

# **SAP Product Road Map**

## **SAP User Interface Technologies**

Road Map Revision: 2015.11.04



Template Revision: 20150318 v4.0

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# Introduction to product road maps

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## Purpose

Product road maps are designed to support the product adoption planning activities of SAP customers. A product road map helps a customer match short term and long term goals with technology plans.

A product road map describes how the feature / function capabilities in an SAP product or technology are planned to progress over time, in general:

- Today = changes in the current release version
- Planned Innovations = changes planned in upcoming development releases (up to 12-18 months).
- Future Direction = proposed themes for a product or technology beyond the planned releases

## Complementary resources

For a more general description of the business problems / processes being solved and supported by SAP, refer to Solution Road maps.

For more detailed technical information please refer to the Product Availability Matrix, Ramp-up Knowledge Transfer materials and product documentation.

# Important notes

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- This road map addresses SAP's mainly adopted UI technologies – following the SAP user experience strategy
- Where separate road maps are available the topics are briefly explained and their dedicated road maps are listed
- Acronym glossary can be found at the end of the presentation



# SAP UI technologies consist of a broad portfolio

## Structure of this presentation

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### Introduction & motivation

- UX market overview, derived UX strategy and supporting main user interface (UI) technologies
  - Complete road map presentation is building upon and is aligned with SAP's user experience (UX) strategy
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### Key UI technologies & tools

- Road maps for SAP's key UI technology frameworks like SAPUI5, FPM/WDA, WebClient User Interface framework, and tools like SAP Web IDE, SAP Screen Personas, UI theme designer and more
- 

### UI client & integration topics

- Seamless UI integration across different technologies is key for user acceptance
  - Several products provide this integration on UI level
- 

### Specialized UI technologies

- Besides the key UI technologies there is always a need for specialized solutions for specific requirements
  - These UI technologies complement SAP's key technologies for dedicated scenarios
- 

### UI related road map topics

- Several SAP products are closely related to the topic UX or UI technology
- Here the most important ones are mentioned and links for further information are provided

# Table of contents

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## **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

## **Key UI Technologies & Tools**

- SAP UI development toolkit for HTML5 (SAPUI5)
- 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
- SAP browser support

## **UI Client & Integration Topics**

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

## **Specialized UI Technologies**

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

## **UI Related Road Map Topics**

- SAP Mobile Platform
- Mobile at SAP Business Suite
- SAP Gateway
- SAP Gateway for Microsoft
- Analytic Solutions from SAP

## **Summary**

## **Appendix**



# 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

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### 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**

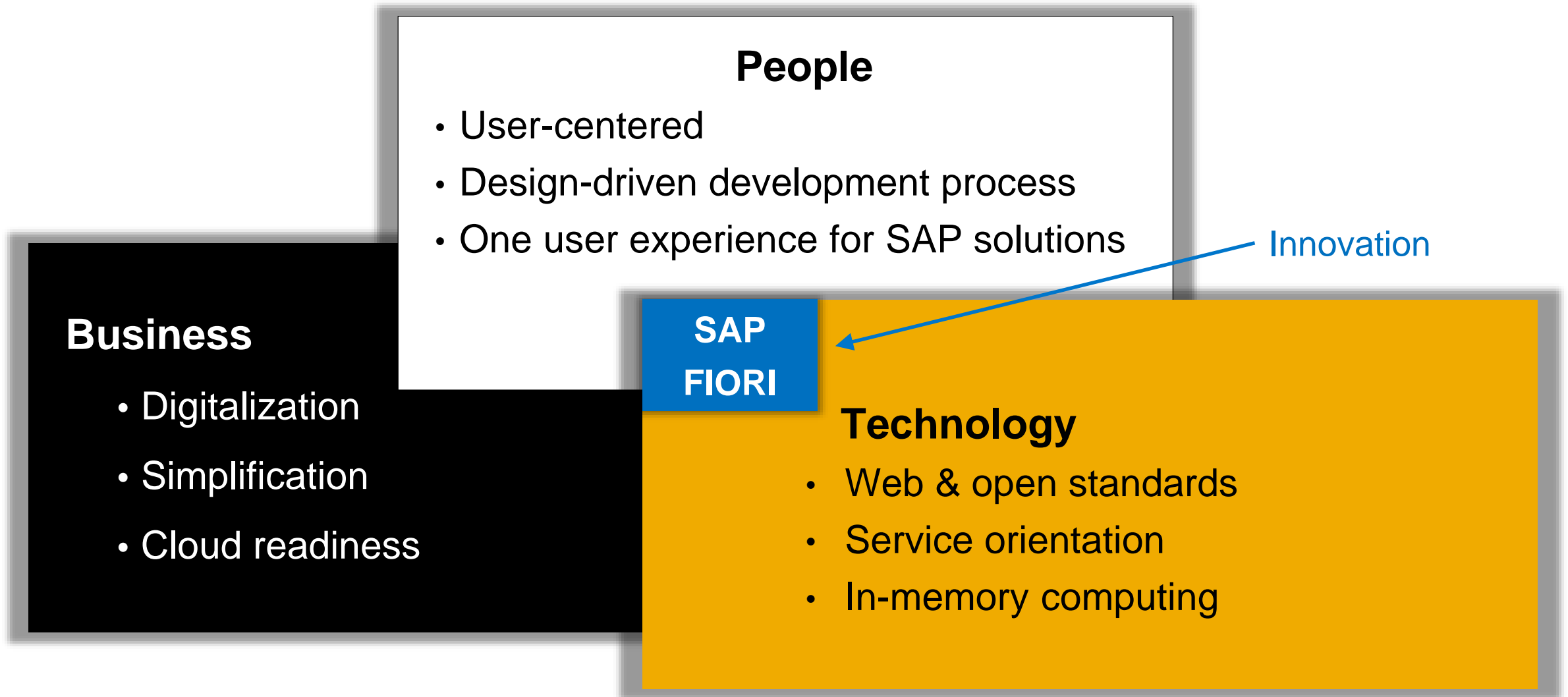


# SAP user interfaces

## Evolution



# SAP's direction: Digital transformation



# Execution of SAP's user experience strategy

## NEW & RENEW

DELIVERING SAP FIORI UX<sup>1</sup> ACROSS SAP SOLUTIONS<sup>2</sup>

## EMPOWER

CUSTOMERS TO INNOVATE THROUGH  
USER EXPERIENCE



Education & Best Practices

Tools & Technologies

UX Design Services

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

# 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**.

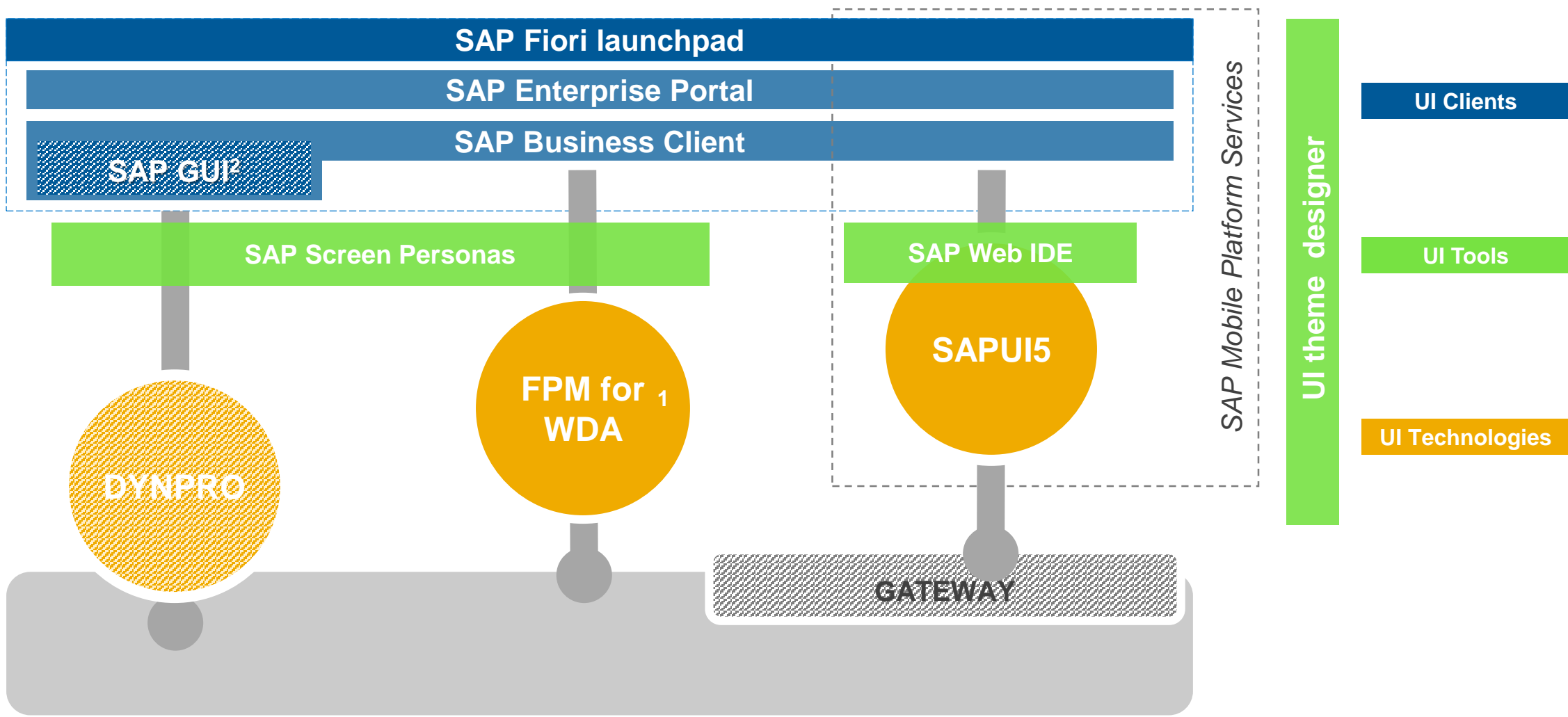


Main UI technology elements relevant for SAP Fiori:

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

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

# SAP's key UI tools & technologies



<sup>1</sup>: Floorplan Manager tools (FPM) for development of new applications based on WebDynpro for ABAP (WDA)

<sup>2</sup> for HTML & Windows





# Key UI Technologies & Tools

- SAP UI development toolkit for HTML5 (SAPUI5)
- 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
- SAP browser support

# Key user interface technologies and tools

## Topic overview

The key UI technologies & tools are those which directly support SAP's 'NEW – RENEW – ENABLE' user experience approach.

### SAPUI5

- Creation of consumer-grade, stateless apps

### SAP Web IDE

- simplify the end-to-end SAPUI5 based application lifecycle

### Floorplan Manager / Web Dynpro ABAP

- Creation of functional, stateful apps

### WebClient UI framework

- UI framework for SAP CRM

### Dynpro

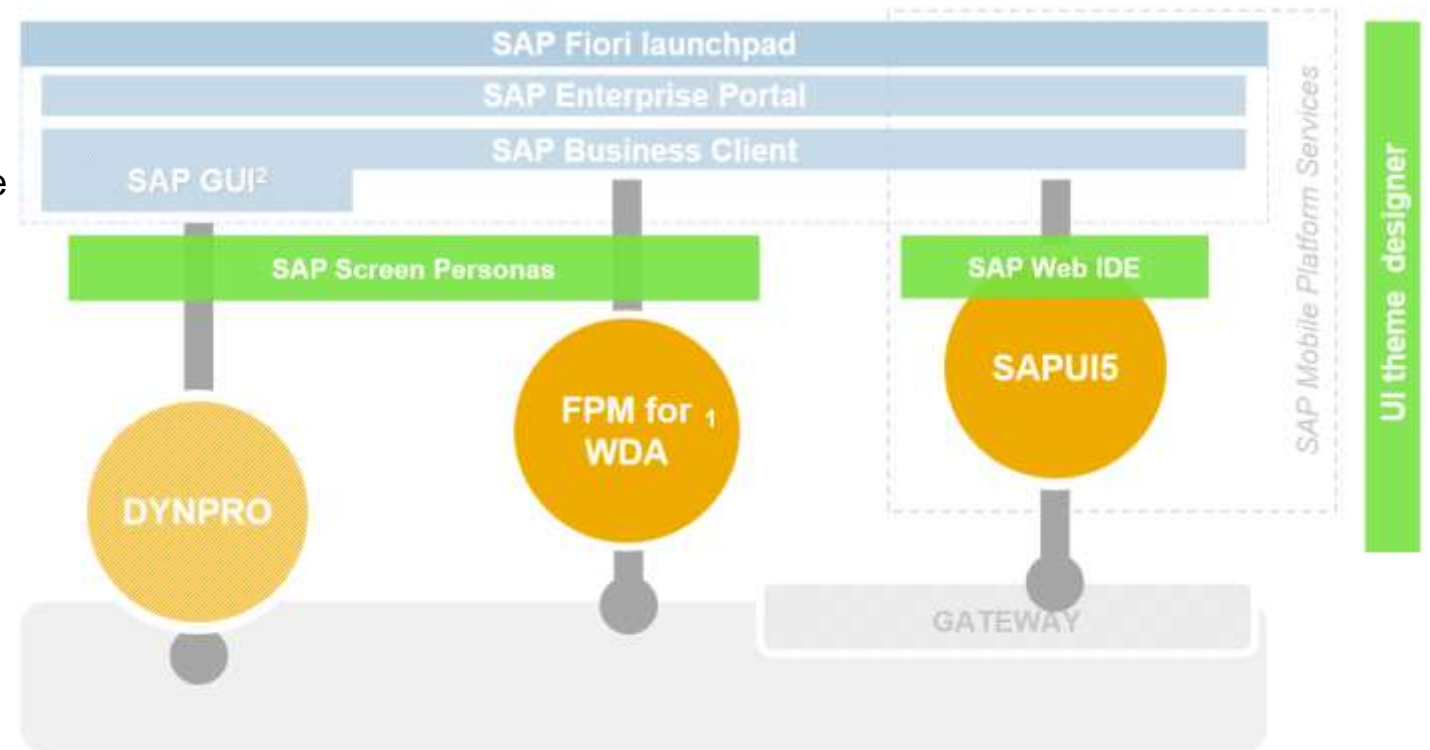
- Most widely adopted UI technology

### SAP Screen Personas

- Beautification and streamline of Dynpro-based screens

### UI theme designer

- Theming and branding of SAP's key UI technologies



# SAP UI development toolkit for HTML5 (SAPUI5)

## Description

[Link to SAP UX Explorer](#)

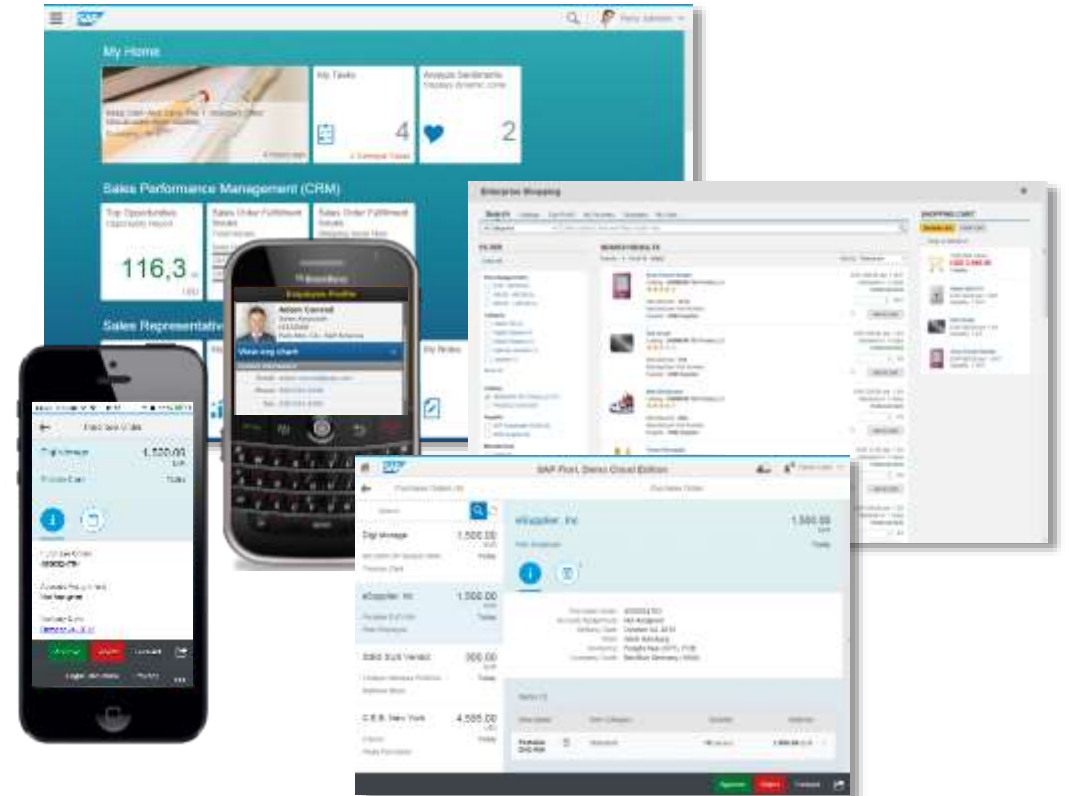
SAPUI5 is a JavaScript-based UI library which is designed to build cross-platform business applications. It combines new qualities like openness, flexibility and high speed of innovation with known SAP strengths like enterprise readiness and product standard support.

