Case Study: Moving From On-Premise to The Cloud with SAP Integration Suite

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In This Session

In this session, you will learn the benefits and challenges of transitioning your business operations to the cloud and the benefits of SAP Integration Suite. Discover the journey that Nedgia has been through to become a true "Cloud First" company and run its integrations in SAP Integration Suite.

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Do you know what a poem, Santiago's Way and SAP Integration Suite have in common?

The journey....

Caminante, no hay camino,
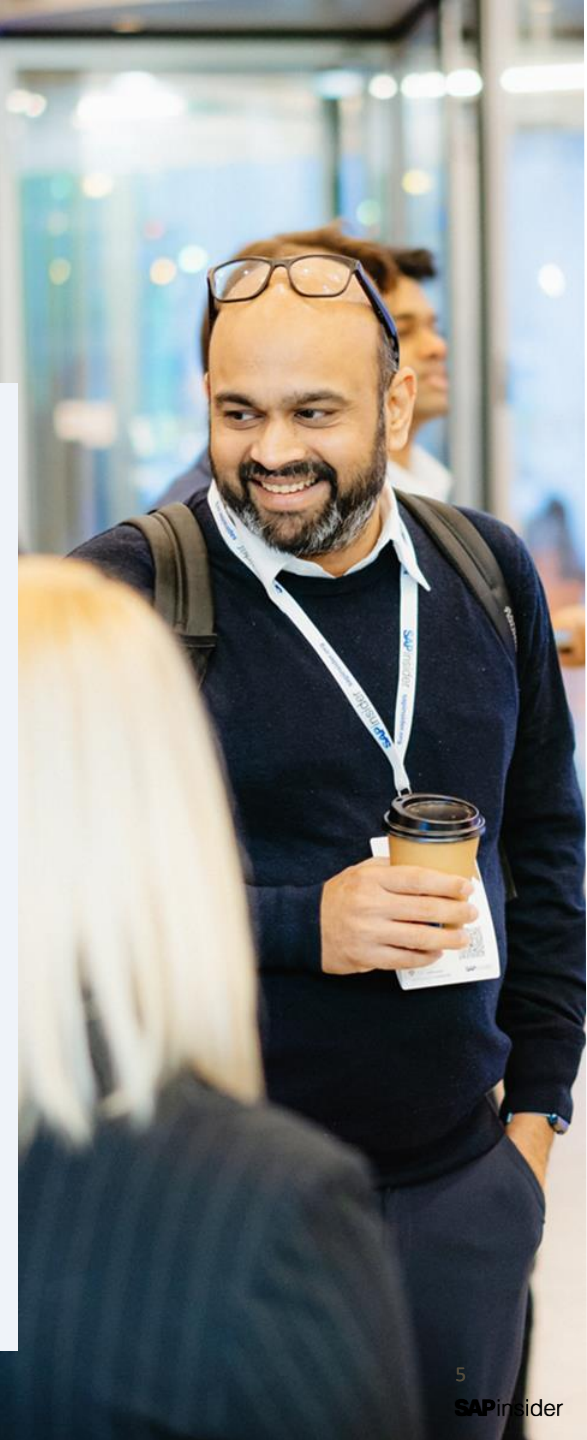se hace camino al andar.

Antonio Machado

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What We'll Cover

- SAP Integration Suite

- Nedgia's integration journey

- Migration tools and assessments

SAP Integration Suite

SAP Integration Suite is an open and modular iPaaS supporting your enterprise-wide integration needs for both SAP and non-SAP integration scenarios.
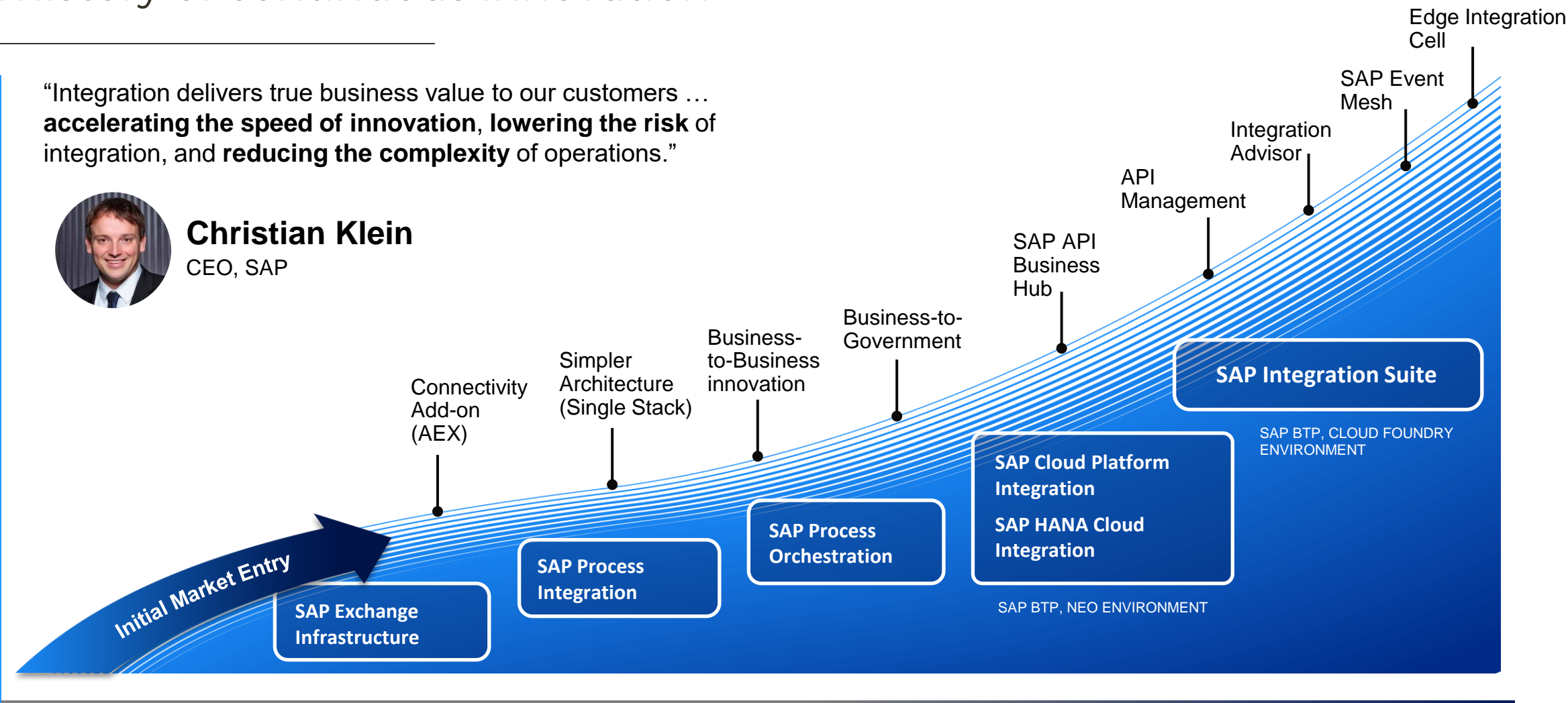
SAP's Investment in Integration
A history of continuous innovation

