Analysis Path Framework (APF)

- Roles, Fiori Content Objects, Authorizations
- Shipment and Deployment
- Processes

Dr. Dirk Degrell, Jens Heumann / P&I – Foundation

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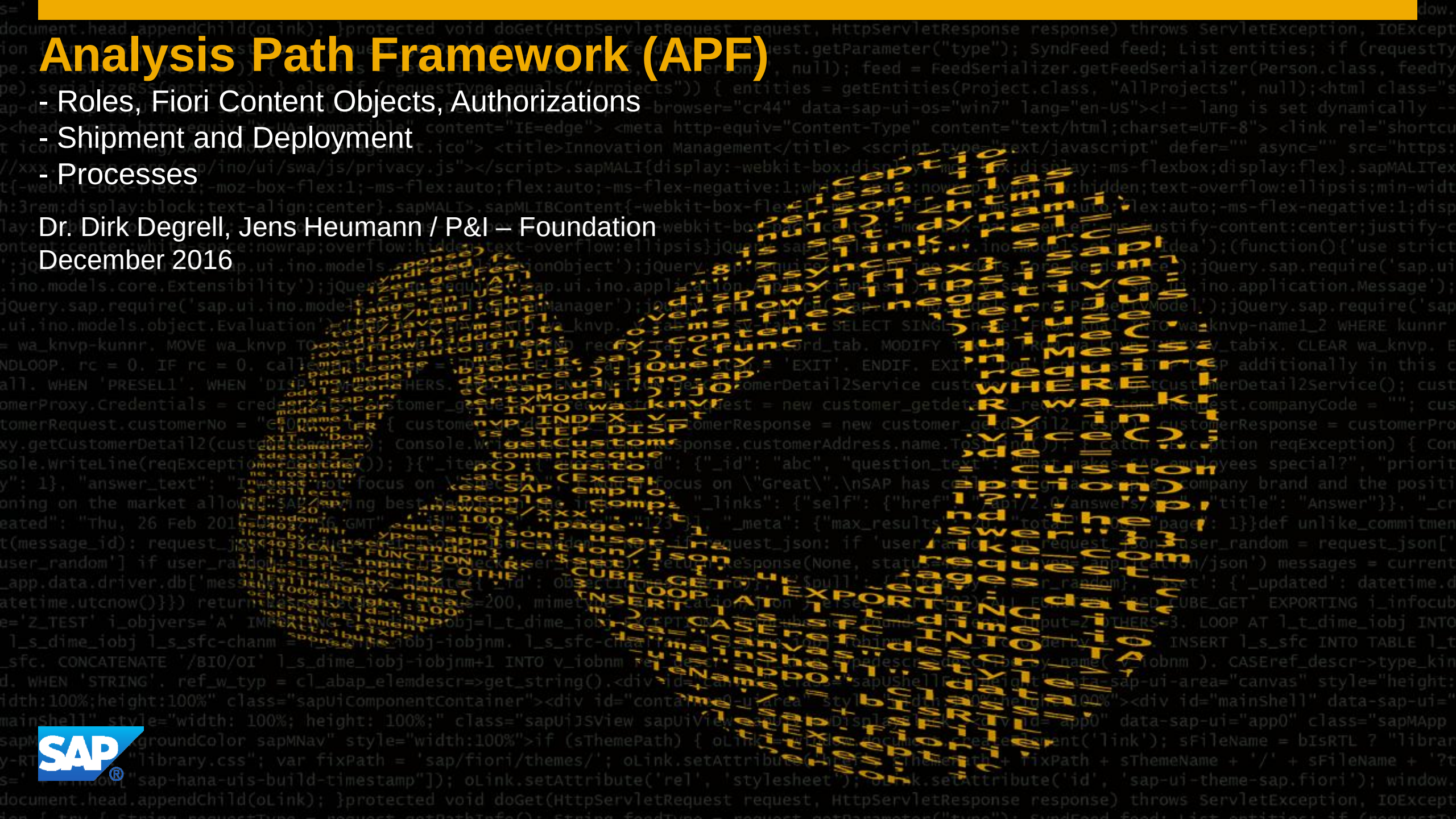

Agenda

APF – Roles, Fiori Content Objects, Authorizations

APF – Shipment and Deployment

APF – Processes

Appendix

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Appendix

APF in Suite on HANA – Roles & Authorizations

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud

APF Design Time

Fiori Frontend Server

PFCG Role: SAP_APF_DT_TCR_A (APF configuration modeler only)

- Fiori Catalog: SAP_APF_DT_TC_A
  - Fiori tile: APF Configuration Modeler
  - Fiori target mapping: APF Configuration Modeler
- Fiori Group: SAP_APF_DT_TCG_A (to show tile directly on launchpad)
  - Fiori tile: APF Configuration Modeler

HANA Database

HANA Role: sap.hba.r.apf.core.roles::AnalyticalConfiguration

Analytic Privileges required for: (need to be created by customers)

- HANA calc view: sap.hba.r.apf.core.v/ApplicationQuery
- HANA calc view: sap.hba.r.apf.core.v/AnalyticalConfigurationQuery
- HANA calc view: sap.hba.r.apf.core.v/TextElementQuery

APF Runtime & Generic APF Runtime

Fiori Frontend Server

PFCG Role: SAP_APF_RT_TCR_A

(only for generic APF runtime; therefore also required for „Execute“ in APF config modeler)

- Fiori Catalog: SAP_APF_RT_TC_A
  - Fiori target mapping: Generic APF Runtime

HANA Database

HANA Role: sap.hba.r.apf.core.roles::AnalysisPath

Analytic Privileges required for: (need to be created by customers)

- HANA calc view: sap.hba.r.apf.core.v/AnalysisPathQuery
- HANA calc view: sap.hba.r.apf.core.v/AnalysisPathCountQuery
- HANA calc view: sap.hba.r.apf.core.v/AnalyticalConfigurationQuery
- HANA calc view: sap.hba.r.apf.core.v/TextElementQuery

APF in S/4HANA On Premise – Roles & Authorizations

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud

Fiori Frontend Server

APF Design Time

PFCG Role: SAP_BR_ANALYTICS_SPECIALIST
(Contains APF design time and runtime and other things (e.g. Smart Business))

Fiori Catalog: SAP_CA_BC_APF_MODELING
- Fiori tile: APF Configuration Modeler (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)
- Fiori target mapping: APF Configuration Modeler (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

Fiori Group: SAP_CA_BCG_APF_MODELING (to show tile directly on launchpad)
- Fiori tile: APF Configuration Modeler

Fiori Catalog: SAP_CA_BC_APF_EXECUTION (included because of „Execute" functionality in APF config modeler)
- Fiori target mapping: Generic APF Runtime (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

Further content e.g. from Smart Business

LREP authorization: (needs to be assigned on customer side)

Authorization object:	/UIF/LREP	
Field name:	/UIF/ROLE	(read/write from/to LREP)
Value:	APFADMIN	

Generic APF Runtime

PFCG Role: ----------
(No pfcg role delivered for APF runtime.
Customer needs to assign „Execution" catalog to customer defined role.)

