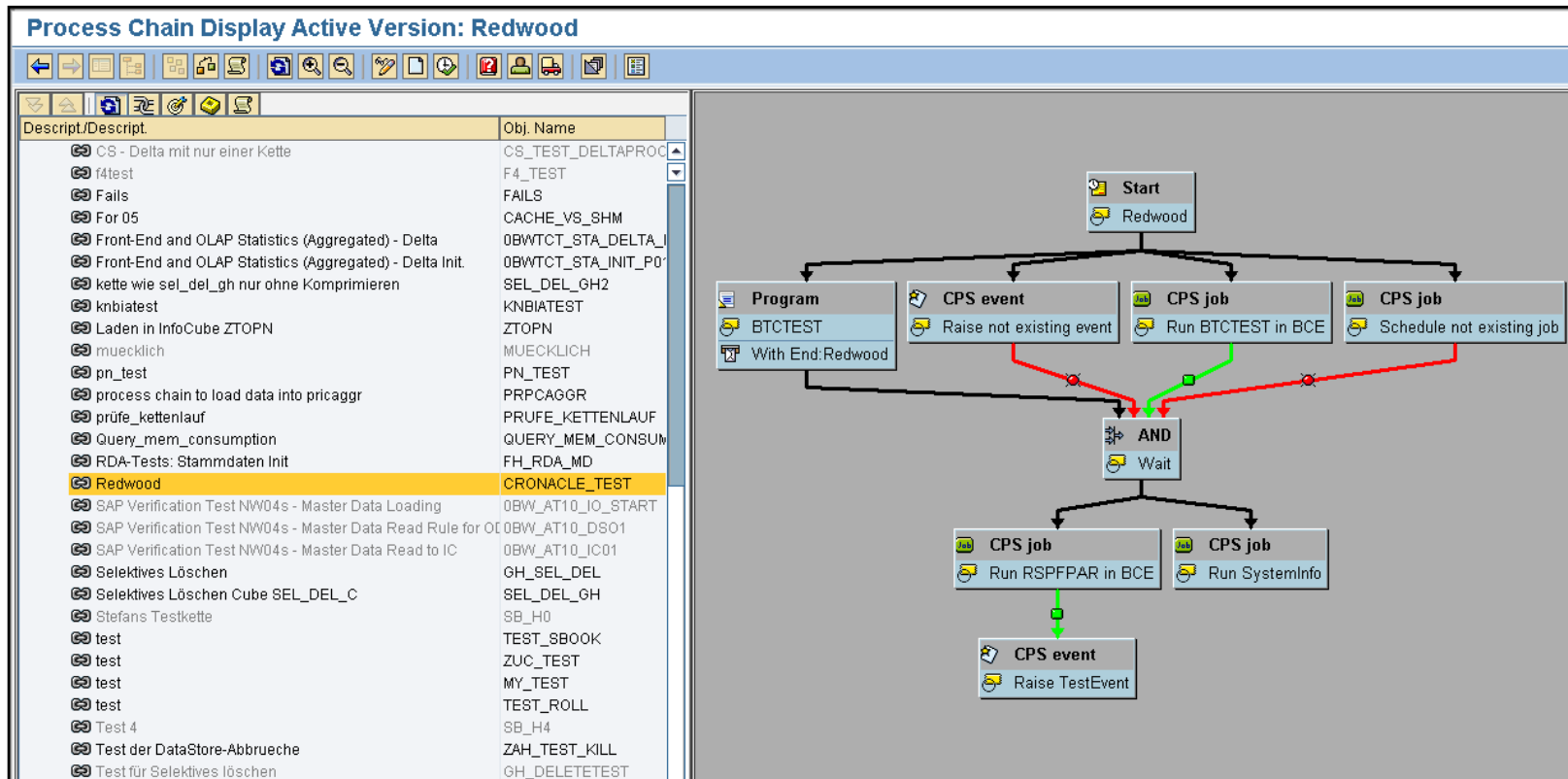


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Integration into Process chains of SAP NetWeaver BW



- A Job, that is managed by SAP CPS can be part of a SAP NetWeaver BW process chain
- Example: SAP CPS transfers a file via FTP within a process chain.
- A SAP CPS-Event can also be triggered within a BW process chain to start the appropriate actions in SAP CPS.
- The Job-Status is delivered back to NetWeaver BW by SAP Central Process Scheduling.



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■ Is SAP Central Process Scheduling a replacement for the transactions SM36/SM37?

SAP Central Process Scheduling enables you to plan and monitor processes centrally and more comfortably, but it will not replace the two transactions SM36 and SM37. These transactions will remain active and still enable you to plan jobs locally, if this matches your business needs. SM36 and SM37 will, however, not be developed further by SAP and will be put into maintenance status.

Summary



- SAP Central Process Scheduling by Redwood is a fully integrated core component of the SAP NetWeaver platform.
- It plays a strategic role in SAP's Application development.
- It will change the SAP IT process automation world.
- For more information, please see:
 - SAP Developer Network
<https://www.sdn.sap.com/irj/sdn/nw-scheduling>
 - eMail
SAPCPS@sap.com





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