"Integration delivers true business value to our customers … **accelerating the speed of innovation**, **lowering the risk** of integration, and **reducing the complexity** of operations."
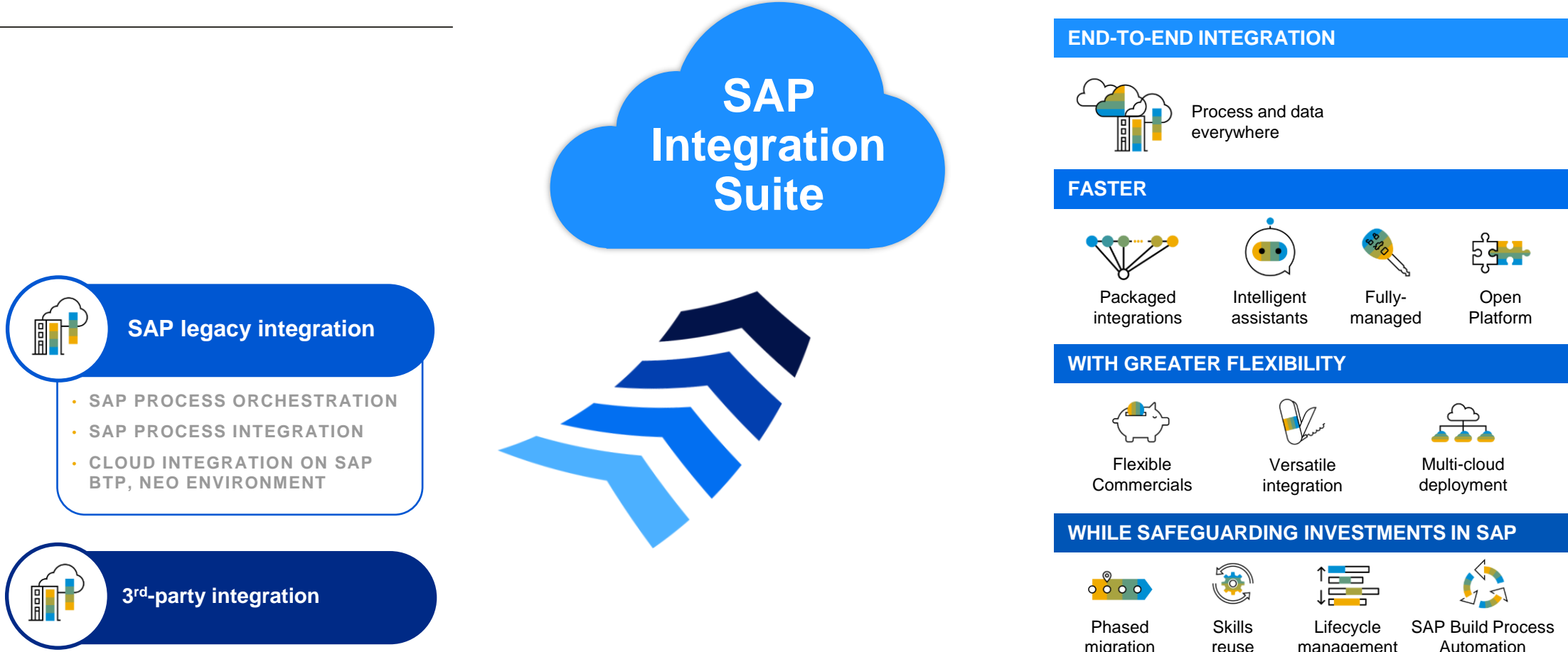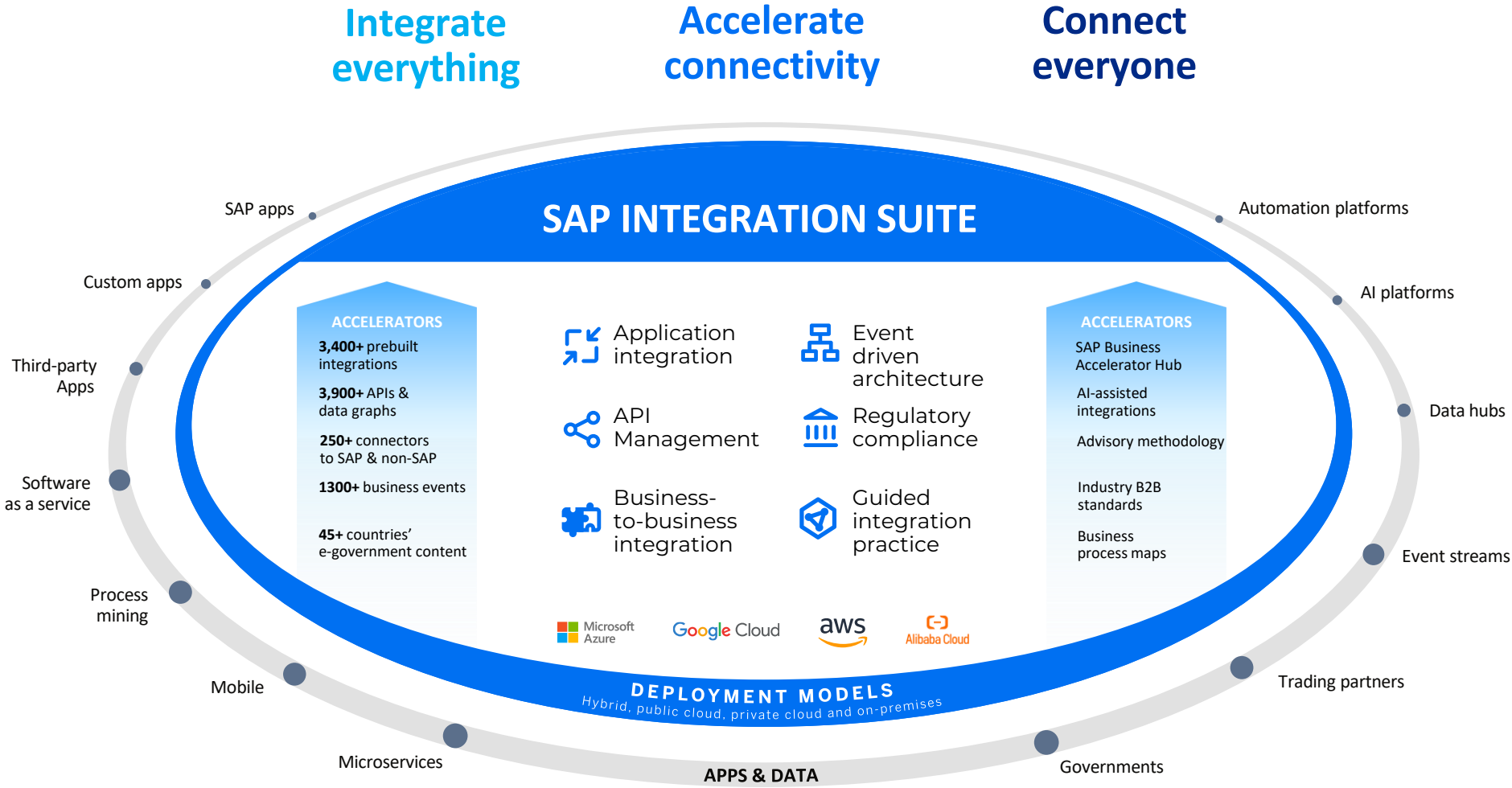
Christian Klein
CEO, SAP

CUSTOMER VALUE

Edge Integration Cell

SAP Event Mesh

Integration Advisor

API Management

SAP API Business Hub

Business-to-Government

Business-to-Business innovation

Simpler Architecture (Single Stack)

Connectivity Add-on (AEX)

Initial Market Entry

SAP Integration Suite

SAP BTP, CLOUD FOUNDRY ENVIRONMENT

SAP Cloud Platform Integration

SAP HANA Cloud Integration

SAP BTP, NEO ENVIRONMENT

SAP Process Orchestration

SAP Process Integration

SAP Exchange Infrastructure

2003

TODAY

Modernize integration to power your transformation journey

SAP Integration Suite

SAP legacy integration
- SAP PROCESS ORCHESTRATION
- SAP PROCESS INTEGRATION
- CLOUD INTEGRATION ON SAP BTP, NEO ENVIRONMENT

3rd-party integration

END-TO-END INTEGRATION
Process and data everywhere

FASTER
Packaged integrations | Intelligent assistants | Fully-managed | Open Platform

WITH GREATER FLEXIBILITY
Flexible Commercials | Versatile integration | Multi-cloud deployment

WHILE SAFEGUARDING INVESTMENTS IN SAP
Phased migration | Skills reuse | Lifecycle management | SAP Build Process Automation
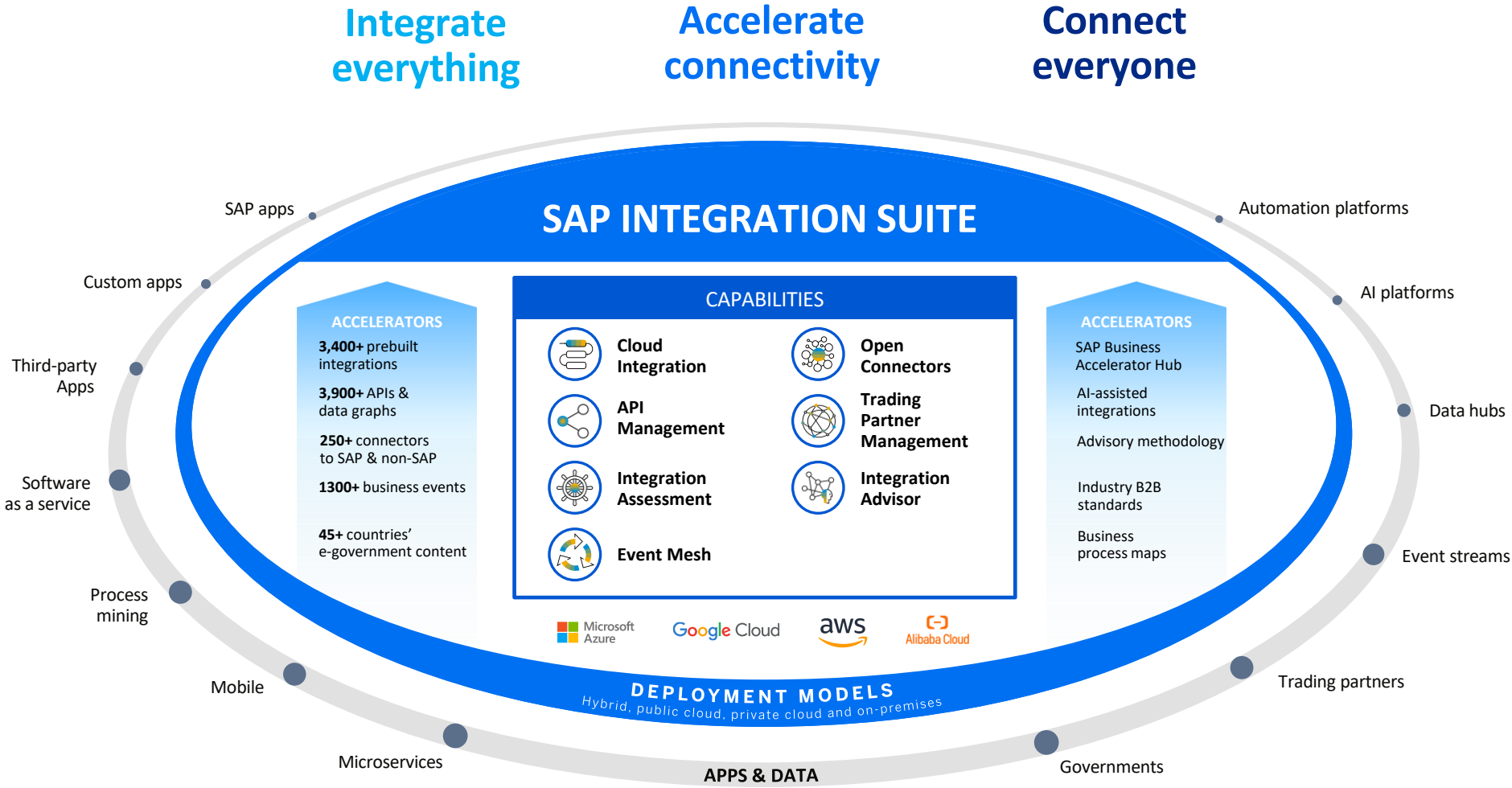
Simplify and consolidate integration to achieve end-to-end-processes faster at a lower TCO

