



Public

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Metals – Industry Characteristics & Trends

Increasing customer demands, decreasing margins and global operations are driving the need for innovation

Demanding Customers



- In-time delivery is key
- Frequent order changes on short notice
- Dealing with commodity products

Narrow Margins



- Rising energy costs
- Volatile prices energy (coal, gas, etc.)
- Very asset intensive industry
- **Overcapacities**

Intensified Innovation



- 'Green' Products required
- High quality standards
- Constant research for innovative products is necessary

Global **Operations**



- Many mergers and acquisitions
- Increasing global activities
- Lack of visibility into supply chain
- Disparate IT landscape

Increased Risk & Regulation



- Financial regulations increase
- Global trade increases
- Environmental regulations increase

Information **Technology**



- Sales of smart phones higher than PCs and mobile turns into primary method of internet access
- Data volume for enterprise applications is doubling every 18 months

SAP portfolio: next-generation technology for business

Mobile



Unwire your business to deliver secure, real-time, business-critical information – anytime, anywhere, to anyone, on any mobile device.

Cloud



Capture the power of the cloud – while fully integrating with on-premise investments. Empower your employees, engage customers, and collaborate with partners across business networks.

Applications



Run your business smarter, faster, and simpler, with an integrated suite of applications powered by SAP HANA – delivering long-term predictability and nondisruptive innovation.

Analytics



Explore and exploit data, find answers in real time, and make confident decisions. Harness visually compelling, easy-to-use tools on the devices of your choice.

Database & Technology



Simplify your IT infrastructure dramatically and drive high-value innovation by exploiting across structured and unstructured data sources.

A real-time business platform, powered by SAP HANA

2014 Value Map for Mill Products

Differentiate in Commodity Markets

SAP Solution Explorer

Profit-Driven Supply Chain Integrated Business Planning Supply Chain Planning Inventory Visibility and Order Promising Transportation and Warehouse Management Supply Chain Monitoring Commodity Management

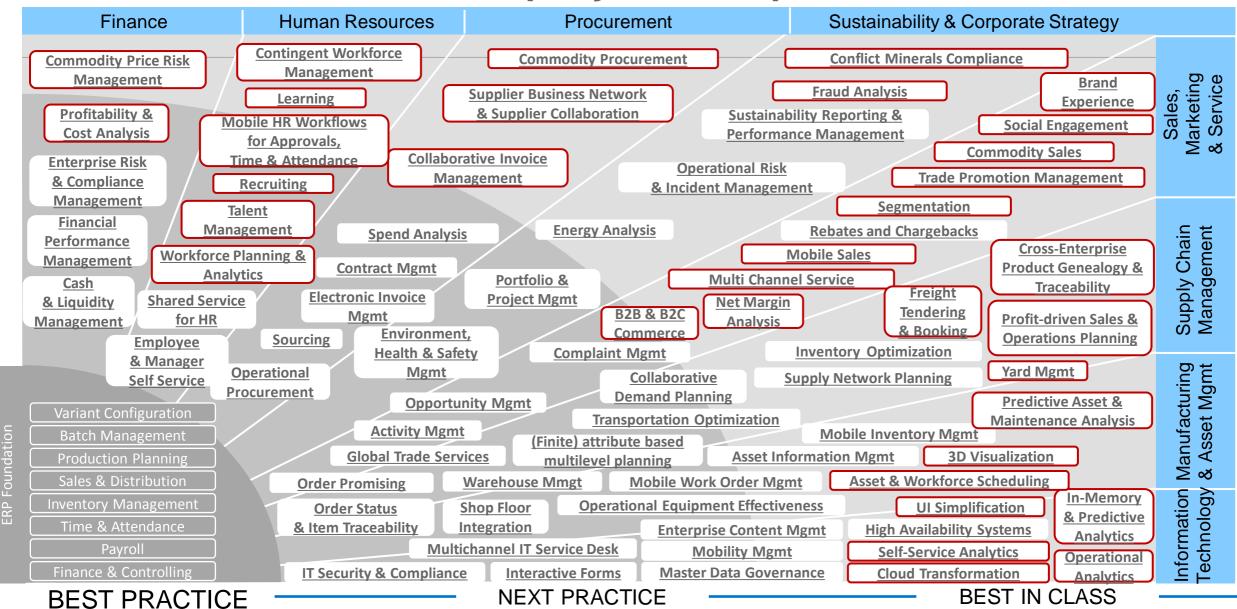




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	Application Integration	Cloud Solutions			

Best Run Mill Products Company Roadmap

Highlighed in red: Recent Innovations



2014 Value Map for Mill Products

Differentiate in Commodity Markets

SAP Solution Explorer

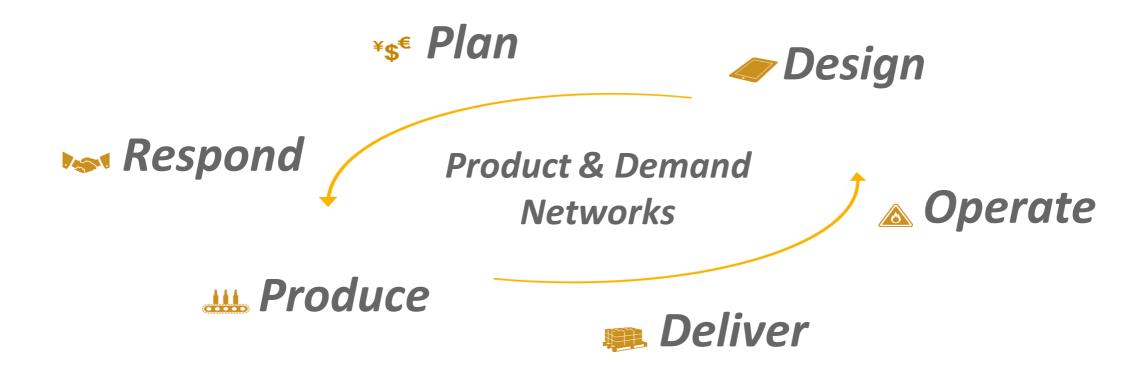






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	Application Integration	Cloud Solutions			

