SAP Hybris (ⱽ)

Landscape Deployment Recommendations for
SAP Hybris Marketing

September, 2017

PUBLIC

SAP **Run Simple**

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Major Changes or Updates
Summary

**Major changes or updates to
former landscape deployment recommendations**

Type of change	Former Status	New Status	Reason	Reference (former presentation)	Reference (current presentation)
Enhancement	*(not available)*	*Support for S/4HANA on premise*	Availability of S/4HANA on premise	./.	13-18
Deployment Rating	*Possible Exception*	*Not Supported*	Complex maintenance and sizing dependencies	Co-deployment with SAP CRM on same AS ABAP system	Slide 17
Deployment Rating	*General Recommendation*	*Possible Exception*	Complex CPU and sizing dependencies	Hub Deployment with shared SAP HANA system	Slide 14
Deployment Rating	*Reasonable Alternative*	*Possible Exception*	Complex CPU and sizing dependencies	Hub Deployment with shared SAP HANA system, Side-by-Side Deployment with shared SAP HANA system	Slide 15/16

Agenda

Introduction

- Methodology & Scope of Landscape Deployment Recommendations

Basic Landscape Setups

- Recommendations for SAP Hybris Marketing

Recommendations

- SAP Hybris Marketing – UI deployment

Introduction
Methodology & Scope of Landscape Recommendations

System Landscapes at Customers
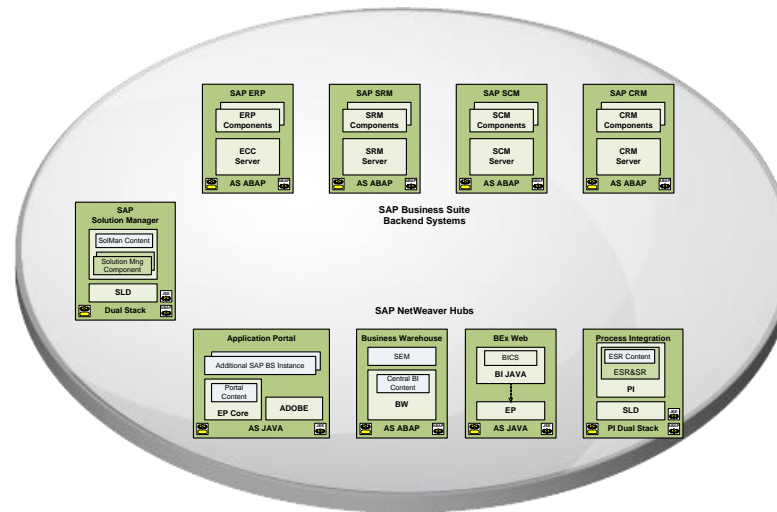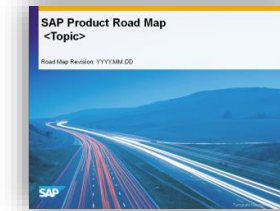## Designing the Optimal Landscape Layout

Customer

SAP

Business Aspects

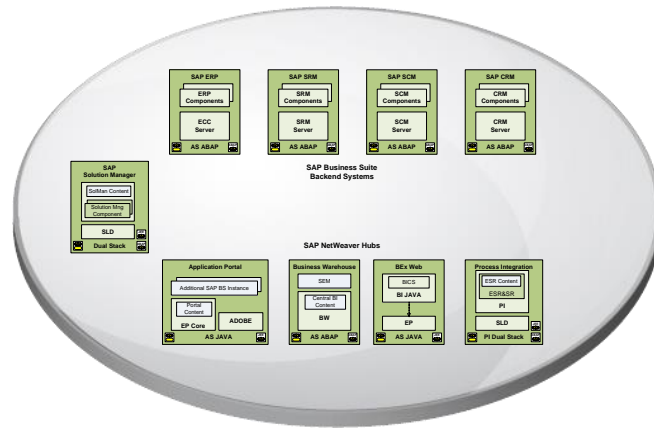IT Aspects

Solution Landscape
of Customer

Product Roadmaps

Technical Documentation
(Planning, Installation &
Configuration Guides, etc.)

