

IAGM Whitepaper

SAP Activate & Authorizations

February 2021



What's the question?

Whitepaper Subject

With SAP R/3 officially being replaced by S/4HANA end of 2027 all SAP R/3 customers and all new SAP customers for SAP S/4 will have to strategize and plan when and how to approach their individual journey to S/4HANA.

SAP Activate is the common reference framework provided by SAP to support this journey from existing R/3 landscapes or other Non-SAP-predecessors.

As with every IT-solution journey, the migration or design, implementation, testing and go live of authorizations is a mandatory part of the baggage.

Topics & Chapters

In the following chapters we will:

- give you an introduction into what SAP Activate is and how it relates to authorizations, as well as 4 deep dives into
- The specific integration of the SAP Activate Plan with authorization phases and activities
- The SAP Activate Agile elements and how to synchronize these with authorization reactions
- The SolMan Solution Documentation of processes and how these can be used in role design
- The SolMan Test Management and how authorization tests can be supported by this

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SAP Activate & Authorizations Introduction



SAP Activate & Authorizations

Overall Activate Introduction



SAP Activate is a methodology created and maintained by SAP, to support implementations of S/4 HANA and other SAP solutions.

It is a combination of SAP Best Practices, Methodology, and SAP Guided Configuration delivered with a reference solution and supported by several SolMan functions.

Activate is a Method

SAP Activate is the successor of the ASAP methodology and SAP Launch methodologies

- Based on use of SAP Best Practices
- Reduced Project Lifecycle with Discover, Prepare, Realize, Deploy and Run phase
- Up to 10 key deliverables per phase, thus easier access to key guides and accelerators
- Blueprint activities replaced with solution validation
- Agile implementation as a default.

Activate is Agile

Agile is applied in SAP Activate as an approach for project elements that require changes to the SAP Standard. It specifically refers to:

- The identification of gaps in the **fit to standard workshops** in the prepare phase prioritizing the gaps as items in the backlog and structuring them into work packages and releases for planning purposes
- The design and implementation of the backlog items in **sprints** in the execute phase
- The testing of changes in **Unit and Epic (String) tests** integrated into the sprints before going into integration tests

Activate is Process Management

SAP makes extensive use of the new Solution Manager 7.2 Solution Documentation for process modelling highly integrated with other SolMan functionalities:

- SolDoc delivers a data model with a process hierarchy referencing to process flowcharts using process steps and executables in separate libraries
- The SolDoc Flows can be populated with best practice content with SAP business process graphical representation of all business processes
- The SolDoc can be integrated with project management, test management as well as change and incident management

Activate is Test Management

SAP is as well using the Solution Manager Test Suite functionality to support the test management from unit via string and integration to user acceptance tests:

- The Test Suite refers to a three level data model with test plan, test packages and test steps
- The Test steps can be directly linked to either nodes in the process hierarchy or process steps in the process library of the Solution Documentation of SolMan
- By linking the test steps to process steps the test suite can directly make use also of the other information of the process steps such as the related executables

SAP Activate & Authorizations

Impact on Authorizations



The Authorizations stream as part of a SAP Activate project, has to provide all project elements & deliverables with regard to users and authorizations for the project as well as steady state.

Thus the authorization approach has to reflect and integrate into the specifics of the SAP Activate method from Method, via Agile and Content to SolMan.

Details on all 4 aspects are then detailed in separate chapters below.

Authorizations integrate with **Method**

- Authorization activities have to be fully aligned with the Activate phases
- Authorization activities have to be aligned with core project activities whenever materials can be used as accelerators for the authorization stream
- Authorization activities have to be planned, so that their deliverables are ready when needed as prerequisites by the core project streams

Authorizations integrate with **Agile**

- For both Agile infused core elements of SAP Activate, “Fit to Standard workshops” and “Sprint workshops”, with direct impact on the authorization design, the authorization stream has to be fully synchronized & integrated
- Integration measures range from an integration of authorization requirements into the Kick Off Trainings for the Streams to the direct participation in the fit to standard workshops

Authorizations integrate with **Process Management**

- The process documentation in the Solution Documentation can be directly used as an orientation for the application role design
- The process documentations process steps can be used as a starting point of the task based application roles
- The executables assigned to the process steps can be assigned to the corresponding application roles
- The flow charts swimlanes can be used as a reference for business roles and application role to business role assignments
- As a long term vision, a regular comparison of changes in the process and role model may be established to identify role change requirements

Authorizations integrate with **Test Management**

- For Test Management the link between Test Steps, Test Users and Business Roles may be maintained directly as an attribute of the test step documentations replacing manual extra test materials outside the test system
- In addition also the functional authorization tests for each executable of each application role could also be defined and documented directly in the test suite

