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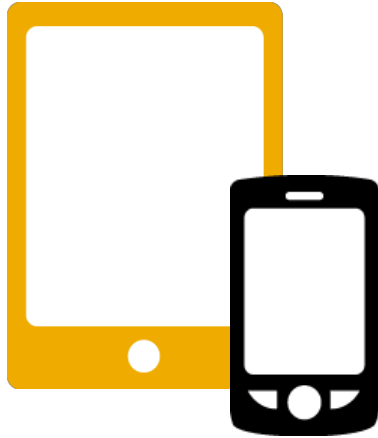


Product Overview

- Key trends and customer needs
- Product description
- Road map overview and major product updates
- Extras & Summary

SAP Gateway

Key trends and impacts in business and technology



Supporting end-to-end scenarios

New devices and experiences

Consumer innovations in the enterprise



Growing new communities of agile developers

Expansion of business data and decision makers



Simple access to complex enterprise systems

Manage and control mission critical systems AND deploy innovative solutions

SAP Gateway + Integration Gateway

Product description

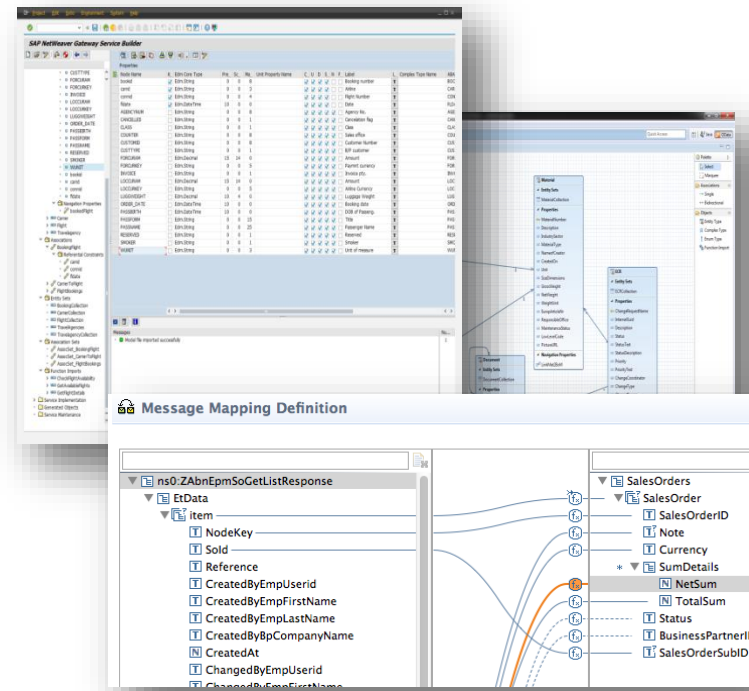
SAP Gateway (formerly SAP NetWeaver Gateway) and Integration Gateway (which is a JAVA-based implementation of the SAP Gateway Server capabilities) are providing a simple way to access SAP and non-SAP Systems for user-centric scenarios to connect devices, environments and platforms based on open market standards on several technologies (ABAP + JAVA). They offer connectivity to SAP applications and non-SAP applications using any front-end programming language or model without the need for SAP knowledge by leveraging the REST based OData protocols (Atom / JSON).

Key capabilities

- Code-free **generation** of services based on RFC, BAPI, BOR, BOL, MDX, SAP HANA, OData, ABAP, BOPF, SADL, SPI etc.
- Manual **development** of new services using the ABAP Workbench
- Error logging, serialization, traces, code snippets
- Pushing of backend events
- Harmonized task representation as a basis for an unified inbox (SAP BPM, SAP Business Workflow, 3rd Party)
- Integration Gateway provides access to SOAP, JPA, JDBC for OData enablement

Benefits

- Development of innovative people-centric solutions bringing the power of SAP business software into new experiences such as social and collaboration environments, mobile and tablet devices

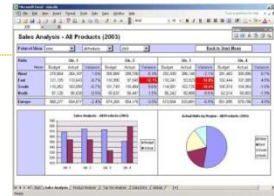


SAP Gateway

Why do we face such challenges?

11:30 am

Update budget via Excel 2013



12:00 pm

Approve team member's leave request workflow using Win 8 native app



10:00 am

Review sales pipeline via a tablet



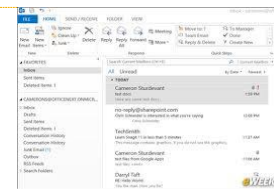
12:30 pm

Conduct online meeting with customer using Lync 2013 & record it as CRM activity



8:30 am

Schedule CRM appointment via Outlook 2013



3:00 pm

Employee portal built using HTML 5



7:30 am

Check workflows on mobile device



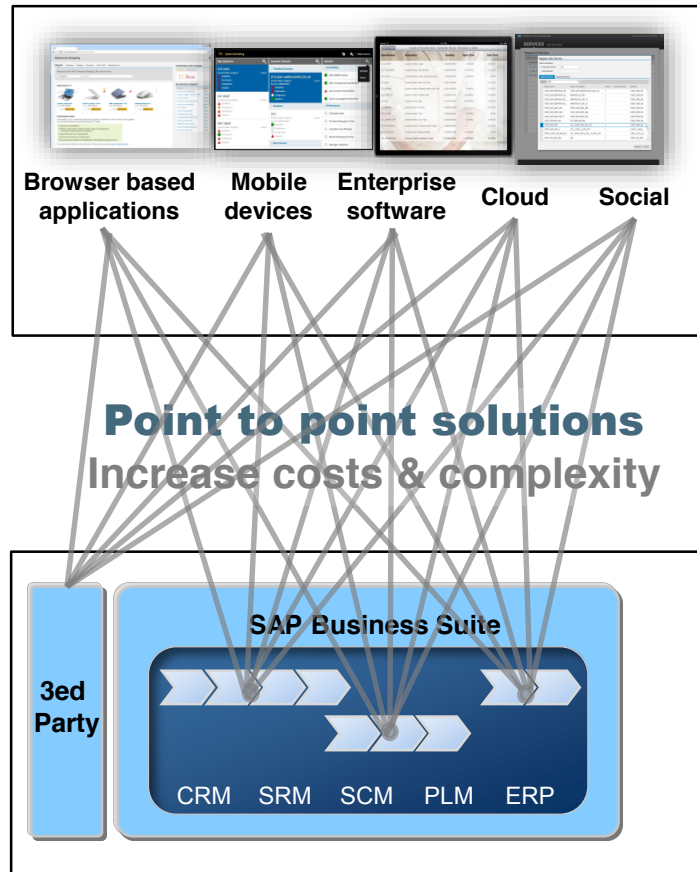
5:30 pm

Record timesheet in SAP via Outlook Web (part of Office 365)



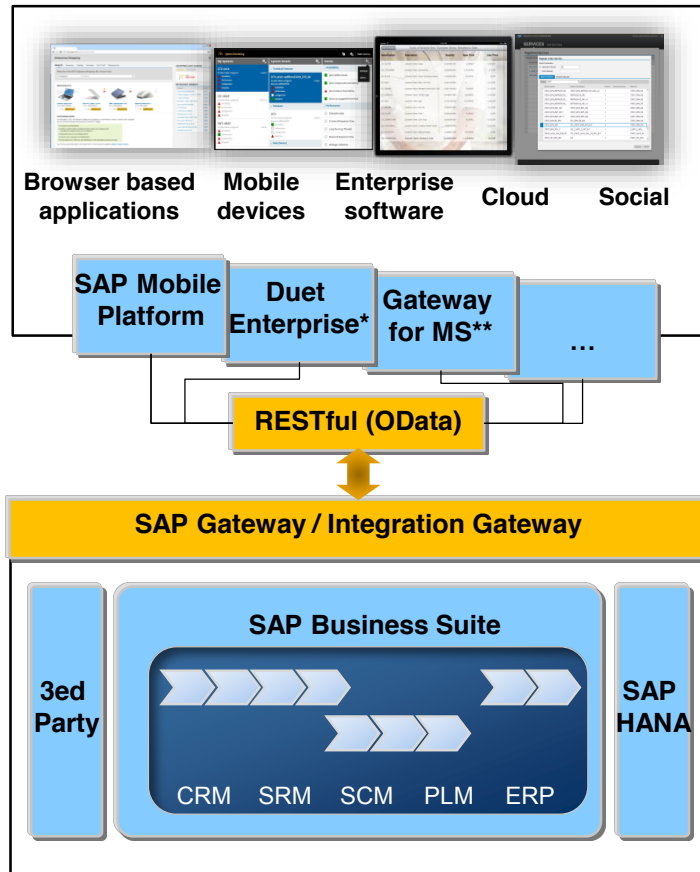
SAP Gateway

Customer needs and the value propositions of the product



SAP Gateway

Customer needs and the value propositions of the product



From black box to open

- Any environment, any platform, any experience

From business-process centric to people centric

- Optimized for user interaction scenarios

From version specific to timeless

- Non-disruptive, any SAP Business Suite version

From SAP developers to non-SAP developers

- No SAP knowledge required

* Duet Enterprise for Microsoft SharePoint Integration

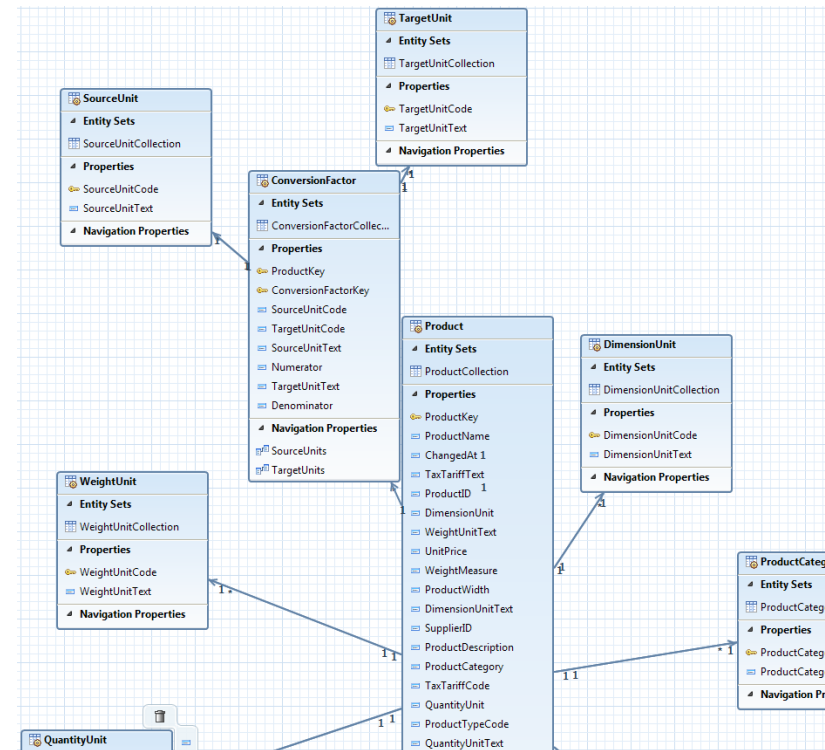
** SAP Gateway for Microsoft (Excel, Outlook) [previously called SAP Gateway productivity accelerator for Microsoft]