Deployment Recommendations for SAP Products
Guiding Principles

Solution Landscape
of Customer

**High-Level Guidance
for optimized
Landscape Layouts**

Deployment Recommendations
for SAP Products

- Allow **flexibility** by offering different deployment options (not one-size-fits-all)
- Provide **guidance** by rating different options
- Ease **decisions** by listing pros & cons
- Simplify **consumption** of information by using a common methodology
- Increase **reliability** by considering SAP product strategy, achieved landscape qualities and cross-product alignment

# Ease Landscape Planning By Stronger Guidance
Used Methodology

Clear recommendations by categorization of deployment options

Possible Exception

- Only useful for specific use cases
- Supported by SAP, but limitations might occur

Reasonable Alternative

- Useful choice for certain use cases or customer scenarios
- Supported and confirmed by SAP's strategy

Option III
Option II
Option I
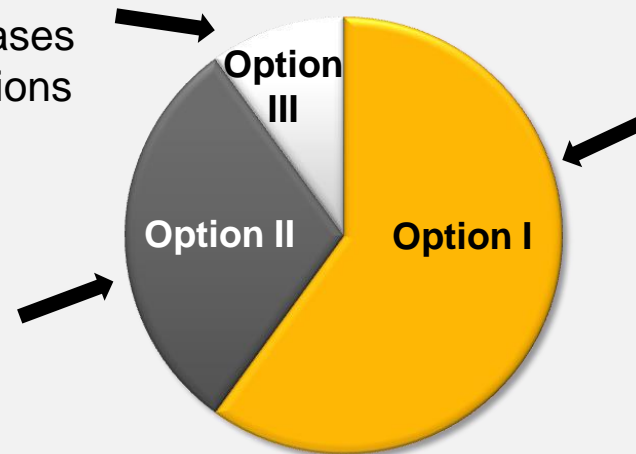
General Recommendation

- Best choice for majority of typical landscape use cases
- Recommended by SAP's strategy
- Accepted by a wide base of customers

Goal ➡
- Outlining main important aspects
- Optimal trade-off between flexibility and simplicity
- Applied to main building blocks of SAP products

Consider ➡
- Alternative deployment options typically have different pros & cons
- Customer individual assessment is **not** compensated

