



SAP S/4HANA PoC a different project

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Agenda



Gassco implemented SAP during 2001 – 2002 and had a go live in 2003 for Gassco Norway. Taking over the operatorship of the receiving facilities in 2007 gave the responsibility for four terminals in Europe.

The following implementation for the terminals was a direct carve out of Statoil's SAP, but adapting SAP standard functionality and was finished in 2007.

- The Customer
- The Vendor
- The Stakeholders
- The Scope
- The Project
- The Solution
- The Workshops
- The Result
- The Learning
- The Way Forward



The Customer

“As operator, Gassco is responsible for safe and efficient gas transport from the Norwegian continental shelf and will be a leading gas transporter in Europe.”

Gassco currently has just over 350 employees. It has a functionally structured linear organisation supplemented by certain staff and support services.

Base values: Gassco - on TRACK

T - Transparent

R - Respectful

A - Accountable

C - Challenging

K - Knowledgeable



The Vendor



“A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms”

Capgemini is a multicultural company of over 250 000 team members and 18 000 SAP consultants in more than 40 countries

Capgemini’s seven core values:

- **Honesty**
- **Boldness**
- **Trust**
- **Freedom**
- **Fun**
- **Modesty**
- **Team spirit**



The Stakeholders

What doesn't work?





Stakeholder's analysis

- Gassco has different practices at the terminals to do the same job
- 25 – 30% Time on Tool, meaning that too much time is spent on administrative tasks
- SAP user interface is outdated and has a high threshold for use
- There has been identified a need for real-time reporting rather than quarterly post-reporting
- Poor meta data in SAP could prove evidence of poor work processes and poor user experience
- Better integration with 3rd party systems. E.g. equipment master (SPO)
- Utilise the full potential from SAP to avoid complex integration to 3rd party systems
- SAP Business Suite ECC 6.0 will meet end of maintenance in 2025. At some point the SAP systems will have to be migrated from ECC 6.0 to S/4HANA
- Internal expertise on SAP is not high. End users will be able to give more accurate input with a better user interface and user experience than today's SAP GUI can give
- SAP is a critical system for Gassco's operating terminals



The Scope

Make it work





Benefits of a proof of concept approach

Controlled change management

- Direct involvement of end users before the project starts
- Heads up on what's coming
- Present selling points to the business
- The users can influence on how the project should be rolled out and with which functionality
- Gives an understanding of capabilities and limitations of S/4HANA
- “Try before you buy”



Benefits of a proof of concept approach

Understanding Gassco

- A clear understanding of Gassco's requirements
- Learn from mistakes
- SAP solution landscapes are different
- Reduction in the overall risk of project failure
- Gassco users wanted own data – not a generic demo system



Fiori UX

Fiori Launchpad with Fiori apps

- Fiori UX is new to Gassco
- Explain and showcase
- Fiori role-based approach

Finance / MM

New functionality in S/4HANA

- Finance table
- New functionality
- Joint Venture
- Conversion of Business Partners

Plant Maintenance

Fiori look and feel on transaction codes

- Gassco terminals needed to be included
- How will transaction codes executed from Fiori Launchpad look like?



