

Simplify Development of SAP Fiori Apps with OData V4

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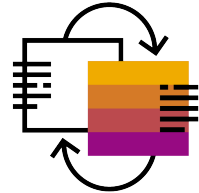
PUBLIC

SAP Fiori elements boosts SAP Fiori development efficiency



Developer Productivity

- Focus on **business logic** and back-end services
- Write **less UI code**
- **Reduce** development and maintenance **costs**



UX Consistency

- Comply with the **latest SAP Fiori design** specification
- Deliver a **centrally managed** user experience
- Include **uniform** layout, navigation, search, filtering, and more



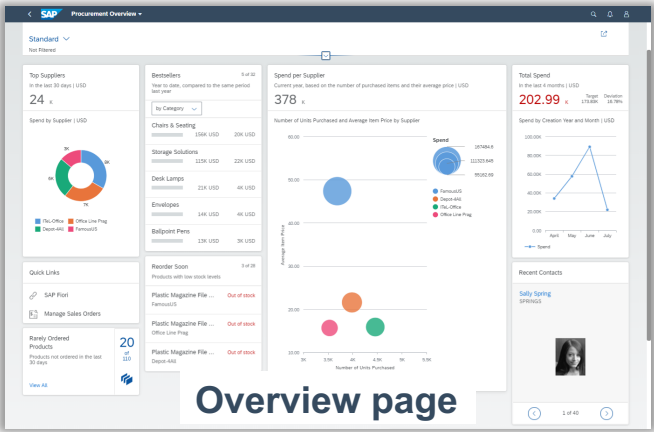
Enterprise Readiness

- Deliver **high quality** SAPUI5 applications to end-users
- Ensure **stable, optimize** UI code out of the box
- Include **standard enterprise features** (accessibility, mobile, translation support, ...)

Standard page types increase developer productivity

Most use cases in the enterprise space involve providing an **overview**, **lists** of business objects and management of these business **objects**.

Provide **overview** on business relevant data

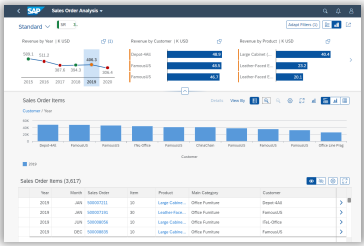


Work on a **list** of business objects

List report page

Manage individual business **objects**

Object page



Worklist page

SAP Fiori elements provides enterprise-ready apps out of the box

Variant Mgmt

Search

Data Lists

Filtering

Actions

Sorting

Personalization

Export to Excel

Navigation

Editing (incl. draft mgmt.)

Object Details

The image shows two SAP Fiori elements app screens. The top screen is 'Manage Product Catalog' with a table of products. The bottom screen is 'Product' details for a 'Visitor Chair'.

Preview Image	Product	Name	Category	Supplier	Star Ratings	Price
	MC-B-1000	AAA Alkaline Batteries - Pack of 8	Bands & Twine	Office-Guru AG	★★★★★	3.50 USD
	MC-CA-1002	All-Purpose Cloth - Pack of 50	Cleaning Aids	ITeL-Office	★★★★★	4.95 USD
	EP-BT-1001	Assorted Colours Rubber Band - Bag of 870	Bands & Twine	Office-Line Prag	★★★★★	3.49 USD
	EP-WM-1000	Block-Bottom Paper Carrier - Pack of 250	Wrapping Material	Regular Custom Ltd	★★★★★	45.00 USD
	PP-SN-1005	Bookmark Sticky Notes - assorted	Sticky Notes	Depot-4All	★★★★★	
	EP-BB-1004	Brown Packaging Tape	Boxes & Box Tape	Depot-4All	★★★★★	
	EP-E-1004	Bubble-lined Envelopes - Box of 100	Envelopes	Office-Guru AG	★★★★★	
	EP-E-1000	Business Envelope - Box of 250	Envelopes	Mein Ressort GmbH	★★★★★	
	EP-E-1001	Business Envelopes with Windows	Envelopes	Mein Ressort GmbH	★★★★★	
	EP-BB-1003	Cardboard Mailing Tube	Boxes & Box Tape	Mein Ressort GmbH	★★★★★	
	PP-NB-1011	Casebound Notebook	Note Books & Paper	Office-Line Prag	★★★★★	
	OF-CS-1002	Circular Mesh Waste Bin 15 litre capacity & silver	Bins & Baskets	Office-Guru AG	★★★★★	
	DE-GS-1005	Clear Universal Adhesive	Glue & Sticky Tape	Office-Guru AG	★★★★★	
	AR-FB-1008	Clear View Folder - Assorted - Pack of 10	Files & Binders	ChinaChain	★★★★★	