### 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”
- Modern theming and branding concepts
- Embraces “open source” framework(s) and web standards

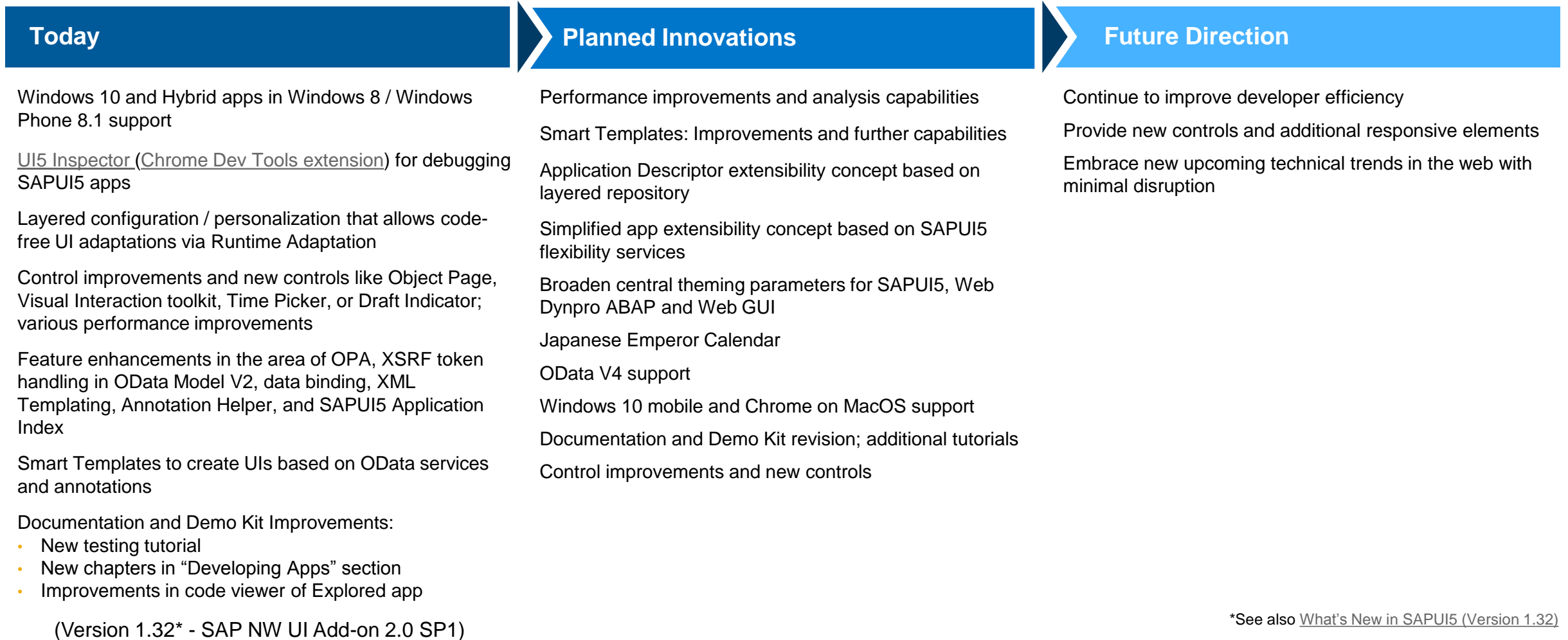
### Benefits

- 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



# SAPUI5

## Product road map overview - key themes and capabilities



\*See also [What's New in SAPUI5 \(Version 1.32\)](#)

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

## Planned innovations – features and functions

Functional Area	Feature
Globalization	<ul style="list-style-type: none"> <li>Japanese Emperor Calendar support in UI and date input controls</li> </ul>
Runtime Adaptation	<ul style="list-style-type: none"> <li>Introduce layers and variants for views including the merging to support extensions on various levels / dimensions (personalization, configuration, industry extensions, etc.)</li> <li>Drag and drop based approach to adapt a concrete UI</li> </ul>
Theming	<ul style="list-style-type: none"> <li>Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI</li> </ul>
Platform support	<ul style="list-style-type: none"> <li>Windows 10 mobile support</li> <li>Support for Chrome on MacOS</li> </ul>
Foundation	<ul style="list-style-type: none"> <li>Extensibility concept for Application Descriptor based on layered repository (LREP)</li> </ul>
Developer productivity	<ul style="list-style-type: none"> <li>Additional capabilities for Smart Templates for a more efficient development process in combination with generic application controller (objects) with standardized logic</li> <li>Extensibility concept based on SAPUI5 flexibility services: For extending app no new app needs to be created but extension artefacts can be stored in a layered repository</li> <li>Revision of Documentation</li> <li>Redesign of Demo Kit</li> <li>Analysis capabilities to improve performance</li> </ul>
Controls	<ul style="list-style-type: none"> <li>New controls like Notification List Item, Bread Crumb, Pop Over Menu</li> <li>Control improvements and feature extensions</li> <li>Performance improvements</li> </ul>

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](#)

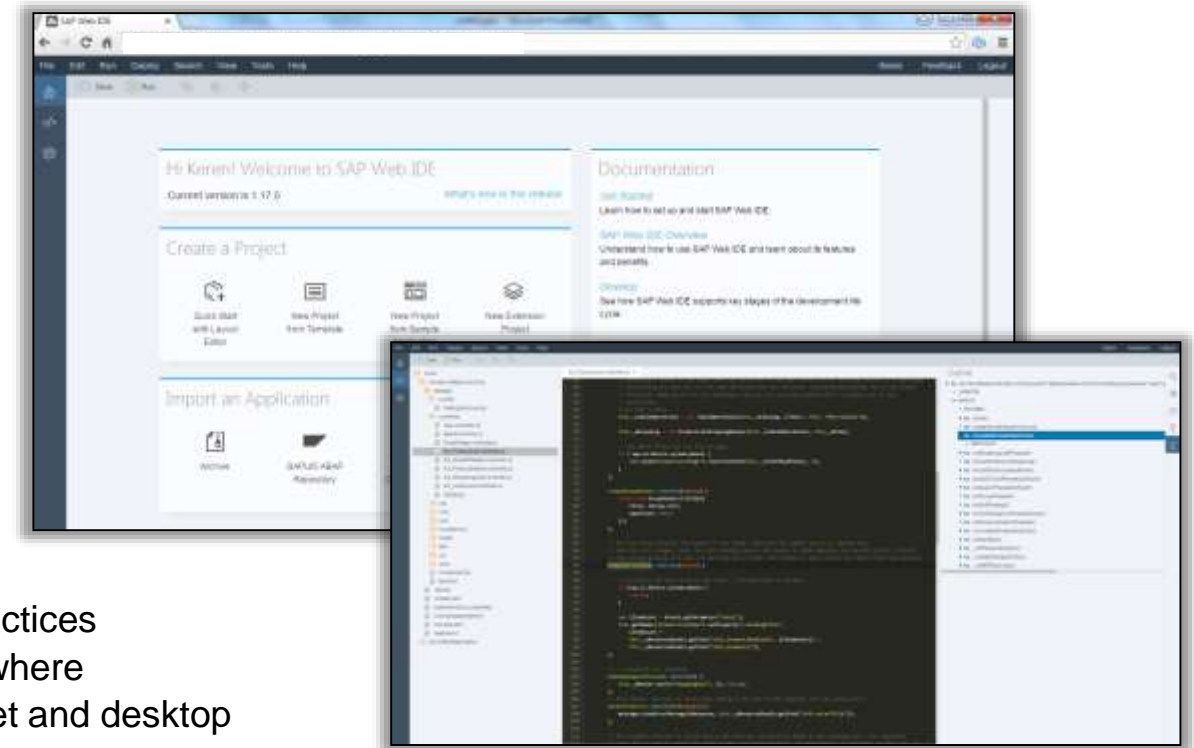
SAP Web IDE is a web-based tool that simplifies the end-to-end application lifecycle: prototyping, development, packaging, deployment and customer extensions for SAP Fiori/SAPUI5 applications.

### 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



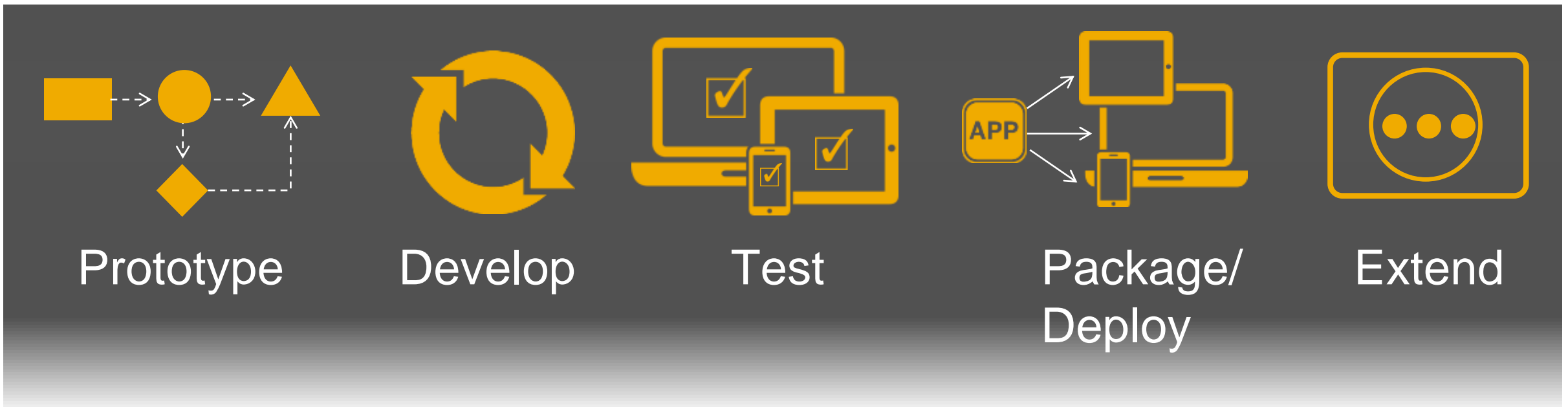
Related product road map available on Service Marketplace (Road Maps → Product & Solution Road Maps → Database & Technology)

- SAP Web IDE

# SAP Web IDE

Simplify SAP Fiori / SAPUI5 development

**Support end-to-end application lifecycle with one tool**



# SAP Web IDE Plugins

SAP offers out-of-the-box plug-ins and templates that leverage SAP Web IDE's modular and extensible framework.

## Hybrid Application Toolkit

- Create and deploy Apache Cordova hybrid apps
- Templates, code completion, testing, build and deploy

## OData Model Editor

- Define and modify OData Models
- Code assistance, auto complete, validation and graphical viewer

## Fact Sheet Editor

- Create fact sheets from scratch
- Edit new/existing fact sheets using drag-and-drop

## VizPacker

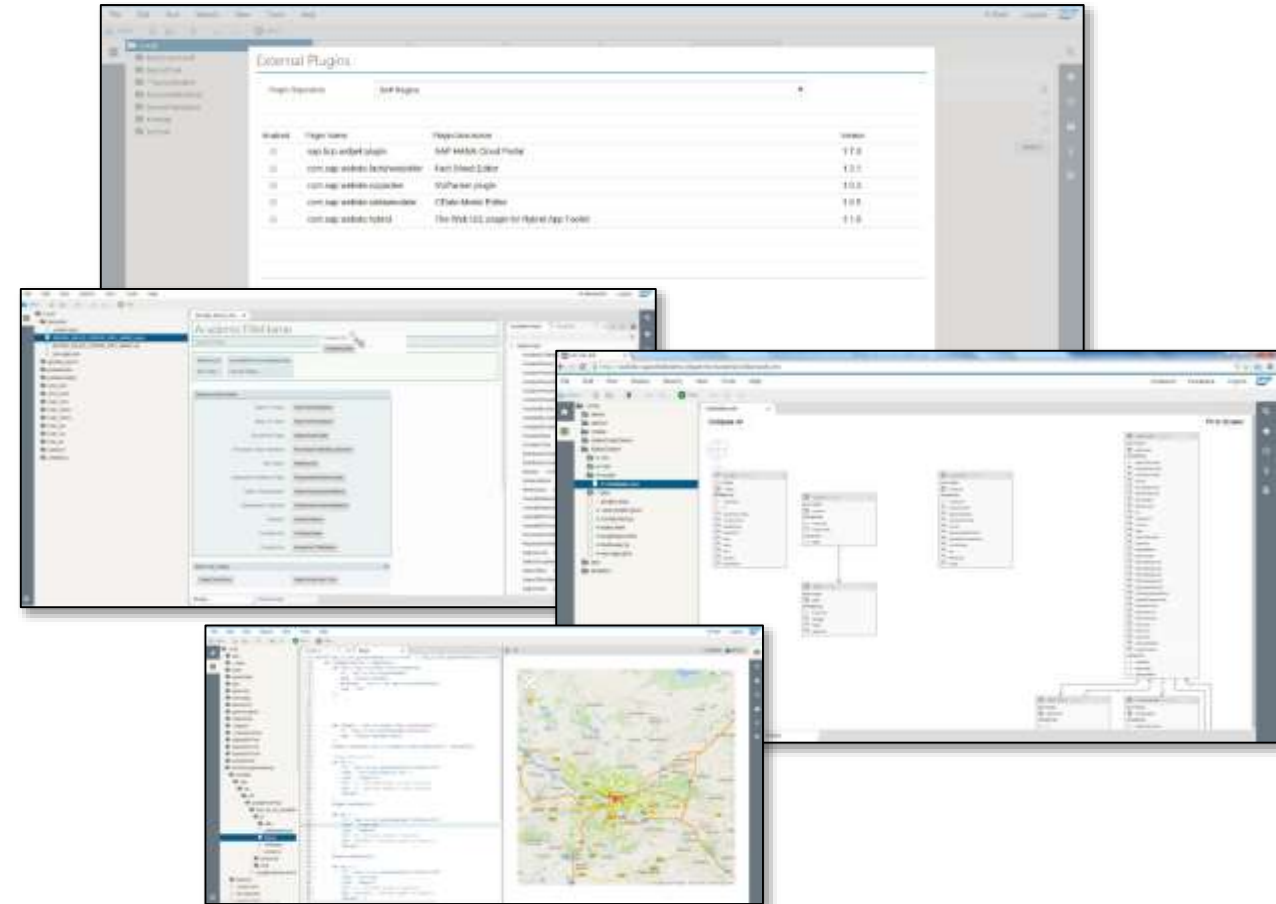
- Creating visual extensions for Analytics – SAP Lumira, SAP Business Objects Design Studio

