

SAP Product Road Map for SAP User Interface Technologies

SAP Webcast for SAP User Groups

June 23, 2016

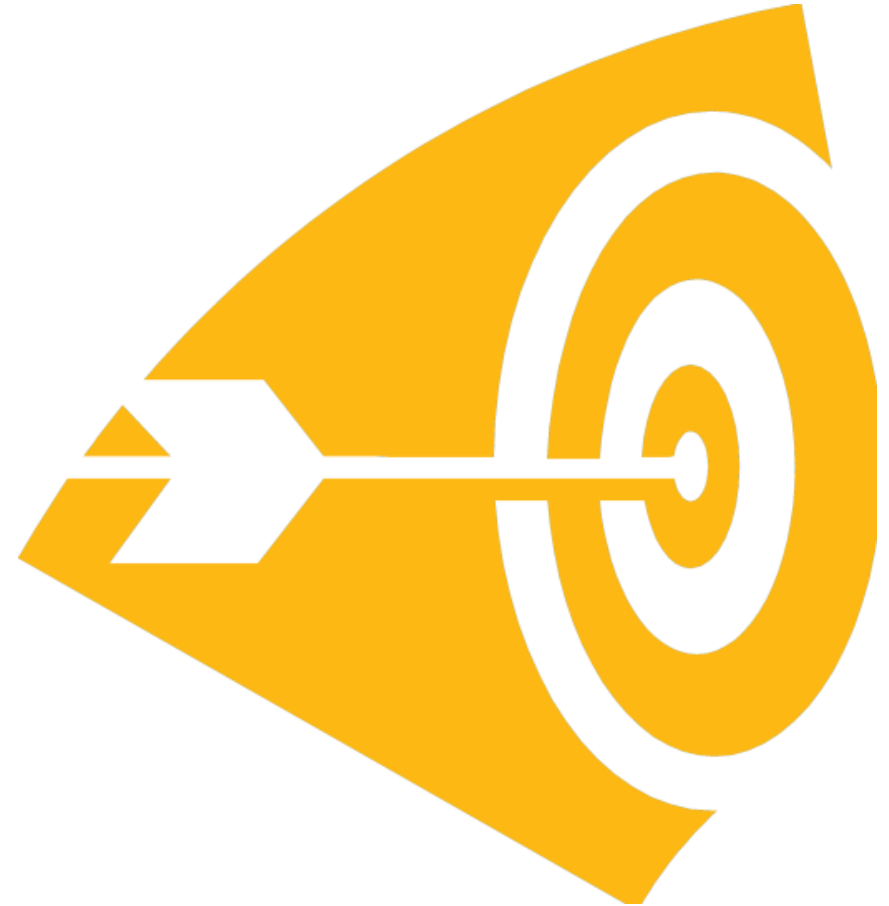
Ingo Deck, SAP User Experience Platform, SAP SE

Customer



Goal Of This Webcast

- › Introduction of the document (structure and content)
- › Brief overview of SAPs UX strategy and how the different key UI technologies support this strategy
- › Highlight key topics in the roadmaps of SAPs key UI technologies
- › What it cannot be:
 - Detailed explanation of the UI technologies
 - Explanation of all roadmap details in this document



SAP Product Road Map

SAP User Interface Technologies

Road Map Revision: 2016.04.21

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Important notes

- › This road map addresses SAP's mainly adopted UI technologies – following the SAP user experience strategy
 - › Where dedicated road maps are available the topics are briefly explained and the respective road maps are listed
 - › This presentation is a shortened version of the Roadmap document linked below.
-
- ▶ Updates: This document is updated every quarter
 - This version was released in April 2016 (Q2)
 - **Next version to come in July 2016 (Q3)**
 - ▶ Where to find this document:
 - SAP Service Marketplace: https://service.sap.com/~form/sapnet?_SHORTKEY=01100035870000749387&SAP.COM: <http://www.sap.com/roadmaps>
 - SCN: <http://scn.sap.com/docs/DOC-41321>

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- SAP user experience strategy
- **SAP Fiori: SAP's new user experience**
- Key UI technologies supporting SAP's user experience strategy

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 - **SAPUI5 flexibility services**
- SAP Web IDE (integrated development environment)
- Floorplan Manager / Web Dynpro ABAP
- WebClient UI framework
- Dynpro-based front end technologies – SAP GUI family
- SAP Screen Personas
- UI theme designer

UI Client & Integration Topics

- **SAP Fiori launchpad**
- SAP Business Client
- Product portfolio for SAP Portal

Specialized UI Technologies

- SAP Visual Business
- SAP Visual Enterprise
- SAP Interactive Forms by Adobe
- Web Dynpro Java

UI Related Road Map Topics

- **SAP browser support**
- SAP Mobile Platform / SAP HANA Cloud Platform, mobile services
- SAP Gateway
- SAP Gateway for Microsoft
- Analytic solutions from SAP

Summary

Appendix

NEW compared to June 2015



SAP User Interfaces Overview

- Market trends and user expectations
- SAP user experience strategy
- **SAP Fiori: SAP's new user experience**
- Key UI technologies supporting SAP's user experience strategy

SAP user interfaces

Key trends and impacts in business and technology

Nearly everyone is using software today

- Smartphones and tablets make it easy to access services, applications and content in private and business life
- Cool devices are desired, become status symbols
- This fuels expectation to only use fun software
- People now want great experience rather than features
- IT is not limited to small group of experts any more



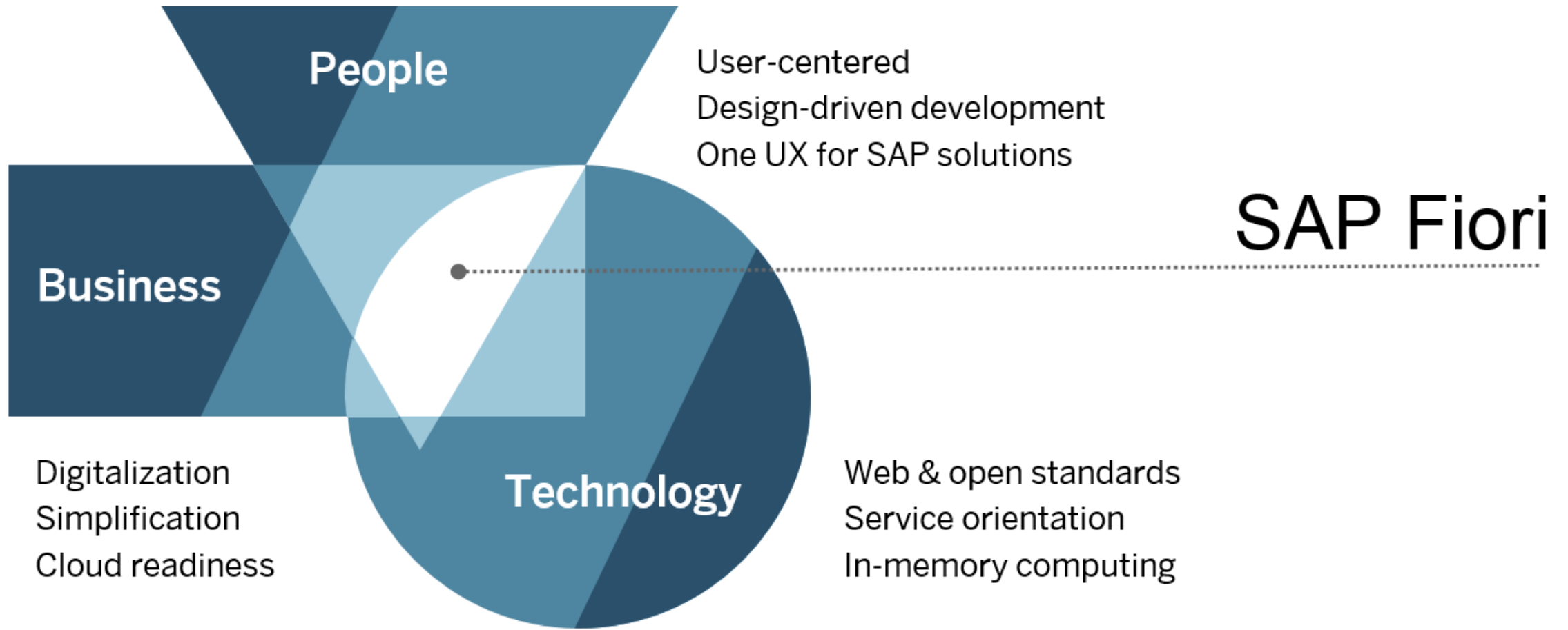
Vision

Provide the leading user experience for business applications

Mission

Deliver attractive applications that make people successful at work

SAP's direction: Digital transformation



SAP Fiori: SAP's new user experience

[Link to SAP Fiori page](#)

SAP Fiori is SAP's **new user experience** that applies **modern user centric design principles**. It provides a **consistent and role specific** experience across all tasks, for all lines of business. SAP Fiori is **personalizable, simple and runs on any device**. It helps users **get the job done easily with a delightful experience**.



Main UI technology elements relevant for SAP Fiori*:

- [SAPUI5](#)
- [SAP Fiori launchpad](#)
- [SAPUI5 flexibility services](#)
- [SAP Mobile Platform](#)
- [UI theme designer](#)
- [SAP Web IDE](#)
- [SAP Gateway](#)

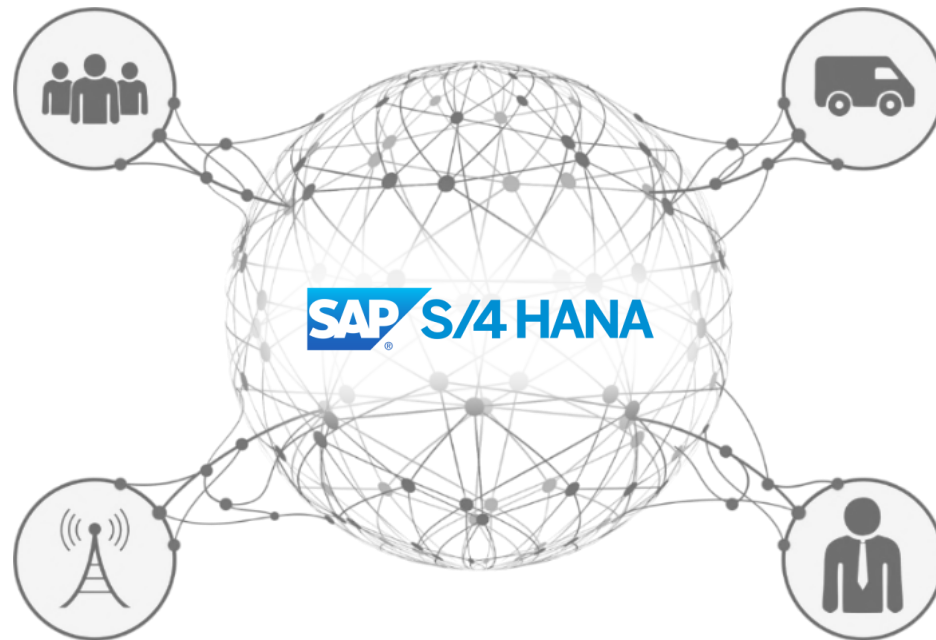
* Find the  logo on these slides

Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Cross Topics → Product Road Maps): SAP Fiori