Supply chains are evolving from supply chain silos to product & demand networks



SAP Supply Chain Solution Vision

Enable Businesses to Transform their Supply Chains to Demand Networks



Supply Chain Monitoring

Ensure integrity and predict issues of the DEMAND NETWORK



Integrated Business Planning

Balance DEMAND plans with NETWORK constraints for profitability



Demand Driven Supply Networks

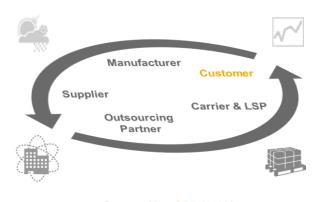
Sense & shape DEMAND and orchestrate the fulfillment NETWORK



Logistics & Order Fulfillment

The DEMAND NETWORK requires speed & efficiency in Logistics

[THE DEMAND NETWORK]



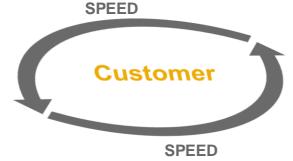
Powered by SAP HANA

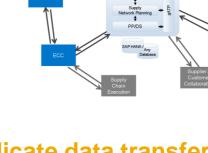
Why a new solution for supply chain planning is needed?

Complex and granular data models encumbers 'what if' analyses



need for speed





Supply chain planning

many interfaces

systems in the market tend

to be fragmented requiring

SAP APO

Disconnect between planning and execution system

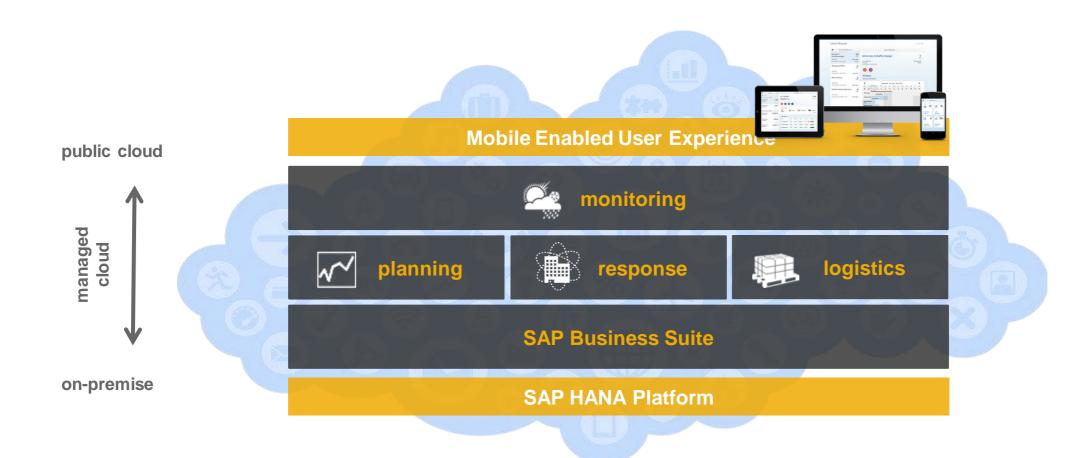


Duplicate data transfers between planning and analytics systems encumbers performance



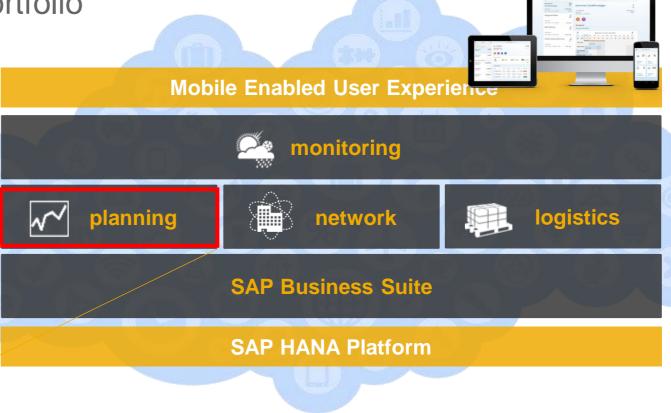
SAP Supply Chain Architecture Sketch

Simplified and Harmonized Solution Architecture for Demand Networks



SAP Integrated Business Planning

Cornerstone of the SAP SCM Portfolio



Supply Chain Monitoring
Supply Chain Control Tower

Integrated Business Planning (IBP)
User Experience
IBP for sales & operations
IBP for demand
IBP for supply
IBP for inventory
IBP for response
SAP HANA Platform

A R I B A° **SAP Business Network**

SAP Integrated Business Planning for sales and operations*

Deliver a cross departmental sales & operations plan balancing the impact on inventory, service levels and profitability

- Create the optimal business plan to drive revenue growth and increase market share
- Effectively balance demand and supply and attain financial targets
- Increase speed and agility of planning and drive most profitable responses
- Improve forecast accuracy and on-time delivery