SAP Gateway

OData - “ODBC” for the web

OData can be used to access table like structures much the same way ODBC does

- Based on industry standards
 - HTTP, XML, Atom, JSON
 - REST-based architecture
- Entity Data Model (EDM) to describe OData services
- EDM modeling tools available to model OData services
- Each entity can support query, create, read, update, and delete (CRUDQ) operations
- Can navigate relationships
- Complex types supported
- Query language included
- More at www.odata.org
- OData as an OASIS standard*



*See the appendix on OData for details

*) https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=odata

Main usage scenarios

SAP Gateway and Integration Gateway

	B2E	B2B	B2C	
	Business to Employee	Business to Employee	Business to Business	External B2C
Intranet?	Internal	External	External	External
Scenario	Employees working inside the intranet on their daily tasks	Employees travelling or outside of the Intranet	External users participating in business processes	External consumers
Exemplary SAP Solutions	<ul style="list-style-type: none"> ▪ Integration into Microsoft Office or Microsoft SharePoint* ▪ SAP Fiori 	<ul style="list-style-type: none"> ▪ SAP Productivity Apps ▪ SAP Fiori ▪ SAP Mobile Platform 	<ul style="list-style-type: none"> ▪ SAP Transportation Management Collaboration Portal 	<ul style="list-style-type: none"> ▪ SAP Multichannel Foundation for Utilities
Exemplary Customer Projects	<ul style="list-style-type: none"> ▪ Optimized HTML5-based user interfaces 	<ul style="list-style-type: none"> ▪ Customer specific mobile applications 	<ul style="list-style-type: none"> ▪ Portal for sub-contractors 	<ul style="list-style-type: none"> ▪ End-user self-services
Deployment	Either stand alone or on top of Business Suite	Stand-alone in DMZ	Stand-alone in DMZ	Stand-alone in DMZ

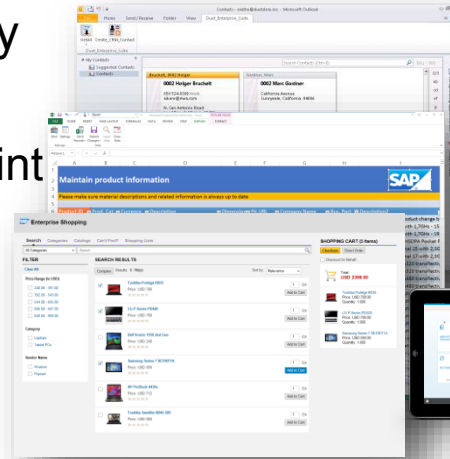
*See the appendix on *B2E, B2B, B2C usage scenarios* for details