An industry user experience standard

10 784 S/4HANA apps

749 SAP Business Suite apps

11 783 apps with mixed content



Migrate from SAP Business Suite to S/4HANA
“simplified” processes

Business Partners

New General Ledger

Joint Venture



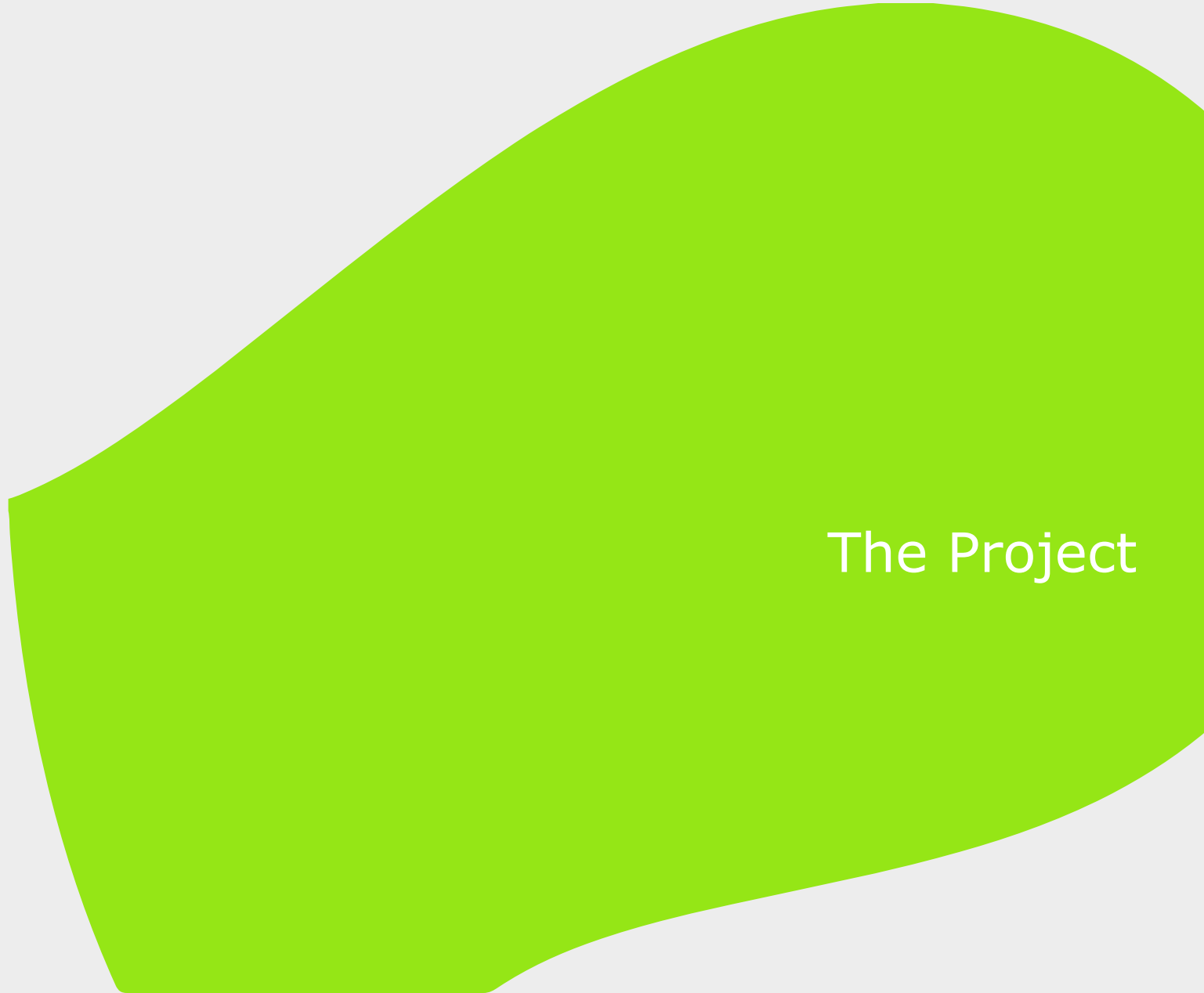
Plant Maintenance

No changes to PM processes in S/4HANA

Simplify user interface

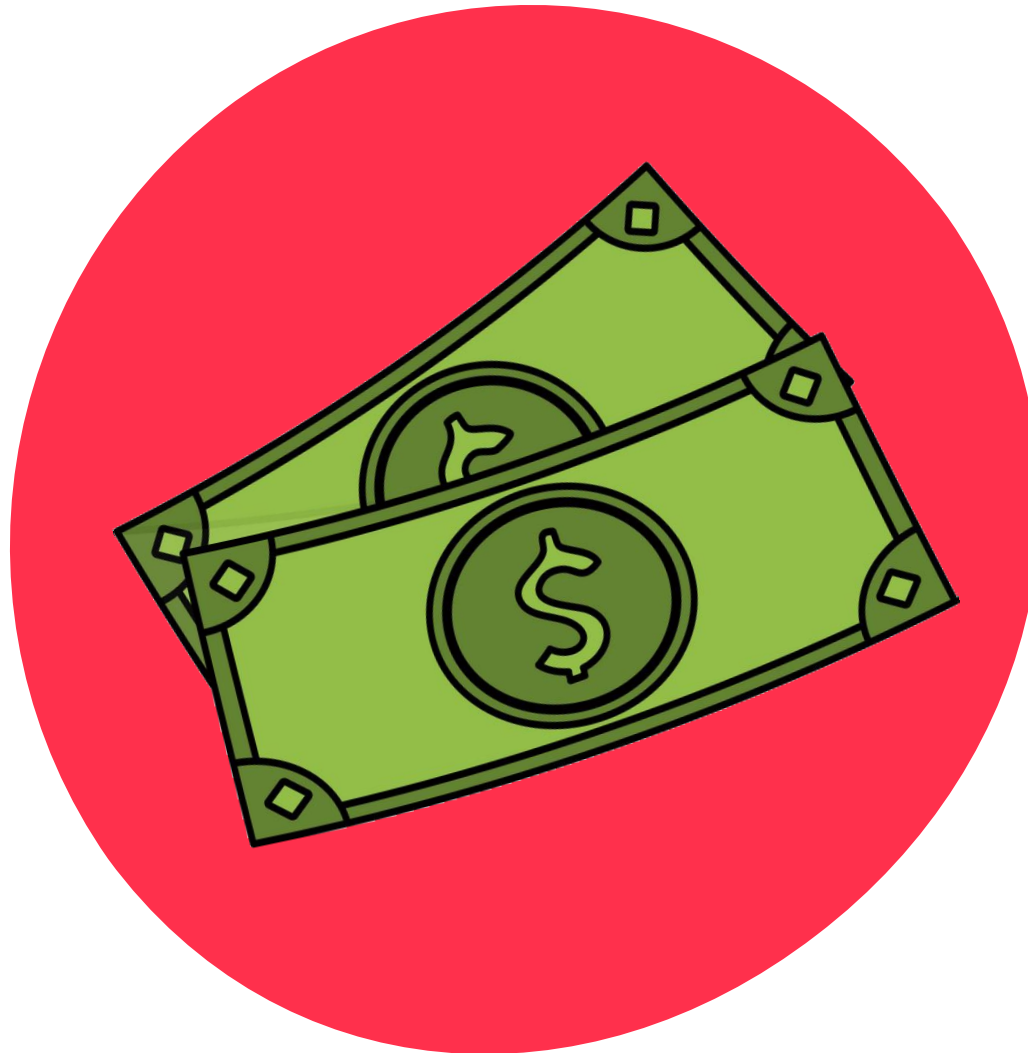
Clean data

Create common processes

A large, bright green abstract shape, resembling a stylized leaf or a curved wedge, occupies the right half of the image. It has a smooth, flowing edge on the left side that meets the gray background, and a more defined, slightly curved top and bottom edge on the right. The color is a vibrant, saturated green.

The Project

Make it cheap





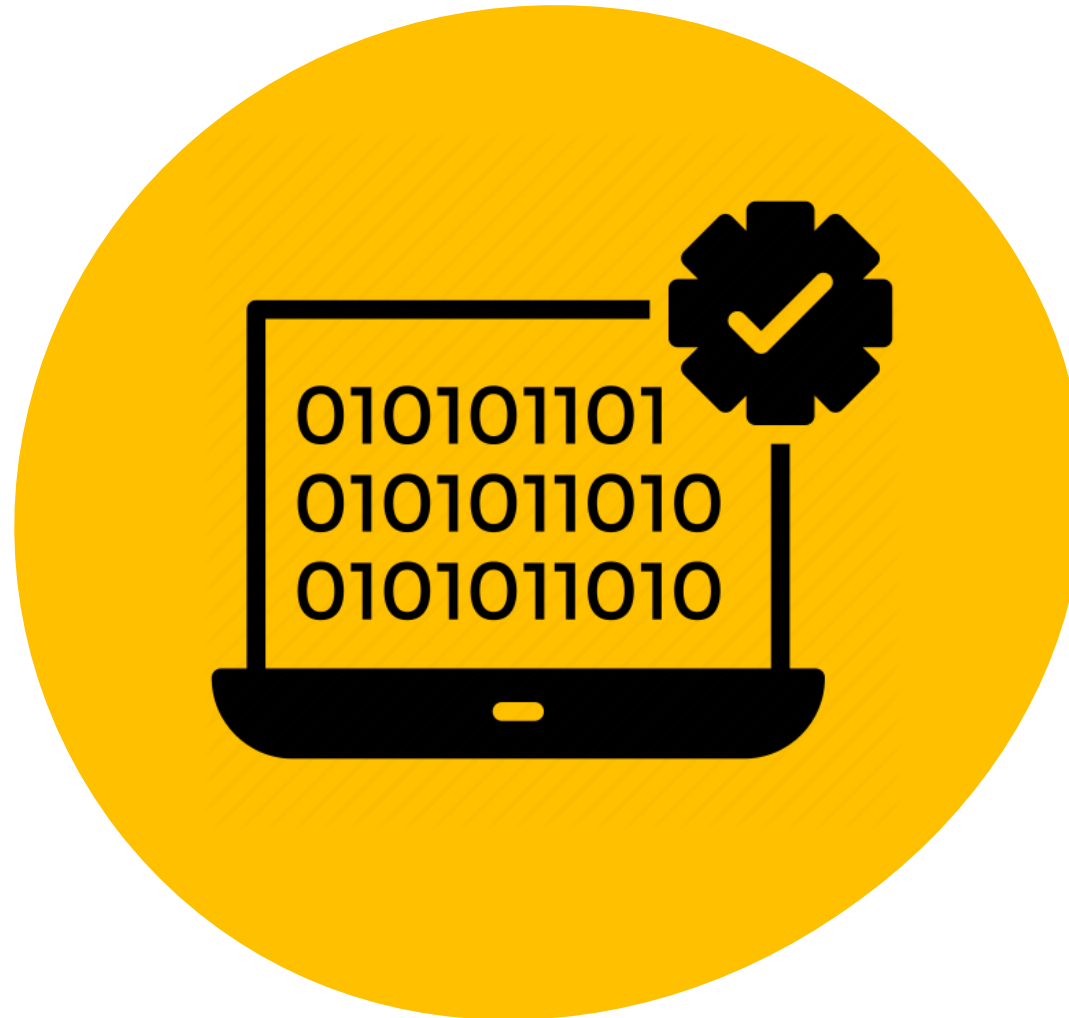
Migrate from SAP Business Suite to S/4HANA – core activities

- Identified hardware gap
- Identified process gap between ECC 6.0 and S/4HANA
- Converted non-Unicode system to Unicode system
- Created sandbox instance with HANA database
- Imported ECC system to sandbox instance with HANA database
- Migrated from SAP Business Suite business processes to S/4HANA simplified processes
- Configuration of SAP Fiori Launchpad
- Identified apps to support current process areas
- Configured Fiori Catalogue and Groups
- Configured Fiori display roles based on Catalogue and Groups
- Unit testing of process areas
- Integration testing of process areas
- Release solution to super users
- Test 3rd party integrations

A large, bright green abstract shape, resembling a stylized leaf or a curved arrow, occupies the right half of the image. It has a smooth, flowing edge and a solid, vibrant green color. The background is a light gray.