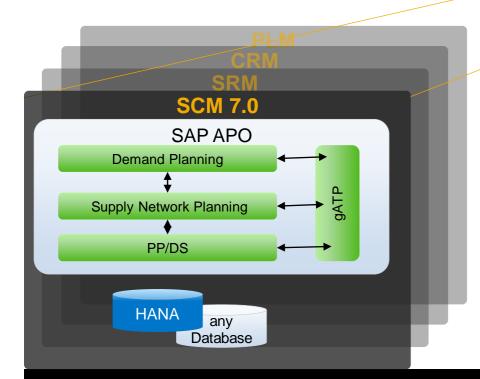


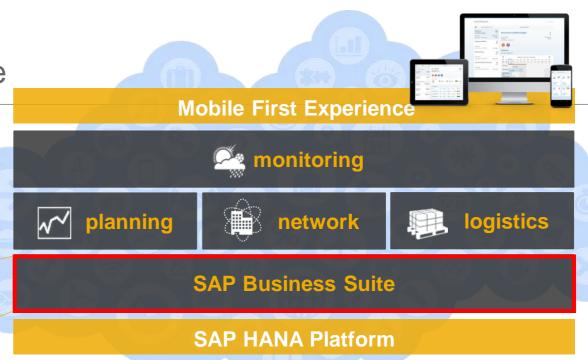
^{*} Also available as on premise release. Cloud-based S&OP is recommended by SAP. See SAP 1938086 for gaps but also general limitations in more detail.

Supply Chain Monitoring **Integrated Business Planning (IBP)** IBP for sales & operations IBP for demand IBP for supply IBP for inventory IBP for response

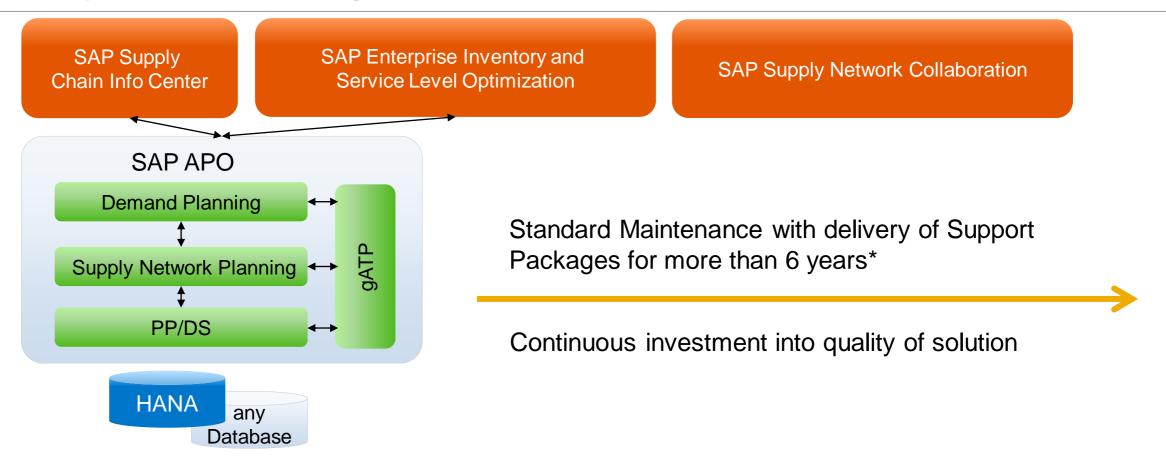
SAP Supply Chain Architecture

SAP SCM as part of SAP Business Suite



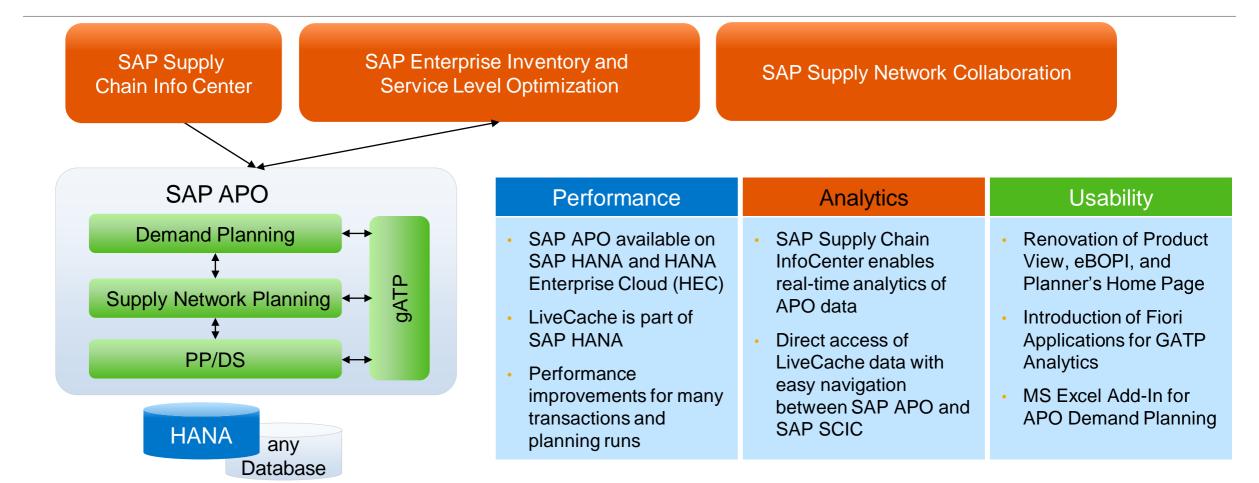


SAP APO and EIS and SNC remain a key part of the standard SAP **Supply Chain offering**



*SAP APO is part of the SAP Business Suite and inherits the planned maintenance timeframes. Currently confirmed timeline for end of maintenance is 2020. Discussions about extension of standard maintenance timeline is on-going

SAP APO Has Been Significantly Enhanced Recently

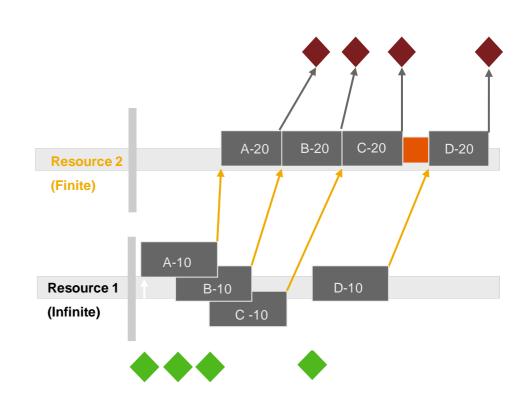


Manufacturing Planning & Scheduling with APO-PPDS



Generate a short- to midterm supply plan / machine schedule based on orders, WIP, detailed Material flow definitions