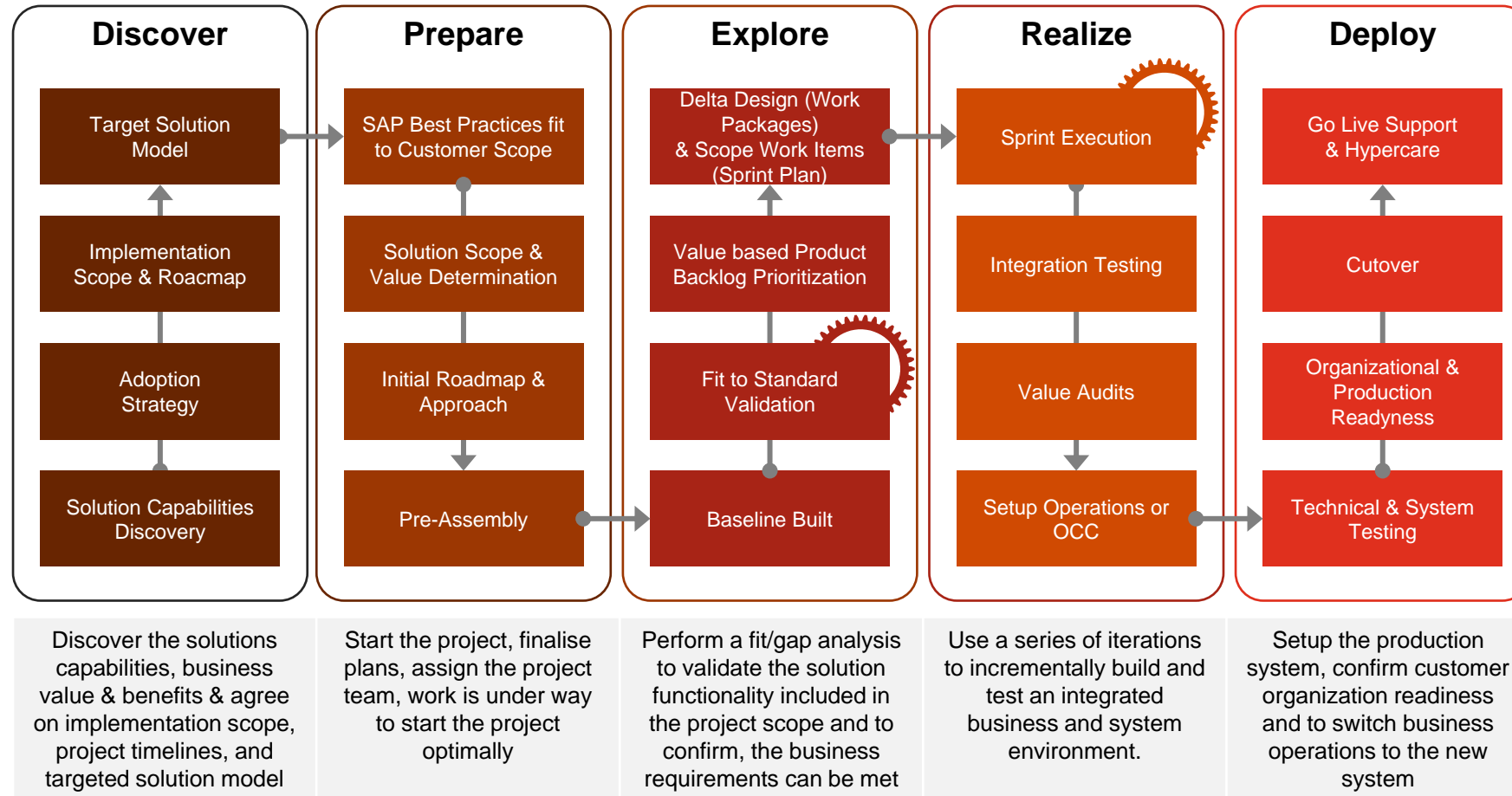
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SAP Activate Method & Authorizations



SAP Activate Method

SAP Activate Phases & Activities



The SAP Activate Methodology refers to an overall project lifecycle with the phases discover, prepare, explore realize and deploy.

For each of the phases we have distilled a couple of core activities and defined a compact definition.

We have created a set of core authorization activities that refer to these phases on the next slide.

In two activities of two phases, SAP Activate makes use of the SCRUM Agile method. This are the fit to standard activity in the explore phase and the sprint executions in the realize phase.

This two agile activities have a major influence on the role design which we address in the next chapter "SAP Activate Agile & Authorizations".

SAP Activate Method

Authorization Phases and Activities (Role Design Focus Variant)



	Discover	Prepare	Explore	Realize	Deploy
Authorization Modelling	<ul style="list-style-type: none"> • Inventorize & gather authorization relevant materials • Identify authorization relevant system configuration 	<ul style="list-style-type: none"> • Align Role Modelling Methods & Materials • Define & Implement Project Application Roles 	<ul style="list-style-type: none"> • Define Application Roles for Business • Implement Application Roles • Functional Test of Application Roles 	<ul style="list-style-type: none"> • Define Business Roles for Business • Implement Business Roles • UAT Business Roles 	<ul style="list-style-type: none"> • Define Cutover & Migration Roles • Define Application & Business-Roles for IT • Create Users and assign Roles
Authorization Governance	<ul style="list-style-type: none"> • Define Core Authorization Team & Execute Kick Off • Specify Authorization Project Scope • Discuss & align Framework Decisions 	<ul style="list-style-type: none"> • Define Authorization Project Plan • Define Extended Authorization Team • Define Standards & Guidelines • Train Role Coordinators 	<ul style="list-style-type: none"> • Define Processes & Organization • Define Process Automations & Improvements • Train Role Developers 	<ul style="list-style-type: none"> • Train User Coordinators • Identify productive Users 	<ul style="list-style-type: none"> • Maintain User to Role Lists • Establish Processes & Organization

The left table shows our standard plan for authorization activities synchronized with the overall SAP activate based project plan.