## SAP Events Management

- Create self-defined transactional SAP Fiori apps for SAP Event Management

## SAP Hana Cloud Portal

- Easily create OpenSocial widgets for use in Cloud Portal sites



# Floorplan Manager / Web Dynpro ABAP

## Description

[Link to SAP UX Explorer](#)

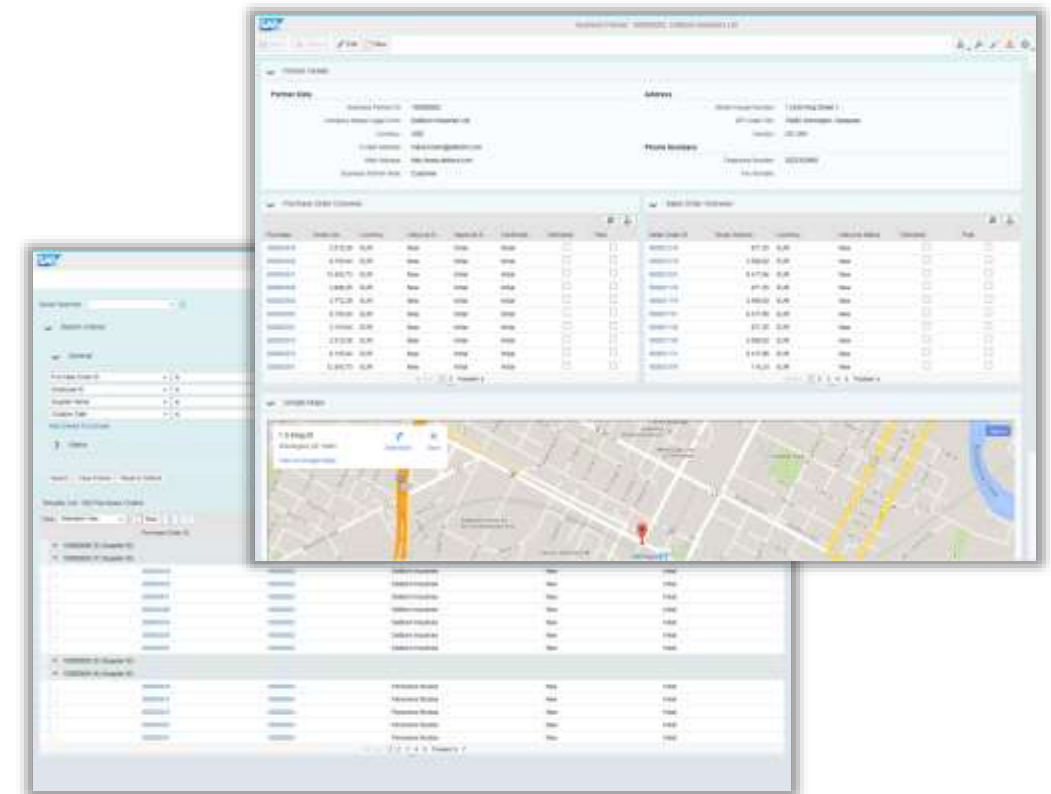
Floorplan Manager (FPM) is a framework for model-based and declarative creation and adaptation of user interfaces. It is based entirely on Web Dynpro ABAP.

### 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)

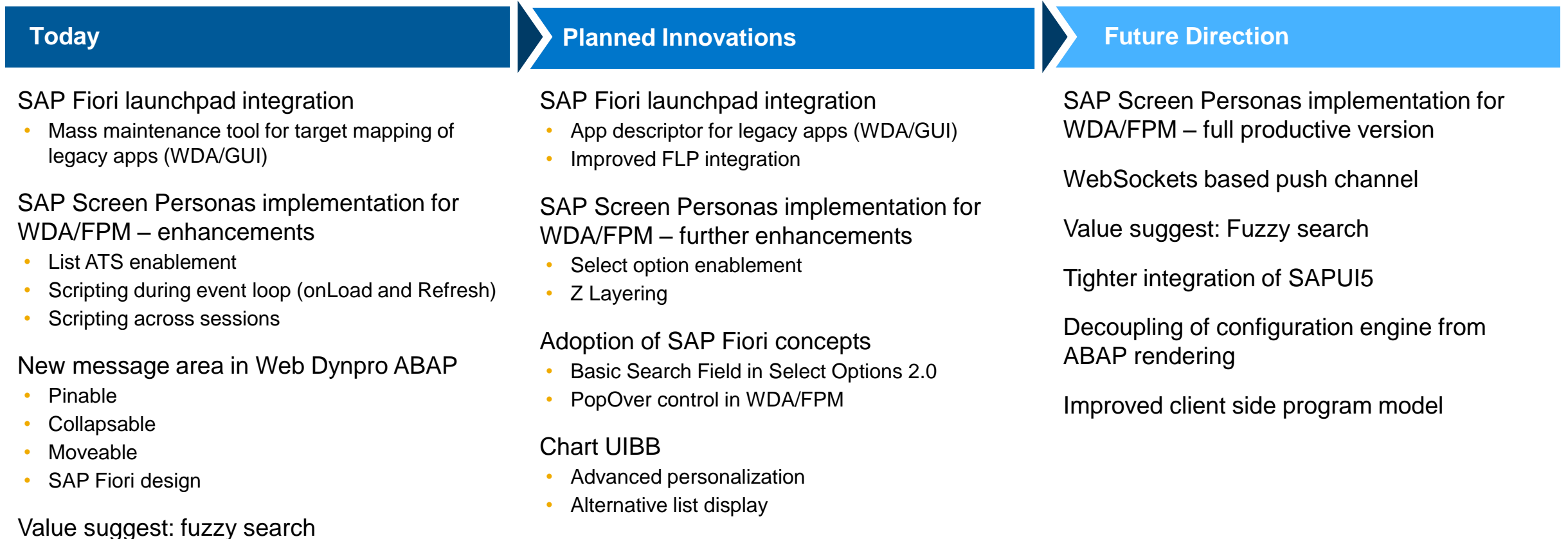
### Benefits

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



# Floorplan Manager / Web Dynpro ABAP

## Product road map overview - key themes and capabilities



(SAP\_UI 7.50 SP01)

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



# Floorplan Manager / Web Dynpro ABAP

## Planned innovations – features and functions

Functional Area	Feature
SAP Fiori launchpad integration	<ul style="list-style-type: none"><li>• Improved FLP integration: Save as Tile / Create Support Message / ...</li><li>• Target Mapping (App Descriptor) – Mass maintenance tool for GUI transactions and WDA applications</li></ul>
SAP Screen Personas implementation for WDA/FPM	<ul style="list-style-type: none"><li>• Enablement for Search GUIBB and Select Options (was not available with first version)</li><li>• Z Layering: Arrange images and other content correctly (bring to front / send to back ( bring forward / send backward)</li></ul>
Adoption of SAP Fiori concepts	<ul style="list-style-type: none"><li>• Basic Search Field in Select Option 2.0: generic one-field search in Fiori Filter Bar</li><li>• New PopOver control (clickable Quickview) available in WDA/FPM for variant selection and for intent based navigation within SAP Fiori launchpad.</li></ul>
Chart UIBB	<ul style="list-style-type: none"><li>• Advanced (optional) personalization capabilities to select dimensions and measures</li><li>• Alternative list display</li></ul>

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](#)

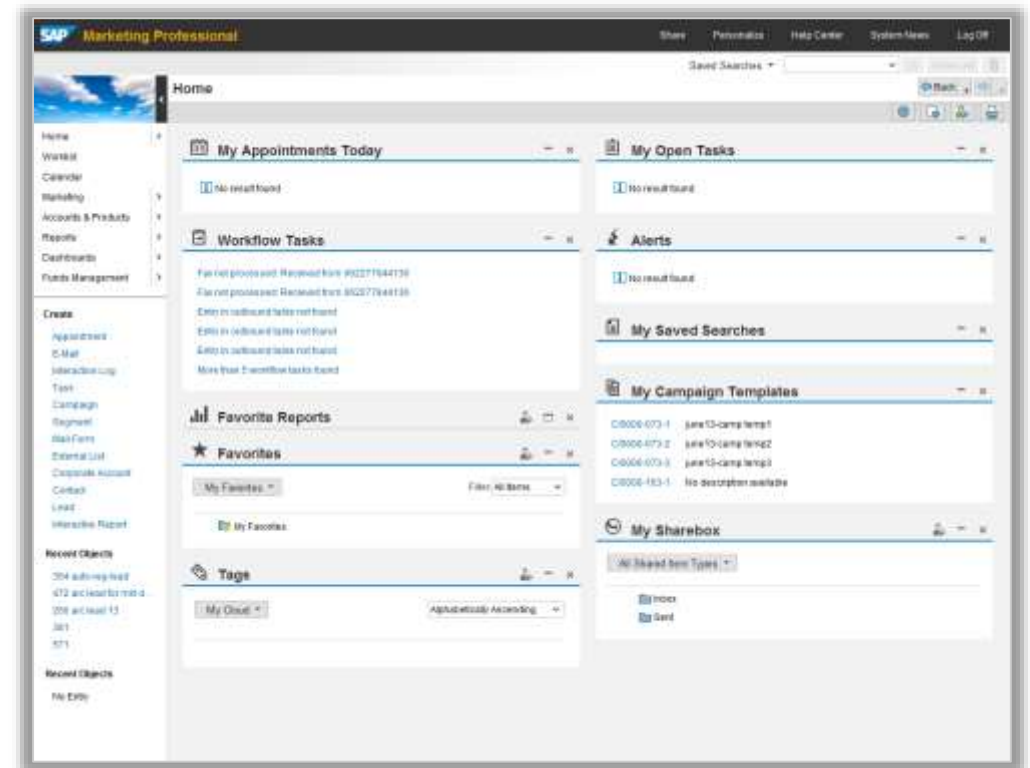
The WebClient UI framework offers a modern user interface leveraging web 2.0 paradigms for SAP CRM. It is harmonized in look and feel as well as interaction paradigms with FPM/WDA.

### 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



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

# WebClient UI framework

## Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction
Automatic front end draft save	SAP Fiori/SAPUI5 Integration	SAP Fiori/SAPUI5 Integration
Front end time out notification	<ul style="list-style-type: none"><li>HTML5 Islands and table graphics</li><li>SAP Blue Crystal theme/skin</li></ul>	<ul style="list-style-type: none"><li>Harmonization and integration with SAP Fiori</li><li>Integration with FLP</li><li>Tighter SAPUI5 integration</li></ul>
New home page layouts	Design/Visualization Tools	WEBCUIF Shell Modernization
Keyboard shortcuts for standard buttons	<ul style="list-style-type: none"><li>Support of UI theme designer</li></ul>	<ul style="list-style-type: none"><li>Redesign of header and branding area</li><li>Flexible Navigation Bar</li><li>Responsive/Adaptive design</li></ul>
Enhanced rich text editor (BTF)	Progress Bar THTMLB Tag	Design/Visualization Tools
Multi-column sorting of tables	Enhanced Design Layer functionalities	<ul style="list-style-type: none"><li>SAP Personas</li><li>SAP Visual Business</li></ul>
Open links in new tab/window	Cellerator Pager on Top	
Quick navigation between search criteria	Customer Connection CRM 2016	
WEBCUIF Shell Modernization		
<ul style="list-style-type: none"><li>Int. with Workforce Performance Builder</li><li>Direct URL for Saved Search</li></ul>		

(SAP CRM 7.0 EhP3\* SP11)

\*see [release notes](#) on SCN

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

# WebClient UI framework

## Planned innovations – features and functions

Functional Area	Feature
User productivity	<ul style="list-style-type: none"><li>• Provide an always accessible pager for the cellerator table</li></ul>
User experience	<ul style="list-style-type: none"><li>• Change the look and feel of the user interface without any programming knowledge via the UI theme designer</li><li>• HTML5 islands will allow developers to leverage the latest HTML5 as well as SAPUI5 features such as enhanced charting capabilities and dynamic content</li><li>• An SAP Blue Crystal theme in order to harmonize with the latest SAP UI technologies</li></ul>
Developer tools	<ul style="list-style-type: none"><li>• Enhance the Design Layer in order to easily override Getters and Setters</li><li>• Bring the Design Layer customizing to the Web UI as part of the Administrator role</li><li>• Offer a Progress Bar THTMLB Tag in order to easily display percentages and process status</li></ul>

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](#)

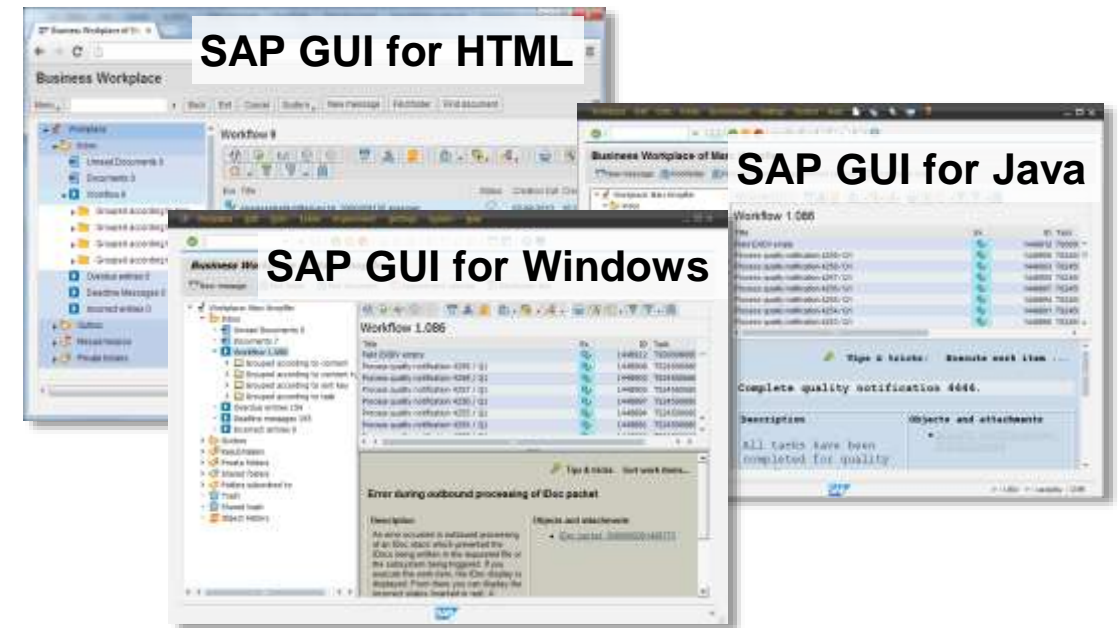
SAP GUI is SAP's universal client for accessing SAP functionality. All three members of the SAP GUI family have unique attributes that make them especially suited for different user environments

### 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, 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 NWBC 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” on 2<sup>nd</sup> of July 2015.

