SAP UI Technologies

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SAP UI Overview

• SAP User Experience Strategy
• Key UI Technologies
• Integration
• Specialized UI Technologies
• Related Topics
SAP UX Strategy
Key Trends

**Software is ubiquitous**
- Smartphones and tablets blur the services, applications and content from private life and business
- Devices are status symbols
- Drives expectations that software should be fun
- People want great experience
- Technology is not limited to just experts

**SAP Vision**
Provide leading user experience for business applications

**Mission**
Deliver attractive applications that make people successful at work
SAP UI Evolution
Digital Transformation

People
- User-centered
- Design-driven
- One user experience

Innovation

Business
- Digitization
- Simplification
- Cloud

SAP Fiori

Technology
- Open Standards
- Service orientation
- In-memory
NEW

Consumer-grade for new applications

RENEW

Most broadly used scenarios

ENABLE

Tools for customers to tailor their value scenarios
SAP Fiori User Experience

SAP Fiori is SAP’s new user experience that applies modern user centric design principles. It provides a consistent and role-based experience for 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.
Key UI Technologies
Key UI Tools and Technologies

- SAP Fiori Launchpad
- SAP Enterprise Portal
- SAP Business Client
- SAP GUI
- SAP Screen Personas
- SAP Web IDE
- Dynpro
- Web Dynpro
- SAPUI5
- SAP Gateway
SAP UI Toolkit for HTML5 (SAPUI5)

SAPUI5 is a JavaScript UI library designed to build cross-platform business applications.

- Rich HTML5 control set for desktop/mobile
- App development and runtime for SAP platforms
- OData integration
- Custom controls for extensibility
- Modern theming
SAPUI 5 Key Capabilities

**Today**
- Built-in extensibility concepts at code and application level
- Data binding types and Model-View-Controller (MVC)
- Feature-rich UI controls for handling complex UI patterns and predefined layouts for typical use cases.
- Full translation support
- Keyboard interaction support and accessibility features
- Windows 10 and Hybrid apps in Windows 8
- UI5 Inspector

**Planned Innovations**
- Performance improvements
- Smart templates
- Simplified app extensibility
- Broaden theming parameters
- Japanese Emperor Calendar
- OData V4 support
- Windows 10 mobile and Chrome on MacOS
- Documentation and tutorial improvements
- Control improvements and new controls
SAP Web IDE

A web-based tool that simplifies end-to-end application lifecycle.

- Drag and drop tools, wizards and templates for creating SAPUI5 apps
- Code editors for SAPUI5
- Instant preview and mock data support
- Collaborative development
- Integration with SAP platforms
- Hybrid mobile development
- Extensible architecture
Floorplan Manager (FPM) is a framework for model-based and declarative creation of Web Dynpro ABAP user interfaces.

- Application composition using predefined floorplans and building blocks
- Code-free UI configuration
- Modification-free adaption and extension of UI
- Coherent screen definition providing standards support
- Flexibility through island concept
- Productivity and usability features (e.g. smart drill down)
Floorplan Manager and WDA Key Capabilities

**Today**
- Basic SAP Fiori launchpad integration
- SAP Screen Personas implementation for WDA enhancements
- New message area in WDA
- Value suggestion for fuzzy search

**Planned Innovations**
- Improved Fiori launchpad integration
- Improved SAP Screen Personas implementation
- Adoption of SAP Fiori concepts
  - Basic search fields
  - PopOver controls
- Chart User Interface Block Builder (UI BB)
SAP GUI Family

SAP GUI is the SAP universal client for accessing functionality.