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SAP Integration Suite: Integrate everything to innovate now

Integrate everything

Accelerate connectivity

Connect everyone

SAP apps

Custom apps

Third-party Apps

Software as a service

Process mining

Mobile

Microservices

Automation platforms

AI platforms

Data hubs

Event streams

Trading partners

Governments

SAP INTEGRATION SUITE

ACCELERATORS
3,400+ prebuilt integrations

3,900+ APIs & data graphs

250+ connectors to SAP & non-SAP

1300+ business events

45+ countries' e-government content

Application integration

API Management

Business-to-business integration

Event driven architecture

Regulatory compliance

Guided integration practice

ACCELERATORS
SAP Business Accelerator Hub

AI-assisted integrations

Advisory methodology

Industry B2B standards

Business process maps

Microsoft Azure   Google Cloud   aws   Alibaba Cloud

DEPLOYMENT MODELS
Hybrid, public cloud, private cloud and on-premises

APPS & DATA

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CAPABILITIES

Cloud Integration

API Management

Integration Assessment

Event Mesh

Open Connectors

Trading Partner Management

Integration Advisor

ACCELERATORS

SAP Business Accelerator Hub

AI-assisted integrations

Advisory methodology

Industry B2B standards

Business process maps

Microsoft Azure

Google Cloud

aws

Alibaba Cloud

DEPLOYMENT MODELS
Hybrid, public cloud, private cloud and on-premises

APPS & DATA

Nedgia's integration journey

Nedgia in a nutshell
Company of the Naturgy group, leader in Spain in distribution of natural gas, renewable gases and LPG

Capillary and modern distribution network

> **Spain** has 94,344 km of gas distribution networks, covering **85% of the population and 100% of the industry**

Regional, resilient and responsible

> We supply gas **to 5.6M supply points (70% of consumers)**

> **~60,000 km** of underground networks in **11 Autonomous Communities** and more than **1,150 municipalities**

> **~ 90,000 new customers** connected per **year**

> **Zero accident goal**, extensive EE.CC network

> **Digitalization and innovation** for excellence

308,000 calls received

78,000 are emergency alerts

93% of calls attended in 10 seconds

27 mins average to reach the emergency site

Almost 2,000 emergency alerts are remotely telemonitored

Strategic plan
Pledged with the energy transition seeing it as an opportunity

KEY ENVIRONMENTAL CHALLENGES

100% renewable gas by 2050

+

Carbon neutral by 2050

=

... commitment at strategic plan

Promoting **biomethane and H$_2$,** enabling net zero Scope 1 emissions for our customers

Neutralizing remaining emissions with CCS and nature-based solutions

Renewable gases

Naturgy is currently working on biomethane and hydrogen projects valued at 4,000€m

nedZero
Our road to carbon neutrality
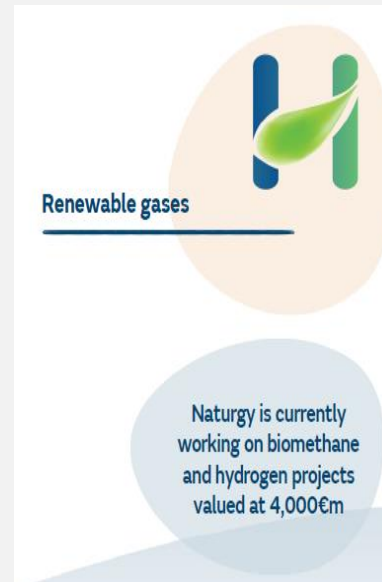
OUR APPROACH

- Leveraging on existing energy networks is the **most cost-effective way to meet EU climate targets.**

- Gas has a **unique value proposition to solve the current energy trilemma**

- Gas networks allow for **balance in the energy demand and supply in Spain**

- Gas is **the energy of choice for heat, industrial production and CCGT electricity generation**.

- A **full aggressive scenario** envisioning the complete electrification of building energy demands is not pragmatic within the context of Spain and Europe.

- For public acceptance and thus, for political feasibility, **a gradual approach to transition is essential**.

- Spain is strategically well positioned **to benefit from circular economy and to act as potential hydrogen hub.**

Challenges

BUSINESS CHALLENGES

Process fragmentation

Data Silos

Complexity

Traceability

Homogeneity

TECHNICAL CHALLENGES

Asynchronous interfaces

High level of customization

Support ending in 2025

Scalability

Nedgia decided to launch a SAP S/4HANA implementation project to cover and transform all the processes associated with the asset life cycle
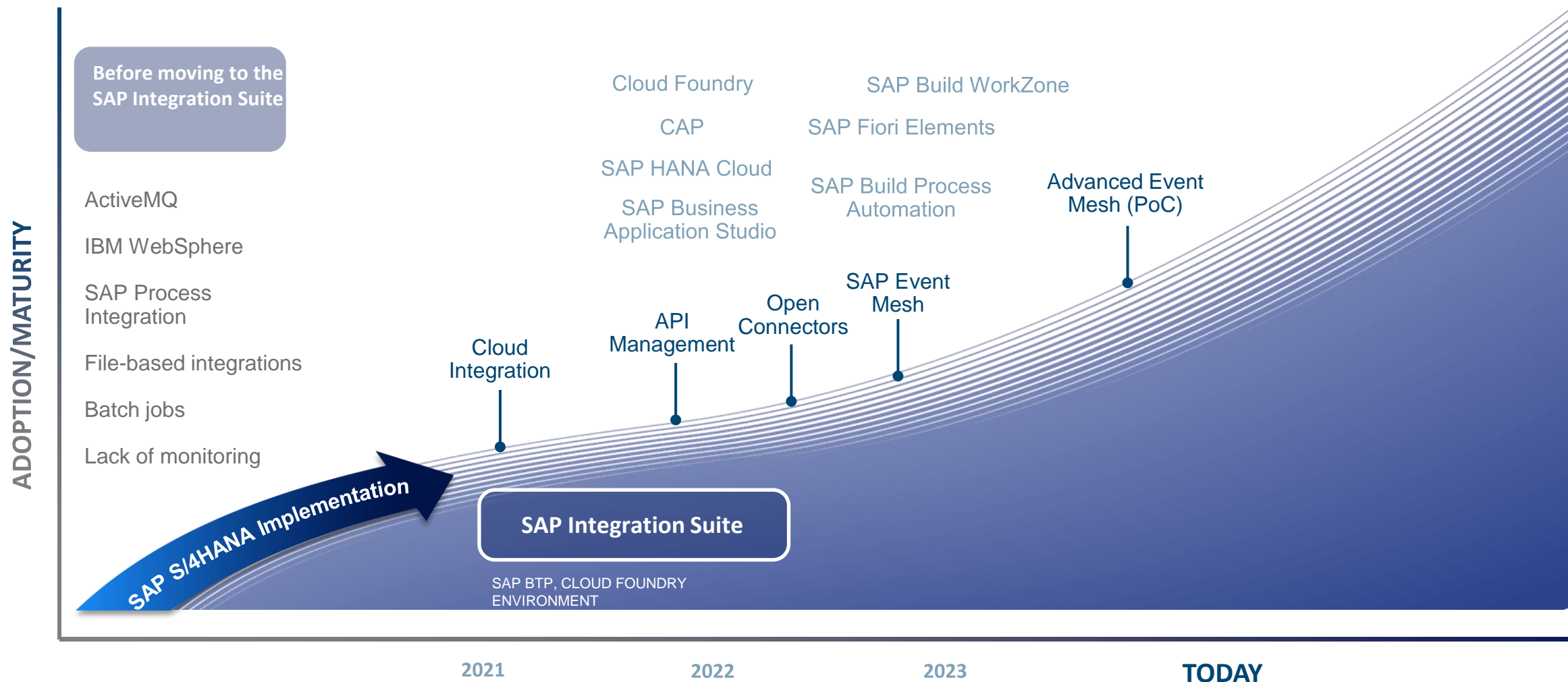
Before moving to the Cloud

File-based Integrations
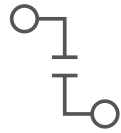
Process fragmentation

Batch jobs

Monitoring

Cloud Integration

Simplifies and accelerates the integration of data, processes, applications and business networks to help companies achieve faster business outcomes.