Architecture Overview

SAP JAM

SAP Hybris Commerce/ Web Shop

SAP CRM
SAP ERP
SAP C4C

Social & Consumer Data

Non-SAP / Web Page

User Interface

SAP Hybris Marketing UI: SAP Fiori with Launchpad

OData via SAP Web Dispatcher

SAP Hybris Marketing

SAP NetWeaver Application Server ABAP

SAP Hybris Marketing: Tables, Views, Procedures, Search Models

SAP HANA

Private Cloud | On-Premise

Social / Web Campaign

Email Service Provider

SMS Service Provider

Product Deployment View
SAP Hybris Marketing in System Landscapes

SAP Webdispatcher

SAP CRM

CRM

ABAP

Integration Middleware

SAP Hybris Marketing

UI for yMKT

yMKT

AS ABAP
ABAP

SAP ERP or S/4HANA

ERP or S/4

ABAP

SAP HANA System for yMKT

Hana Content yMKT

SAP HANA

Application System
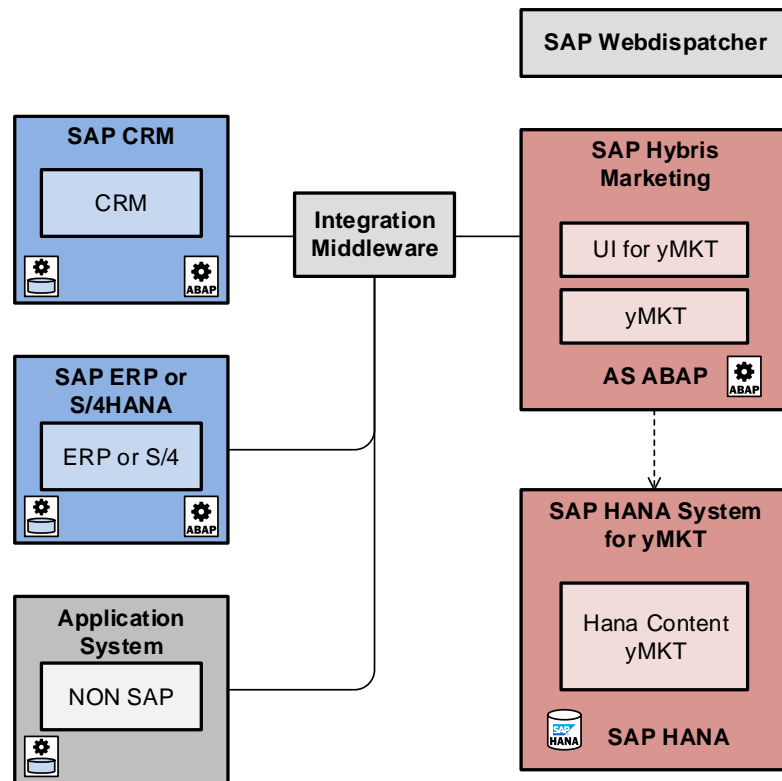
NON SAP

Main required products

- External Application System based on SAP NetWeaver AS ABAP
- SAP Hybris Marketing (yMKT) Add-On
- SAPUI5-based UI for yMKT
- yMKT content for SAP HANA
- SAP HANA system
- SAP BS application system replicating business data
- Integration Middleware
  - SAP Process Integration (PI)/ SAP Cloud Platform Integration (CPI) for SAP ERP or S/4HANA, SAP CRM and NON-SAP applications
  - SAP Landscape Transformation (LT) for SAP ERP and SAP CRM (not S/4HANA)
  - SAP Data Services for NON-SAP applications

Basic Landscape Setups
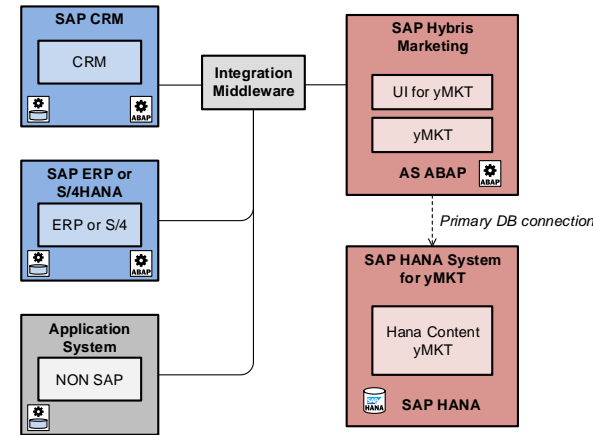## Recommendations for SAP Hybris Marketing

Deployment of SAP Hybris Marketing
Overview of Recommended Landscape Patterns

General Recommendation

Hub Deployment with separate SAP HANA system and separate AS ABAP

Possible Exception

Hub Deployment with shared SAP HANA system of SAP Business Suite

Hub Deployment with shared SAP HANA system of other application

Deployment of SAP Hybris Marketing
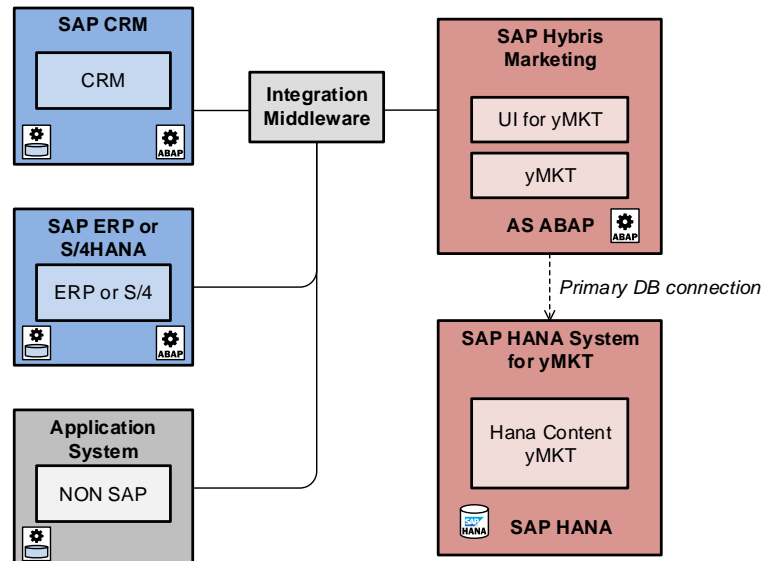*Hub Deployment with separate SAP HANA system and separate AS ABAP*

General Recommendation
("Non-disruptive yMKT deployment into existing SAP Business Suite landscape")

- yMKT centrally integrated with multiple business applications (e.g. SAP ERP or S/4HANA on premise, SAP CRM, NON-SAP)
- yMKT deployed in the cloud or on-premise on a separate AS ABAP and SAP HANA system
- All required business data is replicated to the SAP HANA for yMKT system

Example

```
SAP CRM
   CRM
   [ABAP]

                    Integration
                    Middleware

SAP ERP or
S/4HANA
   ERP or S/4
   [ABAP]

Application
System
   NON SAP
```

```
SAP Hybris
Marketing
   UI for yMKT
   yMKT
AS ABAP  [ABAP]

   │ Primary DB connection
   ▼

SAP HANA System
for yMKT
   Hana Content
   yMKT

   SAP HANA
```

Benefits

- Fast adoption of yMKT via hybrid cloud or separate on-premise deployment
- Independent innovation speed for new yMKT capabilities
- Integration of SAP ERP or S/4HANA with CRM business data for yMKT possible
- Simple sizing
- No need to migrate SAP ERP or SAP CRM to HANA first
- No risk for existing SAP ERP/CRM system (performance, patching, downtime, etc.)

Considerations

- One additional SAP HANA system required (could be deployed in the cloud)
- Connecting multiple SAP ERP or S/4HANA or multiple SAP CRM systems not supported
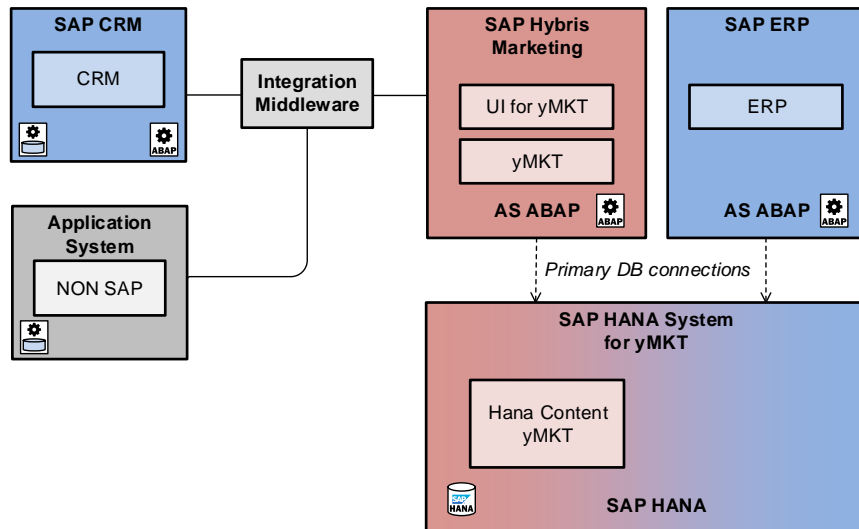
Deployment of SAP Hybris Marketing
Hub Deployment with shared SAP HANA system

Possible Exception
("Deployment with shared SAP HANA")

- yMKT centrally integrated with multiple business applications (e.g. SAP ERP, SAP CRM, NON-SAP)
- yMKT deployed on a separate AS ABAP system, but co-deployed on SAP HANA system of one
  SAP Business Suite Application (SAP CRMonHANA or SAP ERPonHANA) or S/4HANA

Example

SAP CRM
CRM
ABAP

Application System
NON SAP

Integration Middleware

SAP Hybris Marketing
UI for yMKT
yMKT
AS ABAP / ABAP

SAP ERP
ERP
AS ABAP / ABAP

Primary DB connections

SAP HANA System for yMKT
Hana Content yMKT
SAP HANA

Benefits
- Independent innovation speed for new yMKT capabilities
- Integration of SAP ERP or S/4HANA with SAP CRM business data for yMKT possible
- Flexible decision which SAP HANA system to use (SAP CRM or SAP ERP)

Considerations
- Requires at least SAP CRM 7.03 on SAP HANA (resp. SAP ERP 6.07 on SAP HANA)
- More complex SAP HANA sizing
- Shared resources (CPU, memory) influence performance of other applications on top of SAP HANA system
- Impact on existing SAP HANA system during lifecycle operations (patching, downtime, etc.)
- Consider restrictions of SAP HANA co-deployments (SAP note 1826100, 2248291)
- Connecting multiple SAP ERP or multiple SAP CRM systems not supported
- S/4HANA OnPremise cannot be integrated through cross schema access
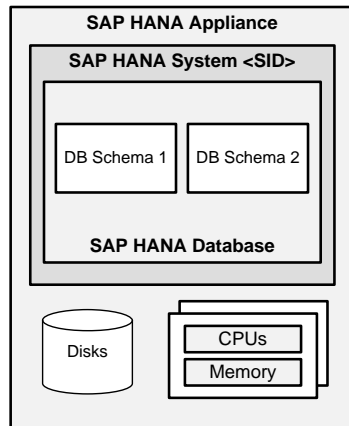
Deployment of SAP Hybris Marketing
Hub Deployment with shared SAP HANA system – General Remarks

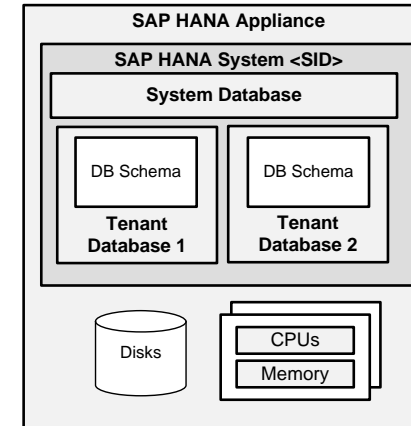> **Possible Exception**
> *("Deployment with shared SAP HANA")*

Multiple Components one Database (MCOD)*

SAP HANA Appliance
SAP HANA System <SID>

DB Schema 1 | DB Schema 2

SAP HANA Database

Disks | CPUs
Memory

- 1 SAP HANA Appliance
- 1 SAP HANA System
- 1 SAP HANA Database
- **n** Applications in different schemas

* only supported for applications listed on white list (SAP Notes 1661202, 1826100)

- SAP HANA system shared with other whitelist applications like
  - SAP CRM, SAP ERP or S/4HANA
  - Other HANA applications
  - SAP BW
- Co-deployment on SAP HANA via MCOD installation
- Integration of ERP or CRM data across different schemas into SAP Hybris Marketing

Multi Database Containers (MDC)

SAP HANA Appliance
SAP HANA System <SID>
System Database

DB Schema | DB Schema
Tenant Database 1 | **Tenant Database 2**

Disks | CPUs
Memory

- 1 SAP HANA Appliance
- 1 SAP HANA System
- **n** SAP HANA Databases

- SAP HANA system shared with any other application
- Co-deployment on SAP HANA via MDC installation
- Replication of CRM, ERP or S/4HANA data into SAP Hybris Marketing has to be done via integration middleware

Deployment of SAP Hybris Marketing
*Business Warehouse Hub Deployment with shared SAP HANA system*

Possible Exception
("Data sharing with other SAP HANA-based application")

- yMKT centrally integrated with multiple business applications (e.g. SAP ERP or S/4HANA, SAP CRM, NON-SAP)
- yMKT deployed on a separate AS ABAP system, but co-deployed with other application(s), e.g. SAP BW, on same SAP HANA system
- yMKT and other SAP HANA-based application(s) allow data sharing within SAP HANA system
- All required business data is replicated to the SAP HANA system

Example
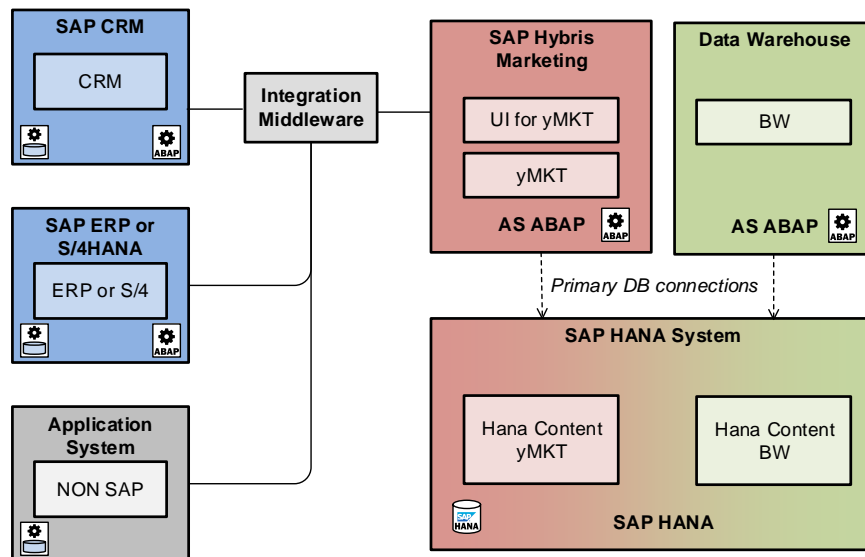
Benefits

- Independent innovation speed for new yMKT capabilities
- Integration of SAP ERP or S/4HANA with SAP CRM business data for yMKT possible
- Lower TCO due to shared SAP HANA system and shared replication data
- Mutual data consumption between yMKT and other SAP HANA-based application (e.g. ADT accessing SAP BW data)
- No risk for existing SAP ERP/CRM system (performance, patching, downtime, etc.)
- No need to migrate SAP ERP or SAP CRM to HANA first

Considerations

- Connecting multiple SAP ERP or multiple SAP CRM systems not supported
- More complex SAP HANA sizing
- Impact on existing SAP HANA system applications(performance, patching, downtime, etc.)
- Co-deployment on SAP HANA only supported for applications listed on whitelist (SAP note 1661202)

Deployment of SAP Hybris Marketing
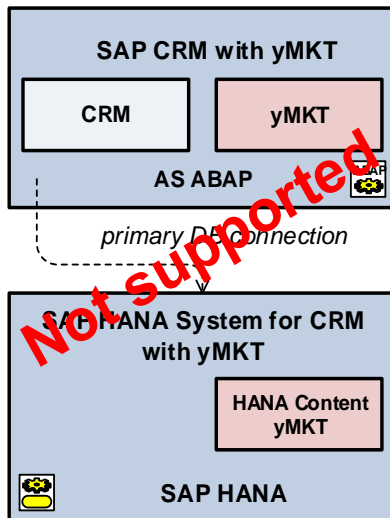*Add-On Deployment with shared ABAP and SAP HANA system*

Not Supported

("Hardware minimized deployment with SAP CRM on SAP HANA")

Not Supported

- yMKT locally integrated with SAP CRM
- yMKT co-deployed on <u>AS ABAP and SAP HANA</u> system of SAP CRM
- SAP CRM business data is directly accessed by yMKT

Example

```
┌─────────────────────────────────┐
│       SAP CRM with yMKT         │
│   ┌─────────┐   ┌─────────────┐ │
│   │   CRM   │   │    yMKT     │ │
│   └─────────┘   └─────────────┘ │
│            AS ABAP              │
└─────────────────────────────────┘
        primary DB connection
┌─────────────────────────────────┐
│    SAP HANA System for CRM      │
│          with yMKT              │
│           ┌─────────────────┐   │
│           │  HANA Content   │   │
│           │     yMKT        │   │
│           └─────────────────┘   │
│            SAP HANA             │
└─────────────────────────────────┘
```

Not supported

Implications

- Shared ABAP system not supported for SAP CRM (or any other SAP Business Suite application or S/4HANA)
- Innovation speed for yMKT dependent from SAP CRM
- High maintenance dependencies
- High manual effort for later scale-out, if yMKT needs to be separated
- More complex sizing (ABAP and SAP HANA)
- Impact on existing SAP HANA system of SAP CRM (performance, patching, downtime, etc.)
- Consider restrictions of SAP HANA co-deployments (SAP note 1826100)
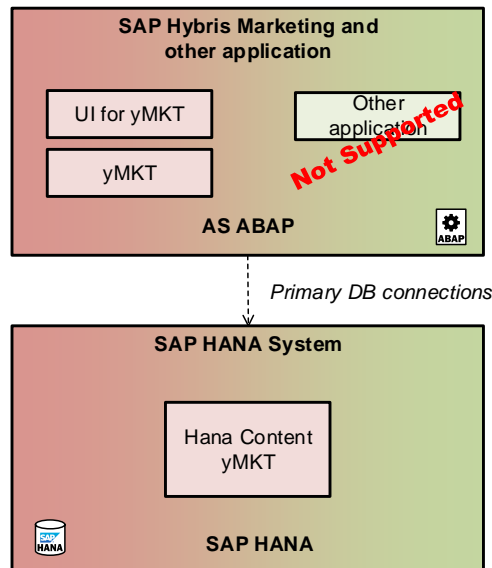
Deployment of SAP Hybris Marketing
Hub Deployment with shared ABAP and SAP HANA system

Not Supported

- yMKT centrally integrated with multiple business applications (e.g. SAP ERP, SAP CRM, NON-SAP)
- yMKT co-deployed on <u>AS ABAP and SAP HANA</u> system with other ABAP-based SAP HANA application
- Required business data is replicated to the SAP HANA system

Not Supported

Example

SAP Hybris Marketing and other application

UI for yMKT

Other application

Not Supported

yMKT

AS ABAP

ABAP

Primary DB connections

SAP HANA System

Hana Content yMKT

SAP HANA

SAP HANA

Implications

- **No support of a co-deployment with any other application on the same AS ABAP system**
- Innovation speed for yMKT needs to be aligned with other application
- Upgrades may not be possible
- Low maintenance flexibility
- High manual effort for later scale-out, if yMKT needs to be separated
- More complex sizing (ABAP and SAP HANA)
- Co-deployment on SAP HANA only supported for applications listed on whitelist (SAP note 1661202)

Recommendations
SAP Hybris Marketing – UI Deployment
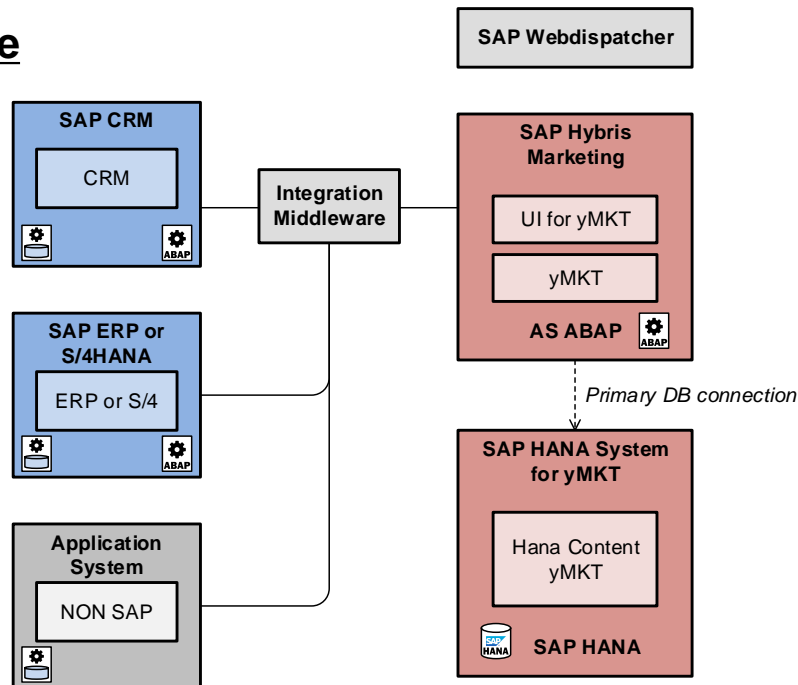
Deployment of UI for SAP Hybris Marketing
Embedded UI Deployment with yMKT AS ABAP system

General Recommendation

- UIs for yMKT deployed within product SAP hybris Marketing
- UIs for yMKT locally integrated with yMKT backend functionality
- UIs for yMKT co-deployed with yMKT backend application on same AS ABAP system

Example

```
SAP Webdispatcher

SAP CRM
  CRM                 Integration      SAP Hybris
  [ABAP]              Middleware       Marketing
SAP ERP or                              UI for yMKT
S/4HANA                                 yMKT
  ERP or S/4                           AS ABAP [ABAP]
  [ABAP]
                                     Primary DB connection
Application
System                              SAP HANA System
  NON SAP                           for yMKT
                                      Hana Content
                                      yMKT
                                    SAP HANA
```

Benefits
- Automated installation & configuration with yMKT backend functionality
- UI and yMKT backend application automatically in sync
- Lower alignment and regression test effort for updates (only yMKT concerned)
- All yMKT UIs are integrated within same environment (single URL, no Fiori Launchpad required)
- No additional system required
- Lower maintenance effort

Considerations
- Innovation speed of yMKT UIs closely coupled with yMKT backend functionality
- No cross-integration with other SAP Fiori UI applications
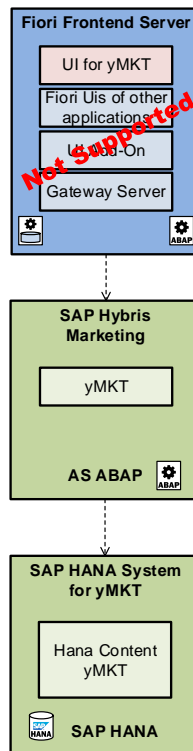
Deployment of UI for SAP Hybris Marketing
Add-On Deployment with central SAP Fiori Front-End Server

Not Supported

- UIs for yMKT co-deployed with SAP Fiori UIs of other applications on central Fiori Front-End Server

Not Supported

Example

Fiori Frontend Server

UI for yMKT

Fiori UIs of other applications

UI Add-On

Gateway Server

Not Supported

SAP Hybris Marketing

yMKT

AS ABAP

SAP HANA System for yMKT

Hana Content yMKT

SAP HANA

Reasons

- UIs for yMKT not shipped separately, but only as part of SAP Hybris Marketing
- Manual additional installation & configuration for yMKT backend connectivity required
- Strict version dependencies with yMKT backend application, frontend and backend parts need to be manually kept in sync
- Alignment and regression test effort for all UI applications after required updates of AS ABAP of central Frontend-Server
- Additional system required
- Performance and downtime side effects due to shared usage of Frontend-Server

SAP Hybris [y]

Thank you.

Contact information:

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or by a Support Incident on component name
CEC-MKT-ITC

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