Execution of SAP's user experience strategy

NEW & RENEW

DELIVERING SAP FIORI UX¹ ACROSS SAP SOLUTIONS²



EMPOWER

CUSTOMERS TO INNOVATE THROUGH
USER EXPERIENCE

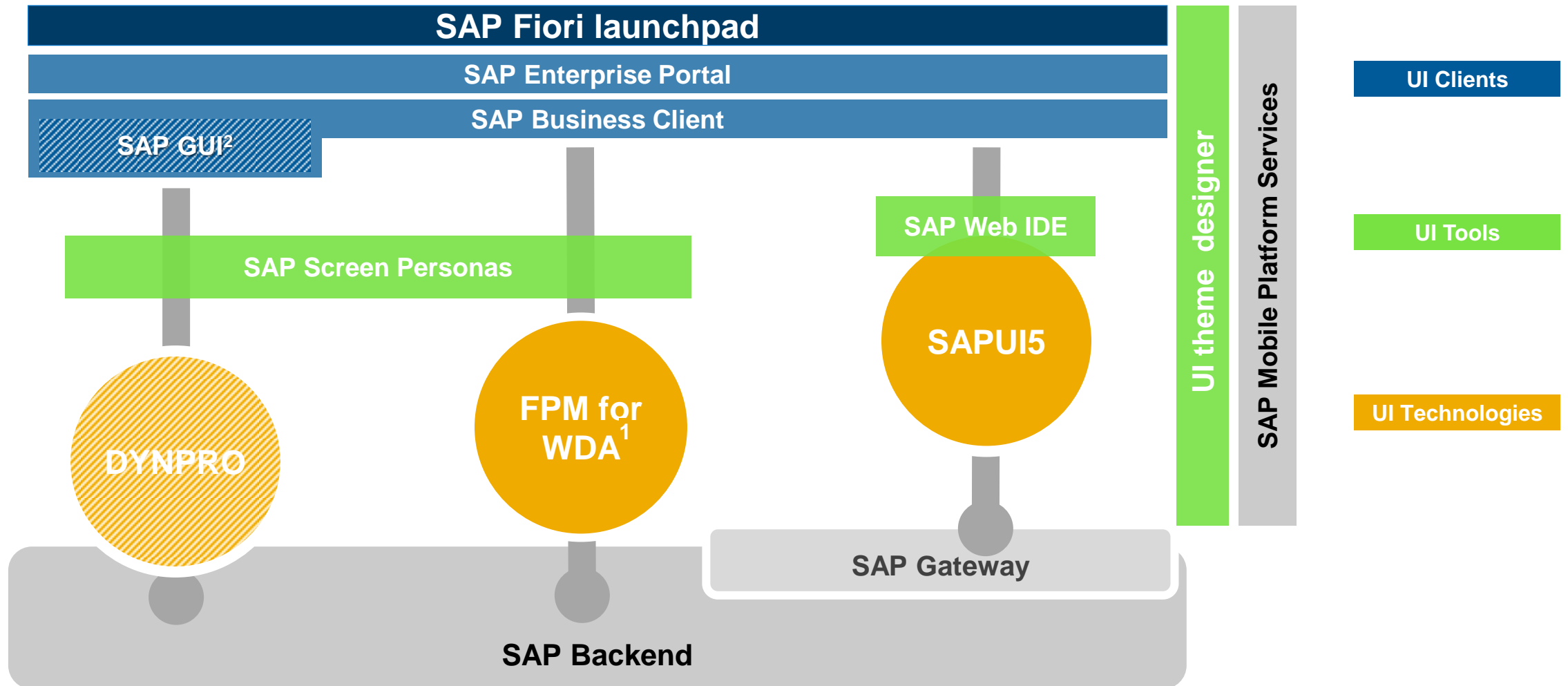
Education & Best Practices

Tools & Technologies

UX Design Services

¹<http://experience.sap.com/fiori> ² This is the current state of planning and may be changed by SAP at any time.

SAP's key UI technologies & development tools



¹: Floorplan Manager (FPM) for development of new applications based on Web Dynpro for ABAP (WDA)

² for HTML & Windows



Key UI Technologies & Tools

- SAP UI development toolkit for HTML5 (SAPUI5)
 - *SAPUI5 flexibility services*
- SAP Web IDE (integrated development environment)
- Floorplan Manager / Web Dynpro ABAP
- WebClient UI framework
- Dynpro-based front end technologies – SAP GUI family
- SAP Screen Personas
- UI theme designer

Typical Topic Structure Within This Document

Intro Page explaining the topic high level

SAP UI development toolkit for HTML5 (SAPUI5)

Description

SAPUI5 is a JavaScript-based UI library which is designed to build cross-platform business applications. It combines new qualities like openness, flexibility and high speed of innovation with known SAP strengths like enterprise readiness and product standard support.

Key capabilities

- Rich HTML5 control set for desktop and mobile including charts
- Application development and runtime environment for all SAP platforms
- OData integration for timeless software
- Extensibility concepts on every layer, e.g. for "custom controls"
- Codeless UI adaptation enablement*
- Modern theming and branding concepts
- Embraces "open source" framework(s) and web standards

Benefits

- Business agility through availability on any device and for any platform
- User productivity and happiness through increased flexibility, openness and pixel perfect design
- Option to leverage the open source version OpenUI5 for all your applications inside your company



*See also slides in SAPUI5 Flexibility Services

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The Road Map

key feature overview for today, planned, future

SAPUI5

Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction
<p>New Core Features</p> <ul style="list-style-type: none"> • OData V2: Binding against function import parameters • ABAP numeric type support in annotations and OData types • New formatting options for sap.ui.core.format.DateFormat • Performance improvements (e.g. related to invisible controls, paging in trees, ComboBox/Select rendering, table scrolling, and much more) • Performance measurement support (for JS code) <p>New Template Features</p> <p>New Controls and Control Features</p> <p>Browser and Platform Support</p> <p>As of this version, SAPUI5 officially supports Microsoft Windows 10, Microsoft IE 11, Microsoft Edge, Edge on touch devices, Edge on Microsoft Windows Phones, and SAP Fiori Client 1.6.</p> <p>(Version 1.36* - SAP NW UI Add-on 2.0 SP3)</p>	<p>Continuous performance improvements and analysis capabilities</p> <p>Smart Templates: Improvements and further capabilities</p> <p>Control improvements and new controls</p> <p>Application Descriptor extensibility concept based on layered repository</p> <p>Simplified app extensibility concept based on SAPUI5 flexibility services</p> <p>SAP Fiori 2.0 design</p> <p>OData V4 support</p> <p>Documentation and Demo Kit revision, additional tutorials</p> <p>Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI</p> <p>Windows 10 mobile and Chrome on MacOS support</p>	<p>Continue to improve developer efficiency</p> <p>Provide new controls and additional responsive elements</p> <p>Embrace new upcoming technical trends in the web with minimal disruption</p>

*See also what's new in SAPUI5 version 1.36

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Planned in Detail

further information on the 'planned' column

SAPUI5

Planned innovations – features and functions

Functional Area	Feature
Developer productivity	<ul style="list-style-type: none"> • Analysis capabilities to improve performance • OData V4 support • Additional capabilities for Smart Templates for a more efficient development process in combination with generic application controller (objects) with standardized logic • Application Descriptor extensibility concept based on layered repository • Simplified app extensibility concept based on SAPUI5 flexibility services • Revision of documentation • Redesign of Demo Kit
User experience	<ul style="list-style-type: none"> • New controls • Control improvements and feature extensions • Performance improvements • SAP Fiori 2.0 design
Browser & Platform support	<ul style="list-style-type: none"> • Windows 10 mobile support • Support for Chrome on MacOS
Theming	<ul style="list-style-type: none"> • Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI

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- Some topics have separate road maps – then only one or few Intro Pages
- Link to other relevant road map documents always on the corresponding page

SAP UI development toolkit for HTML5 (SAPUI5)

Description



[Link to SAP UX Explorer](#)

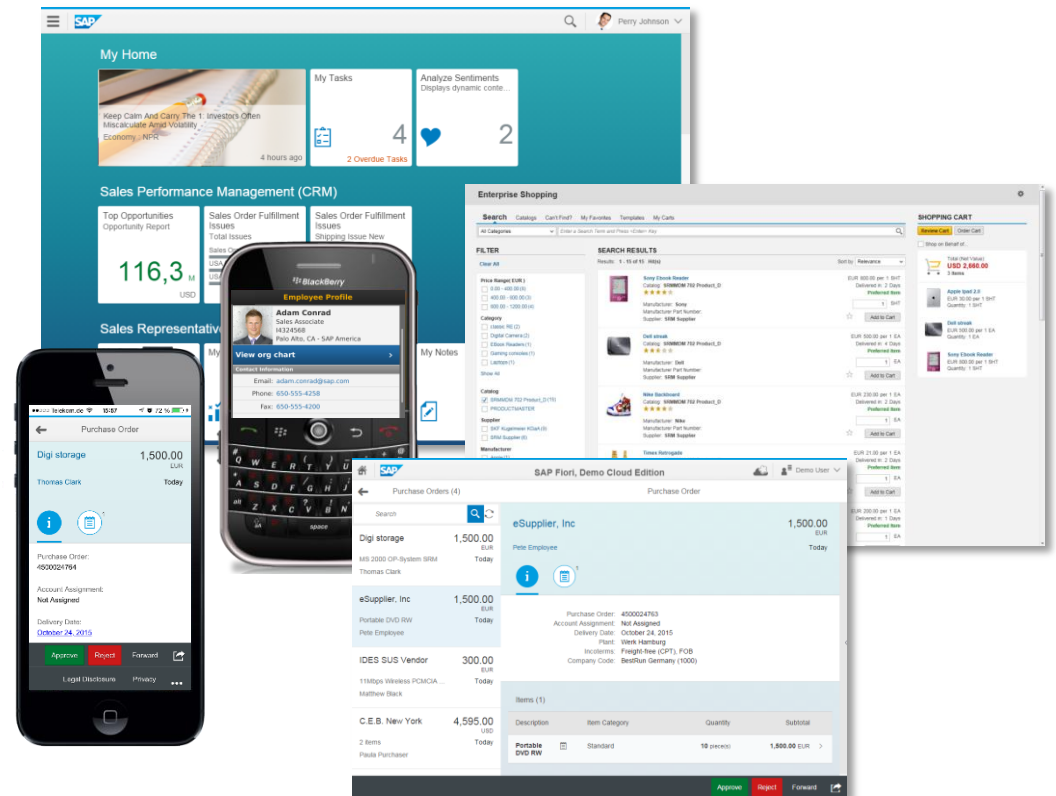
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Key capabilities

- Rich HTML5 control set for desktop and mobile including charts
- Application development and runtime environment for all SAP platforms
- OData integration for timeless software
- Extensibility concepts on every layer, e.g. for “custom controls”
- Codeless UI adaptation enablement*
- Modern theming and branding concepts
- Embraces “open source” framework(s) and web standards

Benefits

- Business agility through availability on any device and for any platform
- User productivity and happiness through increased flexibility, openness and pixel perfect design
- Option to leverage the open source version OpenUI5 for all your applications inside your company



*See also slides « SAPUI5 Flexibility Services »



Today

New Core Features

- OData V2: Binding against function import parameters
- ABAP numeric type support in annotations and OData types
- New formatting options for `sap.ui.core.format.DateFormat`
- **Performance improvements** (e.g. related to invisible controls, paging in trees, ComboBox/Select rendering, table scrolling, and much more)
- Performance measurement support (for JS code)

New Template Features

New Controls and Control Features

Browser and Platform Support

As of this version, SAPUI5 officially supports Microsoft Windows 10, Microsoft IE 11, Microsoft Edge, Edge on touch devices, Edge on Microsoft Windows Phones, and SAP Fiori Client 1.6.

(Version 1.36* - SAP NW UI Add-on 2.0 SP3)

Planned Innovations

Continuous performance improvements and analysis capabilities

Smart Templates: Improvements and further capabilities

Control improvements and new controls

Application Descriptor extensibility concept based on layered repository

Simplified app extensibility concept based on SAPUI5 flexibility services

SAP Fiori 2.0 design

OData V4 support

Documentation and Demo Kit revision; additional tutorials

Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI

Windows 10 mobile and Chrome on MacOS support

Future Direction

Continue to improve developer efficiency

Provide new controls and additional responsive elements

Embrace new upcoming technical trends in the web with minimal disruption

*See also [What's New in SAPUI5 \(Version 1.36\)](#)

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Planned innovations – features and functions

Functional Area	Feature
Developer productivity	<ul style="list-style-type: none">• Analysis capabilities to improve performance• OData V4 support• Additional capabilities for Smart Templates for a more efficient development process in combination with generic application controller (objects) with standardized logic• Application Descriptor extensibility concept based on layered repository• Simplified app extensibility concept based on SAPUI5 flexibility services• Revision of documentation• Redesign of Demo Kit
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This is the current state of planning and may be changed by SAP at any time.