We have separated the activities for authorization modelling and governance.

The activities assume a role architecture with task based application and job based business roles.

Activities do not include any software selection and implementation tasks although an automation of role and user management is highly recommended.

The process will be supported by our extensive PwC role modelling and governance methodology and tools.

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SAP Activate Agile & Authorizations



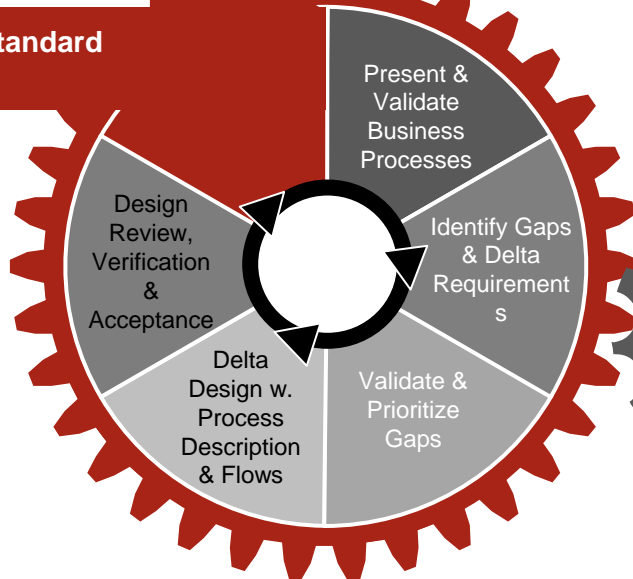
SAP Activate Agile

Integrate Agile Fit-Gap Cycles & Role Design Cycles

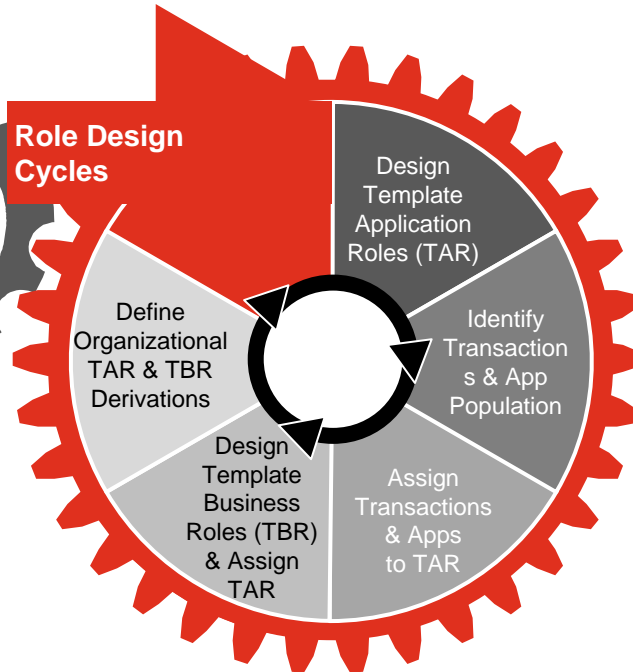


Explore

Fit to Standard Cycles



Role Design Cycles



Core activity to design the process and configuration documents shown before are the Agile Fit Gap Workshops in the Preparation Phase.

