SAP Product Road Map
SAP User Interface Technologies

Road Map Revision: Q1/2016

SAP

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Introduction to product road maps

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

- 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

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

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

SAP User Interfaces Overview
- Market trends and user expectations
- SAP user experience strategy
- SAP Fiori: SAP's new user experience
- UXaaS with Splash and BUILD
- Key UI technologies supporting SAP's user experience strategy

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

UI Client & Integration Topics
- SAP Fiori launchpad
- SAP Business Client
- Product portfolio for SAP Portal
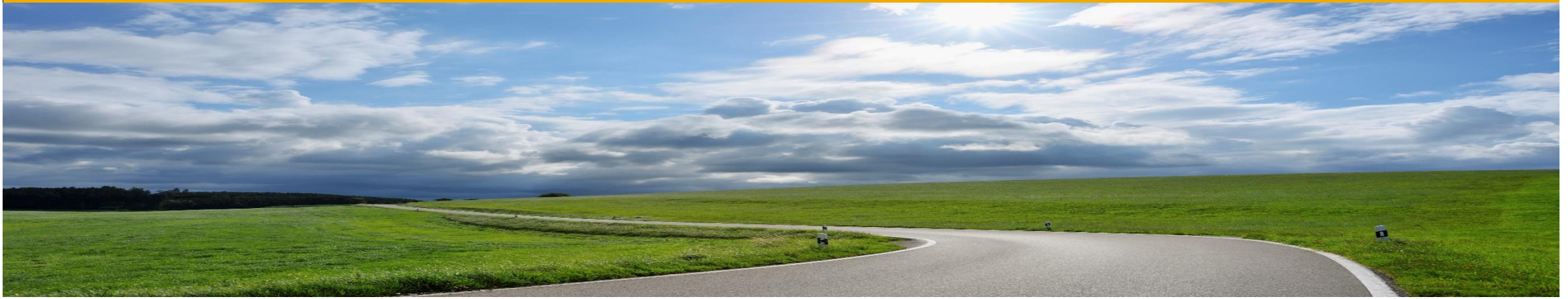
Specialized UI Technologies
- SAP Visual Business
- SAP Visual Enterprise
- SAP Interactive Forms by Adobe
- Web Dynpro Java

UI Related Road Map Topics
- SAP browser support
- SAP Mobile (Platform) Services
- SAP Gateway
- SAP Gateway for Microsoft
- Analytic solutions from SAP

Summary

Appendix

Public

SAP User Interfaces Overview

- Market trends and user expectations
- SAP user experience strategy
- SAP Fiori: SAP's new user experience
- UXaaS with Splash and BUILD
- 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

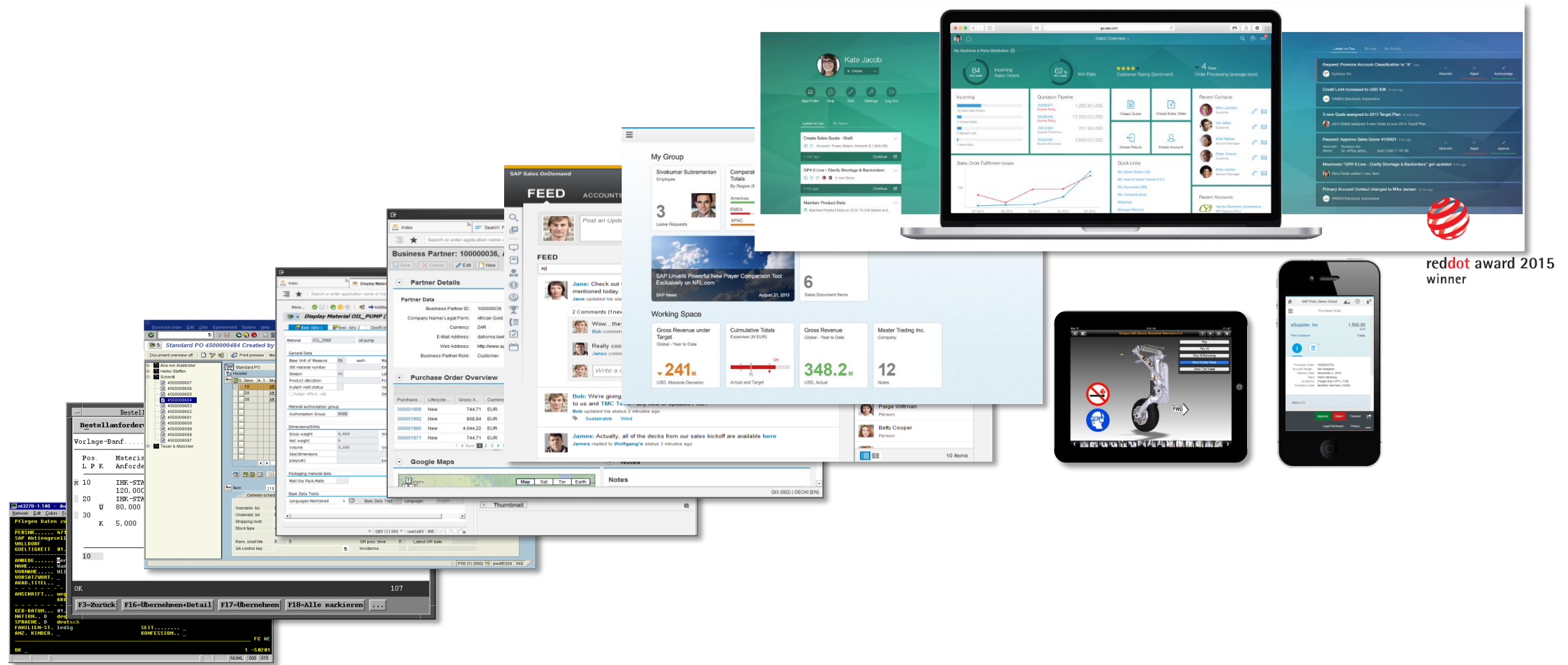- IT is not limited to small group of experts any more

Vision
Provide the leading user experience for business applications

Mission
Deliver attractive applications that make people successful at work

SAP user interfaces
Evolution

reddot award 2015 winner

SAP's direction: Digital transformation

People

- User-centered
- Design-driven development process
- One UX for SAP solutions

Innovation

Business

- Digitalization
- Simplification
- Cloud readiness

SAP FIORI

Technology

- Web & open standards
- Service orientation
- In-memory computing

Execution of SAP's user experience strategy

NEW & RENEW
DELIVERING SAP FIORI UX[1] ACROSS SAP SOLUTIONS[2]

SAP S/4 HANA

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.

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SAP Fiori: SAP's new user experience

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
- SAPUI5 flexibility services
- SAP Web IDE
- SAP Gateway

- SAP Fiori launchpad
- SAP Mobile Platform
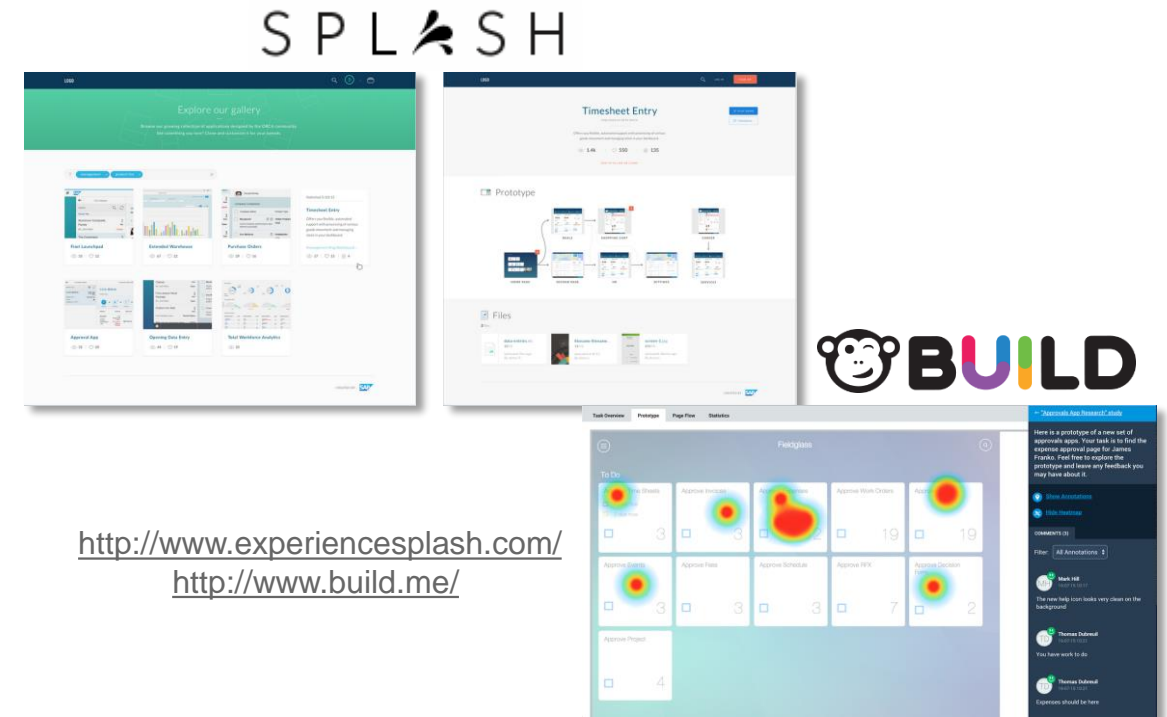- UI theme designer

* 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

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SPLASH and BUILD: Rapid and Effective Design & Prototyping

In SAP's UX as a Service offering Splash and Build provide cloud based entry points especially focused on non-technical users. Splash provides knowledge, tools, and inspiration that will help you create apps that your users love. SAP BUILD is an open source, collaborative design tool for prototyping and user research.

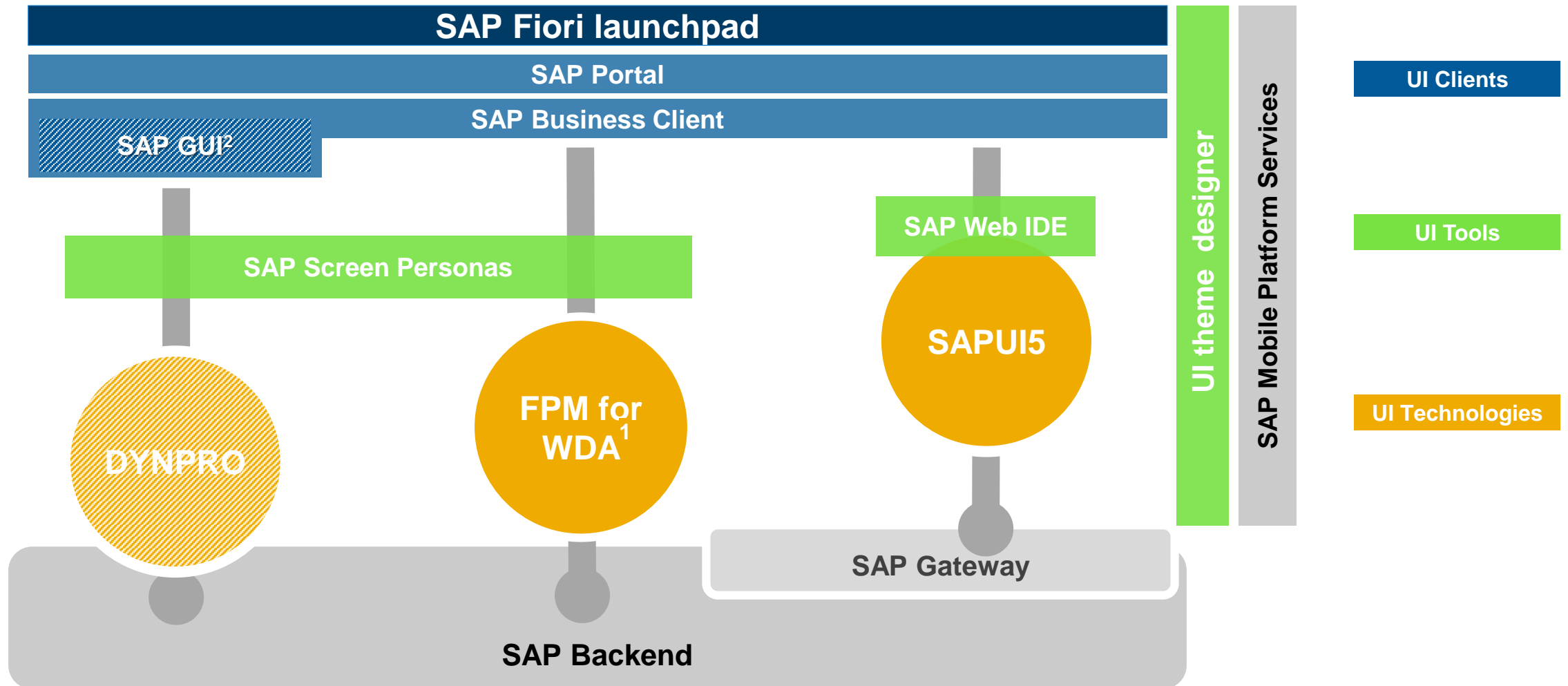Supporting the path towards SAP Fiori UX these tools support you with:

- Virtual brainstorming to support ideation and synthesis

- Intuitive prototyping capabilities
    - Create new or start from an existing design template and modify
    - Design compliance to guidelines — i.e. smart templates
    - Create prototypes with sample data and data model consideration
    - High fidelity prototypes with UI code generation to jumpstart development

- Remote end-user feedback with ability to highlight hot spots and get synthesized analyses

- Further information:
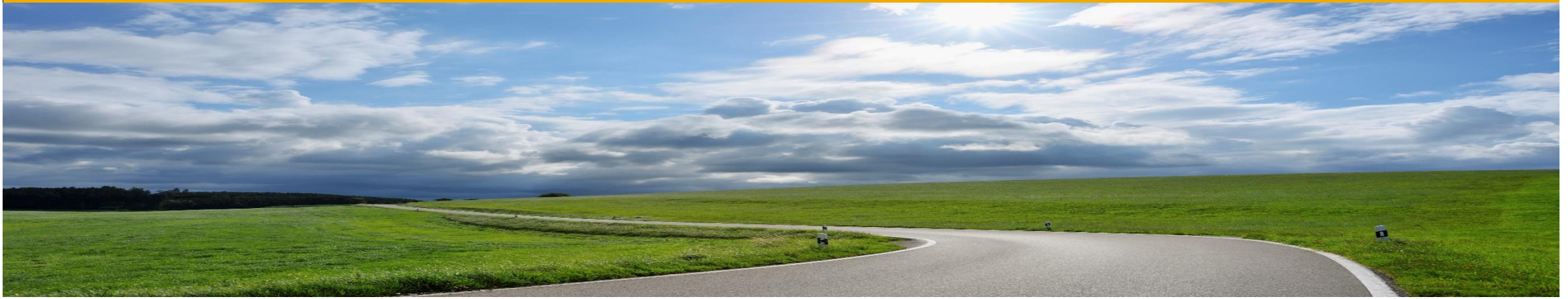   - https://experience.sap.com/news/want-build-better-user-experience/
    - https://www.youtube.com/channel/UCju0kVKOfkw5-hogBYPfgqg

http://www.experiencesplash.com/
http://www.build.me/

SAP's key UI technologies & development tools

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[1]: Floorplan Manager (FPM) for development of new applications based on Web Dynpro for ABAP (WDA)　　　　[2] for HTML & Windows

Public　　19

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

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
- SAPUI5 flexibility services
  – Flexibility infrastructure and capabilities for UI adaptation

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
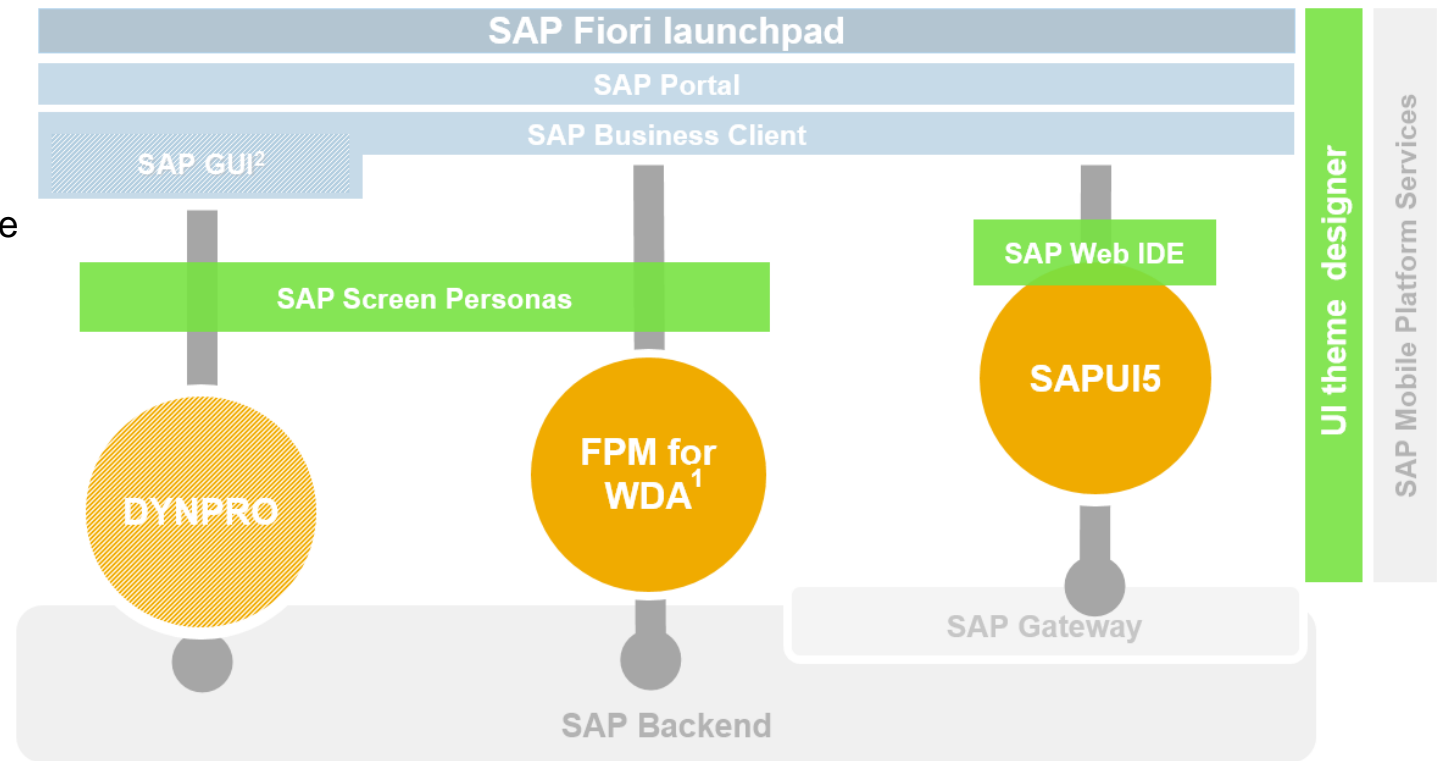- UI framework for SAP CRM

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 Fiori launchpad

SAP Portal

SAP Business Client

SAP GUI[2]

SAP Web IDE

SAP Screen Personas

DYNPRO

FPM for WDA[1]

SAPUI5

UI theme designer

SAP Mobile Platform Services

SAP Gateway

SAP Backend

# 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"
- 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
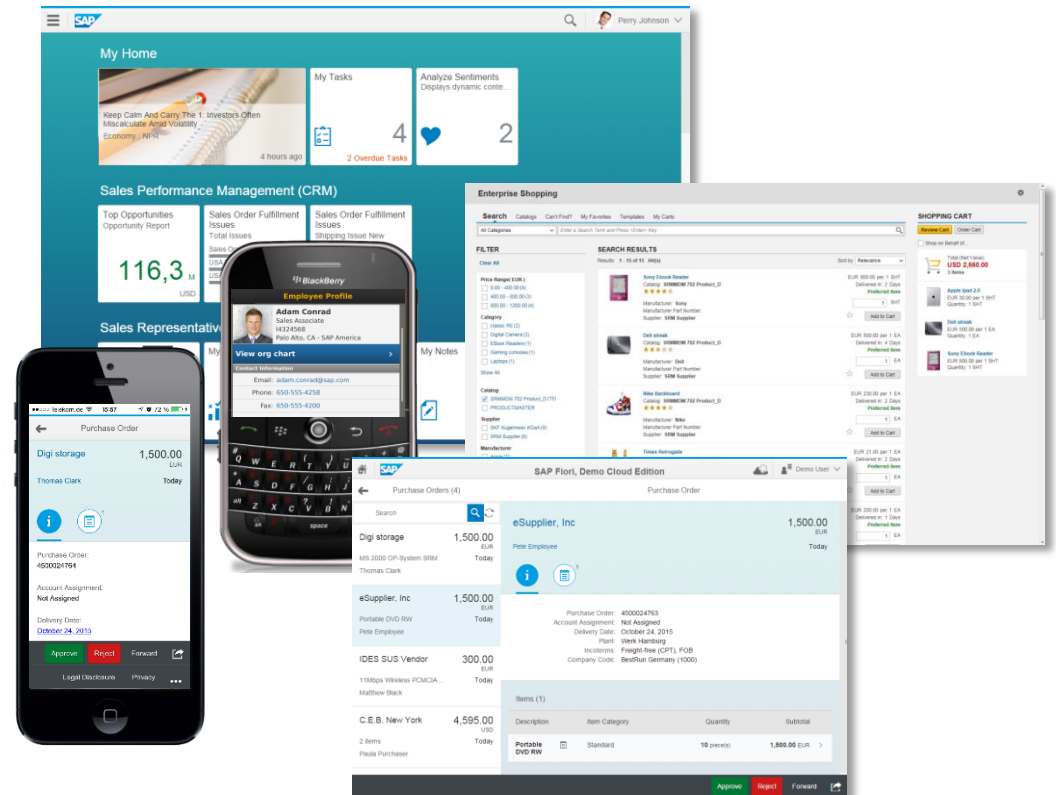
Today	Planned Innovations	Future Direction
Smart template enhancements	Continuous performance improvements and analysis capabilities	Continue to improve developer efficiency
New controls	Smart Templates: Improvements and further capabilities	Provide new controls and additional responsive elements
New libraries	Control improvements and new controls	Embrace new upcoming technical trends in the web with minimal disruption
Control improvements	Application Descriptor extensibility concept based on layered repository	
Features enhancements	Simplified app extensibility concept based on SAPUI5 flexibility services	
New tutorials: Mock Server, Worklist App	Fiori 2.0 design	
Documentation and Demo Kit improvements	Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI	
Enhanced performance across the framework and controls	OData V4 support	
	Windows 10 mobile and Chrome on MacOS support	
	Documentation and Demo Kit revision; additional tutorials	

(Version 1.34* - SAP NW UI Add-on 2.0 SP2)

*See also What's New in SAPUI5 (Version 1.34)

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SAPUI5
Today – features and functions

Functional Area	Feature
Template Enhancements	• Property for setting status colors and icons, value help as dropdown list box, header facets, editable table fields in object page, multi-select single-action, light theme support in object page header • New navigation service for cross-application navigation • Personalization, accessibility and globalization support for overview page
New Controls and Libraries	• sap.m.PlanningCalendar, sap.m.Breadcrumbs, sap.m.MaskInput, sap.m.TabContainer, sap.m.NotificationListGroup and sap.m.NotificationListItem, sap.ui.layout, BlockLayout
New Libraries	• sap.tnt, sap.ui.comp.smartchart.SmartChart, sap.uxap
Control Improvements	• Japanese Emperor Calendar support in sap.m.DatePicker and sap.ui.unified.Calendar
Feature Enhancements	• OPA, SAPUI5 application index, SAPUI5 Clickjacking Framing Protection

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SAPUI5

Planned innovations – features and functions

Functional Area	Feature
Theming	• Broaden central theming parameters for SAPUI5, Web Dynpro ABAP and Web GUI
Platform support	• Windows 10 mobile support
	• Support for Chrome on MacOS
Developer productivity	• Additional capabilities for Smart Templates for a more efficient development process in combination with generic application controller (objects) with standardized logic
	• Revision of Documentation
	• Redesign of Demo Kit
	• Analysis capabilities to improve performance
	• OData V4 support
Controls	• New controls
	• Control improvements and feature extensions
	• Performance improvements
	• SAP Fiori 2.0 design

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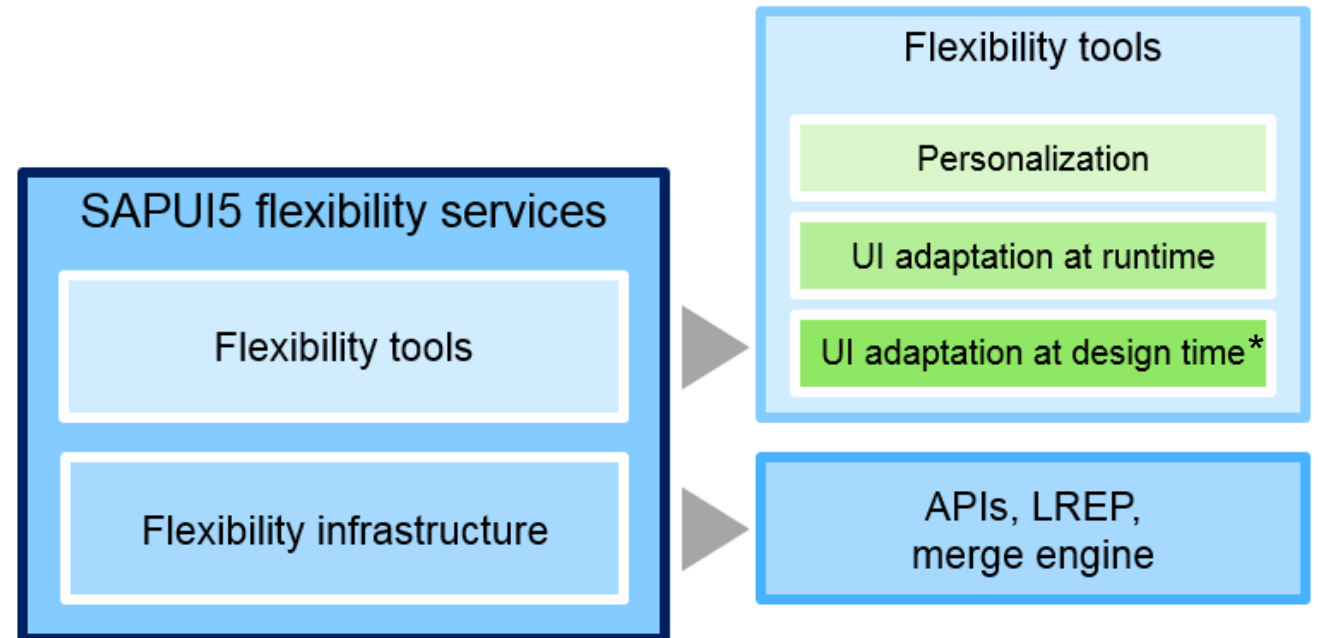# SAPUI5 flexibility services
Description