- Fully SAP-managed, multi-cloud integration platform

- Strong focus on security and infrastructure availability

- Compatible with SAP Process Orchestration*

- A large ecosystem with partner-developed integration content & adapters

- Rich set of connectivity adapters for SAP to SAP and SAP to third-party applications integration, both in the cloud and on-premise

- Edge Integration Cell as an optional, customer-operated next-generation hybrid integration runtime within customer environments for local integrations

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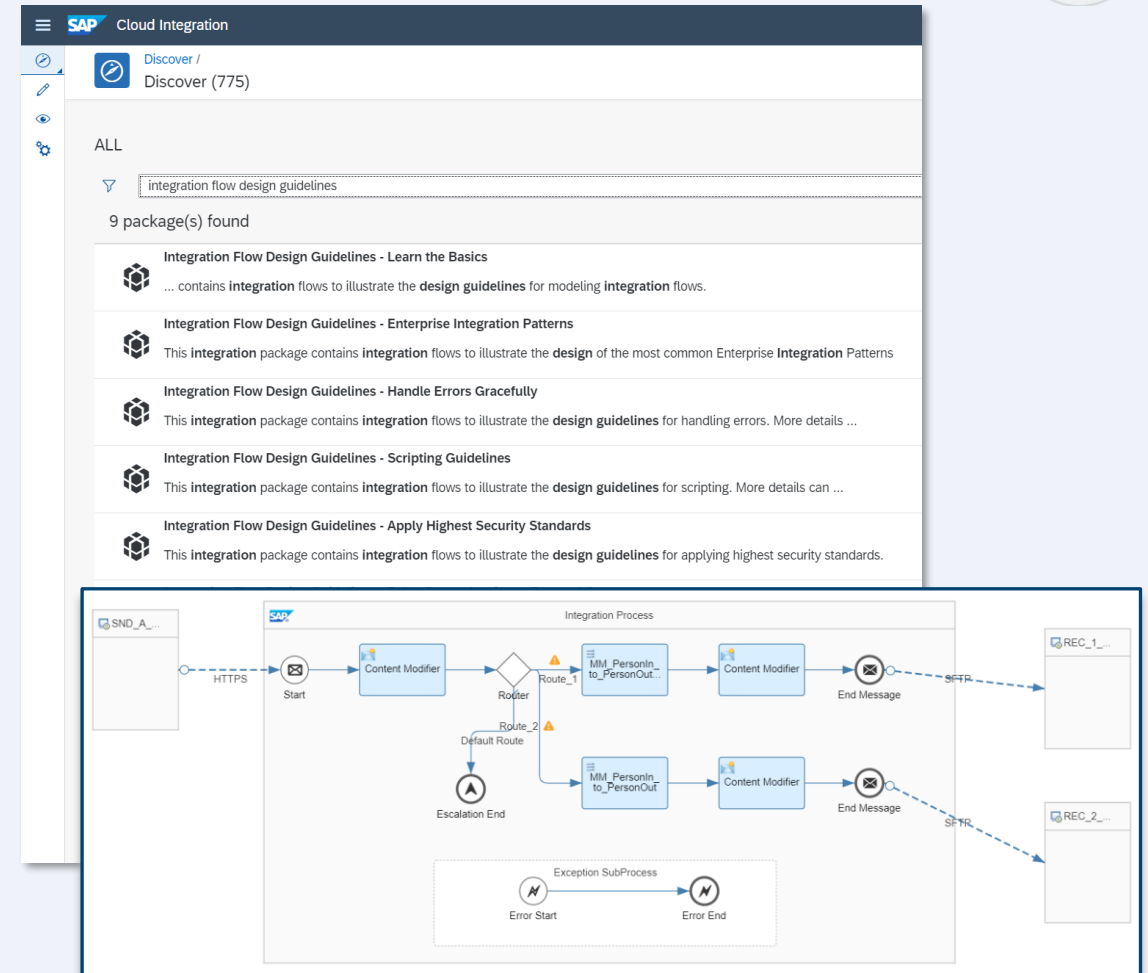
Cloud Integration: *Multi-cloud*
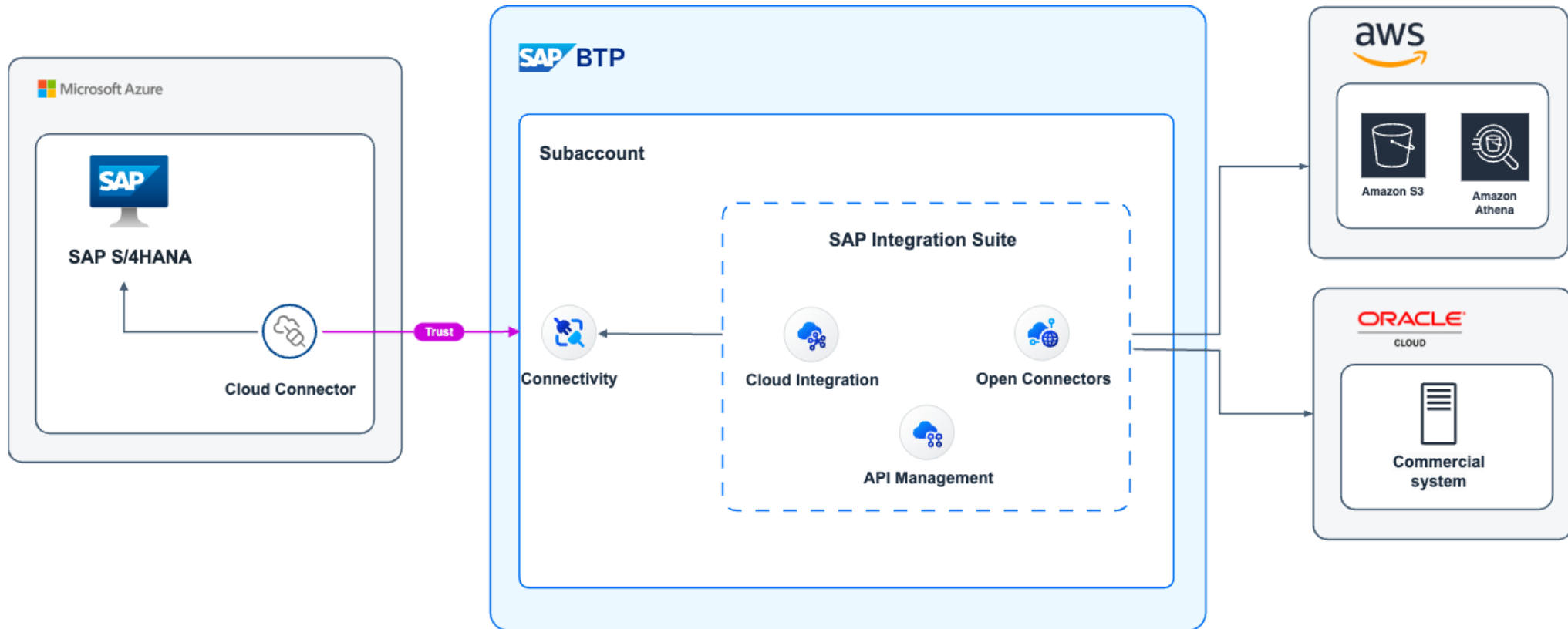
Cloud Integration: *SAP and non-SAP*
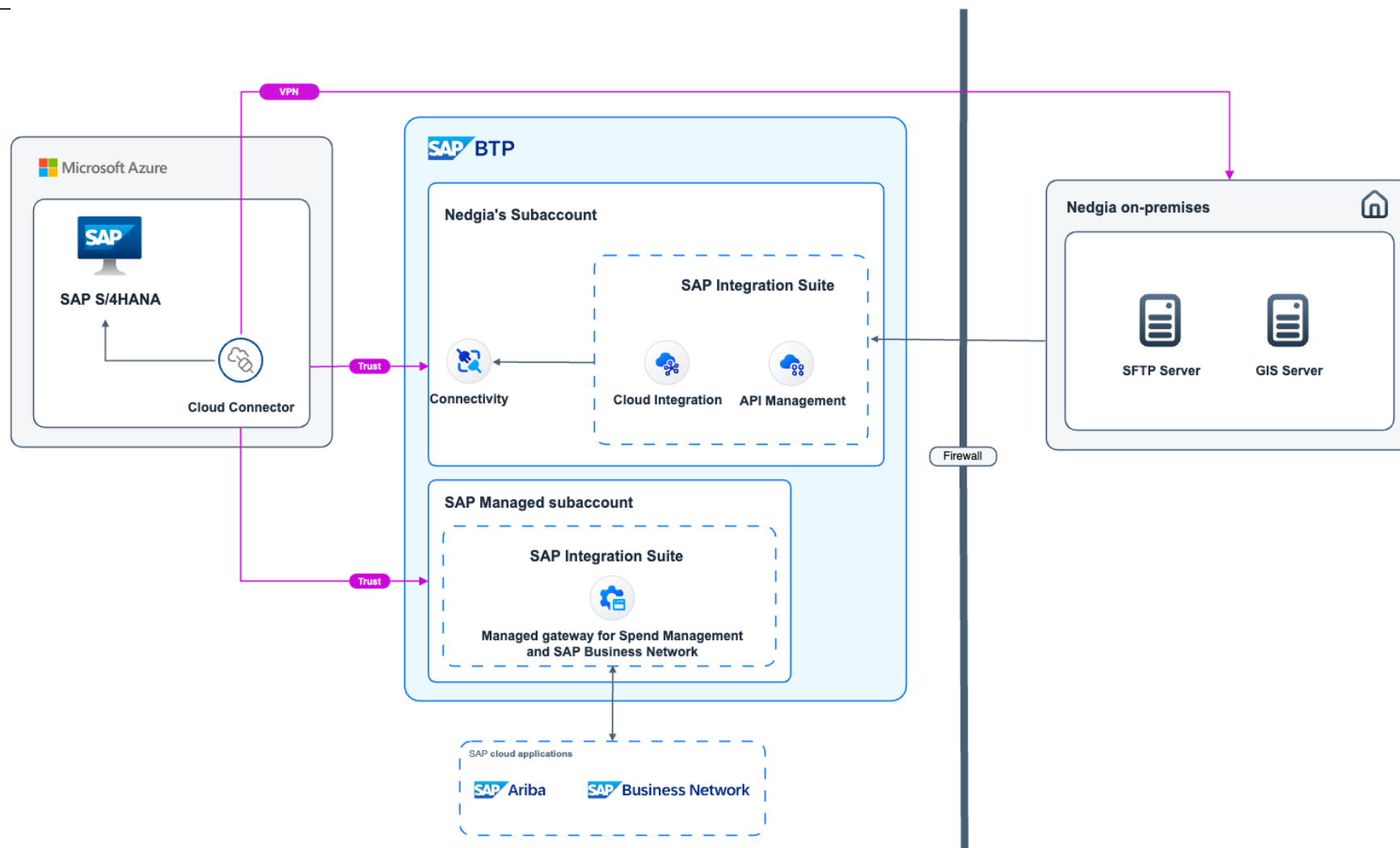
API Management

