

IAGM Whitepaper

SAP Fiori & Authorizations

February 2021



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Fiori & Authorization Impact



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Introduction

Fiori offers a new user experience

SAP Fiori is described by SAP as “the user experience of the intelligent enterprise” promising a more pleasant way of working with their modern visual design.

It offers access to all related activities from one single entry point via three different app types:

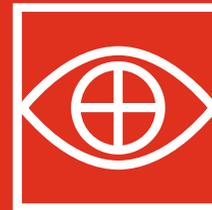
- Analytical apps provide insights into real-time operations by collecting and displaying key figures directly in the browser.
- Transactional apps enable the execution of transactional tasks.
- Fact sheets display contextual information and key facts about central business operations’ objects.

Customers are implementing SAP Fiori in the context of S/4 migrations seeking the multi system integration and a seamless and consistent user experience. In the Fiori environment data across multiple systems can be accessed.



New opportunities bring new challenges

The multi system landscape with new elements leads to a more complex authorization structure and role design. With our over 20 years experience we will support you in creating a consistent authorization concept for a multi system architecture and role design that create transparency, provide sustainability with flexibility and follow regulatory requirements.



Authorizations have an impact on User Experience

The user experience is mainly steered by the visible tiles on the Fiori launchpad. What a user sees on and can access from the launchpad can be restricted by their access rights, making the user experience an important authorization topic. We will support you in improving your user experience with a consistent role design.

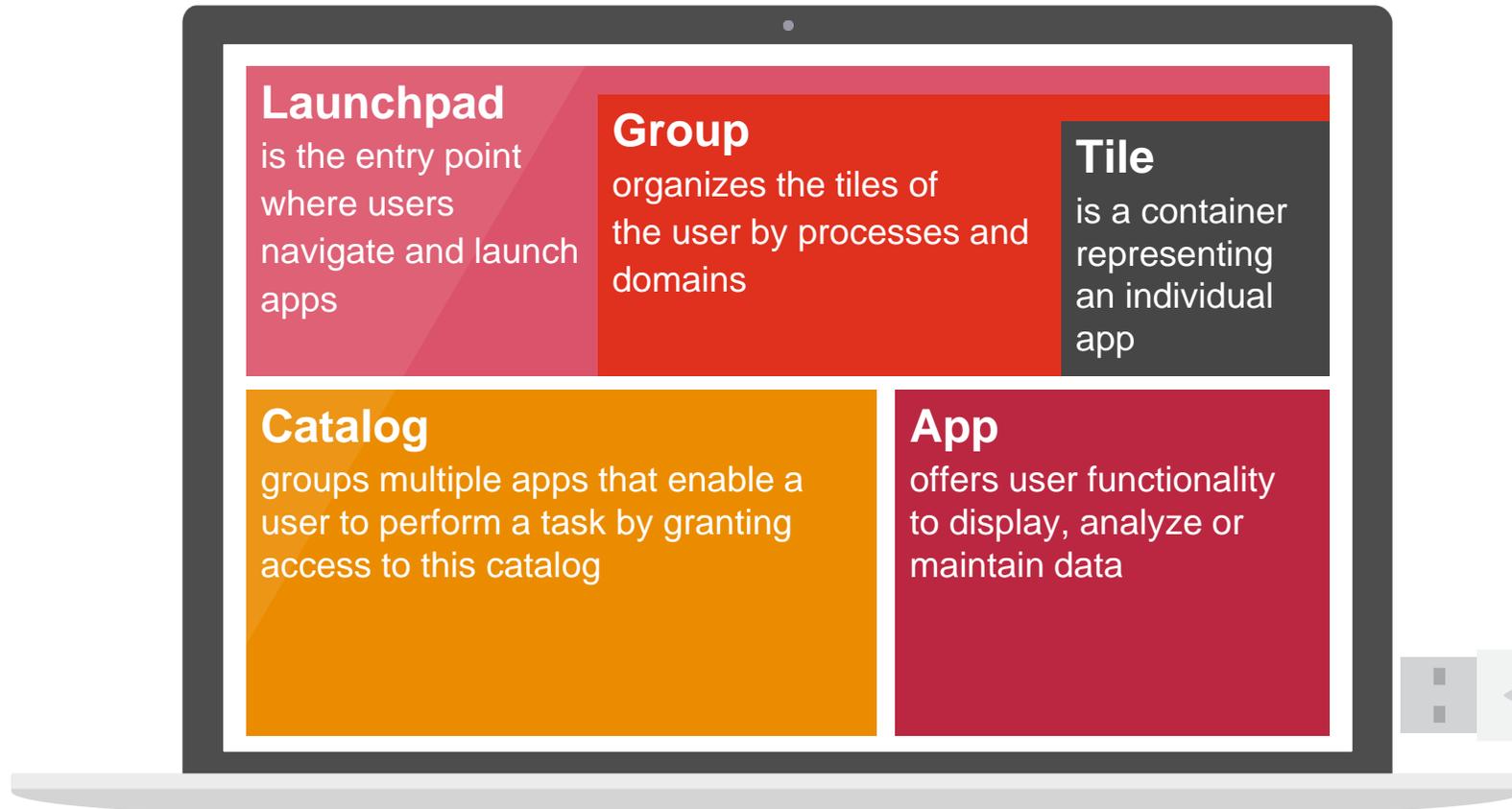


Senior advisory will improve your Fiori strategy

We have a longtime experience in the design and implementation of authorization concepts. Therefore we will enhance your Fiori design by providing a project strategy considering the topic’s complexity. This includes a feasible project timeline and necessary organizational changes for steady-state.