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

Flexibility tools
- Personalization
- UI adaptation at runtime
- UI adaptation at design time*

SAPUI5 flexibility services
- Flexibility tools
- Flexibility infrastructure

APIs, LREP, merge engine

* Planned for future releases

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SAPUI5 Flexibility Services
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

Flexibility infrastructure for NW 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
- Keyboard support
- Enabled in SAP Fiori launchpad (FLP) via key user authorization role

(Version 1.34 - SAP NW UI Add-on 2.0 SP02)

UI adaptation at runtime (RTA)
- Adapt further controls: Simple Form
- Add external content to app
- RTA for FaaS
- Translation of labels
- Adapt Object Page control: add/hide/move sections, rename labels/titles

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)

Flexibility infrastructure on HCP

Context-specific UI flexibility
- Administrate different UI adaptations for a single app
- Administrate various app variants

UI adaptation at runtime (RTA)
- End user personalization of Object Page
- Adapt freestyle apps

UI adaptation for partners

Support tools

Documentation of UI adaptation

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SAPUI5 Flexibility Services
Planned innovations – features and functions

Functional Area	Feature
UI adaptation at runtime (RTA)	• Enable object page and object Page header for UI adaptation
	• Enable smart table for UI adaptation
	• Enable simple form control for UI adaptation
	• Support capability to add external content (like links) to a view
	• Enable RTA for key users in Fiori as a Service (FaaS)
UI adaptation at design time (DTA)	• Provide RTA capabilities at design time for developers (in SAP Web IDE)
	• Enable UI element attribute changes (e.g. column width) for smart template-based apps in a code-free manner
	• Simplified extensibility concept [for smart-template based apps] based on SAPUI5 flexibility services: Layered coding extensibility capabilities for developers in SAP Web IDE
Flexibility infrastructure	• Flexibility infrastructure available on HCP
	• Feature parity with NW ABAP delivery
Context-specific UI flexibility	• User interface to administrate RTA changes and app variants context-based
	• available for runtime (for key user) and design-time (for developers) environment

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SAP Web IDE
Description

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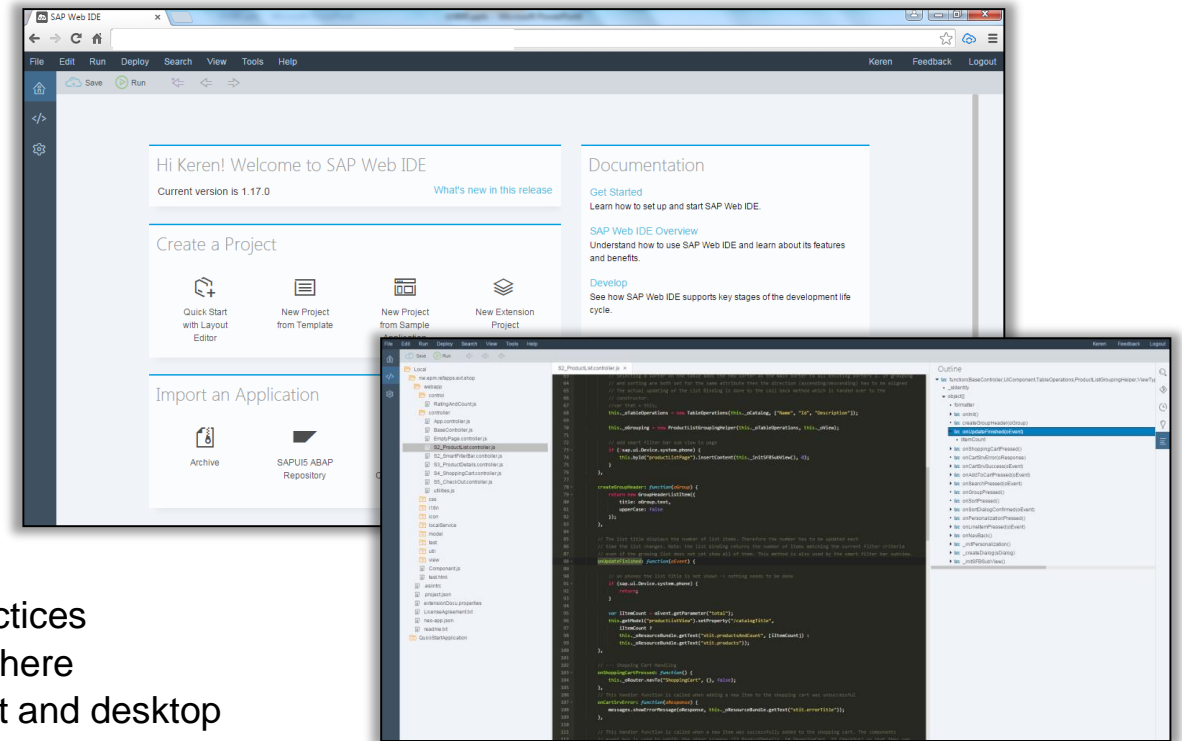
Related product road map available on Service Marketplace (Road Maps → Product & Solution Road Maps → Database & Technology)
- SAP Web IDE

SAP Web IDE
Simplify SAP Fiori / SAPUI5 development

Support end-to-end application lifecycle with one tool

Develop

Test

Package/ Deploy

Extend

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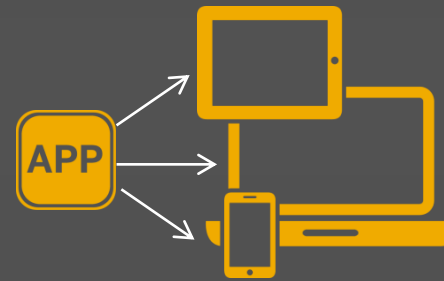
SAP Web IDE Plugins

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 Fiori Overview Page
- Create overview pages to provide users with an interactive overview of specific areas, enabling them to interact with business data and perform key actions

SAP Enterprise Portal
- Deploy any application or plugin from SAP Web IDE to the SAP Enterprise Portal
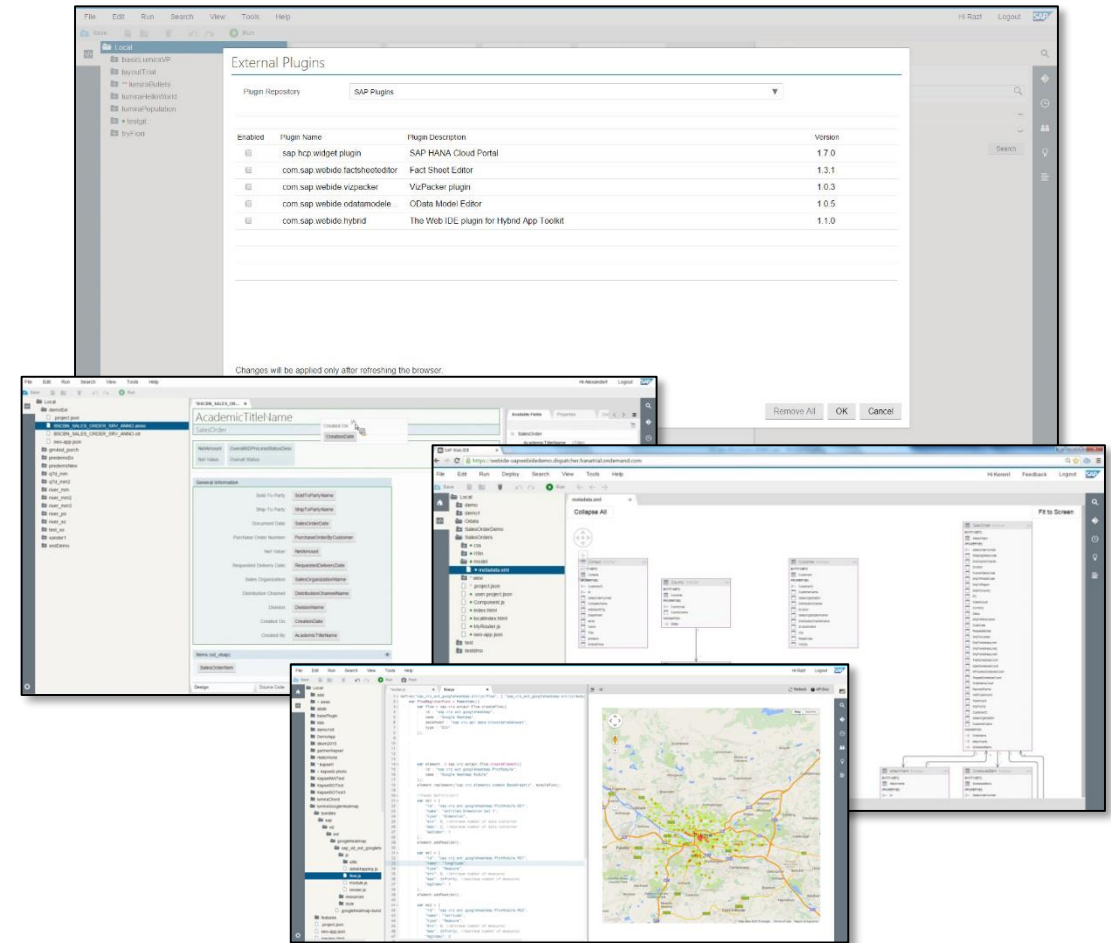
Floorplan Manager / Web Dynpro ABAP
Description

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
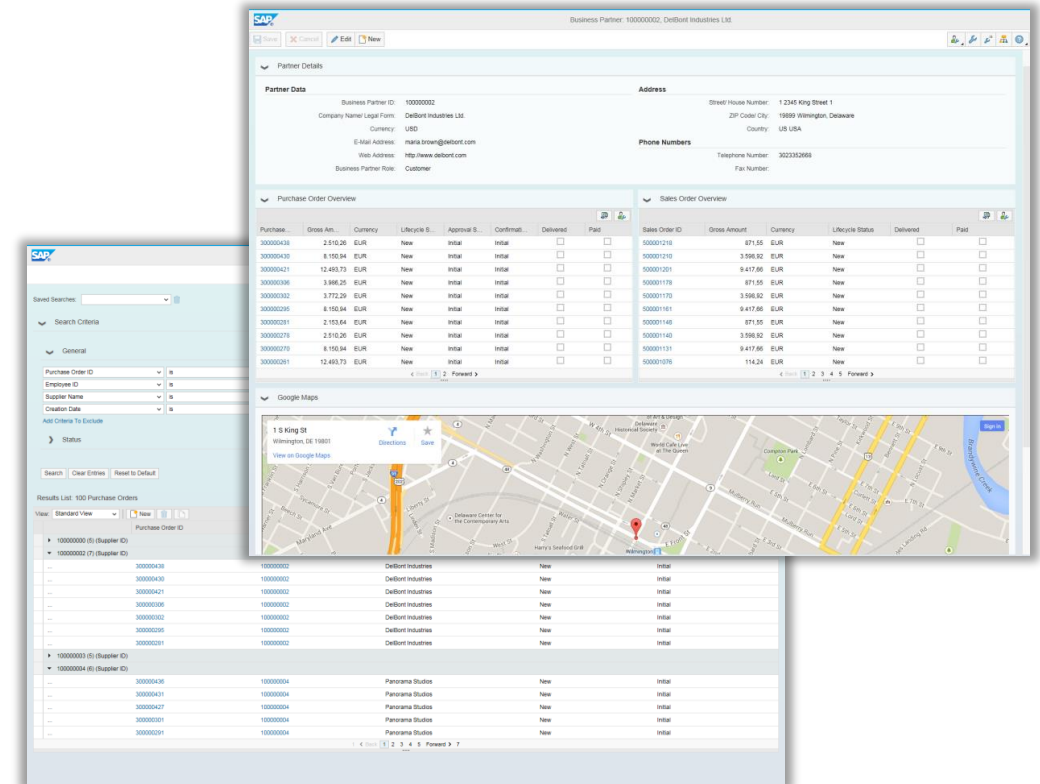
Floorplan Manager / Web Dynpro ABAP
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

Today

SAP Fiori launchpad integration
- Mass maintenance tool for target mapping of legacy apps (WDA/GUI)

SAP Screen Personas implementation for WDA/FPM – enhancements
- Tree ATS enablement
- Enhanced table scripting

Adoption of SAP Fiori concepts
- Basic Search Field in Select Options 2.0
- SAP Fiori Version of F4 help
- Pop Over control in FPM navigation

Value suggest: fuzzy suggest

Chart UIBB
- Advanced personalization

(SAP_UI 7.50 SP02)

Planned Innovations

SAP Fiori launchpad integration
- App descriptor for legacy apps (WDA/GUI)
- Improved FLP integration

SAP Screen Personas implementation for WDA/FPM – further enhancements
- Scripting complex controls
- Select option enablement
- Usability improvements