### 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
- SAP UI landscape improvements (definition of configuration data within an SAP system)
- 64bit Unicode SAP GUI for Windows version (long term)

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

**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](#)

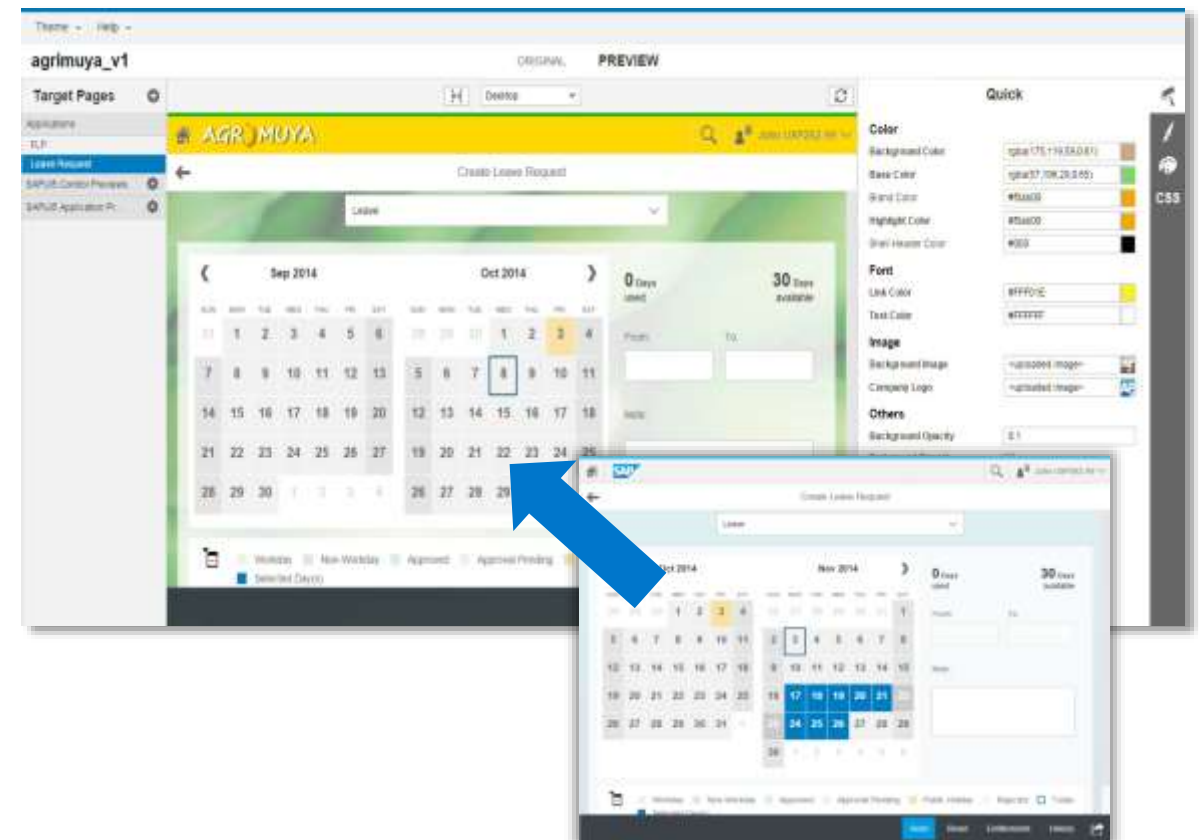
The UI theme designer is a browser-based tool which allows you to create your own themes to adapt the visual appearance of applications. It is the single tool for theming and branding SAP's key user interfaces.

### Key capabilities

- Graphical web-based WYSIWYG editor for controls and application 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 and SAP Business Client (additional planned)
- Supported platforms: SAP NetWeaver AS ABAP, SAP 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

Today	Planned Innovations	Future Direction
<p>Visual design of UI theme designer aligned to SAP Web IDE</p> <p>Start UI theme designer from SAP Web IDE menu</p> <p>Target pages panel can be resized via keyboard</p> <p>Logout button and display of logged in user</p> <p>Improved themes import</p>	<p>Improved theming capabilities for SAPUI5</p> <p>Theming support for SAP NWBC for Desktop (SAP Blue Crystal)</p> <p>Further UI improvements</p> <p>Control picker</p> <p>Error handling improvements</p> <p>Search capabilities for expert parameters – further improvements</p> <p>Theme fallback mechanism (for ABAP)</p> <p>SAP HANA Cloud Platform:</p> <ul style="list-style-type: none"><li>• Theme compatibility, no manual effort after SAPUI5 upgrade</li><li>• SAPUI5 version selection</li></ul>	<p>Theming support for:</p> <ul style="list-style-type: none"><li>• WebClient UIF</li><li>• SAP GUI</li><li>• NWBC HTML</li><li>• SAPUI5 (custom libs)</li></ul> <p>Improved integration with SAP Web IDE</p> <p>Guided theming</p> <p>Easy to use expert theming</p> <p>TCO improvements</p> <p>SAP HANA Cloud Portal:</p> <ul style="list-style-type: none"><li>• Integration with Git persistency (instead of manual up/downloads)</li></ul>

(UI theme designer 1.12\*  
SAP NW UI Add-on 2.0 SP00)

\*see [version history](#) in SCN

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

# UI theme designer

## Planned innovations – features and functions

Functional Area	Feature
Theming capabilities for SAPUI5	<ul style="list-style-type: none"><li>• Expert theming parameters for SAPUI5 mobile</li></ul>
Theming support for NWBC Desktop (SAP Blue Crystal)	<ul style="list-style-type: none"><li>• The NWBC for desktop can also be themed using the base theme SAP Blue Crystal</li></ul>
Further UI improvements	<ul style="list-style-type: none"><li>• Various improvements to increase the user experience of the tool</li></ul>
Control Picker	<ul style="list-style-type: none"><li>• Selecting a control in preview will filter expert theming area to the parameters used on that control</li></ul>
Error handling	<ul style="list-style-type: none"><li>• Improvements in error display and error messages</li></ul>
Search capabilities for expert parameters	<ul style="list-style-type: none"><li>• Search for CSS classes and highlighting</li></ul>
Theme fallback mechanism (for ABAP)	<ul style="list-style-type: none"><li>• This mechanism ensures that for applications, which do not support the main UI theme, a fallback theme is used</li></ul>
SAP HANA Cloud Platform: SAPUI5 version selection	<ul style="list-style-type: none"><li>• Ability to create a theme for a specific SAPUI5 version</li></ul>
SAP HANA Cloud Platform: Theme compatibility	<ul style="list-style-type: none"><li>• After an upgrade of the SAPUI5 version, the themes are automatically rebuilt. No manual effort is necessary to ensure theme compatibility.</li></ul>

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](#)

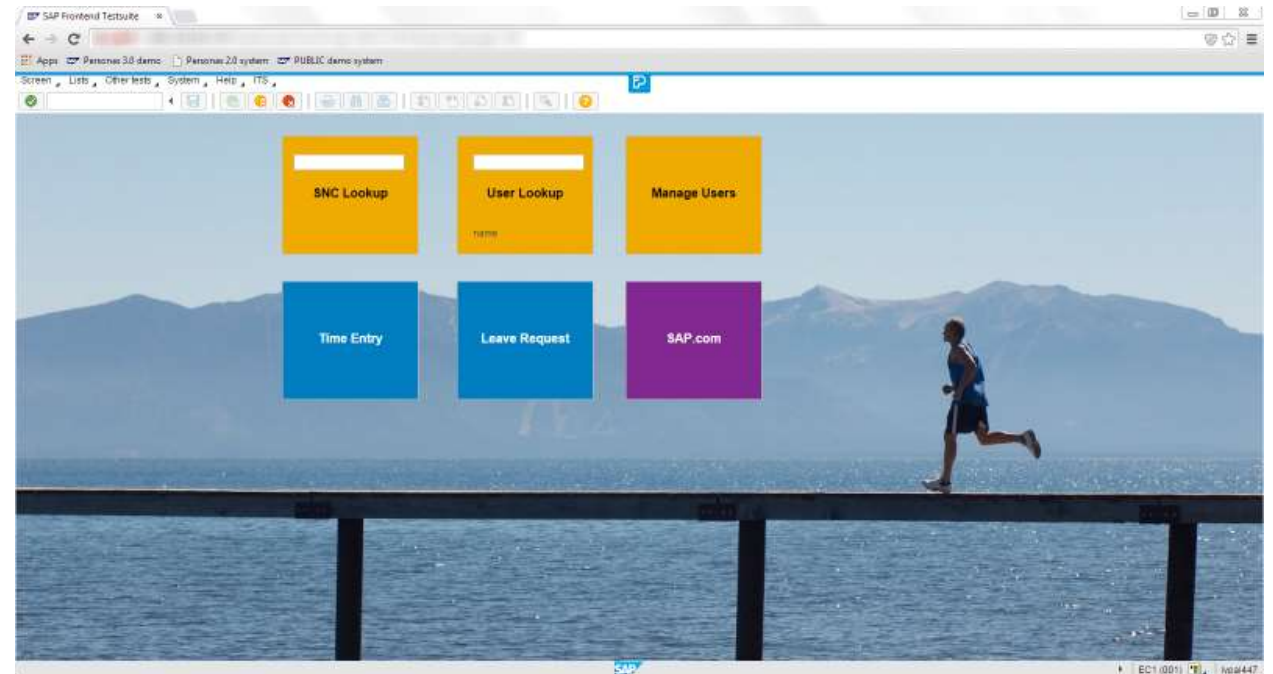
SAP Screen Personas allows companies to improve user productivity through personalization of their SAP ERP screens.

### Key capabilities

- 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

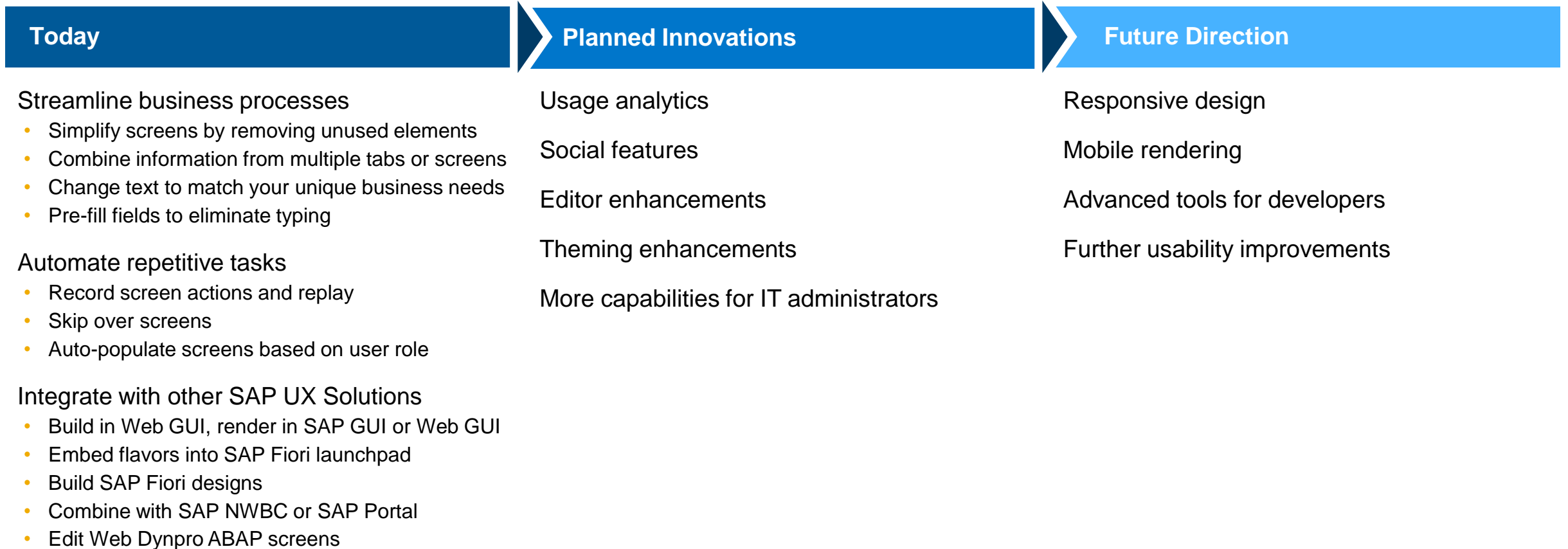
- Improve business user productivity
- Increase SAP adoption by making screens easier to use
- Decrease training time for SAP users with intuitive screens.
- Enhance user satisfaction
- Reduce the cost of personalization





# SAP Screen Personas

## Product road map overview - key themes and capabilities



(SAP Screen Personas 3.0 SP1)

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

# SAP Screen Personas

## Planned innovations – features and functions

Functional Area	Feature
Usage analytics	<ul style="list-style-type: none"><li>• We plan to include functionality so IT can understand how employees are using various flavors</li></ul>
Social features	<ul style="list-style-type: none"><li>• Provide the ability for people to rate flavors and provide feedback for ongoing screen simplification and automation</li></ul>
Editor enhancements	<ul style="list-style-type: none"><li>• Add more capability to screen editor to make it even easier and quicker to build screens following a consistent design</li></ul>
Theme enhancements	<ul style="list-style-type: none"><li>• Enhance the theming tool to provide theming option on individual control instances (EXIT button), instead of classes of controls (TOOLBAR BUTTONS)</li></ul>
More capabilities for IT administrators	<ul style="list-style-type: none"><li>• Make it easier for IT professionals to manage the end-to-end screen creation and deployment process with SAP Screen Personas</li></ul>

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

# SAP browser support\*

## Relevance for SAP user interface technologies

[Link to SAP UX Explorer](#)

SAP offers web applications for desktop devices, for tablet devices and smartphones or both device categories.

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

SAP web applications support the major browser vendors:

Internet Explorer

Google Chrome

Firefox

Safari

\* More details on browser Product Availability Matrix

# SAP browser support summary

## Desktop

### Microsoft Internet Explorer

- IE11 Desktop (recommended)
- Windows 10 support planned for Oct. 2015
- IE7 – IE10 until Jan 2016

### Microsoft Edge

- Planned or SAPUI5 1.32. Downport 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 NW 7.02, 7.03, 7.30 and later

### Apple Safari

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

## Mobile

### Browsers on reference devices

- Apple Safari on iPad
- Apple Safari on iPhone
- Google Chrome on Samsung Galaxy Tab/S
- Android browser on Samsung Galaxy Tab/S (A4.4 and higher)
- Windows Phone 8.1 (replacement with v. 10 planned) on Nokia Lumia 930 (w. conditions)
- BlackBerry on BlackBerry Z10/30

### Devices and OS version support for 3 years from vendor release date

### Supported UI technologies

- SAPUI5 / OpenUI5
- Applications in SAP Fiori may differ

# SAP desktop browser support policy



## SAP Vendor-Synchronized Policy

- Valid for Internet Explorer, Firefox, Chrome and Safari desktop versions
- SAP supports new browser versions at the same time as the browser vendor\*. SAP supports a released desktop browser version as long as it is supported by the vendor
- SAP proactively tests new browser versions and delivers fixes in the current available Support Package Stack\*\*
- SAP publishes exceptions from this policy, restrictions and required *minimum support package stacks* in the Product Availability Matrix
- For details see note [1728946](#) (Browser Support Strategy).

\*) Note: Information about the browser support for individual SAP products like ERP, CRM, SRM or SAP Fiori might differ from technology information. This information is available in the corresponding Product Availability Matrix (PAM).

Exception Safari: SAP intends to support a new Safari version within 3 months from general availability date

\*\*) or the next SPS if the current SPS is not feasible. SAP provides updates for new browser versions as soon as possible.



# SAP mobile browser support policy



## Supported Mobile Browsers, Devices and Operating Systems

- Available for SAPUI5, OpenUI5 and SAP Fiori\*
- Support via reference devices **for 3 years** from vendor release date. Support cases must be reproducible on these devices:
  - Safari versions on supported iPhone and iPad (latest recommended)
  - Latest Android and Chrome versions on supported Android OS version (latest recommended) on Samsung Galaxy S and Tablet
  - Blackberry Browser on Z10 and Z30
  - Windows Phone 10 planned on Nokia Lumia 930
- SAP proactively tests new browser versions and delivers fixes in the current available Support Package Stack\*\*. SAP publishes exceptions from this policy, restrictions and required *minimum support package stacks* in the Product Availability Matrix
- For details note [1728946](#) (Browser Support Strategy) and note [1716423](#) (SAPUI5)

\* Note: Browser support for individual Applications in SAP Fiori may differ and is available in the corresponding Product Availability Matrix.

\*\* or next SPS if not feasible.



# UI Client & Integration Topics

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

# UI client & integration topics

## Topic overview

For a coherent user experience across multiple technologies and frameworks UI integration is key. It starts with offering the user one consolidated entry point via a shell and raises the need for consistent UI services.

### SAP Fiori launchpad

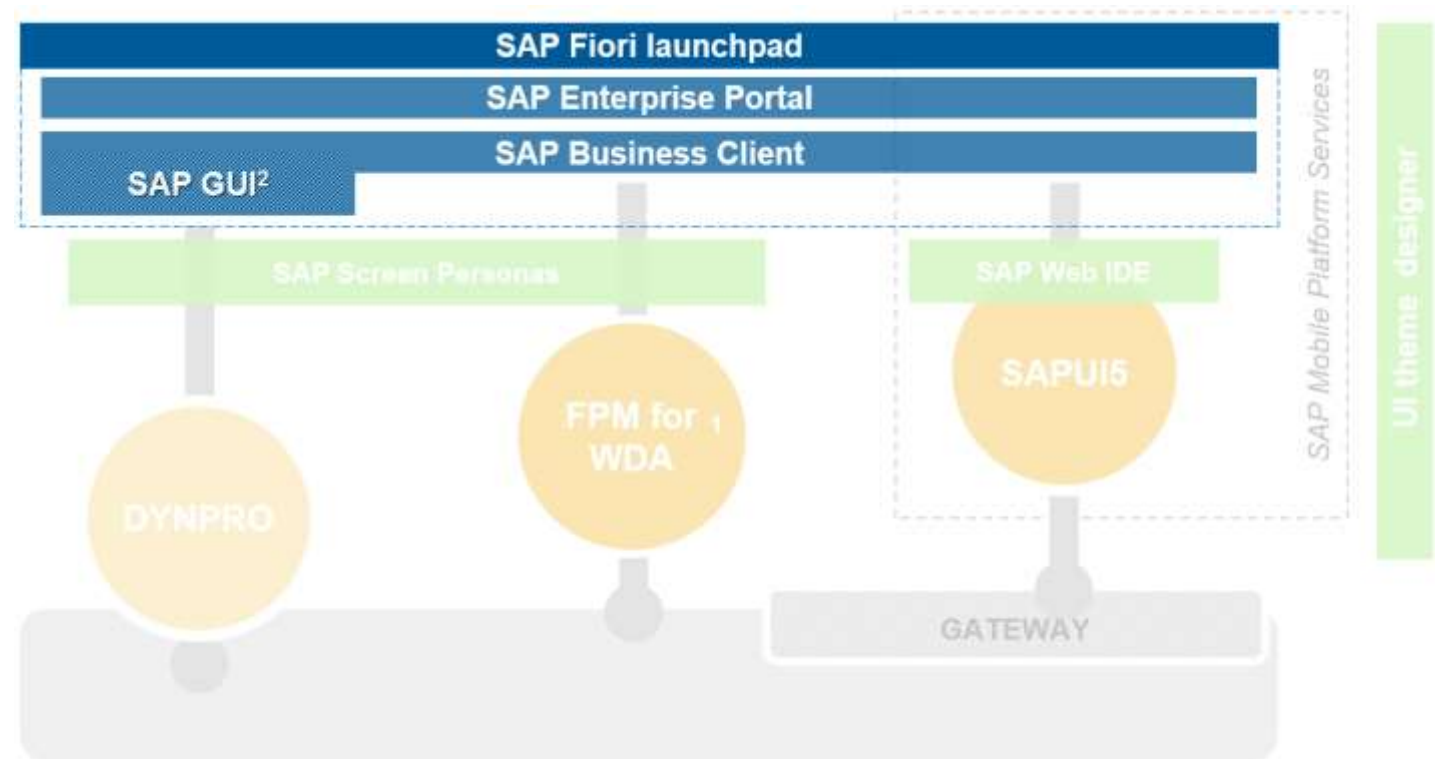
- Designed according to the simple and intuitive SAP Fiori user experience

### SAP Business Client

- Offers harmonized access to SAP applications

### SAP Portal

- Offers on premise and cloud solutions



# SAP Fiori launchpad

## Description

[Link to SAP UX Explorer](#)

SAP Fiori launchpad is the web-based single point of access 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: personalizable content, easy bookmarking and collaboration capabilities
- Context aware: contextual navigation and suggestion of relevant follow up actions
- Fast and easy navigation
- Search across apps and business objects
- Support of established UI technologies, e.g. SAPUI5, FPM/WDA, SAPGUI for HTML (SAPGUI for Windows via SAP Business Client)
- Integration of any URL-based navigation target
- Theming and branding via UI theme designer
- Open and extensible

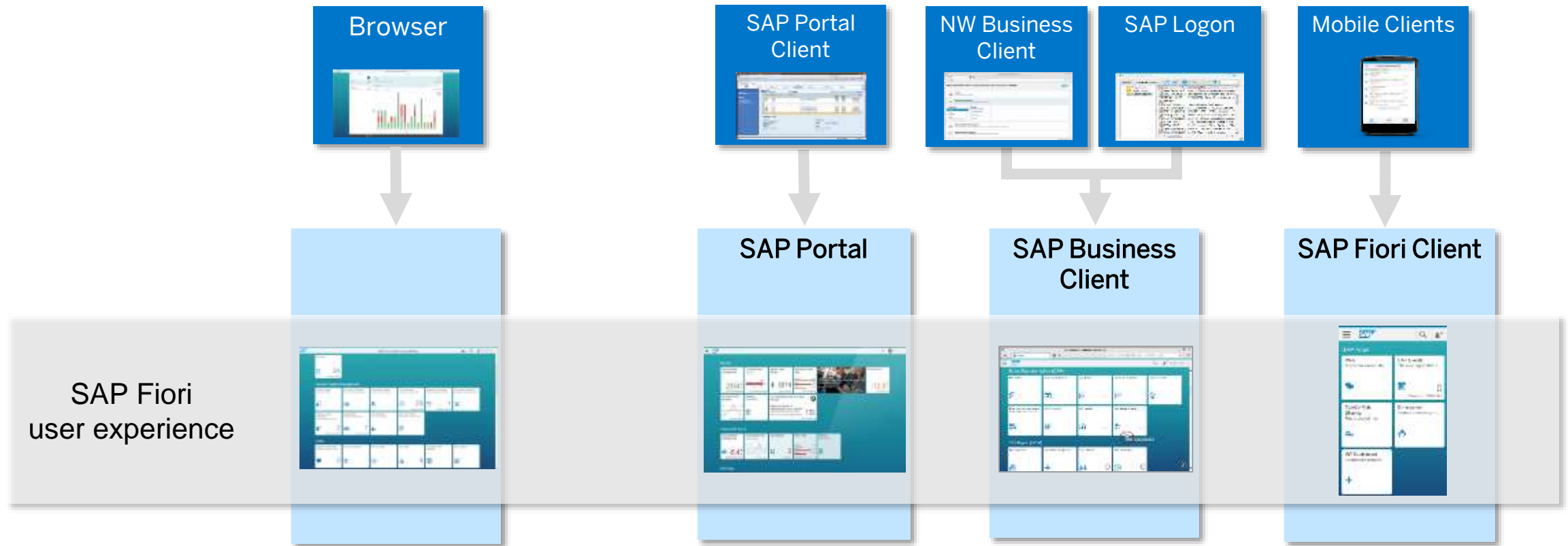
### Benefits

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



# SAP Fiori launchpad – Single point of access 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

- App Launcher as tile or as link on the home page
- Maintenance of user-specific default settings for application start parameters

#### Setup and Configuration

- Target mapping configuration without LPD\_CUST
- Import of SAP-provided FLP content from application system to SAP Fiori front-end server

#### SAP UI Clients alignment

- SAP Business Client 6.0: SAP Fiori launchpad with SAP GUI native experience

#### APIs for shell extensions

### Planned Innovations

#### End User Experience

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

#### Implementation of SAP Fiori 2.0 concepts

#### Modification-free shell extensibility

#### Usage analysis

#### Simplified setup and configuration

- FLP content maintenance for WDA/SAP GUI on application systems

#### SAP UI Clients alignment

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

#### SAP Platform Alignment

- Common FLP content model (ABAP/HCP)
- HANA Cloud Platform: Support for non-Fiori apps (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

#### SAP Platform Alignment

- Common FLP content administration tools

#### Enhanced integration with SAP Fiori Client to provide offline capabilities

(ABAP: SAP NW 7.50 SP01 / UI ADD-ON 2.0 SP01,  
SAP Portal: 7.50 / 7.40 SP13 / 7.31 SP17)

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



# SAP Fiori launchpad

## Planned innovations – features and functions

Functional Area	Feature
End user experience	<ul style="list-style-type: none"><li>• Maintenance of ranges and multiple values for user default values of application start parameters</li><li>• Anchor navigation for modern UI of groups navigation</li><li>• Implementation of SAP Fiori 2.0 concepts, e.g. notification center</li></ul>
Shell extensibility	<ul style="list-style-type: none"><li>• Modification-free shell extensibility via plug-in concept in combination with extension APIs</li></ul>
Configuration and analysis	<ul style="list-style-type: none"><li>• Enhancements for sorting and filtering of tiles</li><li>• Usage analysis</li><li>• Maintenance of technical catalogs for WDA applications / SAP GUI transactions on application systems</li></ul>
SAP UI clients alignment	<ul style="list-style-type: none"><li>• Portal: Integration of factsheets &amp; analytical SAP Fiori apps Search for apps and business data</li></ul>
SAP platform alignment	<ul style="list-style-type: none"><li>• Reuse of SAP Fiori launchpad content from ABAP server within SAP HANA cloud platform</li><li>• HANA Cloud Platform: Support for non-Fiori apps (e.g. SAP GUI and Web Dynpro ABAP)</li></ul>

