



Exercise

Mapping V2 to FHIR

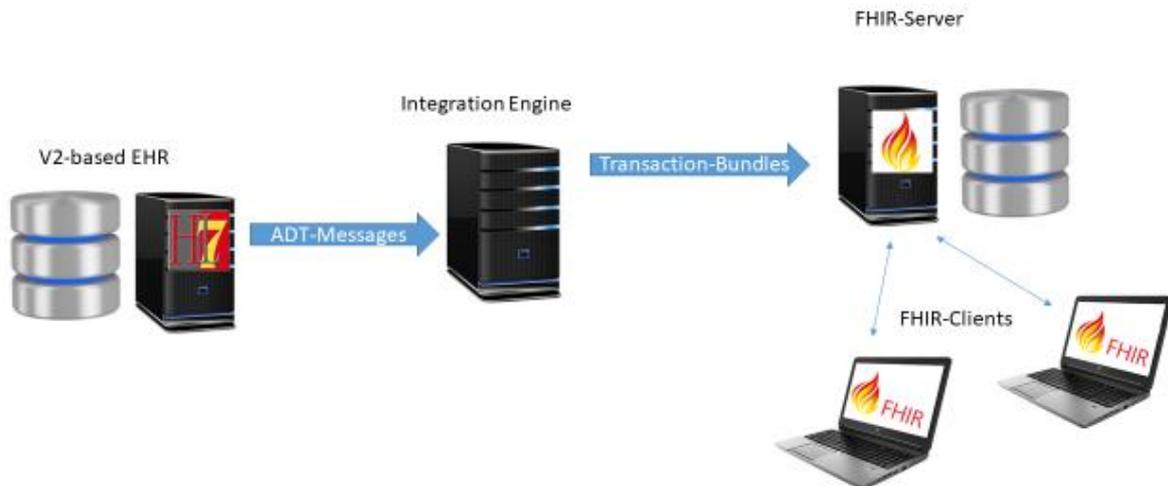
Track: Building Bridges
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During the hands-on session of the “Building Bridges” track we will explore ways of integrating V2 legacy systems with FHIR.

Please find the latest version of this exercise with downloadable example data and clickable links to relevant sources online at www.gefyra.de/devdays18

Exercise

Consider the following scenario as the basis for our exercise:



Our aim is to implement the necessary mechanisms that enable the integration engine to transform the incoming ADT-messages into transaction-type bundles and POST them to the FHIR server, thereby giving the FHIR-Clients access to up-to-date patient demographics.



1. Create a Patient resource from a V2 A28 message

Transform the following message to store the patient demographic information on a FHIR server:

```
MSH|^~\&|LegacyKIS||IntegrationEngine||20171116090000||ADT^A28|00000001|P|2.5
EVN|A28|20171116090000|
PID|1||SC937-0176CEC^^^SFSID^EI||Kirk^James^T.^.^Captain^^L||122330322|M||42 Pioneer
St^^Riverside^Iowa^52327^USA^N|
NK1|1|Kirk^George Samuel|BRO|||^NET^Internet^george.kirk@deneva.ufp
```

- Consult the “United Federation of Planet FHIR Implementation Guide” at <https://simplifier.net/UFP> for guidance on how to assign the appropriate identifier.system uri for the SFSID (Starfleet Service ID)
- Add a custom tag to mark this resource as created by *your* integration engine.
- Make sure that resending the same message will not create duplicates of your Patient on the server by using a conditional create based on the patient identifier and your custom tag.

2. Update a Patient from a V2 A31 message

Transform the following message to update the patient demographics and add a condition:

```
MSH|^~\&|LegacyKIS||IntegrationEngine||20171117090000||ADT^A31|00000002|P|2.5
EVN|A31|20171117090000|
PID|1||SC937-0176CEC^^^SFSID^EI||Kirk^James^T.^.^Admiral^^L||22330322|M||42 Pioneer
St^^Riverside^Iowa^52327^USA^N|
NK1|1|^Spock|DOM|||^NET^Internet^spock@starfleet.ufp
DG1|1||X-123.3^Rigelian Fever^ICD-42|||||||||||||||123134645|A
```

- Create the updated Patient resource
- Use a conditional update in order to reidentify the proper Patient resource to update based on patient identifier and your custom tag
- Assign a uuid as Bundle.entry.fullUrl in order to be able to reference the Patient resource within the Bundle
- Create a Condition resource that references the Patient resource and place it in the transaction Bundle. Consult the “United Federation of Planet FHIR Implementation Guide” for guidance on how to assign the appropriate code.system uri for ICD-42 (Intergalactic Statistical Classification of Diseases, Revision 42).
- Validate your Bundle and POST it to a public test server
- Make sure, that resending the Message will not create duplicates of the condition by using a conditional create based on the diagnosis identifier and your custom tag

Have fun, and remember to ask for help if you get stuck!

The full solutions to this exercise will be published at www.gefyra.de/devdays18

Please note:

- The exercises can be made in the hands-on area, where each track has its own table, indicated with a track sign. The track lead will be present for guidance and review.
- Exercises will only be discussed or reviewed during the HL7 FHIR DevDays 18 in Boston
- Any questions or remarks after the conference can be addressed in the FHIR chat on Zulip: <https://chat.fhir.org>