SAPUI5 flexibility services

Description



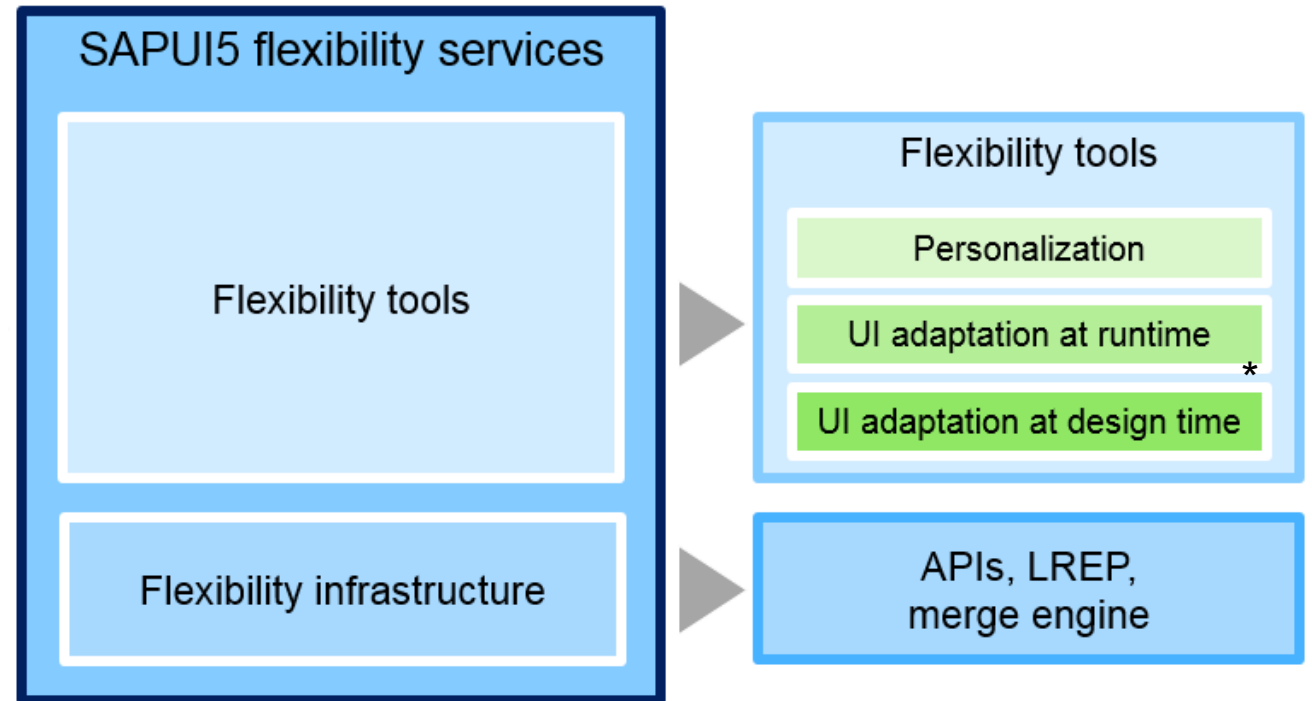
SAPUI5 flexibility services will provide capabilities to flexibly adapt an app and store the changes context-based in a **layered repository**. This allows, for example, customers to create their own SAP Fiori/SAPUI5 UI based on the delivery of SAP without having to modify existing ones in a lower layer. At runtime all changes made to an app are interpreted to define the final UI.

Key capabilities

- Provide flexibility infrastructure used by several flexibility tools
- Allow separation of content delivered by SAP, industries, partners*, customers and end-users
- Store UI changes in a layered repository
- Retrieve UI changes at runtime and generate the final UI
- Enable context-based UI adaptation*
- Provide for different user groups tools to adapt the UI in a convenient way, e.g. WYSIWYG editor for key users at runtime

Benefits

- Simplified, cost-effective, and easy to use UI change process
- Increased end user acceptance through optimized UI layouts
- Upgrade safe when adapting the UI
- Easy and intuitive way for business users to change the UI



* Planned for future releases

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SAPUI5 Flexibility Services

Product road map overview - key themes and capabilities



Today

Flexibility infrastructure for SAP NetWeaver ABAP

- Layered repository with merge engine for UI changes
- Variant handling for Smart Filter Bar and Smart Table
- Lifecycle and transport management

UI adaptation at runtime (RTA) for key users

- Intuitively, code-free, quick and simple
- **Adapt Smart Form control:** add/hide/move fields/groups, rename labels/titles, combine fields
- **Adapt Object Page control:** add/hide/move sections, rename labels/titles
- Keyboard support
- Enabled in SAP Fiori launchpad (FLP) via key user authorization role

Planned Innovations

UI adaptation at runtime (RTA) for key users

- Adapt further controls: Simple Form
- Add external content to app
- RTA for SAP Fiori, cloud edition
- Translation of labels

UI adaptation at design time (DTA) for developer

- UI adaptation capabilities enabled in SAP Web IDE
- Simplified app extensibility concept
- UI configuration for controls in smart template-based apps (e.g. column width in tables, remove buttons in header)
- Coding extensibility

Flexibility infrastructure on SAP HANA Cloud Platform

Context-specific UI flexibility

- Administrate different UI adaptations for a single app
- Administrate and create context-specific app variants

Future Direction

UI adaptation at runtime (RTA)

- End user personalization of **Object Page**
- Adapt freestyle apps

UI adaptation for **partners**

Support tools

Documentation of UI adaptation

(Version 1.36 - SAP NW UI Add-on 2.0 SP03)

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

SAP Web IDE

Description



[Link to SAP UX Explorer](#)

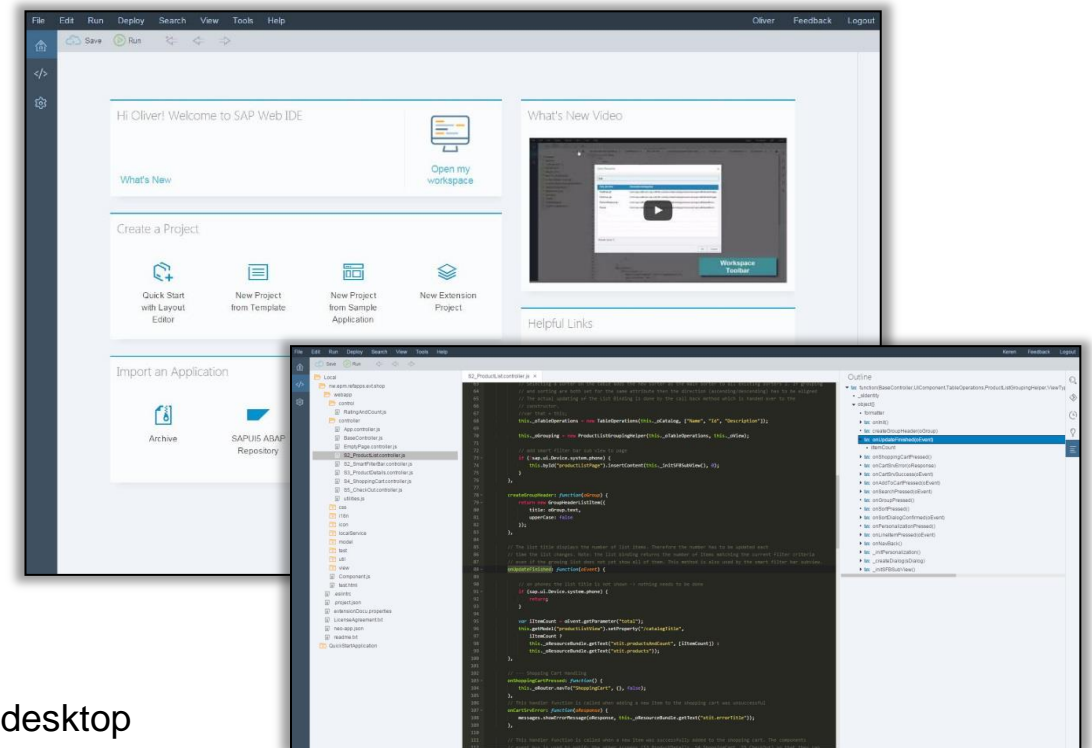
SAP Web IDE is a web-based tool that simplifies the end-to-end application lifecycle: development, packaging, deployment and customer extensions for SAP Fiori/SAPUI5 applications.

Key capabilities

- Drag & drop tools, wizards and templates for creating/extending SAP Fiori/SAPUI5 apps
- Code editors for SAPUI5
- Instant preview and mock data support
- Collaborative development and project persistency
- Integration with SAP platforms
- Hybrid mobile development
- Extensible architecture to add custom tools and templates

Benefits

- Reduces cost, complexity and effort through cloud-based offering
- Increases developer productivity with code templates and SAP best practices
- Improves team productivity with the ability to code and collaborate anywhere
- Develop once, deploy everywhere and run on any device - mobile, tablet and desktop



Related product road map available on [Service Marketplace \(Road Maps → Product & Solution Road Maps → Database & Technology\)](#)

- [SAP Web IDE](#)

Floorplan Manager / Web Dynpro ABAP

Description

[Link to SAP UX Explorer](#)

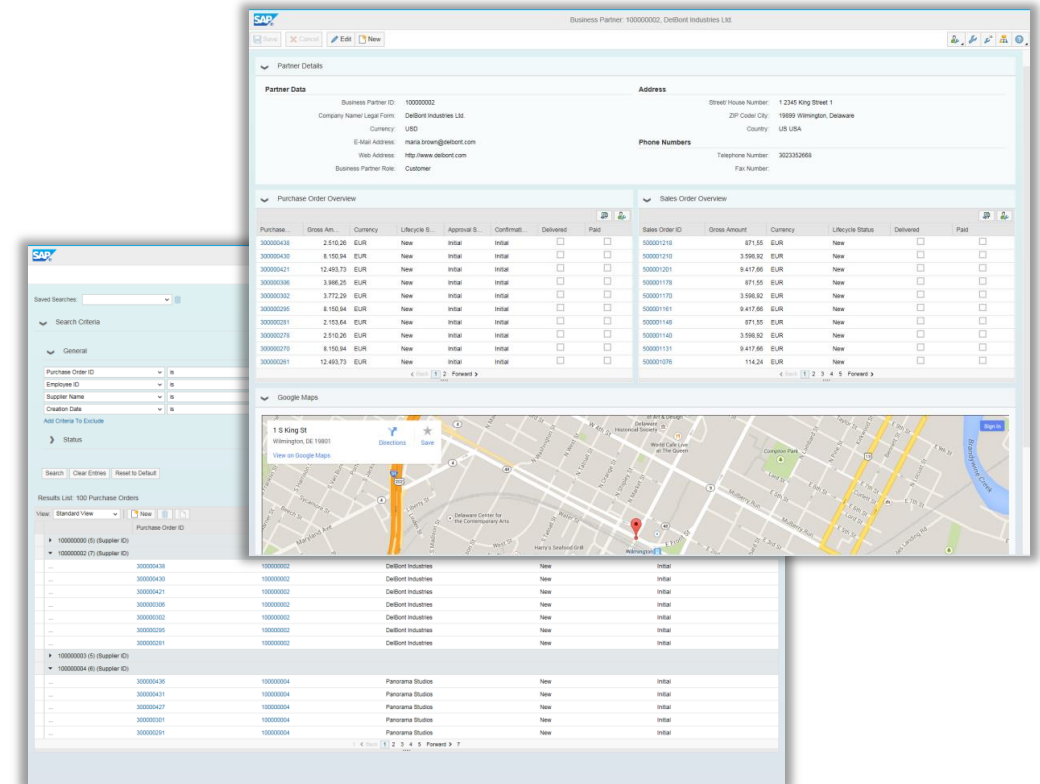
Floorplan Manager (FPM) is a framework for model-based and declarative creation and adaptation of user interfaces. It is based entirely on Web Dynpro ABAP.