Adoption of SAP Fiori concepts
- Theme adaptation and guideline handling
- Pop Over control usage in FPM UIBBs

Chart UIBB
- Alternative list display

WebSockets in Notification Service

Future Direction

SAP Fiori 2.0 support (Visual Harmonization)

SAP Fiori 2.0 – Usage of icon fonts

SAP Screen Personas implementation for WDA/FPM – further enhancements
- Z Layering & Alignment

WebSockets support in FPM

ATS features in IDA List

Tighter integration of SAPUI5

Decoupling of configuration engine from ABAP rendering

Improved client side program model

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Floorplan Manager / Web Dynpro ABAP
Planned innovations – features and functions

Functional Area	Feature
SAP Fiori launchpad integration	• Improved FLP integration: Save as Tile / Create Support Message / … • Target mapping (App Descriptor) – Mass maintenance tool for GUI transactions and WDA applications
SAP Screen Personas implementation for WDA/FPM	• Enablement for Search GUIBB and Select Options (was not available with first version) • Scripting of complex controls (e.g. table support: number of rows etc.) • Z-layering: Arrange images and other content correctly [bring to front / send to back (bring forward / send backward)]
Adoption of SAP Fiori concepts	• Theme adaptation and guideline handling: Holistic theme and guideline support depending on the shell environment • Pop Over control in FPM UIBBs as alternative to Quick Views.
Chart UIBB	• Alternative list display
WebSockets Support	• WebSockets (ABAP Push Channel) support in WDA Notification Service

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WebClient UI framework
Description

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
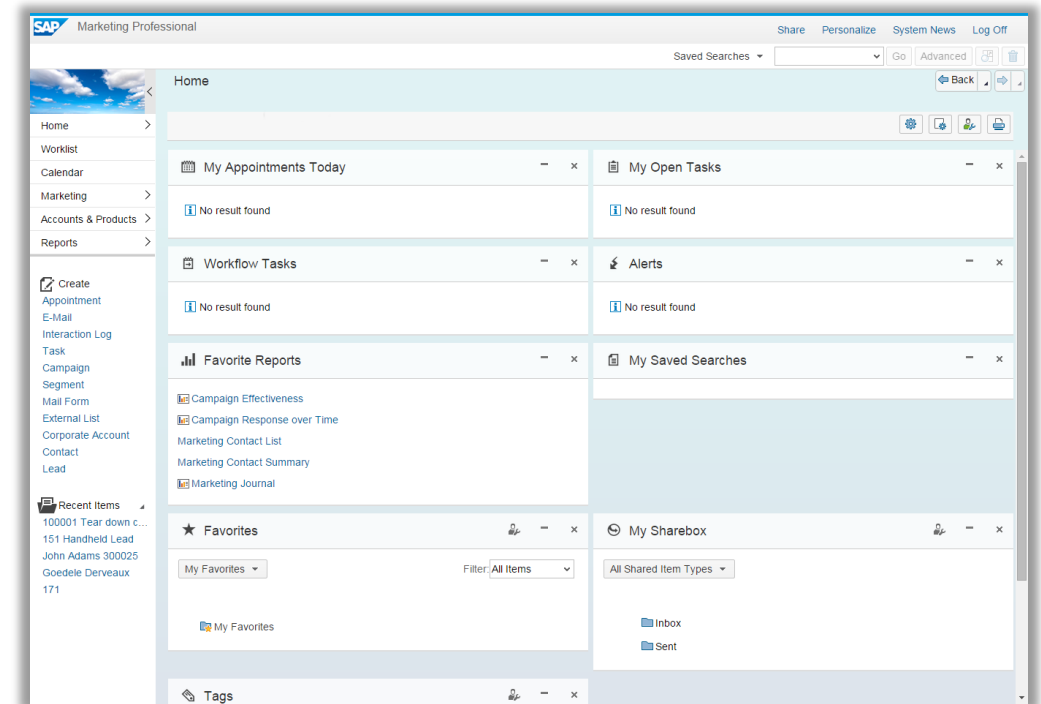
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WebClient UI framework
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

Today

Keyboard shortcuts for standard buttons

Enhanced rich text editor (BTF)

Multi-column sorting of tables

Open links in new tab/window

Quick navigation between search criteria

WEBCUIF shell modernization
- Int. with Workforce Performance Builder
- Direct URL for Saved Search

Progress bar THTMLB tag

SAP Fiori/SAPUI5 integration
- SAP Blue Crystal theme/skin

(SAP CRM 7.0 EhP4* SP01)

Planned Innovations

SAP Fiori/SAPUI5 integration
- HTML5 Islands and table graphics

Design/Visualization tools
- Support of UI theme designer

Enhanced design layer functionalities

Cellerator pager on top

Filter/highlighting in tables

Field styling via configuration

More navigation bar icons

Hide field via BOL attributes

Recent items info card

Future Direction

SAP Fiori/SAPUI5 Integration
- Harmonization and integration with SAP Fiori
- Integration with FLP
- Tighter SAPUI5 integration

WEBCUIF shell modernization
- Redesign of header and branding area
- Flexible navigation bar
- Responsive/Adaptive design

Design/Visualization Tools
- SAP Personas
- SAP Visual Business

*see release notes on SCN

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WebClient UI framework
Planned innovations – features and functions

Functional Area	Feature
User productivity	• Provide an always accessible pager for the cellerator table
	• Allow the user to highlight substrings in a table and then filter on multiple columns
User experience	• Change the look and feel of the user interface without any programming knowledge via the UI theme designer
	• HTML5 islands will allow developers to leverage the latest HTML5 as well as SAPUI5 features such as enhanced charting capabilities and dynamic content
	• Show a floating information card when the user hovers his mouse over a recent item link
Developer tools	• Enhance the design layer in order to easily override Getters and Setters
	• Bring the design layer customizing to the Web UI as part of the administrator role
	• Change the tooltip and add a custom CSS Class to form fields via the configuration tool
	• Offer more pictograms to be used in the Navigation Bar
	• Hide form fields by setting the BOL attribute to "Hidden"

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Dynpro-based front end technologies – SAP GUI family
Description

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

SAP GUI for HTML

SAP GUI for Java

SAP GUI for Windows
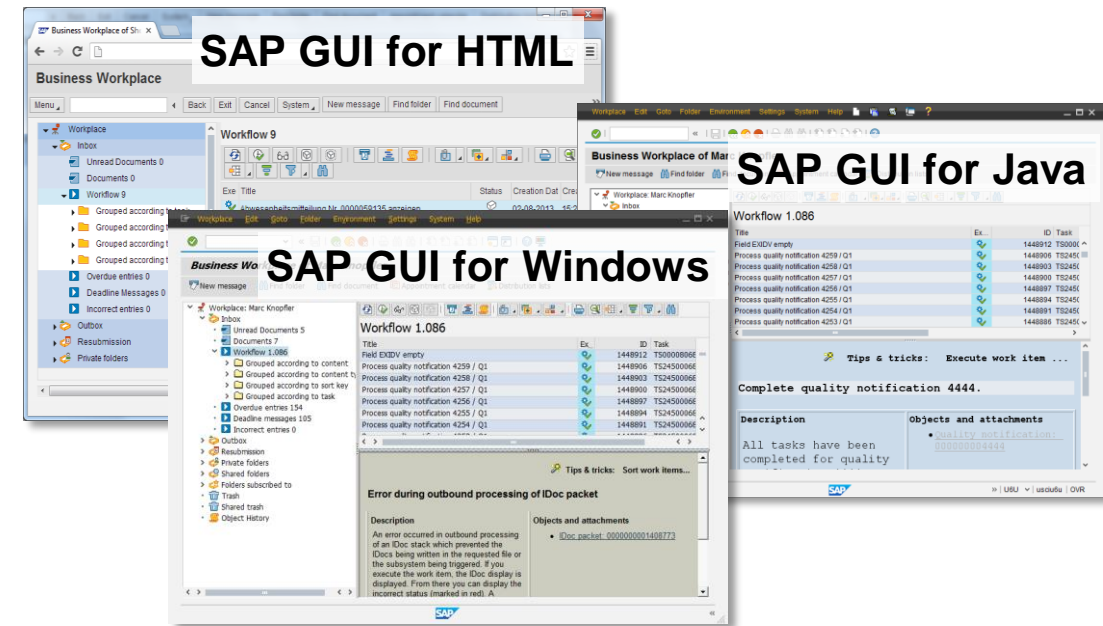
Note

- 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	Planned Innovations / Future Direction

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 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 Unicode SAP GUI for Windows version (long term)
- Visually harmonized design for improved integration into SAP Fiori launchpad / with SAP Fiori applications

(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

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
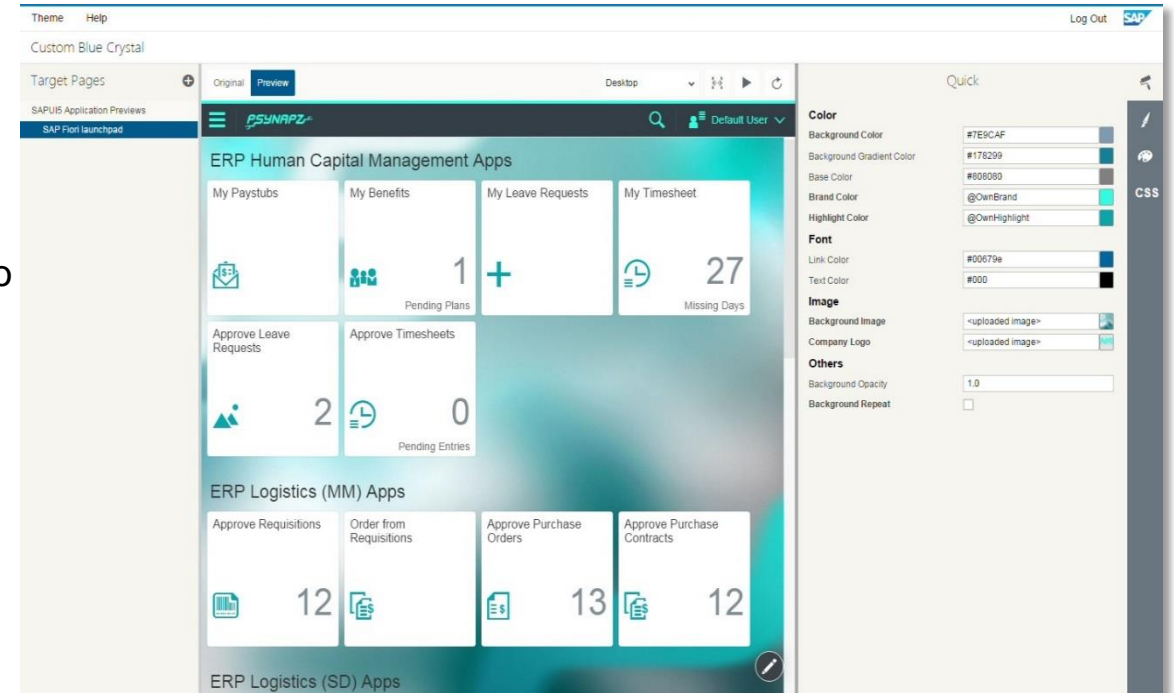
UI theme designer
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

UI theme designer on ABAP – 1.12
- Visual design of UI theme designer aligned to SAP Web IDE
- Start UI theme designer from SAP Web IDE menu
- Target pages panel can be resized via keyboard
- Logout button and display of logged in user
- Improved themes import

UI theme designer on SAP HANA Cloud Platform – 1.14
- Control picker (experimental)
- Further visual design alignment with SAP Web IDE
- Additional browser support for Apple Safari, Google Chrome on Mac and MS Edge
- Significantly improved keyboard support

(UI theme designer*
on ABAP and for SAP HANA Cloud Platform)

Improved theming capabilities for SAPUI5

Theming support for:
- SAP BC for Desktop (SAP Blue Crystal)
- WebClient UIF
- NWBC HTML

Further UI improvements

Control picker improvements

Error handling improvements

Theme fallback mechanism (for ABAP)

SAP HANA Cloud Platform:
- Theme compatibility, no manual effort after SAPUI5 upgrade
- SAPUI5 version selection

Theming support for:
- SAP GUI
- SAPUI5 (custom libs)

Improved integration with SAP Web IDE

Guided theming

TCO improvements

SAP HANA Cloud Portal:
- Integration with Git persistency (instead of manual up/downloads)

Search capabilities for expert parameters – further improvements

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*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	• Expert theming parameters for SAPUI5 mobile
Theming support for	• Business Client for Desktop (SAP Blue Crystal): The BC for desktop can also be themed using the base theme SAP Blue Crystal • WebClient UIF: allow theming of SAP Web Client UI Framework based applications with UI theme designer • HTML: allow theming of SAP Business Client (HTML version) with UI theme designer
Further UI improvements	• Various improvements to increase the user experience of the tool
Control Picker improvements	• Easier selection of controls • Improved restrictions of parameters based on selection
Error handling	• Improvements in error display and error messages
Theme fallback mechanism (for ABAP)	• This mechanism ensures that for applications, which do not support the main UI theme, a fallback theme is used
SAP HANA Cloud Platform: SAPUI5 version selection	• Ability to create a theme for a specific SAPUI5 version
SAP HANA Cloud Platform: Theme compatibility	• After a upgrade of the SAPUI5 version, the themes are automatically rebuilt. No manual effort is necessary to ensure theme compatibility.