* SAP Gateway for Microsoft

Examples of SAP Solutions – powered by SAP Gateway

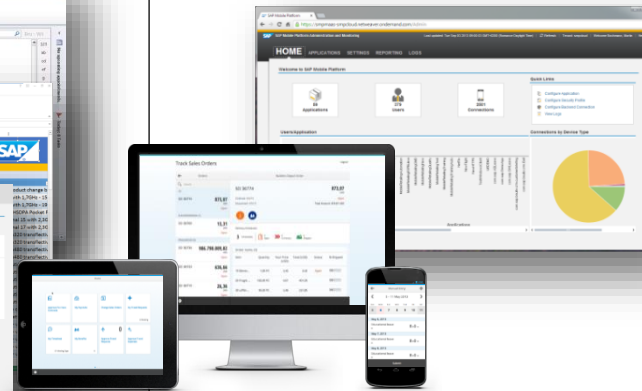
B2E – internally

- MS Office
- MS SharePoint
- HCM, SRM
- SAP Fiori



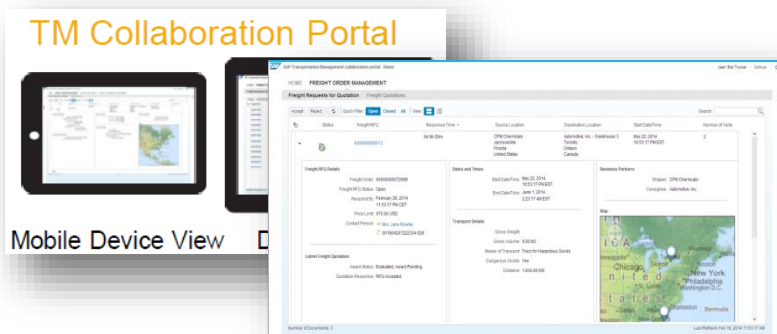
B2E – externally

- SAP Fiori
- SAP Mobile Platform



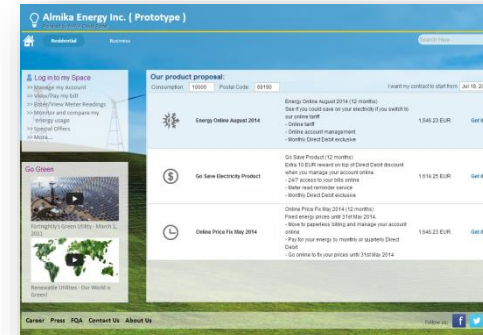
B2B

- Transportation management



B2C

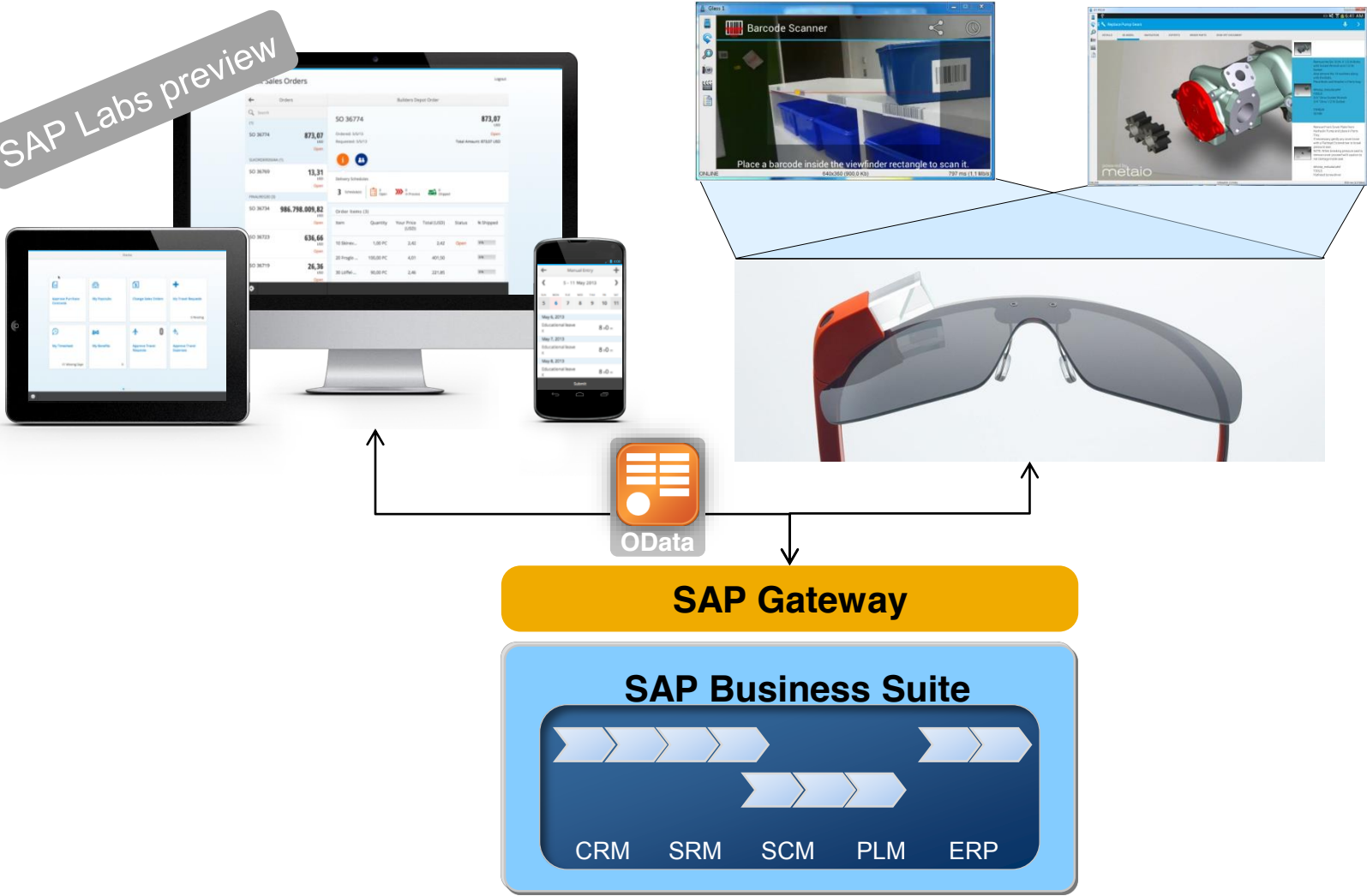
- Multichannel foundation for utilities



Augmented reality to support hands-free activities

B2E

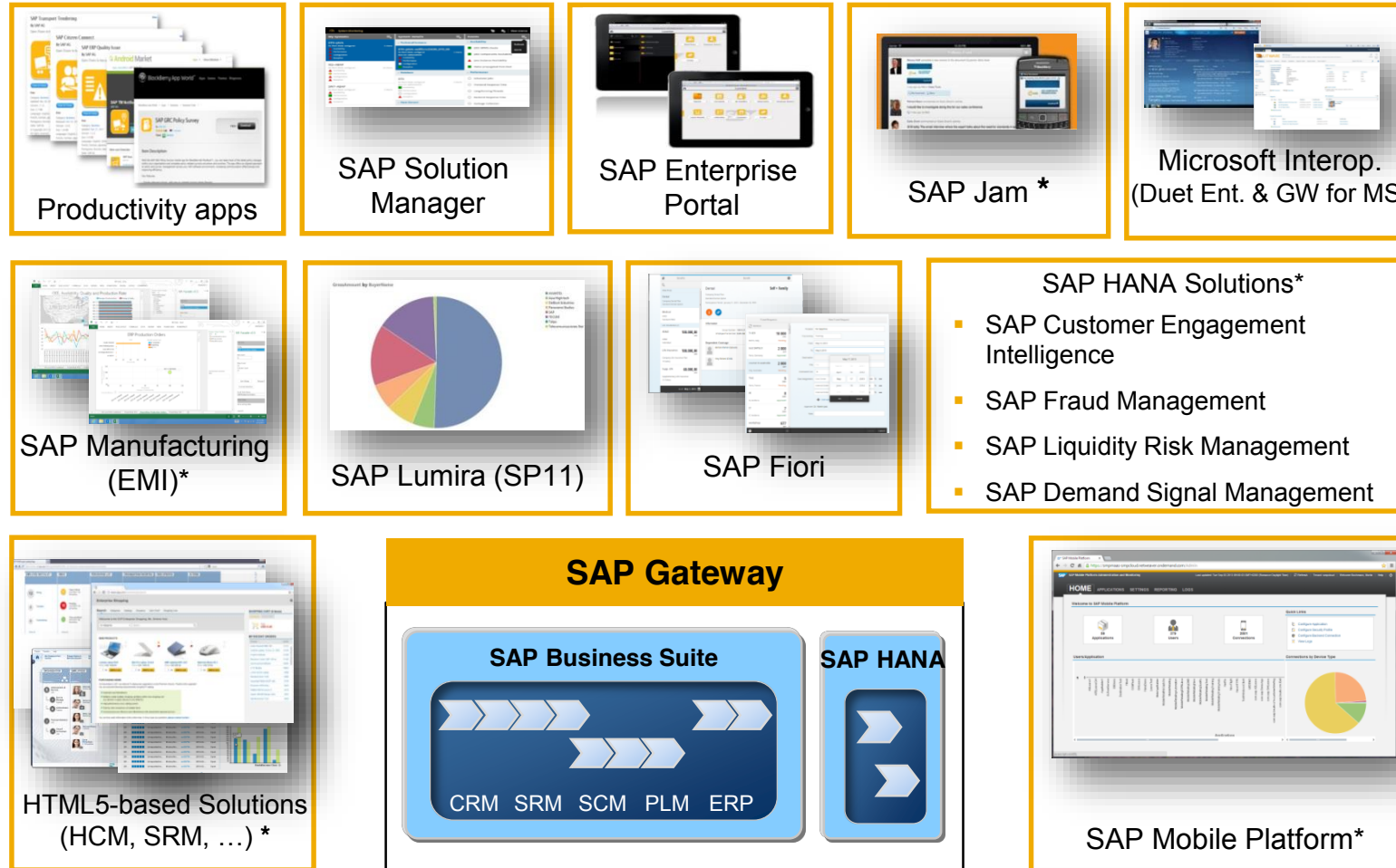
SAP Labs preview



This is the current state of planning and may be changed by SAP at any time.

SAP Gateway

odata used in SAP's standard offerings



* Planned or in Ramp-Up

This is the current state of planning and may be changed by SAP at any time.

SAP Gateway is part of several Rapid Deployment Solutions (RDS)

SAP Fiori apps

- Prepackaged, instant-value apps across multiple business functions
- Fixed-time, fixed-scope, and fixed-price implementation
- Including 44 SAP Fiori apps together with the installation of SAP Gateway technology

<http://service.sap.com/rds-fiori-apps>

SAP Fiori infrastructure

- Focus on Fiori Landscape, Security and Networking challenges
- Launchpad configuration and personalization
- Sample applications to test and verify landscape readiness:
 - Transactional
 - Analytical
 - Smart Business
 - Factsheet

<http://service.sap.com/rds-fiori-infrastructure>

SAP Mobile Apps and infrastructure

- Prepackaged, instant-value apps across multiple business functions
- The fixed-time, fixed-scope, and fixed-price implementation offers a choice to deploy one or many native build mobile apps.
- If the customer does not yet have SAP Mobile Platform or SAP Gateway yet, each will be installed as part of the package.

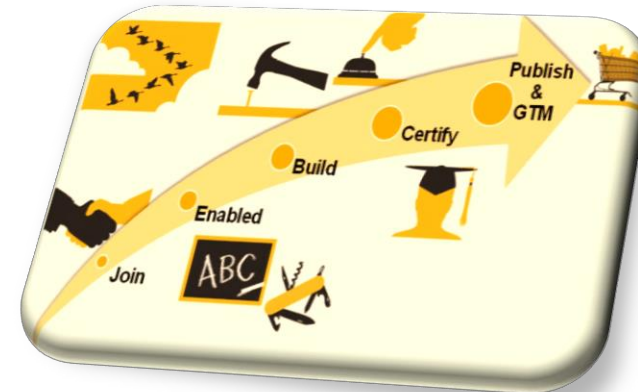
<http://service.sap.com/rds-mobile-apps>

SAP Gateway

Adoption in the SAP partner ecosystem

A vibrant ecosystem of partners available globally

- System integrators of varying sizes have been implementing projects globally
 - Mobile Solutions
 - Web Solutions
- More than 90 partner solutions have been certified and published on several SAP Partner Solution Directories
 - [SAP Partner Information Center](#)
 - SAP Store
- New partners are recruited regularly through campaigns
 - Technical enablement (trainings, developer license, technical support)
 - Certification of partner solutions
 - Marketing and go-to-market benefits
- Close collaboration with several technology partners



PARTNER INFORMATION CENTER: SEARCH RESULTS

Search Criteria		
Third-Party Defined Integration Scenarios:	SAP NetWeaver Gateway Integration 2.0	
Search Results		
Solution	Company	Country
1. Above Border Enterprise 2.55	Above Border Inc. 32 Rosery Pl NW Calgary AB T2K1L2	Canada
2. Advanced Sales Analysis 1.0	FIVE1 GmbH & Co. KG Altrottstraße 31 Walldorf 69190	Germany
3. Asset Management 2.0	Innowera LLC 2201 W Royal Lane, Ste 165 Irving TX 75063	United States
4. BridgingIT PM Radar 2.0	BridgingIT GmbH N7 5-6 Mannheim 68161	Germany
5. Contract2Go 2.0	Gicom GmbH Propsteistraße 21 Overath 51491	Germany
6. Craftsmen Solution 2.0	Software AG Ullandstraße 12 Darmstadt 64297	Germany
7. Credit Release 1.0	Zvaen Company Ltd Center Tower,Rama 9 Rd. 65/60 Huaykwang,Bangkok 10310	Thailand
8. Customer Information 2.0	Innowera LLC 2201 W Royal Lane, Ste 165	United States

SAP Gateway and Integration Gateway

Product road map overview - key themes and capabilities

SAP Gateway 2.0 SP9

- Manual development and code-free generation of OData services for BAPIs, BOL, GenIL, BOPF, SPI, MDX, EasyQuery
- Workflow integration (SAP Business Suite workflow, SAP BPM)
- Event publishing
- Logging, monitoring, SAP Solution Manager integration
- XML and JSON output

Integration Gateway

- Mapping of sources from SOAP, JPA, JDBC and ABAP backend into OData services
- Eclipse based design-time for modelling of the OData service and mappinga
- Part of SAP Mobile Platform 3.0, HANA Cloud Integration (HCI) and SAP Process Orchestration.