Key capabilities

- Application composition using predefined floorplans & building blocks
- Code-free UI configuration, e.g. via flexible UI designer tool (FLUID)
- Modification-free adaptation and extension of UIs as well as end-user personalization
- Coherent and guideline-conforming screen definition, providing product standards support
- Flexibility through island concept
- Productivity and usability features e.g. smart drill-down tools for insight to action on Big Data (e.g. SAP HANA, BICS)

Benefits

- Increased developer efficiency
- Increased flexibility and agility through separation of business logic and UI (timeless software)
- Key technology for stateful desktop apps in SAP Business Suite and SAP S/4HANA



Floorplan Manager / Web Dynpro ABAP

Product road map overview - key themes and capabilities

Today

SAP Fiori launchpad integration

- App descriptor for legacy apps (WDA/GUI)

SAP Screen Personas implementation for WDA/FPM – enhancements

- Scripting complex controls
- Usability improvements

Adoption of SAP Fiori concepts

- PopOver control usage in FPM UIBBs
- SAP Fiori Version of F4 help

Chart UIBB

- Alternative list display

Planned Innovations

SAP Fiori 2.0 support (Visual Harmonization)

- Support of new theme sap_belize
- Support of SAP Fiori 2.0 concepts (Object Page and splitted toolbar)

SAP Fiori launchpad integration

- App descriptor for legacy apps (WDA/GUI): SNOTE and SCWB connection
- Improved FLP integration

SAP Screen Personas implementation for WDA/FPM – further enhancements

- Relative positioning of elements in a form
- Select option enablement

WebSockets in Notification Service

- FPM registration on ABAP Push Channel

Future Direction

SAP Fiori 2.0 support (Visual Harmonization)

- Support and usage of icon fonts

SAP Screen Personas implementation for WDA/FPM – further enhancements

- Z Layering & Alignment
- Script recording

ATS features in IDA List

Tighter integration of SAPUI5

Decoupling of configuration engine from ABAP rendering

Improved client side program model

(SAP_UI 7.50 SP03)

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

WebClient UI framework

Description

[Link to SAP UX Explorer](#)

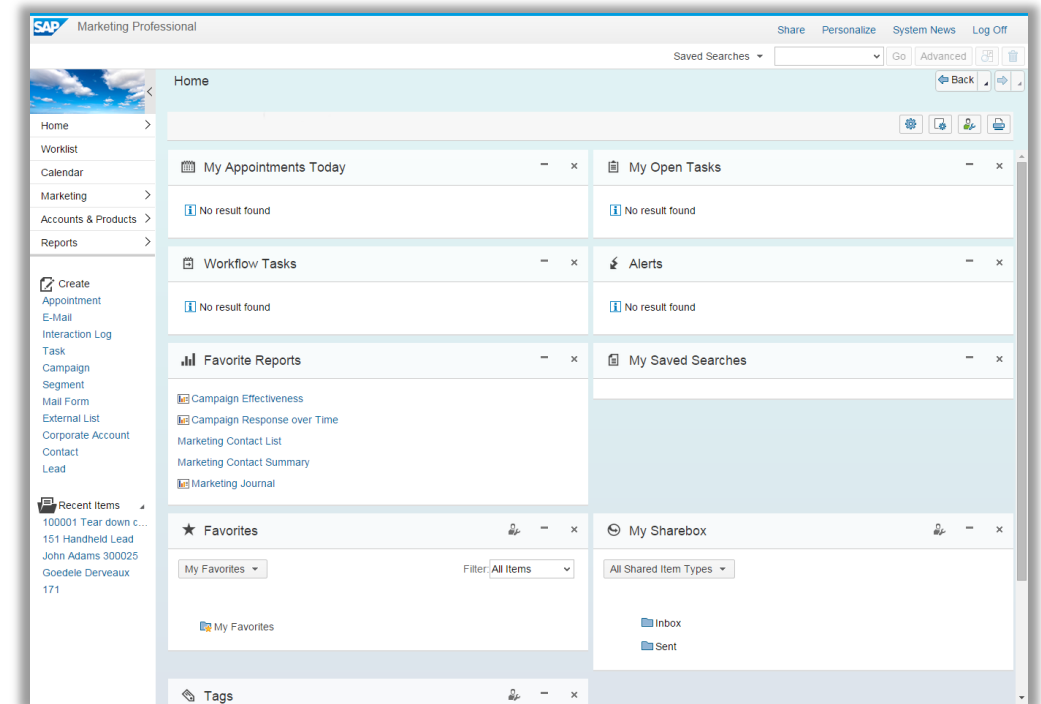
The WebClient UI framework offers a modern user interface leveraging web 2.0 paradigms for SAP CRM. It is harmonized in look and feel as well as interaction paradigms with FPM/WDA.

Key capabilities

- Open and flexible UI framework
- Simple but flexible UI configuration
- Custom fields, tables and views via the application enhancement tool (AET)
- UI and data mashups

Benefits

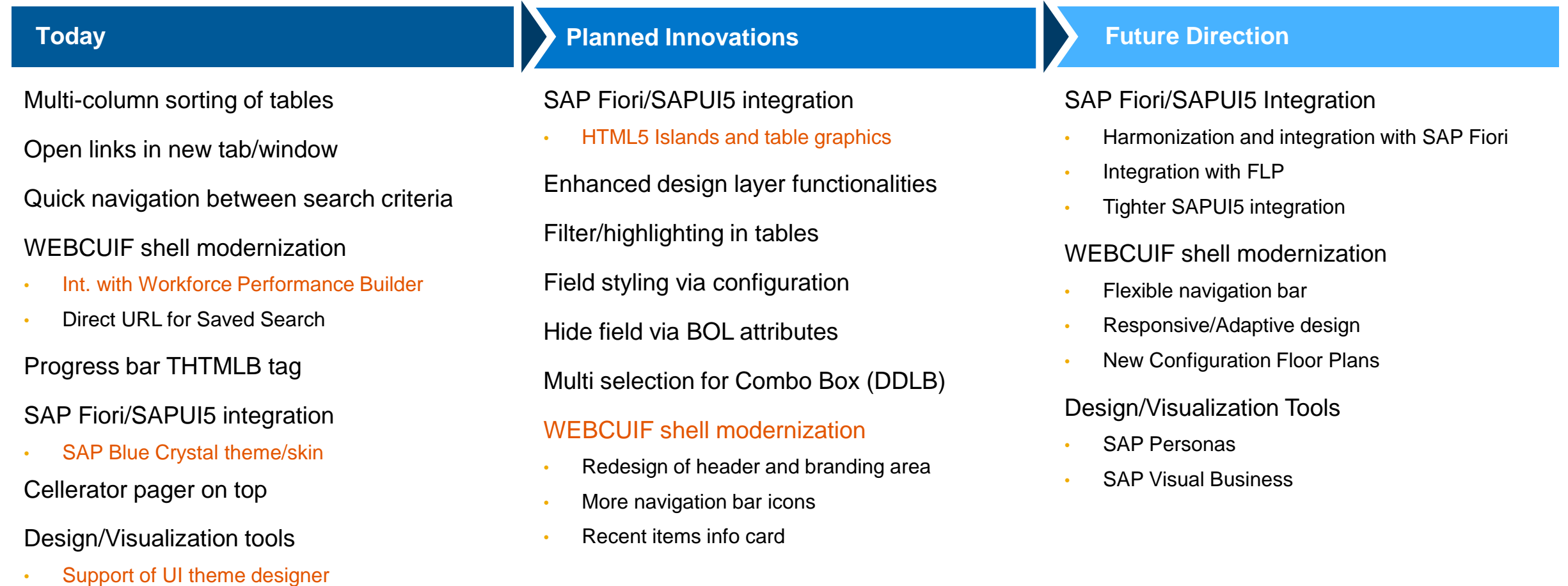
- Consistent web-based user interface across all CRM applications
- Tailoring to user group needs via business roles
- Increased user productivity via broad personalization options



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WebClient UI framework

Product road map overview - key themes and capabilities



(SAP CRM 7.0 EhP4* SP02)

*see [release notes](#) on SCN

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

Dynpro-based front end technologies – SAP GUI family

Description

[Link to SAP UX Explorer](#)

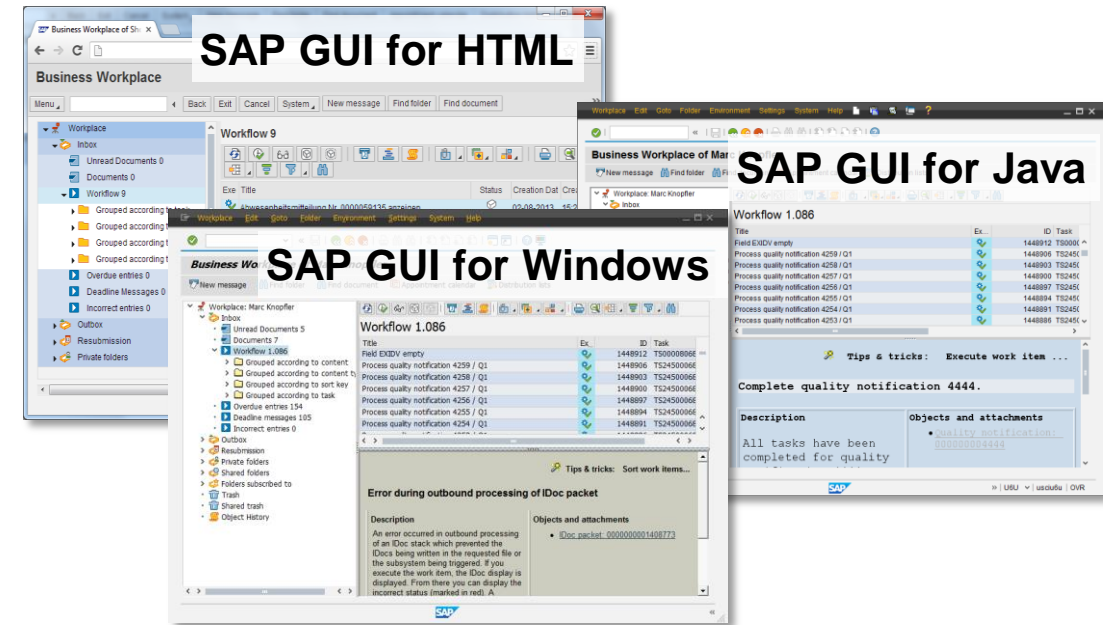
SAP GUI is SAP's universal client for accessing SAP functionality. All three members of the SAP GUI family have unique attributes that make them especially suited for different user environments

Key capabilities

- Graphical user interfaces for all SAP applications based on Dynpro technology
- Separation of user interface and application logic
- Support for various environments (WTS, virtualization, browser,...) and operating systems

Benefits

- High performance and user interactivity
- Fully compatible with all supported SAP NetWeaver releases
- Seamless integration into nearly all environments



Note

- The SAP GUI family is and will be maintained according to SAP's support level agreements. It will continuously receive focused new investments
- Continue using applications based on SAP GUI as well as developing own applications or adding enhancements to existing applications is absolutely safe
- Following SAP's UX strategy SAP GUI is not a key UI technology for SAPs developers to build completely new applications; here SAP recommends to use Web Dynpro ABAP/Floorplan Manager (WebClient UI framework for CRM applications) or SAPUI5. However SAP continues to extend existing Dynpro-based applications with this technology

Dynpro-based front end technologies – SAP GUI family

Product road map overview - key themes and capabilities

Today

All SAP GUIs

- SAP Blue Crystal theme include complete icon redesign
- Enhanced search
- Common configuration infrastructure “SAP UI Landscape” (SAP GUI for Windows, SAP GUI for Java, NWBC)
- Current platform support (Windows 10)