- Support for finite backward- and forward-scheduling models with constraint-modeling capabilities
- Creates a production schedule considering all capacity constraints (at multiple levels) and materials availability
- Optimization based on actual constraints to ensure reliable delivery-due-date promises and to maximize capacity utilization
- Highly specific sequencing capability (for example, tank mixing and scheduling, model mix planning & sequencing)
- Seamlessly integrates with ATP for CTP scenarios



SAP APO as ERP Add-On

AVAILABLE*

A new Deployment Option for SAP APO

Key Facts

- > Installation on ERP EhP6 SP >= 5 or ERP EhP7
- Functional Scope is SAP APO DP, SNP, PP/DS and gATP
- Current Add-on does not support IPPE, MSP, SSP, planning with CDP/VC/Batches,
- Support of CDP/VC/Batches support is planned for Q1'2015 SP*

Value Proposition

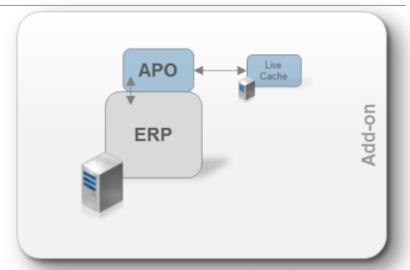
SAP APO at reduces TCO (Total Cost of ownership)

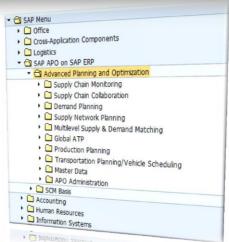
Simplified System Landscape

Reduced Operation efforts for DB/OS/Backup/Basis

Install SAP APO as ERP Add-on

Uses proven Middleware Approach (CIF)



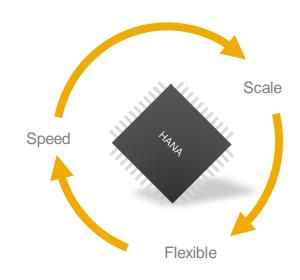


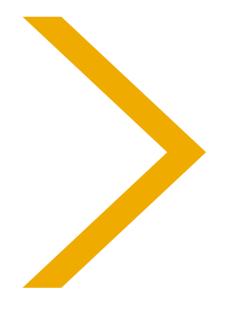
^{*}Current version of add-on does not support IPPE, MSP, SSP, planning with CDP/VC/Batches

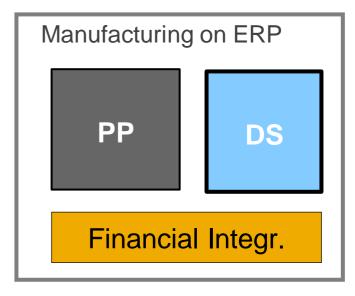
Future plans on APO-PPDS

Planned

Increase Flexibility and Speed of Production Processes







Benefits

- Simplification
- Production planning on ERP reduced latency to execution information
- More flexible manufacturing simulation between shop floor and planning

Comprehensive Plan to Produce in ONE System

Planned

Sales Order Entry

MRP Run + Constrained Planning

Interactive Planning

Release to Production

Production Execution

Monitor and Control



Production Planner



Production Supervisor



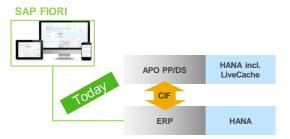
Production Worker

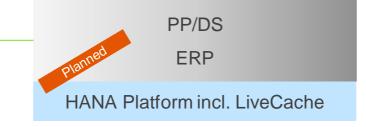


Production Planner



SAP FIORI





Planned Improvements:

- UI Harmonization
- CIF Simplification
- Master Data Harmonization
- Analytics

Benefits

E2E process in ONE system

Complete Integration from Sales order via Constrained Based Planning, Shop Floor **Dispatching and Monitoring to Order Confirmation**

Full APO-PP/DS functionality on ERP with highly reduced system / administration complexity on one ERP instance:

- Reduced landscape complexity & HW infrastructure
- ONE database with simplified administration (live cache being part of Hana)
- Cost reduction in technical operations: OS/DB/basis stack, backup, monitoring
- PP/DS improvements are planned for a more seamless integration with ERP:

Less effort for master data setup and maintenance

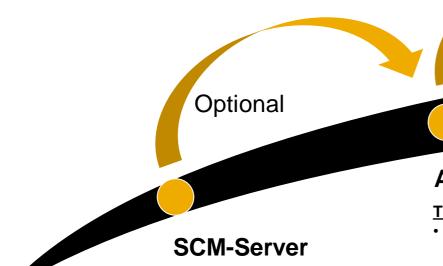
- Less monitoring effort enabled by synchronous data updates on ERP and Live-Cache
- Single point of entry for all planning relevant data and navigation to corresponding execution transactions
- Analytical content combining APO and ERP data with harmonized data models accessible in real time

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SAP Manufacturing Planning & Scheduling

Simplification Roadmap

Future ideas for simplification / improvements



APO-Addon on ERP

Optional

TCO-Reduction

- Simplified Landscape, reduced TCO
- Less DB/OS/Backup/Basis Operations
- HANA deployment option available