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Architecture



Fiori elements can be tailored

There are many new key elements to be considered with the Fiori Architecture. Some of these elements are visible for end users like the groups and tiles on the launchpad. Other elements like apps and catalogs are hidden technical elements. All these elements are adjustable.

The launchpad and tiles are flexible and can be tailored to your needs. Groups and catalogs are designed individually based on your process design and even apps can be customized.

We will support you in introducing a great Fiori user experience to your employees with a proper authorization design. Starting with selecting and possibly customizing required apps and steering the access to the apps by designing the catalogs and groups in an efficient, sustainable and compliant way that meet your company's needs.

With our experience in authorization support on transformation projects we will enhance your access rights and optimize your user experience.

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Technical Layers

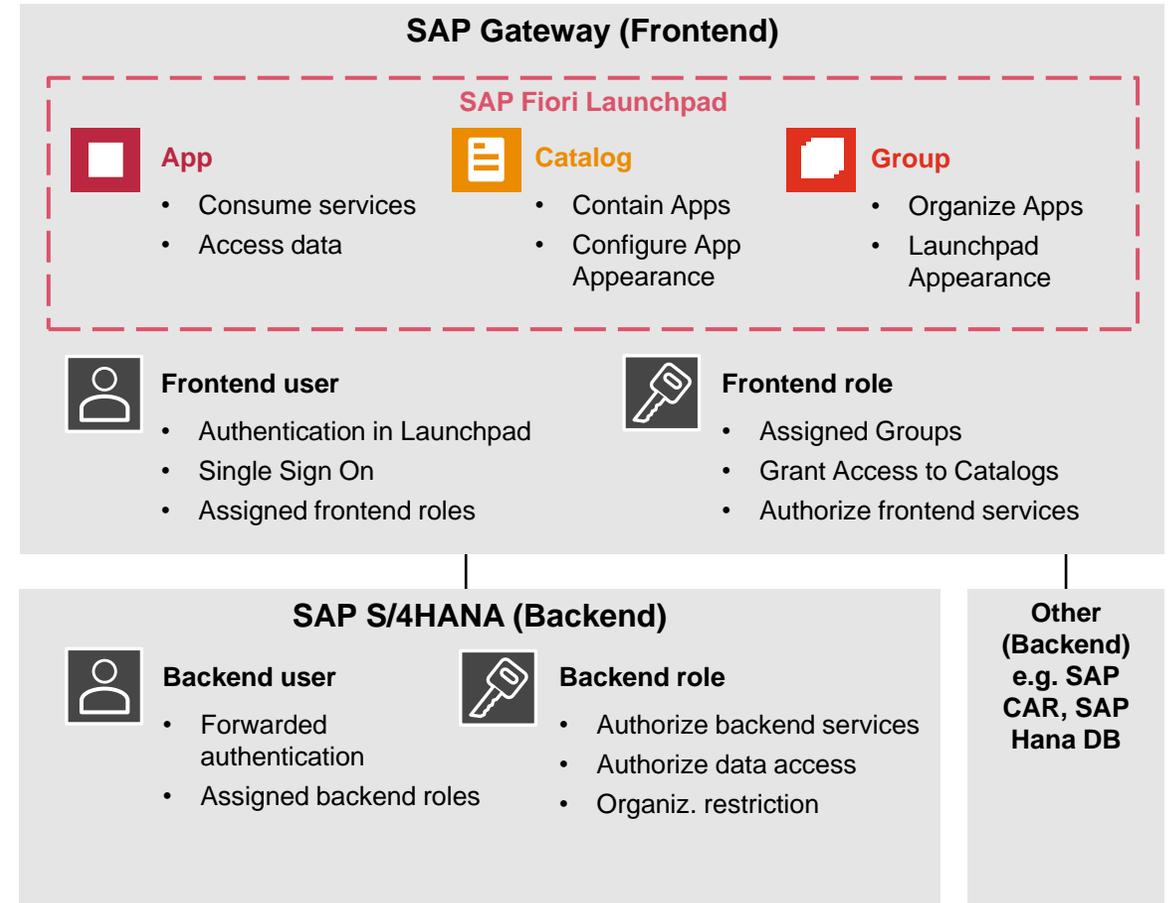
Fiori splits landscape in Front- and Backend

The Fiori interface uses a two-layer architecture. The frontend SAP Gateway system hosts the Fiori Launchpad and populates the OData services for consuming applications. Every Gateway can have multiple backend systems that offer access to various data and functionalities by OData services. It is possible to host both layers on one system for testing purposes.

