



Discover SAP's Integration Solution Advisory Methodology (ISA-M) Methodology for a Hybrid Integration Platform

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Product Management – Intelligent Enterprise Technology | Central Engineering | SAP SE

October, 2019

PUBLIC

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Agenda

Integration Challenge for Enterprise Architects

ISA-M in Action

CIO Guides for Integration

ISA-M Template for Enterprise Architects

Agenda

Integration Challenge for Enterprise Architects

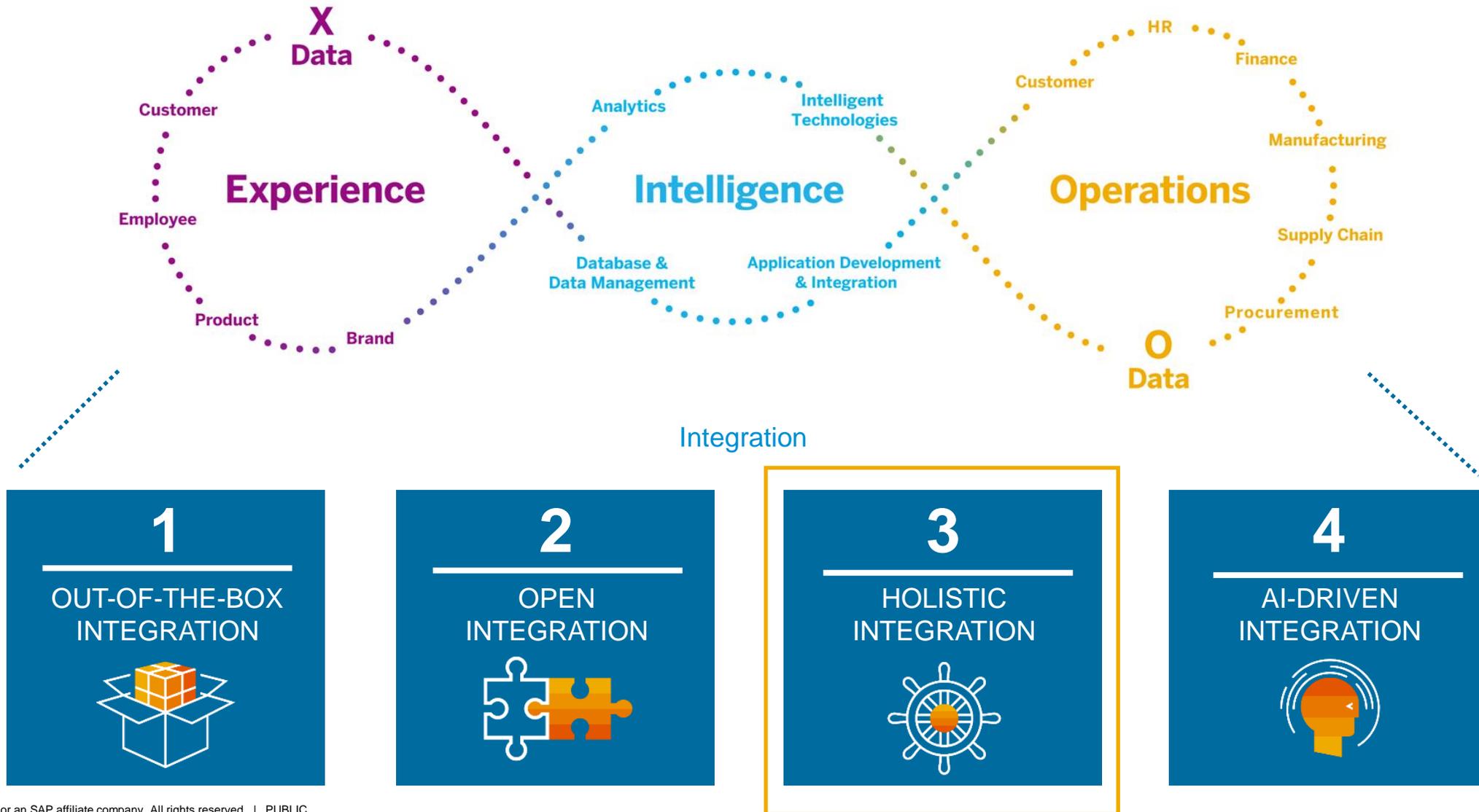
ISA-M in Action

CIO Guides for Integration

ISA-M Template for Enterprise Architects

Intelligent Enterprises are Integrated Enterprises

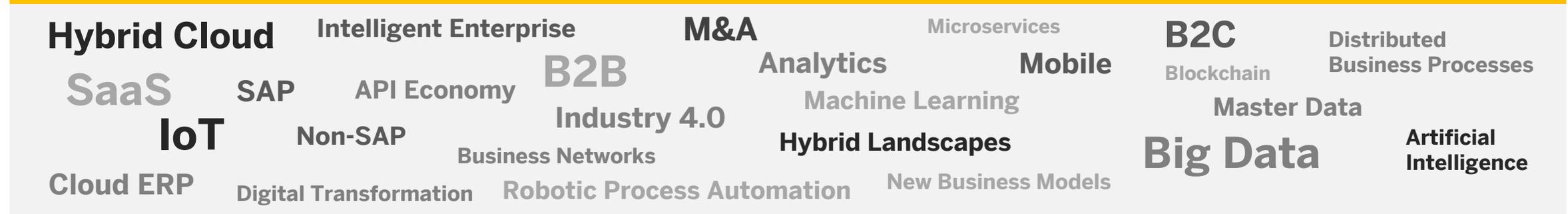
Key Integration Principles



The Increased Scope of Integration

Integration Challenge for Enterprise Architects

Fast evolving hybrid landscapes



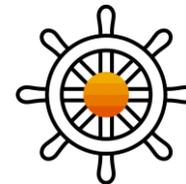
FUTURE INTEGRATION ARCHITECTURE



HYBRID INTEGRATION PLATFORM



INTEGRATION GOVERNANCE



AGILITY AND PRACTICE OF ENABLEMENT

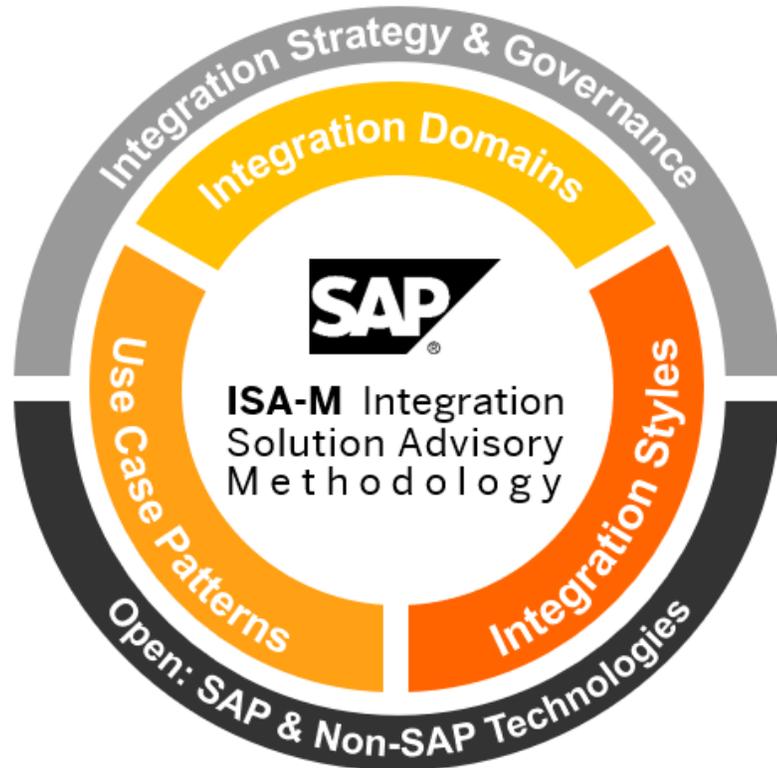


Customer context

Enterprise architecture strategy | Future application landscape | Existing investments | Skillsets | Commercial aspects

Integration Solution Advisory Methodology (ISA-M)

Simplify Integration by a Systematic Integration Approach



Overview

- Helps enterprise architects to shape their integration strategy
- Collection of typical integration styles and patterns
- Mapping to integration services (based on customer context)
- Open to SAP and Non-SAP services / technologies
- Target Group: Enterprise Architects / Integration Architects

ISA-M Template

- Free PPT template available
- Successfully adopted in multiple global organizations
- SAP Consulting Services (optional)
- +1.400 registered customers, partners and SAP consultants