Fiori Catalog: SAP_CA_BC_APF_EXECUTION (needs to be assigned by customer to customer defined role)
- Fiori target mapping: Generic APF Runtime (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

LREP authorization: (needs to be assigned on customer side)

Authorization object:	/UIF/LREP	
Field name:	/UIF/ROLE	(read from LREP)
Value:	APFUSER	

Start authorization for path persistence OData service:
R3TR IWSG BSANLY_APF_RUNTIME_SRV_0001

S/4HANA Backend System

Start authorization for path persistence OData service:
R3TR IWSV BSANLY_APF_RUNTIME_SRV

APF in S/4HANA Cloud – Roles & Authorizations

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud

S/4HANA Cloud System
(no separate frontend and backend system)

APF Design Time

Business Role Template: SAP_BR_ANALYTICS_SPECIALIST
(no pfcg role; can be used as template to create business roles on customer side in cloud environment)

Business Catalog: SAP_CA_BC_APF_MODELING_PC
(no Fiori catalog; can be used on customer side for more fine granular business role definition in cloud environment)

PFCG Role: SAP_BCR_APF_MODELING_PC
(contains APF design time incl. LREP authorization; cloud customers can't assign pfcg roles to users)

Fiori Catalog: SAP_CA_BC_APF_MODELING_PC

Fiori tile: APF Configuration Modeler (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

Fiori target mapping: APF Configuration Modeler (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

Fiori Group: SAP_CA_BCG_APF_MODELING_PC
(to show tile directly on launchpad)

Fiori tile: APF Configuration Modeler

LREP authorization:

Authorization object:	/UIF/LREP	
Field name:	/UIF/ROLE	(read/write from/to LREP)
Value:	APFADMIN	

Further Business Catalogs for Smart Business etc.

APF Runtime & Generic APF Runtime

PFCG Role: SAP_BCR_CORE_COMMON
(role is automatically assigned to any cloud user)

LREP authorization:

Authorization object:	/UIF/LREP	
Field name:	/UIF/ROLE	(read from LREP)
Value:	APFUSER	

PFCG Role: SAP_BCR_CA_COMMON
(role is automatically assigned to any S/4HANA Cloud user)

Fiori Catalog: SAP_CA_BC_COMMON

Fiori target mapping: Generic APF Runtime (via reference to technical Fiori catalog: SAP_TC_CA_APF_COMMON)

Start authorization for path persistence OData service:
R3TR IWSG BSANLY_APF_RUNTIME_SRV_0001

Start authorization for path persistence OData service:
R3TR IWSV BSANLY_APF_RUNTIME_SRV

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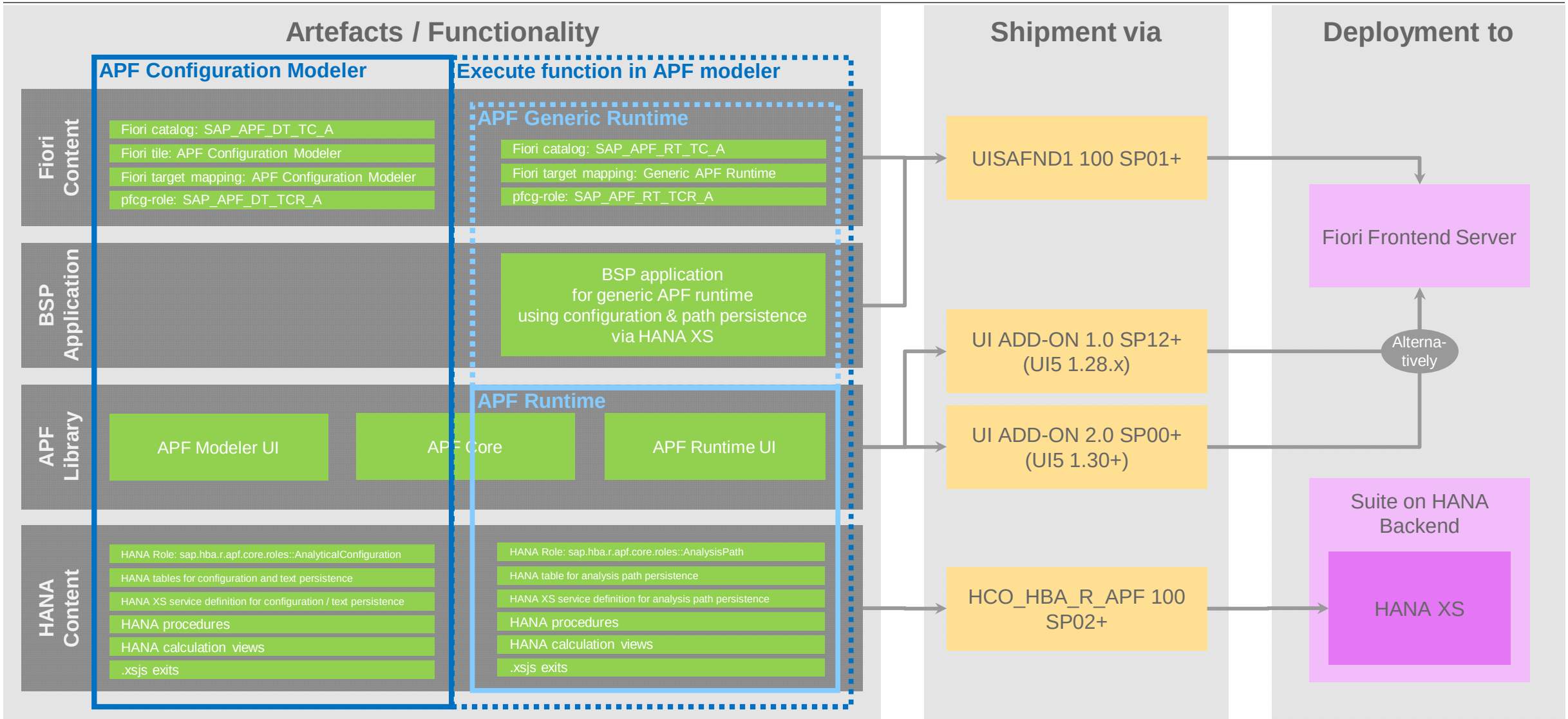
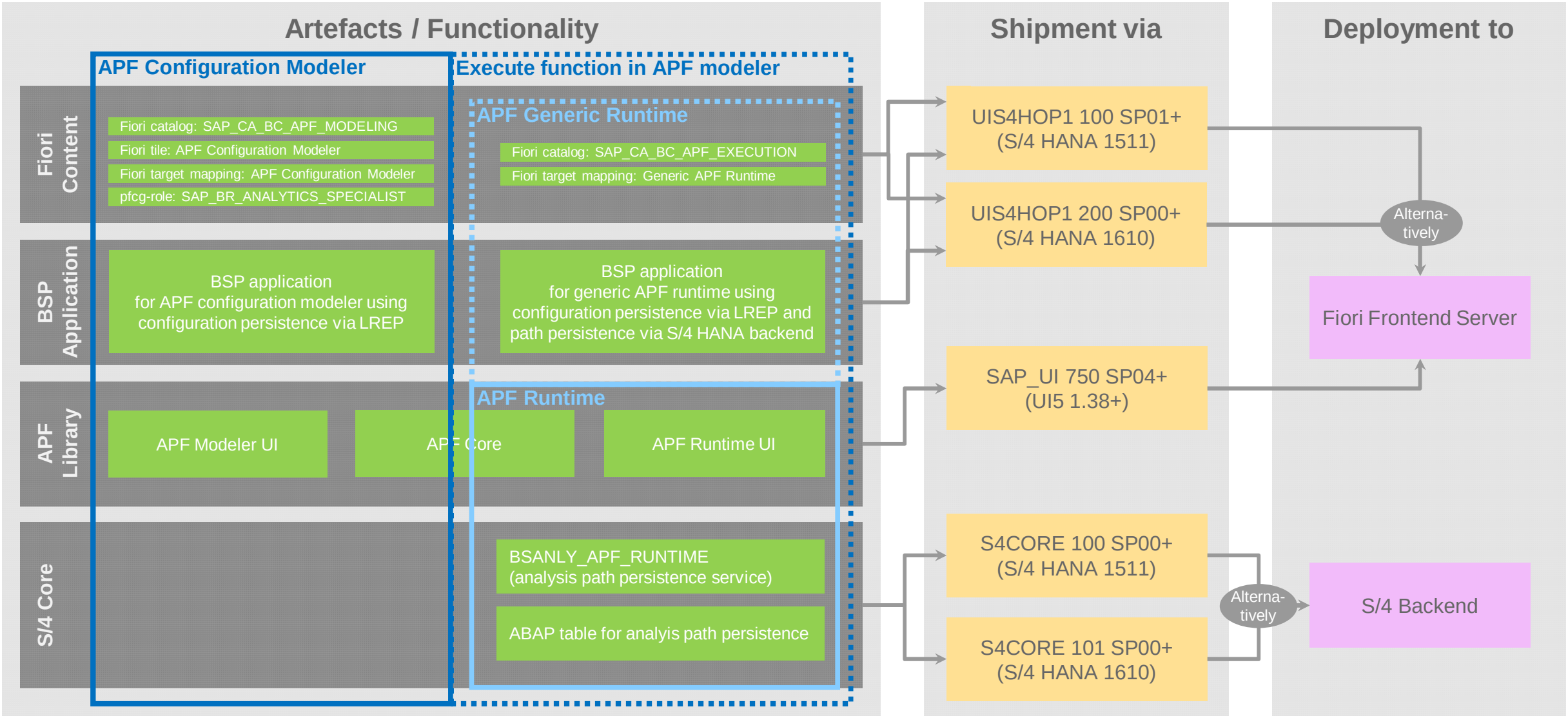
APF in Suite on HANA – Shipment & Deployment