SAP Gateway

- Push notifications based on WebSockets
- Continuous improvements for Task Gateway, Gateway Core and Service Builder

Integration Gateway

- REST support
- Adapter SDK for supporting other data sources
- Improved modelling capabilities
- SOAP enhancements
- Supporting of HANA Cloud Integration (HCI)

SAP Gateway

- Support of OData 4.0
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Integration Gateway

- Improved integration into SAP HANA for high-performance integration scenarios

Today

Planned Innovations

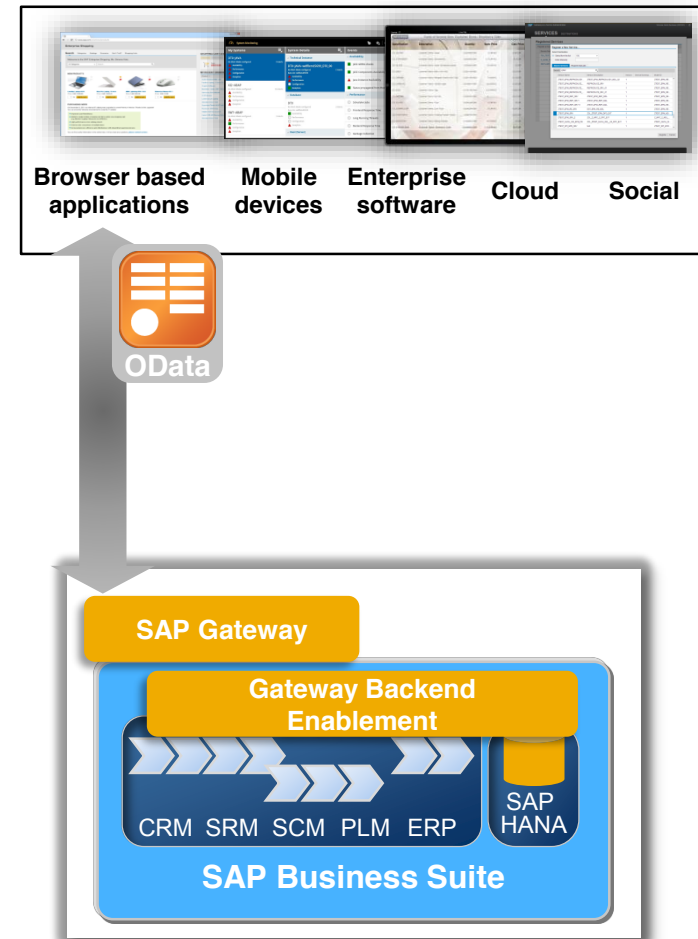
Future Direction

* explanation of acronyms on last page

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SAP Gateway & Integration Gateway - positioning

- SAP Gateway (Backend Enablement and SAP Gateway Hub) both based on ABAP technology

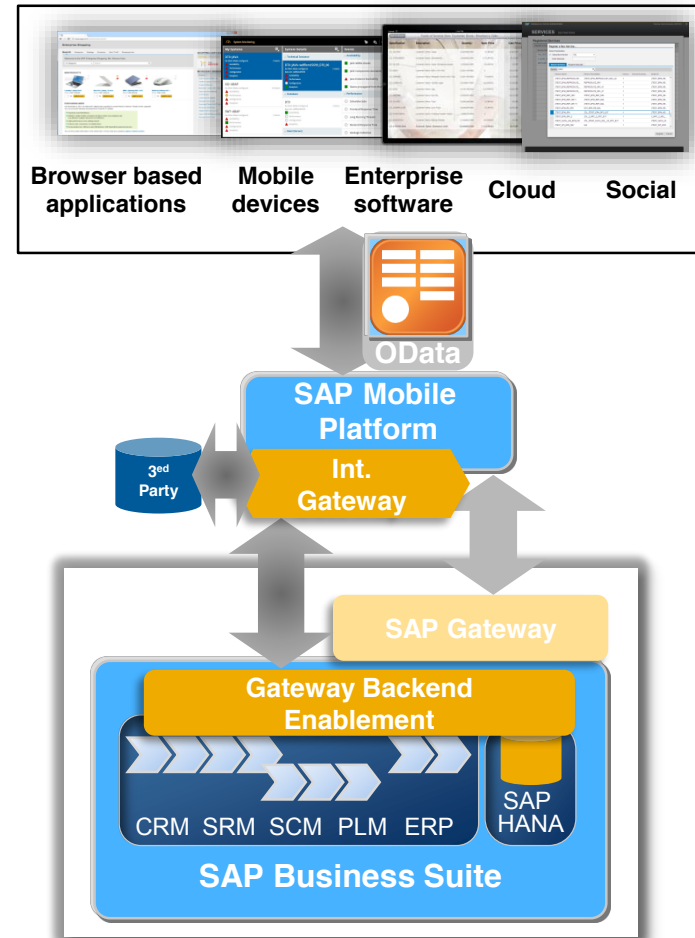


TODAY

SAP Gateway & Integration Gateway - positioning

SAP Mobile Platform

- SAP Gateway (Backend Enablement and SAP Gateway Hub) both based on ABAP technology
- SAP Mobile Platform is leveraging the Integration Gateway capabilities. This allows to connect to data sources via:
 - SAP Gateway
 - Gateway backend enablement (IW_BEP)
 - SOAP, JDBC, JPA

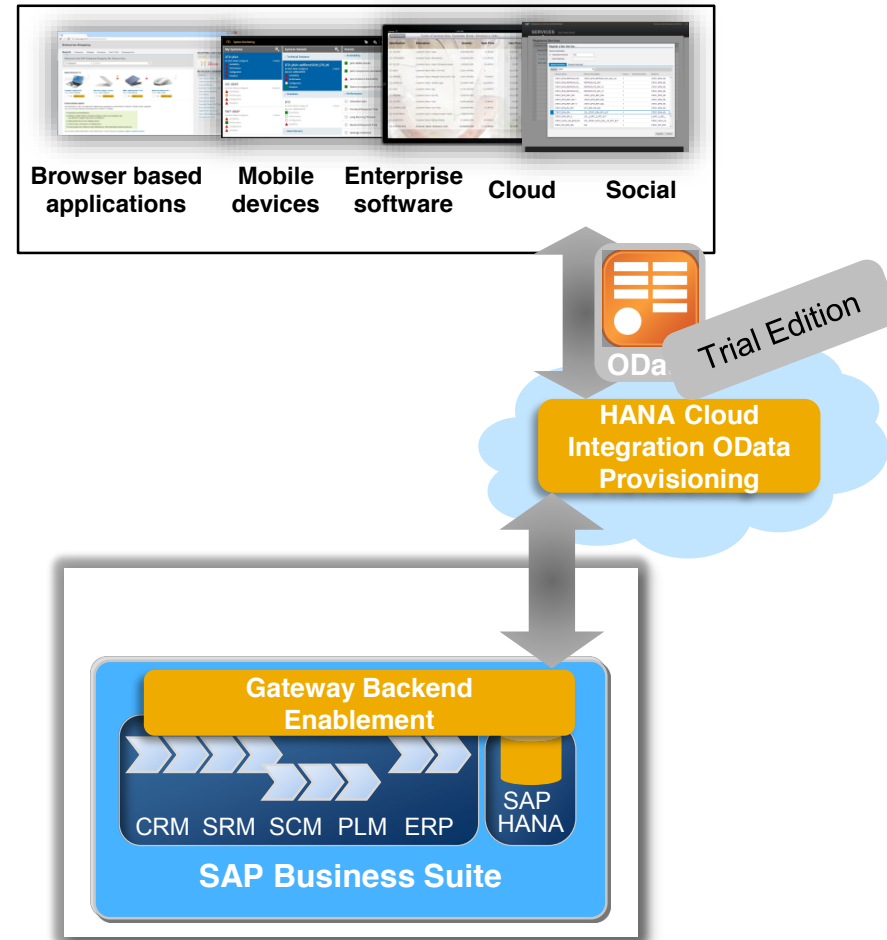


TODAY

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HANA Cloud Integration OData provisioning

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- HANA Cloud Integration OData Provisioning directly connects to the gateway backend enablement (IW_BEP)



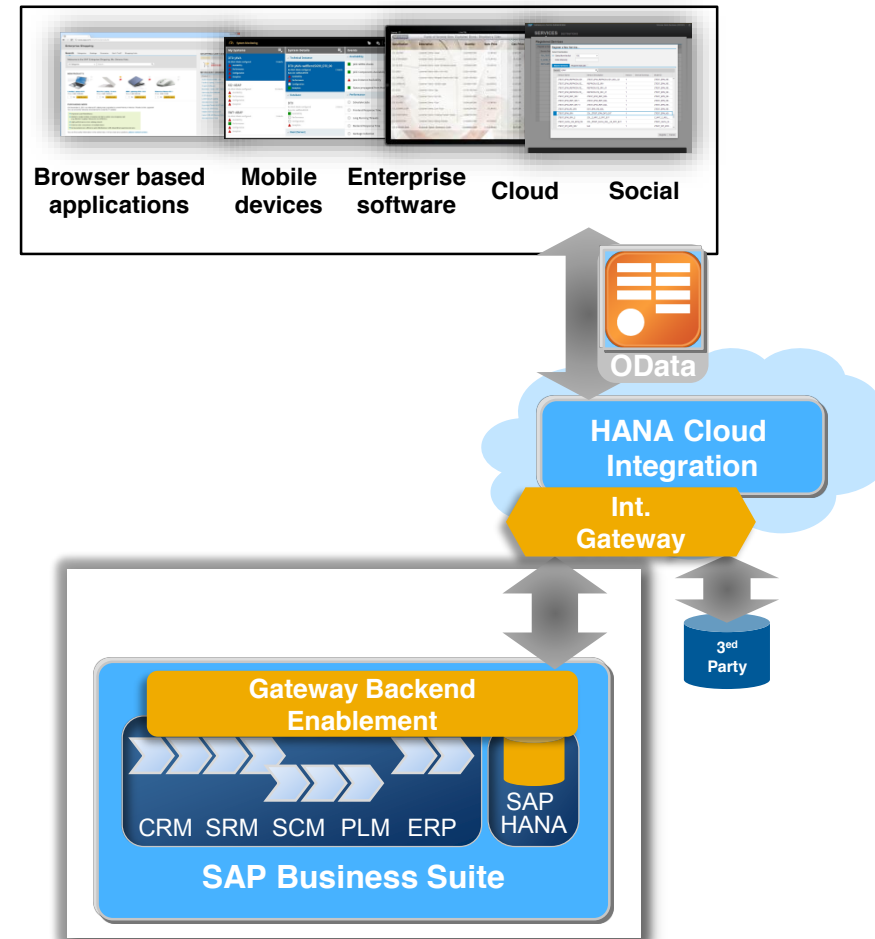
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- HANA Cloud Integration OData provisioning directly connects to the gateway backend enablement (IW_BEP)
- HANA Cloud Integration – additional connectivity to SOAP, JDBC, JPA