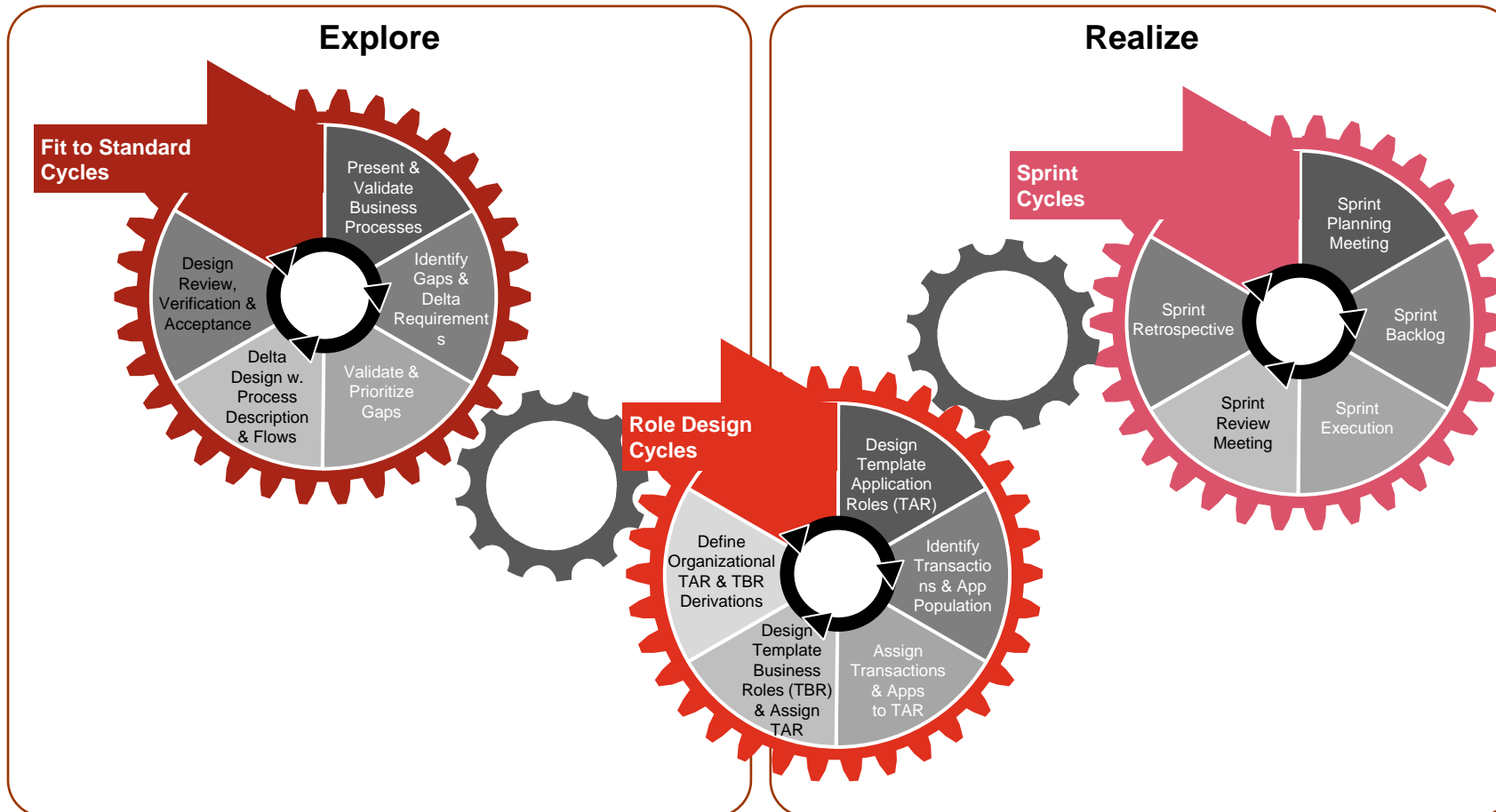
To optimize the usability (completeness and correctness) of the materials, for the role design and to start as soon as possible with the role design, we synchronize or even integrate our authorization specialists into the fit gap and sprint cycles.

With the given delayed start, we suggest to jump start with those streams, that are completely standard followed by the streams with minimum gaps.

All other authorization relevant streams are addressed, after the Gaps are closed in the Sprint Cycles.

SAP Activate Agile

Integrate Role Design with both Agile Fit-Gap & Sprint Cycles



After having already covered the design for all processes identified as being standard in the fit to standard workshops in the explore phase, the challenge in the realize phase is, to stay in synch with all authorization relevant activities managed via work packages in the backlog and worked upon in the agile Sprint workshops.

One of the major challenges is to understand, which of the many backlog items really have an impact on the role design which may trigger a) the creation of new template application roles, b) the addition of new transactions or Apps to existing template application roles and c) the adjustment of authorizations to custom authority checks or d) the adjustment of authorization fields to changed field relevant configurations.