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud



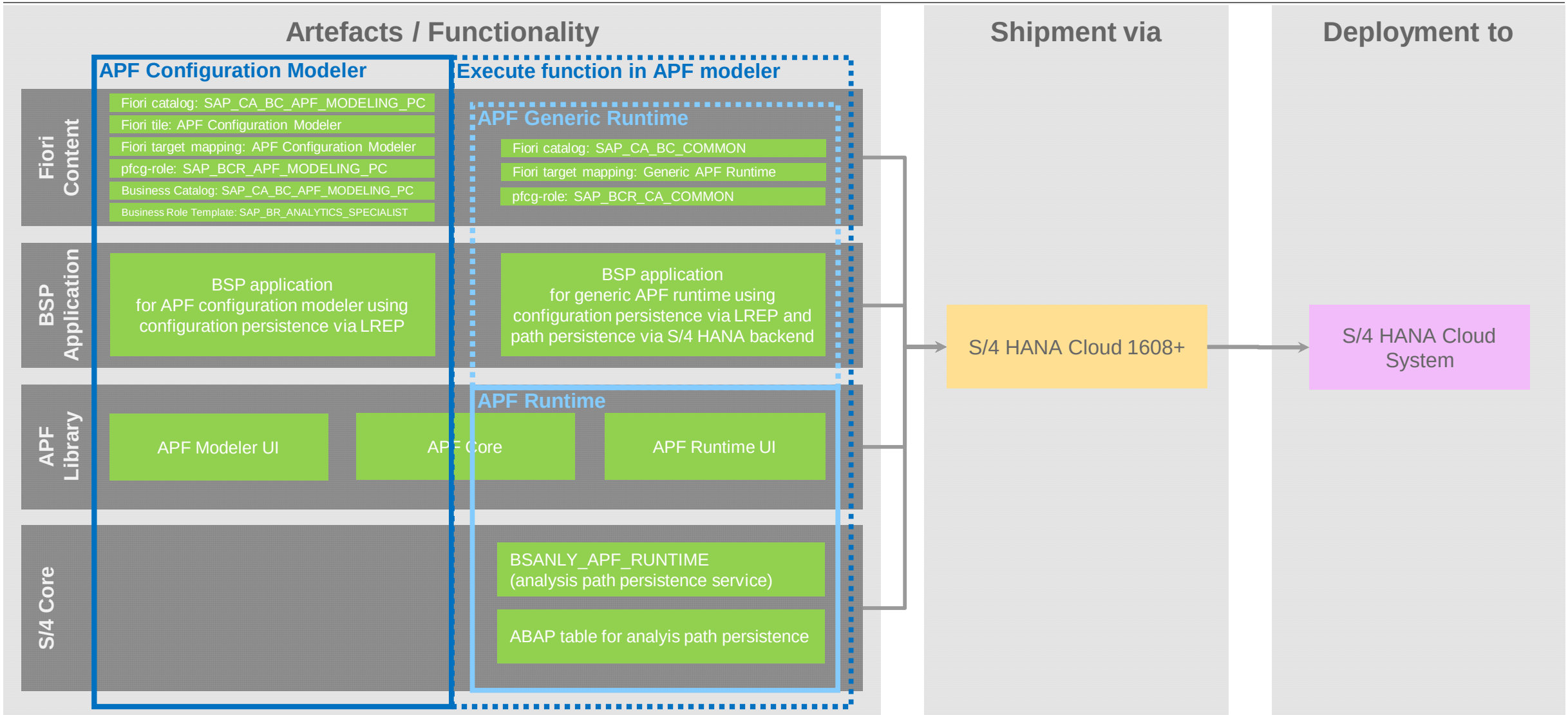
APF in S/4HANA On Premise – Shipment & Deployment

