SAP BTP in a Nutshell
SAP Market Communication for Utilities

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Public

Agenda

SAP Market Communication for Utilities

- Introduction
- Benefits
- Example Process and Communication

How SAP Market Communication for Utilities is leveraging SAP BTP

- Solution Building Blocks
  – Market Message Transfer
  – Process Engine
  – Monitoring and Customer Self Services

- SAP BTP Highlights
  – SAP HANA Cloud
  – SAP BTP Kyma Runtime
  – SAP Cloud Foundry

SAP Market Communication for Utilities

The Utilities Market Situation: Introduction

Global Energy Crisis

- Exploding prices and procurement issues for energy on a global level
- Need for more sustainable energy sources and efficient transit
- Radically changing global political situation requiring agility of enterprises

High degree of legal changes occurring regularly

- Companies struggling to deal with high number of regulatory changes regularly
- Increase resiliency against cyber-attacks, pandemics, etc.

Customer expectations

- Transformation of customer expectations from pure delivery of energy to service providers
- Offer best-in-class customer service

Drive operational excellence

- Build seamless operations in business networks
- Use smart technologies like AI for process automation

Solving Customer Needs on SAP Market Communication Cloud Together with SAP S/4 HANA Utilities Add-Ons

Building standardized processes on Market Communication Cloud for Utilities

Co-Innovation

BTP Utilization

- Common definition of industry best-practice business processes together with strategic customers
- Prioritization of requirements and enhancements in customer community

- Providing "Market Communication as a service" utilizing:
  - SAP Cloud Integration
  - SAP Cloud Foundry
  - SAP BTP Kyma Runtime
  - SAP HANA Cloud

Market Communication Cloud (German version)

SAP Market Communication Cloud for Utilities is a public cloud solution for the **holistic management of communication processes in the German energy market**. Legislation requires the intercompany data-exchange processes between the various market participants in deregulated energy markets to comply to a strictly standardized regulatory framework. SAP Market Communication for Utilities performs conversion and data exchange processes as a service in the German energy market.

Benefits

- Highly reduced effort for regularly occurring legal change implementations
- Unlock capacity for the core business and new business models
- Improved Monitoring and Exception Handling