SAP GUI for Windows 7.40

- Tighter integration of SAP GUI for Windows and SAP Business Client for desktop (e.g. joint installation, configuration)
- SAP Screen Personas 3.0 features as trial version

SAP GUI for Java 7.40

- Significantly improved HTML control implementation

SAP GUI for HTML 7.4 (SAP Kernel 7.42)

- SAP Screen Personas 3.0 released as “General Available”

(SAP GUI for Windows 7.40 / SAP GUI for Java 7.40 / SAP GUI for HTML 7.4)

Planned Innovations / Future Direction

SAP continues to invest into SAP GUI

- SAP Screen Personas 3.0 enhancements in all SAP GUI versions
- SAP Screen Personas 3.0 downport for NW 7.0x releases
- Productive release of SAP GUI for Windows 7.40 for SAP Screen Personas 3.0 planned for Q2/2016 with functional limitations
- SAP UI landscape improvements (maintenance application)
- 64bit SAP GUI for Windows version (long term)
- Visually harmonized design for improved integration into SAP Fiori launchpad / with SAP Fiori applications

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

UI theme designer

Description



[Link to SAP UX Explorer](#)

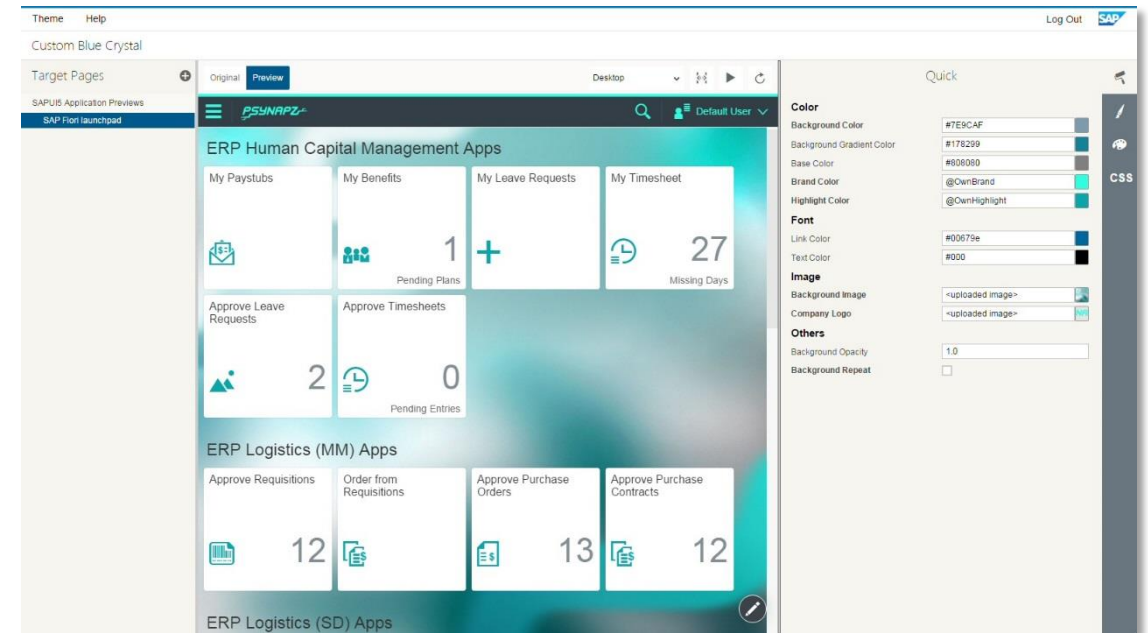
The UI theme designer is a browser-based tool which allows you to create your own themes to adapt the visual appearance of applications. It is the single tool for theming and branding SAP's key user interfaces.

Key capabilities

- Graphical WYSIWYG editor for application and control previews
- Different skill levels of theming: quick, expert and CSS
- Custom CSS3 and LESS support
- Supported UI technologies: SAPUI5 (incl. SAP Fiori apps), Unified Rendering (WDA, WDJ, SAP GUI for HTML, HTMLB), SAP Portal portfolio and SAP Business Client (additional planned)
- Supported platforms: SAP NetWeaver AS ABAP, SAP Enterprise Portal and SAP HANA Cloud Platform

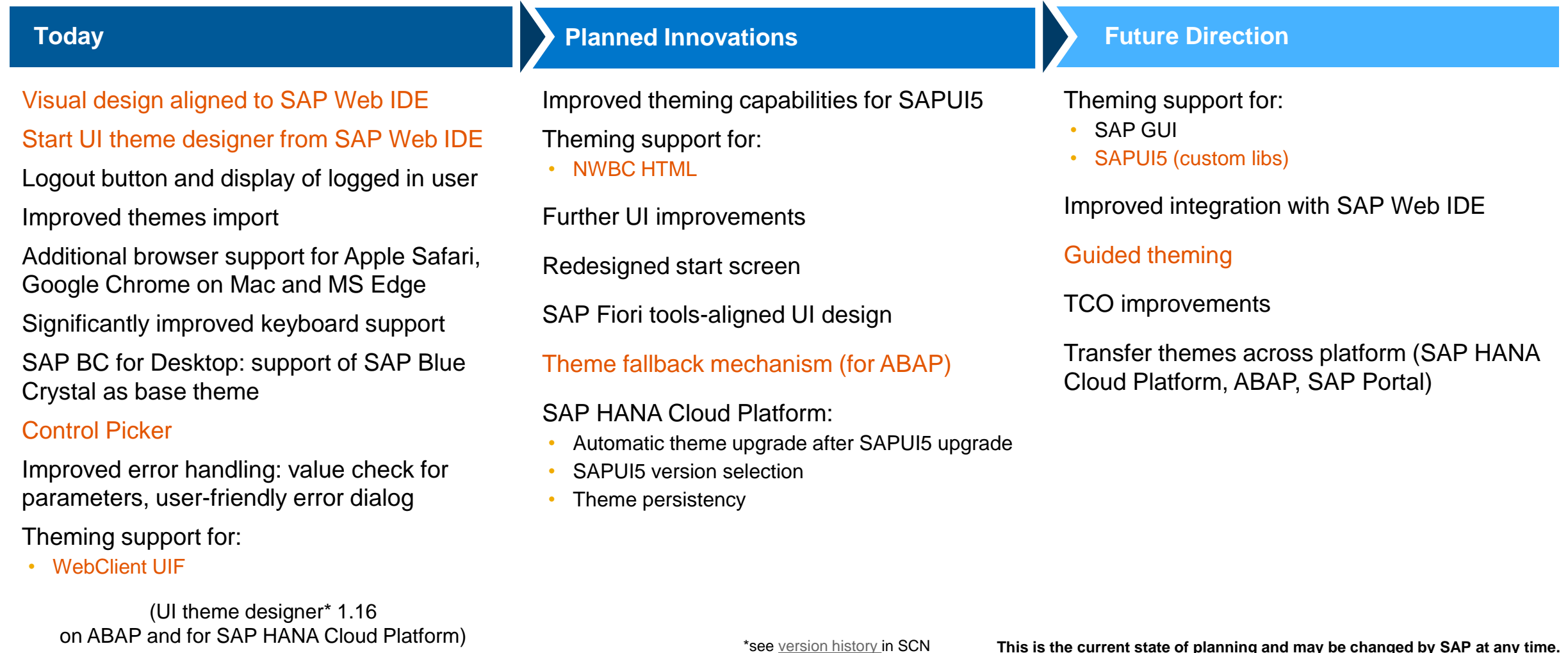
Benefits

- Apply corporate identity
- Reduce visual breaks for end users
- Increased theming/branding efficiency
- Easy ramp up via SAP HANA Cloud Trial and lower TCO



UI theme designer

Product road map overview - key themes and capabilities



*see [version history](#) in SCN

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

SAP Screen Personas

Description

[Link to SAP UX Explorer](#)

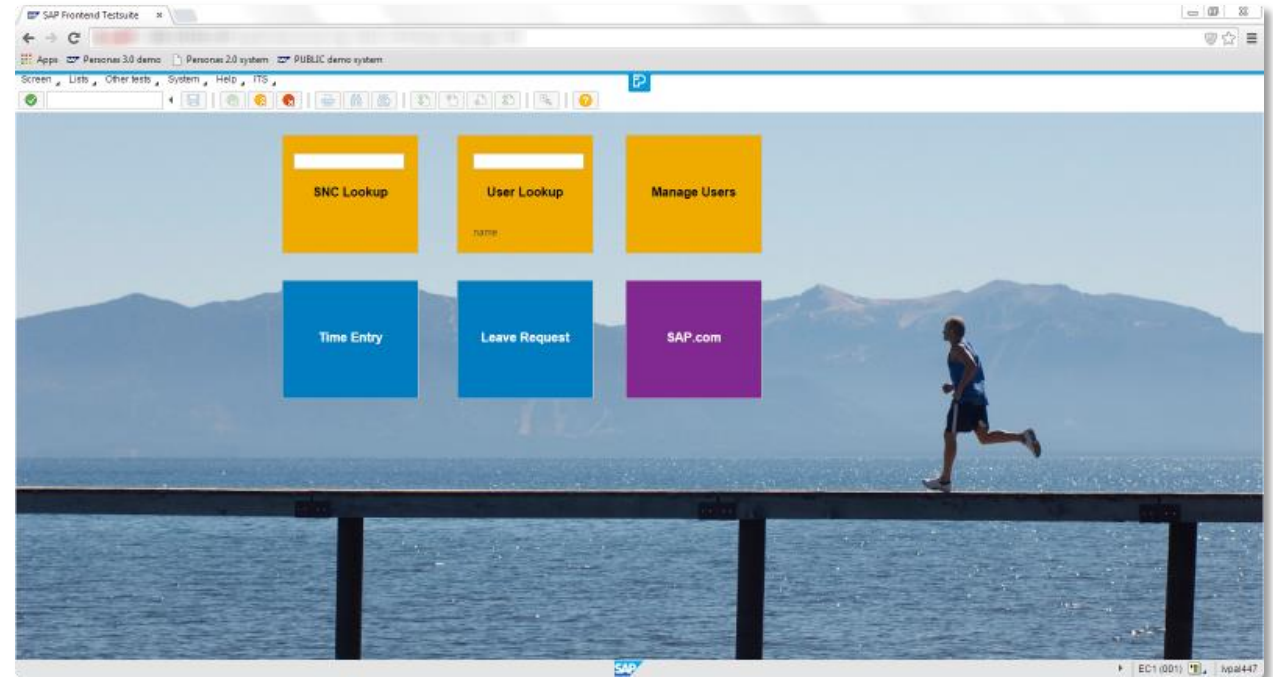
SAP Screen Personas allows companies to improve user productivity by personalizing their SAP ERP screens.