Visitor Chair - Green
OF-CS-1002

Category: Chairs & Seating
Supplier: FamousUS
Availability: 2
Price: 122.00 USD
Star Ratings: ★★★★★

Basic Data

Product: OF-CS-1002	Category: Chairs & Seating	Technical Data	Admin Data
Name: Visitor Chair - Green	Supplier: FamousUS	Length: 0.450 m	Created By: Data Generator
Description: Contemporary, eye-appealing visitor chair. Seat in vibrant colours on an attractive light-weight wood and metal base. Tough, hard-wearing nylon seat structure means that the chair is easy to clean. Ideal visitor area chair. These chairs are stackable and come in a pack of 4. Stylish, practical and comfortable.	Price: 122.00 USD	Width: 0.550 m	Created On: Jan 1, 2017, 1:00:00 AM
Alternative Product: OF-CS-1003		Height: 0.550 m	Modified by: hams-jaergen.richstein@sap.com
		Weight: 4.500 kg	Changed On: Aug 12, 2020, 6:38:26 PM

Reviews (10)

Star Rating	User	Title	Text
★★★★★	Kelley Gaspard Jul 23, 2019, 11:51:53 AM	Not sure yet	Go for it, not really bad at all. Works as advertised.
★★★★★	Howard Vega Dec 31, 2017, 11:38:03 PM	As Advertised	Go for it, not really bad at all. Would buy a better quality next time. Adorable, but expensive.
★★★★★	Felicia Merchant Jul 24, 2019, 12:49:46 PM	Almost perfect	Lower quality than expected. Does not look the same as the picture provided, which was disappointing, but ok. Product functions as advertised. Nothing special to mention on this one.
★★★★★	Hannetta Perine Feb 4, 2018, 5:39:42 AM	Highly recommended	Definitely worth the investment. I was surprised how nice this product really looks. Perfect for my needs.

Additional **enterprise readiness** features included are:

- Accessibility
- Internationalization
- Mobile compatibility
- Responsiveness
- Performance optimizations
- Integration
- Security checks
- Lifecycle stability
- Test automation support
- ...and more

OData annotations fine-tune how the app looks and behaves

Consumption hints

Which fields allow a human to identify the entity?

Which fields are clickable?

Semantics

“These fields shall be displayed together in a form”

Behavior

“This entity can be edited”

Semantics

“This is the currency for the amount”

Semantics

“This is an email address”

The screenshot displays the SAP Fiori 'Product' app interface for a 'Visitor Chair - Green' (OF-CS-1002). The interface is annotated with yellow arrows and text boxes explaining OData annotations:

- Consumption hints:** Arrows point to the chair image and the 'Category: Chairs & Seating' field, indicating fields that help identify the entity.
- Semantics:** An arrow points to the 'Price: 122.00 USD' field, indicating the currency for the amount.
- Behavior:** An arrow points to the 'Edit' button, indicating that the entity can be edited.
- Semantics:** An arrow points to the email address 'hans-juergen.richstein@sap.com' in the 'Modified by' field, indicating it is an email address.

The product details are organized into sections:

- General Information:** Includes the product name, category, availability, price, and star ratings.
- Basic Data:** Includes product name, category, supplier, price, and description.
- Technical Data:** Includes dimensions (Length, Width, Height) and weight.
- Admin Data:** Includes creation and modification dates and users.
- Reviews:** A table showing user reviews with star ratings, user names, dates, titles, and text.