SAP Market Communication cloud for Utilities enables customers to
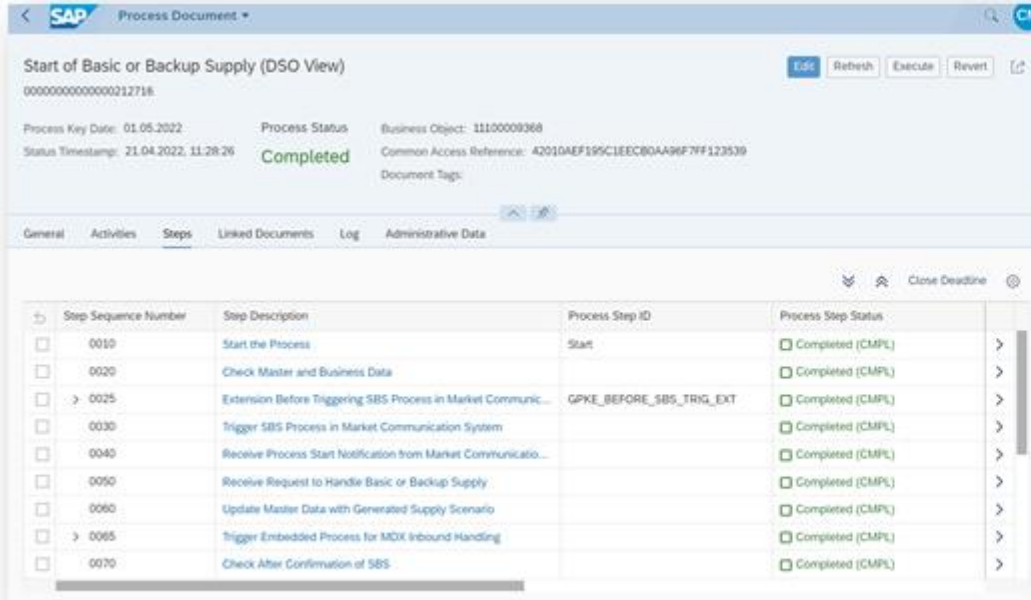
- Automatically run legally compliant processes as a service managed by SAP
- Handle Exceptions in Market Communication in Self-Services with low effort
- Dynamically scale their business and market processes on a usage-based metric
- Seamlessly connect to the SAP S/4HANA Utilities Add-Ons for the German Market
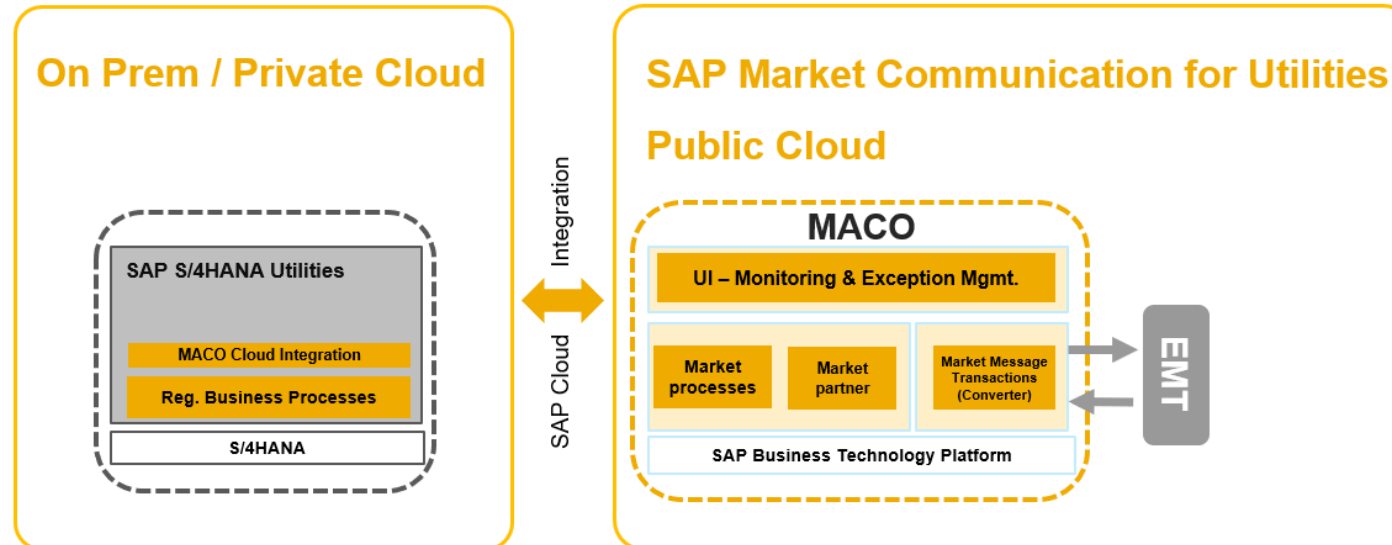
Solution Page (sap.com)
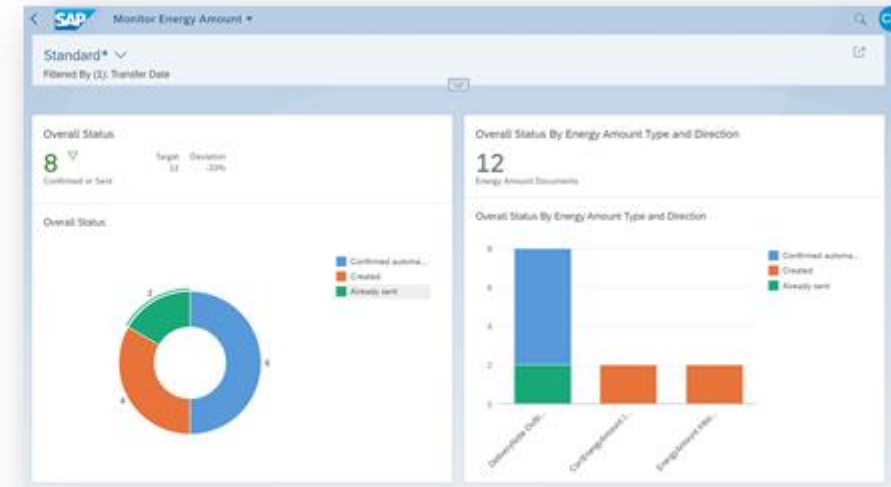
Help.sap.com

Solving Customer Needs on SAP Market Communication Cloud Together with SAP S/4 HANA Utilities Add-Ons

- Highly automized process and message Handling

- Seamless integration with SAP S/4HANA Utilities

- Improved Monitoring and Exception Handling

- Regulatory updates as per legal requirements to ensure process compliance

Help Portal: SAP Market Communication for Utilities

https://help.sap.com/maco

SAP Market Communication for Utilities: FAQ and Example Process

FAQ on MaCo:

https://help.sap.com/docs/market-communication-for-utilities/faq/general-faq?locale=en-US

What is a Market Communication Cloud Process? – an example including the communication of BTP with SAP S/4HANA

How SAP MaCo is leveraging SAP BTP

Market Process
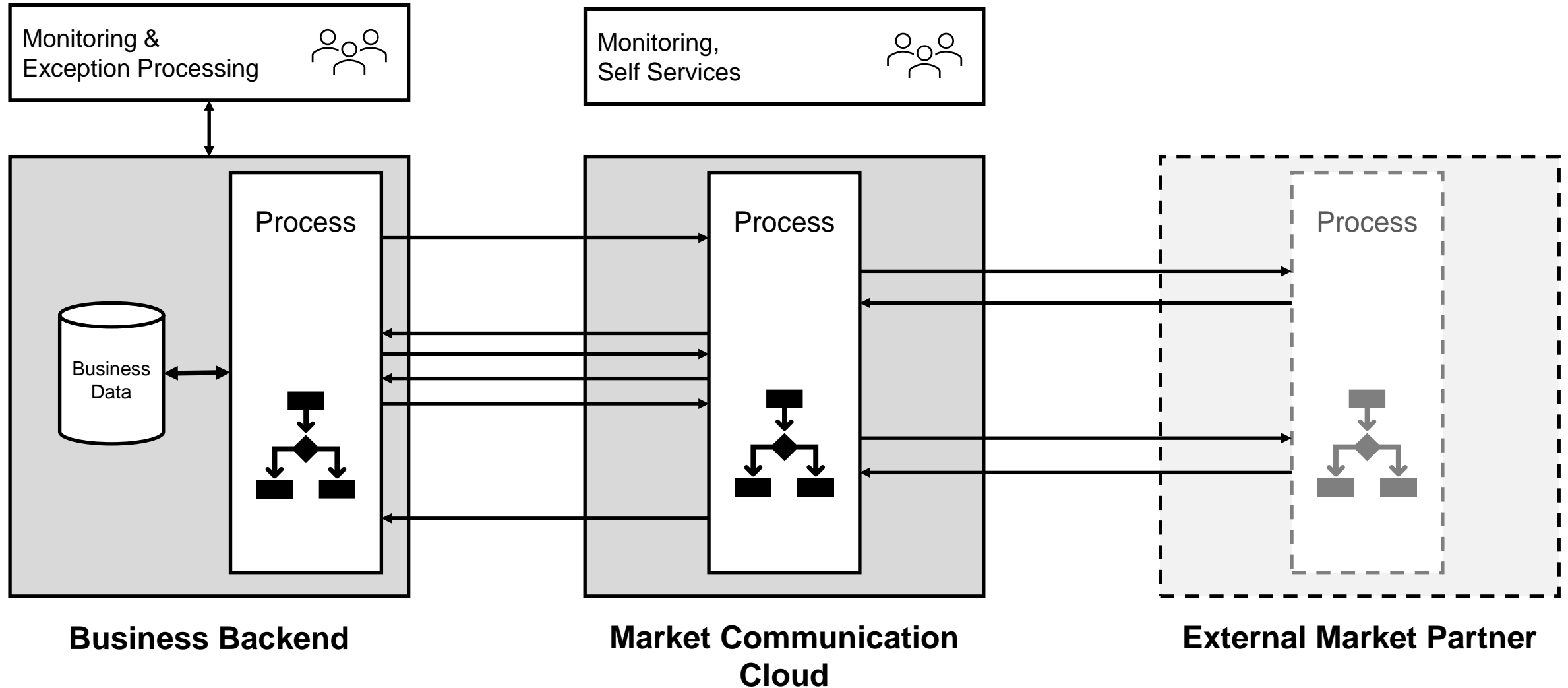
Market Processes – Characteristics and Challenges

- Characteristics of Market Processes:

  - comprised of several message-based interactions between partners

  - interact several times with the Business Backend System for data retrieval or update

  - Are fully standardized across all market partners due to legal regulations

- High volume of Market Processes to be supported

- Peak situations require highly elastic scaling of the solution

- Process Engine must be capable to handle deadlines and wait times

- Solution must efficiently handle very large messages (aggregated data, e.g. meter readings or invoices)

Solution Building Blocks

Market Partners

S/4 HANA

(Business Data)

Market Message Transfer

Handling of single
Messages

Process Engine

Orchestration of Processes
comprised of several single
messages

**Private Cloud /
On-Premise**

SAP Business Technology Platform (SAP BTP)

Cloud Foundry, Kyma, ABAP Environment
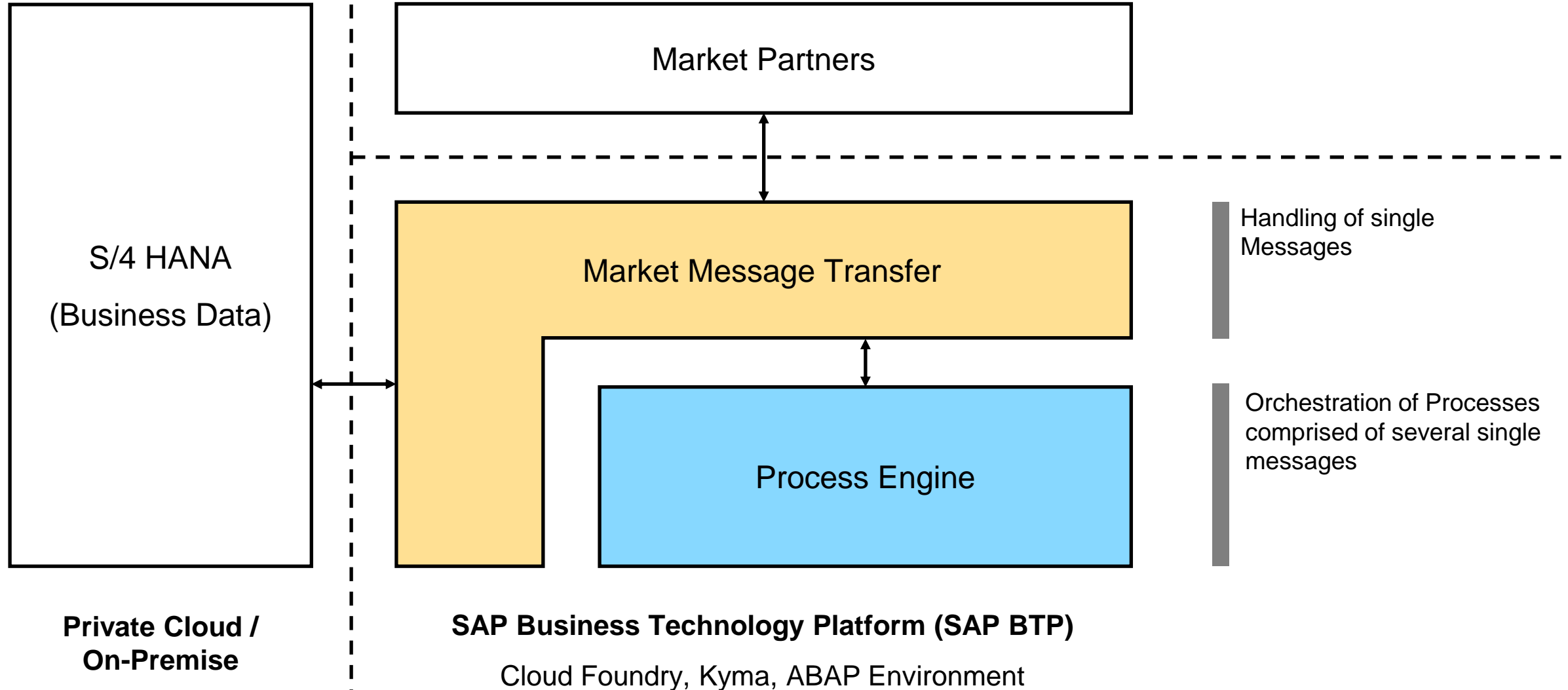
Market Message Transfer

What?

- Handling of single messages, typically EDIFACT

- Encryption, Decryption

- Technical Routing

- Format Parsing and Rendering

- Format Syntax checks (inbound and outbound)

How?

- SAP Cloud Integration

- SAP HANA Cloud

- SAP Cloud Foundry (Java, CAP)

- SAP Audit Logging

Process Engine

What?

- Orchestration of Business Processes comprised of several single messages

- Business Logic

- Data retrieval from Business Backend

- Push of data change requests to Business Backend

- Business Data Mapping

- Business Data Validation

- Deadline Processing

How?

- SAP BTP, Kyma Runtime (NodeJS, CAP)

- SAP HANA Cloud

- SAP Message Queueing

- SAP Cloud Logging Service

- SAP BTP, ABAP Environment

Monitoring and Customer Self Services

What?

- Monitoring on Business Process Level

- Message Routing based on Business Content and customer specific rules

- Various Customer Self Services (e.g. Connection Data, Partner Data, Certificates etc.)

How?

- SAP BTP, Cloud Foundry (NodeJS, Java, CAP)

- SAP HANA Cloud

- SAP Message Queuing

- SAP Business Rules Service

BTP Highlights – SAP HANA Cloud

- Reliable Storage of transactional data

- Fast and scalable

- Seamlessly integrated

BTP Highlights – SAP BTP, Kyma Runtime

- Fully managed Kubernetes Cluster

- State-of-the-Art cloud runtime

- Highly and elastically scalable

- Well-known open source tools pre-installed and ready for use, e.g. Istio Service Mesh

- BTP Operator allows easy consumption of BTP Services

BTP Highlights – SAP BTP, Cloud Foundry

- Proven BTP runtime

- Suitable for JAVA and NodeJS Applications

- Easy BTP Service consumption

- All BTP Services available for peering

- Stable, well documented and supported

Some further SAP BTP Services

- SAP HTML5 Application Repository Service for SAP BTP

- SAP Audit Log Service

- SAP Credential Store

- SAP Authorization and Trust Management Service

- SAP Service Manager

- SAP Software-as-a-Service Provisioning service

Thank you.

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