Provides your developer community with unified, secure, controlled and compliant access to the APIs of your digital assets.

- Standards-based API discovery of OpenAPI, REST, OData, GraphQL and SOAP services

- Enterprise-grade API security, validation, compliance and attack protection (DoS, CSRF, XSS…)

- Visual development of powerful custom API governance, security and mediation policies

- Creation and composition of data graphs, for use with GraphQL or OData

- Real-time insights, analytics and monitoring of API traffic, notifications of usage & errors

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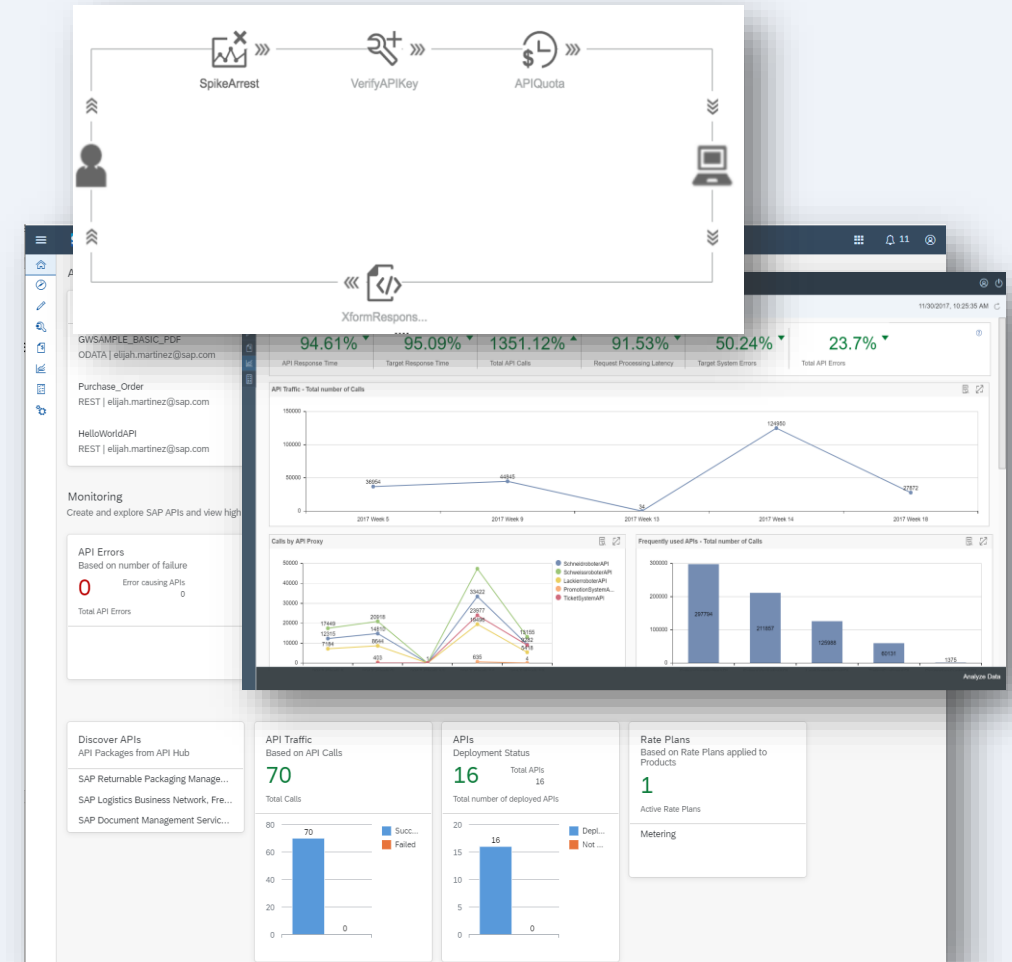
API Management: *B2B API access*
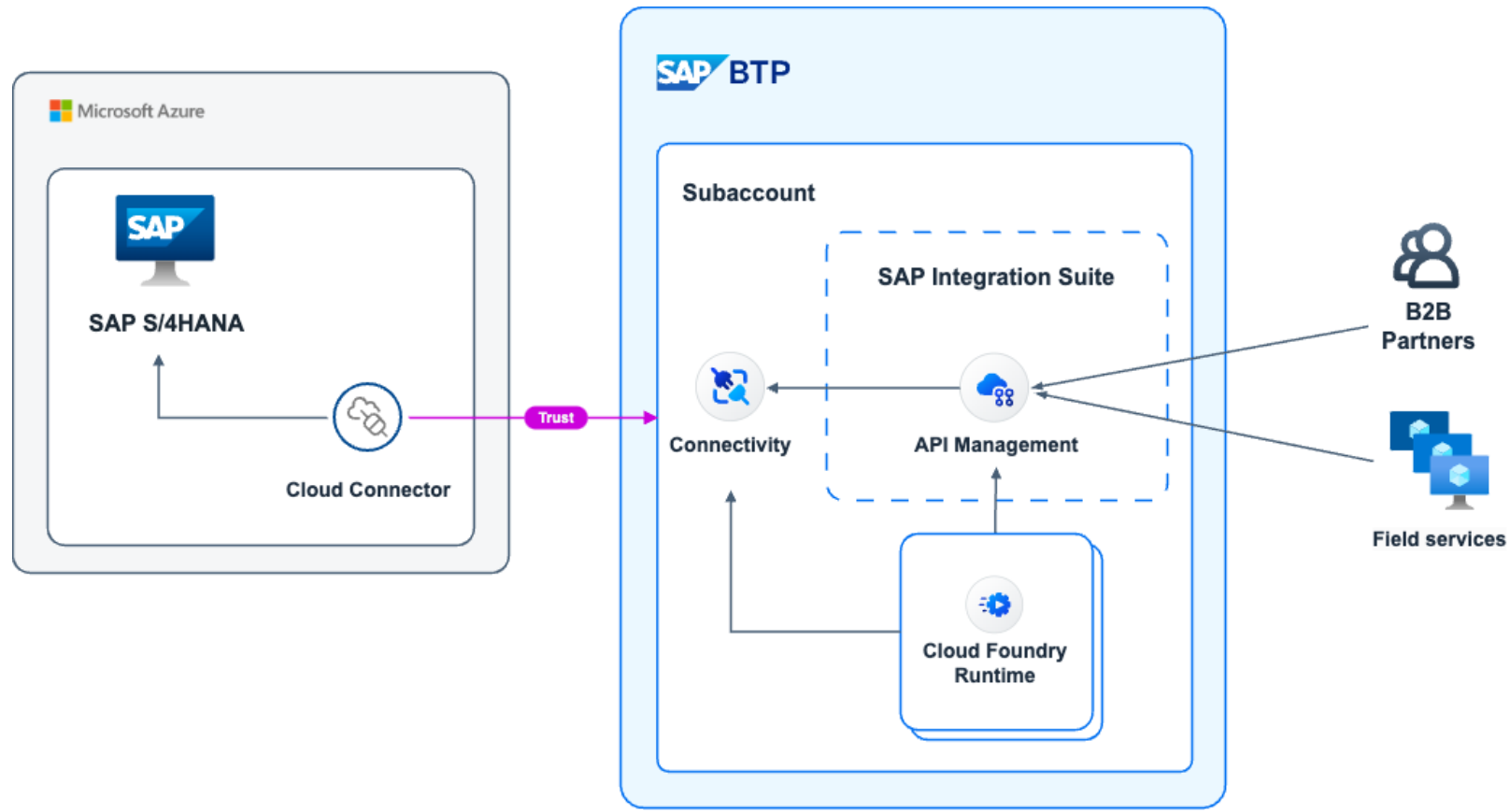
Open Connectors

Simplifies connectivity to third-party apps by providing feature-rich, pre-built connectors to over 160 non-SAP cloud applications. It offers a comprehensive and seamless integration to third-party apps that work out of the box.