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud



APF in S/4HANA Cloud – Shipment & Deployment

Suite on HANA
S/4HANA On Premise
S/4HANA Cloud



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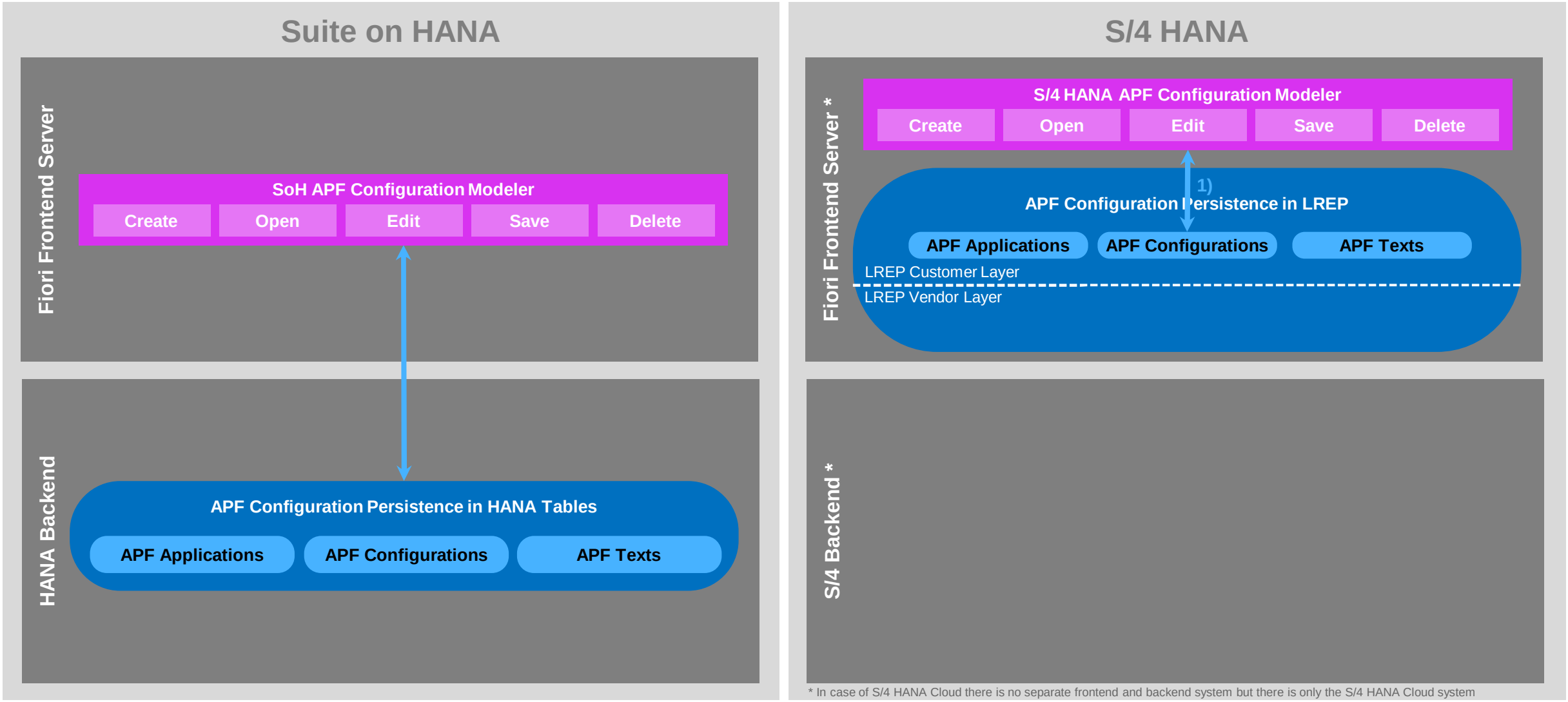
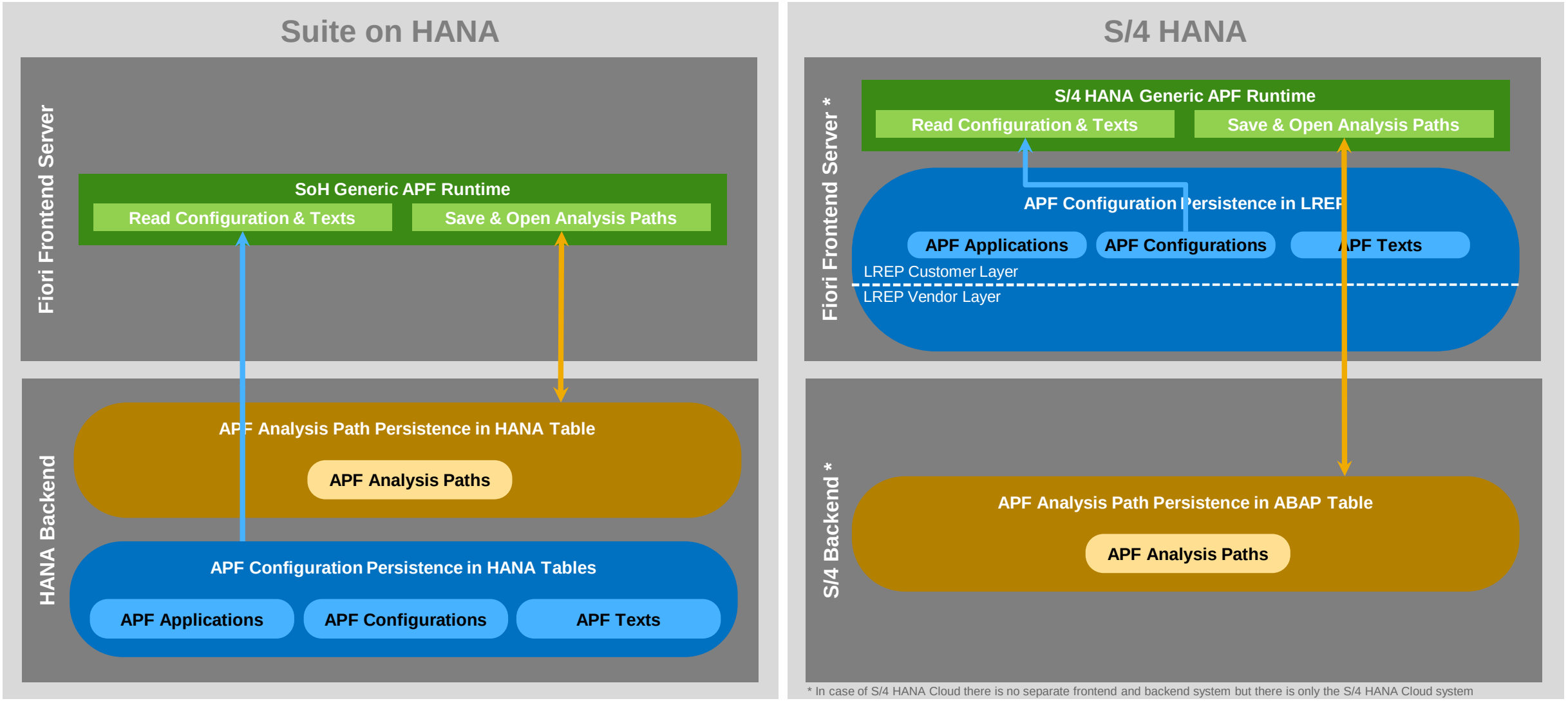
(1) Define APF Configurations

1) The S/4 HANA APF configuration modeler creates, edits, saves, and deletes artefacts only in the customer layer of LREP (never in the vendor layer). APF artefacts get into the vendor layer of LREP only via the Fiori build process.



* In case of S/4 HANA Cloud there is no separate frontend and backend system but there is only the S/4 HANA Cloud system

