



EXPLORERS GUIDE TO FIORI & CLOUD SECURITY

GREG CAPPS CISA, CRISC

GEORGIA-PACIFIC LLC



CLOUD SECURITY



FIORI Impacts to
Security



Brownfield, Greenfield:
Risk Impacts



Fiori and SAP EAM

PUBLIC CLOUD RESPONSIBILITIES

- Public Cloud Provider, SAP and the Customer
- Hyperscalers: Physical Security of data center and platform
- SAP: Responsible for Virtual Machines, Operating System, Application Software and Data Protection Application & Database, data security, virtual machines, resources, operating systems and integration
- Customer: User Management

SAP AS SAAS PROVIDER

- Preventitive Controls & Detective Controls (External & Internal)
- Lifecycle Management
- Blueprint Apps with Security Best Practices
- Standards Review and Risk Analysis for Deployed Applications
- Security by Default Cloud Account Settings
- Security Policies such as Multifactor Authentication
- Hyperscaler Specific Platform Security Features & Services

HOW DOES YOUR ON-PREM OR PRIVATE CLOUD IMPLEMENTATION COMPARE

- Security Patch Frequency?
- Threat Detection Tools?
- Best Practice Security & Application Parameters?
- Stringent Application Best Practice & Security Reviews?
- Secure Connectivity?
- Encryption?
- ???

FIORI SECURITY



Fiori Components



FIORI Impacts to
Security



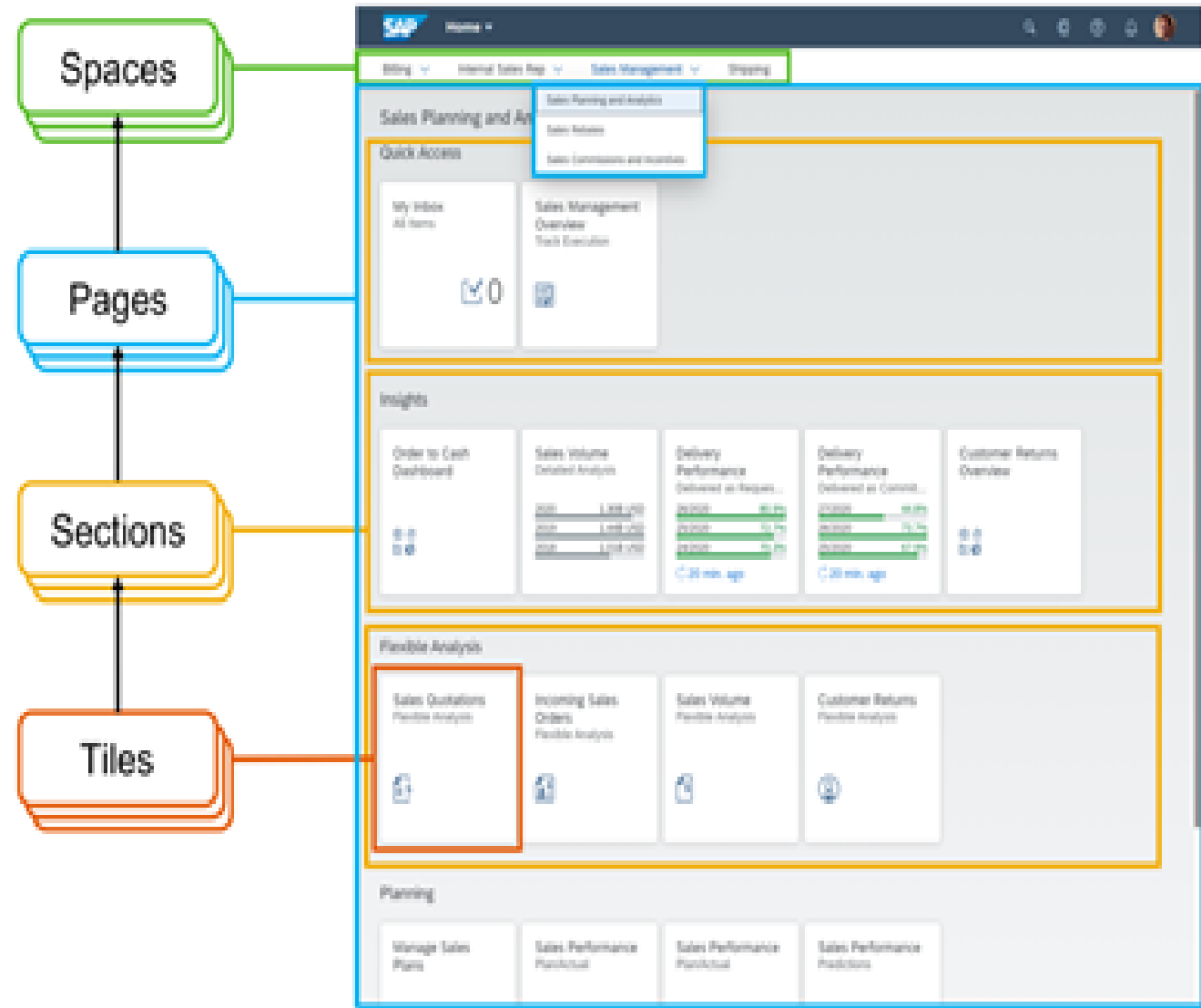
Brownfield, Greenfield:
Risk Impacts



Fiori and SAP EAM

FIORI COMPONENTS

- Frontend – Fiori Gateway: Primarily UI5 – Fiori App
- Backend – Odata Services, Web Dynpro, web enabled FM's



FIORI IMPACTS TO SECURITY

GRC Ruleset for example

- For Fiori Apps you must perform an Authorization Sync for your Fiori/Gateway Connector.
- For Odata Services you must perform an Authorization Sync for your S/4HANA Connector.