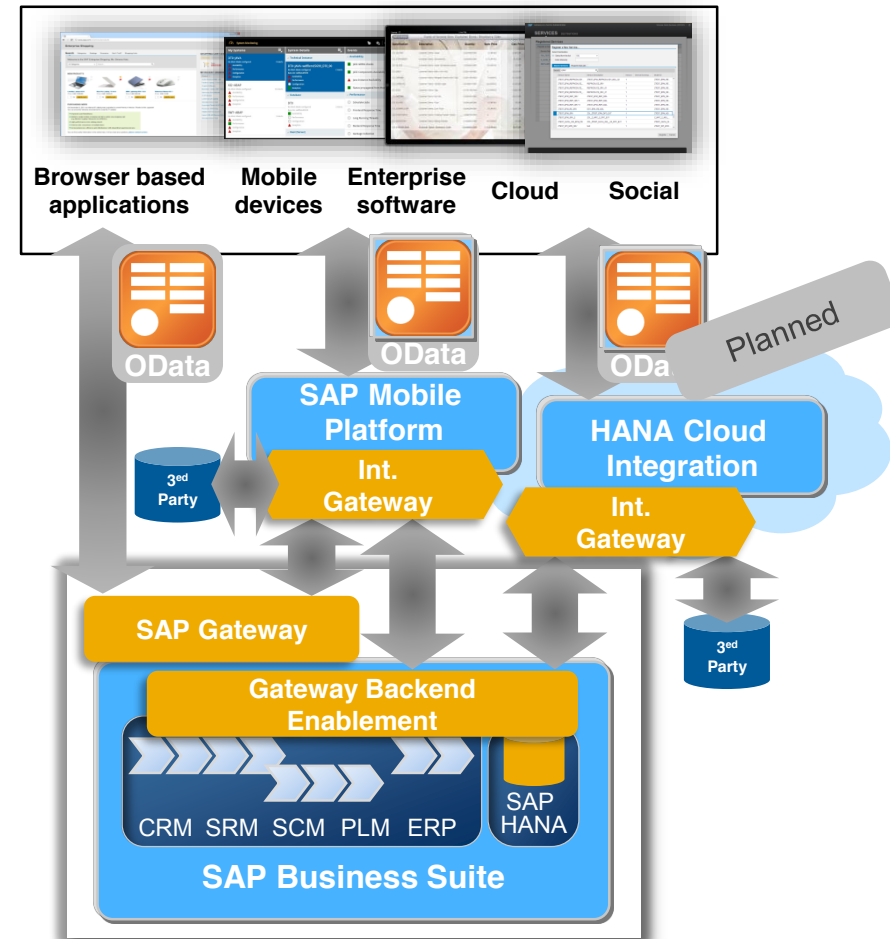


TODAY

SAP Gateway & Integration Gateway - positioning

SAP Gateway and Integration Gateway are offering the following advantages:

- Business Suite content only needs to be developed once – it can be reused in various channels (cloud, mobile, ...)
- Optimized technology stack available for various use-cases (on premise, on-demand, ABAP, JAVA, ...)
- Consistent developer experience for User-Interface developers – system details (on premise, on-demand, ABAP, JAVA, ...) is invisible. OData as the abstraction layer.



TODAY

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SAP Gateway 2.0

Service generation

Providing powerful and convenient tools to generate OData services based on existing technologies and frameworks. This enables also users with a less technical background to create OData services based on the SAP Business Suite

Standard SAP APIs

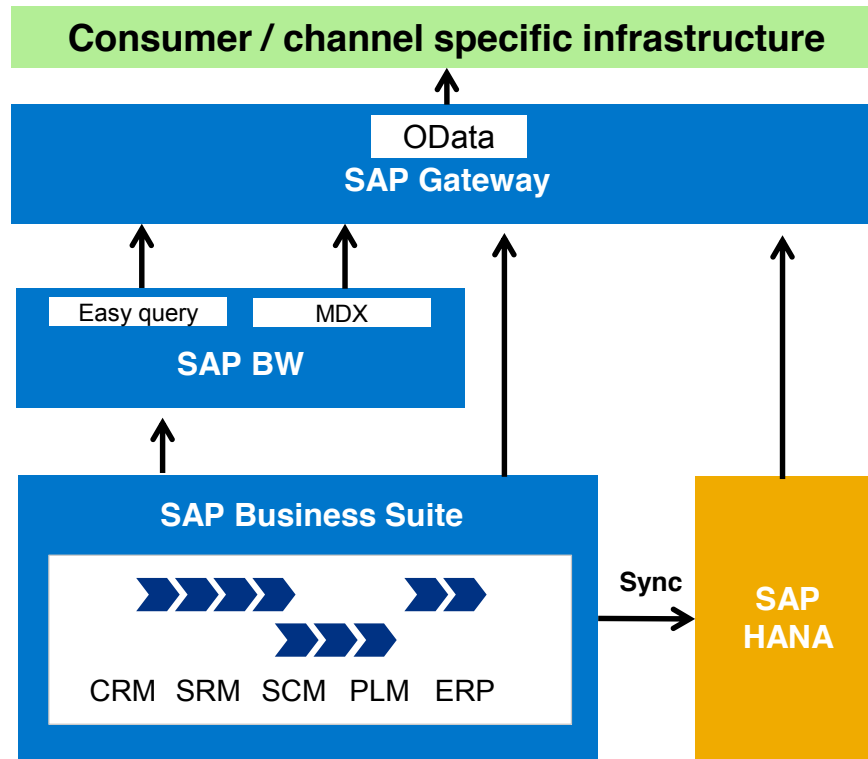
- Remote Function Calls (RFC), Business API (BAPI), Business Object Repository (BOR)
- Code-free generation of OData services as source-code
- Available also for older versions of SAP Business Suite (SAP NetWeaver 7.0)

Application service frameworks

- Many SAP Solutions are based on standard frameworks / architectures like SAP CRM, SAP PLM, SAP SCM / SAP TM or SAP EAM
- SAP Gateway is supporting the code-free generation of OData services based on these frameworks (BOL/GenIL, BOPF, SPI)

Analytical applications

- SAP Business Information Warehouse (MDX, Easy Query)
- SAP HANA



TODAY

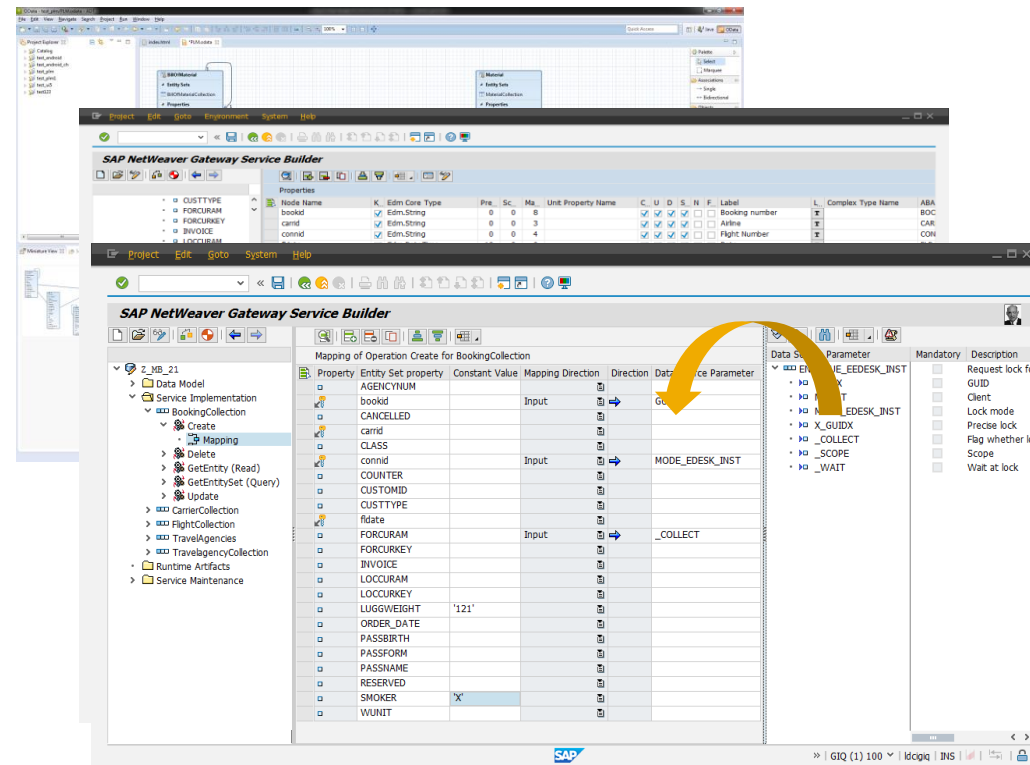
SAP Gateway 2.0

Service development

In addition to the generation of services, the development of services is also possible. SAP Gateway provides various tools to simplify and accelerate the development of OData services

Service builder

- OData service modeling
 - Based on EDMX-file
 - Using the Eclipse-based OData Modeler
 - Modeling in the service builder
- Mapping to data sources like RFC, BAPI or BOR
- Importing from SAP CRM, SAP PLM, SAP SCM, SAP EAM frameworks
- Source-code generation
- Redefinition of existing services
- Available from SAP NetWeaver 7.0 on (Business Suite ECC 6.0, EhP 0)



TODAY

SAP Gateway 2.0

Core functionalities

SAP Gateway's core functionalities provide the basis for the efficient, secured and controlled usage of OData in an enterprise environment