Agenda

Integration Challenge for Enterprise Architects

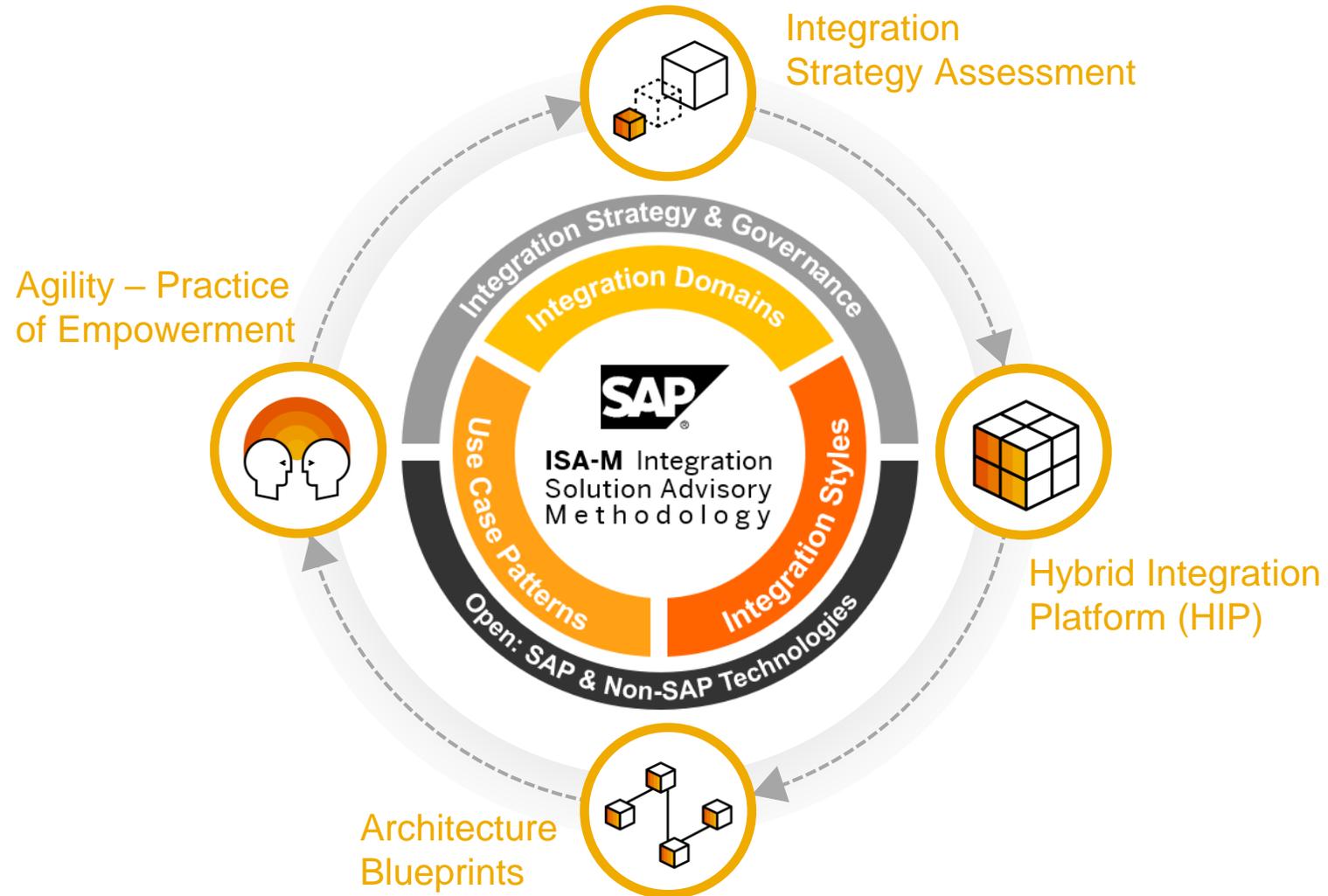
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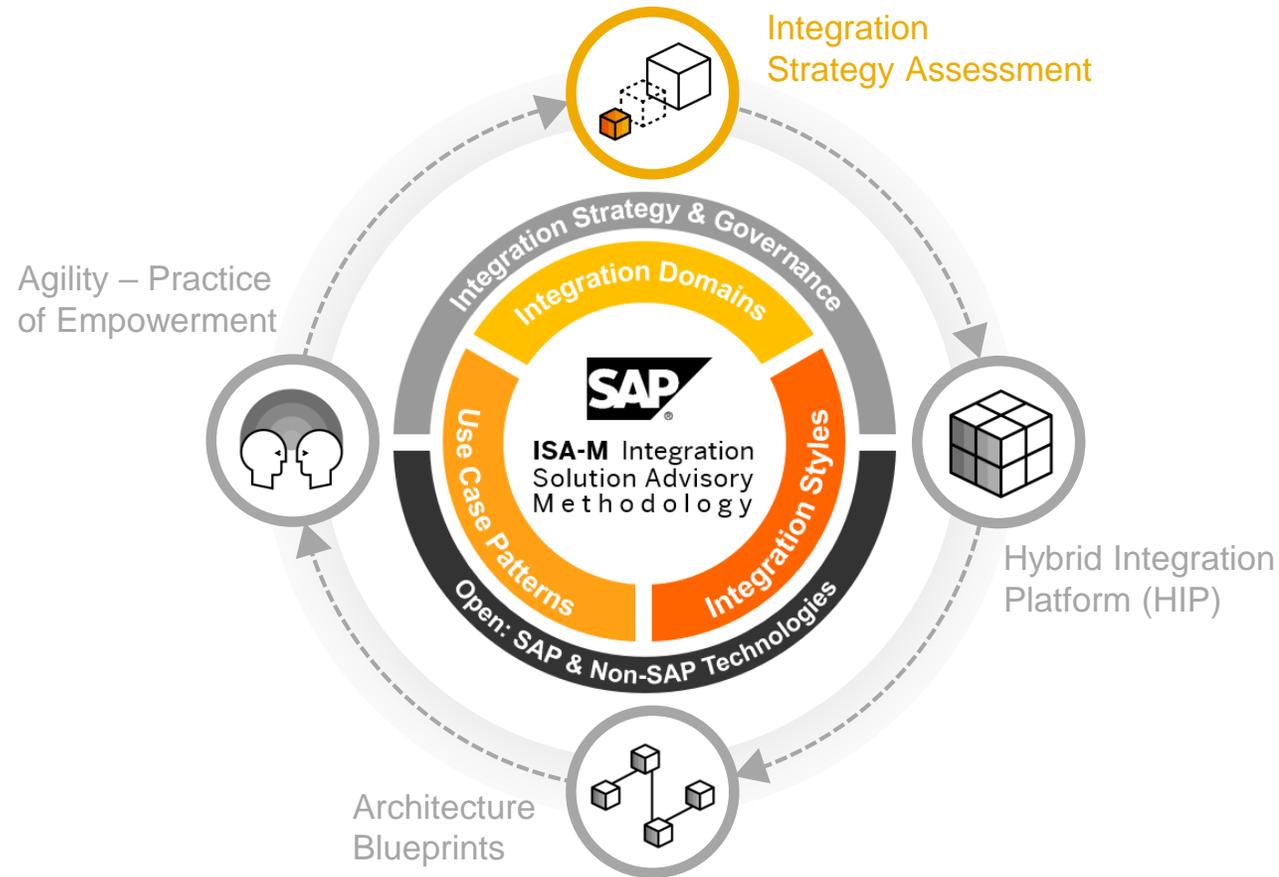
ISA-M Cycle

Overview: Use Cases for Enterprise Architects



ISA-M Cycle

Phase 1: Asses Your Integration Strategy



Objectives and approach

- Documentation/review of your integration architecture
- Scoping of focus areas e.g. future building blocks
- Use-case driven approach (technology-agnostic)

Reasons for integration strategy assessment

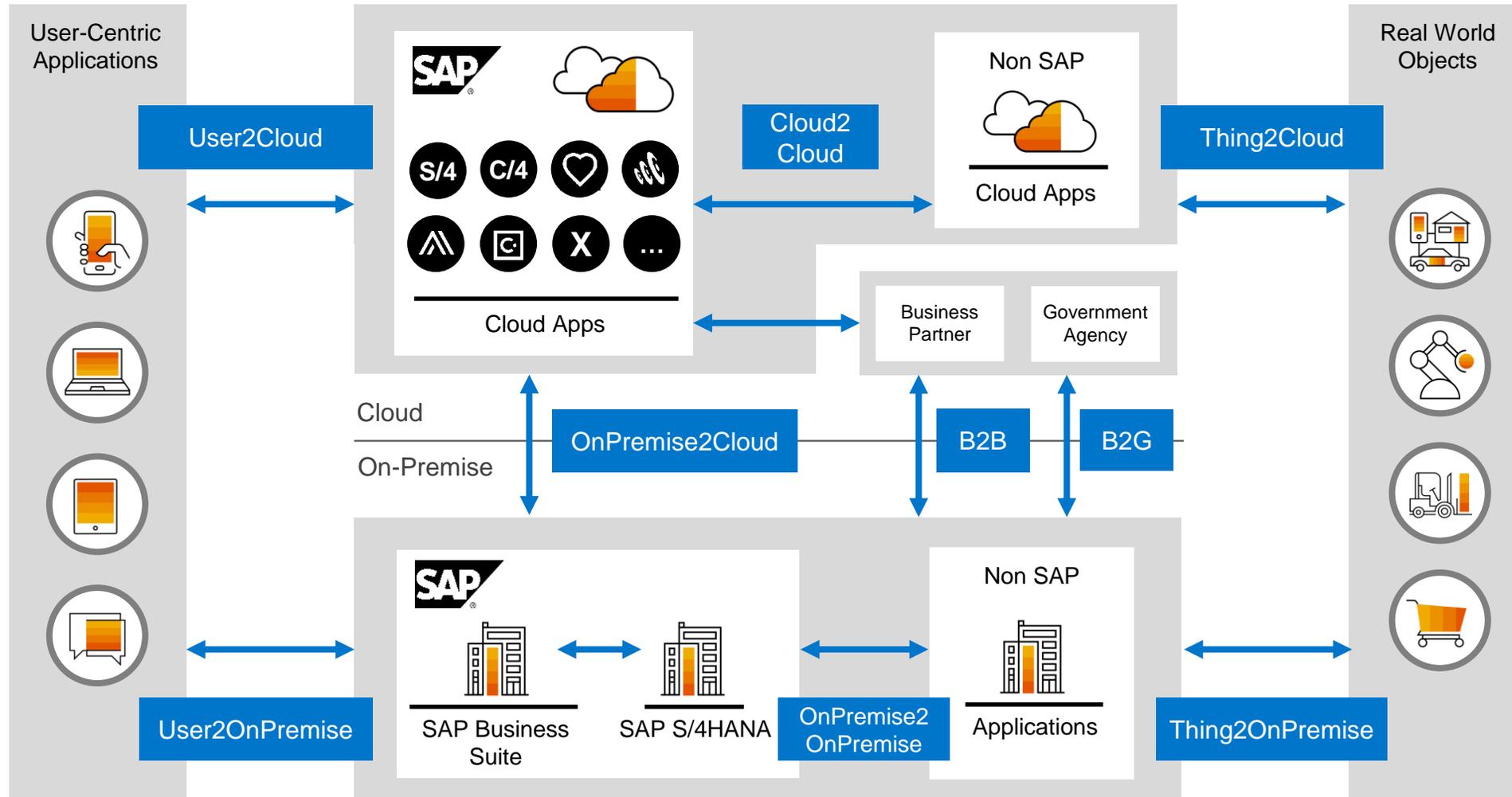
- Need to cover new integration patterns
- Implementation of new cloud applications
- Transition to SAP S/4HANA
- Standardization and Governance
- Integration technology consolidation
- Mergers and acquisitions