Risks	Analysis Results
Add Fiori Apps[FAPP] in Functions 1 & 2 for a risk	Action Level Risks only
Add Odata Services[SVC} in Functions 1 & 2 for a risk	Action and Permission Level Risks
Add Fiori App[FAPP] & Odata Service in Functions 1 & 2 for a risk	Action and Permission Level Risks at a granular level

	Systems in Scope	Authorization Sync	Prefix/Abbreviation	Risk Analysis	Standard Ruleset Available
Traditional Tcodes/Action & Authorization	SAP/ERP, ECC, Portal	Yes	Traditional Actions	Yes	Yes
Webdynpro Application	SRM	Yes	[WDY]	Yes	Yes
Odata Services	S/4, Basis Release 731 & above having Odata Services	Yes	[SVC]	Yes	Yes
Fiori Application	Fiori system	Yes	[FAPP]	Yes	Yes
Fiori Catalog	Fiori system	Yes	[FCAT]	Yes	No

GRC RISKS AND RULES

2655122 - MAINTAINING GRC RISKS BEYOND TRANSACTIONS

SAP Simplification Continues : Transactions & Programs are Becoming Obsolete

- First Release of S/4HANA obsolete (1511)
- S/4HANA 1511, 1610, 1709 and 1809 implementations becoming obsolete
- Standard Maintenance for new releases is 5 Years
- ECC was setup and support forever
- S/4HANA is an ongoing continuous improvement project
- You must embrace change to enable easier upgrades



SAP Simplification Continues : Transactions & Programs are Becoming Obsolete

- Master list of impacted transactions/programs - DNE
- Program PROFGEN_CORR_REPORT_2 provides list of obsolete transactions in role menus
- Many Central Transactions replaced derivations
- Some transactions enhanced instead of becoming web-based Fiori Apps

[Simplification Item Catalog](#)

SAP S/4HANA 2022	SAP S/4HANA 2021	SAP S/4HANA 2020
742 Items	700 Items	681 Items

SAP Simplification Continues : Transactions & Programs are Becoming Obsolete

- Table SBLM_BLACKLIST – Obsolete Transactions, Programs, etc.
- SAP Error - [2476734 - Runtime error SYSTEM ABAP ACCESS DENIED](#)
- SAP Error - [2295840 - Outbound / Inbound calls from external to RFC FM are blocked when the FM is blacklisted and the UCON-Check is active](#)
- S/4HANA 2109 UCON is active by default

Table SBLM_BLACKLIST Select Entries 5,007

PS4S:ITR:HM:XXX:MAS...	ITR - HM - Mass Mainten...	56	Transaction	IW37	Entry will be replaced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IW37N	Change Orders and Operat...	
PS4S:ITR:PN:XXX:COM...	ITR - PN - ITR Common ...	107	Transaction	IW49	Old entry will be deleted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IW49N	Display Orders and Operati...	Transaction
PS4S:ITR:PN:XXX:COM...	ITR - PN - ITR Common ...	111	Transaction		Old entry will be deleted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			Transaction

FIORI & S/4HANA APP ENHANCEMENTS

In this blog post, I will summarize the highlights for the business areas **Maintenance Management** and **Resource Scheduling** as part of the line of business **Asset Management** in SAP S/4HANA 2021.

Table of content (for quick access, just click on one of the business area links):

Maintenance Management

- New Scope Items
- New SAP Fiori Apps
- Process Phases and Phase Control Codes
- Maintenance Planning Buckets and Backlog
- Lean Service Procurement
- PM-EWM Integration for Stock Components
- Material Availability Check
- Maintenance Order Costs Analysis
- Inspection Checklists
- Geographical Enablement Framework
- Linear Asset Management

Resource Scheduling

- Flexible schedule periods
- Drag & Drop to move Order Operations
- Maintenance Scheduling Board – Enhancements
- Cross-App Navigation
- Cross-App Changes
- Additional fields like Phase Control Codes

New SAP FIORI Apps

The table below lists new SAP FIORI apps that are available as part of SAP S/4HANA 2021 FPS0. The "+" sign in column 'Scope Item Applicable' means that this app can be used for non –phase control activated work orders (old scope items [BH1](#), [BH2](#), [BJ2](#)):

Fiori ID	New Fiori Apps	Scope Item Applicable
F1511A	Create Maintenance Request	4HH
F4513	My Maintenance Requests	4HH
F4072	Screen Maintenance Requests	4HH & 4HI
F5104A	Perform Maintenance Jobs	4HH & 4HI
F4604	Manage Maintenance Notifications and Orders	4HH & 4HI
F4989	Manage Workflow for Maintenance Orders	4HH & 4HI
F5105	Maintenance Backlog Overview	4HH & 4HI +
F4603	Maintenance Order Costs (Planned/Actual)	4HH & 4HI +
F3888	Manage Maintenance Planning Buckets	4HH & 4HI +
F4073	Manage Maintenance Backlog	4HH & 4HI +
F5147	Display Serial Numbers	4HH & 4HI +

Fig. 3: List of new SAP FIORI apps that are available as part of SAP S/4HANA 2021 FPS0

[Blog Link - 2021 EAM Fiori App Enhancements](#)



CONTACT DETAILS

greg.capps@gapac.com