The Solution

A complete S/4HANA system





What did the solution contain?

Hardware

- Virtual server with specification as a HANA database
- A migrated ECC system with familiar datasets

Software

- S/4HANA release 1908
- Migrated finance processes
- Some migrated SCM processes

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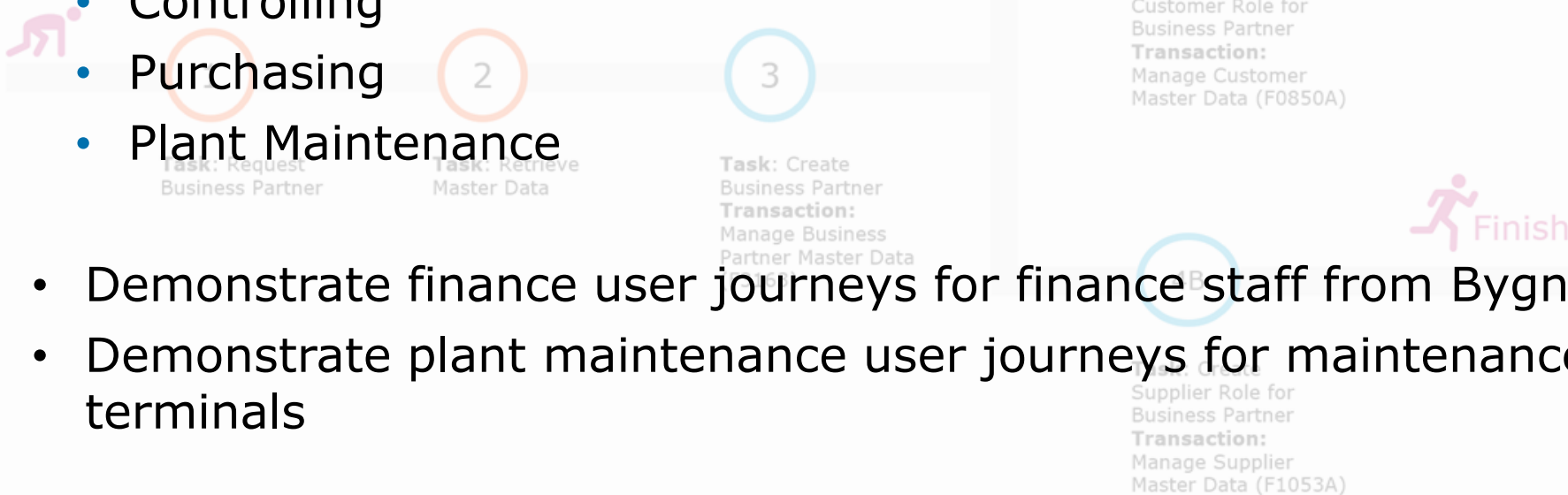
The Workshops



User journeys and workshop

- Identify which Fiori apps that covered today's functionality in SAP Business Suite
- Create user journeys on new S/4HANA functionality in the following areas

- Finance
- Controlling
- Purchasing
- Plant Maintenance



- Demonstrate finance user journeys for finance staff from Bygnes and terminals
- Demonstrate plant maintenance user journeys for maintenance staff from the terminals



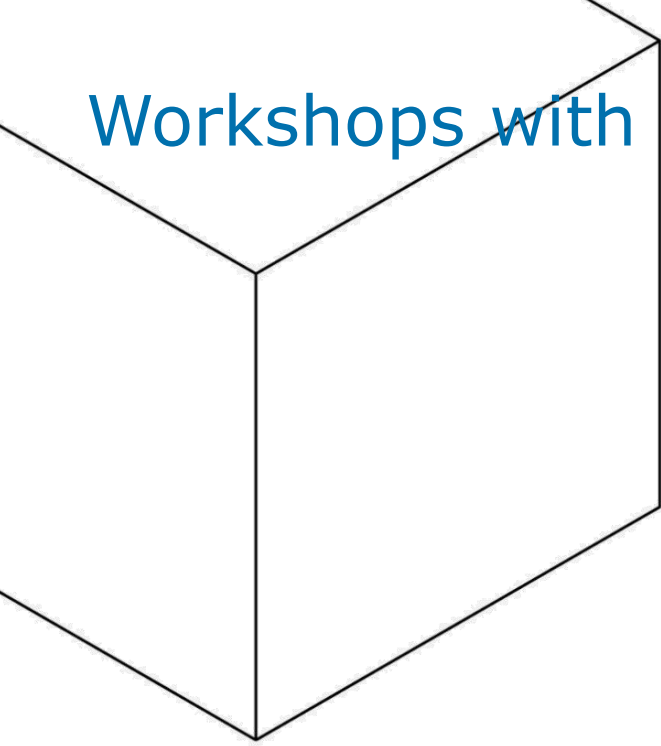
Employee - Master Data Request



Master Data Specialist



Workshops with Gassco Norway and the terminals



The
ONE GASSCO STANDARD
cubic metre

- We got together in Amsterdam to demonstrate the system
- Our aim was to get an overview of "as-is"
- Find common ground among users
- Trying to achieve one process



The Results

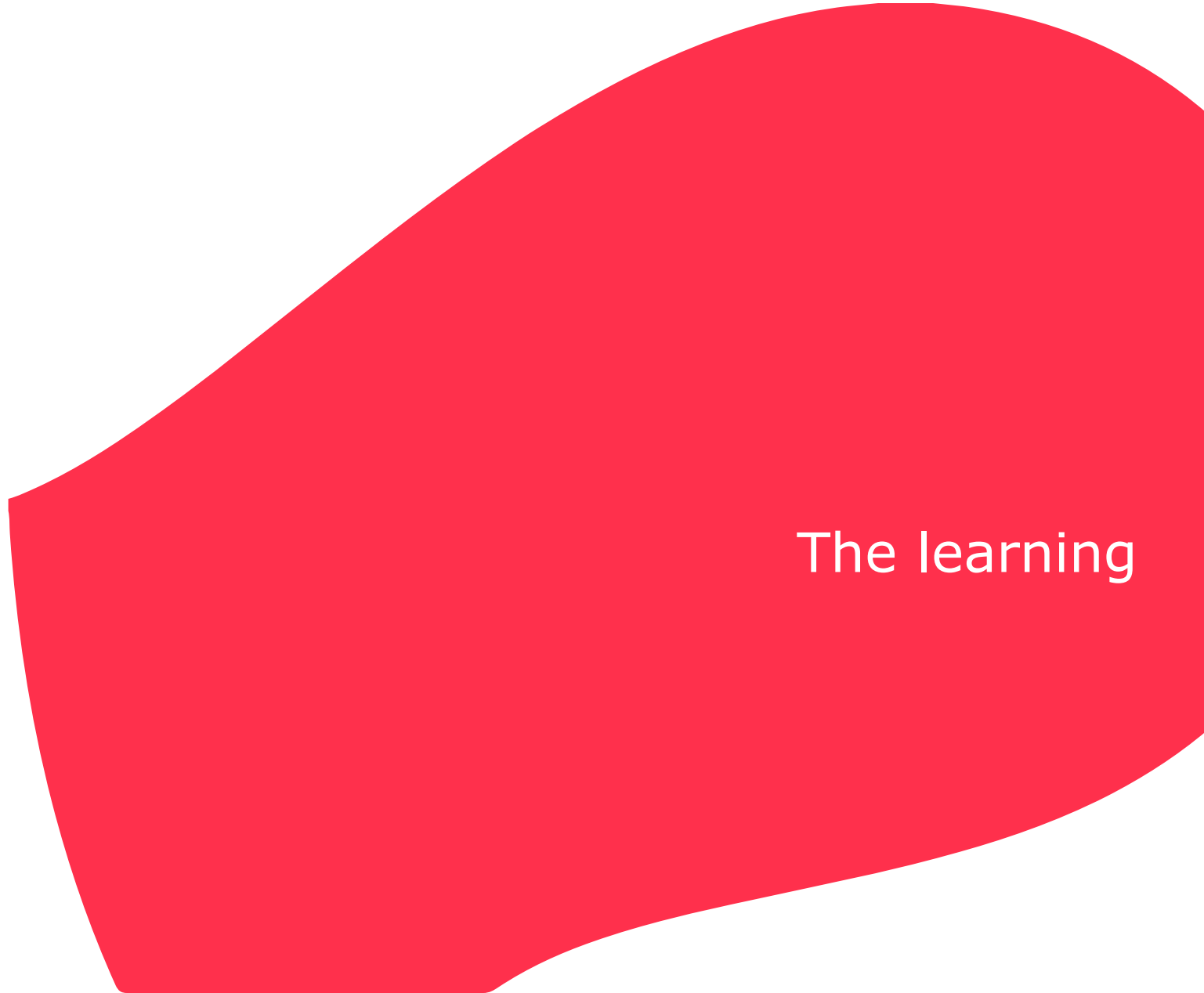
What did it give us?