Key capabilities

- Simplify complex Dynpro or Web Dynpro ABAP screens
- Create SAP Fiori designs for custom or standard transactions, including SAP S/4HANA
- Streamline business processes by providing only the essential screen elements and data to complete transactions faster and more accurately through fewer data entry fields and reduced scrolling
- Automate repetitive tasks and simplify complex screens through pre-filled fields and pull-down menus, which help the user save time on data entry

Benefits

- Improve business user productivity
- Increase SAP adoption by making screens easier to use
- Decrease training time for SAP users with intuitive screens
- Enhance user satisfaction
- Reduce the cost of personalization compared to custom coding



SAP Screen Personas

Product road map overview - key themes and capabilities

Today

Streamline business processes

- Simplify screens by removing unused elements
- Combine information from multiple tabs or screens
- Change text to match your unique business needs
- Pre-fill fields to eliminate typing

Automate repetitive tasks

- Record screen actions and replay
- Skip over screens
- Auto-populate screens based on user role

Integrate with other SAP UX Solutions

- Build in Web GUI, render in SAP GUI or Web GUI
- Embed flavors into SAP Fiori launchpad, SAP Business Client (formerly NWBC) or SAP Portal portfolio
- Simplify custom transactions in S/4HANA on-premise edition and apply SAP Fiori design
- Edit Web Dynpro ABAP screens

(SAP Screen Personas 3.0 SP2)

Planned Innovations

Editor enhancements

Scripting enhancements

Easier SAP Fiori designs

More capabilities for IT administrators

Kernel 7.22 support (Basis 7.XX)

Future Direction

Responsive design

Mobile rendering

Advanced tools for developers

Further usability improvements

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



UI Client & Integration Topics

- SAP Fiori launchpad
- SAP Business Client
- Product portfolio for SAP Portal

SAP Fiori launchpad

Description



[Link to SAP UX Explorer](#)

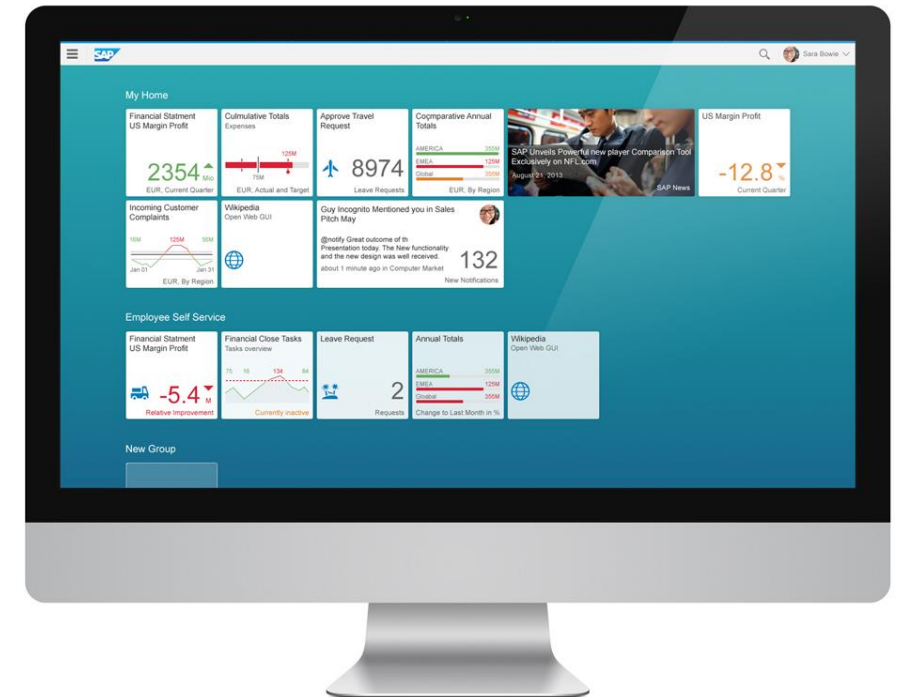
SAP Fiori launchpad is the web-based single point of entry for business applications and analytics. Offering all aspects of SAP Fiori user experience it is the recommended client for SAP S/4HANA.

Key capabilities

- Supports multiple platforms and devices (using responsive design paradigm)
- Role-based with preconfigured home page content
- People aware via personalizable content, easy bookmarking and collaboration capabilities
- Quick and easy navigation
- Search across apps and business objects
- Support of established UI technologies as SAPUI5, FPM/WDA, SAPGUI for HTML (SAPGUI for Windows only via SAP Business Client)
- Integration of any URL-based navigation target
- Theming and branding via UI theme designer
- Open and extensible

Benefits

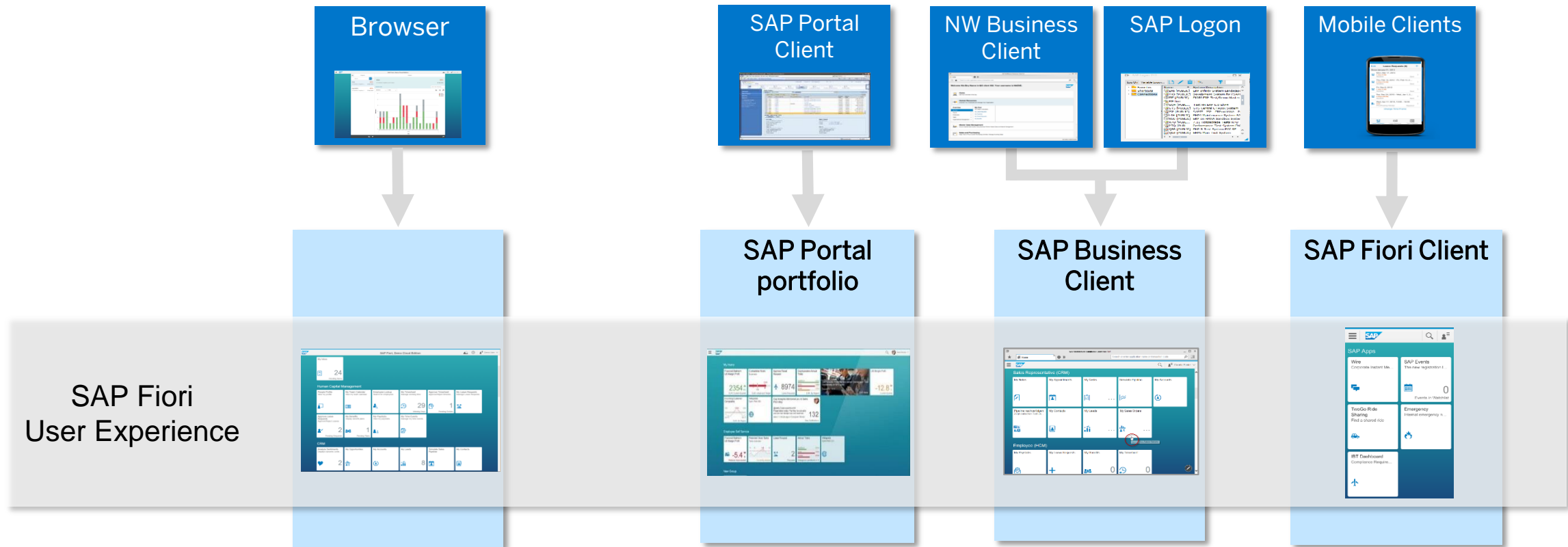
- Simplified, personalizable single point of access drives user productivity and agility on multiple devices



SAP Fiori launchpad – Single point of entry across clients



SAP Fiori launchpad runs standalone and on key SAP UI clients offering the unified SAP Fiori user experience.



SAP Fiori launchpad

Product road map overview - key themes and capabilities



Today

End User Experience

- User default settings: Ranges and multiple values
- *Anchor Navigation*

Performance Optimization of FLP startup for SAPGUI for HTML apps

SAP UI clients alignment

- *SAP Enterprise Portal: Integration of search, factsheets & analytical SAP Fiori apps*

Planned Innovations

End User Experience

- *Access to Easy Access* (SAP Menu and User Menu)

Implementation of **SAP Fiori 2.0 concepts**

Cloud extensions infrastructure (e.g. usage analysis, Co-Pilot)

Simplified setup and configuration

- FLP content maintenance for WDA/SAPGUI on application systems
- SAP Screen Personas integration into FLP
- Simplified setup of PFCG authorization based on SAP Fiori catalogs

SAP Platform Alignment

- Common FLP content model (ABAP/SAP HANA Cloud Platform)
- *Unified support of UI technologies* (e.g. SAP GUI and Web Dynpro ABAP)

Future Direction

The SAP entry point across devices and platforms

- Integration of additional apps from SAP cloud solutions
- Integration of analytical content and tools
- Integration with document management solutions

Central FLP Design Time including SAP cloud solutions

Extended search capabilities

SAP Business Client

Description

[Link to SAP UX Explorer](#)

SAP Business Client 6.0 is the new name for the latest version of **SAP NetWeaver Business Client** (NWBC).

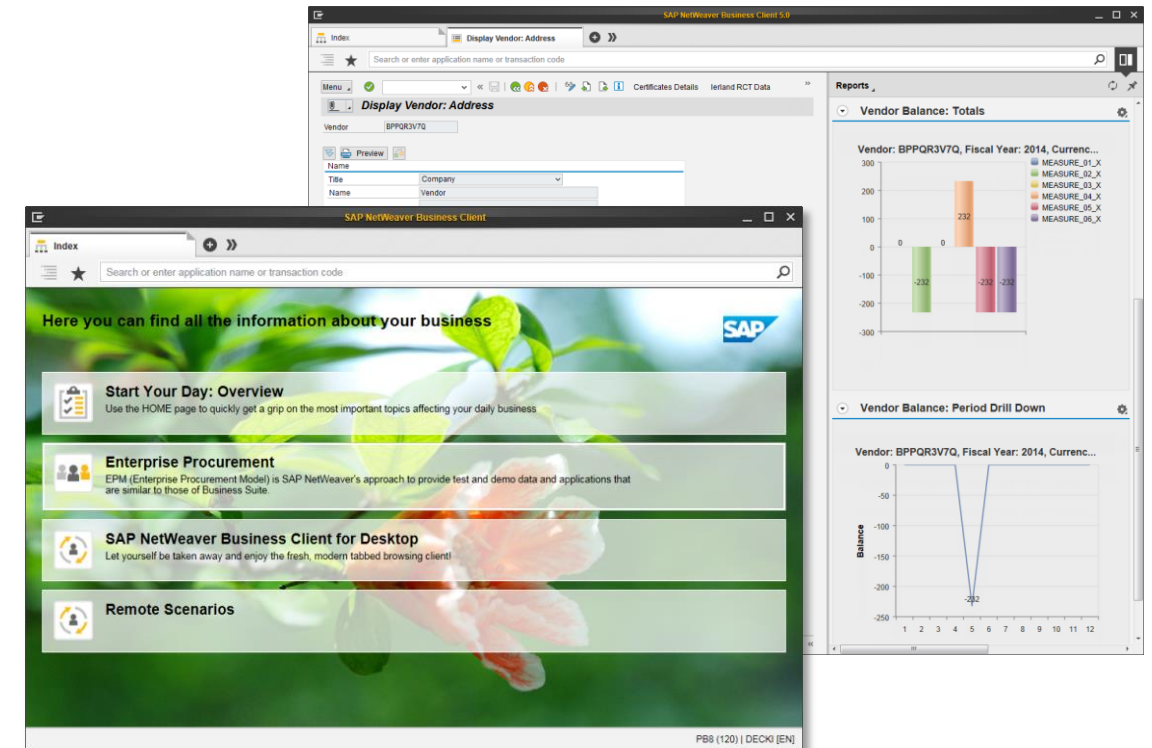
SAP Business Client offers a harmonized access to SAP business applications including SAP Fiori, FPM/WDA, and SAP GUI applications as well as any web-based content.