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SAP Fiori elements now also supports OData V4



OData V4 (Open Data Protocol) is an **ISO/IEC** approved **OASIS** standard, which makes it the **technology of choice for enterprise applications**

SAP Fiori elements floorplans are **OData protocol agnostic**, keeping the look & feel consistent

We plan to **deliver** support for OData V4 in a **phased approach**

- List report / object page
- Initial support for the existing overview page
- Ability to inject custom code (pages, sections, actions, columns) into SAP Fiori elements apps as extensions

TODAY

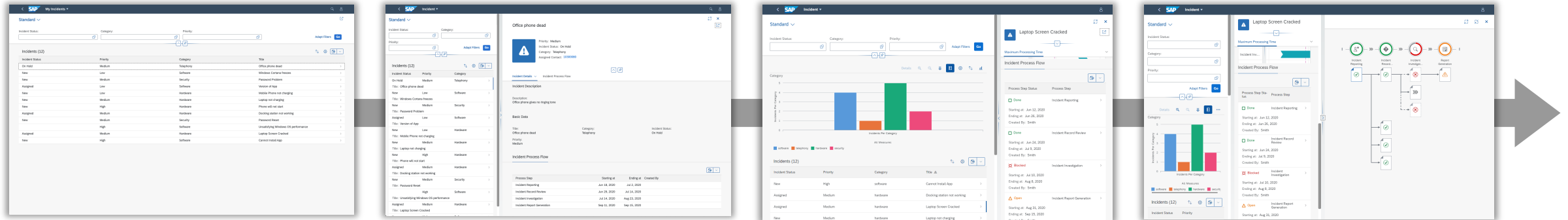
- Worklist
- Analytical list page
- SAP Fiori elements building blocks** that can be used in extensions to ensure UX compatibility and lifecycle stability
- Leverage more and more OData V4 advantages such as \$apply for aggregation, deep expand, \$filter functions and many more

PLANNED*

*This is the current state of planning and may be changed by SAP at any time without notice.

**'wrapper' around UI5 Controls binding it to an OData entity leveraging annotations.

SAP Fiori elements application architecture provides flexibility



Start with the generated app based on a standard page type

Configure the app, e.g. apply the **flexible column layout**

Enhance the app with annotations, as needed

Extend the app with SAPUI5 code, if necessary

SAP builds over 80% of new apps for SAP S/4HANA using Fiori elements

SAP Fiori elements prioritizes efficiency over flexibility

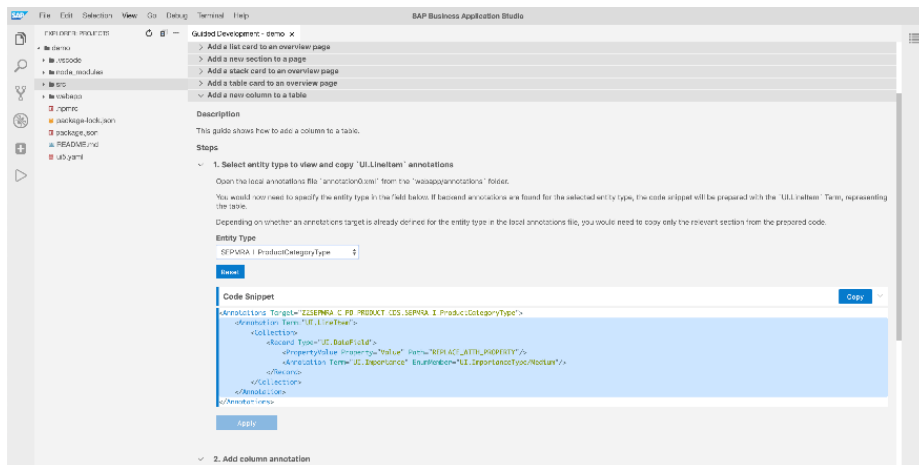
Freestyle SAPUI5		SAP Fiori elements
Flexibility	Overall approach	Efficiency
Freestyle designs	Design requirements	SAP templates
Web Development	Development knowledge	Annotations
Own coding, own UI logic	App ownership / maintenance	Own annotations, SAP's UI logic
Higher	Total cost of development and maintenance	Lower