Integration Domains

Assessment and Scoping of Your Hybrid Integration Landscape



Integration Strategy
Assessment

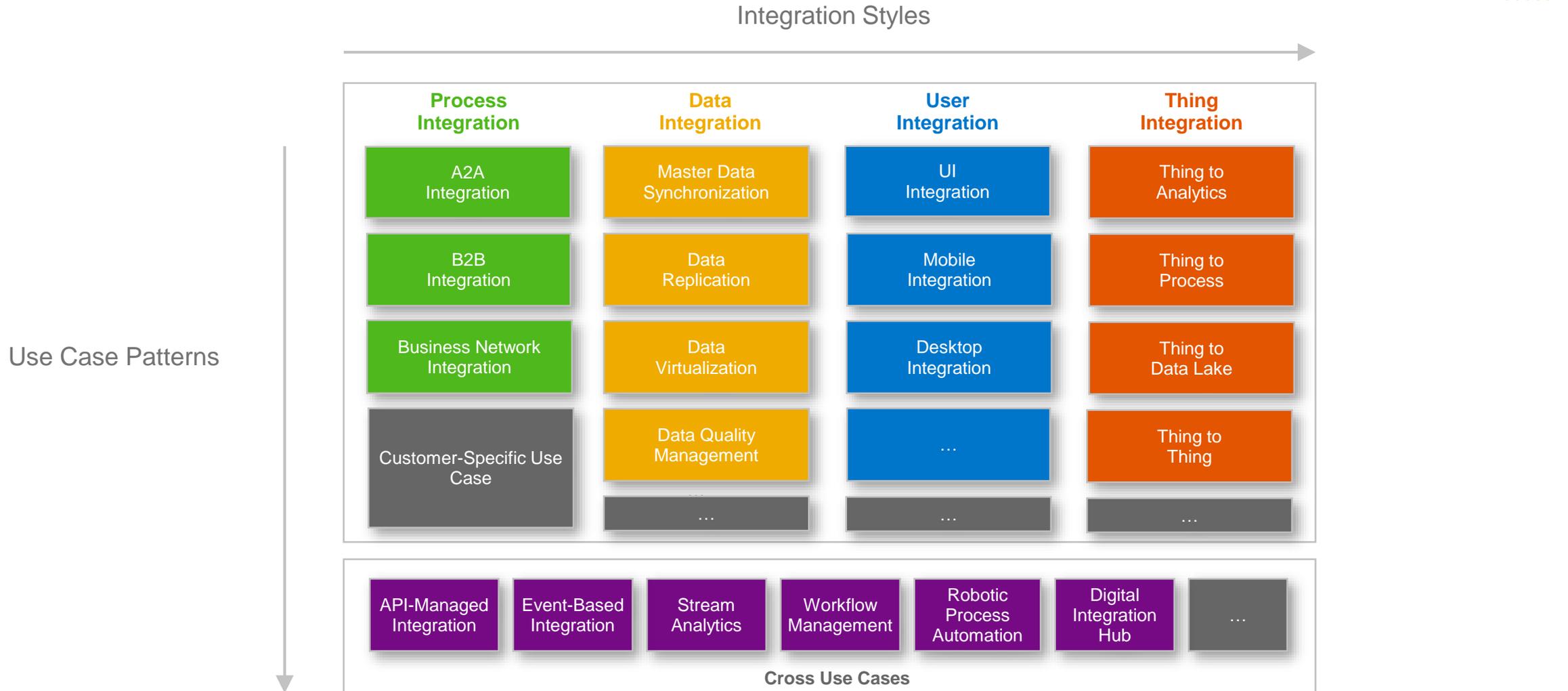


Integration Styles and Use Case Patterns

Technology-Agnostic Library of Integration Use Cases*



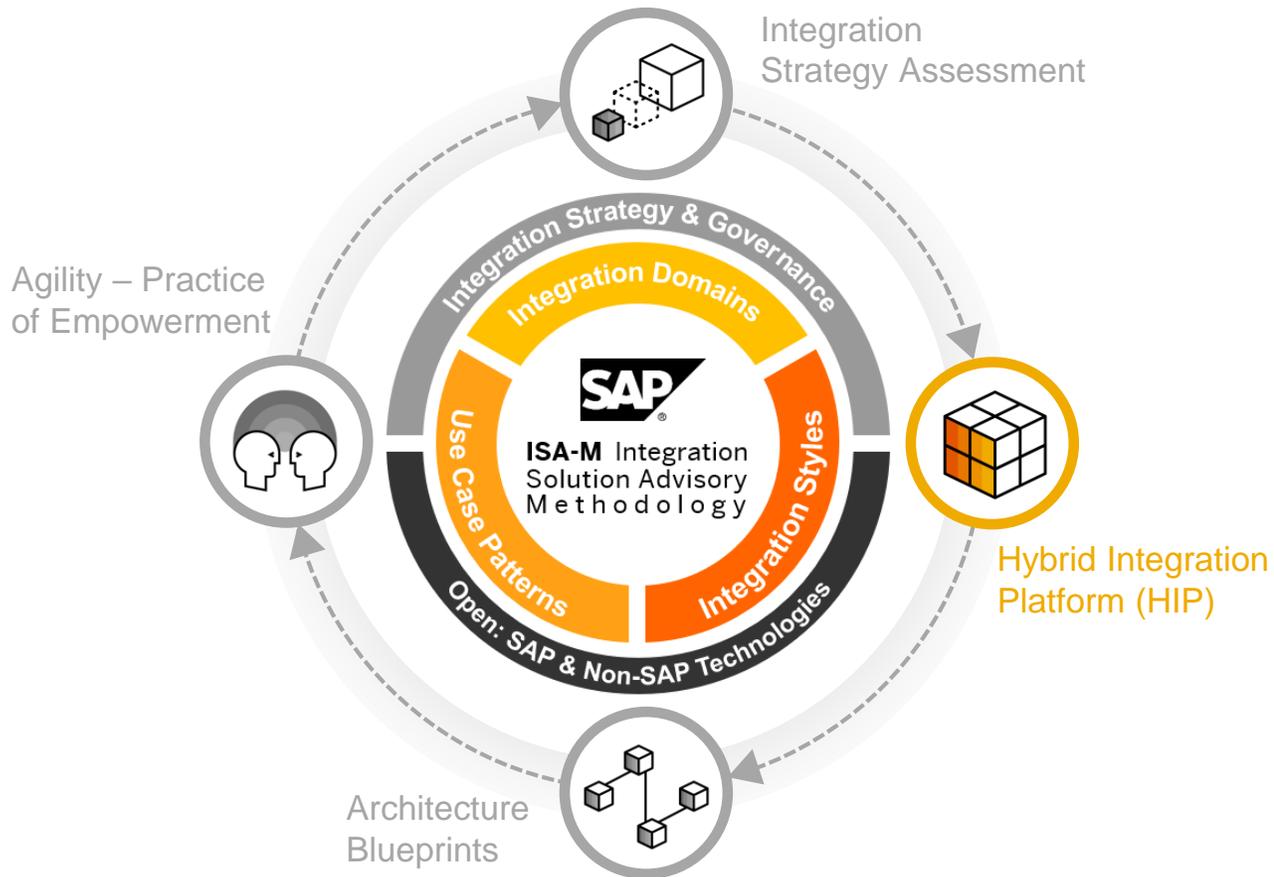
Integration Strategy Assessment



* Extensible by customers

ISA-M Cycle

Phase 2: Define Hybrid Integration Platform for Your Organization



Objectives and approach

- Mapping of use case patterns to integration technologies and services
- Open to SAP and Non-SAP integration services
- Derive integration guidelines for your organization
- Highly depends on the customer context

Sample customer context

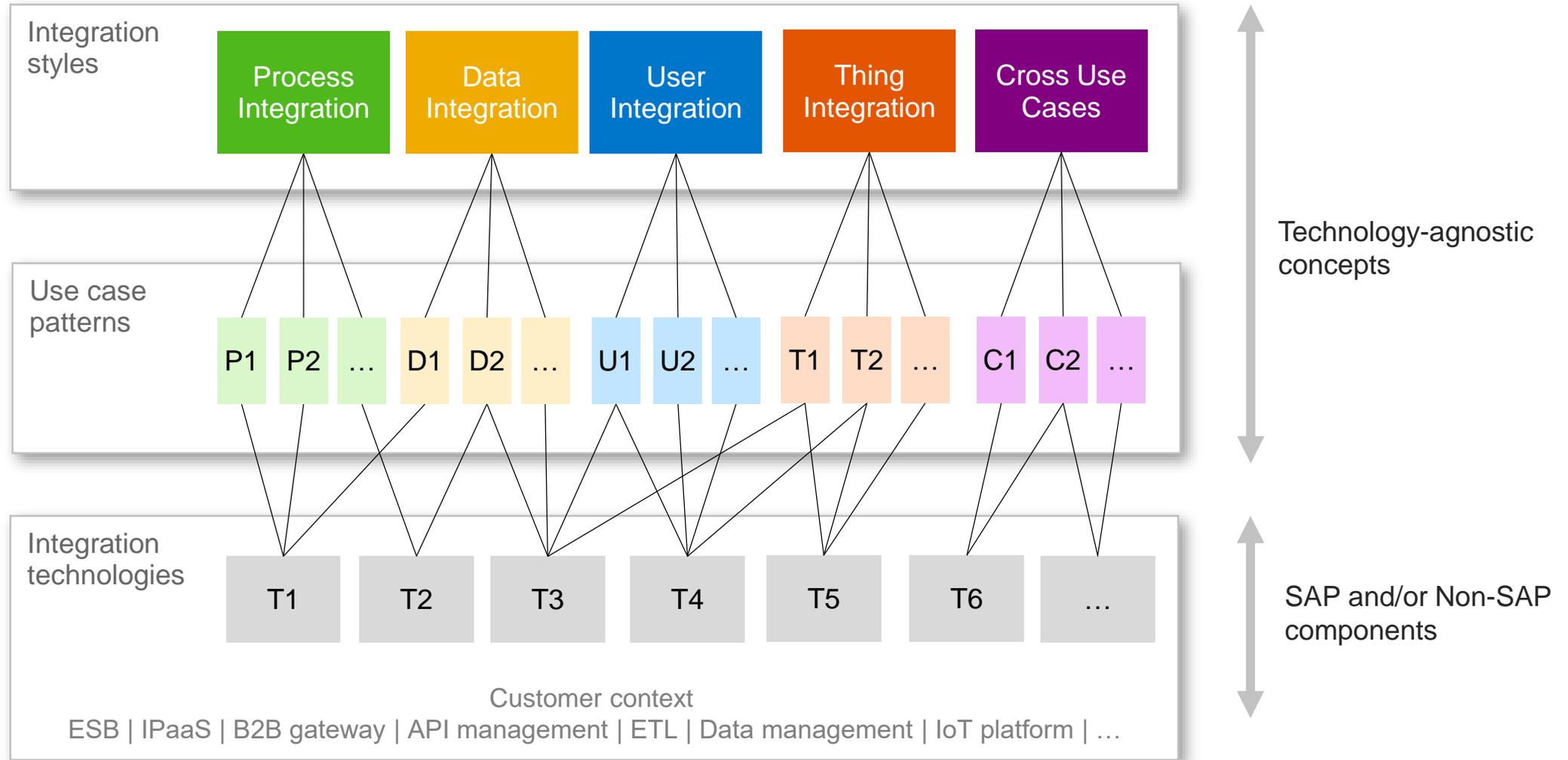
- Enterprise architecture strategy
- Future application landscape
- Existing investments
- Skillsets
- Commercial aspects