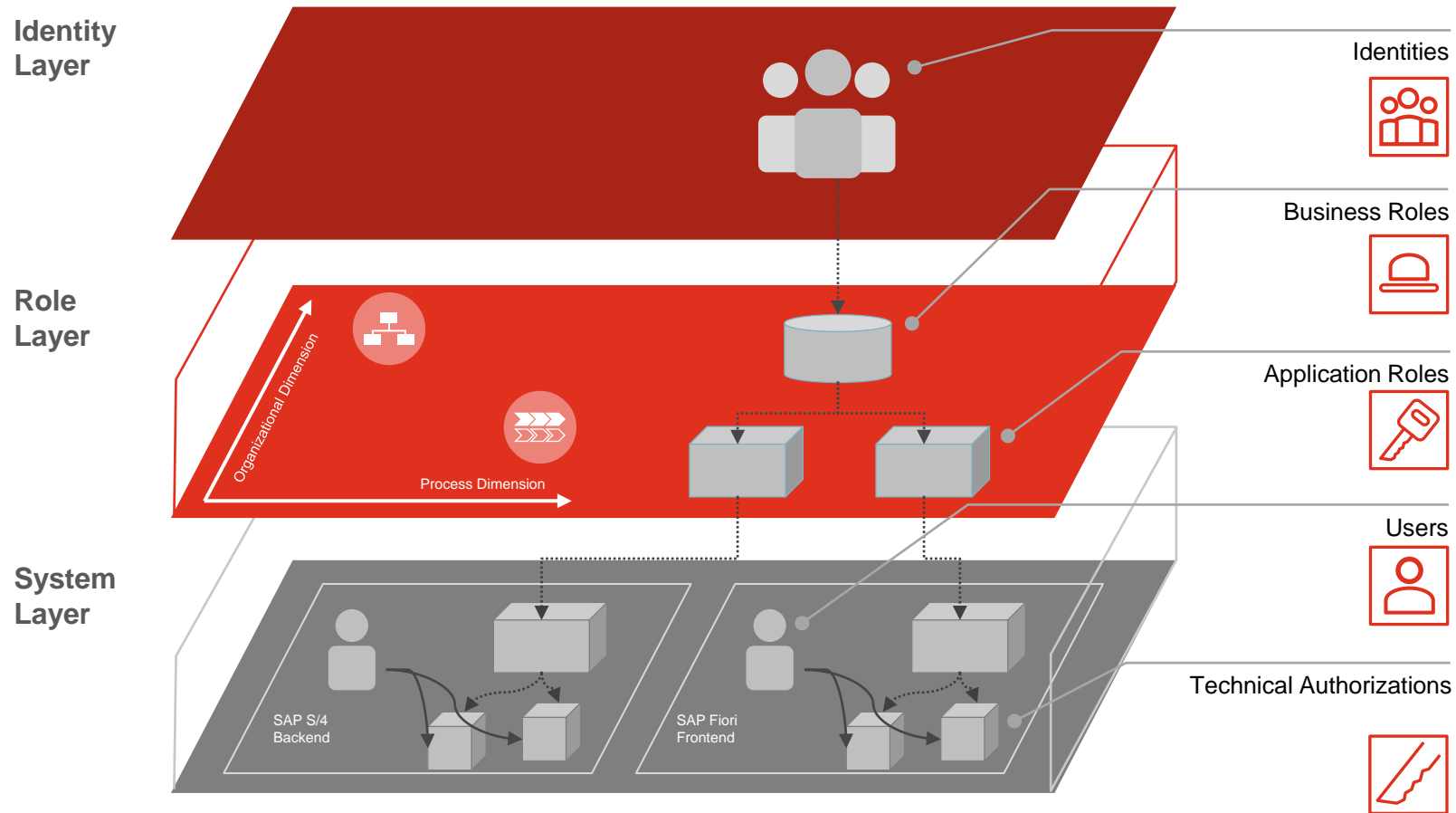
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SAP Process Management & Authorizations



SAP Activate Content

Authorization Model Elements



Since over 20 years we design role concepts following a task based application role & job-based business role approach.

By modelling application roles (single roles in SAP) on task level (combination of objects and activities such as vendor creation) with corresponding Transactions and Apps we can keep this level highly stable.

By modelling business roles (composite roles) on job / function level, we can allow for sufficient flexibility for organizational changes and local specifics via business role to application role assignments.

SAP Activate Content

Synchronizing SAP Activate's Process Model with PwC's Role Model



One of the core deliverables of our SAP Activate based project are process documentations containing swimlanes with process steps and assigned executables (transactions and Apps).

The swimlanes can be an orientation for the business roles, process steps can be transferred to application roles, executables used for role specification and the documentations on organizational configuration on the application and business role derivation.

The better the alignment in the fit gap workshops and the following adoption and specification, the smaller the delta to the role design

Process Model



Process Hierarchy



Swimlanes



Process Steps



Executables



Organizational Values

Role Model

Application Role Hierarchy



Business Roles



Application Roles



Role Specification



Role Derivation



Even under the assumption of a very good quality (completeness and correctness) of the result of the fit gap and sprint cycles, the process and configuration documentation will never deliver the complete role design.

The delta has to be filled using additional data sources such as historical transaction statistics, old role concepts, organizational data from HR and PwC best practices but mostly by adding integrated authorization related activities and deliverables directly in the fit gap and sprint workshops per workstream / process areas of the SAP Activate Method.