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

# 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.

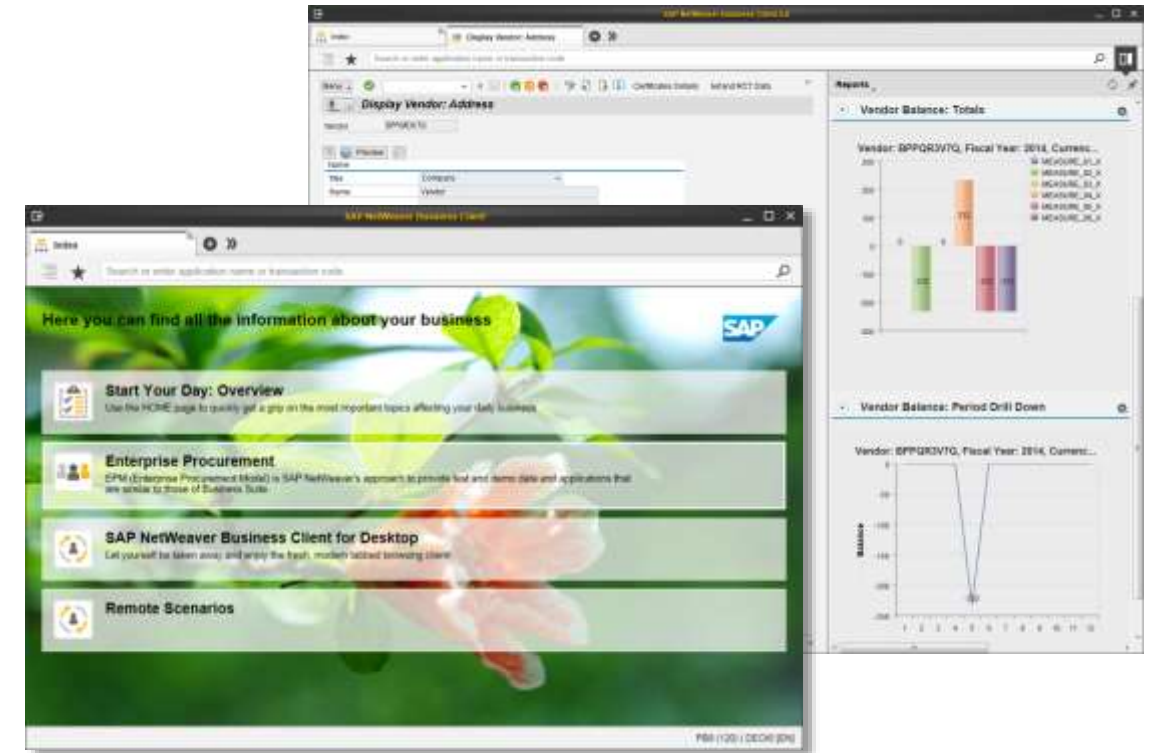
### Key capabilities

- 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
- Reduce TCO

\* Desktop version only

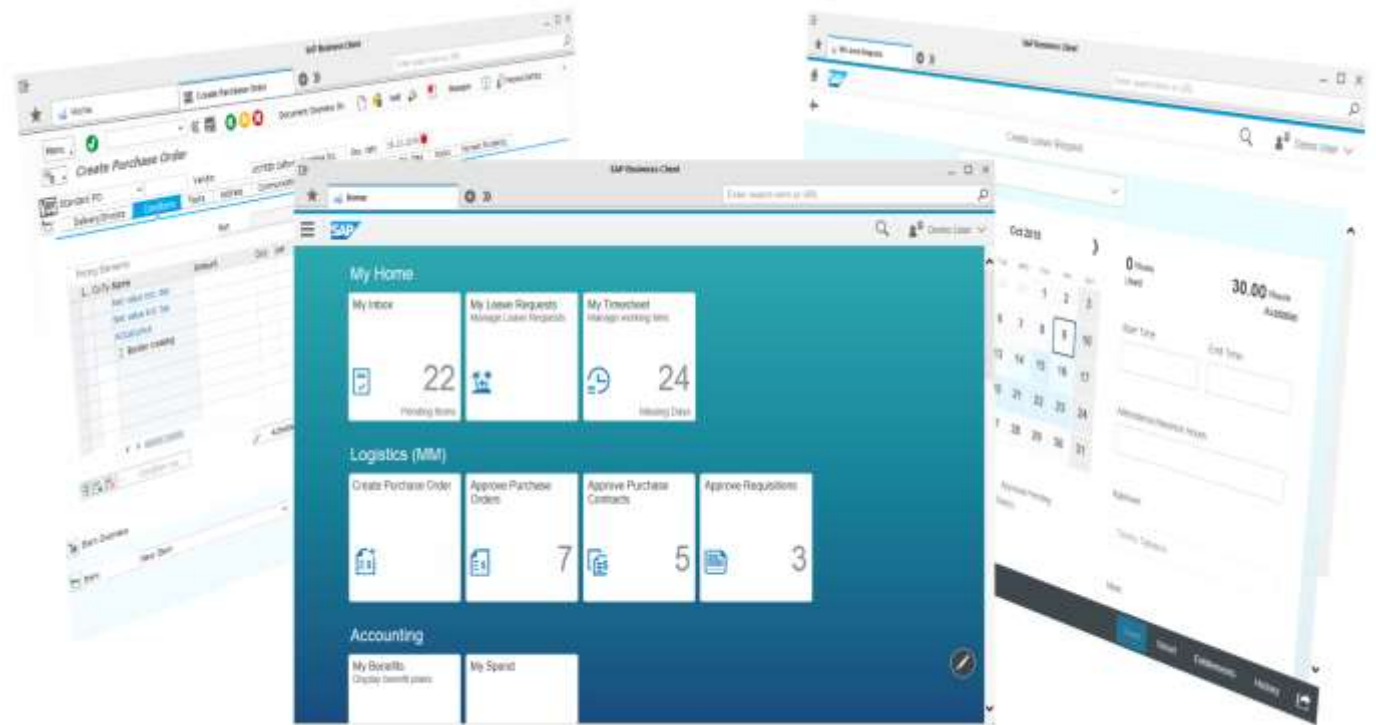


# SAP Business Client

## SAP Fiori experience on Windows desktop

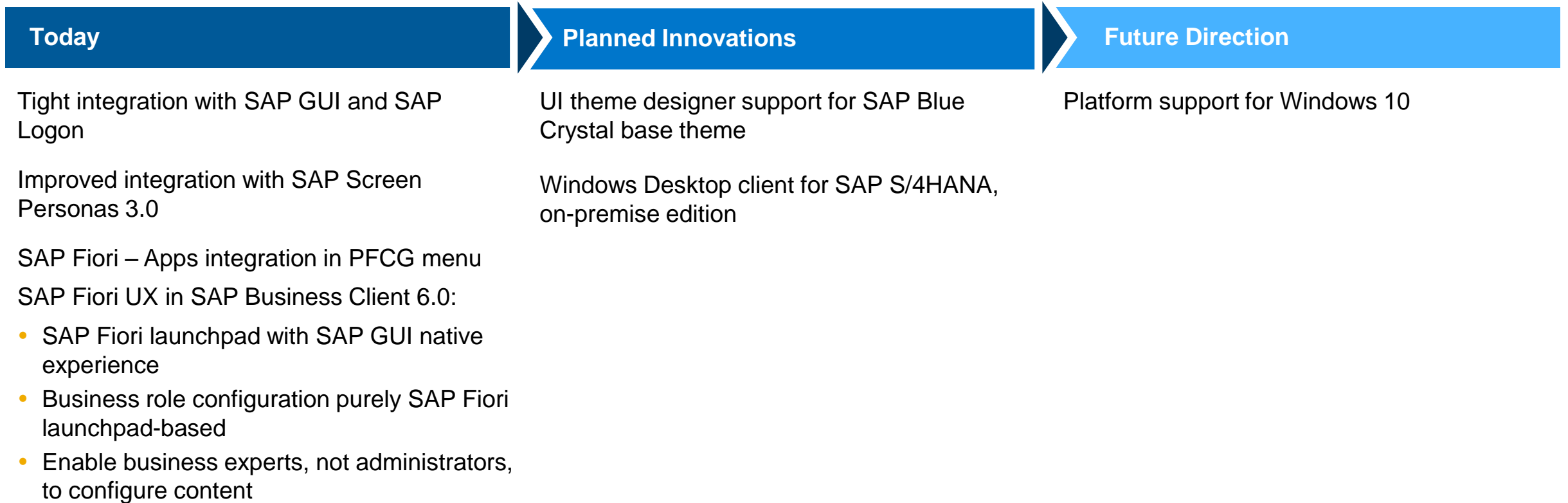
SAP Business Client offers an integration of the SAP Fiori launchpad to allow a unified SAP Fiori user experience.

- 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



SAP Business Client 6.0  
(ABAP: SAP NW 7.50 SP01 / UI ADD-ON 2.0 SP01)

**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 3<sup>rd</sup> 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

# SAP Enterprise Portal

## Product road map overview – key themes and capabilities

### Today

#### SAP Fiori launchpad (on SAP Enterprise Portal)

- SAP Fiori launchpad as simplified experience across devices for application portal scenarios
- Personalized single point of access for Portal iViews and pages alongside SAP Fiori transactional applications
- My Inbox integration for task management
- SAP Business Client integration for expert users on desktop, and SAP Fiori Client for mobile scenarios

#### Classical Portal experience

- Ajax Framework Page standards mode enabled
- Integrating standalone SAP Fiori applications
- New SAP Blue Crystal theme for Ajax Framework Page

#### Administration

- UI theme designer for central look & feel management across UI technologies
- Remote catalogs' role assignment editor

#### Powered by HANA

- Qualified to run on SAP HANA as a database and run natively on the HANA server

(SAP Enterprise Portal 7.4 SP11 / 7.5)

### Planned Innovations

#### SAP Fiori launchpad (on SAP Enterprise Portal)

- Extended document management capabilities with SAP Mobile Documents
- Support dynamic navigation and related links
- Simply SAP Fiori – SAP Portal upgrade dependencies
- Continues UX and launchpad extensibility enhancements
- Extend the integration with native applications

#### UI Clients alignment

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

#### Development and extensibility

- Enrich developer experience leveraging SAP Web IDE
- Allow deployment of SAPUI5 and Fiori-like applications on the Portal for 3rd party and extensibility purposes

#### Powered by HANA

- Support the consumption of SAP Fiori Analytical and Factsheets
- Integrate SAP HANA search

### Future Direction

- Continues enhancements for SAP Fiori launchpad on SAP Enterprise Portal
- Integrate S/4HANA applications
- Consume remote catalogs from SAP HANA Cloud Platform
- Integrate technology services: usage analysis, collaboration (SAP Jam), SAP Mobile Documents, SAP Lumira
- Integrate with SAP HANA Cloud Portal sites
- Enhance HR scenarios via SuccessFactors integration

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



# SAP HANA Cloud Portal

## Product road map overview – key themes and capabilities

### Today

#### User Experience

- Single entry point of access to applications, content and services across devices
- Freestyle site templates, extensions and Fiori launchpad experiences

#### Content Management & Integrations

- Templates via Market Place
- Lifecycle management for sites, content, documents and widgets
- Jam integration

#### Developer Productivity

- Market standard, OpenSocial enabled technology
- Template-based widget development flows

#### Cloud Solutions & Extensions

- Cloud for Service – Support Site
- Cloud for Sales – Partner Portal
- SuccessFactors – Extensions and Employee Central Service Desk

(Q3/2015)

### Planned Innovations

#### Enhanced User Experience

- SAP Fiori-based sites and extensions
- Multi experience patterns – SAP Fiori launchpad, Overview Pages, Object Page, smart templates and freestyle Portal Pages

#### Content Management & Integrations

- Preconfigured, extensible site templates for SAP Fiori experiences and content types integration
- Business Suite & S/4 Fiori app support
- SAP Mobile Documents integration
- Enterprise Search, Analytics, ECM, etc.

#### Enhanced Developer Productivity

- Developer-driven site composition
- Template-based editors and plug-ins in SAP Web IDE
- Fiori development patterns integration

#### Cloud Solutions & Extensions

- Internet of Things (IoT) Site template
- Support Site (Fiori flavor)
- Flexible extensions template

### Future Direction

#### Enhanced User Experience

- Entry point for Cross SAP solutions (SaaS and non SaaS)
- Additional SAP Smart Patterns
- Out of the box, predefined flexible Freestyle templates

#### Content Management & Integrations

- Cross Marketplace integration (+Hybris)
- Established UIs consumption
- Integrate with SAP HCP Lifecycle Management
- Advance SAP Jam integration

#### Enhanced Developer Productivity

- WYSIWYG developer editors in SAP Web IDE
- New plug-ins for templates and patterns

#### Cloud Solutions & Extensions

- Additional solutions for SAP lines of businesses
- Partners made solutions

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



# 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](#)

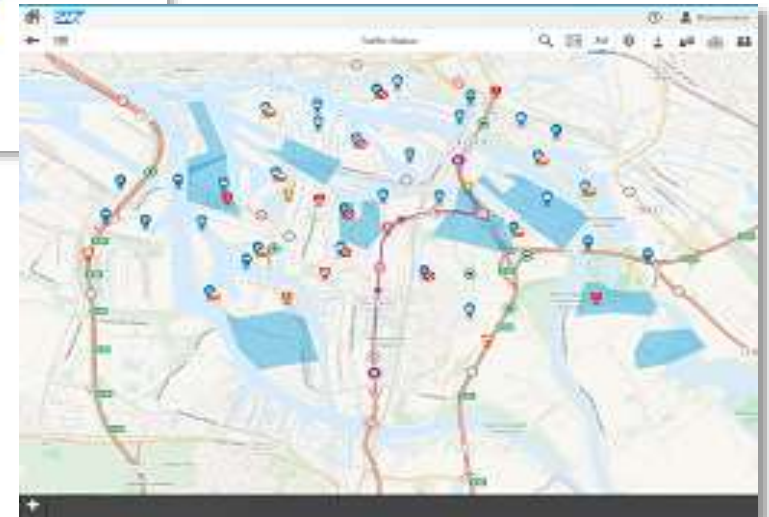
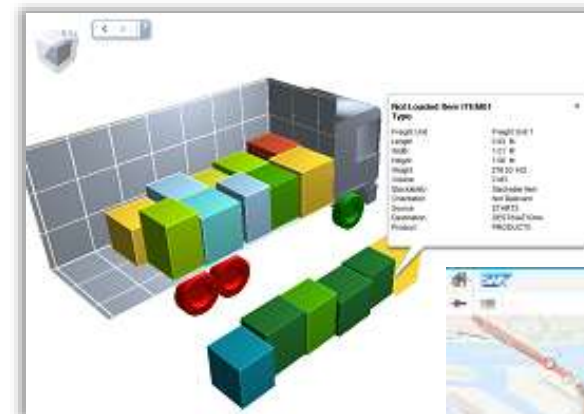
SAP Visual Business is an interactive UI technology that enables users to work with visualized SAP and non-SAP data from various sources. It also contains a toolbox that allows the rapid building of interactive graphics. SAP Visual Business is the standard approach for SAP applications to integrate maps.

### 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

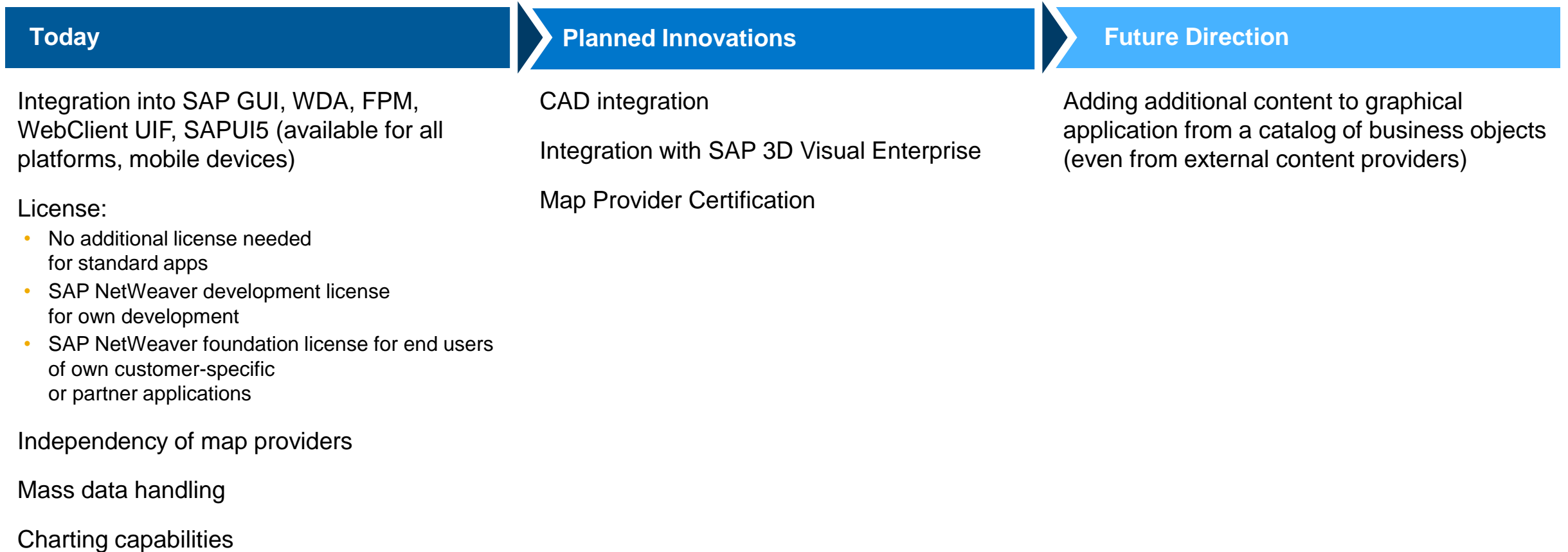
### Benefits

- 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 Business

## Product road map overview - key themes and capabilities



(Version 2.1 SP0 PL08)

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

# SAP Visual Business

## Planned innovations – features and functions

Functional Area	Feature
CAD integration	<ul style="list-style-type: none"><li>• 2D CAD plans can be used as a map layer</li></ul>
Integration with SAP 3D Visual Enterprise	<ul style="list-style-type: none"><li>• 3D Visual Enterprise is integrated in Visual Business scenes and can be used for detailed visualization of assets or products.</li><li>• 3D Visual Enterprise Animations can be started from a Visual Business application</li></ul>
Map Provider Certification	<ul style="list-style-type: none"><li>• Provider maps and services can be used without development effort (today only for maps)</li></ul>

This is the current state of planning and may be changed by SAP at any 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 SAP UI5 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 Visual Enterprise

## Product road map overview - key themes and capabilities

### Today

#### Integrations / Products

- Visual Interaction toolkit incorporating a SAPUI5 version of VE Viewer inside SAPUI5 distribution
- Visual Manufacturing Planner V2
- Visual Instance Planner
- 3D in MII Self Service Composition Environment
- CAD integration and Visualisation in Real Estate Management
- SAP Work Manager v6.1
- VE in CAMS

#### Features

- VMP: manufacturing assembly simulation and Visual Work Instruction generation
- Dynamic Labels in 3D and 2D
- SAPUI5 WebGL Viewer

### Planned Innovations

#### Integrations / Products

- Visual Enterprise on SAP Hana
- Visual Enterprise Cloud Publishing service in SAP HANA Cloud Platform
- Configurable Visual Work Instructions
- VE client convertor for ECTR
- Visual Asset Planner: EAM structure manager
- Integration with Asset Intelligence network

#### Features

- Enhancements to change management
- Dynamic / shattered viewing (non monolithic); Rapid change propagation
- Application controlled hotspotting and overlay controls in SAPUI5
- IFC file format support