Results from the PoC

- Future focus on common processes
- Sandbox to play in and create future PoC's
- A test environment to test 3rd party integrations
- Focus on work processes
- Can be considered as a dry-run before the actual upgrade



The learning

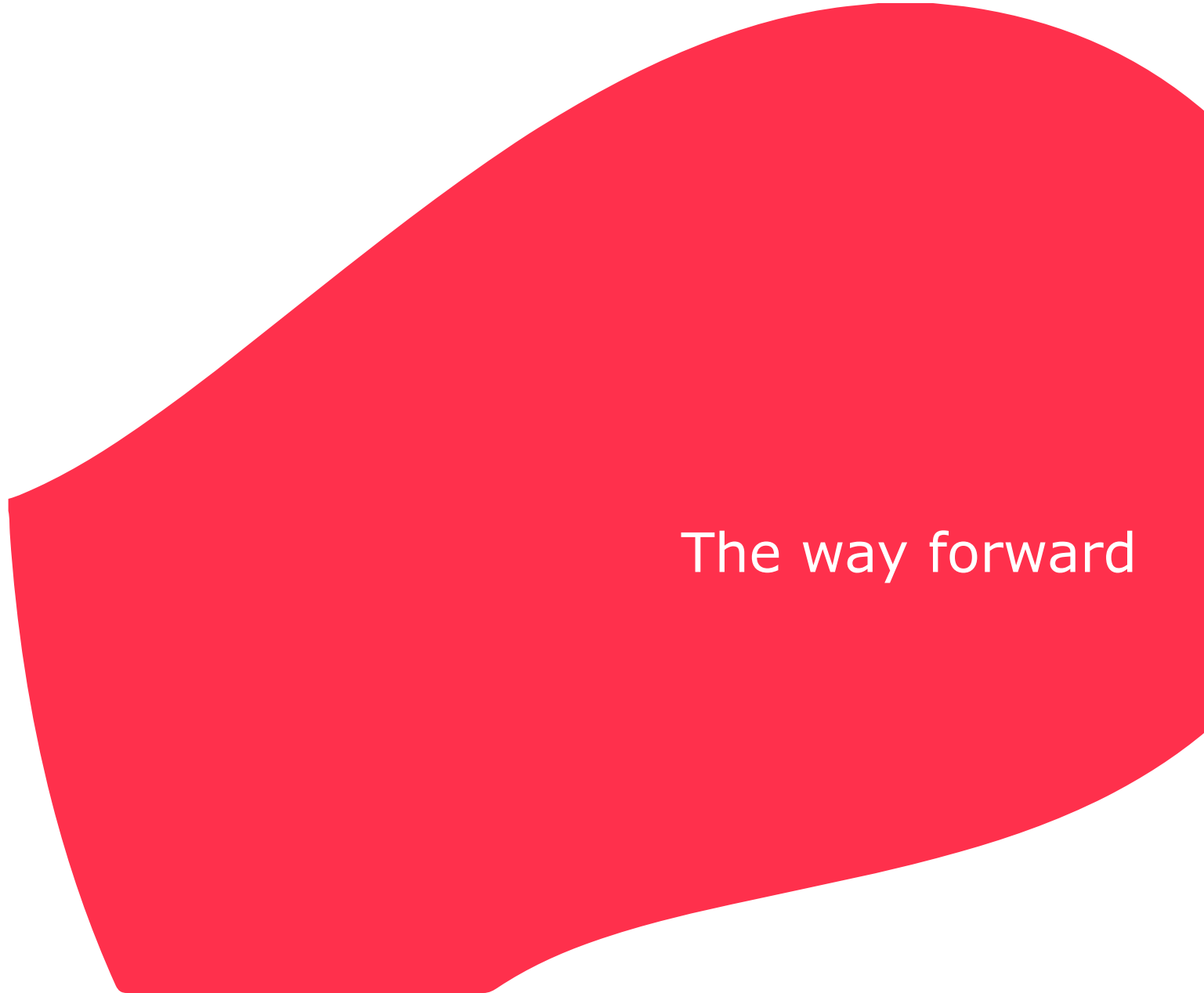
Learning by PoC





What we learned

- Business partners should be set up in SAP Business suite (old ECC)
- Mixed content look delightful with Belize theme
- EyeShare needs to be upgraded for S/4HANA
- Gassco users are ready for a change!
- The data sets in the current system are not ready for an upgrade
- Technical challenging in an on-premise environment
- "Information overload" overwhelming amount of apps
- Many ways of handling a specific process
- Need to revisit the roles and authorizations strategy before migrating
- Gassco has a low volume of custom code which gives reduced risk during the implementation



The way forward

The road to S/4HANA





- ECC 6.0 will be migrated to run on HANA database
- ECC 6.0 will run on compatibility mode on HANA database
 - Can continue to work as today
 - Can run Fiori apps side-by-side
- Will upgrade process area by process area





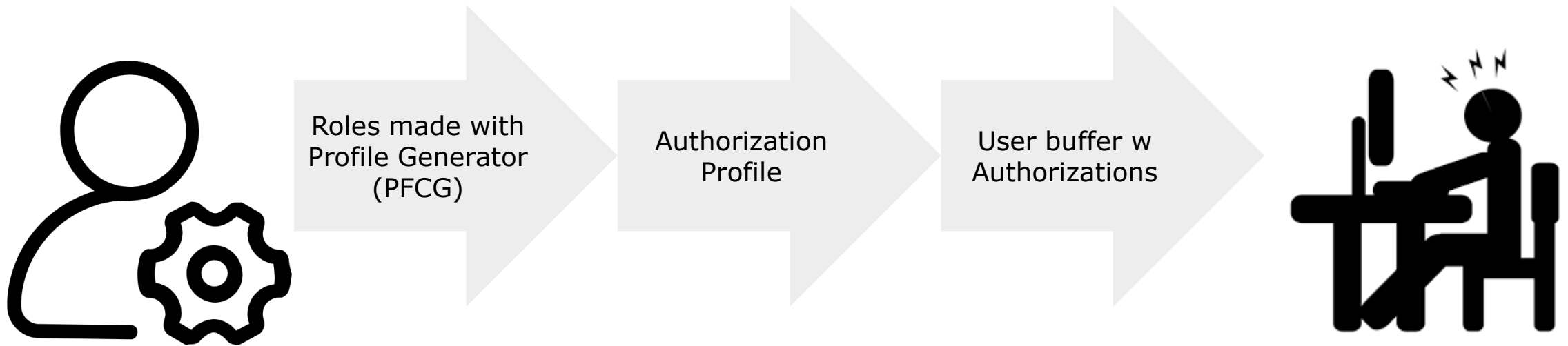
SAP S/4 HANA Security

Agenda



- A common SAP authorization issue
- SAP Fiori Role Concept
- S/4 HANA Security Case
- Actual update in SAP Security