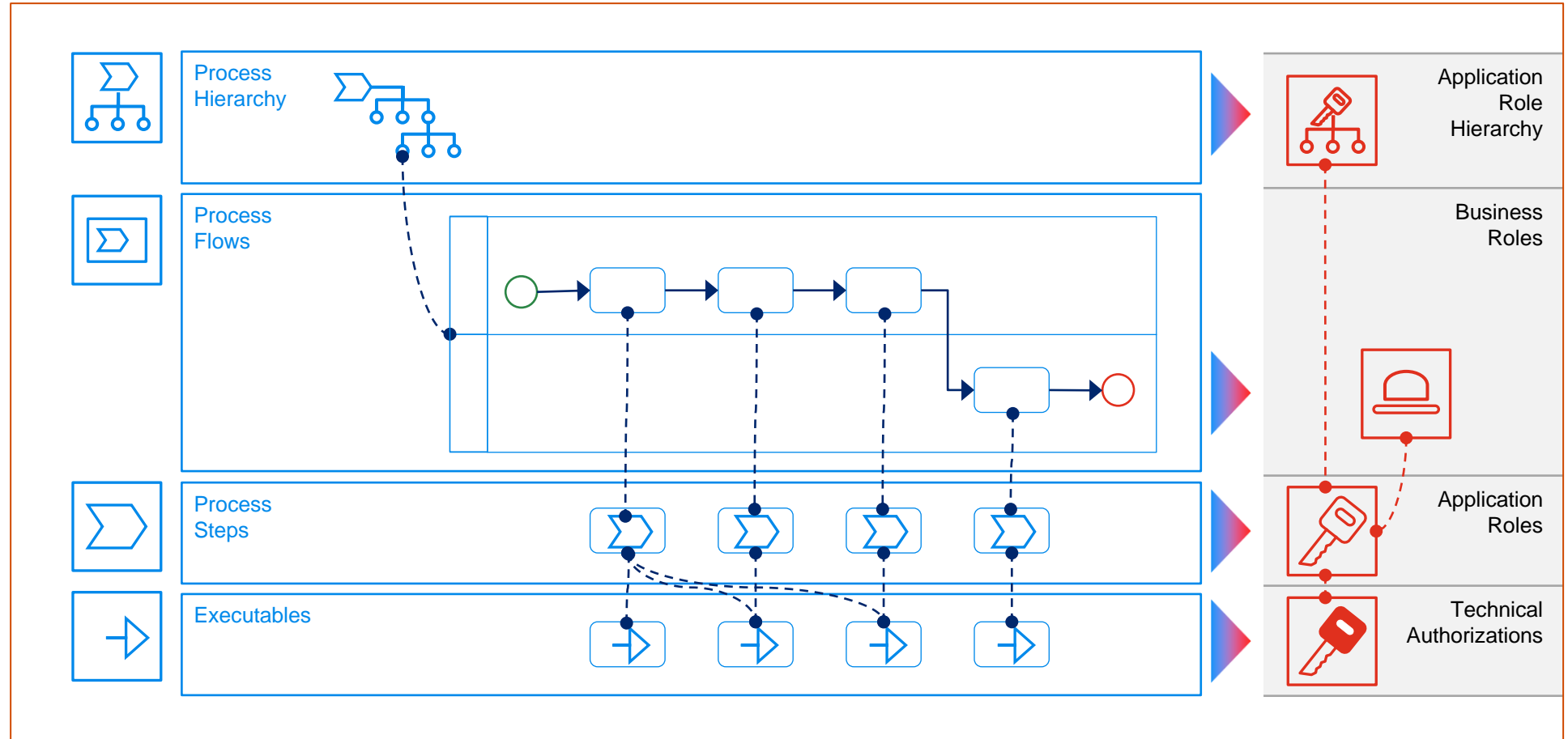
SAP Activate Content

Translations of Process into Role Elements & Relations



Using Process Documentation Elements as the foundation for role designs requires:

- a translation & reduction of a n-level process hierarchy to a 2 level application role hierarchy
- a selection and translation of process steps into task based template application roles
- a Transfer of the Executables per Process Step into the TAR's authorization specification
- an orientation of the swimlanes enduser roles for the derivation of template business roles



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SAP Test Management & Authorizations