(2) Execute APF Configuration with Generic APF Runtime



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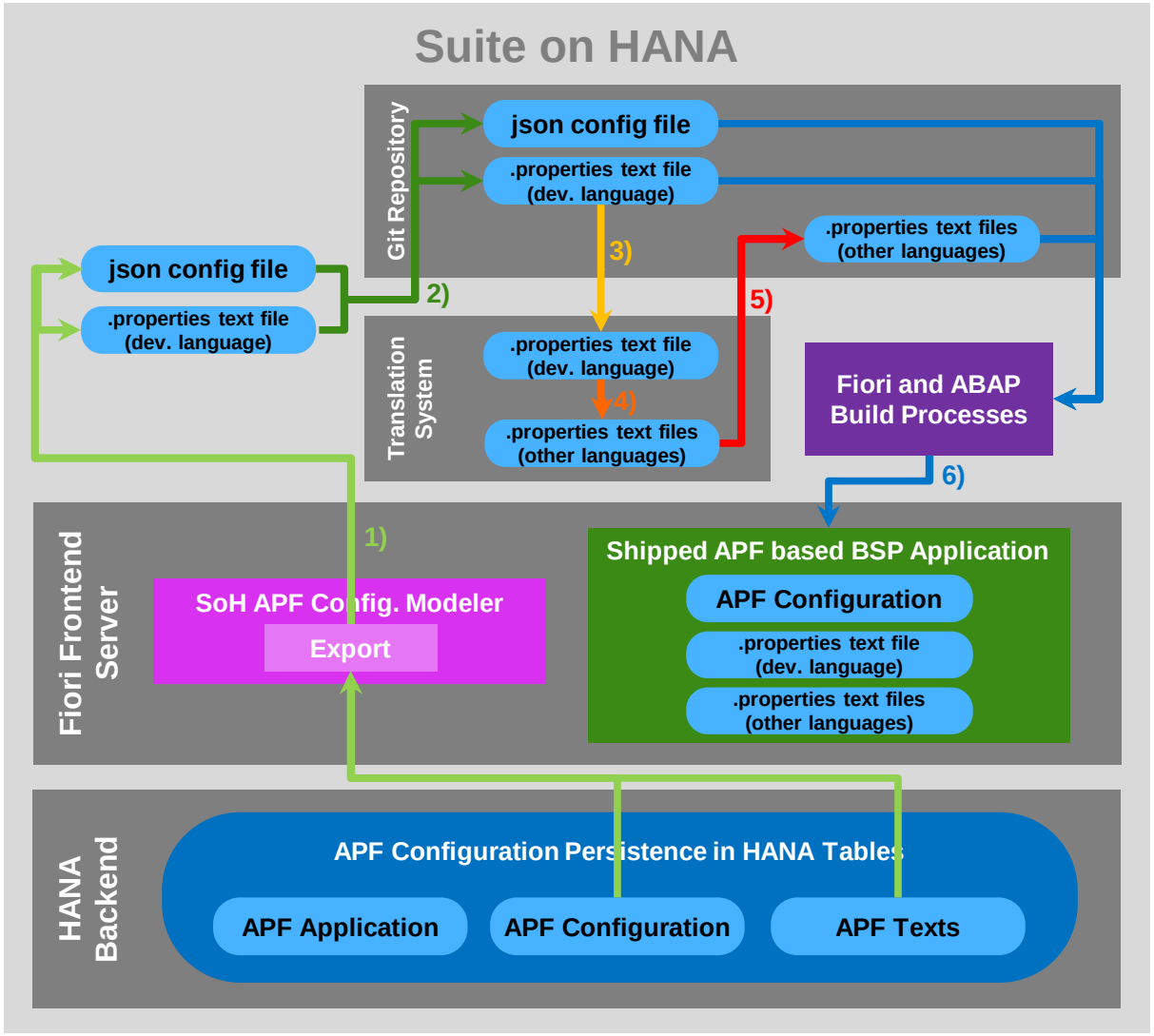
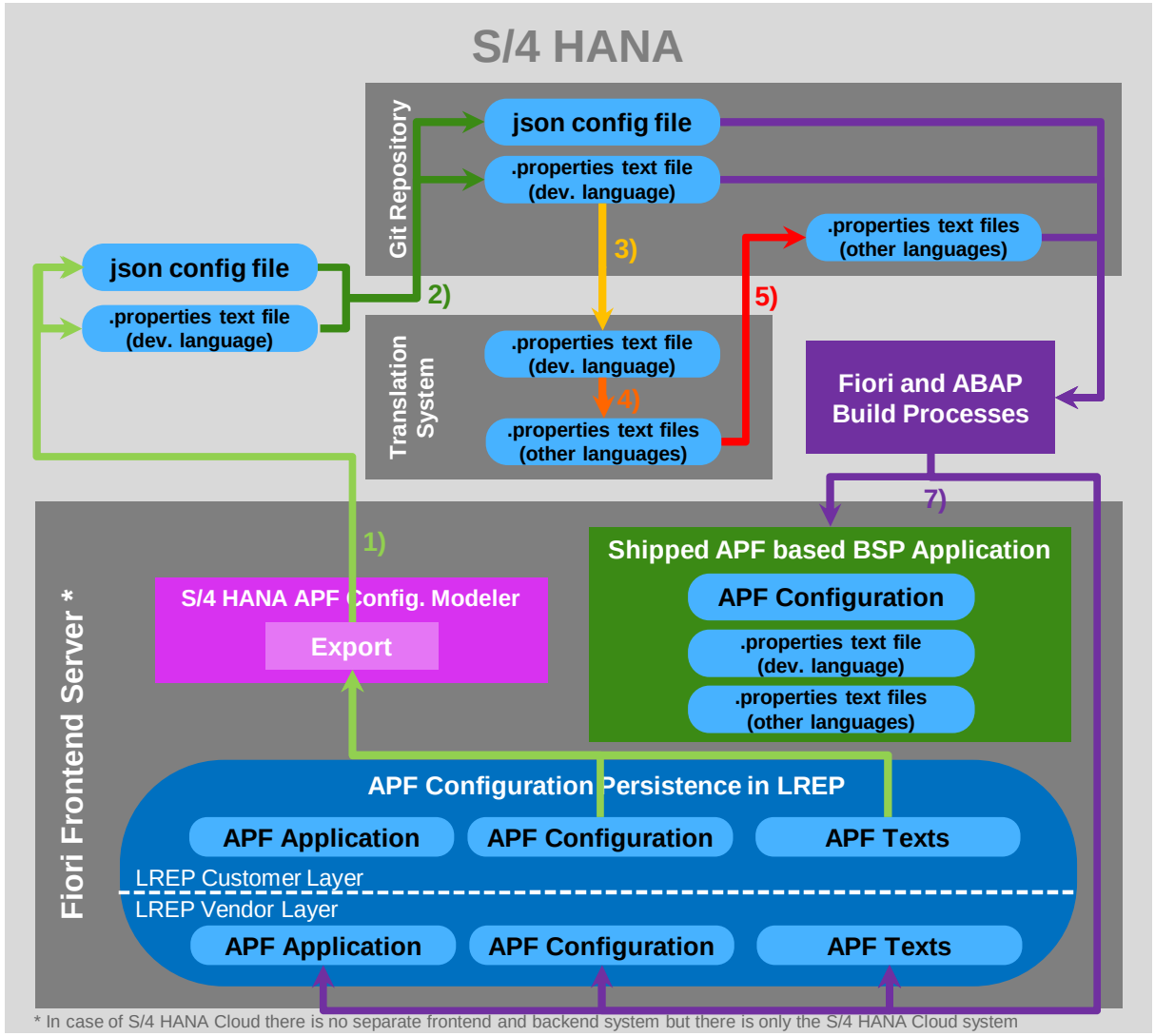
(3) Ship APF Content

1) Via the „Export“ functionality in the APF configuration modeler local files for the APF configuration and the texts in development language are created.
2) The local APF configuration file and the .properties text file in development language are checked into the Git repository.
3) The .properties text file in development language is being uploaded into the translation system.
4) During the translation process for each language a separate .properties text file is being created.
5) The .properties text files from the translation process are downloaded from translation system to the Git repository.
6) In SoH a BSP application is created via Fiori and ABAP build processes based on the artefacts from Git repository. This BSP app is shipped via ABAP transport.
7) In S/4 HANA the Fiori and ABAP build processes also creates a BSP application based on the artefacts from Git repository. In addition the APF content is also written into in the LREP vendor layer. Both BSP application and LREP vendor layer content is shipped via ABAP transport.