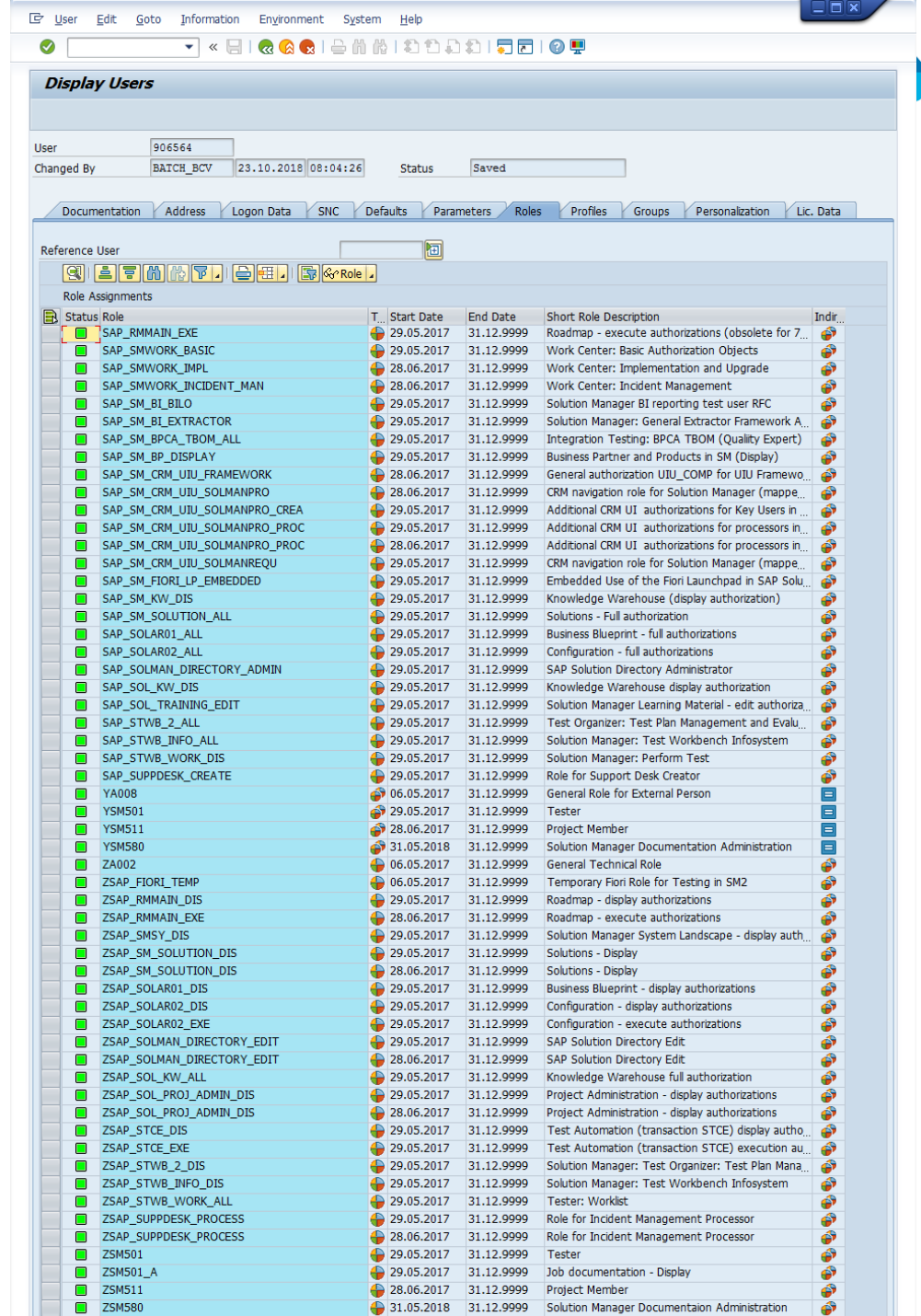
Security Role components



Progress of an SAP authorization role

Example

- Solution Manager user account with access to
 - User Testing
 - Documentation Admin
- Why does this user need 56 roles to do two things in Solution Manager?

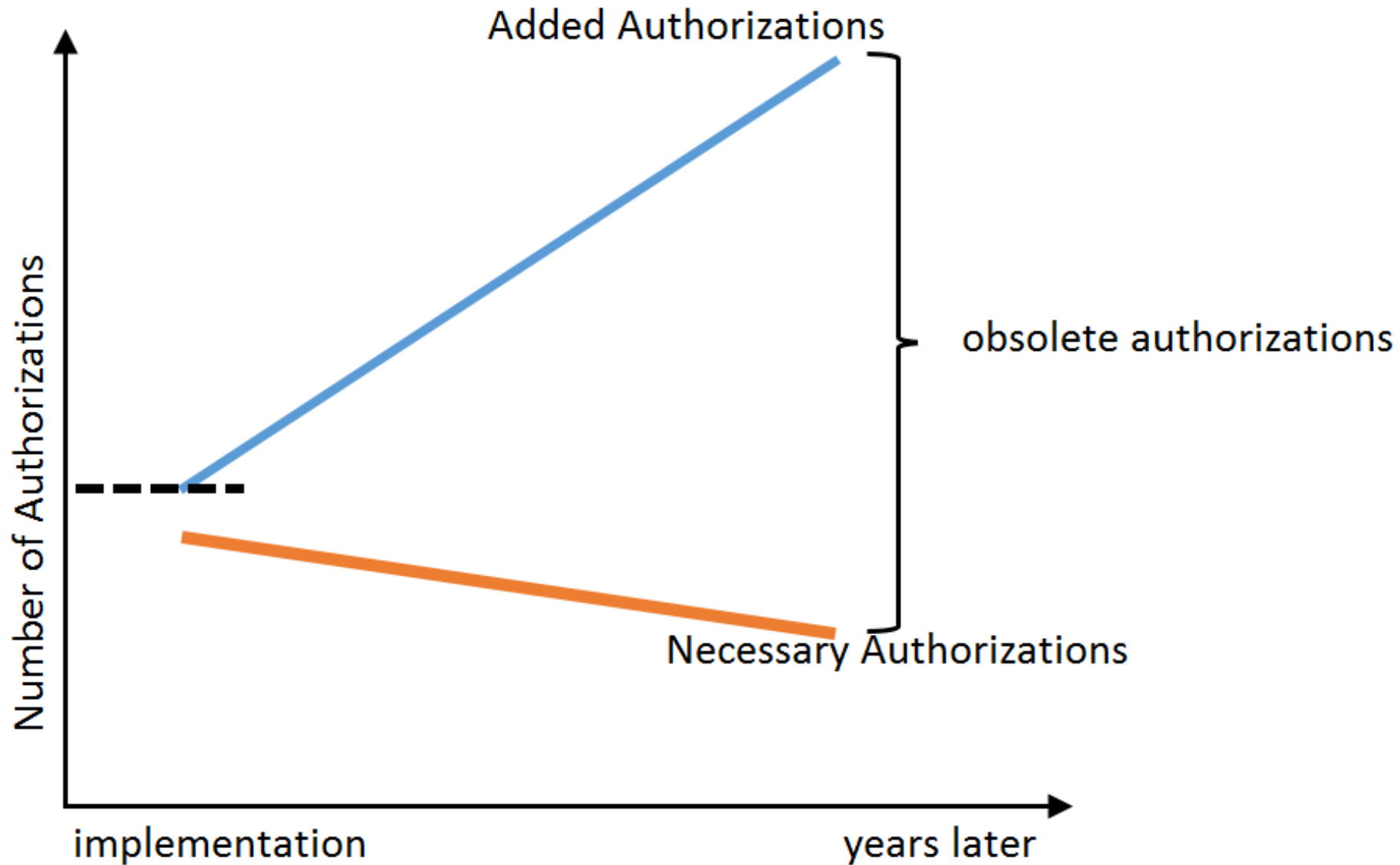


The screenshot shows the 'Display Users' transaction in SAP. The user '906564' is selected, and the 'Roles' tab is active. The table below lists the roles assigned to this user.