- Reduce time to connect

- Normalized authentication, error handling, search, eventing, and pagination via pre-built connectors.

- Consistent data model across one or more connectors into a normalized resource.

- RESTful APIs with built-in interactive API documentation
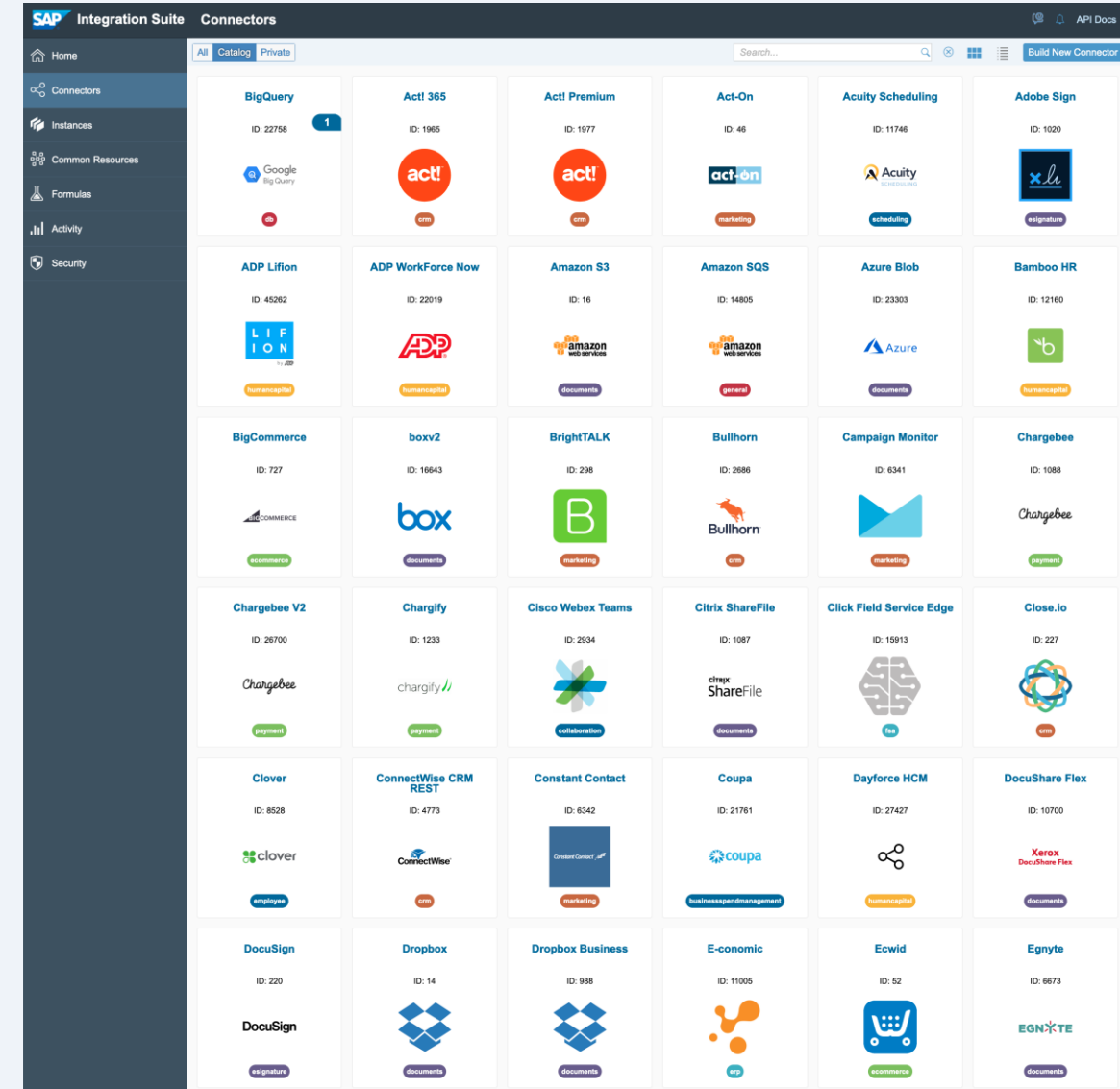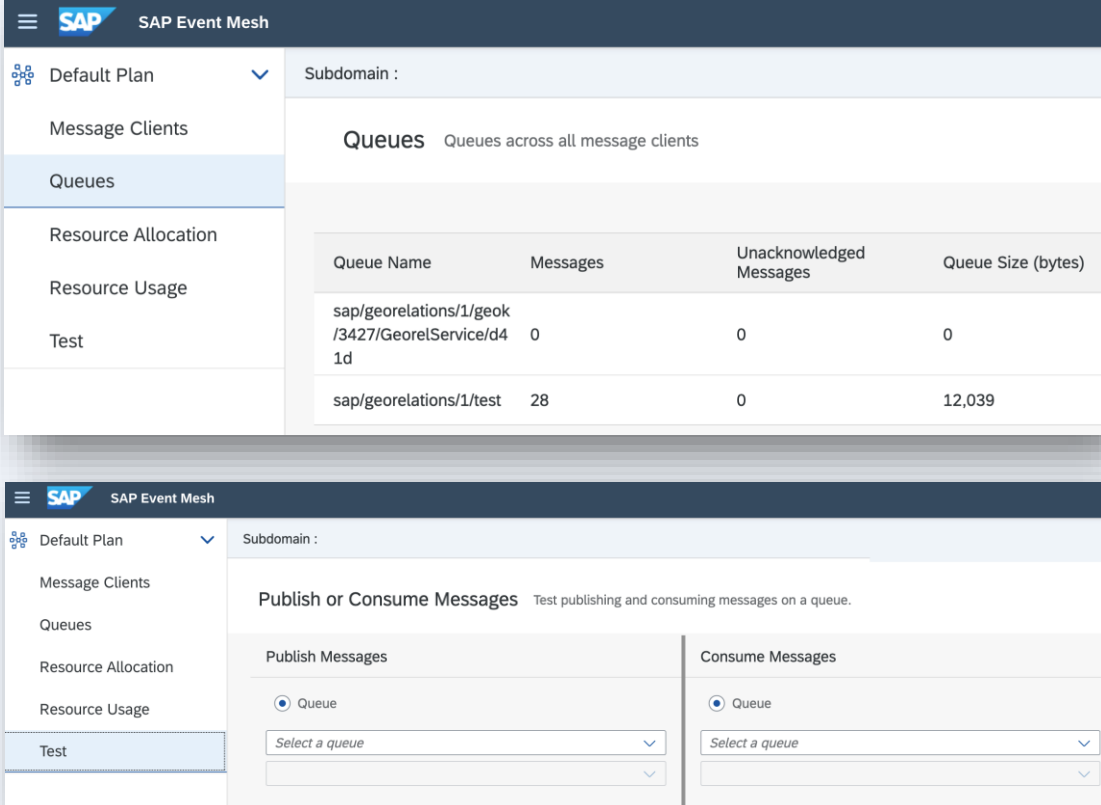
Open Connectors: *3rd party APIs*
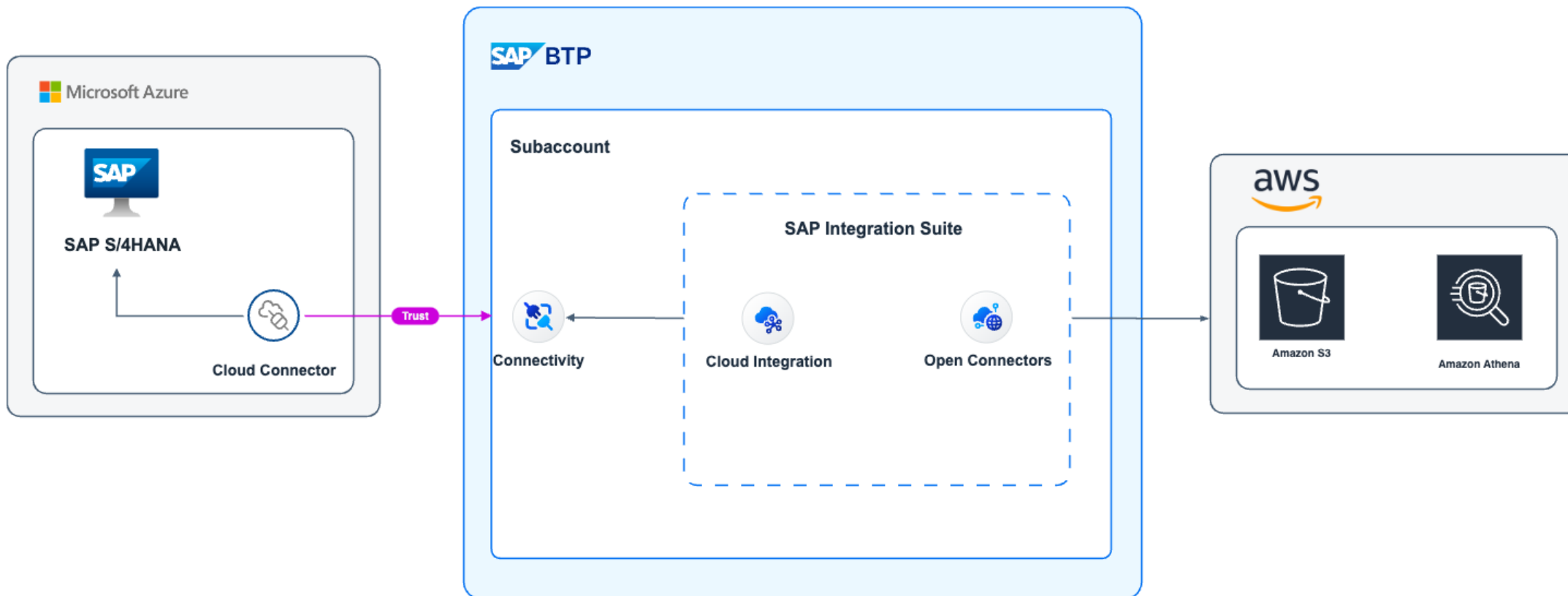
SAP Event Mesh

SAP Event Mesh is a fully-managed cloud service for enabling applications, integrations and extensions to communicate asynchronously through events.

- Event-Broker-as-a-Service decouples communication

- Business real-time updates on significant changes in business applications

- Share SAP events outside the core SAP ecosystem

- Loosely coupling business applications and infrastructure

- Openness and focus by supporting open standards while providing extra benefits for SAP's ecosystem

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SAP Event Mesh

Nedgia's current landscape

What's next in Nedgia's integration journey?

ADOPTION/MATURITY

Now in SAP Integration Suite

Centralized API Management

Event-based integrations

Integration monitoring

Cloud Foundry

CAP

SAP HANA Cloud

SAP Business Application Studio

SAP Build WorkZone

SAP Fiori Elements

SAP Build Process Automation

Continuous Integration and Delivery

SAP Cloud ALM

Advanced Event Mesh

Cloud Integration

API Management

Open Connectors

SAP Event Mesh

SAP S/4HANA Implementation

SAP Integration Suite

SAP BTP, CLOUD FOUNDRY ENVIRONMENT

50 -> 100 integrations

Non-SAP integrations

2021   **2022**   **2023**   **TODAY**

How has SAP helped you on this journey?

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Migration tools and assessments

- It's all about the right mindset

- Edge Integration Cell

- SAP Migration Factory

- Migration Assessment

- Evolve Neo program

How to approach integration modernization?
Start with the right mindset and methodology

1

THINK STRATEGICALLY

- Invest in standardized solutions that support you for the long haul
  - New projects on SAP Integration Suite
  - Stop investments on SAP PI/PO or SAP CPI
    on SAP BTP, Neo environment
- Do not assume "lift and shift" is your best option

2

START SIMPLE

- Choose easy migration scenarios to gain experience
- Consider prebuilt integrations maintained by SAP (api.sap.com)
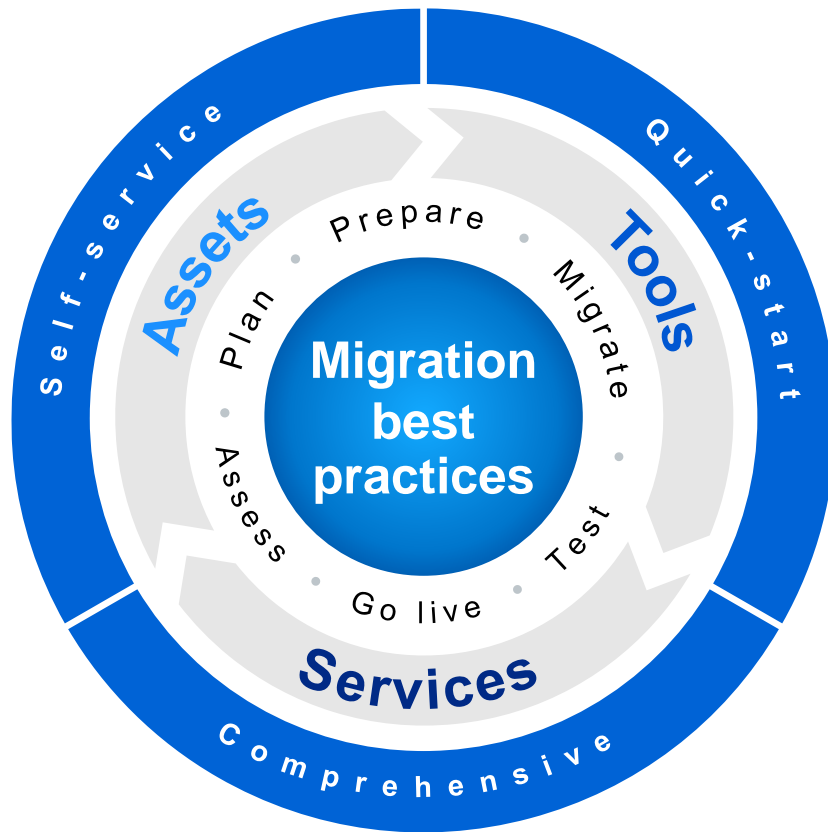- Migrate simpler scenarios with least disruption to gain experience

3

SCALE CONFIDENTLY

- Approach more complex scenarios
  - Highly customized / code intensive
  - Ground-to-ground
  - Business-to-Business
  - Mission critical scenarios

How to accelerate modernization outcomes and lower risks?
Take advantage of assets, tools, and services from SAP & partners

SELF-SERVICE HELP

- **Assessment tools** to evaluate your existing environment and estimate efforts

- **Tools to automate migration and testing** from SAP and partners

- **Migration guides, documentation, and community content** to guide you through the migration lifecycle

- **Pre-built integrations** maintained by SAP

QUICK START PROGRAMS

- **SAP Migration Factory –** a **free** 2-3 week program to help asses and plan your migration from **SAP PI/PO to SAP Integration Suite**

- **Evolve Neo program – free** access to SAP experts who help you plan and prepare your migration to SAP Integration Suite on SAP BTP, **Cloud Foundry** environment

- **SAP Service and Support** offer SAP Integration Suite quick start and migration assistance with **short duration, low cost engagements**

END-TO-END SERVICES

- **SAP Services** - tailored services across the entire migration lifecycle – **including implementation services**

- **SAP Premium Engagements** (e.g., SAP MaxAttention) offers a customizable deep dive **SAP PI/PO migration workshop** along with **proof-of-concept**, **health-check** and **on-call go-live** support services.
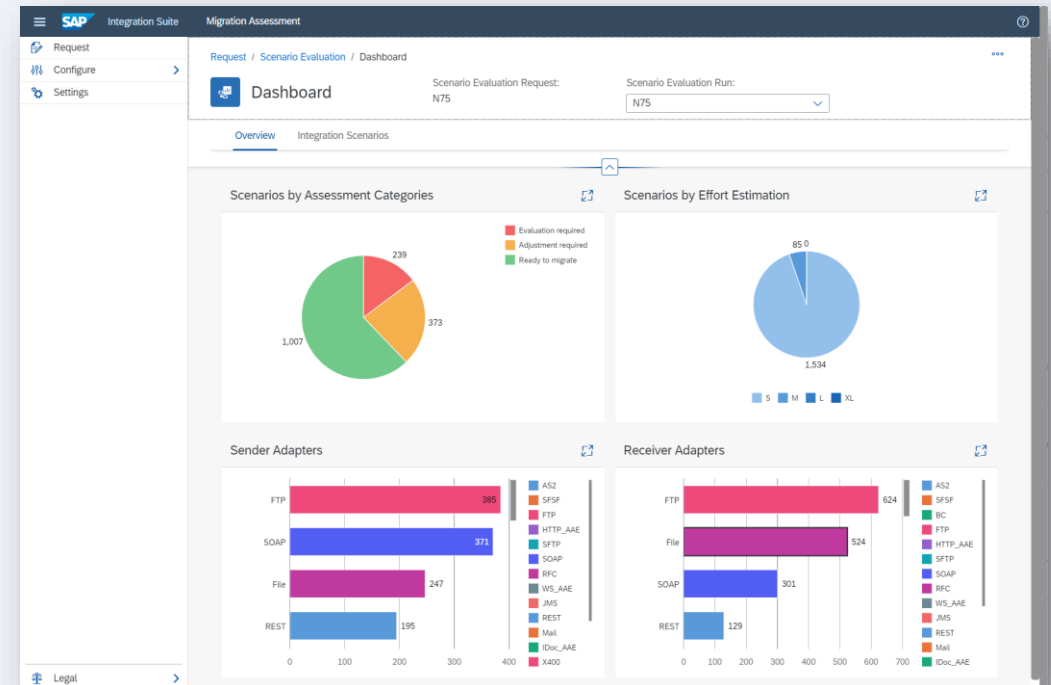
Migration Assessment capability
Transition to the cloud from SAP Process Orchestration

The Migration Assessment capability is a self-service tool that automatically analyses and assesses an on-premise SAP Process Orchestration system to be migrated to SAP Integration Suite.
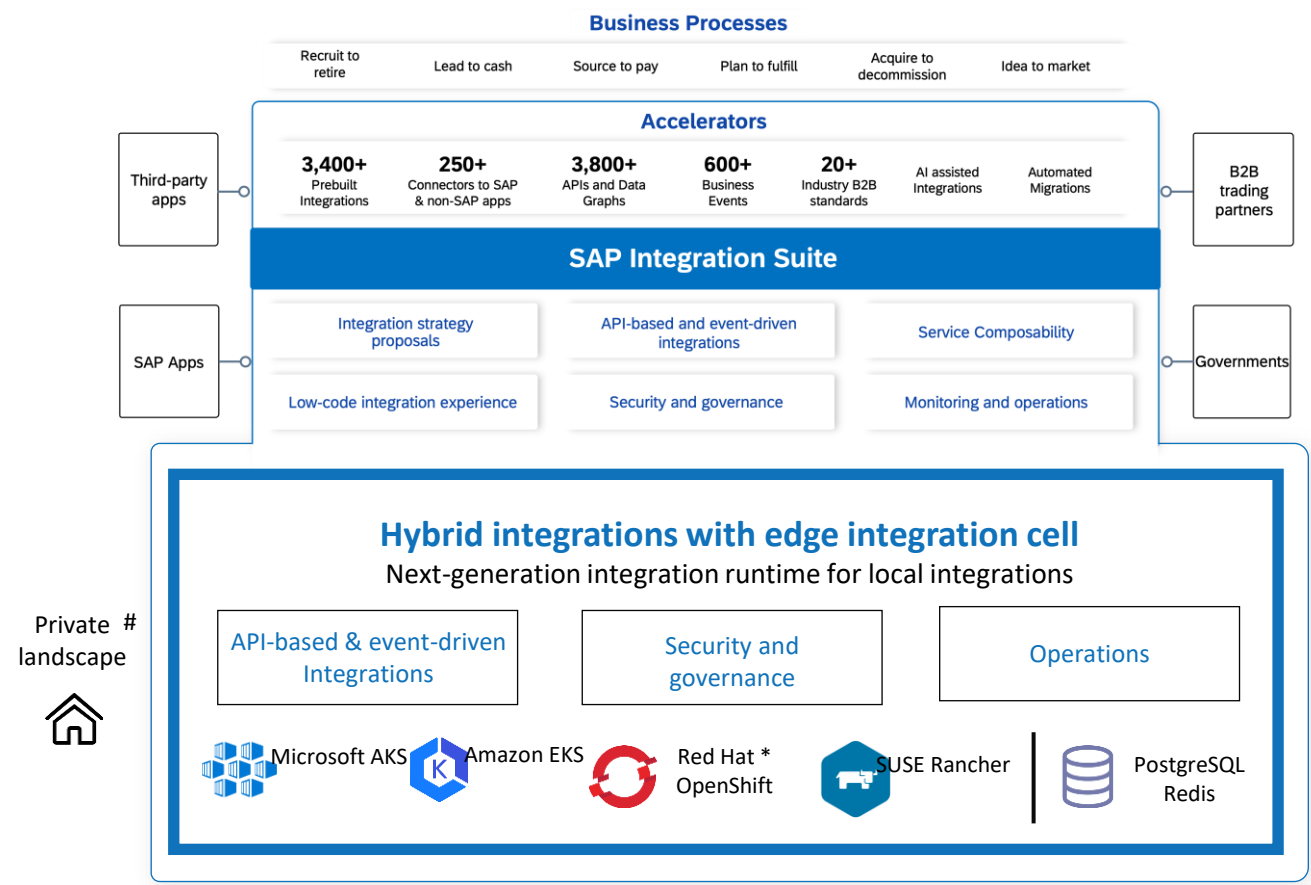
- Provides upfront transparency on estimated migration effort and costs

- Accelerates the migration process

- Analyses and assesses an SAP Process Orchestration system to be migrated to SAP Integration Suite

- Extracts integration scenarios from SAP Process Orchestration

- Evaluates integration scenarios based on flexible rules framework

- Estimates migration effort

- Complements the migration tool to semi-automatically migrate integration scenarios from SAP Process Orchestration to SAP Integration Suite based on integration flow templates

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Edge Integration Cell
Next-generation "hybrid" integration runtime

Business Processes

| Recruit to retire | Lead to cash | Source to pay | Plan to fulfill | Acquire to decommission | Idea to market |

Accelerators

| 3,400+ Prebuilt Integrations | 250+ Connectors to SAP & non-SAP apps | 3,800+ APIs and Data Graphs | 600+ Business Events | 20+ Industry B2B standards | AI assisted Integrations | Automated Migrations |

SAP Integration Suite

| Integration strategy proposals | API-based and event-driven integrations | Service Composability |
| Low-code integration experience | Security and governance | Monitoring and operations |

Third-party apps

SAP Apps

B2B trading partners

Governments

Hybrid integrations with edge integration cell
Next-generation integration runtime for local integrations

| API-based & event-driven Integrations | Security and governance | Operations |

Microsoft AKS   Amazon EKS   Red Hat * OpenShift   SUSE Rancher   PostgreSQL Redis

Private # landscape

\# Private landscape corresponds to on-premise or private cloud.
* Part of the road map, beyond GA

EDGE INTEGRATION CELL – WHY ?

Elevate the transformation journey for **SAP PIPO** Customers

Stickiness of **on-premise / private cloud** install base

Regulatory **Compliance**

Embrace the modern cloud with **hybrid** architecture

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SAP Migration Factory
Detailed Engagement Model

Transfer to Customer, SAP Services or Partner

Migration Assessment
F R E E

Migration Execution
P A I D

STEP 1: Define Scope
(Capture Information & Analyze)

1-2 WEEKS

Information / Access Required

- Migration Questionnaire
- Review as-is architecture & landscape (including interfaces and applications)
- Run automated assessment utility to assess current environment (v. 7.5 SP06 and higher)
- Access to current environment (optional)*

Access to Customer SME

- 2-to-3 (1 hr.) technical call's with customer

STEP 2: Migration Plan
(Approved by Customer)

1 WEEK

Review and Approve

- Migration Scope (inventory of integrations; SAP & non-SAP)
- Migration Roadmap (Dev/QA/Production cutover)
- Migration Plan (timeline, effort)

SAP Integration Suite Education

- Migration Benefits & IS Education

STEP 3: Migration Prep & Execution

Migration Execution

- Ramp-up customer: SAP Integration Suite
- Prepare environment (Dev/QA/Prod)
- Migrate artifacts
- Test & adjust migration
- Go-live
  - Configure production integration/apps
  - Monitor for issues
  - Final enablement/sign-off by customer

Create Project Plan

Engage: migrationfactory.integration@sap.com to get started

*The automated assessment utility can be run by the customer to extract metadata used by SAP to automate the assessment of existing artifacts in the PI/PO system. Typically, an online meeting to review the more complex scenarios with the customer is all that's required.

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Evolve Neo program
Migrate your Neo implementation to a modern, multi-cloud foundation

Four easy steps to help you succeed in your modernization journey

1

One-hour kick off call to go over an overview of the program and migration process

2

An SAP BTP expert for two weeks:
1. Analyses your Neo services – including your apps, configurations, and security settings
2. Develops a migration roadmap detailing system scope and migration journey

3

One-hour call to review the migration roadmap and discuss next steps with your team

4

Checkpoint Calls every 2 – 4 weeks with SAP BTP experts to address your migration-related questions

Prerequisites

- Program open to CPEA and subscription customers only
- Must have active SAP BTP, Neo environment subaccounts
- Must grant SAP access to subaccounts to be analysed for migration

Get started today!

Contact: sap.btp.migration@sap.com

SAP Partner offerings
Automated Integration Testing

INT4 SHIELD LITE

CAPABILITIES

- Automatically create and execute test cases

- Automatically capture messages from productive landscapes using Int4 Robotic Crawler

- Simulating 3rd party systems and B2B partners with captured messages

- Validate message routing, mapping, and translation

- Audit test quality

- Scale to millions of test cases

- SAP certified ABAP add-on; whitelisted for SAP Private Cloud (SAP_BASIS & SAP_ABA 7.40; Fiori UI Optional SAP_UI 7.54 SP02 See SAP Note 2796241)

Available on **SAP Store**

Figaf   **Figaf Migration Edition**

CAPABILITIES

- Automatically generate test scripts & creation of test data

- Advanced testing capabilities like
  - Mocking endpoints
  - Ensuring compliance with confidential data sets

- SAP PI/PO migration process management & automation
  - Complete migration status overview
  - Generate test data from SAP PI/PO & compare results
  - Migrate/test from SAP PI/PO 7.1 to 7.5

- Built on SAP BTP (Cloud Foundry)

- 12 months FREE usage of testing tools for migration purposes

- 2 months FREE trial of full DevOps Suite with migration tools

- Runs on customer SAP BTP or Desktop (Java JRE 8+; PostgreSQL 11+)

Available on **SAP Store**

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Key Points to Take Home

- **Future-proof** your **investments** and move to multi-cloud

- Think strategically – **"Lift-N-Transform"**

- Start **Simple** and Scale **Confidently**

- Take advantage of **Evolve Neo** and **Migration Factory.** Free programs

- SAP Integration Suite: Versatile, Hybrid and Enterprise-Grade integration platform.

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Thank you! Any Questions?

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Stefano Passaro: spassaro@nedgia.es

Please remember to complete your session evaluation.

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Integration Suite (ondemand.com)

EIC: https://cpisuite-us-07.integrationsuite.cfapps.us10.hana.ondemand.com/shell/home

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