APO/PPDS in ERP on HANA

Application Simplification

- UI- / Process Harmonization
 - MRP-Cockpit for ERP / APO focusing on material flow based on ERP model
 - Capacity-cockpit focusing on APO data model
 - One MRP
- CIF Simplification one-click integration activation und more synchronous data updates
- Master Data Harmonization One Material master / source of Supply
- · Analytics with predelivered analytical content across ERP / APO

Standard deployment on

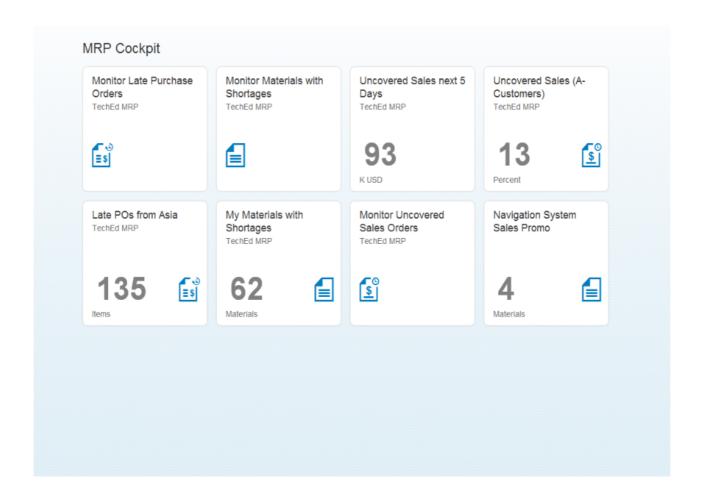
separate Server:

APO-PPDS

 HANA deployment option available

MRP Cockpit – Using SAP Fiori and HANA

Insight to Action



SAP Smart Business cockpits available today

RESPONSIVE

PERSONALIZED

SEAMLESS

BEAUTIFUL

My Team's Projects - Today
Project Status

Critical 4
Warning 1
Good 7

SAP Smart Business for project execution

Slow-Moving Item
Current Costs

13.93_B

EUR

SAP Smart Business for inventory management

Sales Order Fulfillment Issue

Profit Hold - Max Amount

. 103.4 k

EUR

SAP Smart Business for sales order fulfillment

Off-Contract Spend

Off Contract Spend in Equipment

36.5%

SAP Smart Business for purchasing

Liquidity Forecast

Forecast In 7 Days (USD)



Fri Jan 24 2... Thu Jan 30 ...

SAP Smart Business for cash management My Materials with Shortages
TechEd MRP

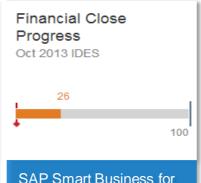
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Materials

SAP Smart Business for material requirements planning







financial close





2014 Value Map for Mill Products

Differentiate in Commodity Markets

SAP Solution Explorer

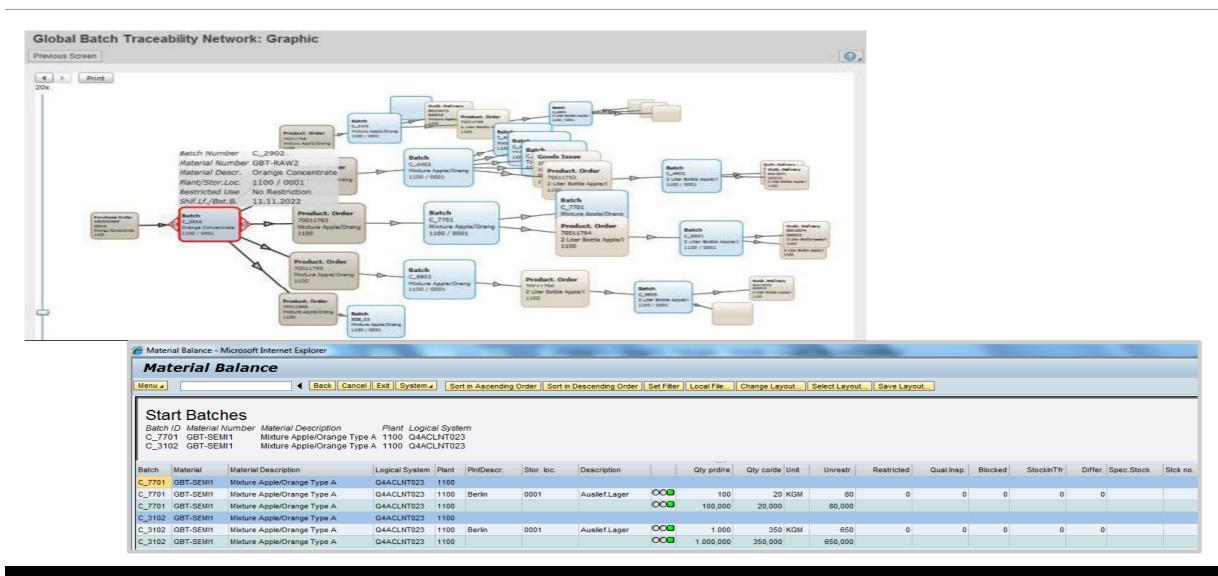




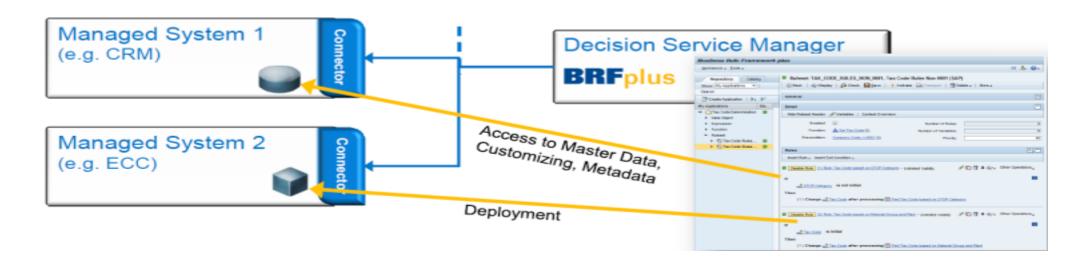


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Global Batch Traceability - Genealogy & Stock Overview