Status	Role	T...	Start Date	End Date	Short Role Description	Indir...
	SAP_RMMAIN_EXE		29.05.2017	31.12.9999	Roadmap - execute authorizations (obsolete for 7...	
	SAP_SMWORK_BASIC		29.05.2017	31.12.9999	Work Center: Basic Authorization Objects	
	SAP_SMWORK_IMPL		28.06.2017	31.12.9999	Work Center: Implementation and Upgrade	
	SAP_SMWORK_INCIDENT_MAN		28.06.2017	31.12.9999	Work Center: Incident Management	
	SAP_SM_BI_BILO		29.05.2017	31.12.9999	Solution Manager BI reporting test user RFC	
	SAP_SM_BI_EXTRACTOR		29.05.2017	31.12.9999	Solution Manager: General Extractor Framework A...	
	SAP_SM_BPCA_TBOM_ALL		29.05.2017	31.12.9999	Integration Testing: BPCA TBOM (Quality Expert)	
	SAP_SM_BP_DISPLAY		29.05.2017	31.12.9999	Business Partner and Products in SM (Display)	
	SAP_SM_CRM_UIU_FRAMEWORK		28.06.2017	31.12.9999	General authorization UIU_COMP for UIU Framewo...	
	SAP_SM_CRM_UIU_SOLMANPRO		28.06.2017	31.12.9999	CRM navigation role for Solution Manager (mappe...	
	SAP_SM_CRM_UIU_SOLMANPRO_CREA		29.05.2017	31.12.9999	Additional CRM UI authorizations for Key Users in ...	
	SAP_SM_CRM_UIU_SOLMANPRO_PROC		29.05.2017	31.12.9999	Additional CRM UI authorizations for processors in...	
	SAP_SM_CRM_UIU_SOLMANPRO_PROC		28.06.2017	31.12.9999	Additional CRM UI authorizations for processors in...	
	SAP_SM_CRM_UIU_SOLMANREQU		29.05.2017	31.12.9999	CRM navigation role for Solution Manager (mappe...	
	SAP_SM_FIORI_LP_EMBEDDED		29.05.2017	31.12.9999	Embedded Use of the Fiori Launchpad in SAP Solu...	
	SAP_SM_KW_DIS		29.05.2017	31.12.9999	Knowledge Warehouse (display authorization)	
	SAP_SM_SOLUTION_ALL		29.05.2017	31.12.9999	Solutions - Full authorization	
	SAP_SOLAR01_ALL		29.05.2017	31.12.9999	Business Blueprint - full authorizations	
	SAP_SOLAR02_ALL		29.05.2017	31.12.9999	Configuration - full authorizations	
	SAP_SOLMAN_DIRECTORY_ADMIN		29.05.2017	31.12.9999	SAP Solution Directory Administrator	
	SAP_SOL_KW_DIS		29.05.2017	31.12.9999	Knowledge Warehouse display authorization	
	SAP_SOL_TRAINING_EDIT		29.05.2017	31.12.9999	Solution Manager Learning Material - edit authoriza...	
	SAP_STWB_2_ALL		29.05.2017	31.12.9999	Test Organizer: Test Plan Management and Evalu...	
	SAP_STWB_INFO_ALL		29.05.2017	31.12.9999	Solution Manager: Test Workbench Infosystem	
	SAP_STWB_WORK_DIS		29.05.2017	31.12.9999	Solution Manager: Perform Test	
	SAP_SUPPDESK_CREATE		29.05.2017	31.12.9999	Role for Support Desk Creator	
	YA008		06.05.2017	31.12.9999	General Role for External Person	
	YSM501		29.05.2017	31.12.9999	Tester	
	YSM511		28.06.2017	31.12.9999	Project Member	
	YSM580		31.05.2018	31.12.9999	Solution Manager Documentation Administration	
	ZA002		06.05.2017	31.12.9999	General Technical Role	
	ZSAP_FIORI_TEMP		06.05.2017	31.12.9999	Temporary Fiori Role for Testing in SM2	
	ZSAP_RMMAIN_DIS		29.05.2017	31.12.9999	Roadmap - display authorizations	
	ZSAP_RMMAIN_EXE		28.06.2017	31.12.9999	Roadmap - execute authorizations	
	ZSAP_SMSY_DIS		29.05.2017	31.12.9999	Solution Manager System Landscape - display auth...	
	ZSAP_SM_SOLUTION_DIS		29.05.2017	31.12.9999	Solutions - Display	
	ZSAP_SM_SOLUTION_DIS		28.06.2017	31.12.9999	Solutions - Display	
	ZSAP_SOLAR01_DIS		29.05.2017	31.12.9999	Business Blueprint - display authorizations	
	ZSAP_SOLAR02_DIS		29.05.2017	31.12.9999	Configuration - display authorizations	
	ZSAP_SOLAR02_EXE		29.05.2017	31.12.9999	Configuration - execute authorizations	
	ZSAP_SOLMAN_DIRECTORY_EDIT		29.05.2017	31.12.9999	SAP Solution Directory Edit	
	ZSAP_SOLMAN_DIRECTORY_EDIT		28.06.2017	31.12.9999	SAP Solution Directory Edit	
	ZSAP_SOL_KW_ALL		29.05.2017	31.12.9999	Knowledge Warehouse full authorization	
	ZSAP_SOL_PROJ_ADMIN_DIS		29.05.2017	31.12.9999	Project Administration - display authorizations	
	ZSAP_SOL_PROJ_ADMIN_DIS		28.06.2017	31.12.9999	Project Administration - display authorizations	
	ZSAP_STCE_DIS		29.05.2017	31.12.9999	Test Automation (transaction STCE) display autho...	
	ZSAP_STCE_EXE		29.05.2017	31.12.9999	Test Automation (transaction STCE) execution au...	
	ZSAP_STWB_2_DIS		29.05.2017	31.12.9999	Solution Manager: Test Organizer: Test Plan Mana...	
	ZSAP_STWB_INFO_DIS		29.05.2017	31.12.9999	Solution Manager: Test Workbench Infosystem	
	ZSAP_STWB_WORK_ALL		29.05.2017	31.12.9999	Tester: Worklist	
	ZSAP_SUPPDESK_PROCESS		29.05.2017	31.12.9999	Role for Incident Management Processor	
	ZSAP_SUPPDESK_PROCESS		28.06.2017	31.12.9999	Role for Incident Management Processor	
	ZSM501		29.05.2017	31.12.9999	Tester	
	ZSM501_A		29.05.2017	31.12.9999	Job documentation - Display	
	ZSM511		28.06.2017	31.12.9999	Project Member	
	ZSM580		31.05.2018	31.12.9999	Solution Manager Documentaion Administration	



Common development over years





- **Fiori** - SAP has developed Fiori Apps based on UI5 industry standard
- **Tile** –represents an app on the SAP Fiori launchpad home page
- **Group** - Is a special collection of tiles for specific users. To add tiles to a group, they need to be a part of some catalog first. A group can have tiles from more than one catalog
- **Catalog** - Is a collection of all the available tiles for a role