Integration Technology Mapping

Important: Customer Context



Hybrid Integration Platform (HIP)



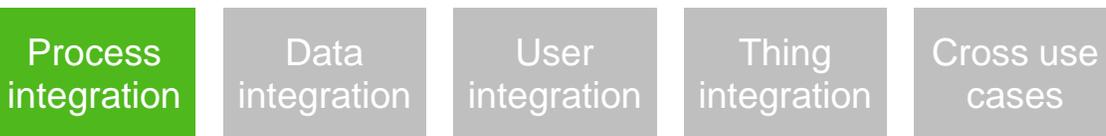
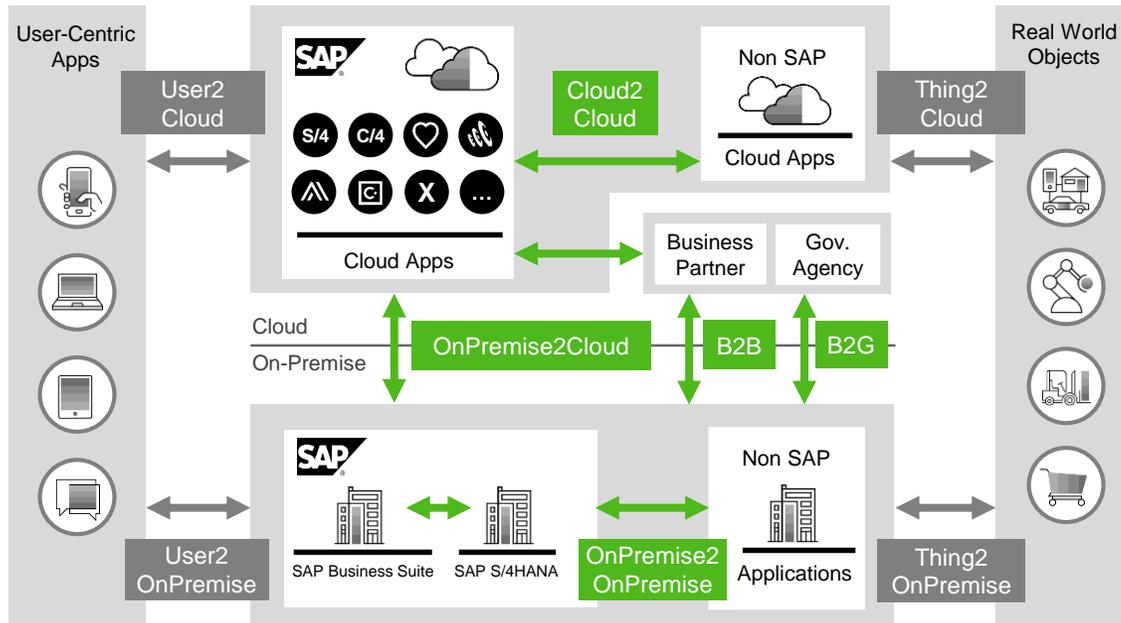
SAP Technology Mapping for Your Hybrid Integration Platform

Example 1: Process Integration



Hybrid Integration Platform (HIP)

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

SAP Cloud Platform Integration Suite

- SAP's IPaaS for cloud and hybrid integration
- Prepackaged content for SAP and non-SAP apps (+1.100 pre-packaged integration flows)
- SAP Cloud Platform Integration Advisor (Simplified integration supported by Artificial Intelligence)
- SAP Cloud Platform Open Connectors (+160 pre-built connectors for Non-SAP apps)
- Complementary: SAP Process Orchestration and SAP Application Interface Framework (AIF)

Key characteristics

- A2A, B2B/B2G, master data synchronization use cases
- API-based integration and near real-time processing
- Transactional process integrity

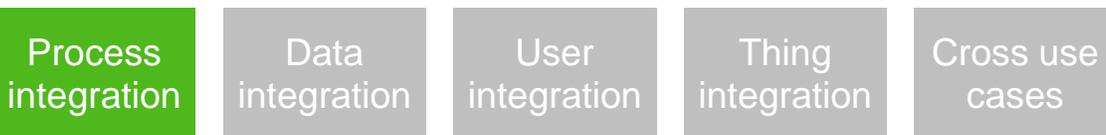
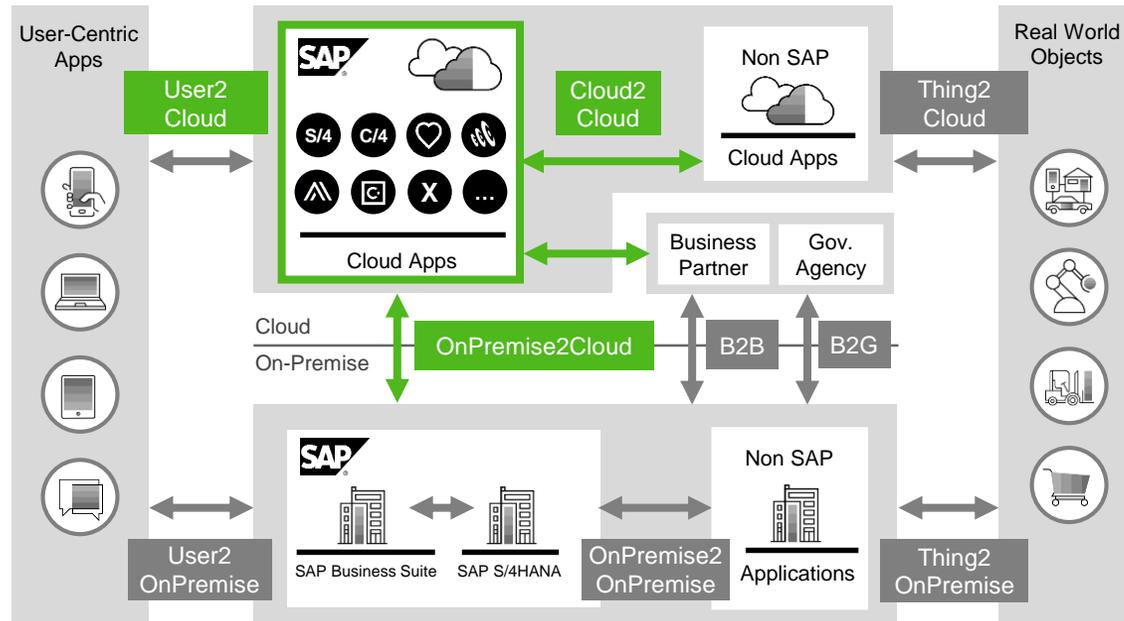


Hybrid Integration Platform (HIP)

SAP Technology Mapping for Your Hybrid Integration Platform

Example 2: Process Integration – Future Direction for SAP-2-SAP scenarios*

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

Simplified integration approach for the Intelligent Suite

- Standardized integration approach
- E2E processes in the context of the Intelligent Enterprise
- Stepwise adoption of technology standards

Technology standards

- E2E process documentation
- Aligned APIs and content SAP Cloud Platform Integration
- Leverage SAP Cloud Platform Master Data Services
- Application lifecycle management
- Security and identity management
- User experience
- Analytics

* Lab Preview

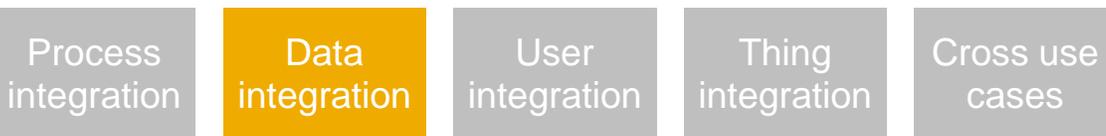
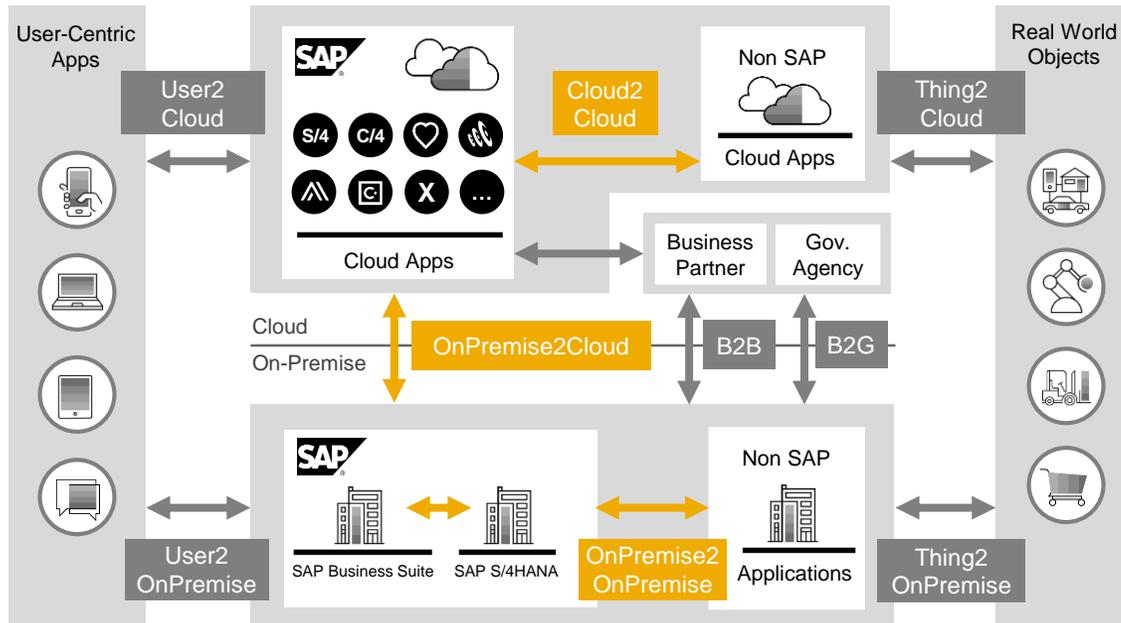
SAP Technology Mapping for Your Hybrid Integration Platform

Example 3: Data Integration



Hybrid Integration Platform (HIP)

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

SAP Data Hub / SAP Data Intelligence

- Part of SAP Data Intelligence
- Holistic data management across hybrid landscapes
- Pipelining and orchestration of big data
- Leverages SAP EIM tools, e.g. SAP HANA Smart Data Integration (SDI) or SAP Data Services (DS)