Key capabilities

- Single point of entry for the user using role-based access to business applications
- Harmonized experience through integration and interoperability of different UI technologies
- Allows modification-free mash-ups using side panel*
 - ~ 1600 ERP transactions enabled
 - ~ 130 reusable chips available
- Easy theming and branding using UI theme designer*
- Web browser-like interaction paradigm*

Benefits

- Increased productivity for expert users
- Faster decision making and data entry



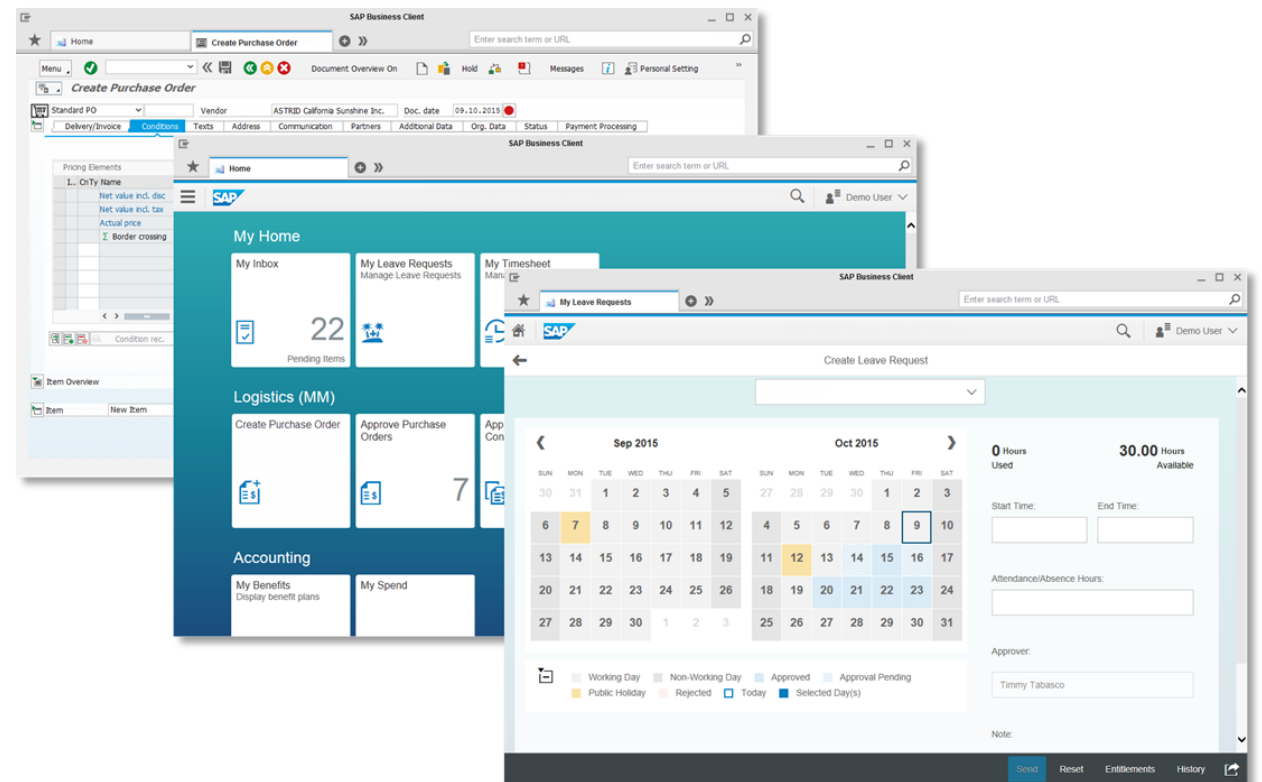
* Desktop version only

SAP Business Client

SAP Fiori experience on Windows desktop

SAP Business Client offers an integration of the SAP Fiori launchpad to allow a unified SAP Fiori user experience.

- Integration of the SAP Fiori launchpad
 - Launch SAP GUI transactions using embedded SAP GUI for Windows
 - SAP Fiori launchpad as start page
 - Additional system connection type
 - Business role configuration purely SAP Fiori launchpad-based
- SAP Blue Crystal as default theme



SAP Business Client

Product road map overview - key themes and capabilities

Today

Tight integration with SAP GUI and SAP Logon

Enhanced integration with SAP Screen Personas 3.0

SAP Fiori – apps integration in PFCG menu

SAP Fiori UX in SAP Business Client 6.0:

- SAP Fiori launchpad with SAP GUI native experience*
- Business role configuration purely SAP Fiori launchpad-based
- UI theme designer support for SAP Blue Crystal base theme*
- Windows desktop client for SAP S/4HANA, on-premise edition

Platform support for Windows 10 / IE11

SAP Business Client 6.0
(ABAP: SAP NW 7.50 SP03 / UI ADD-ON 2.0 SP03)

Planned Innovations

Display side panels for SAP GUI transactions in SAP Fiori launchpad connection

Future Direction

Visually harmonized design for improved integration with the next generation of SAP Fiori launchpad

* Specific backend requirements see [documentation](#)

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

Product portfolio for SAP Portal

Innovations for on-premise and cloud-based UI integration and extension scenarios

[Link to SAP UX Explorer](#)

SAP Enterprise Portal

Proven user experience platform unifying access to business applications, information and services (SAP and 3rd party) with modern user experience leveraging SAP Fiori (launchpad and apps) and SAP Mobile Documents to provide an end-to-end, personalized multichannel entry point.

SAP HANA Cloud Portal

Flexible portal solution for building attractive business sites, extending on-premise and cloud scenarios across devices.

SAP HANA Cloud Portal supports three main business scenarios:

- **SAP Fiori-based business sites**
- **Self-service business sites**
- **Extensions for cloud applications**



Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Database & Technology)

- [SAP Enterprise Portal and SAP HANA Cloud Portal](#)



Specialized UI Technologies

- SAP Visual Business
- SAP Visual Enterprise
- SAP Interactive Forms by Adobe
- Web Dynpro Java

SAP Visual Business

Description

[Link to SAP UX Explorer](#)

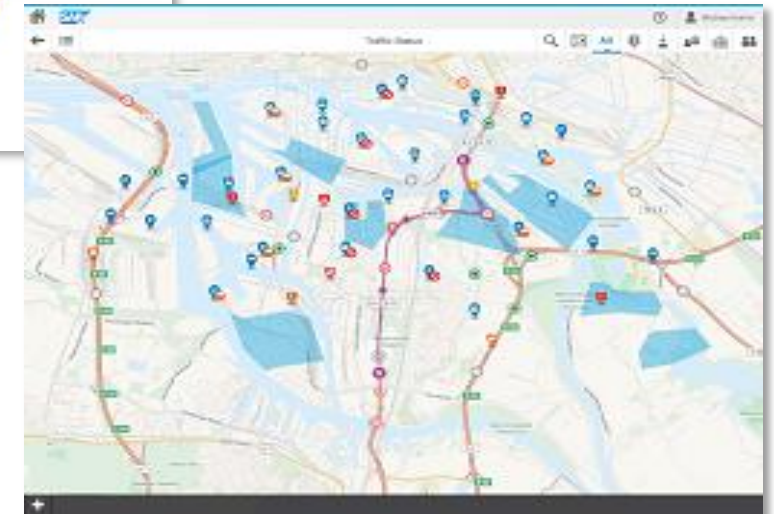
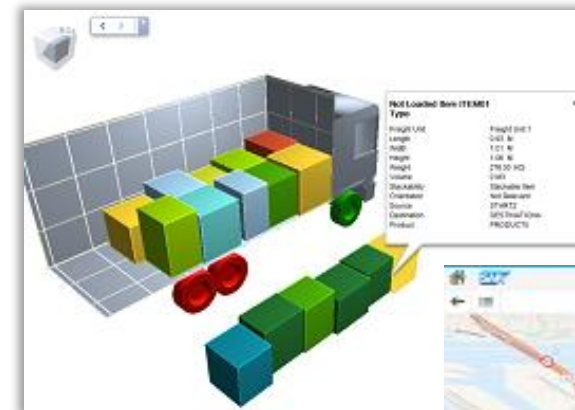
SAP Visual Business is an interactive UI technology that enables users to work with visualized SAP and non-SAP data from various sources. It also contains a toolbox that allows the rapid building of interactive graphics. SAP Visual Business is the standard approach for SAP applications to integrate maps.

Key capabilities

- Transactional, fully interactive
- High performance & SAP data volumes possible
- Full integration in key SAP UI technologies, providing SAP product standard support
- Simple ABAP/SAPUI5 API
- Abstraction layer for the applications
- Standard ABAP geo services for backend applications

Benefits

- Provide greater transparency across the enterprise by aggregating and integrating information on one screen
- Seeing consequences of choices at a glance supports well informed decisions based on relevant data
- Visualize internal and external systems in real-time



SAP Visual Enterprise

Description

[Link to SAP UX Explorer](#)

SAP Visual Enterprise Solutions combine visual product, asset and plant information with business content. This provides an unprecedented combination of traditional business information with fully interactive 3D visuals.

Key capabilities

- Powerful, easy-to-use and free-of-charge **SAP Visual Enterprise Viewer (VEV)** allows viewing and interacting with the authored and published content. Viewers exist for desktop, mobile and UI5/HTML5.
- The **Viewer** is delivered in the Visual Interaction toolkit, inside standard SAPUI5 distribution
- **SAP Visual Enterprise Author (VEA)** creates animated procedures, 3D embedded documents and high-definition imagery. It includes a component called Visual Enterprise Link (VEL), which allows hot-spotting of business data on top of 2D images
- **SAP Visual Enterprise Generator (VEG)** is a server-based process engine. It
 - Reads most CAD or other 3D or 2D inputs
 - Provides automated, scalable, robust translation, publishing and management of business-linked Visualization data.
 - Publishes graphics, videos, and documents with optional storage in DMS
- Powerful SDKs support easy embedding of visualization in all SAP platforms, applications, processes and business models, including cloud, on-device and on-premise.
- Integrated into a wide range of SAP solutions including PLM and Visual Manufacturing Planner

Benefits

- Enables better and faster decision making and more intuitive user experiences.
- Improves productivity and process efficiency by providing visual navigation and query of product information and graphical animation of procedures.



SAP Interactive Forms by Adobe (IFbA)

Description

[Link to SAP UX Explorer](#)

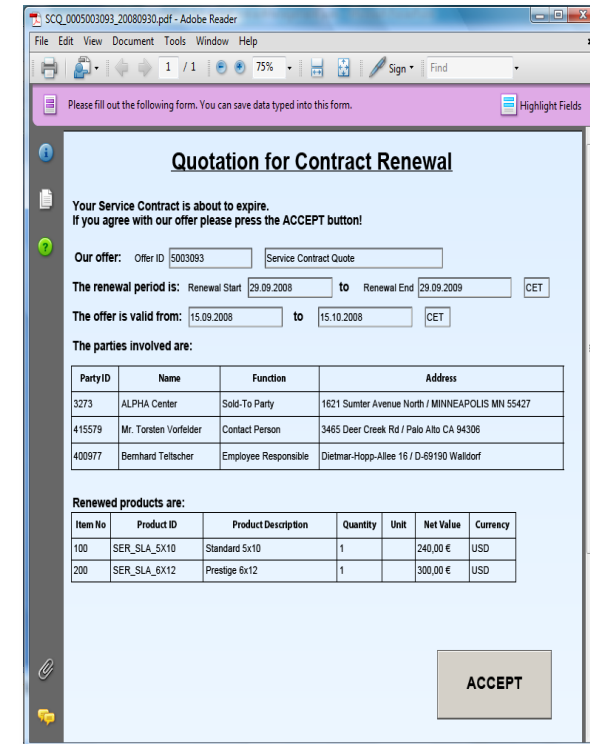
SAP Interactive Forms by Adobe (IFbA) is SAP's on-premise solution for print forms and interactive forms. SAP Forms as a Service by Adobe is SAP's hybrid solution for print forms and interactive forms: The ADS runs on SAP HANA Cloud Platform everything else runs on-premise.