Core capabilities

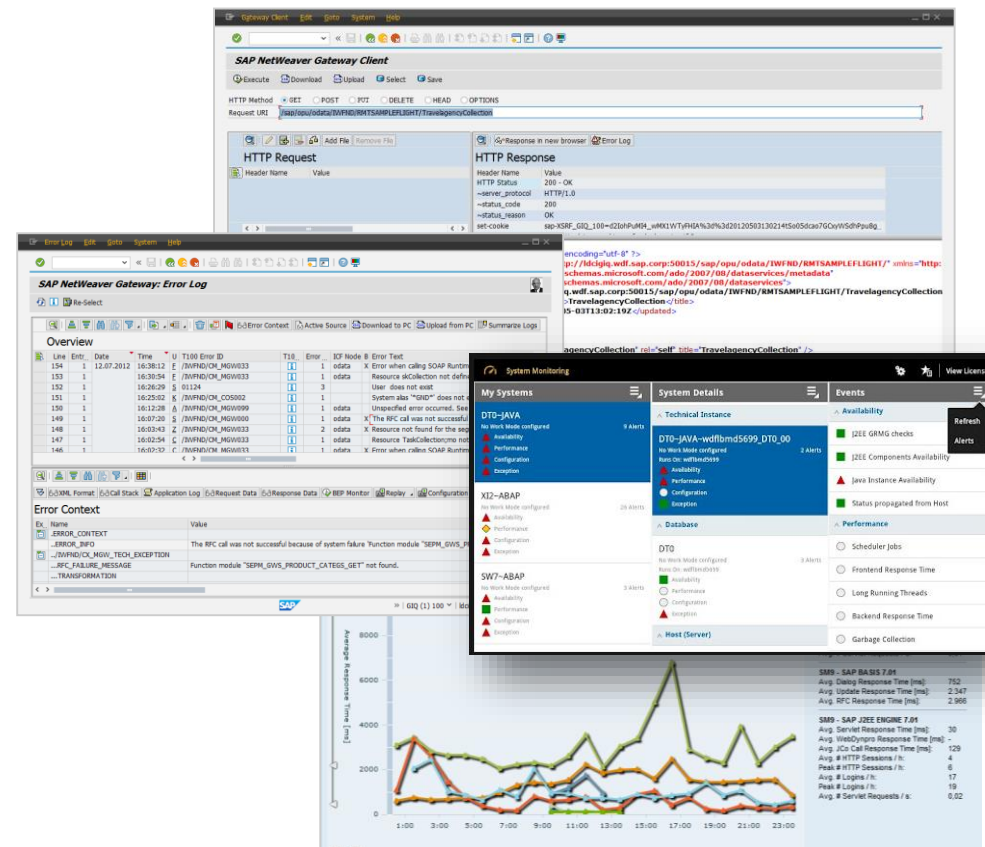
- JSON or XML support
- Monitoring
- Performance trace / Error Log
- OData offline support (with SMP)
- Push notifications
- Authentication: OAuth, X509, SAML
- Generic REST support

Scenario support

- Workflow task service for SAP Business Workflow
- User Management (B2C)

SAP Solution Manager integration

- Root cause analysis
- Load analysis



TODAY

SAP Gateway and Integration Gateway

Product road map overview - key themes and capabilities

SAP Gateway 2.0 SP9

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SAP Gateway

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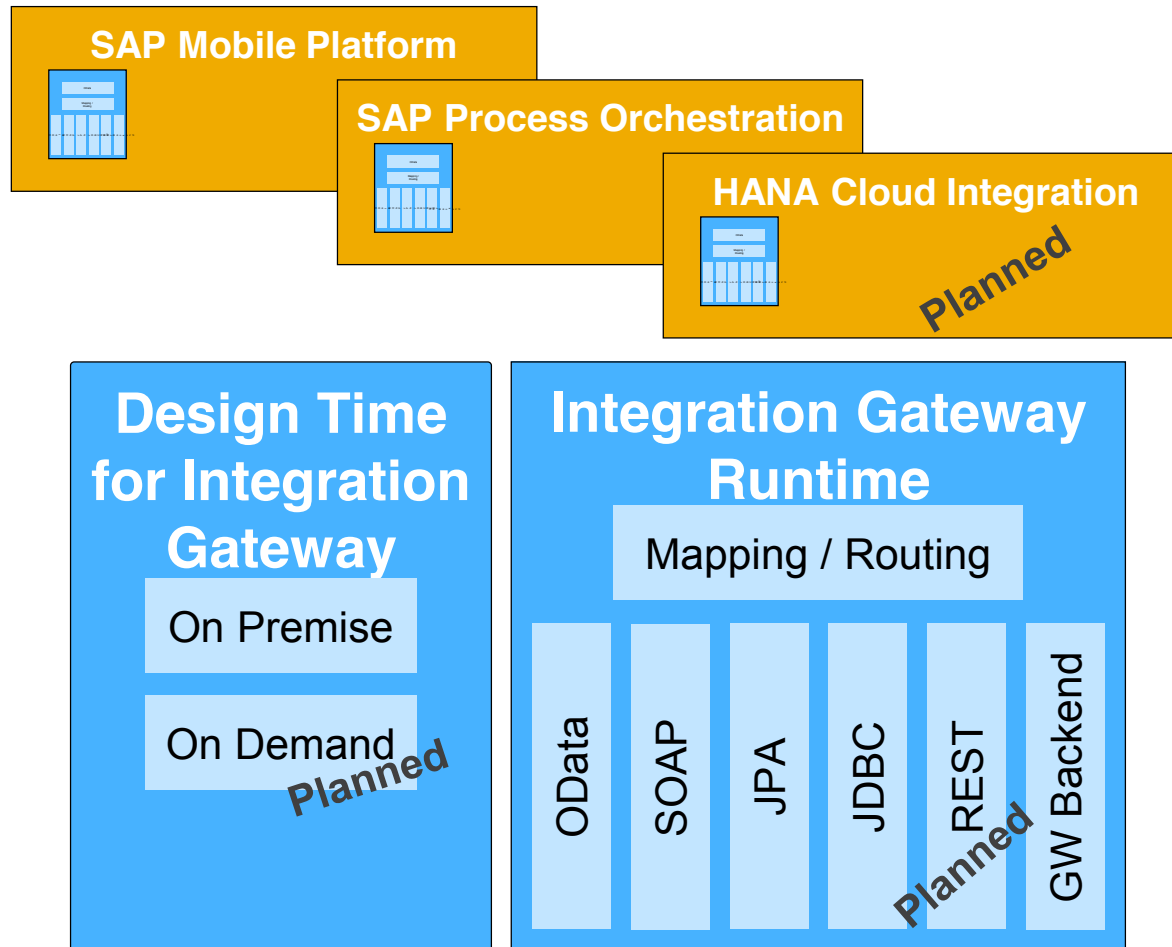
Future Direction

* explanation of acronyms on last page

This is the current state of planning and may be changed by SAP at any time.

Planned innovations

Integration Gateway



Planned enhancements for Integration Gateway:

- Adapter SDK for supporting other data sources
- Generic REST support
- Improved modelling capabilities like orchestration
- Improved SOAP support

PLANNED INNOVATIONS

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SAP Gateway

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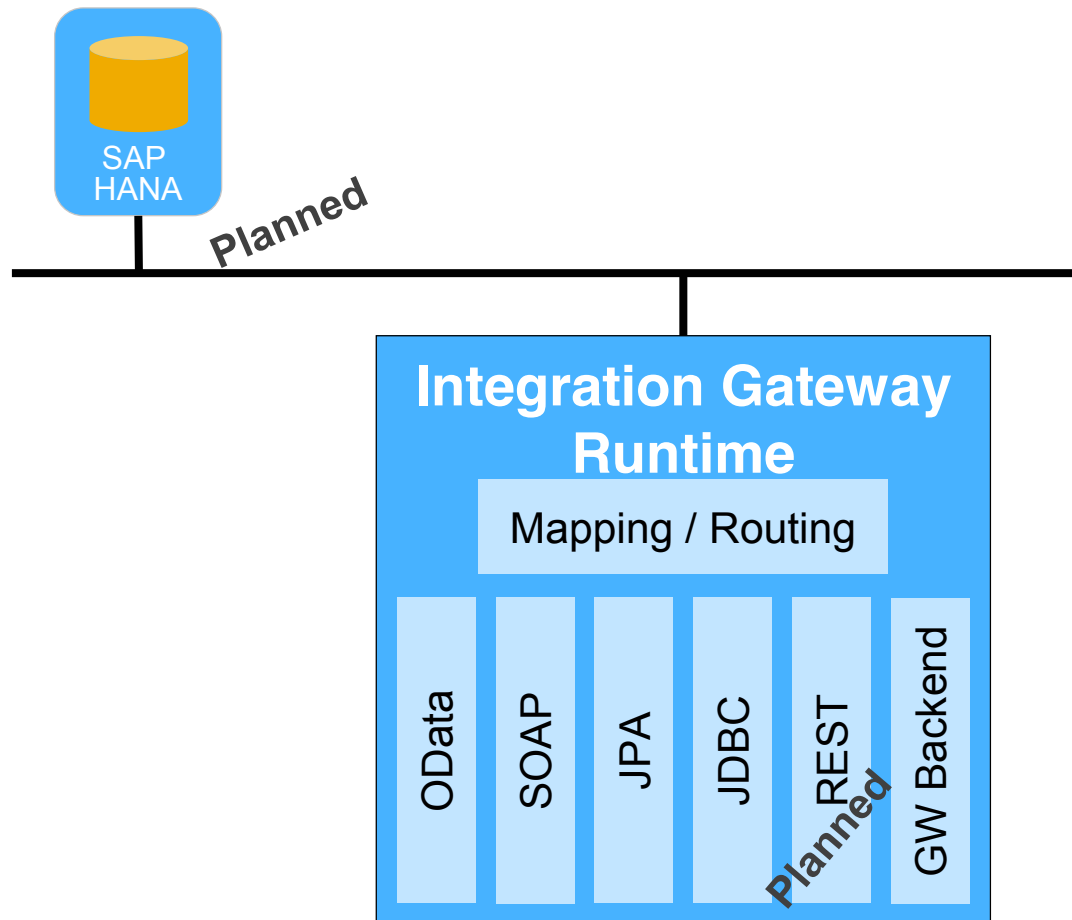
FUTURE DIRECTION

* acronyms glossary on last page

This is the current state of planning and may be changed by SAP at any time.