Key characteristics

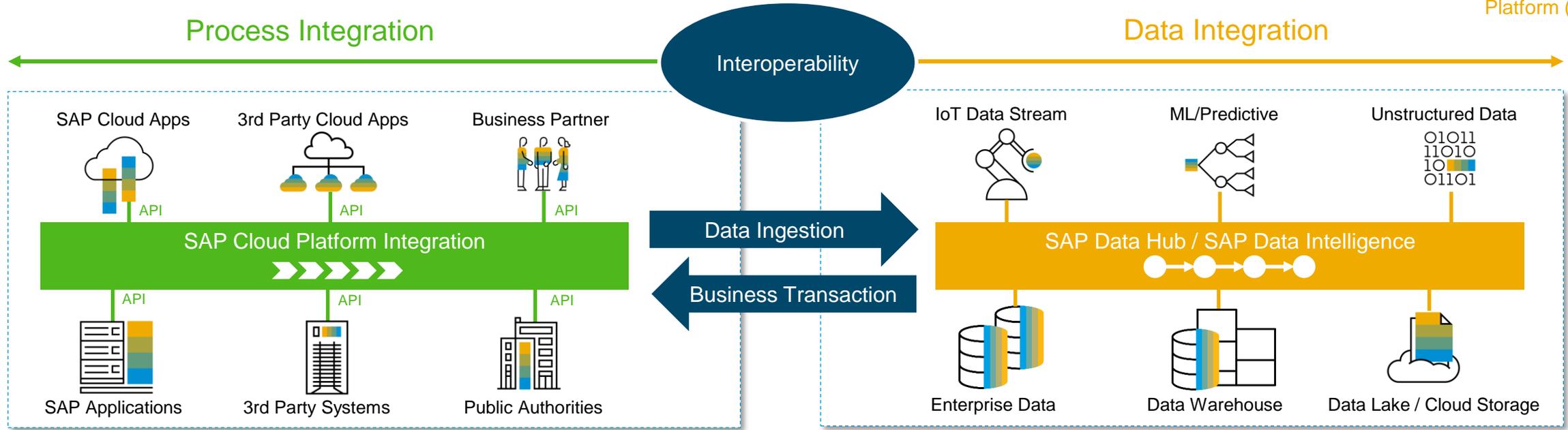
- Support of multiple data integration use cases
- Data focused (table/view, storages, processing, libraries)
- High frequent event processing (e.g. via Kafka)
- Advanced data transformations & processing (e.g. ML)

Technology Guidance

SAP Cloud Platform Integration and SAP Data Hub / SAP Data Intelligence



Hybrid Integration Platform (HIP)



Key Use Cases and Characteristics

- Chaining of distributed business processes
- A2A / B2B, B2G / Master Data Synchronization
- API focused (synch., async., business events)*
- Message-based processing (mapping, routing, monitoring)
- Transactional Integrity (reliable messaging and error handling)
- Pre-packaged integration content for SAP/Non-SAP scenarios

Key Use Cases and Characteristics

- Pipelining and orchestration of big data in complex landscapes
- Big Data Warehousing, IoT Ingestion, EIM (e.g. batch, streaming)
- Data focused (table/view, storages, processing, libraries)*
- Distributed data processing & server less computing
- High frequent event processing (e.g. via Kafka)
- Advanced data transformations & processing (e.g. ML, Predictive, Code)

* Also table access possible by CPI (like CPI-DS) and API level access possible by SAP Data Hub, but not key focus

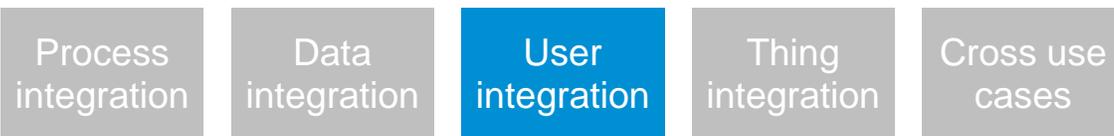
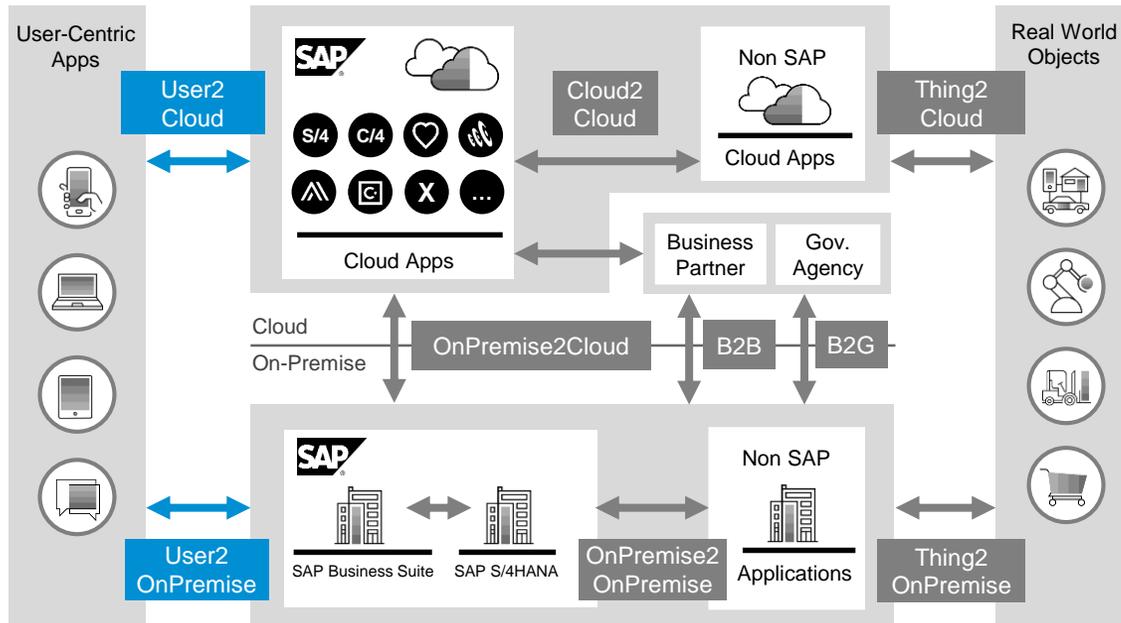
SAP Technology Mapping for Your Hybrid Integration Platform

Example 4: UI Integration



Hybrid Integration Platform (HIP)

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

SAP Fiori Launchpad

- Single point of entry for business applications
- Based on SAP Fiori user experience

SAP Cloud Platform Mobile Services

- Development platform for enterprise mobile apps
- SDKs available for multiple devices (e.g. iOS, Android)

Key characteristics

- Role-based access
- Online / offline support
- Application lifecycle management
- Device management

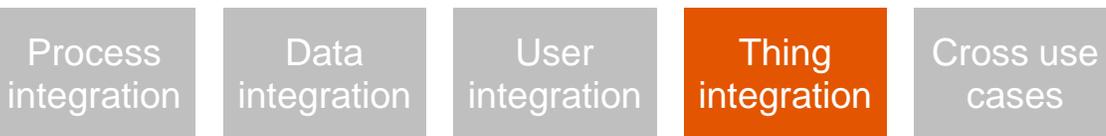
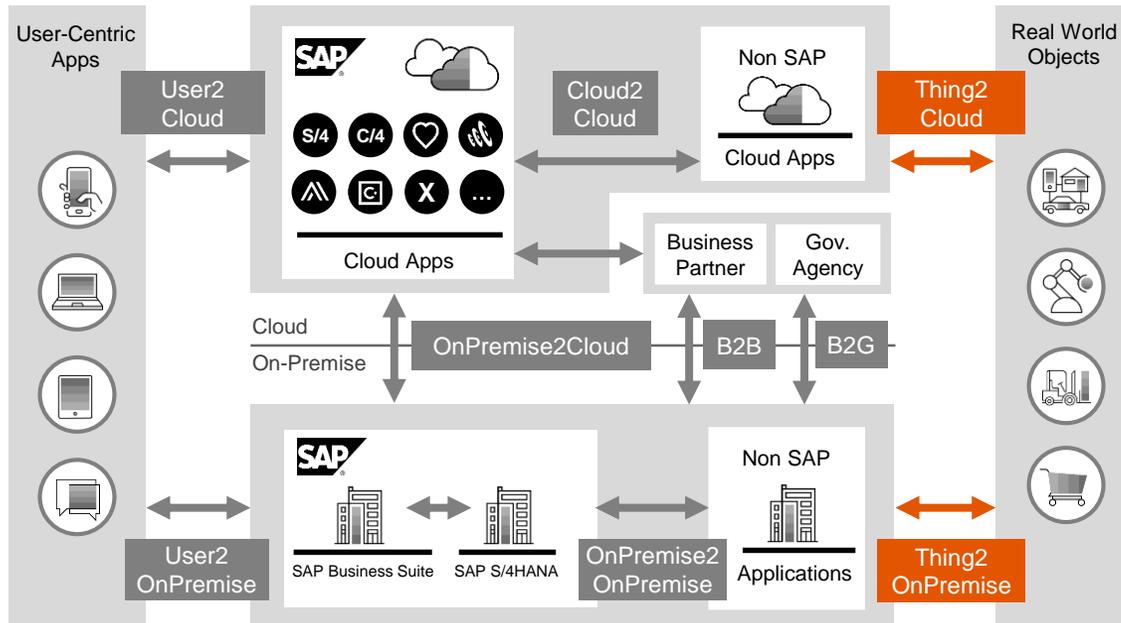
SAP Technology Mapping for Your Hybrid Integration Platform

Example 5: Thing Integration



Hybrid Integration Platform (HIP)

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

SAP Leonardo IoT and SAP Cloud Platform Internet of Things

- Integrate data from devices (e.g. machines, products, assets) and process it in business or analytical IoT applications
- Interoperability with device management and connectivity components of other cloud providers (e.g. Azure or AWS)
- Data processing at the edge close to the source of IoT data

Key characteristics

- Device lifecycle management
- IoT specific protocol support (e.g. MQTT, OPC-UA)
- Data ingestion, big data storage and time series management
- Edge-level processing capabilities