Role	
Role	ZTEST ☐ Obsolete
Description	Demo
Target System	☐ No destination

☒ Description
 ☒ Menu
 ☒ Authorizations
 ☒ User
 ☒ Personalization

SAP Fiori Tile Catalog
From Menus
Additional Activities
Other Node Details
Menu Options

Hierarchy

- ▼ Role Menu
 - X-SAP-UI2-CATALOGPAGE:SMTestManagement?DEST_FES=&ROLE_ORIGIN=SM2CLI801&

Node Details

Type	SAP Fiori Tile Catalog
Object	X-SAP-UI2-CATALOGPAGE:SMTestManagement?DEST_FES=...
Text	Test Suite

Build Role for SolMan tester



Display Roles

Other role | Inheritance | Information

Role: ZSM501 ☐ Obsolete

Description: Tester

Target System: ☐ No destination

Description | **Menu** | Authorizations | User | Personalization

Transaction | From Menus | Additional Activities | Other Node Details | Menu Options

Hierarchy

- Role Menu
 - SAP Solution Manager
 - NWBC Control Sequence - Do Not Change
 - SAP Linkis
 - X-SAP-UI2-CATALOGPAGE:ITSM_EQUINOR?DESC_TYPES=&ROLE_ORIGIN=SM2CLI801&AUTI
 - IT Service Management -
 - Test Suit -
 - Test Suit -**
 - Project and Process Management
 - Project and Process Management

Node Details

Type	SAP Fiori Tile Group
Object	TEST_SUIT
Text	Test Suit -

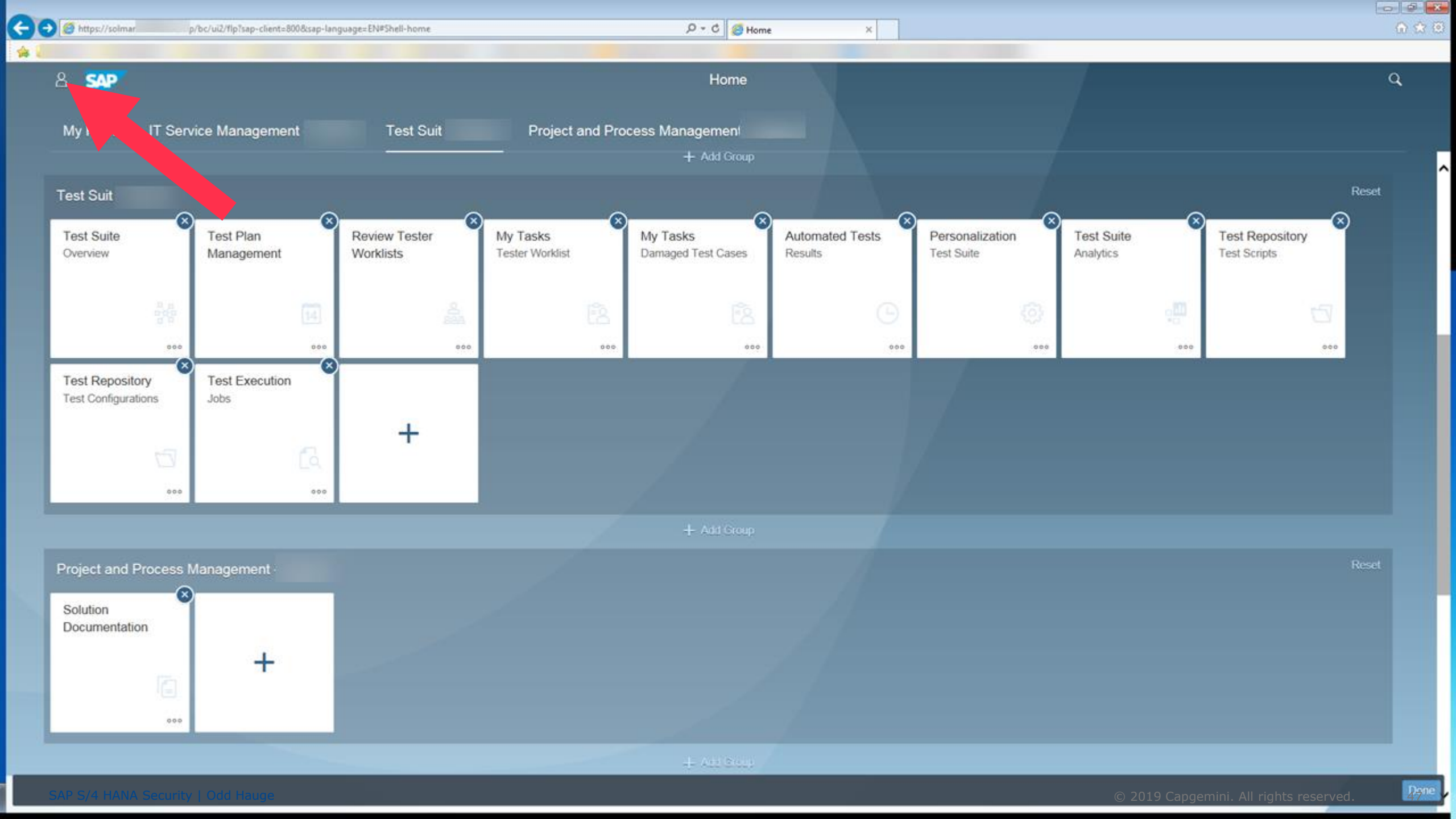




Build a Fiori role

- Use best practice roles given from SAP
- Give only a minimum of available tiles to the users for simplicity
- Should not customize app
- Start with SAP standard release

- If standard content in catalogue is too much, only include some of the tiles in the group
- The end users can then add own tiles from the catalogue



Home

My SAP IT Service Management Test Suite Project and Process Management

+ Add Group

Test Suite

Reset

Test Suite Overview

...

Test Plan Management

...

Review Tester Worklists

...

My Tasks Tester Worklist

...

My Tasks Damaged Test Cases

...

Automated Tests Results

...

Personalization Test Suite

...

Test Suite Analytics

...

Test Repository Test Scripts

...

Test Repository Test Configurations

...

Test Execution Jobs

...