• Graphical user interfaces for all SAP applications based on Dynpro technology
• Separation of user interface and application logic
• Support for various environment and operating systems
• High performance
• Fully compatible with supported SAP NetWeaver releases
SAP GUI Family Key Capabilities

**Today**
- All SAP GUIs
  - SAP Blue Crystal theme
  - Enhanced search
  - Common configuration infrastructure
  - Windows 10 support
- SAP GUI for Windows 7.40
  - Tighter integration with Business Client
  - SAP Screen Personas 3.0 features
- SAP GUI for Java 7.40
  - Improved HTML control implementation
- SAP GUI for HTML 7.4 (part of Kernel 7.42)
  - SAP Screen Personas 3.0

**Planned Innovations**
- SAP continues to invest in SAP GUI
  - SAP Screen Personas into all SAP GUI versions
  - SAP configuration improvements
  - 64-bit Unicode client for Windows

SAP GUI is not a key UI technology for SAPs developers to build completely new applications; here SAP recommends to use WDA or SAPUI5. However SAP continues to extend existing Dynpro-based applications with this technology.
UI Theme Designer

A browser-based tool which allows you to create your own themes to adapt the visual appearance of applications to apply corporate identity.

- Graphical WYSIGYG editor for previews
- Different theme types: quick, expert, CSS
- Custom CSS3 and LESS support
- Support for
  - SAPUI5
  - WDA
  - WDJ
  - SAP GUI for HTML
  - SAP Portal
  - SAP Business Client
UI Theme Designer Key Capabilities

Today
• Visual design of theme designer aligned to SAP Web IDE
• Target pages can be resized via keyboard
• Increased theming efficiency

Planned Innovations
• Improved theming support for SAPUI5
• Further UI improvements
• Theming support for
  • SAP GUI
  • Business Client HTML
SAP Screen Personas

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

- Show only essential screen elements
- Automate repetitive tasks through pre-filled values
- Decrease training time
- Enhance user satisfaction
- Reduce cost of personalization
SAP Screen Personas Key Capabilities

**Today**
- Streamline business processes
  - Simplify screens
  - Combine information from multiple tabs
  - Change text to match business needs
  - Pre-fill fields
- Automate repetitive tasks
  - Record screen actions to replay
  - Skip over unnecessary screens
  - Auto-populate fields based on role
- Integrate with other SAP UX solutions
  - Render in SAP GUI or Web GUI
  - Embed flavors into Fiori launchpad
  - Combine with Business Client screens

**Planned Innovations**
- Usage analytics
- Social features
- Editor enhancements
- Theming enhancements
- Improved administration
SAP Browser Support

**Desktop**
- Microsoft Internet Explorer
  - IE11 (only supported version since Jan 2016)
- Microsoft Edge
- Mozilla Firefox
  - Latest extended support release
- Google Chrome
  - Latest release cycle for Windows
  - Support of NW 7.02 and later
- Apple Safari
  - For 3 years from OS X release date
  - Support of NW 7.02 and later

**Mobile**
- References devices
  - Apple Safari on iPad
  - Apple Safari on iPhone
  - Google Chrome on Samsung Galaxy Tab/S
  - Android Browser on Samsung Galaxy Tab/S 4.4+
  - Windows Phone on Nokia Lumia 930
  - Blackberry on Z10/30
- Devices and OS version support for 3 years from vendor release
- SAPUI5 / OpenUI5 technologies
UI Client and Integration
UI Client and Integration

Provides coherent user experience across multiple technologies. Offers the user one consolidated entry point.

SAP Fiori Launchpad
• Designed for SAP Fiori UX

SAP Business Client
• Harmonized access to SAP apps

SAP Portal
• On premise and cloud solutions
SAP Fiori Launchpad

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.

- Supports multiple platforms and devices
- Role based with preconfigured home page content
- Personalizable
- Search across apps and business objects
- Integration of any URL-based navigation
- Theming
- Open and extensible
SAP Fiori Launchpad Single Point Of Access

SAP Fiori launchpad runs standalone and on key SAP UI clients offering a unified Fiori UX.
SAP Fiori Launchpad Key Capabilities

**Today**

- End User Experience
  - App Launcher as tile or link
  - User specific default settings
- Setup and Configuration
  - Target mapping configuration
  - Import of content from application system
- SAP UI client alignment
  - Business Client 6.0 integrates launchpad with SAP GUI experience
- APIs for shell extensions

**Planned Innovations**

- Modification free shell extensibility
- Usage analysis
- Simplified setup and configuration
- Further UI client alignment
SAP Business Client