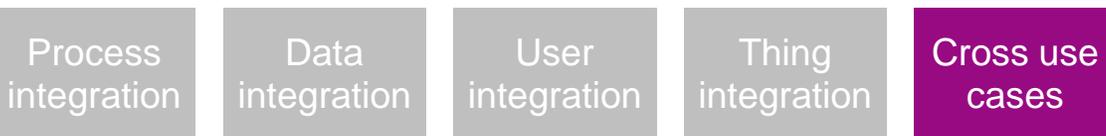
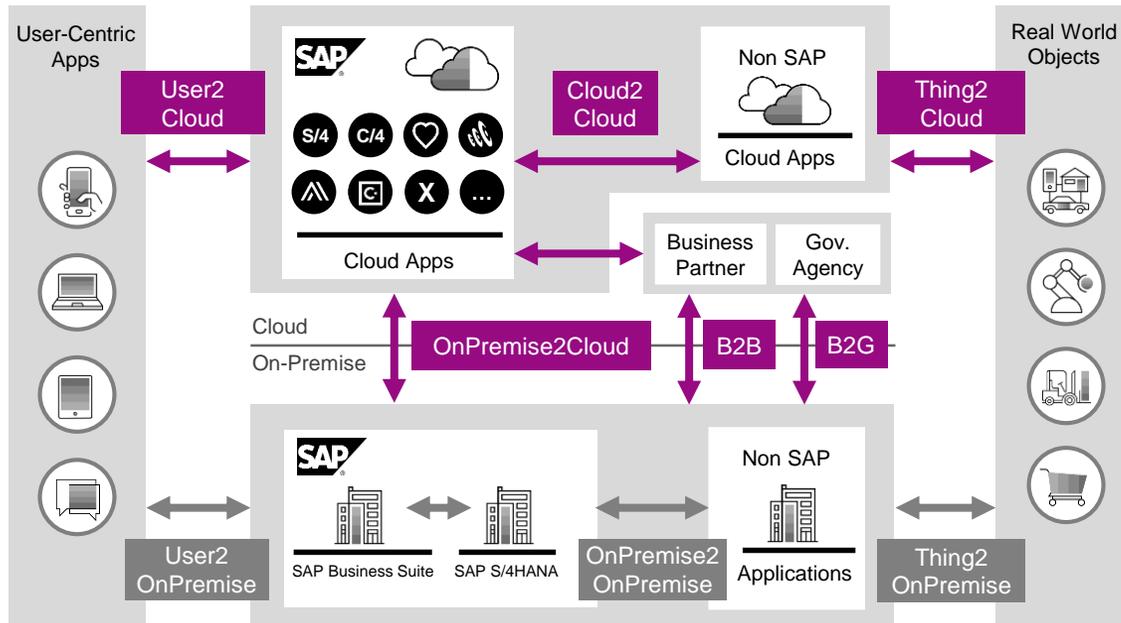
SAP Technology Mapping for Your Hybrid Integration Platform

Example 6: Event-based Integration



Hybrid Integration Platform (HIP)

1 Select integration domain(s) and integration style



2 Sample mapping to SAP technologies / services

SAP Cloud Platform Enterprise Messaging

- Cloud-based messaging and event-enabling service
- Integration of loosely-coupled microservices
- Consume business events in side-by-side extension apps
- Event enablement e.g. for S/4HANA Cloud
- Supported protocols: REST, AMQP, MQTT

Key characteristics

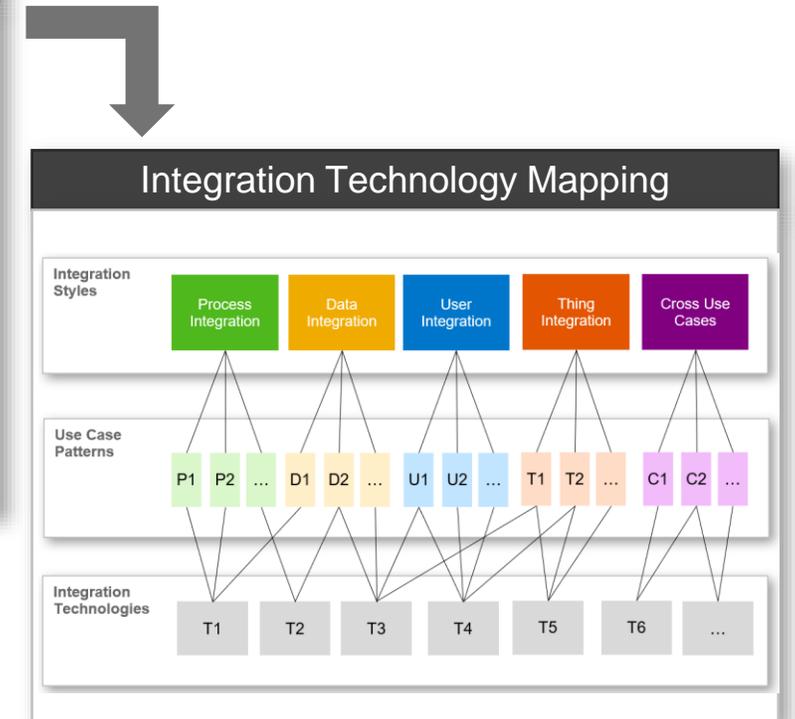
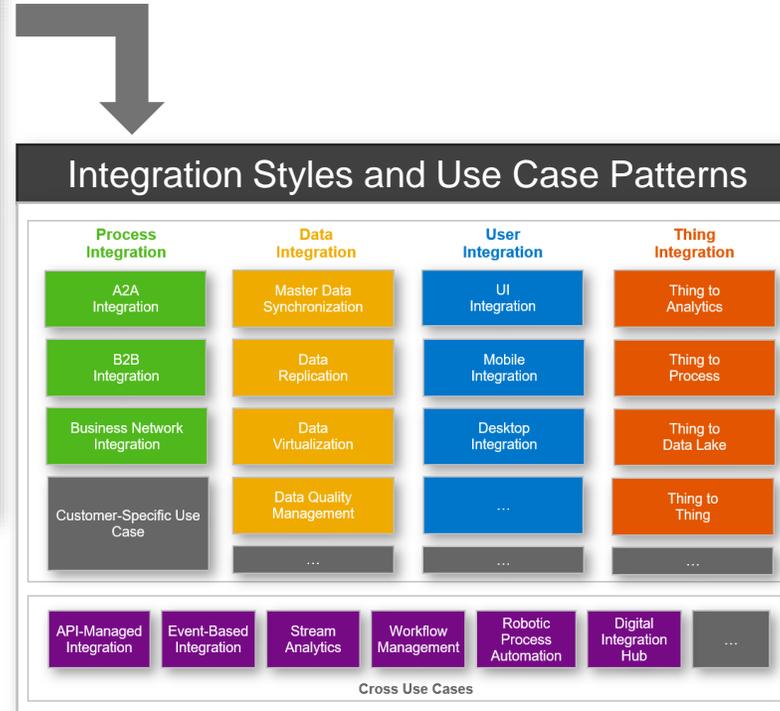
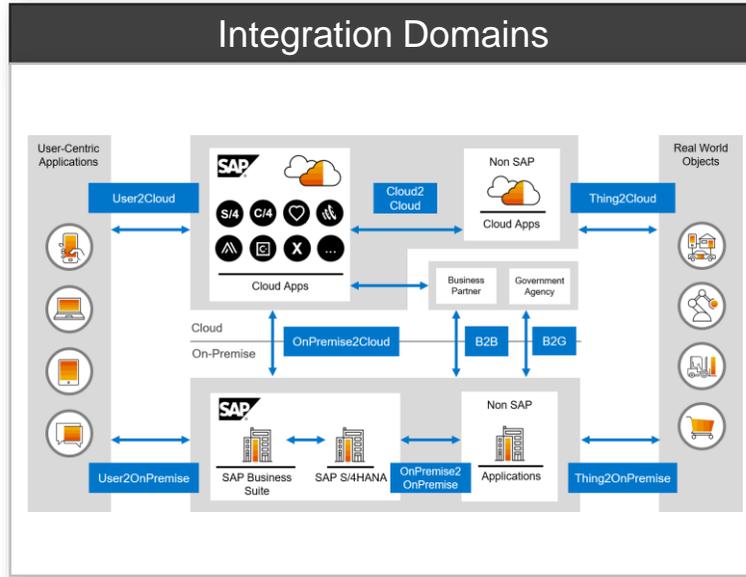
- High flexibility by decoupling of applications
- Publish/subscribe and point-to-point messaging patterns
- Handle unexpected peaks in data traffic

Summary

Simplify Integration by a Holistic Integration Approach for the Intelligent Enterprise



Hybrid Integration Platform (HIP)

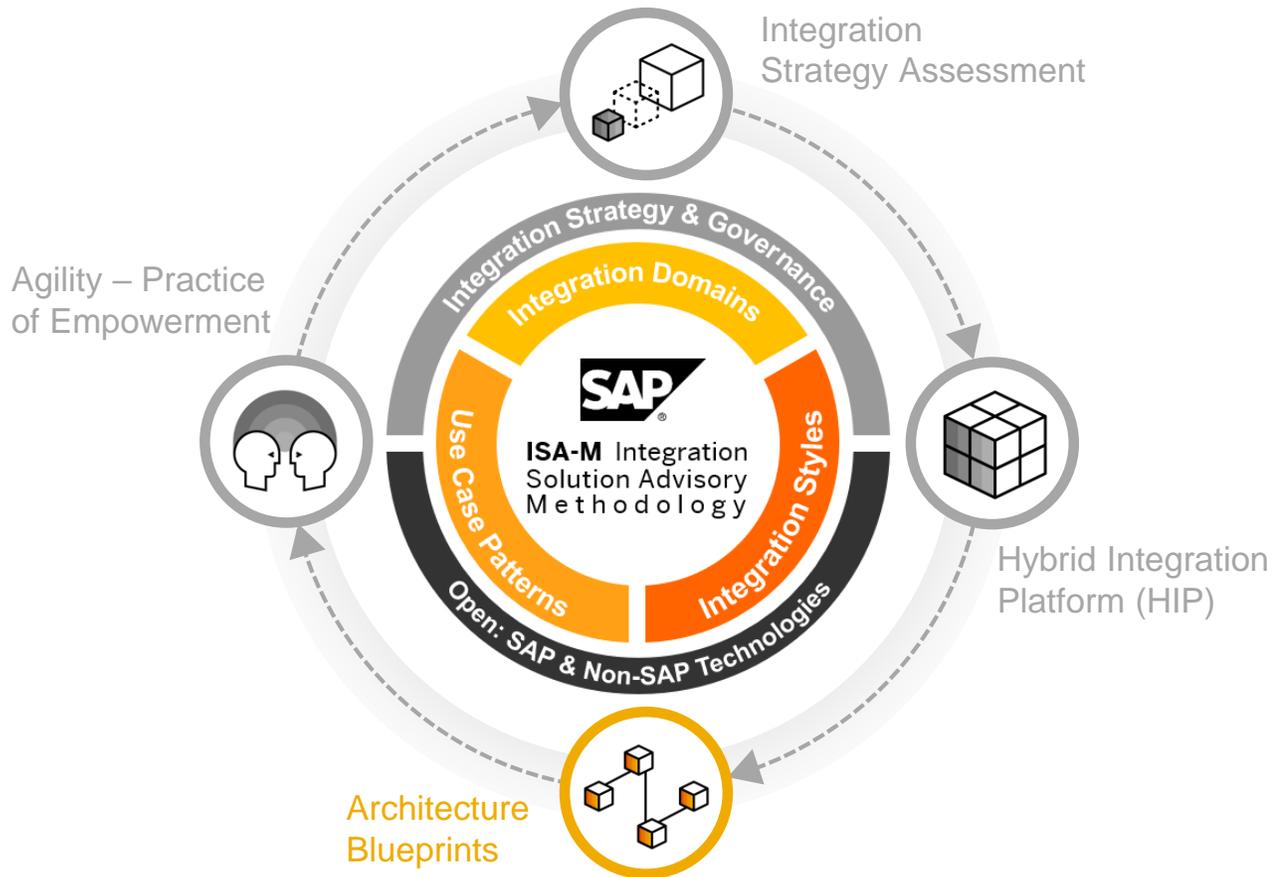


Further Information

<https://blogs.sap.com/2019/02/24/integration-solution-advisory-methodology-isa-m-define-integration-guidelines-for-your-organization/>