### Future Direction

#### Integrations / Products

- Streaming services for Visual Index / Massive Models
- VE in SAP Fiori for Cloud PLM
- Viewer integration into SAP Lumira & SAP Business Objects Design Studio
- Ariba 3D Parts Catalog
- Integration with Hybris for parts ordering
- Extended cloud services including cloud authoring
- Extended Visual Collaboration
- Enhanced Visual Interaction toolkit

#### Features

- UI/UX improvements
- Extended business solutions
- Visual product configuration
- Support for ISO15926 imports for AEC / ECO
- VE DRM including mobile

(Version 8.0 SP4)

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

# SAP Visual Enterprise

## Planned innovations – features and functions

Functional Area	Feature
Visual Enterprise on SAP HANA	<ul style="list-style-type: none"> <li>3D geometry stored &amp; streamed from SAP HANA database</li> </ul>
VE Cloud Publishing service in HCP	<ul style="list-style-type: none"> <li>Cloud micro-service to allow apps to offer conversion of customer CAD to VE visualization formats</li> </ul>
Configurable Visual Work Instructions	<ul style="list-style-type: none"> <li>Support for authoring of “150%” Visual Work instructions for use in Variant manufacturing; support for run-time production of 100% Visual Work Instruction for “lot size 1” manufacturing</li> </ul>
VE client converter for ECTR	<ul style="list-style-type: none"> <li>Client side conversion into visualization format; storage in DMS</li> </ul>
Visual Asset Planner: EAM structure manager	<ul style="list-style-type: none"> <li>Link Visual Representation of an Asset to EAM Asset Structure; restructure visual source structure to form a 1:1 visual representation of Functional Location Structure; single VE file for the entire hierarchy with technical object metadata tagged to it.</li> </ul>
Integration with Asset Intelligence network	<ul style="list-style-type: none"> <li>SAPUI5 Embedded Visualization and Cloud publishing via micro-services</li> </ul>
Visual Interaction toolkit	<ul style="list-style-type: none"> <li>SAPUI5 distribution of combined VE Viewer and Visual Business capabilities as UI5 components. Controls and an API for applications to support hotspotting and overlays in visualizations</li> </ul>
Enhancements to change management	<ul style="list-style-type: none"> <li>Ability to manually, or automatically update authored 3D content from Design changes</li> </ul>
Dynamic / shattered viewing (non monolithic); rapid change propagation	<ul style="list-style-type: none"> <li>Enables dynamic visualization of configurable BOM's. This supports rapid change propagation - there is no longer any need to re-translate entire assemblies when just a part or subassembly has changed</li> </ul>
IFC support	<ul style="list-style-type: none"> <li>Reading of Industry Foundation Classes compliant geometry and metadata to support Virtual Design and Construction offerings into EC&amp;O</li> </ul>

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

# 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 HCP, 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 Business Suite and Business ByDesign (currently 2400+)

**Quotation for Contract Renewal**

Your Service Contract is about to expire.  
If you agree with our offer please press the **ACCEPT** button!

Our offer: Offer ID: 00000000 Service Contract Code: [Field]

The renewal period is: Renewal Start: 20.09.2009 to Renewal End: 20.09.2009 [Field]

The offer is valid from: 11.09.2009 to 15.10.2009 [Field]

The parties involved are:

Party ID	Name	Function	Address
3075	ALPHA Center	Sales To Party	1621 Tupper Avenue North / MINNEAPOLIS MN 55427
415179	Mr. Tarsen Iordache	Contact Person	3485 Deer Creek Rd / Palo Alto CA 94306
408177	Bernhard Tietzsch	Employee Responsible	Destinee Plaza-Allee 16 / D-40130 Vahlenhof

Renewed products are:

Item No	Product ID	Product Description	Quantity	Unit	Net Value	Currency
100	SEM_SLA_5X10	Standard 5x10	1		240.00 €	USD
200	SEM_SLA_6X12	Prestige 6x12	1		200.00 €	USD

**ACCEPT**

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)

# Web Dynpro Java

## Product road map overview - key themes and capabilities

### Today

Well defined support for newer/existing browsers (note: 1618309, 1602569 and 990034)

IOS devices browsers are enabled as tolerant browsers for WD Java applications (note: 1800376)

Support for Standards mode of rendering in IE and other browsers for all WD Java applications (notes:1854758, 1894272, 1911889 and 2026293).

New printing format support in PDFObject API - lfbA. (note:1903721).  
Performance improvement(note:1926600)

Option to use custom virus scan profilers (note: 1769657)

WD Java enabled to support consumption of Sybase DB as data source (note: 1717862) HDB database (note: 1818524)

Performance Improvement in Content Administrator(Note:- 2044377)

### Planned Innovations / Future Direction

Continued support for new browsers along with support for rapid release versions of browser (e.g. Firefox and Chrome)

Support for Themes (SAP Blue Crystal)

Constant monitoring of threats to remain up to date with security standards.

New features in SAP NetWeaver Developer Studio 7.50

- Support Eclipse Luna (Eclipse version 4.4, 64 bit)
- Support JDK 1.8 (64 bit)
- Supports JCo3. (JCo2 is completely removed from NWDS and JCo2 support still available in WD runtime for backward compatibility)
- ARFC1 model completely removed from NWDS 7.50. (Since, ARFC1 uses JCo2).

WD Java will be secure against clickjacking vulnerabilities

- When released some notes have to be followed to secure WD Java against clickjacking vulnerabilities.

(SAP NetWeaver 7.30 SP12 / 7.31 SP15 / 7.40 SP10 / 7.50 SP00)

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





# UI Related Road Map Topics

- SAP Mobile Platform
- Mobile at SAP Business Suite
- SAP Gateway
- SAP Gateway for Microsoft
- Analytic Solutions from SAP



# SAP Mobile Platform

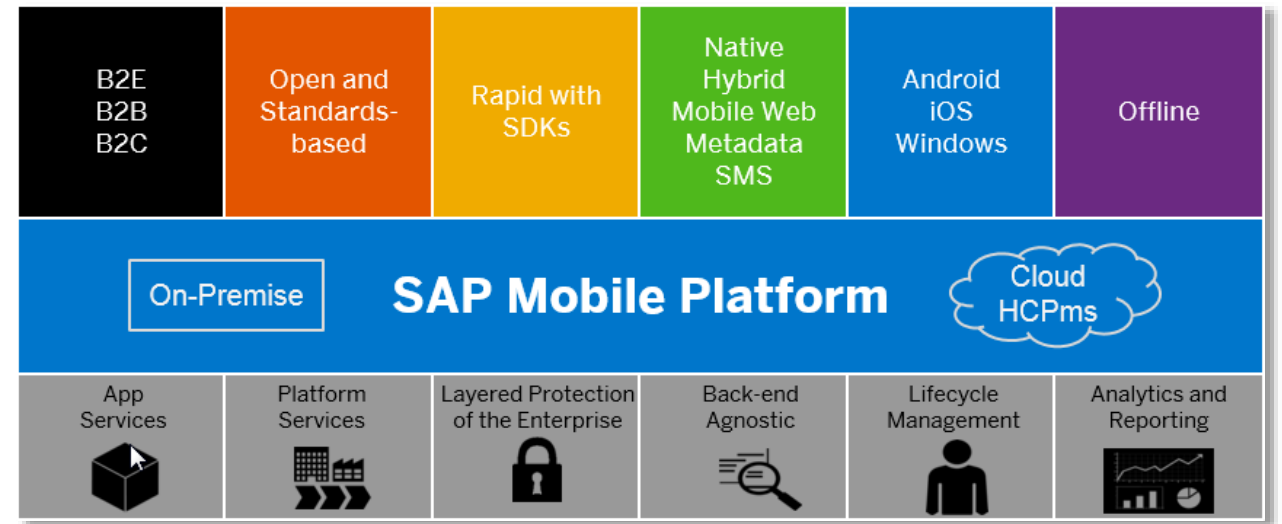
## Description

[Link to SAP UX Explorer](#)

Develop, deploy and run Mobile B2E, B2B and B2C apps on one platform through common mobile platform services with SAP Mobile Platform (on premise) or HCP mobile services (cloud).

### Key capabilities

- Rapidly mobilize SAP Fiori and SAPUI5 apps with enhanced enterprise capabilities
- 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 or BYOT (Bring Your Own Tool)
- Out of the box support for critical enterprise security standards
- Provide insight to measure engagement
- Manage the complete lifecycle of your enterprise apps
- Integration with SAP Mobile Secure or 3<sup>rd</sup> party EMM for comprehensive mobility management
- Extensive library of off-the-shelf apps for industry and LOB from SAP and 3<sup>rd</sup> parties



### Benefits

- Enable a highly mobilized work force and a strategic channel to consumers, suppliers and partners
- Increase workforce productivity and transform business with a comprehensive mobile strategy and industry leading mobile apps

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

# Mobile at SAP Business Suite

## Description

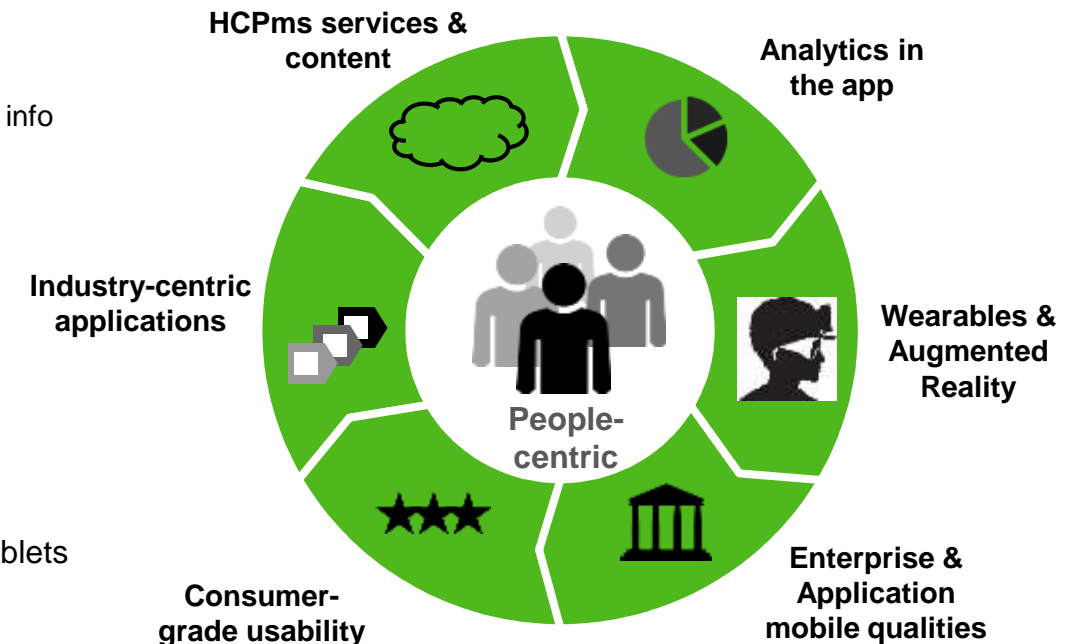
A comprehensive mobile strategy and solutions are required to transform and meet the breadth of an organization's needs. Effective transformational mobile strategy empowers employees to accomplish daily tasks from their desks, tablets or smartphones. Mobile applications use SAPUI5 combined with native device capabilities based on SAP mobile client SDK's.

### Key capabilities

- SAP Fiori apps with role-based content and mobile qualities
  - Qualities like offline data, access to calendar and address book, scanner, documents, location-based info
- Built with SAP Mobile SDK with independent deployment option
- Run on SAP Mobile Platform on-premise OR SAP HANA Cloud Platform mobile services
- Support branding, theming and extensibility
- Latest mobile OS support, e.g. Android, iOS, Windows 8
- HANA and any DB support
- New: Wearables and Augmented Reality

### Benefits

- Enable employees throughout the organization to accomplish daily tasks from their desktops, tablets or smartphones optimized for their work environment
- People-centric solutions transform the experience into context-rich experience, based on user history, sensor data, smart products in IoT, social content, predictive analytics.



Related road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Cross Topics): Mobile Applications and (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](#)

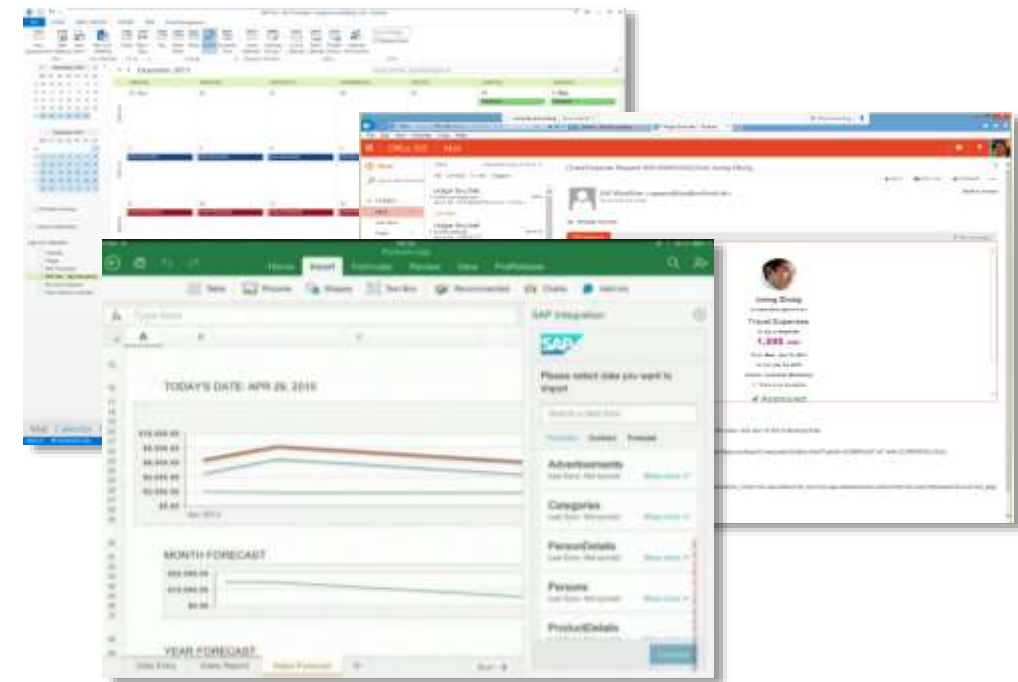
SAP Gateway for Microsoft\* is an interoperability framework that enables IT to securely integrate SAP and Microsoft technologies in a non-disruptive, scalable, and sustainable manner. It is designed to enable .NET developers to quickly and easily create SAP software-based Microsoft applications, thereby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

### Key capabilities

- Enterprise ready integration supports 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

# SAP Gateway for Microsoft

## Online learning material and resources

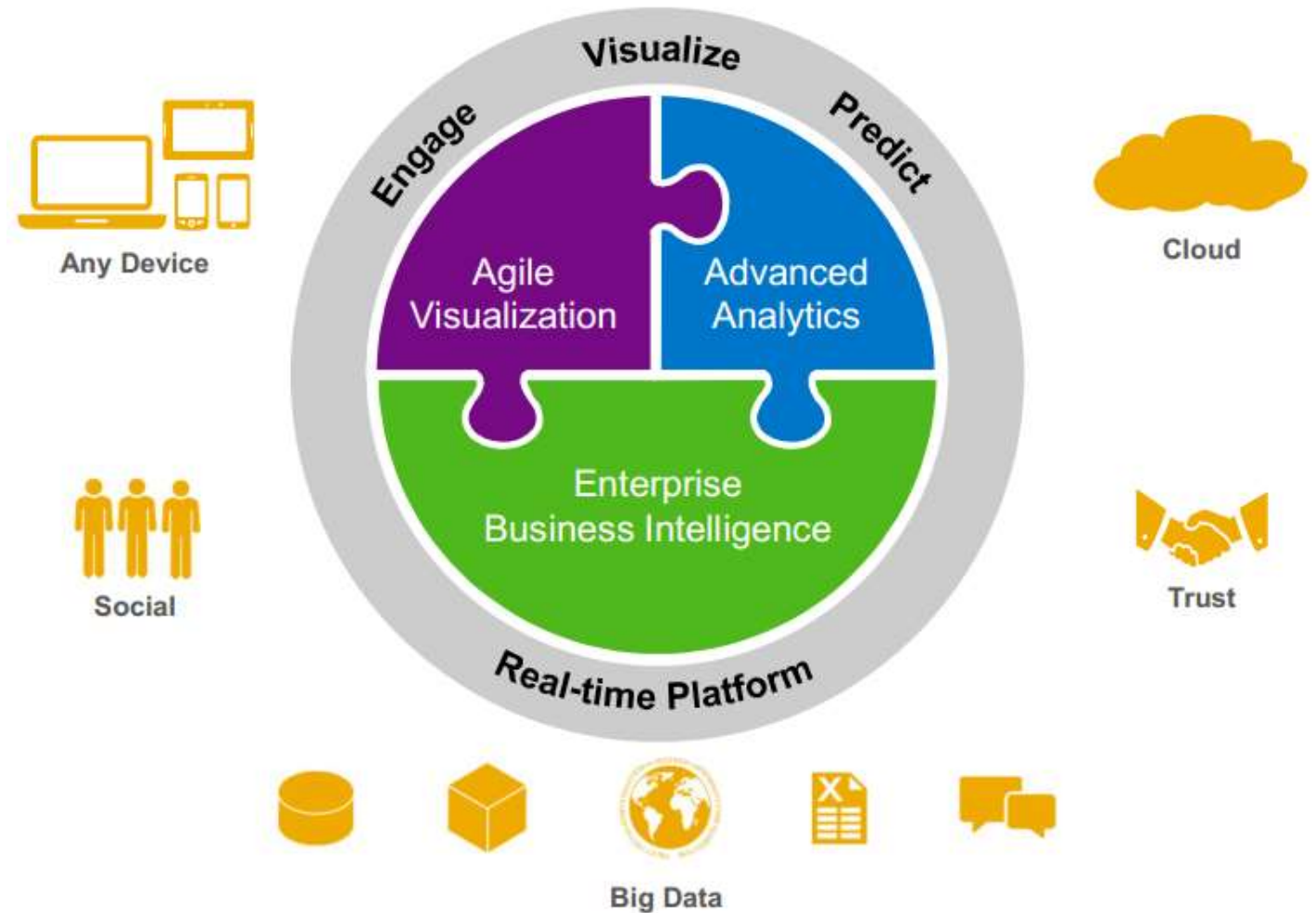
<a href="#"><u>SAP Gateway for Microsoft Partner Jump Start Guide</u></a>	<a href="#"><u>SAP Gateway for Microsoft Self-Paced Learning</u></a>
<a href="#"><u>SAP Gateway for Microsoft at SCN</u></a>	<a href="#"><u>Microsoft Virtual Academy Training</u></a>
<a href="#"><u>Free Trial for SAP Gateway for Microsoft</u></a>	<a href="#"><u>SAP Gateway for Microsoft on MS TechNet</u></a>
<a href="#"><u>SAP Gateway for Microsoft FAQ</u></a>	<a href="#"><u>Gateway for Microsoft at help.sap.com</u></a>
<div><div><b>SAP PartnerEdge for Application Development</b>   <a href="#"><u>Exploration member</u></a> Free GWM licenses      Base enablement      Community support <a href="http://www.sapadpc.com">www.sapadpc.com</a></div><div>FREE 1 year only</div></div>	
<b>Join us online:</b> <a href="#"><u>Facebook</u></a>   <a href="#"><u>Twitter</u></a>   <a href="#"><u>LinkedIn</u></a>   <a href="#"><u>YouTube</u></a>	

# Analytic Solutions from SAP

## Description

In the BI solution space several UIs are offered based on specific customer needs.

Please refer to the related Analytics road maps on SMP for details about the analytic solutions' user interfaces.



Related analytic solutions product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Analytics)





# Summary

# Recommendations for customers

## 1 UNDERSTAND SAP UX Strategy & Roadmap

## 2 DEFINE and EXECUTE Customer specific UX strategy

- Understand Users & Scenarios
- Investigate NEW and RENEW solutions
- Evaluate ENABLE solutions
- Build knowledge from SAP resources
- Follow SAP UI technology strategy

### Refer to:

- See slides 'Key links for more information'

## 3 LEVERAGE SAP's UX Design Services

<https://experience.sap.com/designservices>



# 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 [ingo.deck@sap.com](mailto:ingo.deck@sap.com)
- Margot Wollny [margot.wollny@sap.com](mailto:margot.wollny@sap.com)
- Michael Falk [michael.falk@sap.com](mailto:michael.falk@sap.com)

# Key links for more information (1)

## For customers and partners

### SAP User Experience focus

- SAP UX Strategy: <http://experience.sap.com/ux-strategy/>
- SAP UX Explorer: <http://www.sap.com/uxexplorer>
- SAP Design Guidelines: <https://experience.sap.com/guidelines/>

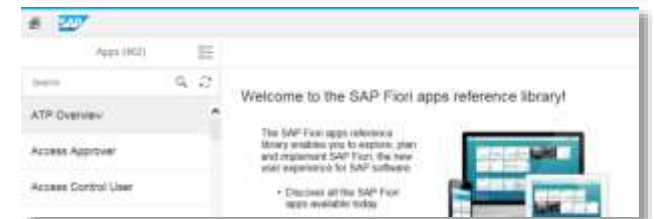
### SAP Fiori UX focus

- Experience SAP Fiori UX: <http://www.sap.com/fiori-demo>
- SAP Fiori application reference library: <http://www.sap.com/fiori-apps-library>
- SAP Fiori UX at SCN: <http://scn.sap.com/docs/DOC-41598>

### SAP Services focus

- SAP UX Design Services: <https://experience.sap.com/designservices/>
- Rapid Deployment solutions: <http://service.sap.com/rds-userexperience>

SAP design guidelines and resources



# Key links for more information (2)

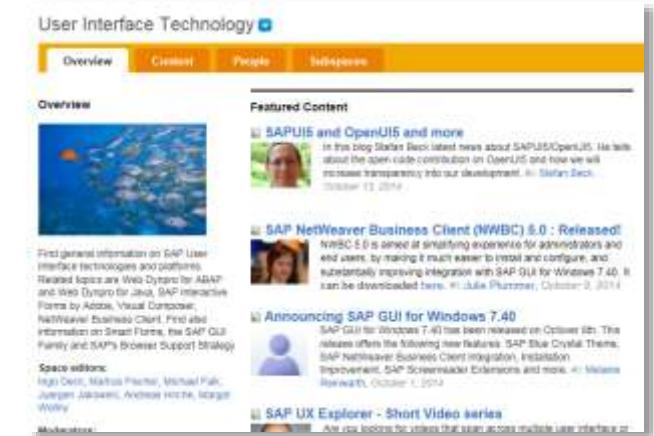
## For customers and partners

### SAP Solutions focus

- SAP Innovation Discovery: <https://apps.support.sap.com/innovation-discovery>
- SAP Improvement Finder: <http://www.sapimprovementfinder.com/>

### General

- Road maps on SAP Service Marketplace <http://service.sap.com/saproadmaps>
- UI Technologies @ SCN <http://scn.sap.com/community/ui-technology>
- SAP Developer Center @ SCN <http://scn.sap.com/community/developer-center>
- IT Planning Resources <https://service.sap.com/~sapidb/011000358700001160122012E>
- Influence programs <http://service.sap.com/influence>
- SAP User Groups <http://www.sapusergroups.com>







# Appendix

# SAP Fiori User Experience

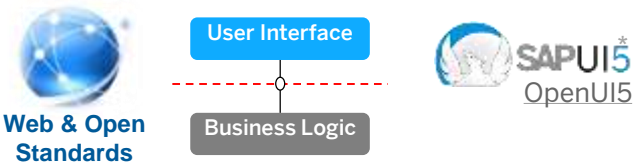
## Concept



## Design



## Technology



\*: SAP's preferred way to build SAP Fiori apps is using SAPUI5, but other technologies might be applied as well

# Comparison of key UI technologies

	SAPUI5		FPM/WDA*	Dynpro
<b>Key properties</b>	<ul style="list-style-type: none"> <li>HTML5, Java Script and web standards based</li> <li>Client side rendering</li> <li>Platform-independent</li> </ul>	<ul style="list-style-type: none"> <li>Connectivity e.g. through OData services, XML, JSON</li> <li>Stateless</li> </ul>	<ul style="list-style-type: none"> <li>ABAP</li> <li>Optimized for ABAP back ends</li> <li>Server-side rendering</li> <li>Connectivity mainly through feeder classes</li> <li>Transactional &amp; stateful</li> </ul>	<ul style="list-style-type: none"> <li>ABAP</li> <li>Classical SAP GUI Transactions</li> <li>WIN GUI</li> <li>HTML GUI</li> </ul>
<b>Key UI tools &amp; enhancements options</b>	<b>SAP Web IDE</b> <ul style="list-style-type: none"> <li>SAPUI5 specific code completion</li> <li>Drag &amp; drop, wizards and code and business templates</li> <li>Instant preview in browser and mock data support</li> <li>Integrated deployment to SAP platforms</li> <li>Extensible and modular architecture for “adding your own plug-ins”</li> </ul>		<b>Floorplan Manager incl. Flexible UI Designer*</b> <ul style="list-style-type: none"> <li>Pattern based development with predefined floorplans &amp; building blocks</li> <li>Code-free UI configuration</li> <li>Modification-free adaptation and extension of Uis</li> <li>end-user personalization concept</li> <li>UI guidelines and SAP product standards support</li> <li>Flexibility through island concept</li> </ul>	<b>Side panel</b> <ul style="list-style-type: none"> <li>Context specific enrichment of existing transactions</li> <li>Non-disruptive</li> </ul>
	<b>Fully functional Eclipse IDE still available</b>		<b>SAP Screen Personas</b> <ul style="list-style-type: none"> <li>Personalize Web Dynpro ABAP screens</li> </ul>	<b>SAP Screen Personas</b> <ul style="list-style-type: none"> <li>Personalize Dynpro (SAP GUI) screens</li> <li>Move/hide/pre-fill data fields</li> <li>Add images, web content, shortcut buttons and record process steps</li> </ul>
<b>Required basic skill set</b>	JavaScript, HTML5, CSS3, Gateway, OData		ABAP OO, Web Dynpro ABAP, Floorplan Manager	ABAP & Dynpro
<b>Recommended use cases</b>	Desktop <b>AND</b> mobile usage <ul style="list-style-type: none"> <li>Native alike UX</li> <li>Device independence</li> <li>Responsive design</li> </ul>		Optimized for desktop usage**	

\* Harmonized in run & design time with WebClient UIF

\*\* Touch support conditionally released for WDA/FPM, WebClient UIF, SAP GUI for HTML “What you see on the desktop is what you get on the tablet computer”

# UI clients & integration topics

## Comparison with focus on SAP NWBC and SAP Portal<sup>3</sup>

### SAP Logon / SAP GUI <sup>1</sup>



✓ Windows    ✓ Browser

#### Key attributes

- Classic transaction launcher
- Menu-based access
- Desktop integration

### SAP (NetWeaver) Business Client



✓ Windows    ✓ Browser <sup>2</sup>

- Successor to SAP Logon/SAP GUI stand-alone
- Role-based access
- Integration of Web UI technologies
  - Web Dynpro
  - Side panel
  - SAPUI5
- Configurable entry pages

#### Typical use cases

- ABAP environment
- Focus on Dynpro transactions

### SAP Enterprise Portal Client



○ Windows    ✓ Browser

- Portal platform for intranet/extranet (on premise and cloud)
- Support for "Mobile Portal" scenarios
- (Web) content management
- Calls SAP GUI for HTML
- Role-based access
- Collaboration
- Branding/theming

- Heterogeneous environment
- Focus on multiple UI technologies
- Focus on portal-like scenarios
- Access to a large set of systems

<sup>1</sup> Stand-alone <sup>2</sup> With limited functional range <sup>3</sup>For further insights see SNC blog [When to use NWBC](#)

# Acronym glossary (1/4)

Acronym	Full Text
AET	Application Enhancement Tool
ALV	ABAP List Viewer
API	Application Programming Interface
ARIA	Accessibility for Rich Internet Applications
AS	Application Server
BAPI	Business Application Programming Interface
BC	Business Client
BI	Business Intelligence
BICS	Business Intelligence Consumer Services
BOL	Business Object Layer
BOM	Bill of Material
BOR	Business Object Repository
CAD	Computer-Aided Design
CGM	Computer Graphics Metafile
CORBU	New visual identity for the SAP Business Suite (named after Le Corbusier, Swiss architect and designer)
CRM	Customer Relationship Management
CSS	Cascading Style Sheets
CVOM	Common Visual Object Modeler

# Acronym glossary (2/4)

Acronym	Full Text
DIR	Directory
DMS	Data Management System
DRM	Direct Reseller Management
Dynpro	Dynamic Program
EAM	Enterprise Asset Management
EBOM	Engineering Bill of Material
ERP	Enterprise Resource Planning
FLP	Fiori launchpad
FLUID	Flexible User Interface Designer
FPM	Floorplan Manager
GUI	Graphical User Interface
GUIBB	Generic User Interface Building Block
HANA	High Performance Analytic Appliance
IDA	Integrated Data Services
IDE	Integrated Development Environment
IE	Internet Explorer
IFbA	Interactive Forms by Adobe
JT	Most widely used 3d file format for PLM



# Acronym glossary (3/4)

Acronym	Full Text
LESS	Dynamic StyleSheet Language ( <a href="http://lesscss.org">http://lesscss.org</a> )
LoB	Line of Business
MDX	Multi Dimensional eXpression
NWBC	NetWeaver Business Client
NWDI	SAP NetWeaver Java Development Infrastructure
OCR	Optical Character Recognition
OData	Open Data Protocol
PAM	Product Availability Matrix
PHP	General-purpose server-side scripting for dynamic web pages ( <a href="http://en.wikipedia.org/wiki/PHP">http://en.wikipedia.org/wiki/PHP</a> )
PFC	Remote Function Call
PL	Patch Level
PLM	Product Lifecycle Management
REST	Representational State Transfer
SADL	Service Adaptation Description Language
SAPUI5	SAP development toolkit for HTML5
SCM	Supply Chain Management
SDK	Software Development Kit

# Acronym glossary (4/4)

Acronym	Full Text
SRM	Supplier Relationship Management
TCO	Total Cost of Operation
UI	User Interface
UR	Unified Rendering
UX	User Experience
VE	Visual Enterprise
VEA	Visual Enterprise Author
VEG	Visual Enterprise Generator
VEV	Visual Enterprise Viewer
WD	Web Dynpro
WDA	Web Dynpro ABAP
WDJ	Web Dynrpo Java
WTS	Windows Terminal Server
WYSIWYG	What You See Is What You Get
XML	Extensible Markup Language

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