Key capabilities

- Online and offline interactive scenarios
- Print forms
- Optimal integration with SAP technology
- Digital signatures & bar codes
- Pre-filled application values, list boxes...
- Automatic data extraction and integration in SAP applications
- Printing, saving locally and archiving
- Integration with BPM and other SAP workflows
- Standard Adobe Reader functionality
- Distribution by e-mail / portal

Benefits

- Self-explanatory (paper-like)
- a contribution to sustainability while reducing printing, transport and storage costs
- a way of reducing manual data entry and eliminating expensive errors
- High number of predefined forms for SAP Business Suite and SAP Business ByDesign (currently 2400+)



Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Database & Technology)

- SAP Interactive Forms by Adobe

Web Dynpro Java

Description

[Link to SAP UX Explorer](#)

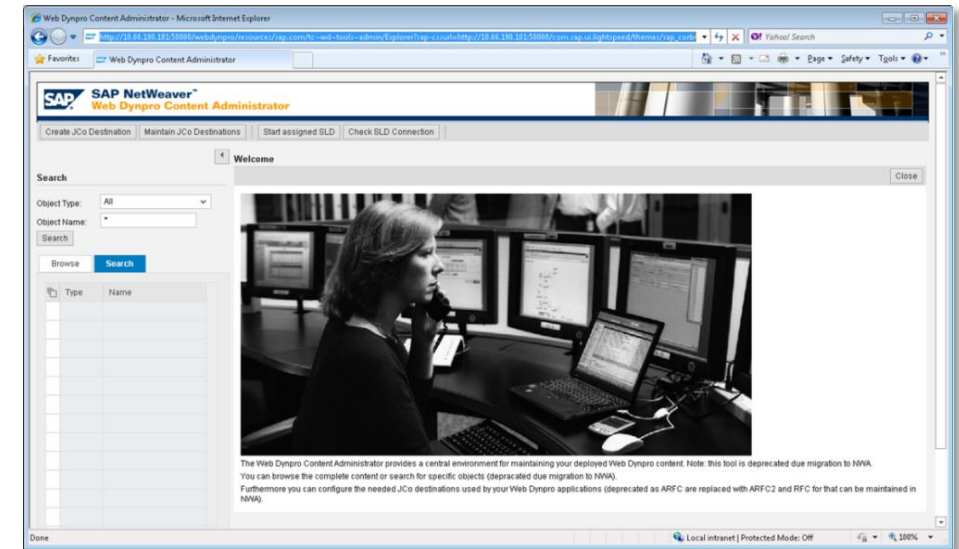
Web Dynpro Java (WDJ) is a development and runtime environment that is used to create professional user interfaces for business applications powered by SAP NetWeaver. It is based on the model view controller paradigm.

Key capabilities

- Meta model approach with declarative programming
- Reusability and better maintainability by using components
- Graphical support with tools in the Web Dynpro perspective
- SAP NetWeaver Java development infrastructure (NWDI) supports team work with different services such as source code versioning and the central build service

Benefits

- Platform-independence
- Minimized implementation effort



Note

- Web Dynpro Java will be maintained according to SAP's support level agreements. It will continuously receive focused new investments
- It is safe to continue using applications based on WDJ and also for a customer to add little enhancements based on existing capabilities
- However, following the SAP UX strategy, WDJ is not a key UI technology for SAPs developers to build new SAP standard applications. SAP recommends using SAPUI5 or Web Dynpro ABAP with Floorplan Manager (for CRM applications the WebClient UI framework)



UI Related Road Map Topics

- SAP browser support
- SAP Mobile Platform / SAP HANA Cloud Platform mobile services
- Mobile at SAP Business Suite
- SAP Gateway
- SAP Gateway for Microsoft
- Analytic Solutions from SAP

SAP browser support*

Relevance for SAP user interface technologies

[Link to SAP UX Explorer](#)

SAP offers web applications for desktop, tablet and smartphones devices.

SAP technologies for web based user interfaces are SAPUI5, Floorplan Manager/Web Dynpro ABAP, Web Client UI framework and more.

SAP web applications support the major browser vendors on the major client platforms:

Microsoft Internet Explorer

Google Chrome

Microsoft Edge

Apple Safari

Mozilla Firefox

* More details on browser Product Availability Matrix

SAP browser support summary

Desktop

Microsoft Internet Explorer

- IE11 Desktop (recommended)
- IE7 – IE10 until Jan 2016

Microsoft Edge

- Support for Current Branch for Business (CBB)
- in SAPUI5 1.32 and higher. Down port to 1.28 planned

Mozilla Firefox

- Latest Extended Support Release Cycle (rec.)
- Latest Rapid Release Cycle (w. conditions)

Google Chrome

- Latest Release Cycle for Windows
- Support of SAP NW 7.02, 7.03, 7.30 and higher

Apple Safari

- On OS X for 3 years from version release date
- Support of SAP NW 7.02, 7.03, 7.30 and higher

Mobile

Browsers on reference devices

- Apple Safari on iPhone and iPad
- Latest Google Chrome version on Samsung Galaxy Tab/S
- BlackBerry on BlackBerry Z10/30
- Windows Phone 8.1 on Nokia Lumia 930 (w. conditions). Replacement with Windows 10 mobile planned

Devices and operating system versions are supported for 3 years from vendor release date

Supported UI technologies

- SAPUI5
- Applications in SAP Fiori may differ

Product availability matrix (PAM)

Supported browsers, operating systems, devices and list of restrictions can be found on PAM:

<http://support.sap.com/pam>



Application Server ABAP (ABAP) 131 Entries

Web-Browser	Operating System	Scope	Status	Valid from	Additional Information
APPLE SAFARI 6	OS X 10.8 (MOUNTAIN LION)	SAP BASIS 7.40 maintained until 31.12.2020	Green	10.05.2013	
APPLE SAFARI 6	OS X 10.8 (MOUNTAIN LION)	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Green	10.05.2013	Display (1)
APPLE SAFARI ON IOS	IPAD OS 5.1	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Yellow	10.05.2013	Display (1)
APPLE SAFARI ON IOS	IPAD OS 6.0	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Yellow	10.05.2013	Display (1)
APPLE SAFARI ON IOS	IPHONE OS 5.1	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Yellow	10.05.2013	Display (1)
APPLE SAFARI ON IOS	IPHONE OS 6.0	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Yellow	10.05.2013	Display (1)
BLACKBERRY BROWSER FOR Z10/Z30	BLACKBERRY OS 10	USER INTERFACE TECHNOLOGY 7.40 maintained until 31.12.2020	Yellow	12.12.2013	Display (1)
CHROME FOR ANDROID (OS)	ANDROID 4.0	USER INTERFACE TECHNOLOGY 7.40	Yellow	10.05.2013	Display (1)

APPLE SAFARI 6 + OS X 10.8 (MOUNTAIN LION) + USER INTERFACE TECHNOLOGY 7.40
For details please refer to Note 1716423 SAPUI5 for Mobile and SAPUI5 for Desktop

SAP Mobile Platform / SAP HANA Cloud Platform mobile services

Description

[Link to SAP UX Explorer](#)

SAP Mobile Platform (on premise) and SAP HANA Cloud Platform mobiles (cloud) provide tools and services for developing and deploying native, hybrid and SAP Fiori mobile apps. The SAP Mobile Platform SDK simplifies the development of cross-platform apps with powerful enterprise capabilities.

Key capabilities

- Rapidly mobilize SAP Fiori and SAPUI5 apps with true mobile capabilities such as push notifications, offline data, and access to mobile device features.
- One SDK supporting native, hybrid, HTML5, metadata-driven and SMS app types – online or offline, on premise or cloud.
- End-to-end developer experience with SAP Web IDE, with open support for 3rd party tools such as Microsoft Visual Studio
- Out of the box support for critical enterprise security standards
- Integration with SAP and 3rd party back-end systems
- Manage the complete lifecycle of your enterprise apps
- Integration with SAP Mobile Secure or 3rd party EMM for comprehensive mobility management
- Extensive library of off-the-shelf apps for industry and LOB from SAP and 3rd parties, including 800+ SAP Fiori apps



Benefits

- Enable a highly mobilized work force and a strategic channel to consumers, suppliers and partners
- Mobility is a key enabler of digital transformation, impacting the moment of truth connecting people, processes, data and devices.

[Related road map available on Service Marketplace \(Improvements & Innovations → SAP Road Maps → Database & Technology\): SAP Mobile Platform](#)

SAP Gateway

Product description



[Link to SAP UX Explorer](#)

SAP Gateway, an integral part of SAP NetWeaver, enables you to connect devices, environments, and platforms to SAP systems efficiently and securely. It uses the globally renowned Open Data Protocol ([OData](#)) so you can use any programming language or model to connect to SAP and non-SAP applications.

Use SAP Gateway to development innovative, people-centric solutions with an engaging and consistent user experience for desktop, mobile, and tablet devices. All you need is the latest SAP NetWeaver system and knowledge of ABAP and HTTP. Creating OData services with SAP Gateway is that simple.

Did you know? SAP Fiori uses SAP Gateway to create OData services that bring business data from backend systems to compelling apps on any device.

Use SAP Gateway to:

- Expose data from SAP backend systems and consume on compelling apps on any device.
- Create OData services quickly and easily, increasing developer productivity.
- Reuse On-Premise data in cloud and hybrid scenarios
- Digitalize your business and engage with end consumers.



Related product road map available on [Service Marketplace \(Improvements & Innovations → SAP Road Maps → Database & Technology\): SAP Gateway](#)

SAP Gateway for Microsoft

Description

[Link to SAP UX Explorer](#)

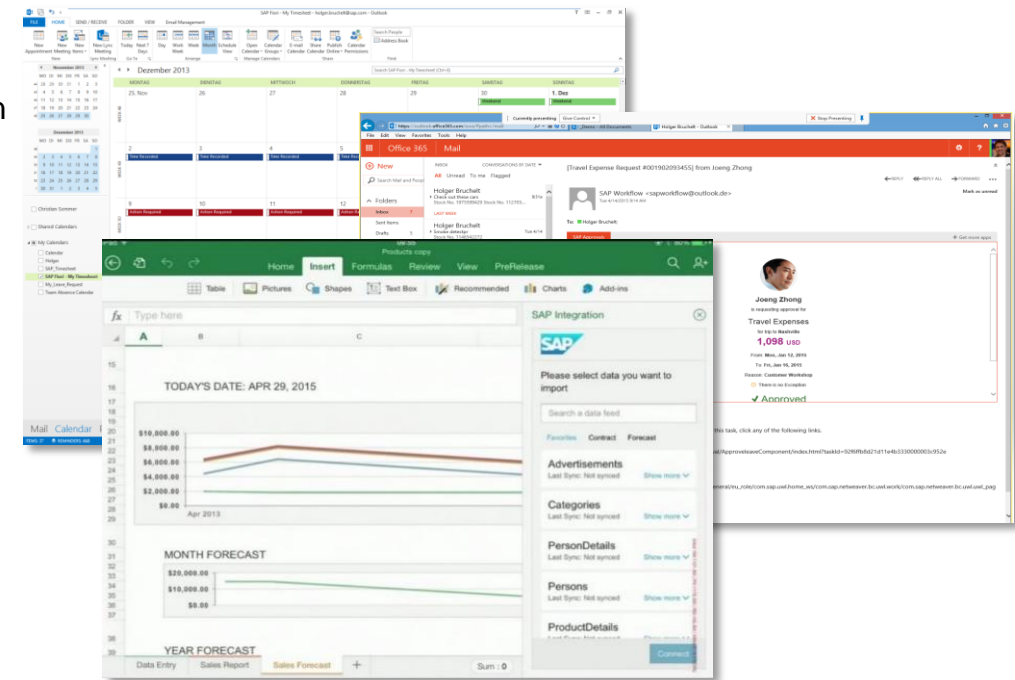
SAP Gateway for Microsoft* is an interoperability framework that enables IT to securely integrate SAP and Microsoft technologies in a non-disruptive, scalable, and sustainable manner. It is designed to enable .NET developers to quickly and easily create SAP software-based Microsoft applications, thereby allowing business users to access SAP data and related processes from their most familiar Microsoft environment.

Key capabilities

- Enterprise ready integration supports SAP Single Sign-On and SAP Solution Manager integration
- Provides developer templates for commonly used scenarios (e.g. Outlook Workflow integration) and enables the generation of SAP specific services in any .NET application.
- Interoperability in both (Office 2010/2013) on-premise and Microsoft Azure / Office 365
- Delivers out-of-the-box Excel integration to allow mass update / create processes of SAP data directly from Microsoft Excel
- Ability to consume and extend SAP Fiori services in Microsoft environments

Benefits

- Optimize the investments in Microsoft and SAP by providing a bridge between the two worlds
- Use of the already-familiar Microsoft Visual Studio environment with SAP data extensions and a build-in developer toolkit
- Lower TCO by employing a secure, integrated environment to replace costly point-to-point solutions



Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Database & Technology): SAP Gateway for Microsoft

*Formerly SAP Gateway productivity accelerator for Microsoft



Summary

Key takeaway

Choosing the right tool or **technology** is one **important step**.

However, in order to achieve a high level of user experience,

it is **neither the first**

nor the most important step.



Thank you

Road map contacts for customers and partners

- Ingo Deck

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