SAP Test Management & Authorizations

Authorization Integration Tests

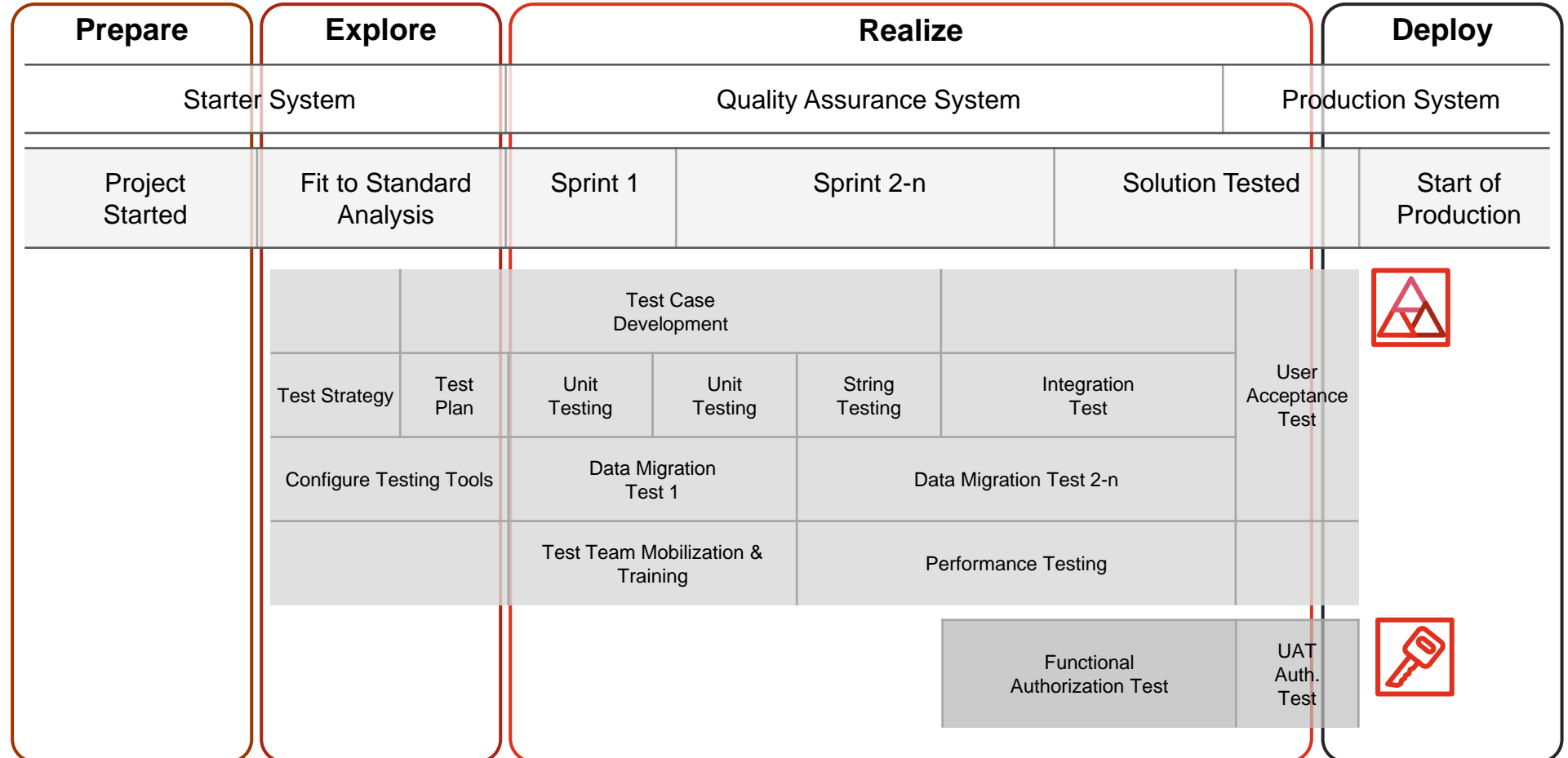


The test activities and deliverables according to activate and agile methods make the test management even more challenging than without.

To the right you can see a visualization of the test execution with regard to

- the project system environments
- major project milestones
- overall testing activities
- authorization testing activities

In the following two slides we will explain the two authorization test activities



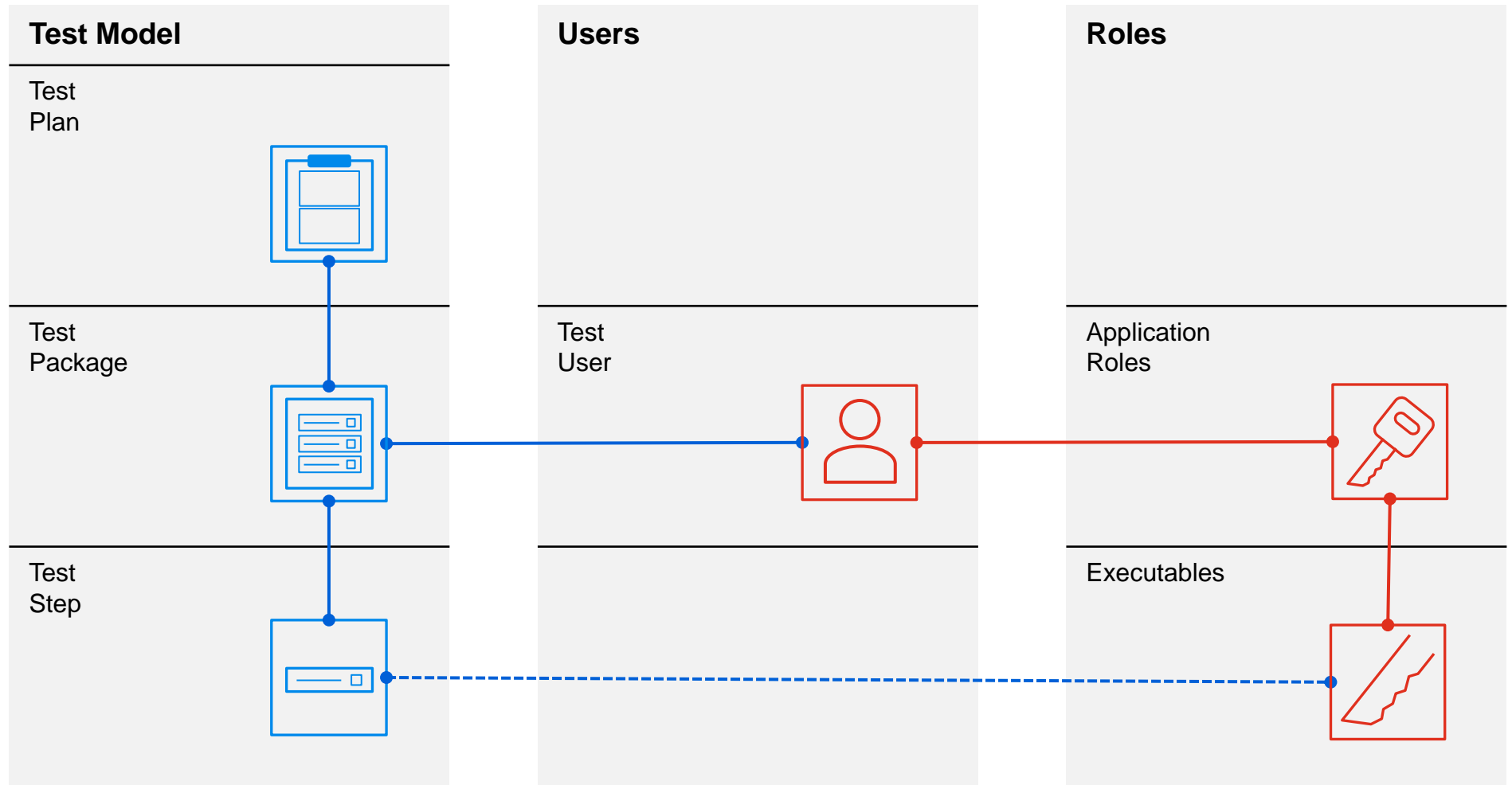
SAP Test Management & Authorizations

Authorization Integration Tests



Test of each Template or Solitary Role for each executable:

- One test plan for the complete Authorization Integration Test
- One test package per Template or Solitary Application Role
- One test step per executable and application role
- One test package has one test user with one application role
- Each test package gets assigned to one test user



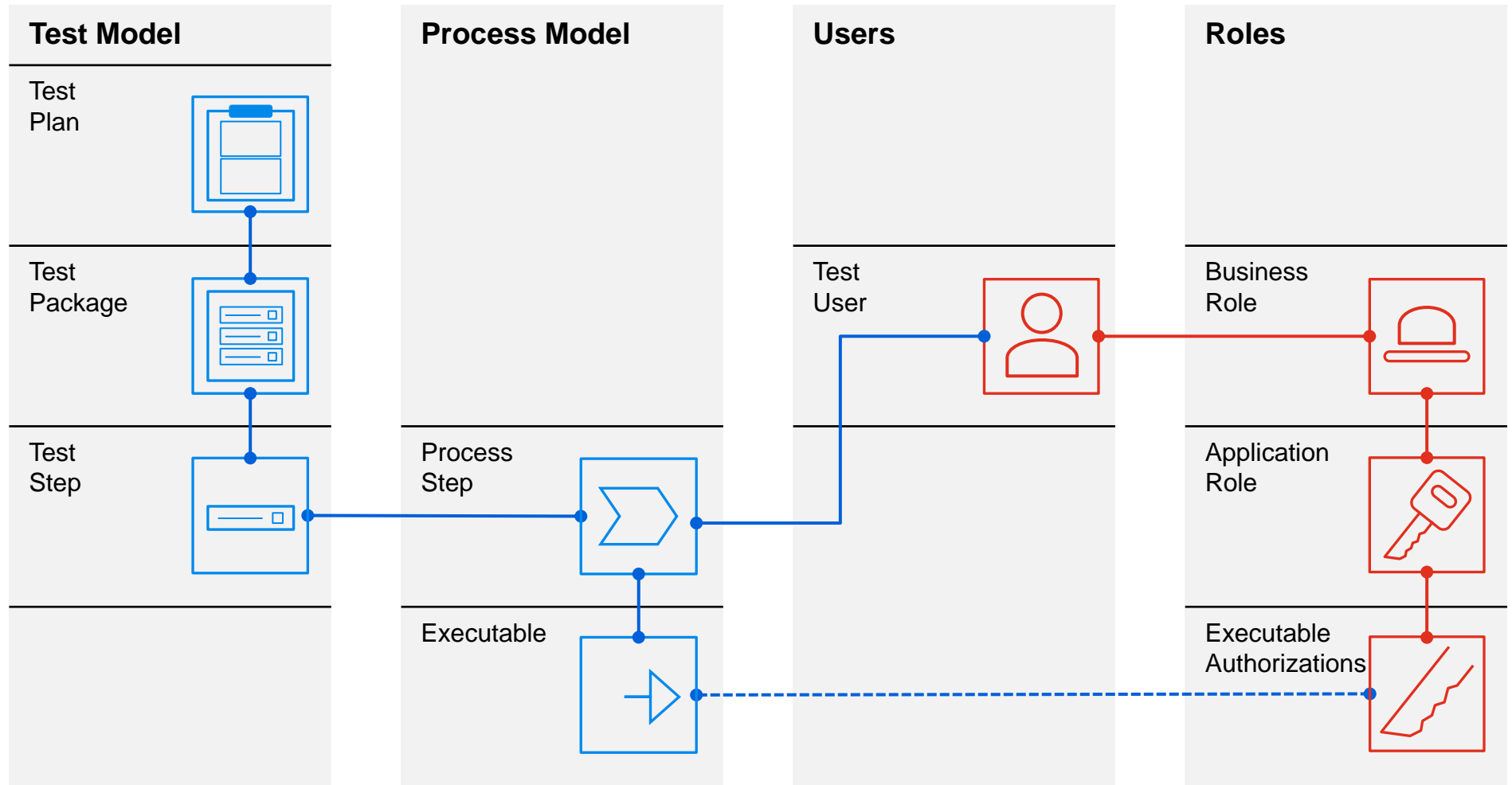
SAP Test Management & Authorizations

Integrated User Acceptance Tests



Test execution of test steps for process steps by business users with corresponding business roles:

- One joint test plan for UAT functional and authorization test
- Each test step is assigned to one test user corresponding to a business role
- This requires a preceding mapping of business roles to test steps
- This can be based on a mapping of the test step to process step to application role with the application role to business role information



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