Future direction

Direct SAP HANA access



Providing a high performing connection between SAP HANA and Integration Gateway for:

- Highly scalable performance
- Non-SAP connectivity
- Convenient messaging APIs
- Modularization

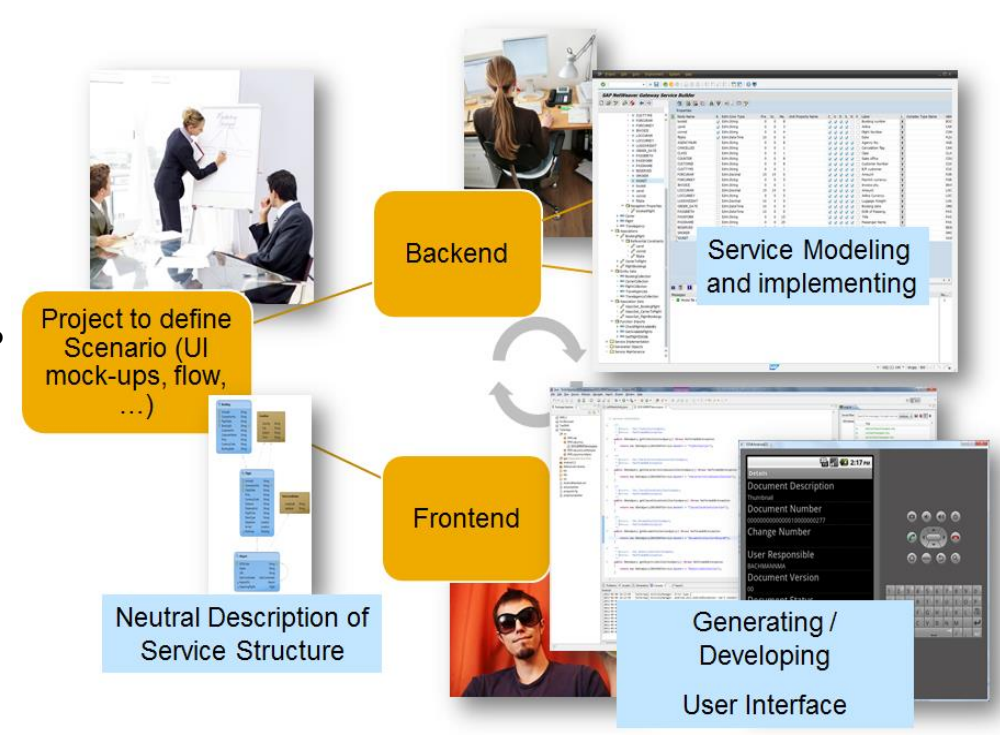
FUTURE DIRECTION

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Summary

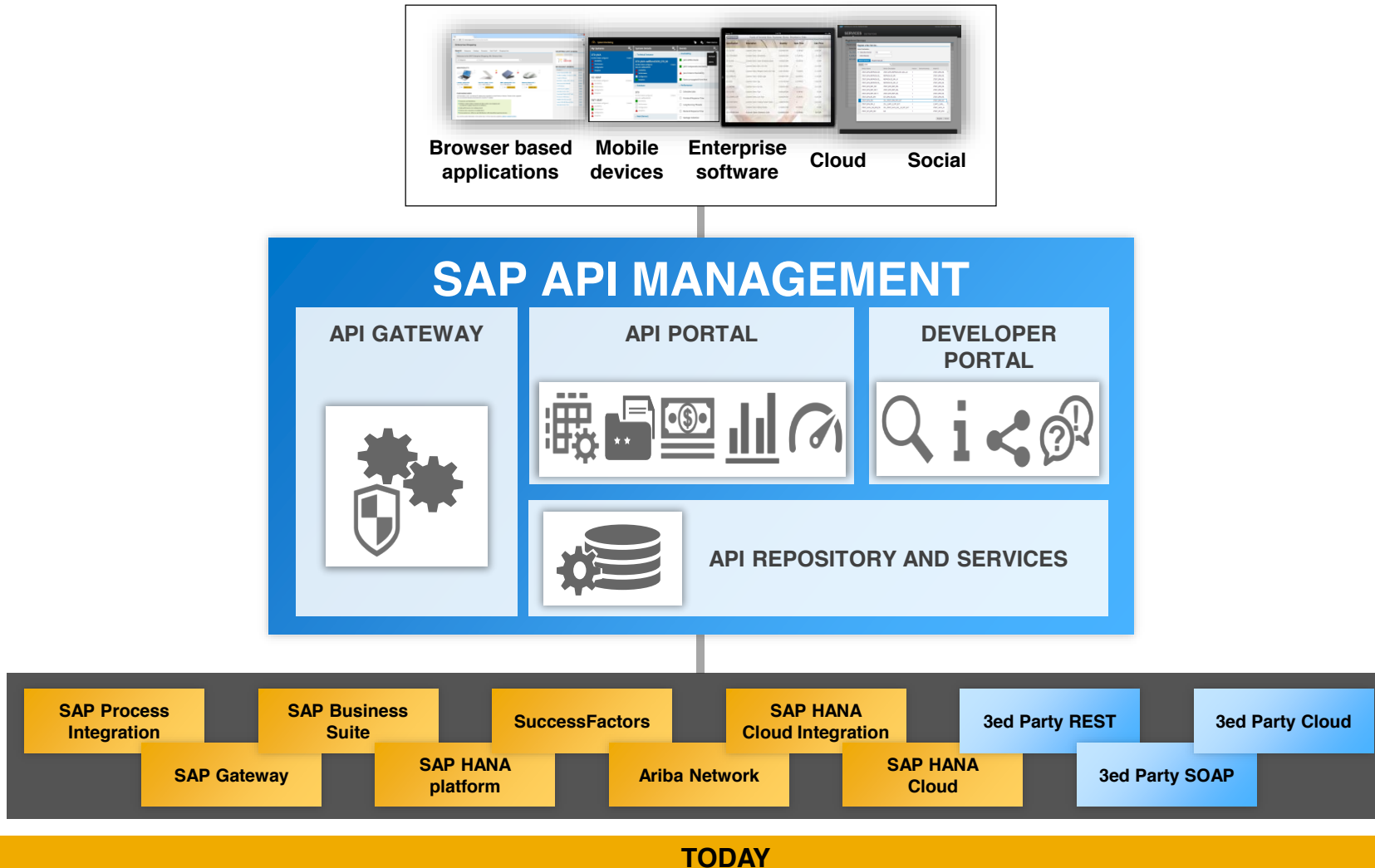
SAP Gateway is the platform to enable easy and secure access to data from the SAP Business Suite via open and standardized interfaces

- **Innovation**
The non-disruptive innovation enabler for building custom business applications rapidly based on SAP Business Suite
- **Cost leadership & value**
Lowers TCD (and TCO) significantly for solutions that consume SAP Business Suite functionality
- **Simplification**
Simplifies the consumption of SAP Business Suite from Cloud to on-premise platforms

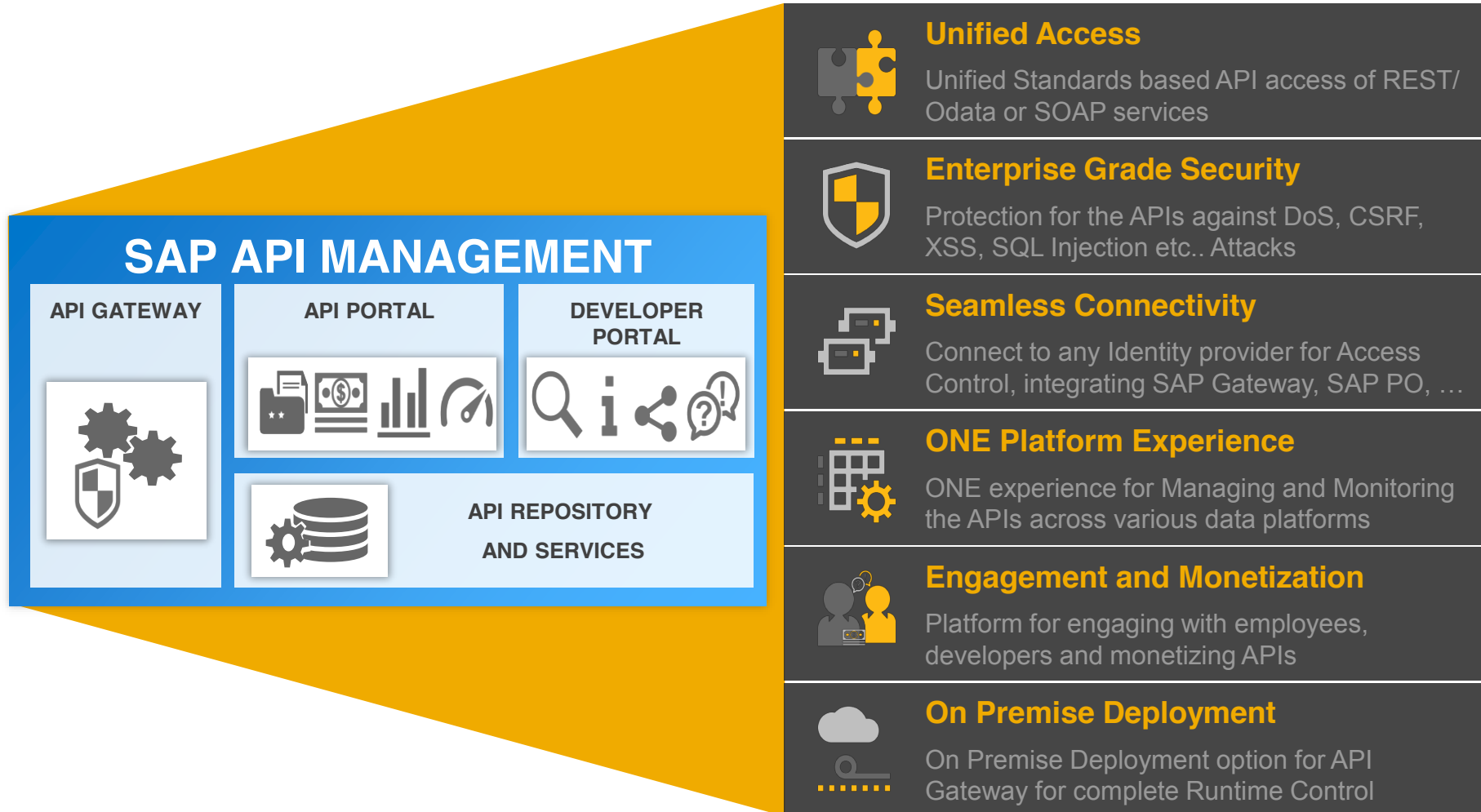


This is the current state of planning and may be changed by SAP at any time.