ISA-M Cycle

Phase 3: Define Solution Architecture Blueprints*



Objectives and approach

- Refine technology agnostic use case patterns with solution architecture blueprints
- Add decision criteria and key characteristics
- Illustrate components and interactions

Usage scenarios

- Use solution architecture blueprints as templates/examples for your projects
- Use solution architecture blueprints as documentation for your integration scenarios

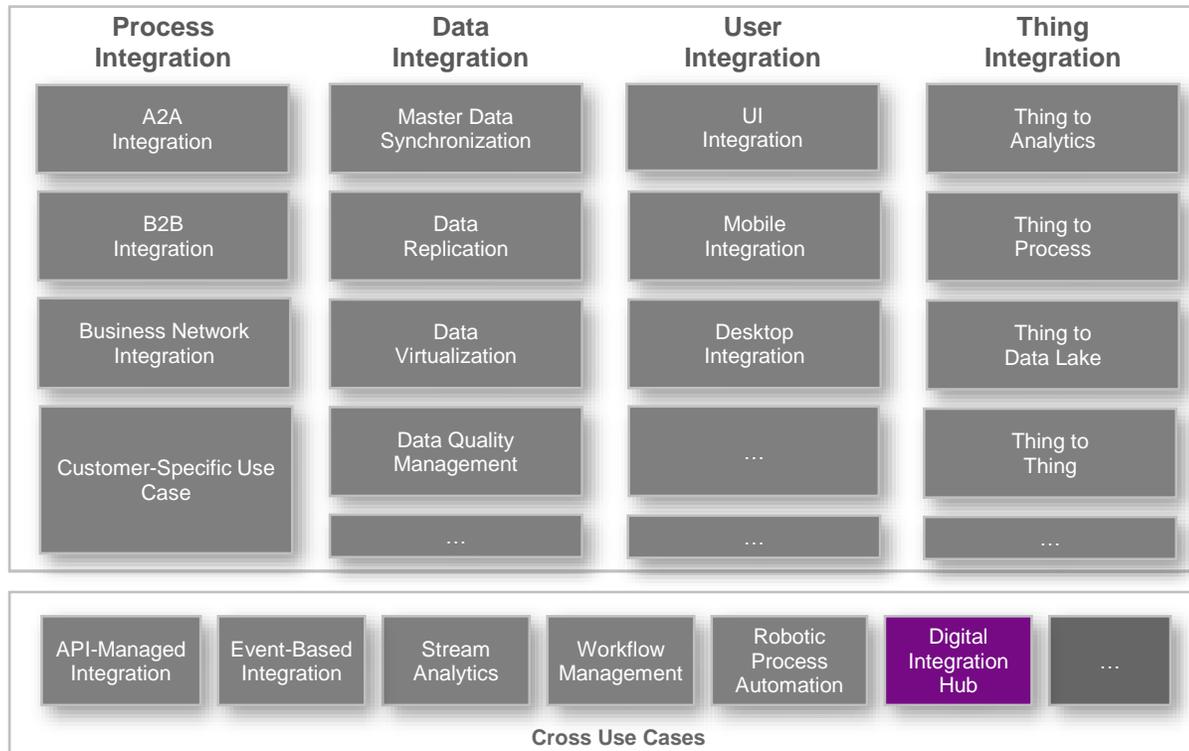
Use Case Pattern: Digital Integration Hub

Sample Solution Architecture Blueprint



Architecture
Blueprints

Integration styles and use case patterns



Digital Integration Hub Pattern

- Emerging architecture for implementing large-scale, high-throughput APIs
- Inserting an in-memory data store layer between the API layer and the system of record

Key characteristics

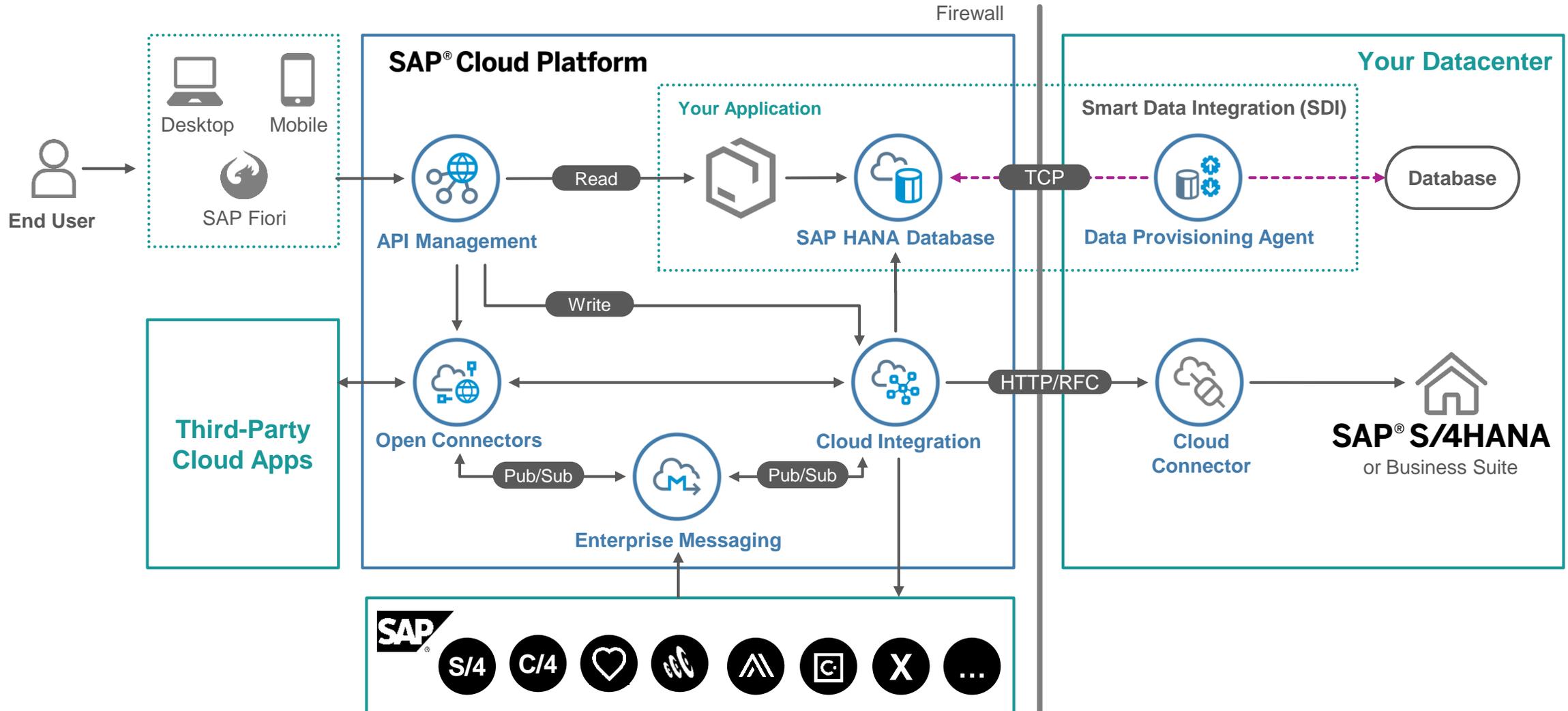
- Responsive user experience
- Decoupling of backend apps and front-end APIs
- Protection of backend apps from excessive front-end APIs
- Normalization of the APIs for certain domains
- Real time business insights and analytics