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

- Single point of entry for role based access
- Harmonized experience of different UI technologies
- Allows mash-ups using side panel
  - ~1600 ERP transactions enabled
  - ~130 reusable chips available
- Theming and branding
- Web browser-like interaction paradigm
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
  - 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 Key Capabilities

Today

• Tight integration with SAP GUI and SAP Logon
• Improved 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
  • Enable business experts, not administrators, to configure content

Planned Innovations

• UI theme designer support for SAP Blue Crystal base theme
• Windows Desktop client for SAP S/4HANA, on-premise edition
SAP Portal

Innovations for on-premise and cloud-based UI integration

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
SAP Visual Enterprise

SAP Visual Enterprise Solutions combine visual product, asset and plant information with business content.

• SAP Visual Enterprise Viewer allows viewing and interacting with the authored and published content. Viewers exist for desktop, mobile and UI5/HTML5.

• SAP Visual Enterprise Author creates animated procedures, 3D embedded documents and high-definition imagery and allows hot-spotting of business data on top of 2D images.

• SAP Visual Enterprise Generator (VEG) is a server-based process engine.
  • Reads most CAD or other 3D or 2D inputs
  • Provides publishing and management of business-linked Visualization data.
  • Publishes graphics, videos, and documents with optional storage in DMS.
SAP Interactive Forms by Adobe

SAP Interactive Forms by Adobe (IFbA) is SAP’s on-premise solution for print forms and interactive forms.

- Online and offline interactive scenarios
- Print forms
- Optimal integration with SAP technology
- Digital signatures & Bar codes
- Printing, saving locally and archiving
- Integration with BPM and other SAP workflows
- Standard Adobe Reader functionality
- Distribution by e-mail / portal
Web Dynpro Java

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

- Meta model approach with declarative programming
- Reusability and better maintainability by using components
- Graphical support with tools in the Web Dynpro perspective
- Java development infrastructure (NWDI) supports teams

WDJ is not a key UI technology for SAPs developers to build new SAP standard applications. SAP recommends using SAPUI5 or WDA. It is safe to continue using applications based on WDJ and also for a customer to add little enhancements based on existing capabilities.
SAP Mobile Platform

**One Mobile SDK**
- Online or offline
- Cloud or on-premise

**SAP Mobile Platform SDK**
- Agently
- Hybrid
- Native

**SAP HANA Cloud Platform mobile services**

**Right-Fit Technology**
- Native, Hybrid or Metadata-driven

**Harmonized Platform**
- Enterprise class mobile services

**Flexible Deployment**
- Deploy on-premise or in the cloud with no code changes
SAP Mobile Platform App Types

- SMP supports
  - Native
  - Hybrid using HTML5 (Kapsel)
  - SAP Fiori Client
  - Metadata-driven Agenty apps
  - SMS
SAP Mobile Platform Core Services

Focus on delivering app value, not infrastructure.

- App Management
  - Register and assign users
  - Usage reporting
  - Unified administration
- Supportability
  - End to end trace
  - Solution Manager integration
- Security
  - Encryption and authentication
  - Edge Protection
- Integration
  - RESTful services
  - Composite Data Models
SAP Gateway

• Enables connection of devices, environments, and platforms to SAP systems efficiently and securely.

• 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
  • Digitize your business and engage with end consumers.
Analytic Solutions

**Enterprise BI**
- Ubiquitous BI for all users and landscapes
- Collaborate across the organization
- Scalable, secure, and mission critical

**Agile Visualization**
- Unleash user’s creativity
- Agility for the business
- Able to leverage IT’s expertise

**Advanced Analytics**
- Integrated simple predictive
- Take action on insights
- Front end to sophisticated planning and predictive models

**Cloud**
- Public cloud with Cloud for Analytics
- Private cloud with support for HANA, Enterprise Cloud, AWS, Azure
- Drive lower TCO

**Big Data**
- Explore new opportunities
- Build on SAP HANA strengths
- Embrace new emerging data sources
Thank You!!