Developers can run SAP Fiori tools either in the cloud or on-premise

SAP Business Application Studio

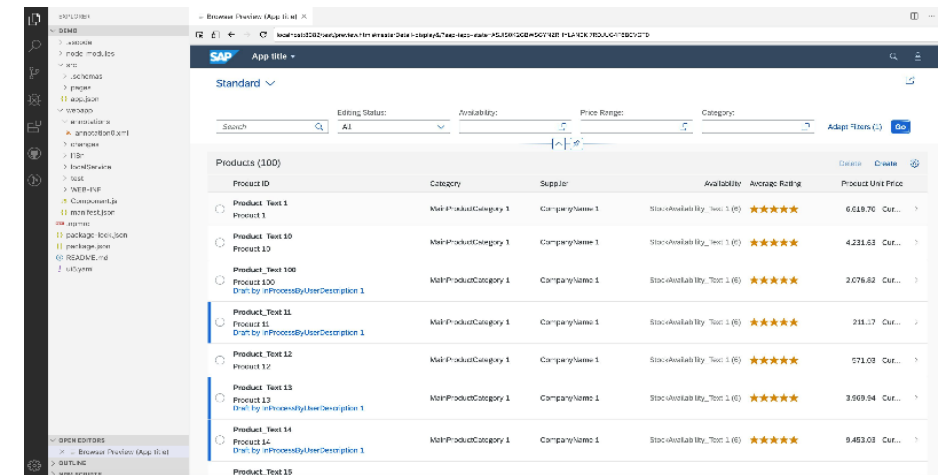
Provides a modern, maintenance-free, preconfigured, **hosted environment***, optimized for SAP developers

- Can be **centrally administrated** with tools repositories, systems access and company policies
- Integrates with existing SAP solutions, systems & services
- Easy access to Visual Studio Code-compatible extensions from open source Theia marketplace **



Visual Studio Code

- Provides development flexibility with **offline** capabilities
- Features a **user-controlled**, highly configurable development environment
- Allows access to thousands of extensions from the Visual Studio Code marketplace
- Is part of a fast growing open source community

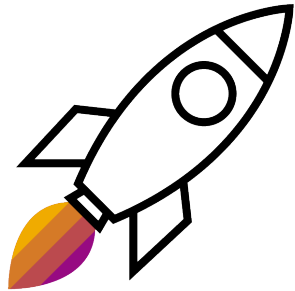


* Offline development option is planned

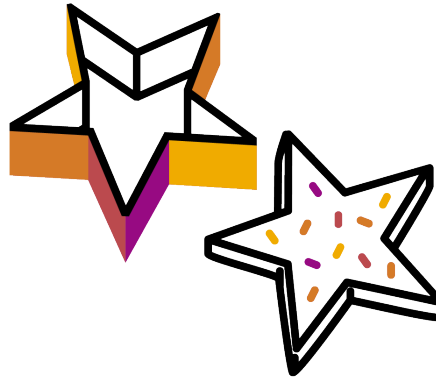
** Theia marketplace is planned

3 things to remember about SAP Fiori elements & SAP Fiori tools

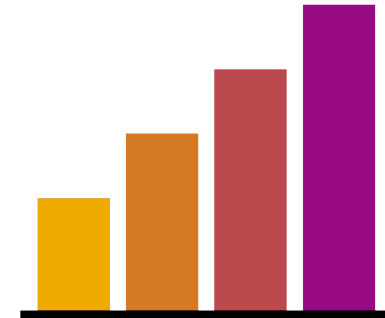
1. SAP Fiori elements & SAP Fiori tools **accelerate** app development



2. SAP Fiori elements enables **UX consistency**



3. SAP Fiori elements covers **80%** of app development scenarios



Learn more

- ▶ SAP Fiori elements community topic page
<https://community.sap.com/topics/fiori-elements>
- ▶ SAP Fiori tools product announcement
<https://blogs.sap.com/2020/06/22/sap-fiori-tools-is-generally-available.-increase-the-efficiency-of-developing-sap-fiori-elements-apps/>
- ▶ Sign up for SAP Fiori development newsletter
<http://link.personas.help/fenews>
- ▶ SAP UX Engineering YouTube channel
<https://www.youtube.com/channel/UC4FRdP-pm8mwIRbqOQwnPJQ>
- ▶ openSAP course “SAP Fiori overview”
<https://open.sap.com/courses/fiori3/>



Exercises



Thank you.

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