When working with Fiori, a person needs access to both frontend and backend systems. A user in the frontend system is required to authenticate for the gateway usage. Roles on the frontend user account authorize to consume the frontend services and assign catalogs and groups to the user. This influences the appearance in the Fiori Launchpad.

The same person requires a user in the backend system to authorize data access. This access is organized by backend roles authorizing the backend services. These backend services allow to set the level of access and restrict on organizational structures.

We will support you with the design of a proper role concept that creates transparency and clearness over all layers. This includes a clear structure on functional and organizational authorizations as well as a better cross application user experience. To achieve a consistent maintenance of users and roles over multiple systems we contribute with consulting on an overlying business role concept that is enabled by an Identity Access Management solution.

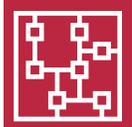


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Suitable Apps

Relevant Fiori apps need to be identified

Since currently more than 1700 Fiori Apps are available for SAP S/4 HANA, the identification of suitable apps can be challenging for companies. We will support you in achieving a high quality selection of available apps according to your existing role design. Our team is experienced in designing roles with apps from scratch and in adding newly selected apps into your current role design. Our method to select and integrate apps into your role design is based on a combination of process oriented and transaction replacement mapping. During the design process we will make sure to focus on important topics as compliance and long term sustainability.



Process oriented

Your business processes define jobs and tasks performed by your employees. Based on this valuable information the Fiori Apps Reference Library can be explored. Suitable transactions are identified by reference menus or reference role implementations. This approach fits for the selection of suitable Apps as well. We will enable you to use reference structures from SAP as well as custom PwC content to enhance your processes by fitting apps. Your business experts will learn to find apps and evaluate the impact from a role modeling perspective.



Transaction Replacement

A one-to-one mapping of apps to transactions is often not possible as the scope of an app is usually wider than a single transaction. We provide you a consolidated version of all publicly available information (e.g. simplification list, Apps Reference Library mappings) and PwC content on possible replacements of transactions. Including information on system usage statistics, technical authorization information and your current role design we can propose interesting apps for a deeper evaluation.

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Implementation Roadmap

Fiori integrates in your project plan

A Fiori implementation should be planned carefully. Considerations should begin with the conceptual decision on how to integrate Fiori apps in the authorization design and cover the whole process from app selection to designing, testing and provisioning business roles including Fiori apps.

We will support you to include the topic in your underlying project plan. It is challenging to coordinate several teams for the frontend, backend, business and IT. Knowledge transfer must start here in the first days of the project.

Fiori Concept

Conceptual Fiori decisions include whether to design frontend roles with an integrated or additional approach for groups. For backend roles it needs to be decided whether to use a combi or split approach for GUI and Fiori elements.

App Selection & Role Design

Application roles are typically designed task-based. For each task/ process step it needs to be decided if an app will be used instead/ additionally to transactions.

Implementation

Selected apps need to be activated before they can be included in application roles via catalogs.

Business Role Design

Business roles are typically designed job-based and include application roles from different applications, thus including Fiori frontend and S/4 backend roles.

Testing

The Business Roles need to be tested including the Fiori apps.

Provisioning

Business roles allowing access to multiple system including the Fiori frontend system need to be assigned to users.

Handover

For maintaining an effective role concept including Fioris, new organizational roles are required.

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Fiori Use Cases



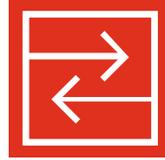
Fiori Use Cases

Client Stories



UI5 Flexibility

One of our clients liked the nice and compact overview of key information that a few apps were providing. However, compared to similar transaction codes these apps were including more functionality such as an additional create button in their reporting overview. Since the client was solely interested in the reporting functionalities of that app, we supported them in using SAPUI5 flexibility to adapt the app and making it a display only variant by removing the create button.



Referenced Apps

Sometimes one app is not enough to use the full scope of a new app. By navigation you can jump to fact sheets, display extended information on data elements or open reference transaction data in a linked app. Reuse Libraries are not visible in the Launchpad, but essential for the app to work correctly. Our client faced a big amount of defects in testing phases. We developed a strategy for our client to identify referenced apps in an early stage to decide if it should be considered in the design.



Security Risks

With Fiori our clients are facing new security risks. The authorization object S_SERVICE was not fully understood by our client's system integrators and maintained with full authorization (*), thus providing access to all OData services. Another risk our client overlooked was using similar Firefighter (FF) IDs for the frontend and backend systems. Even though a user might only have FF access to one system, with the same ID it might be possible to indirectly access the other system and bypass controls. We supported our client in identifying and avoiding these risks.



Monitoring & Support

In the multi system architecture of a Fiori landscape it gets more and more complicated to identify the root cause for issues if they belong to authorizations or not. On the front- and backend new teams for development, monitoring, support and administration must get authorized. We consulted our client in an IT-Business Role authorization concept to reflect specific needs of the teams under consideration of compliance aspects. We set up an authorization troubleshooting guide for Fiori in a layered IT support organization.

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