+

+ Add Group

Project and Process Management

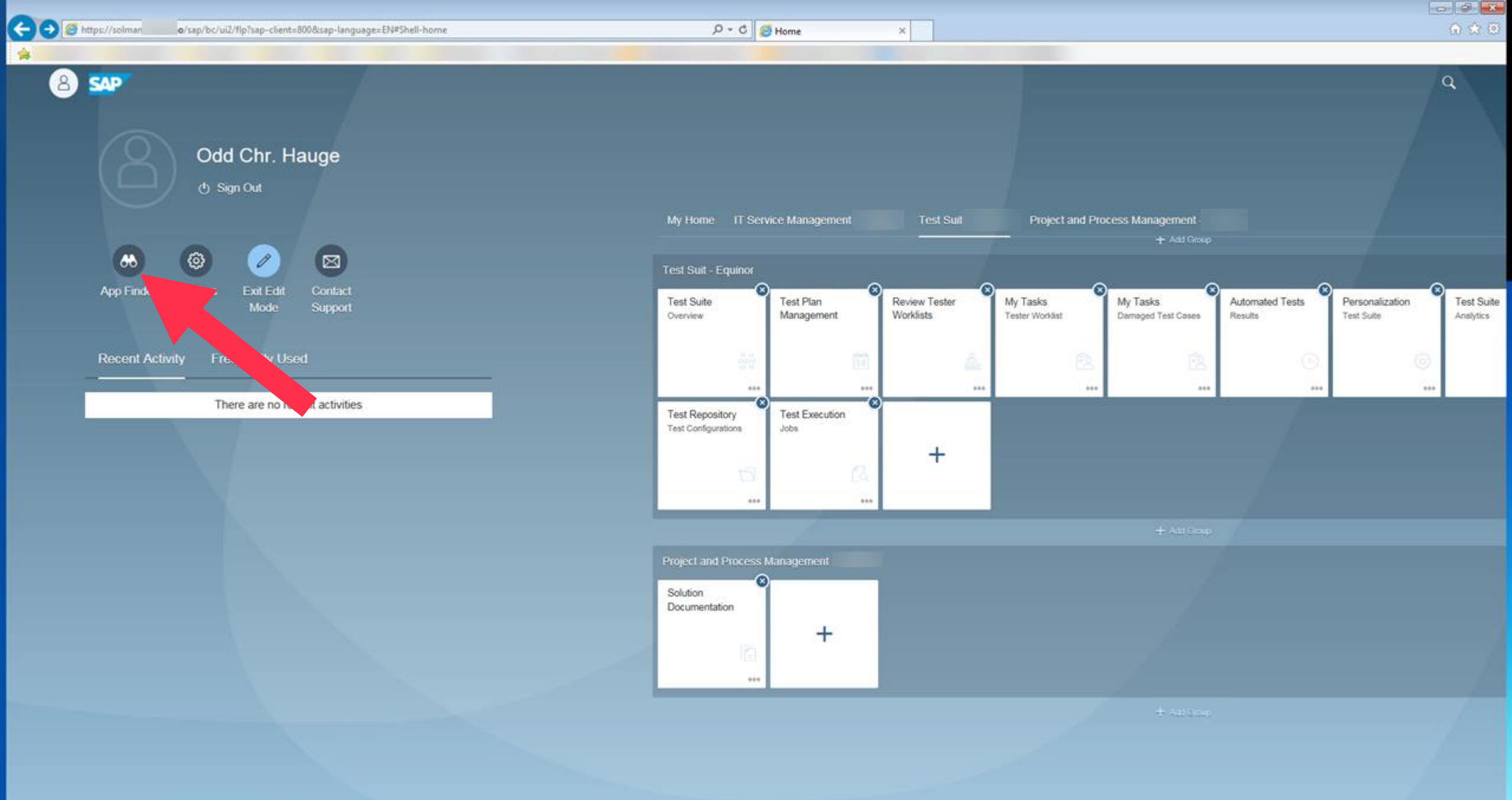
Reset

Solution Documentation

...

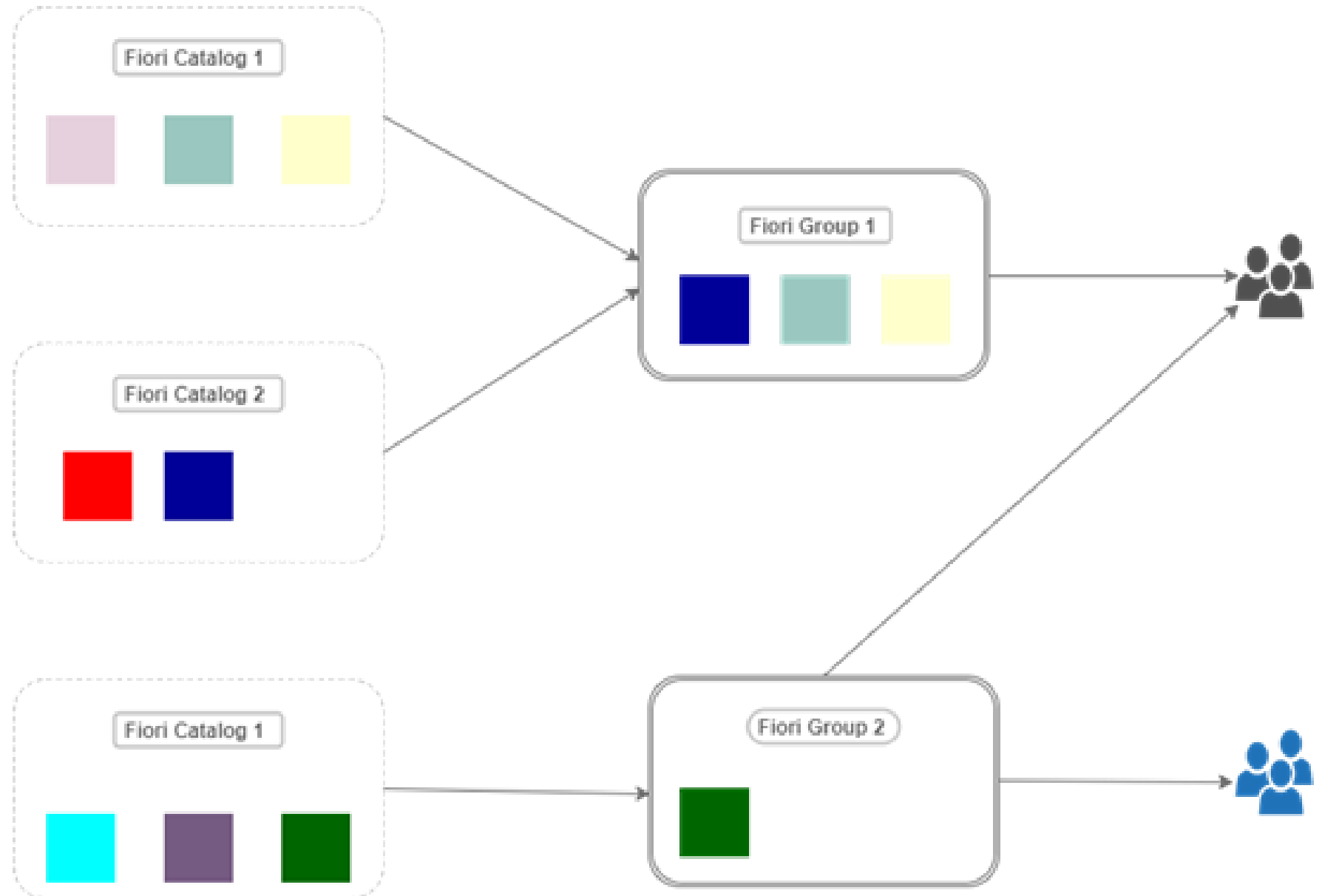
+

+ Add Group





Layout of catalogs, groups and users





Tables - the Terrain

PFCG – the Map you have to draw

/UI2/PB_C_PAGE

/UI2/PB_C_PAGEM

/UI2/PB_C_PAGET

/UI2/PB_C_PAGEMT

AGR_1251

AGR_BUFFI

AGR_HIER

AGR_HIERT

TADIR





SAP Resources to build Fiori roles

[https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/#/detail/Apps\('F1353'\)/W20](https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/#/detail/Apps('F1353')/W20)

The following sections list app-specific data required to configure the app:

SAPUI5 Application

The ICF nodes for the following SAPUI5 application must be activated on the front-end server:

Component	Technical Name	Path to ICF Node	SAP UI5 Component
SAP UI5 Application	AI_MY_INCIDENTS	/sap/bc/ui5_ui5/sap/ai_my_incidents	sm.itsm.myincidents

OData Service(s)

The following OData services must be activated on the front-end server
Users require PFCG authorization for the front-end and back-end systems.

OData Service	Version	Software Component Version	Back-End Authorization Role (PFCG)
AI_CRM_GW_MYMESSAGE_SRV	0001	ST 720	SAP_SUPPDESK_CREATE

SAP Fiori Launchpad

You require the following data to give users access to the app in the SAP Fiori launchpad.

Technical Configuration

Technical Catalog	SAP_STUI_ITSM_MYINC_TC
Technical Catalog Description	SAP Solution Manager Incident Management
PFCG Role for Technical Catalog	SAP_STUI_ITSM_MYINC_TCR
SAPUI5 Application	AI_MY_INCIDENTS



Main message

- Keep authorization concept separate from Fiori apps
- **Make it simple**



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