Use Case Pattern: Digital Integration Hub

Sample Solution Architecture Blueprint

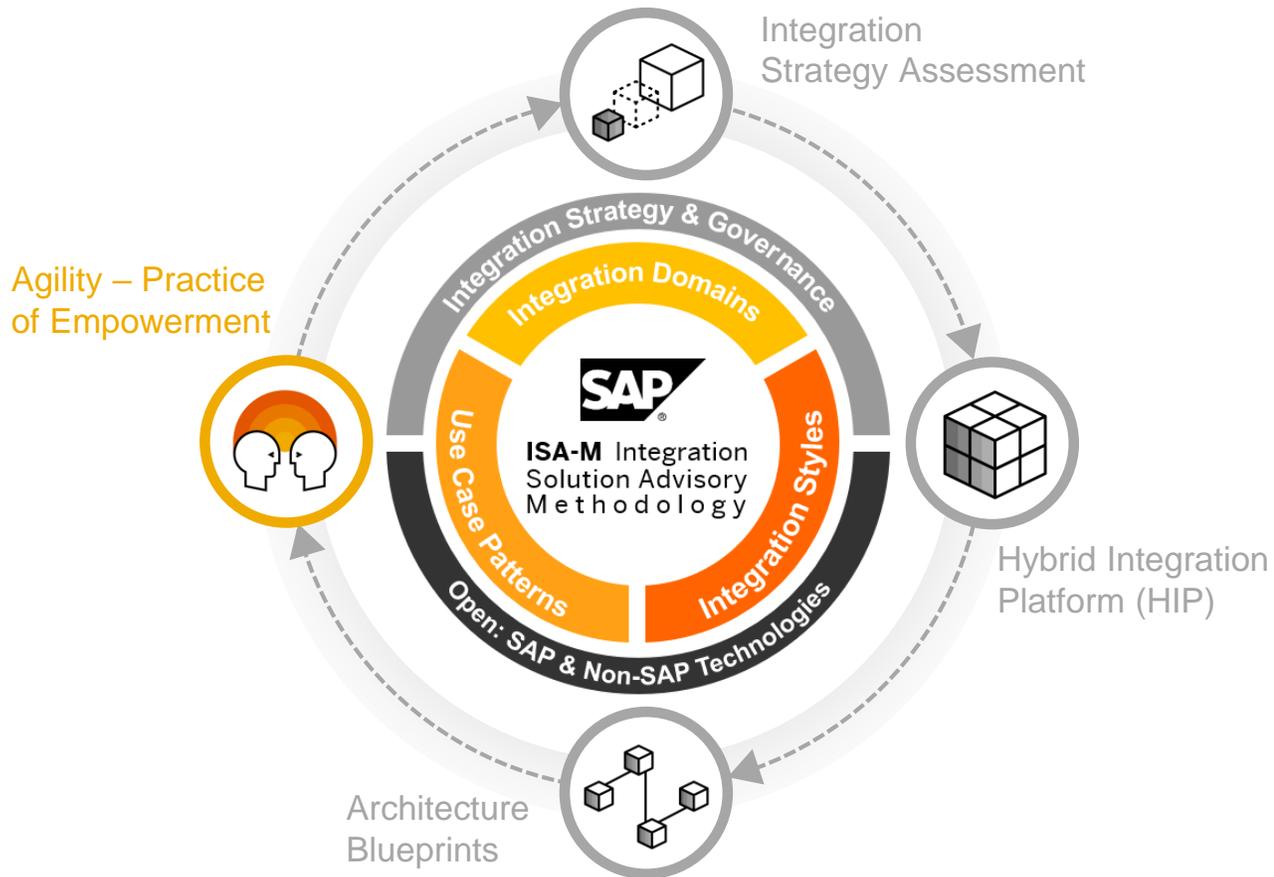


Architecture Blueprints



ISA-M Cycle

Phase 4: Enable an Agile Integration Practice in Your Organization



Objectives

- Establish integration as recognized discipline
- Position integration as a strategic differentiator
- Provide holistic view on integration
- Democratize integration delivery
- Establish knowledge sharing culture (best practices)
- Improve communication between teams / SIs

Sample approach*

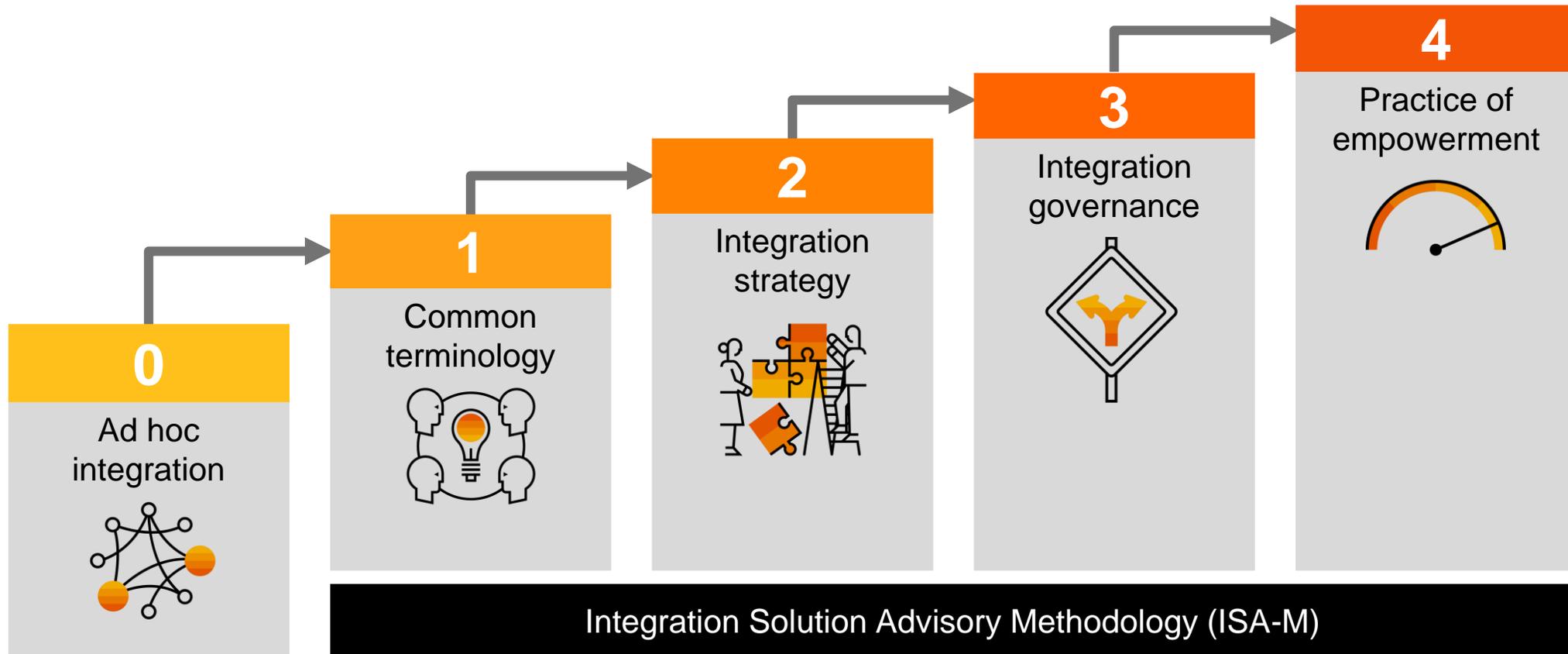
- Setup a dedicated integration strategy team
- Roll-out integration guidelines in your organization
- Establish an enterprise architecture board
- Rollout solution architecture blueprints
- Define areas for self-service integration

ISA-M: Benefits for Your Organization

Increase Your Integration Maturity Level



Agility – Practice of Empowerment



Agenda

Integration Challenge for Enterprise Architects

ISA-M in Action

CIO Guides for Integration

ISA-M Template for Enterprise Architects

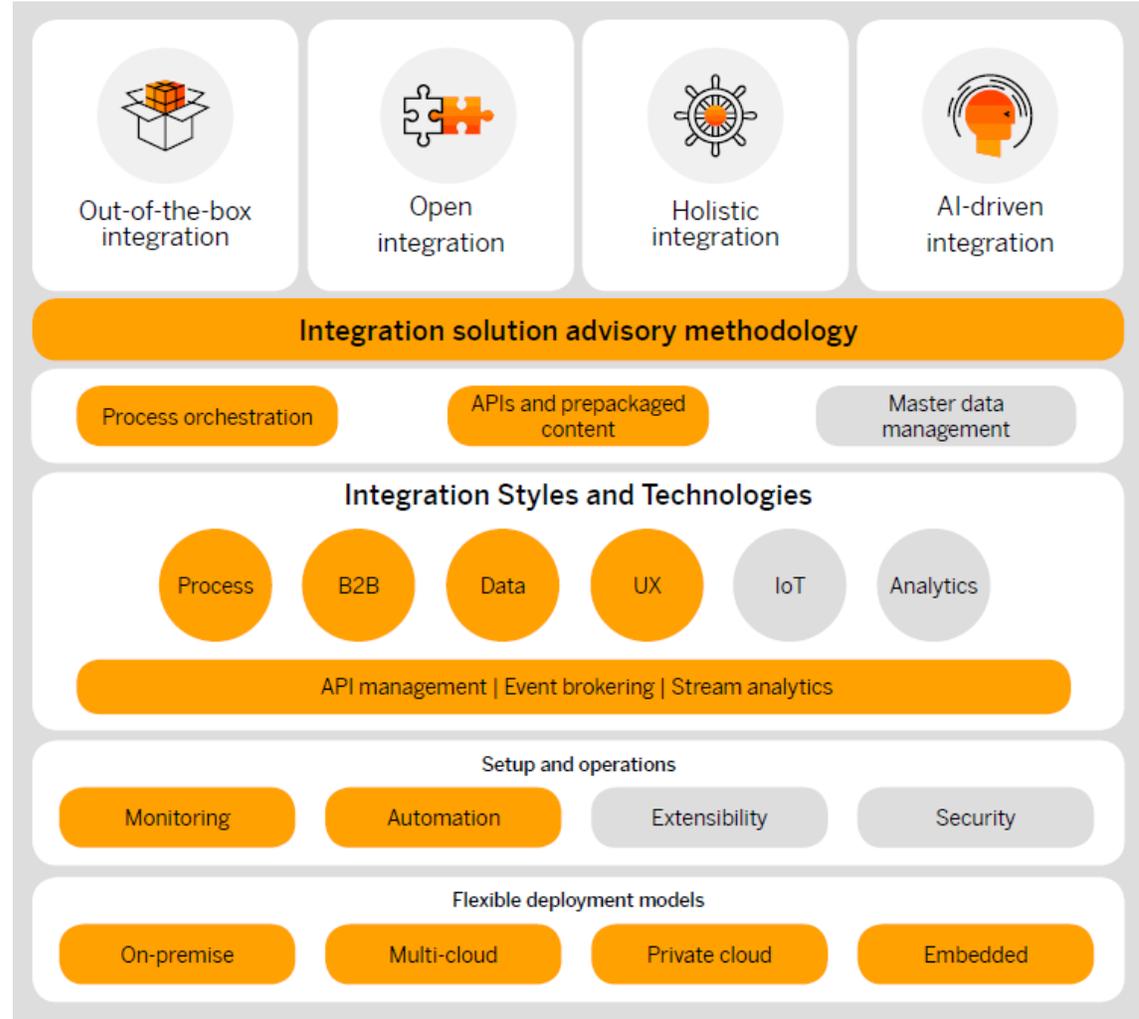
CIO Guide: Process and Data Integration in Hybrid Landscapes

Content Map

2018 | 2019



[Download](#)



Agenda

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ISA-M in Action

CIO Guides for Integration

ISA-M Template for Enterprise Architects

SAP Integration Architecture Community

Download ISA-M template

ISA-M Template

Derive Integration Guidelines for Your Organization

< Your Organization >



ISA-M Template

Overview



1

Overview & Terms of Use

2

Integration Roles

3

Integration Domains

4

Integration Styles & Use Cases Patterns

5

Technology Mapping

6

Interface Assessment

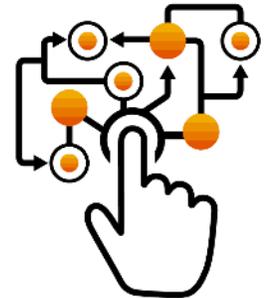
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CIO Guides

- Free PPT template
- Successfully adopted in multiple global organizations
- Usage in your organizations, projects or services
- SAP Consulting Services (optional)
- Contribute to ISA-M evolution (optional)

If you are interested in subscribing to the ISA-M template please send a mail to:

matthias.allgaier@sap.com



Key Takeaways

Summary and Outlook

Key use cases



Outlook

- 1 | Enhancement of ISA-M based on customer and partner feedback
- 2 | Enhancement of ISA-M with additional integration patterns
- 3 | Enhancement of ISA-M with sample solution architecture blueprints

Contact

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