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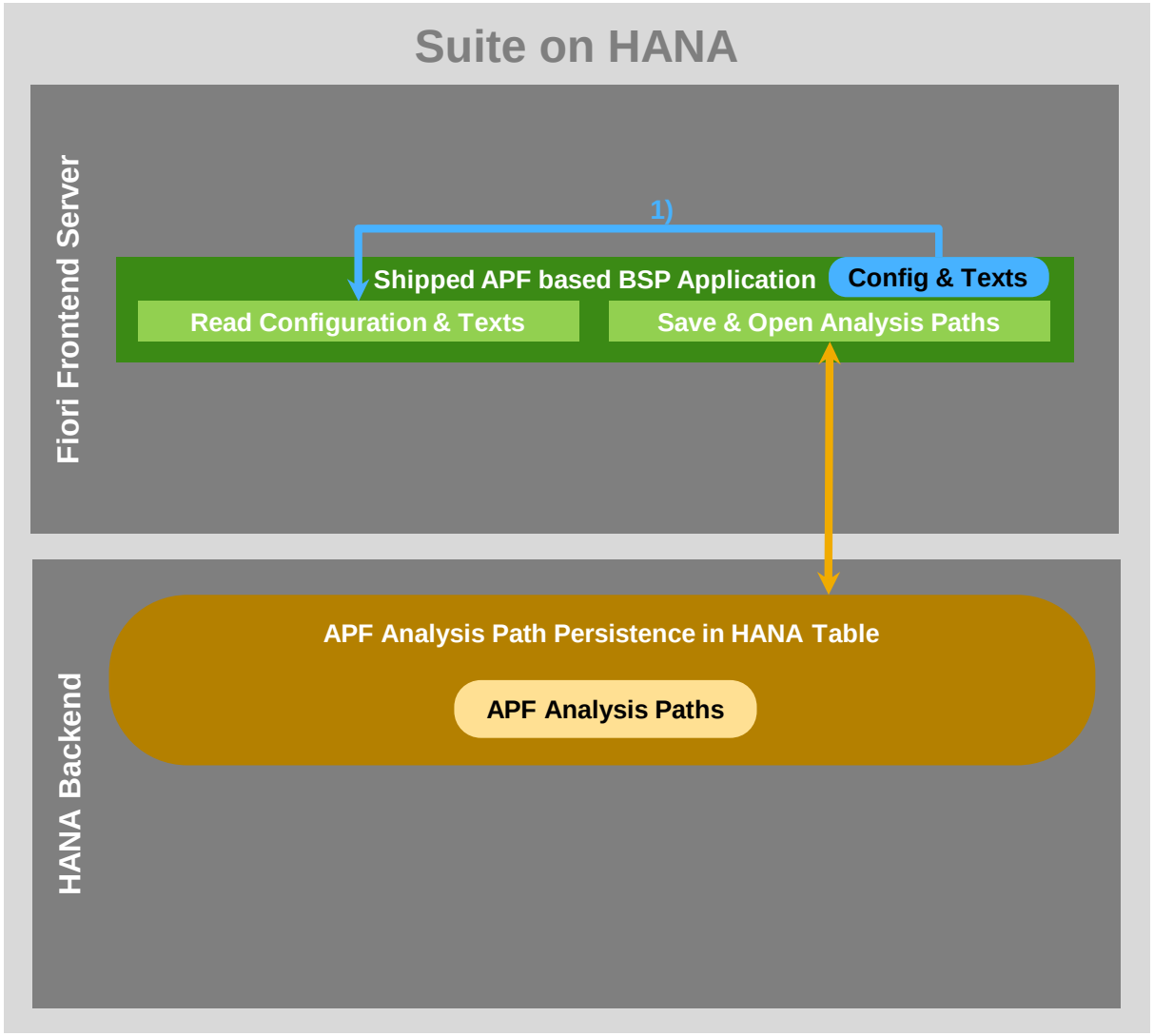
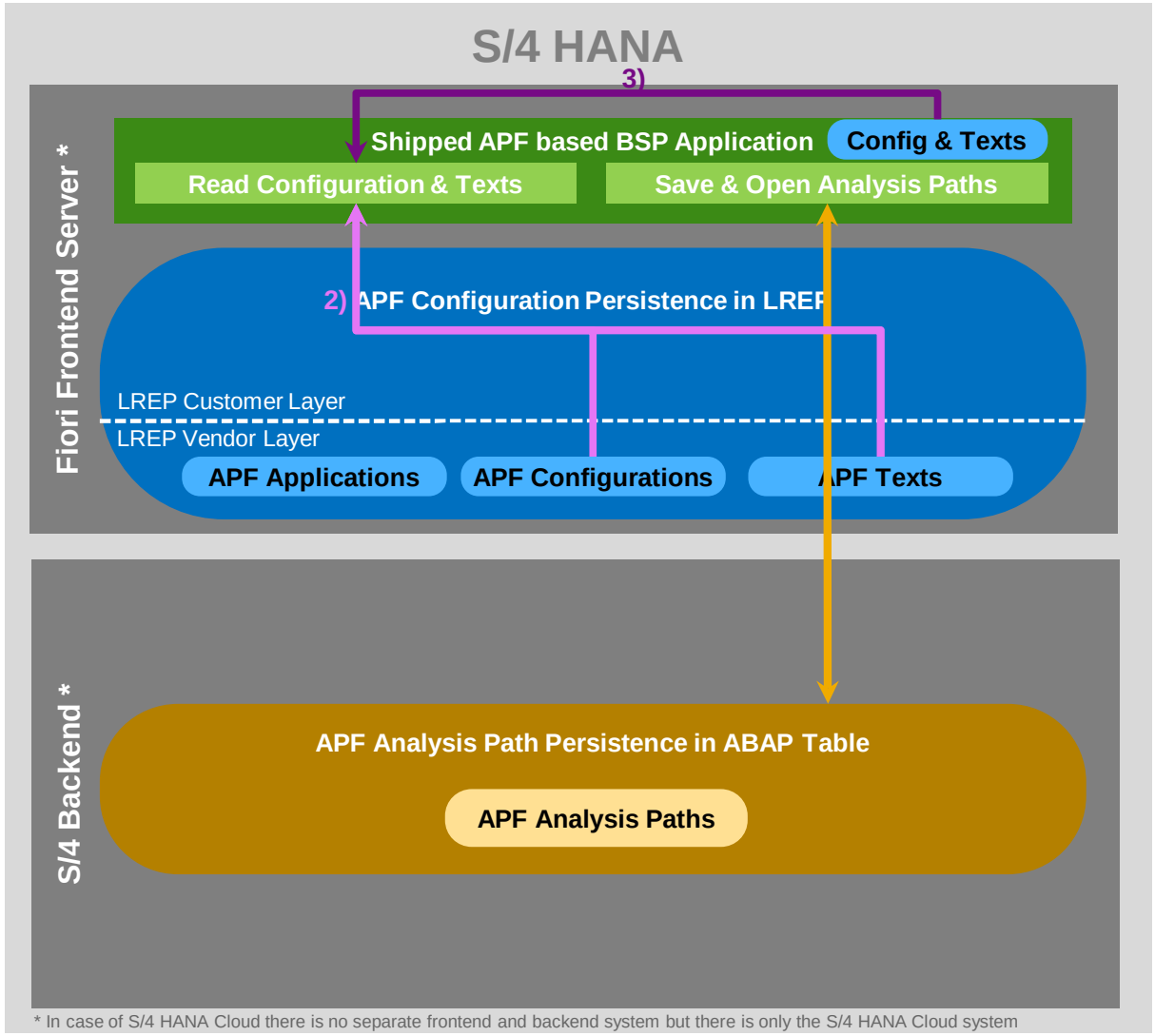
(4) Execute Delivered APF Content

1) In case of launch without config ID
2) In case of launch with app and config ID (recommended in guidelines)
3) Texts in other languages than the dev language are read from the BSP application. The configuration is only read from the BSP application in case of launch without app and config ID.





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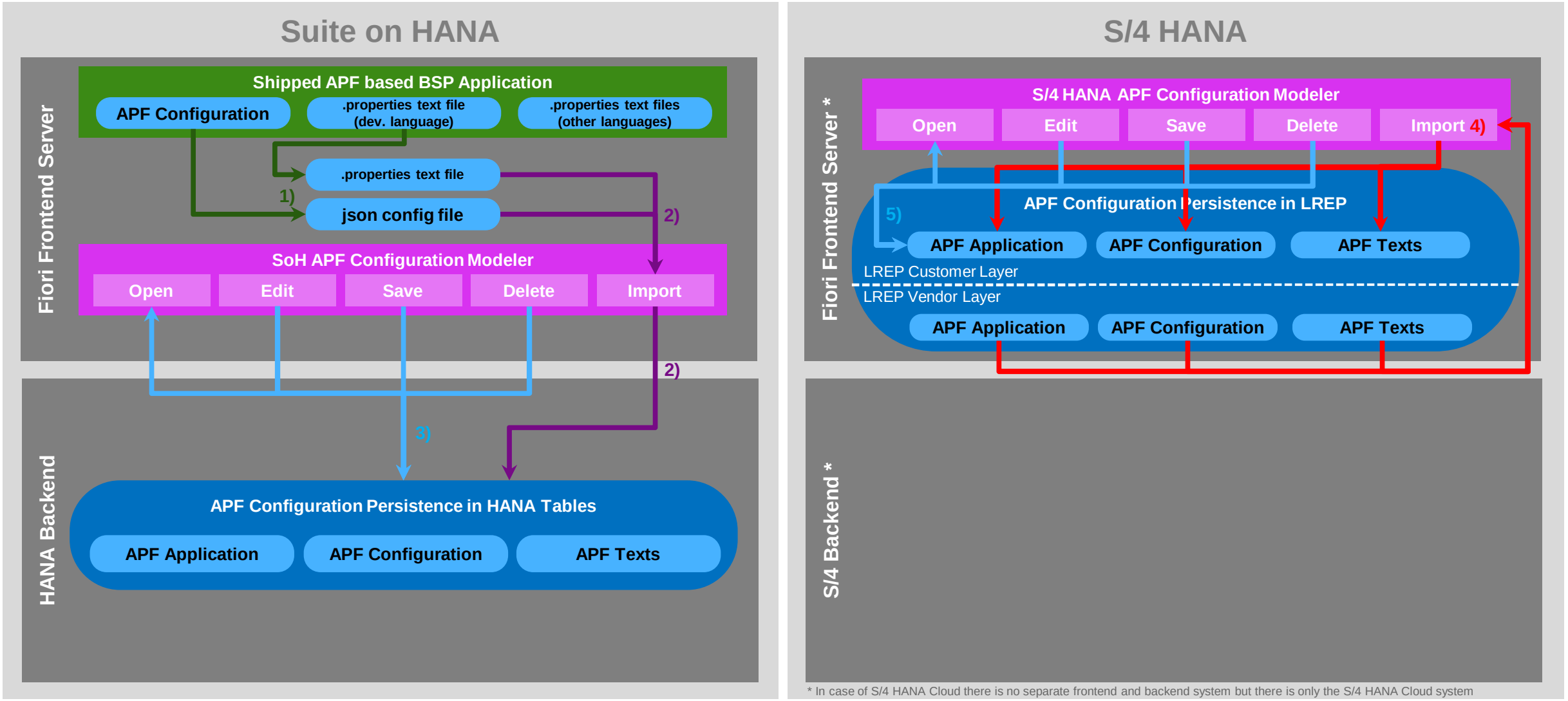
(5) Adjust Shipped APF Content