SAP Decision Service Management (DSM)



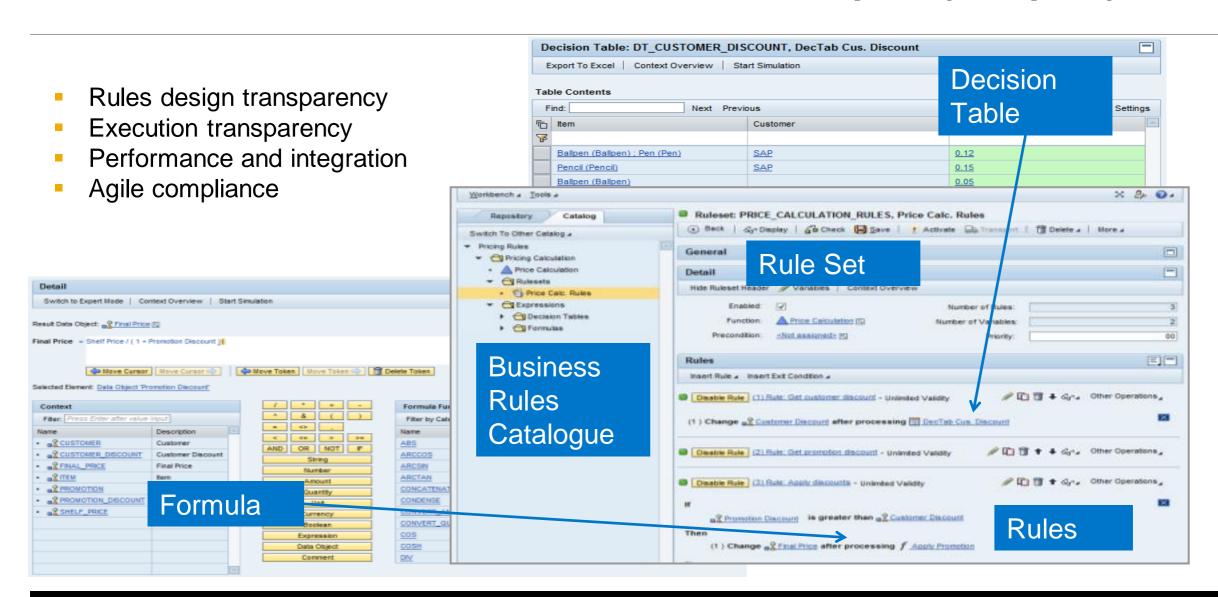
Superior Technology

- Decision Service Manager provides access to metadata, code and values (master data, customizing) of ECC or CRM for "local" modeling
- From the modeled service, Decision Service Manager compiles an executable service on the Managed System for local execution
- The managed system does not require upgrades (or Support Packages); Decision Service Manager can be upgraded independently

Immediate Business Value / ROI

- Rapid change cycles of business rules in the hand of the domain experts
- Analyze, Optimize, Implement; service execution testing, tracing, analytics
- No IT involvement, no downtime, planned service availability, test deployments to any number of systems
- Automated business decisions with full transparency for better decision quality

SAP DSM contains Business Rule Framework plus (BRFplus)



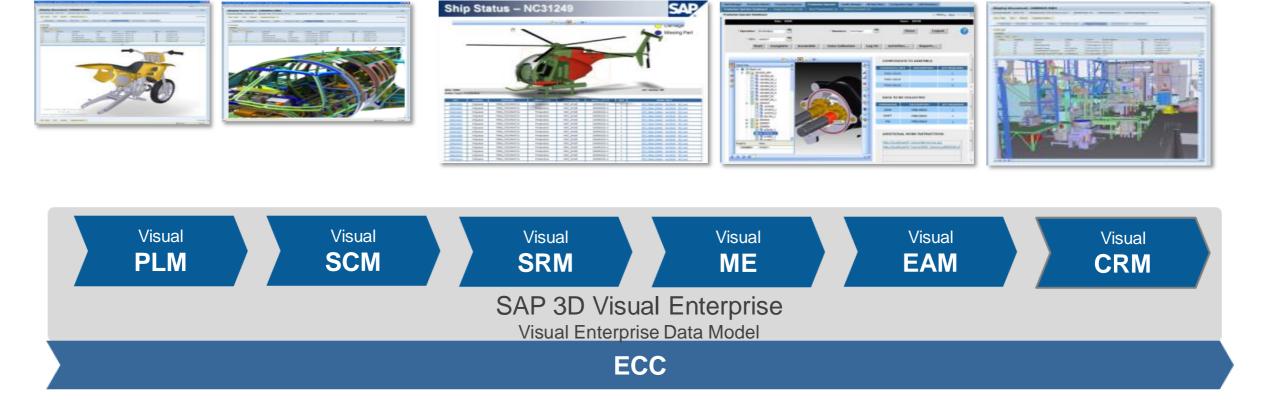
SAP 3D Visual Enterprise

Visual

Product Navigation

Visual

Development



Visual

Manufacturing

Visual

Analytics

Visual

Operations

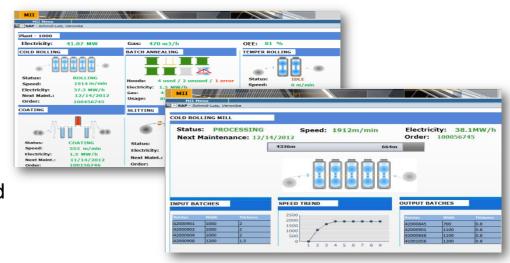
SAP Manufacturing Integration and Intelligence (SAP MII)

SAP MII - What is it?

 Extensible manufacturing platform allowing rapid adaption to any manufacturing process

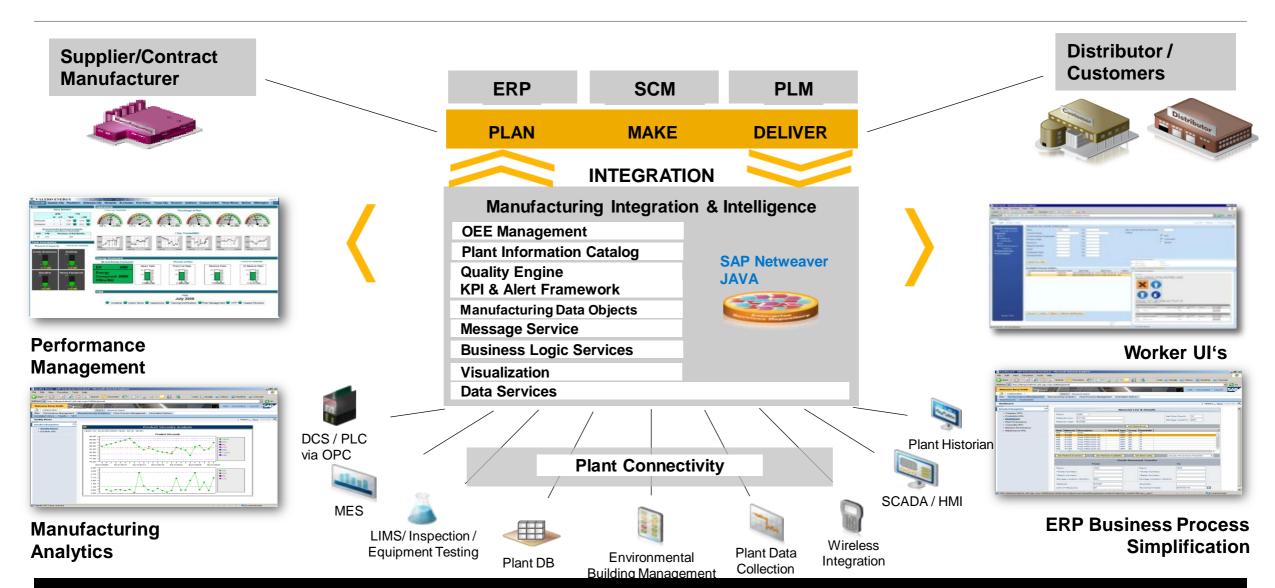
SAP MII – Main Differentiators

- Integration: Provide interoperability (in)between Shop Floor solutions and enterprise ERP (PP, PM, MM, QM)
- Intelligence: Visualize data from any of above sources to provide KPIs.
 Provide simple and efficient local User Interface and Dashboards
- Innovation: Powerful SOA-enabled business logic to cover for customer specific processes around Planning, Execution, Maintenance and Quality now including versioning of any Content
- Allows Fast prototyping to achieve fast ROI
- Broad and extensive Partner Network
- Applicable to all Manufacturing Industries and Utilities





SAP Manufacturing Integration and Intelligence (SAP MII)



News in SAP MII

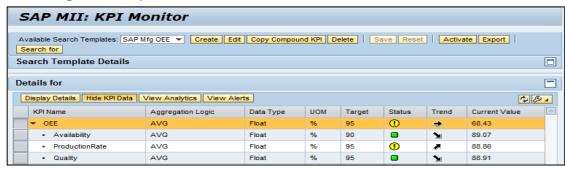
Plant Information Catalog

 Pre-defined data elements, which can be organized for example hierarchically

Could reflect tags, equipment, process steps, etc.

Plant Performance Management Framework

- New KPI manager for plant metrics
- Definition of KPI calculations, thresholds, and charts
- Calculation of aggregated KPI values
- Running history of calculated KPI values







Our solutions for Environment, Health and Safety

Overview

Proactively managing operational risks to run safer and more efficiently

Solution highlights

- Incident management:
 - Manage and learn from incidents and safety observations to build a proactive safety culture
- EHS compliance and risk management:
 - Identify operational risks and hazards; implement effective controls; develop and execute required occupational health, safety and environmental programs
- Emissions and waste management:
 - Manage air, water and waste emissions for voluntary or regulatory disclosure.
- Management of change:
 - Reduce risks caused by operational changes using risk assessment and approval processes
- Maintenance safety and permit to work:
 - Safely manage maintenance work by using safety plans and work permit systems, including LO/TO isolation processes



Ongoing investment: EHS environment, health and safety innovations and roadmap – 5 releases in 3.5 years

Component extension	RTC*	Significant New Functionality
1.0	Dec 2010	Incident Management
2.0	Oct 2011	 Risk assessment 4 types (safety, health, environment, JHA) - risks, hazards, controls, configurable risk matrix IH amounts and OEL comparison
3.0 3.03	Aug 2012 Apr 2013	 Similar Exposure Groups, Personal Exposure Profile Risk-based Health Surveillance Proposal with integration to OH or 3rd party
4.0	Jul 2013	 Risk-based controls inspections Chemical health and safety processes SDS approval, Hazcom, HazMat Inventory
5.0 5.0x	May 2014 3Q planned	 Role-based homepages, Fiori apps, chem h&s (continued) Measurement management
6.0	2015 planned	Emissions, calculations, and reports

^{*}RTC is Released to Customer (General Availability is typically 6 months later)

Component Extension 5.0 for SAP EHS Management

Health, Safety and Environment related enhancements

Risk Assessment incl. Managing chemicals for H&S processes:

- Homepages Easy Worklist, Services
- Chemical Advanced Search Extract Chemical Data
- Risk Assessment Improved Exposure Analysis
- Chemical Approval Enhanced Exposure information during approval
- Chemical Dialog Better Usability to enter values/ranges with units

FIORI Applications (delivered with FIORI Wave 4):

- Inspect Safety Controls
- Retrieve Safety Information

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SAP Solution Explorer



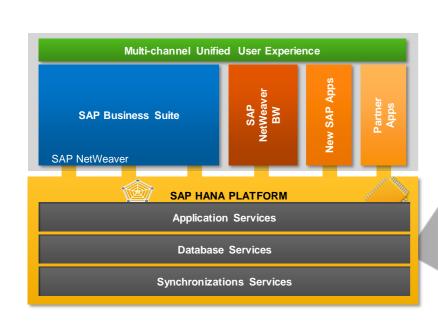




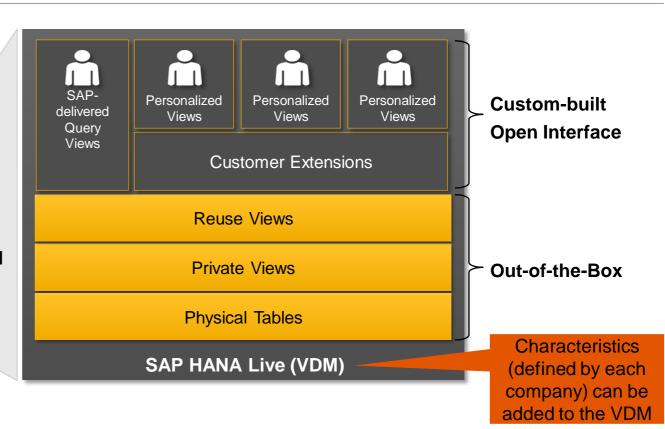
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SAP HANA Live – HANA based Analytics

Unified view of business processes across organizational functions



Operational Reporting





Instantaneous transactions - results-to-actions



Unified view of operations without delay

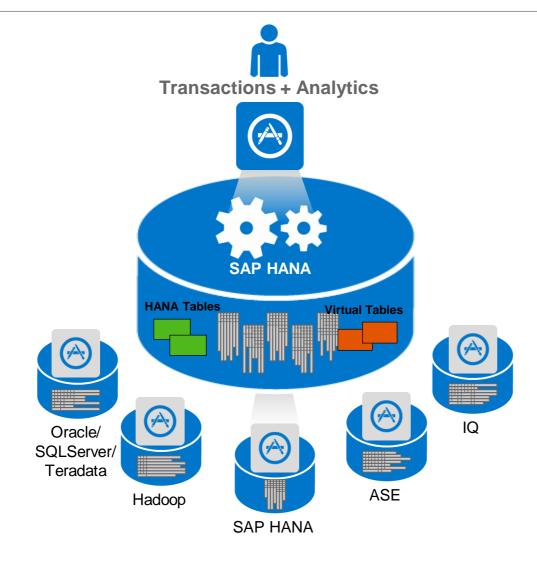


Empowerment for front-line employees

^{*} SAP HANA Live is a separate package for SAP Business Suite

SAP HANA Smart Data Access

Data virtualization for on-premise and hybrid cloud environments



Benefits

- Enables access to remote data access just like "local" table
- Smart query processing including query decomposition with predicate push-down, functional compensation
- Supports data location agnostic development
- No special syntax to access heterogeneous data sources

Heterogeneous data sources

- Hadoop (Hive)
- HANA
- Teradata
- Oracle
- Microsoft SQLServer
- SAP Sybase IQ
- SAP Sybase ASE

Innovation at SAP

Three channels for customer influence

Improvement

Today's Solution

Customer Connection

Improvements

Innovation

Planned Solution

Customer Engagement Initiative

Next Products and Solutions

Vision

Future Direction

Advisory Councils / 1:1 Co-Innovation

Strategic Concepts

Find more information about the programs at http://service.sap.com/influence

Customer Engagement Initiative (CEI)

Three steps to engage in a collaborative environment







Review projects & register

2 Join initial call around project

3 Collaborate continuously



Find projects to join at:

https://influence.sap.com

2014-3 Cycle (Oct 6th - Oct 31st) 2014-03 CEI topic list

Examples

- APO on ERP: CIF Enhancements
- · Compose a powerful and compelling story using Lumira
- Measure your Supply Chain Performance with Supply Chain Control Tower
- New SAP Fiori User Interfaces for Returns Management in Sales and Distribution
- Next Generation Manufacturing Solutions / Trends in manufacturing
- Optimizing analytical tools to address Big Data use cases
- Predictive Analytics tools & accelerators
- Process Safety Management
- · Real Time Close- Close step real time enablement
- Smart Close
- Use Cases for 3D Spatial Analytics in Lumira and Design Studio
- Visual Enterprise and Asset Management

• ...

Steps to take

Contact

cei@sap.com for more information

Review the list of projects

Participate
in the full development cycle

Key links for more information

SAP Service Marketplace General information

- SAP Roadmaps
- SAP Improvements & Innovations
- SAP's Release Strategy
- SAP Rapid Deployment Solutions



Mill Products Info

- Solution Explorer and Value Map for Mill Products
- Mill Products on www.sap.com
- Metals on www.sap.com

Mill Products User Groups

- ASUG Special Interest Group Mill Products
- DSAG Workgroup Mill Products
- SAP Configuration Workgroup

Join the SAP Mill Products & Mining Community





http://scn.sap.com/community/mining-and-mill-products





http://www.linkedin.com/groups/SAP-Mill-Products-Mining-Group-4532949





http://www.facebook.com/SAPMillProductsandMining







http://twitter.com/SAPMillMining @SAPMillMining



Thank you

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