Relevant additional topic: SAP API Management



Relevant additional topic: SAP API Management



TODAY

SAP API Management, On-Premise Edition

Product Description

SAP API Management helps business customers share digital assets and processes beyond traditional applications and websites, enabling developer communities to consume digital assets with ease in new channels, devices, user interfaces while promoting innovation and supporting new revenue streams.



SIMPLE

API Provisioning & Publishing

Discovery & Consumption

Developer Services



SCALABLE

Seamlessly scale to billions of API calls

High Availability and Distributed Deployment



SECURE

Access Control

Role-Based Security

Full-Scale Auditing & Monitoring

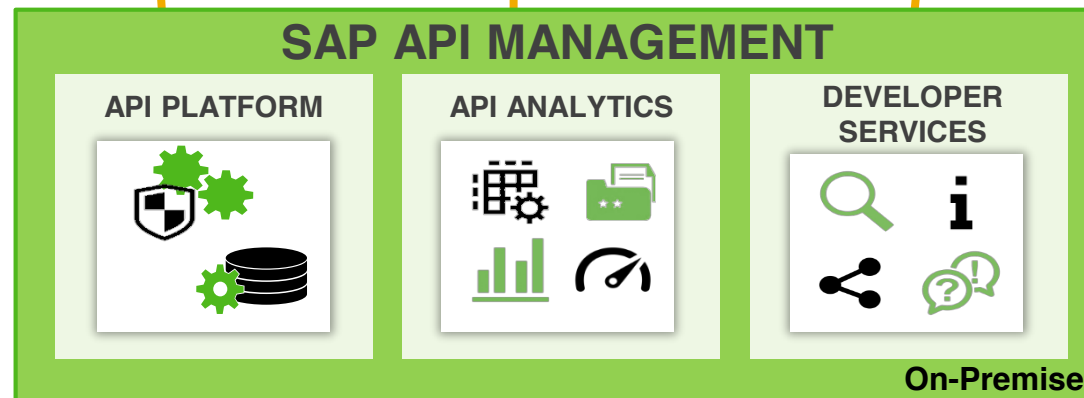
SAP API Management, On-Premise Edition

High Level Components

Analytics Services – Provides powerful analytical tools to view short and long term usage trends on errors, Latency traffic composition and custom reporting

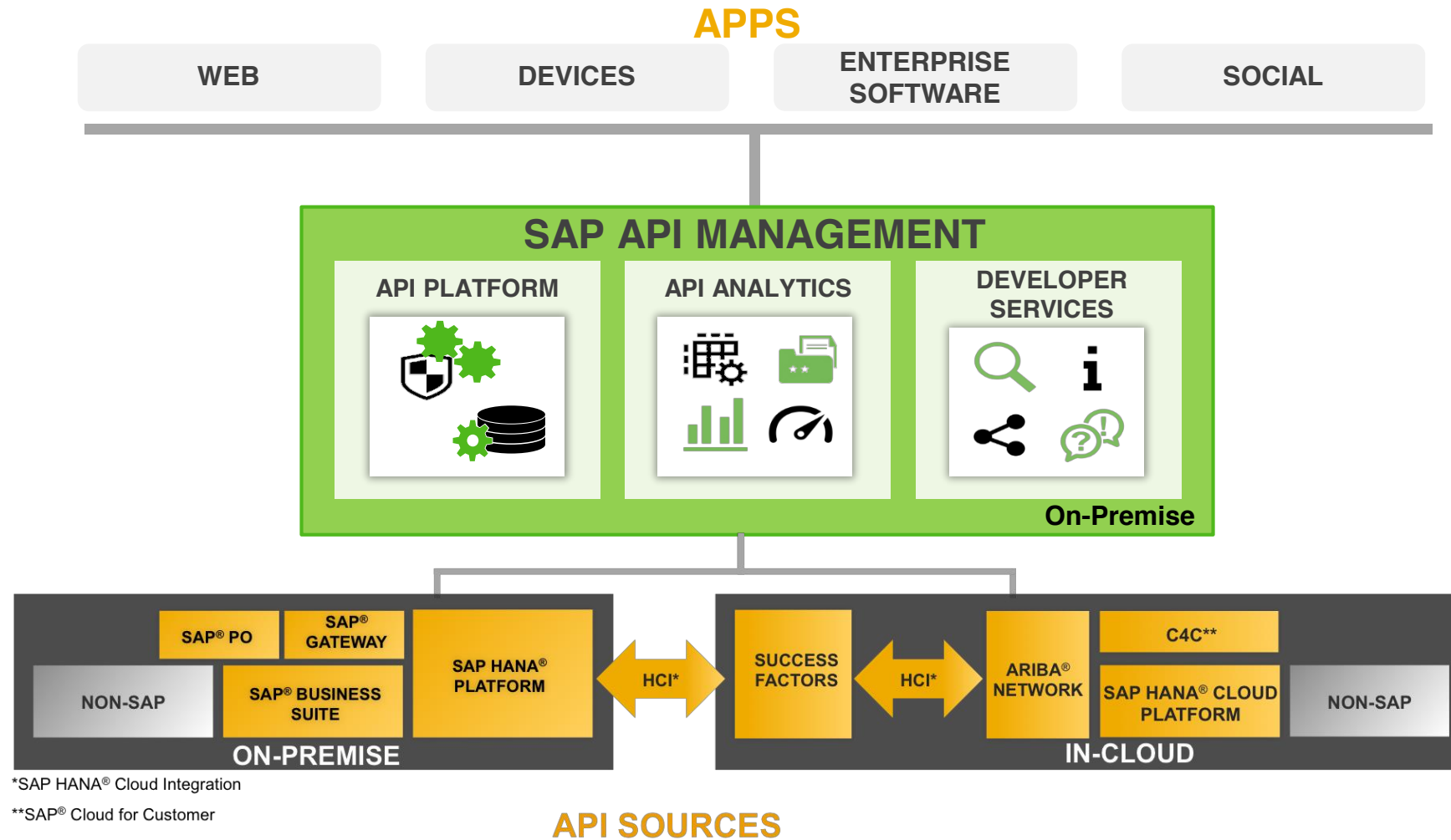
API Platform – Provides tools to configure, manage APIs, developers and apps. Provides the Run-time for Enforcing Mediation, Security & Traffic Policies for APIs.

Developer Services – Provides tools to create developer portal for Publishing APIs, Onboarding Developers, Apps and Engaging with them.



SAP API Management, On-Premise Edition

your World with SAP API Management



SAP API Management, On-Premise Edition

Product road map overview - key themes and capabilities

Provision

- Register REST/ OData/ SOAP Services as APIs
- API Throttling and Quota Mgmt.
- Node.JS API Development
- Extensibility via Java, JS, Python

Secure

- Threat Protection policies
- API Keys validation, OAuth2.0 , SAML, Basic Authentication
- LDAP connectivity

Engage/Consume

- Developer Services (Portal)
- Onboarding Applications & developers

Analyze

- Real-time Analysis of Error, performance, Latency of APIs
- Analytics Dashboard
- Custom Reports

Today

(Release 1.0 SP1)

Provision

- Repository and Tools Integration for ESR, Process Orchestration
- SAP Gateway Tools integration for REST/ OData Services Enablement as APIs

Secure

- Specific Policies for Process Orchestration, SAP Gateway
- Pre-built connectivity through policies for SAP product family

Engage/Consume

- Web IDE, SAP Gateway for Microsoft Consumption
- Pre-built developer portal modules

Analyze

- Integration with HANA for Real-time Analysis and predictability
- SAP Lumira Integration

Planned Innovations

Provision

- Direct Gateway Backend Enablement and Connectivity
- SAP JSON RPC Connectivity and provisioning

Monetize

- Monetize APIs through integrated billing and Invoicing.

Engage/Consume

- CRM integration for developers and Contract Management
- Public Content hub publishing

Future Direction

This is the current state of planning and may be changed by SAP at any time.



THANK YOU

SAP API Management Social Media Channels



SAP website: <http://www.sap.com/api-management>



SAP API Management: <http://spr.ly/SAP-API-Management>



SAP API Management: <https://www.linkedin.com/groups/SAP-Gateway-4554629>



SAP Technology: <http://spr.ly/youtube-sap-api-management>



SAP Technology: <https://twitter.com/sapdevs>



SAP Technology: <https://www.facebook.com/sapdevcenter>

SAP Gateway Social Media Channels & Resources



SAP website: <http://www.sap.com/gateway>



SAP Gateway: <http://scn.sap.com/community/gateway>



SAP Gateway: <https://www.linkedin.com/groups/SAP-Gateway-4554629>



SAP Gateway: <http://spr.ly/SAPNetWeaverGateway>



SAP Technology: <https://twitter.com/sapdevs>



SAP Technology: <https://www.facebook.com/sapdevcenter>



SAP Technology: [SAP PRESS Book – Odata and SAP Gateway](#)