1) Save the APF json config file and the .properties text file in dev language from the shipped BSP application as local files (e.g. using transaction SE80).
2) Use the „Import“ functionality in the APF config modeler to import the json config file and the .properties text file to the APF configuration persistence. The APF application is created if required.
3) Use APF configuration modeler to adjust imported configuration.
4) Use the „Import Delivered Content“ to copy configuration and text artefacts from the vendor layer of LREP to the customer layer.
5) Use APF configuration modeler to adjust imported configuration in LREP customer layer.



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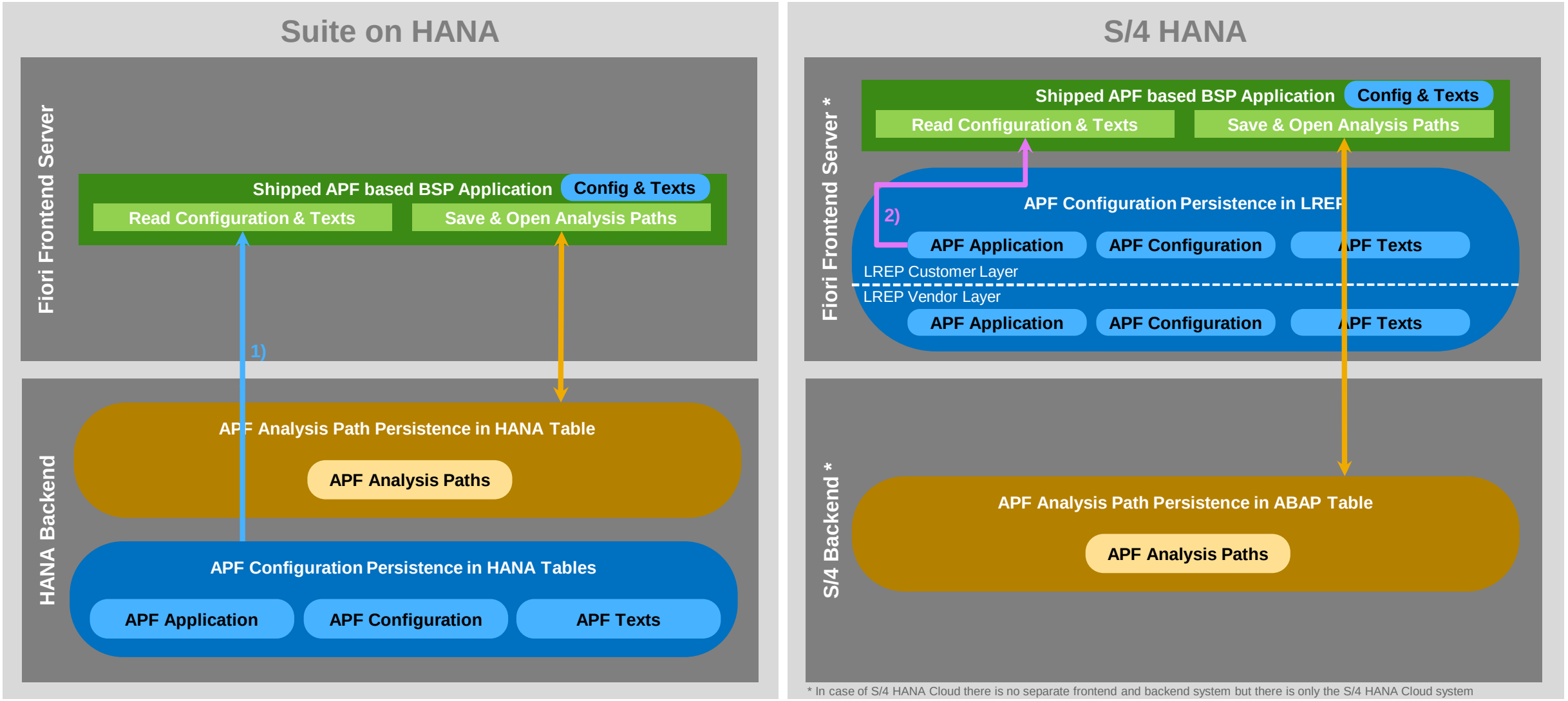
(6) Execute Adjusted Delivered APF Content

1) In order not to consume the delivered configuration contained in the BSP application but the adjusted config in the configuration persistence in the HANA backend the Fiori target mapping has to be adjusted with the config ID of the adjusted configuration.
2) In case the delivered BSP application is being launched with the app and config ID it automatically consumes the (adjusted) configuration from the customer layer in LREP if there is any, otherwise the delivered config from the vendor layer is consumed.