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

SAP Screen Personas
Description

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
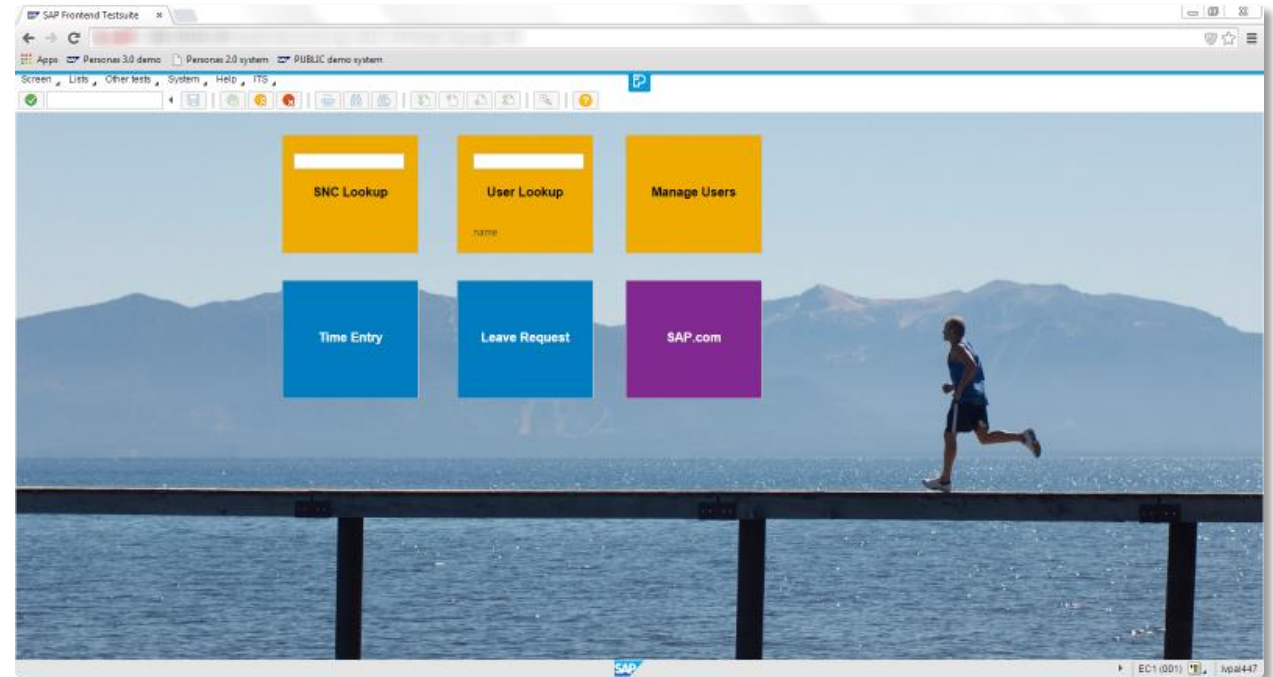
SAP Screen Personas
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

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

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.

SAP Screen Personas
Planned innovations – features and functions

Functional Area	Feature
Editor enhancements	• Add more capability to screen editor to make it even easier and faster to build screens • Include new features aimed at professional designers
Scripting enhancements	• Add more options to create powerful scripts, including conditional formatting options and easier script creation and debugging • Integrate feedback from usability testing at SAP TechEd 2015
Easier SAP Fiori designs	• Include template tools to embed consistent sets of controls across multiple screens • Add library of SAP Fiori-inspired controls to simplify creation of SAP Fiori designs for SAP GUI transactions or custom transactions in SAP S/4HANA
More capabilities for IT administrators	• Make it easier for IT Professionals to manage the end-to-end screen creation and deployment process with SAP Screen Personas

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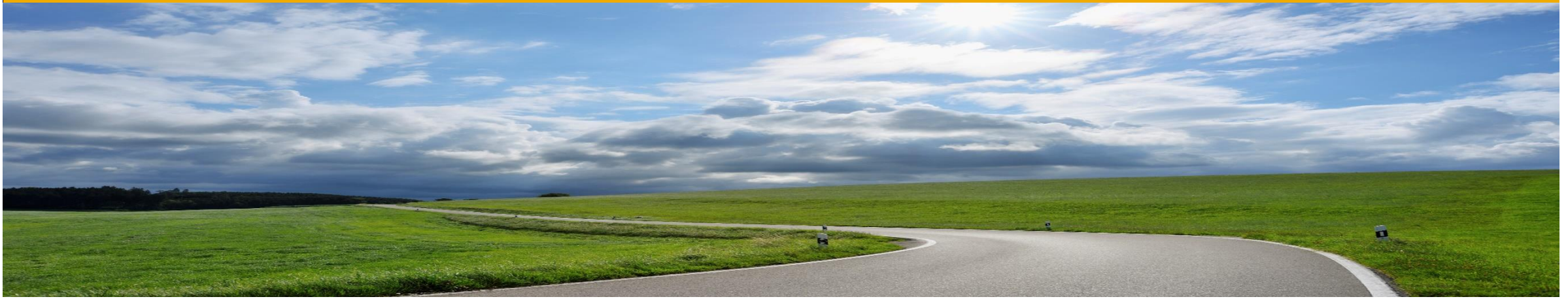
UI Client & Integration Topics

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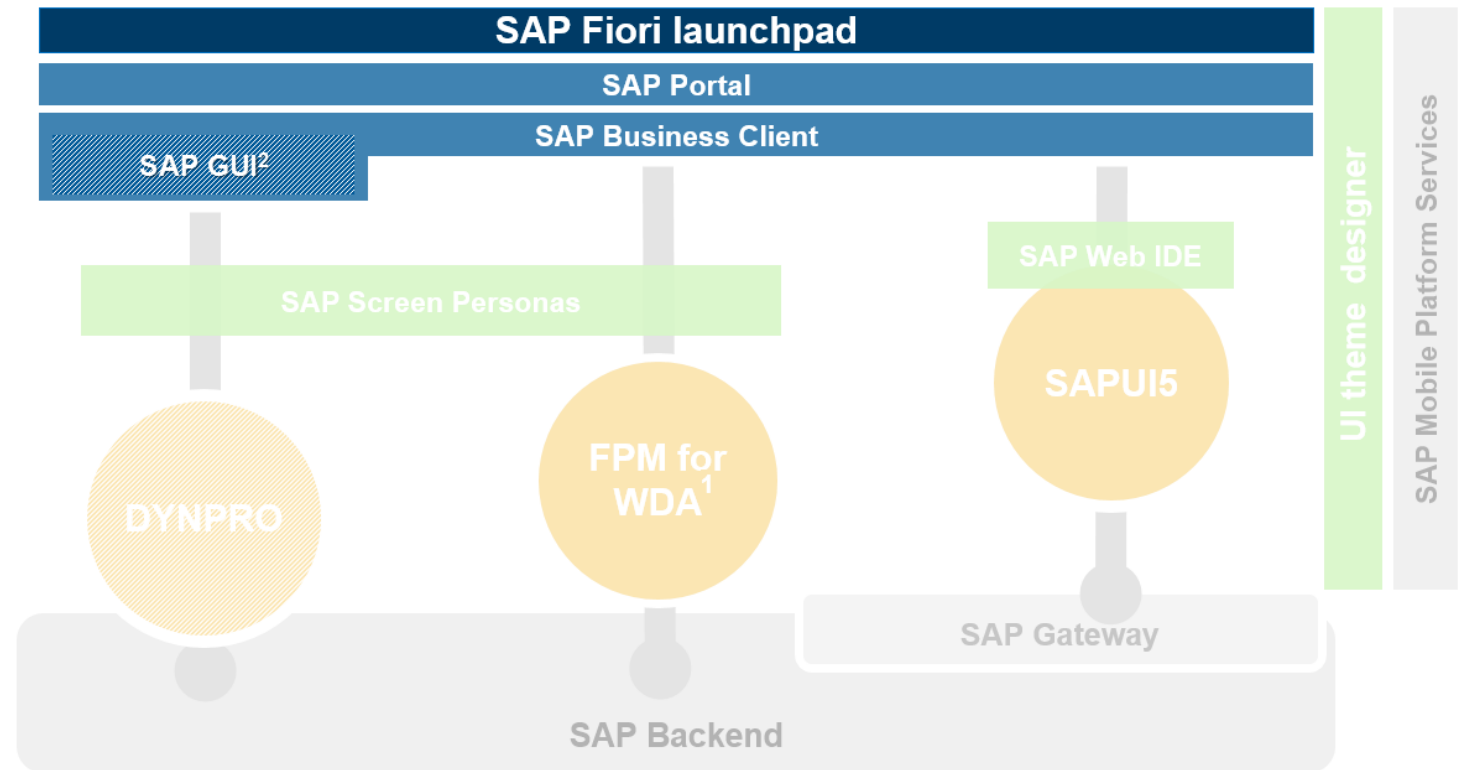
SAP Fiori launchpad
Description

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: 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, SAP GUI for HTML (SAP GUI 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
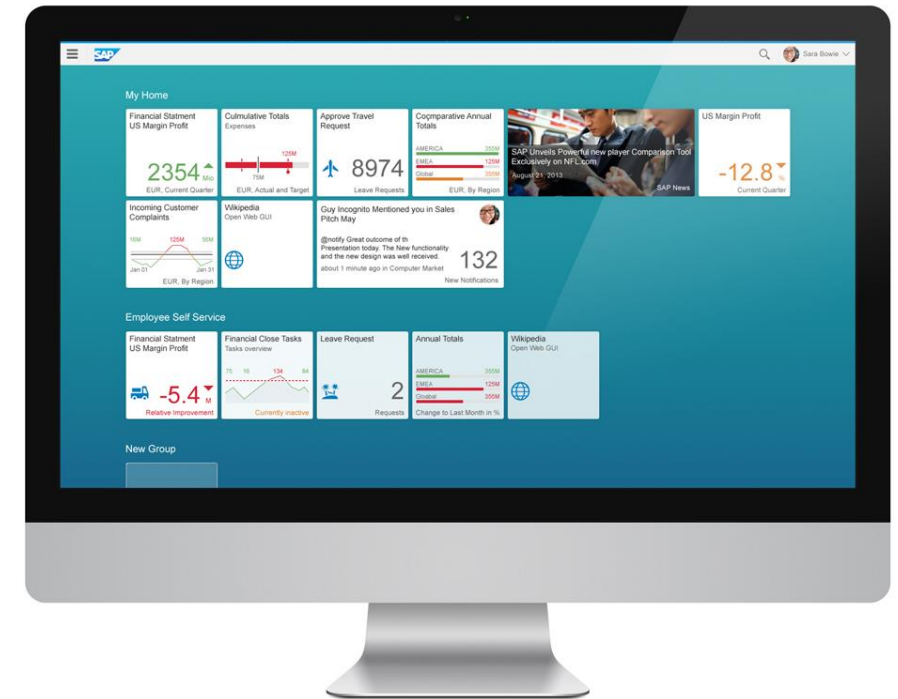
SAP Fiori launchpad – Single point of entry across clients

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

Browser

SAP Portal Client

NW Business Client

SAP Logon

Mobile Clients

SAP Portal portfolio

SAP Business Client

SAP Fiori Client

SAP Fiori User Experience
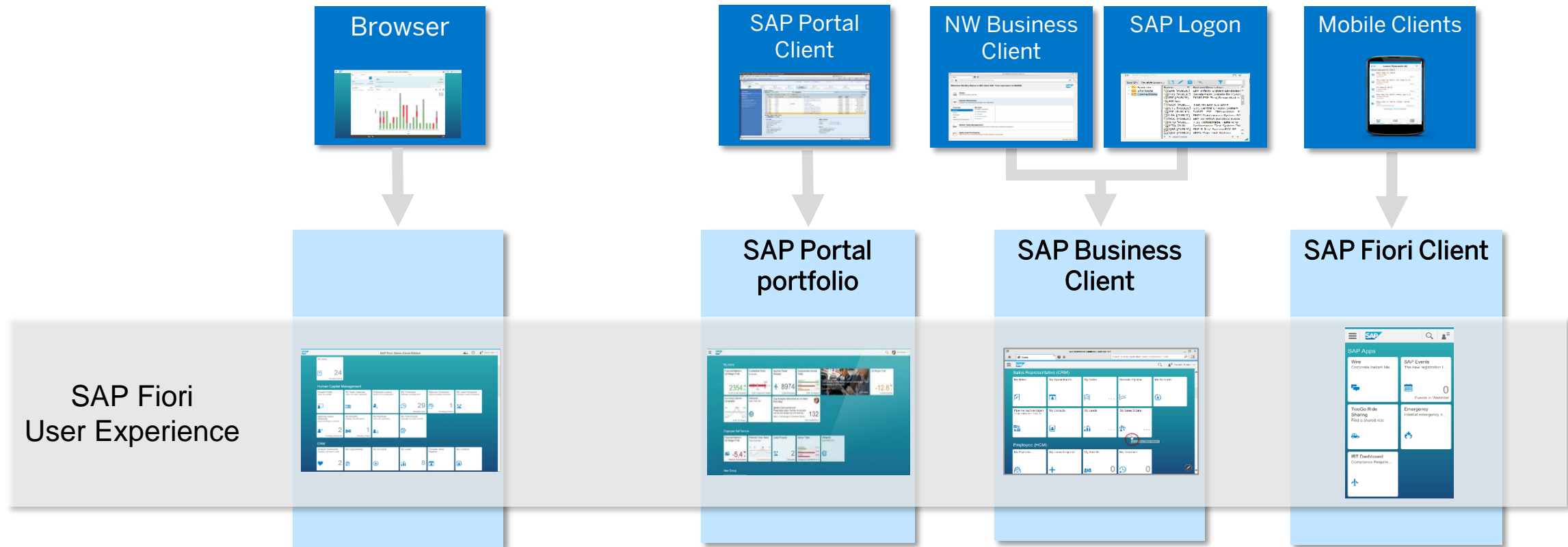
SAP Fiori launchpad
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

End user experience
- Anchor Navigation

Setup and configuration
- Parameter mapping within FLP designer target mapping configuration

Modification-free shell extensibility

Central system alias mapping without changing catalogs

SAP UI clients alignment
- SAP Enterprise Portal: Integration of search, factsheets & analytical SAP Fiori apps

End user experience
- User default settings: Ranges and multiple values
- Access to Easy Access 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 platform alignment
- Common SAP Fiori launchpad content model (ABAP/HCP)
- Unified support of UI technologies (e.g. SAP GUI and Web Dynpro ABAP)

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

Unified SAP Fiori launchpad content administration tools

(ABAP: SAP NW 7.50 SP02 / UI ADD-ON 2.0 SP02,
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	• Maintenance of ranges and multiple values for user default values of application start parameters • Access to Easy Access and User Menu for legacy content • Implementation of SAP Fiori 2.0 concepts: AppFinder, Me Area, Co-Pilot, Notification Area
Cloud extension infrastructure	• Extension infrastructure for implementation of concepts as Co-Pilot and usage analysis
Simplified setup and configuration	• Enhancements for sorting and filtering of tiles • Maintenance of technical catalogs for WDA applications / SAP GUI transactions on application systems
SAP platform alignment	• Reuse of SAP Fiori launchpad content on ABAP server and SAP HANA Cloud Platform • Unified support of different UI technologies (e.g. SAP GUI and Web Dynpro ABAP)

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

SAP Business Client
Description

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
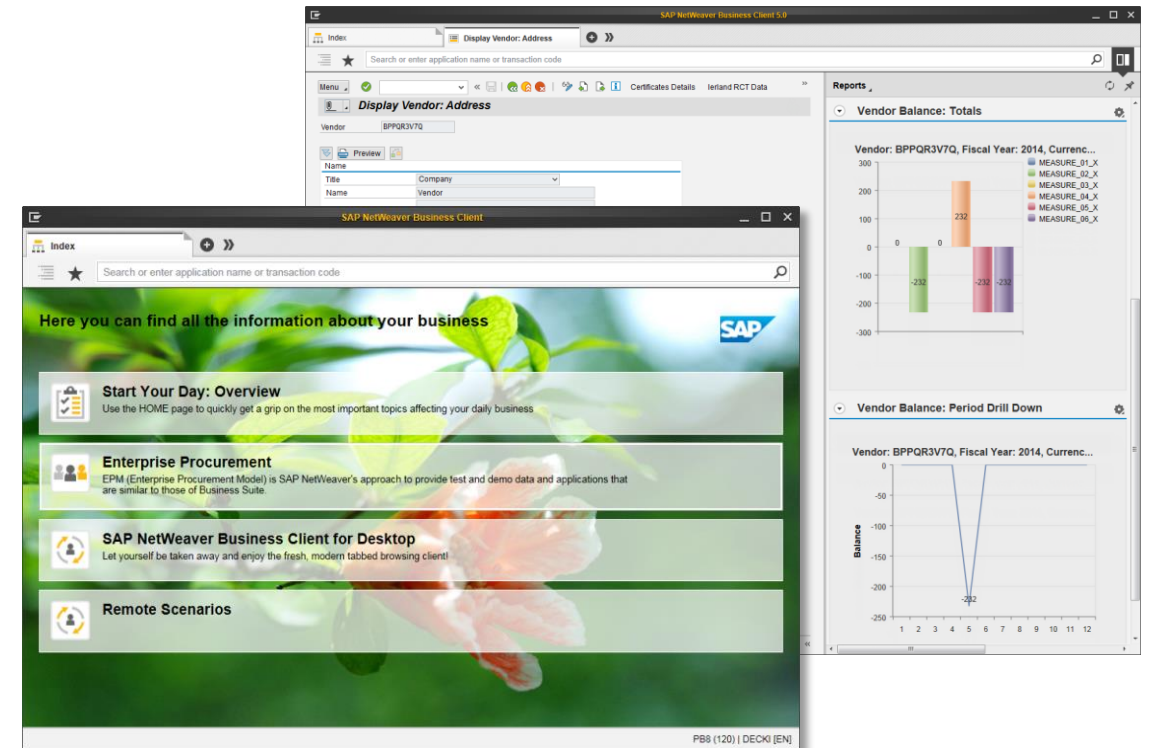
SAP Business Client
SAP Fiori experience on Windows desktop

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
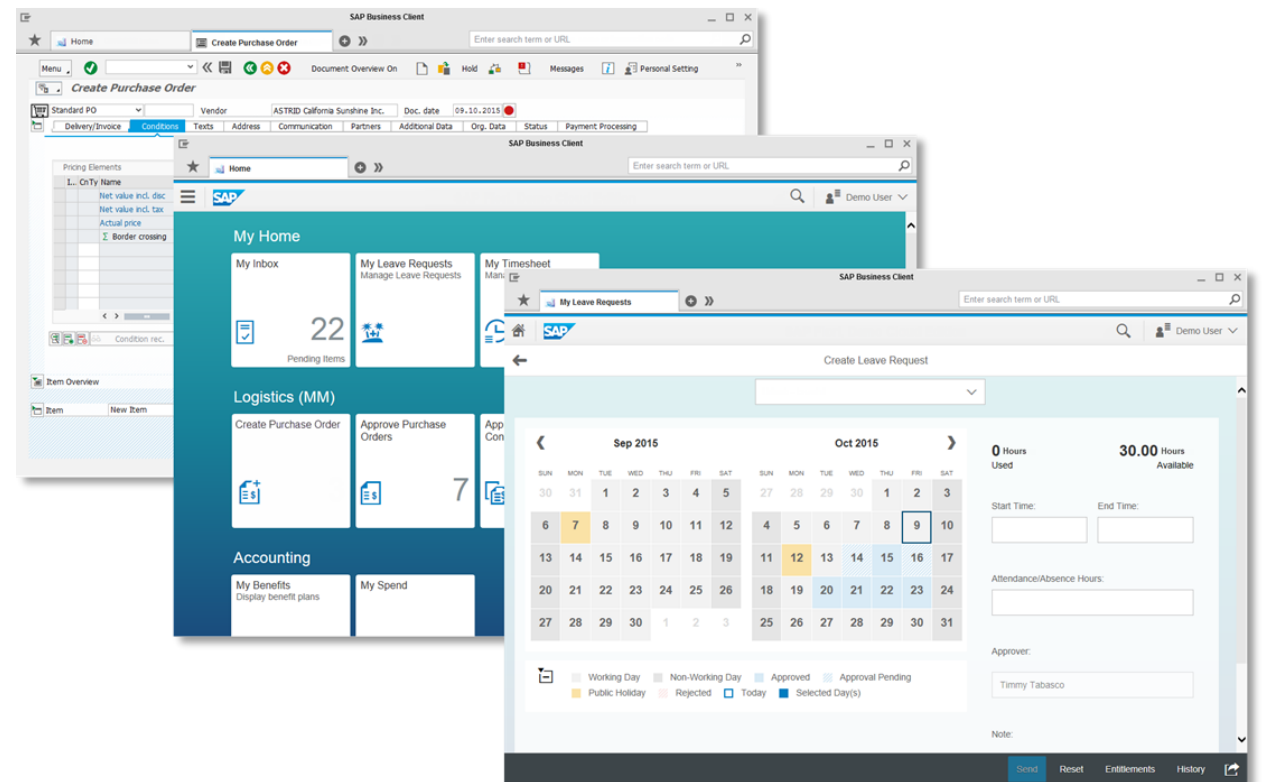
SAP Business Client
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction
Tight integration with SAP GUI and SAP Logon	Platform support for Windows 10	Display side panels for SAP GUI transactions in SAP Fiori launchpad connection

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

SAP Business Client 6.0
(ABAP: SAP NW 7.50 SP02 / UI ADD-ON 2.0 SP02)

*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

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

SAP Enterprise Portal
Product road map overview – key themes and capabilities

Today	Planned Innovations	Future Direction

SAP Fiori framework page
- SAP Fiori launchpad experience for cross devices application portal scenarios
- Personalized single point of access for Portal iViews and pages alongside SAP Fiori apps (transactional, factsheets & analytical)
- Support dynamic navigation and related links

Integration
- Consumption of remote catalogs and groups from the ABAP front-end server to the Portal
- Integrate SAP HANA search

Development and extensibility
- Deploy SAP Fiori-like apps from SAP Web IDE directly to the Portal
- Launchpad extensibility

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

(SAP Enterprise Portal 7.4 SP13 / 7.5 SP1)

SAP Fiori framework page
- Extended document management capabilities with SAP Mobile Documents
- Enhanced usage analysis with SAP Web Analytics
- Performance optimizations
- Enable end user feedback
- Business Warehouse reports bookmarking support
- Homepage synchronization
- New news tile

UX Renewal
- Integration and alignment with SAP Fiori 2.0 concepts (Fiori Overview Page, notifications, etc.)

Integration
- Consumption of S/4HANA content in the Portal

Upgrade
- Simplified SAP Fiori – SAP Portal upgrade dependencies

Cloud Integration
- Consume remote catalogs from SAP HANA Cloud Platform
- Integration with technology services: collaboration (SAP Jam), SAP Lumira, etc.
- Enhance HR scenarios via SuccessFactors integration

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SAP HANA Cloud Portal
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

Enhanced user experience
- SAP Fiori-based sites and templates
- 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
- Asset management repository

Enhanced Developer productivity
- Developer-driven site composition
- Template-based editors and plug-ins in SAP Web IDE
- Lifecycle management for sites and applications

Cloud solutions & extensions
- Support Site and Partner Channel Management solution templates
- SAP SuccessFactors extensions and Employee Central Service Center (Q1/2016)

Enhanced user experience
- SAP Fiori-based extensions
- Standard out of the box SAP Fiori templates

Content Management & Integrations
- Multi widgets in page section
- SAP Fiori app support for Business Suite & S/4HANA
- Advanced integration with HCP services (SAP Mobile Documents, SAP Jam and more)
- Web Analytics, ECM, etc.

Enhanced Developer productivity
- Site preview in SAP Web IDE
- Enrich SAP Fiori experiences library (smart templates) and content integration

Cloud solutions & extensions
- Internet of Things (IoT) site template
- SAP SuccessFactors extensions – SAP Fiori flavor
- Additional solution templates for easy site creation

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
- Delegated admin on sites and subsequent elements (catalogs, apps, menus)
- Cross-Marketplace integration (+SAP Hybris)
- Integrate with HCP Lifecycle Management
- Advance 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

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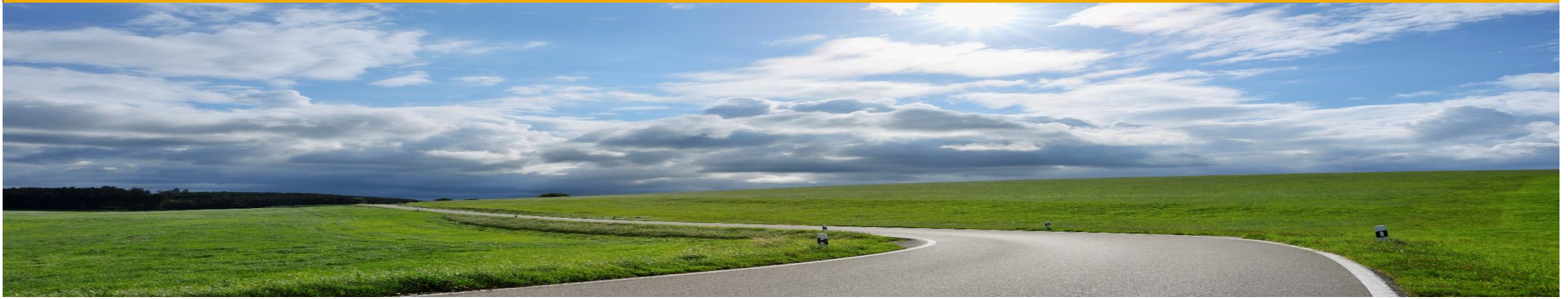
Specialized UI Technologies

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

SAP Visual Business
Description

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

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SAP Visual Business
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction
Integration into SAP GUI, WDA, FPM, WebClient UIF, SAPUI5 (available for all platforms, mobile devices)	CAD integration	Adding additional content to graphical application from a catalog of business objects (even from external content providers)

Today

Integration into SAP GUI, WDA, FPM, WebClient UIF, SAPUI5 (available for all platforms, mobile devices)

License:
- No additional license needed for standard apps
- SAP NetWeaver development license for own development
- SAP NetWeaver foundation license for end users of own customer-specific or partner applications

Independency of map providers

Mass data handling

Charting capabilities

(Version 2.1 SP0 PL08)

Planned Innovations

CAD integration

Integration with SAP 3D Visual Enterprise

Map Provider Certification

Future Direction

Adding additional content to graphical application from a catalog of business objects (even from external content providers)

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	• 2D CAD plans can be used as a map layer
Integration with SAP 3D Visual Enterprise	• 3D Visual Enterprise is integrated in Visual Business scenes and can be used for detailed visualization of assets or products. • 3D Visual Enterprise Animations can be started from a Visual Business application
Map Provider Certification	• Provider maps and services can be used without development effort (today only for maps)

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SAP Visual Enterprise
Description

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 Visual Enterprise
Product road map overview - key themes and capabilities

Today	Planned Innovations	Future Direction

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

(Version 8.0 SP4)

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
- Variant configuration support in Visual Work Instructions – 150% VWI → 100% VWI
- Application controlled hotspotting and overlay controls in SAPUI5
- IFC file format support

Integrations / Products

- Streaming services for Visual Index / Massive Models
- Viewer integration into SAP Lumira & Design Studio
- SAPUI5 Viewer / SAP Ariba 3D Parts Catalog
- Integration with SAP Hybris for parts ordering
- Extended cloud services including cloud authoring
- Enhanced Visual Interaction toolkit
- Integration into Collaborative Manufacturing app – Additive Manufacturing

Features

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

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SAP Visual Enterprise
Planned innovations – features and functions

Functional Area	Feature
Visual Enterprise on SAP HANA	• 3D geometry stored & streamed from SAP HANA database
HTML5 Viewer/ MII SSCE	• Ability to display 3D models in MII dashboard with live dynamic data labels monitoring IoT data
Visual Interaction Toolkit	• SAPUI5 distribution of combined VE Viewer and Visual Business capabilities as SAPUI5 components. Controls and an API for applications to support hotspotting and overlays in visualizations
Visual Asset Planner	• Link Visual representation of an asset to SAP EAM asset structure; restructure visual source structure to form a 1:1 visual representation of functional location structure
Configurable Visual Work Instructions	• Support for authoring of "150%" visual work instructions for use in variant manufacturing; support for runtime production of 100% visual work instruction for "lot size 1" manufacturing
VE client converter for ECTR	• Client side conversion into visualization format; storage in DMS
Enhancements to Change Management	• Ability to manually, or automatically update authored 3D content from design changes
Dynamic / shattered viewing (non monolithic); rapid change propagation	• 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
VE Cloud Publishing service in HCP	• Cloud micro-service to allow apps to offer conversion of customer CAD to VE visualization formats
IFC support	• Reading of industry foundation classes compliant geometry and metadata

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SAP Interactive Forms by Adobe (IFbA)
Description

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 SAP Business Suite and SAP Business ByDesign (currently 2400+)
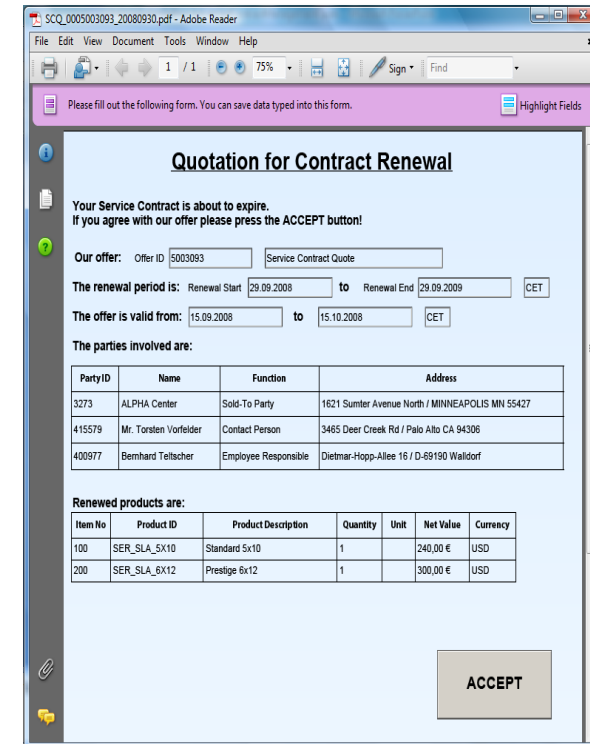
Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Database & Technology)
- SAP Interactive Forms by Adobe

Web Dynpro Java
Description

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
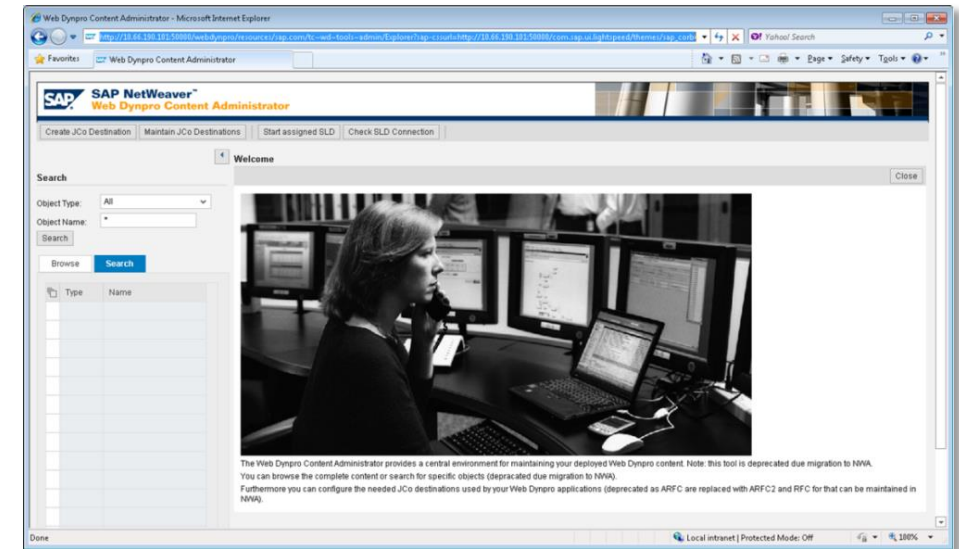
Note

- 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	Planned Innovations / Future Direction

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 - IfbA. (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 browser support
- SAP Mobile Platform
- 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

Mozilla Firefox

Apple Safari

* More details on browser Product Availability Matrix

SAP browser support summary

Desktop	Mobile

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

Microsoft Edge Desktop
- With SAPUI5 1.32. Down port to 1.28 planned

Mozilla Firefox
- Latest extended support release cycle version (rec.)
- Latest rapid release cycle version (w. conditions)

Google Chrome
- Latest version 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

Browsers on reference devices
- Apple Safari on iPad and 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 (with 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
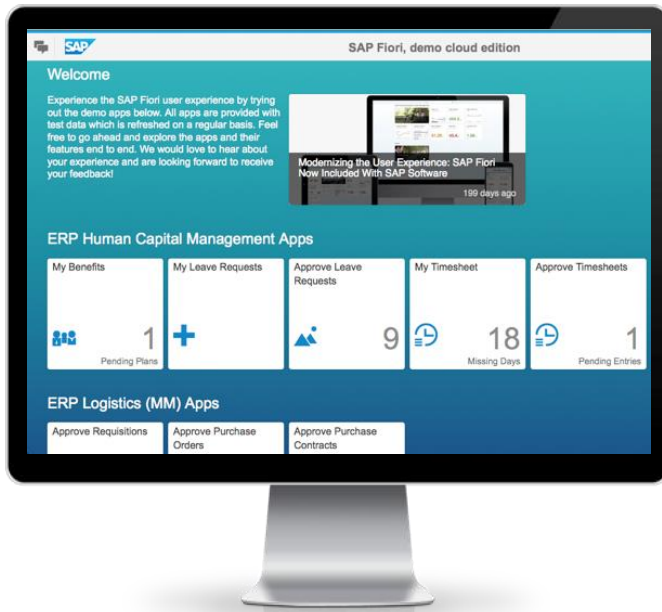
- Valid for Microsoft Internet Explorer, Mozilla Firefox, Google Chrome and Apple Safari desktop versions

- SAP supports new browser versions at the same time as the browser vendor[1]. SAP support ends with end of support by the vendor

- SAP proactively tests new browser versions and delivers fixes in the current available Support Package Stack[2]

- 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).

1) Note: Information about the browser support for individual SAP products like ERP, CRM, SRM or Fiori might differ from technology information. This information is available in the corresponding Product Availability Matrix (PAM).
   Exception Safari: SAP supports new Safari versions within 3 months from general availability date
2) or the next SPS if the current SPS is not feasible. SAP provides updates for new browser versions as soon as possible.

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SAP mobile browser support policy
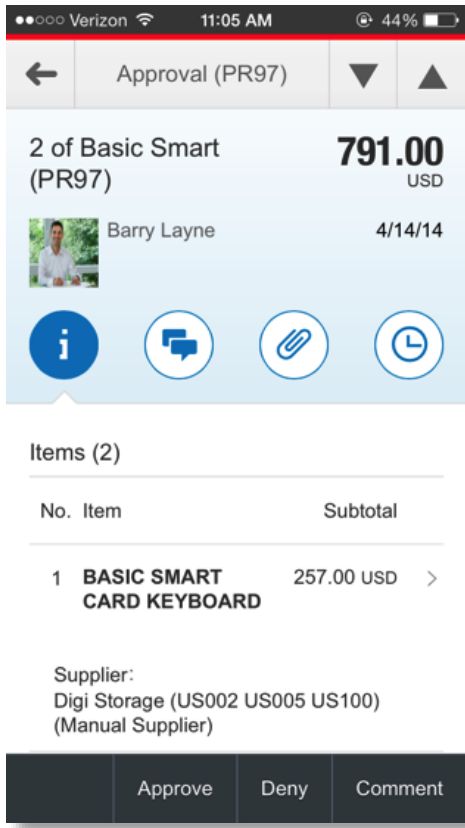
Supported Mobile Browsers, Devices and Operating Systems

- Available for SAPUI5, OpenUI5 and SAP Fiori[1]

- 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 Chrome versions on supported Android OS version on Samsung Galaxy S and Tablet
  - Blackberry Browser on Z10/Z30
  - Windows 10 mobile planned on Nokia Lumia 950

- SAP proactively tests new browser versions and delivers fixes in the current available Support Package Stack[2]

- 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)

---

1) Note: Browser support for individual Applications in SAP Fiori may differ and is available in the corresponding Product Availability Matrix.
2) or next SPS if not feasible.

SAP Mobile Platform
Description

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 SAP HANA Cloud Platform 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 3rd party EMM for comprehensive mobility management
- Extensive library of off-the-shelf apps for industry and LOB from SAP and 3rd parties

B2E B2B B2C | Open and Standards-based | Rapid with SDKs | Native Hybrid Mobile Web Metadata SMS | Android iOS Windows | Offline

On-Premise — **SAP Mobile Platform** — Cloud HCPms

App Services | Platform Services | Layered Protection of the Enterprise | Back-end Agnostic | Lifecycle Management | Analytics and Reporting
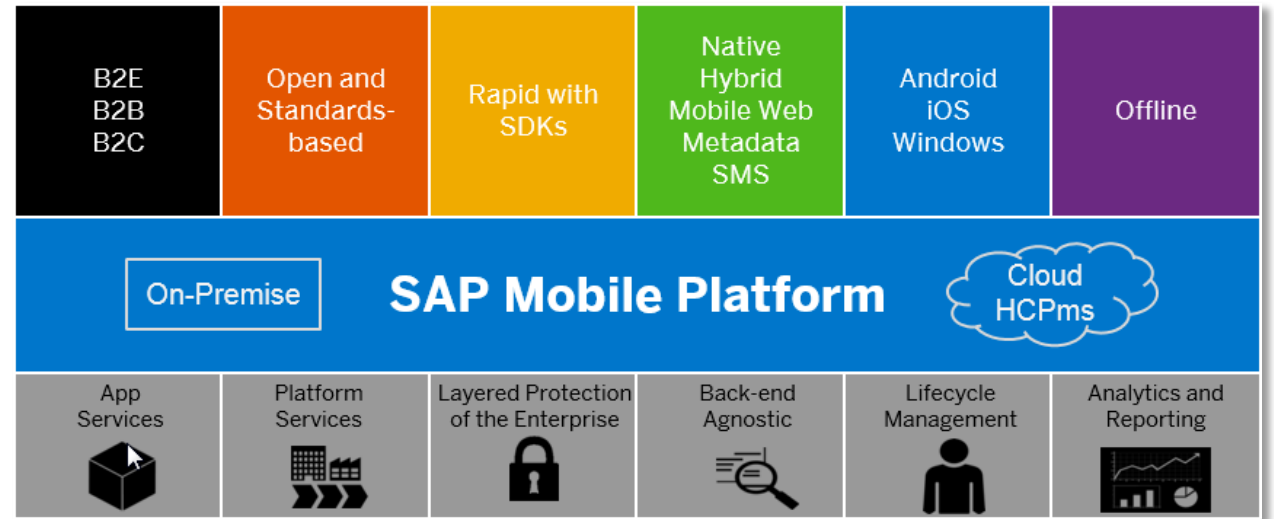
Benefits

- 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

SAP Gateway
Product description

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

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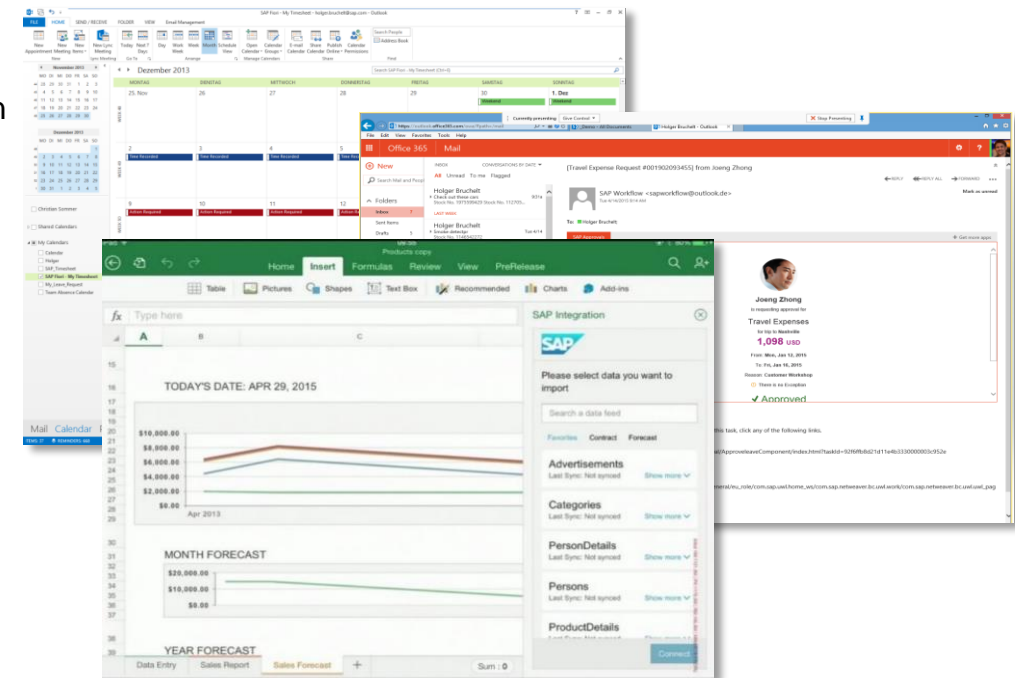
Related product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Database & Technology): SAP Gateway for Microsoft

*Formerly SAP Gateway productivity accelerator for Microsoft

SAP Gateway for Microsoft
Online learning material and resources

SAP Gateway for Microsoft Partner Jump Start Guide	SAP Gateway for Microsoft Self-Paced Learning
SAP Gateway for Microsoft at SCN	Microsoft Virtual Academy Training
Free Trial for SAP Gateway for Microsoft	SAP Gateway for Microsoft on MS TechNet
SAP Gateway for Microsoft FAQ	Gateway for Microsoft at help.sap.com

SAP PartnerEdge for Application Development | Exploration member

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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.

Any Device

Social

Visualize

Engage

Predict

Agile Visualization

Advanced Analytics

Enterprise Business Intelligence

Real-time Platform

Cloud

Trust

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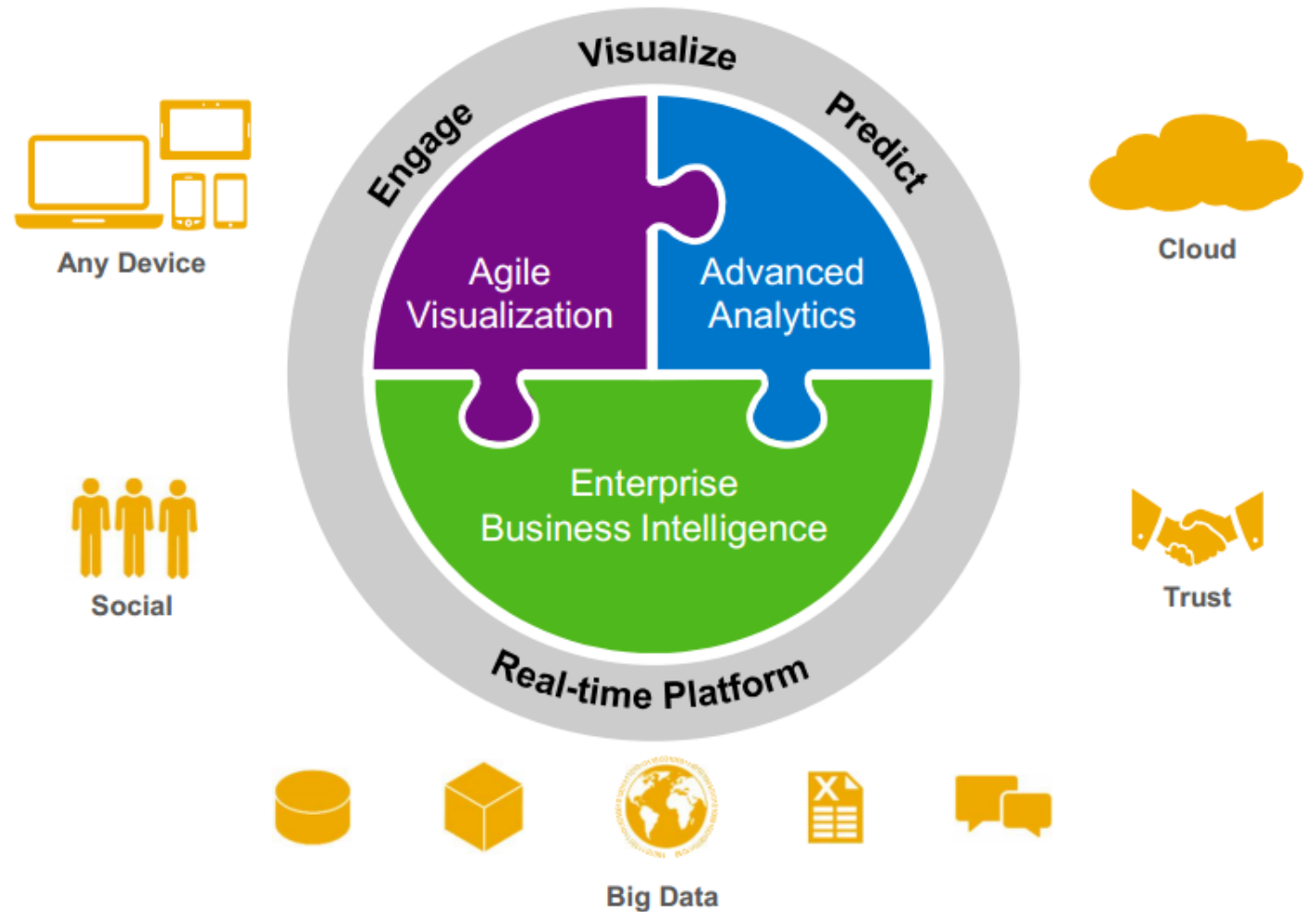
Related analytic solutions product road map available on Service Marketplace (Improvements & Innovations → SAP Road Maps → Analytics)
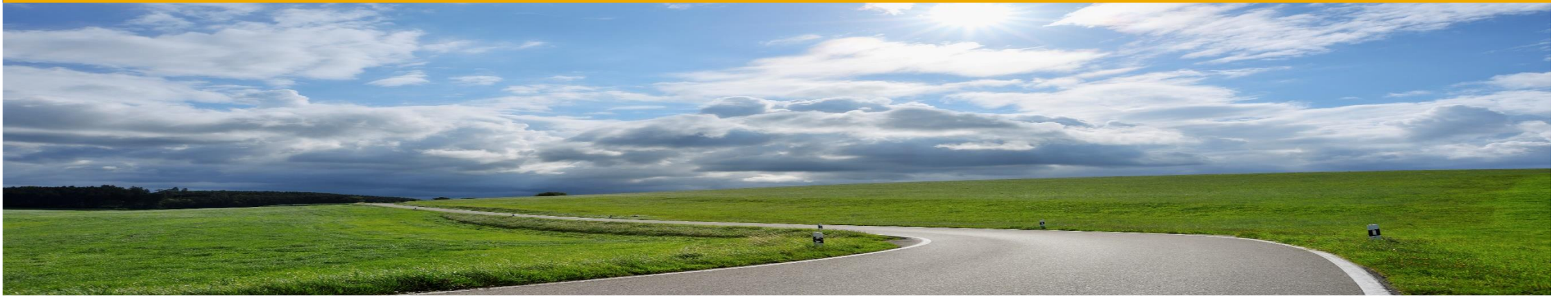
Summary

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

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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.

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Thank you

Road map contacts for customers and partners

- Ingo Deck   ingo.deck@sap.com
- Margot Wollny   margot.wollny@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/
- Splash   http://www.experiencesplash.com/
- Build   http://www.build.me/

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
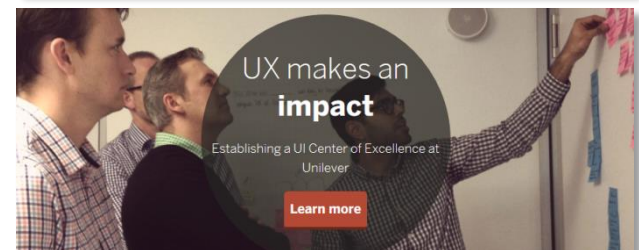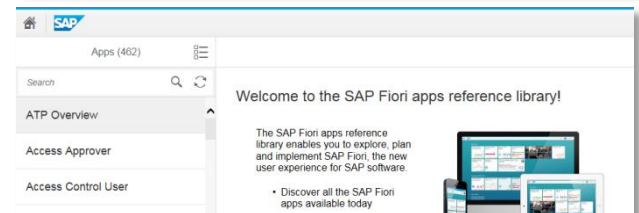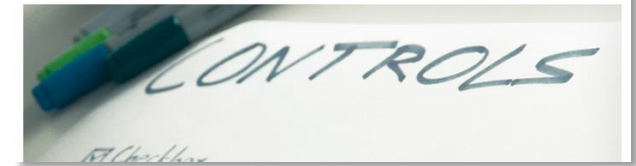
Key links for more information (2)
For customers and partners

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

Role-based | Responsive | Simple | Coherent | Delightful

Design

Visual Design | Information Architecture | Interaction Patterns

Technology

Web & Open Standards | User Interface | Business Logic | SAPUI5* / OpenUI5
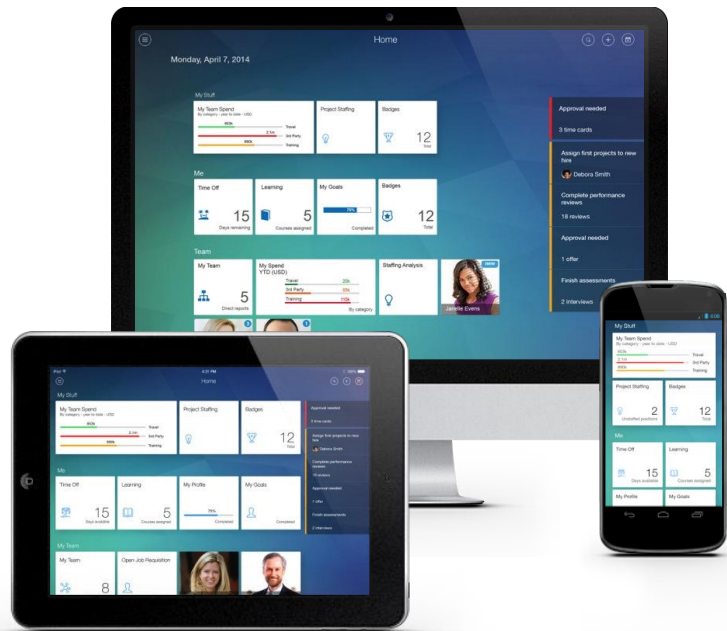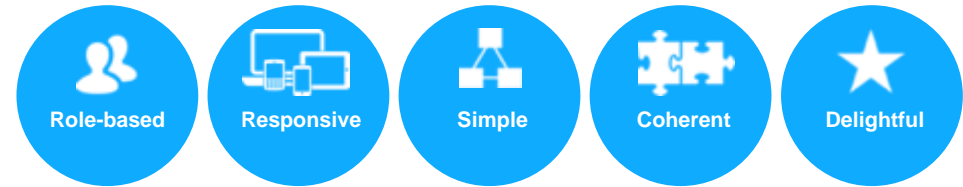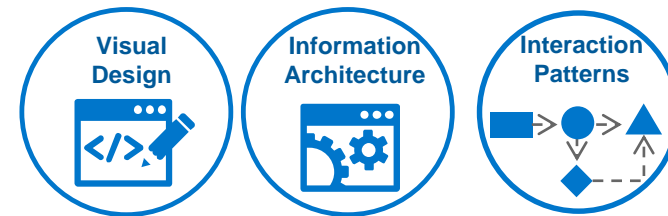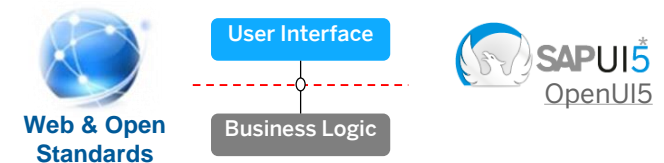
*: SAP's preferred way to build SAP Fiori apps is using SAPUI5, but other technologies might be applied as well

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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 (http://lesscss.org)
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 (http://en.wikipedia.org/wiki/PHP)
PFC	Remote Function Call
PL	Patch Level
PLM	Product Lifecycle Management
REST	Representational State Transfer
RTA	UI adaptation at runtime
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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