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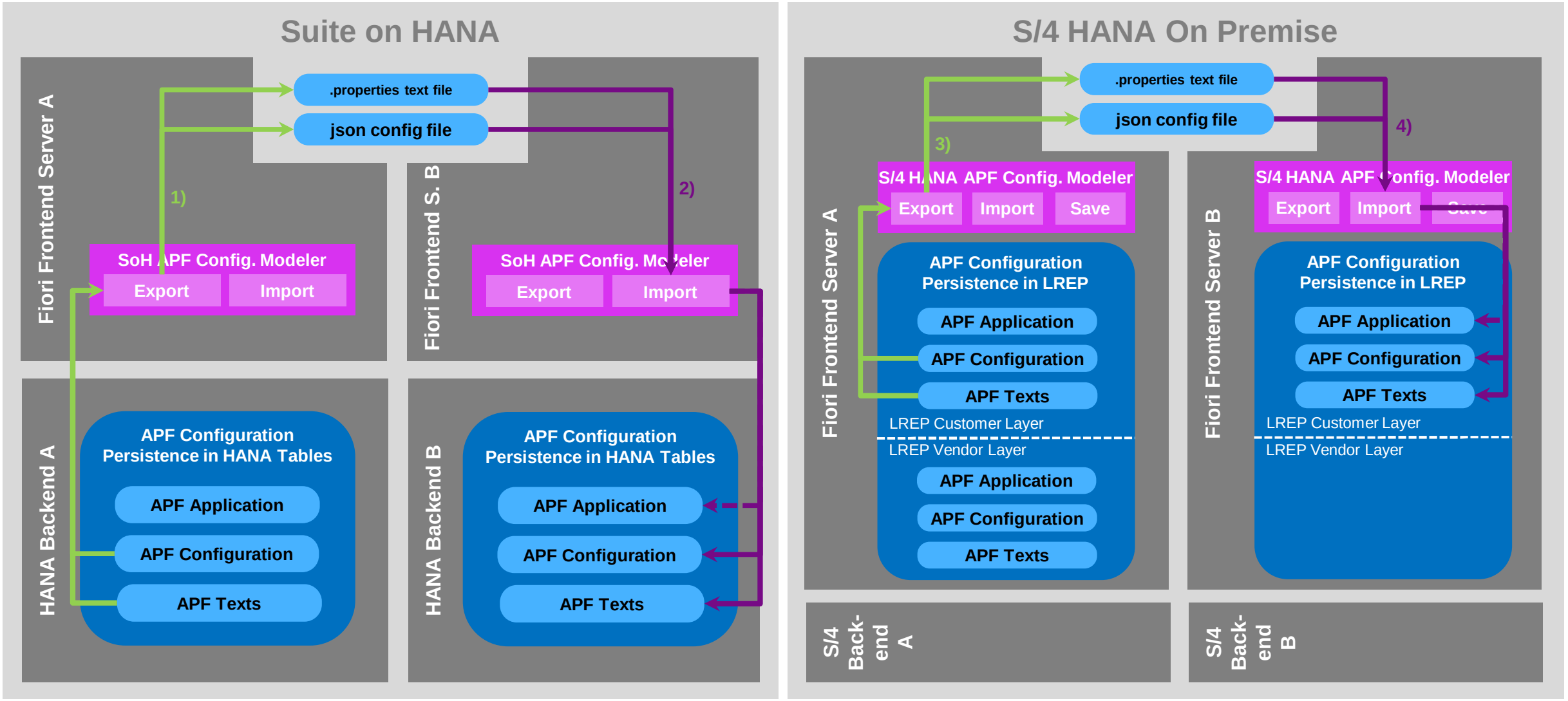
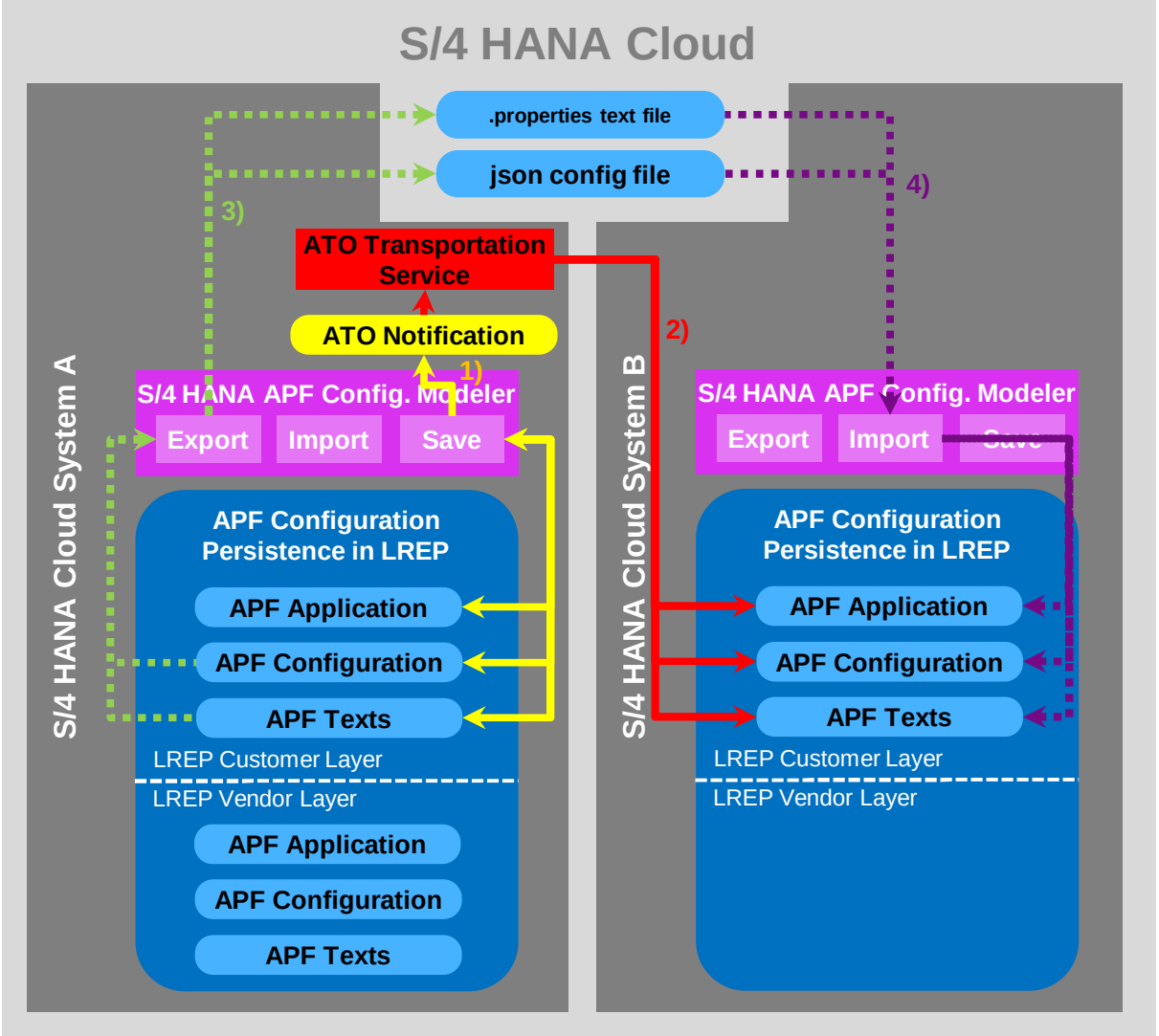
(7a) Transport APF Configuration

1) Use the „Export“ functionality in the APF configurtion modeler to export the json configuration file and .properties text file in development language as local files.
2) Use the „Import“ functionality in the APF configuration modeler to import the json config file and the .properties text file to the APF configuration persistence. The APF application is created if required.
3) Use the „Export“ functionality in the APF configurtion modeler to export the json configuration file and .properties text file in development language from LREP customer layer as local files.
4) Use the „Import“ functionality in the APF configuration modeler to import the json config file and the .properties text file to the APF configuration persistence in LREP customer layer. The APF application is created if required.



(7b) Transport APF Configuration

1) In S/4 HANA Cloud saving changes with the APF config modeler writes „ATO notifications“ as well.
2) Using the ATO transport service APF artefacts can be transported between systems.
3) The „Export“ functionality in the APF configurtion modeler can also be used in Cloud to export the json configuration file and .properties text file in development language from LREP customer layer as local files.
4) The „Import“ functionality in the APF configuration modeler can also be used in Cloud to import the json config file and the .properties text file to the APF configuration persistence in LREP customer layer. The APF application is created if required.



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Analysis Path Framework - Further Information

Central Places for Further Information

- APF @ SAP Community
- APF Wiki Page (SAP internal only)
- APF @ Fiori Design Guidelines
- APF Documentation

Online Demos

- SAP Fiori Trial – Demo of APF-based App (public available via internet w/o user login; click on  to get a guided tour)
- SAP Demo Cloud – Demo and Script – APF Configuration Modeler and APF-based App (SAP internal only) (To get access to the demo cloud follow these instructions)
  (In case you are facing issues with the link above please copy https://www.sapdemostore.com/scenario/12529 into your internet browser directly)

Video Tutorials

- APF Runtime – 1: UI Overview
- APF Runtime – 2: Creating an Analysis Path
- APF Runtime – 3: Further Options for Analysis Paths
- APF Runtime – 4: Filtering Data in an Analysis Path
- APF Configuration Modeler – 1: UI Overview
- APF Configuration Modeler – 2: Configuring an Analysis Step
- APF Configuration Modeler – 3: Configuring a Representation
- APF Configuration Modeler – 4: Configuring Filters
- APF Configuration Modeler – 5: Insight to Action
- APF Configuration Modeler – 6: Export and Import of Configurations
- APF Configuration Modeler – 7: Import in SAP S/4HANA
- APF – Smart Business Integration

Thank you

Contact information: