

# Pilot connection of cardiac centers in Czechia using IHE profiles

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### Why we decided for IHE?

### EU-wide eHealth interoperability based on IHE is being built:

 Commission Decision (EU) 2015/1302 of 28 July 2015 on the identification of profiles "Integrating the Healthcare Enterprise" for the purpose of referencing when awarding public contracts

https://eur-lex.europa.eu/legal-content/CS/TXT/?uri=OJ%3AJOL 2015 199 R 0011#

 The IHE Gazelle testing tool is used in the development and deployment of 27 EC-recommended profiles and is the cornerstone for testing within Connectathons as well as international IHE conformity assessment and accreditation according to ISO/IEC 17025.

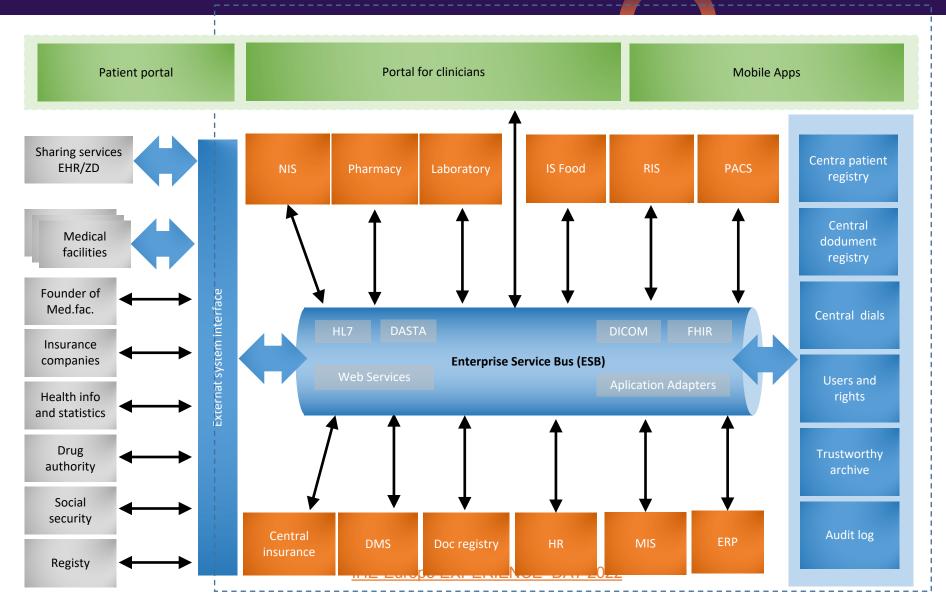


### Where is IHE used?

NCPeH –EU eHealth xCountry data exchange ELGA – Austria nationalwide electronic health record NHS – England National Health service eHealth Suisse – Swiss national wide eHealth project Gematik – German nationalwide "gesundheitskarte" DMP – French national wide eHealth project Kanta – Finland national wide eHealth project Veneto Italy USA, Australia, SAR and many others...

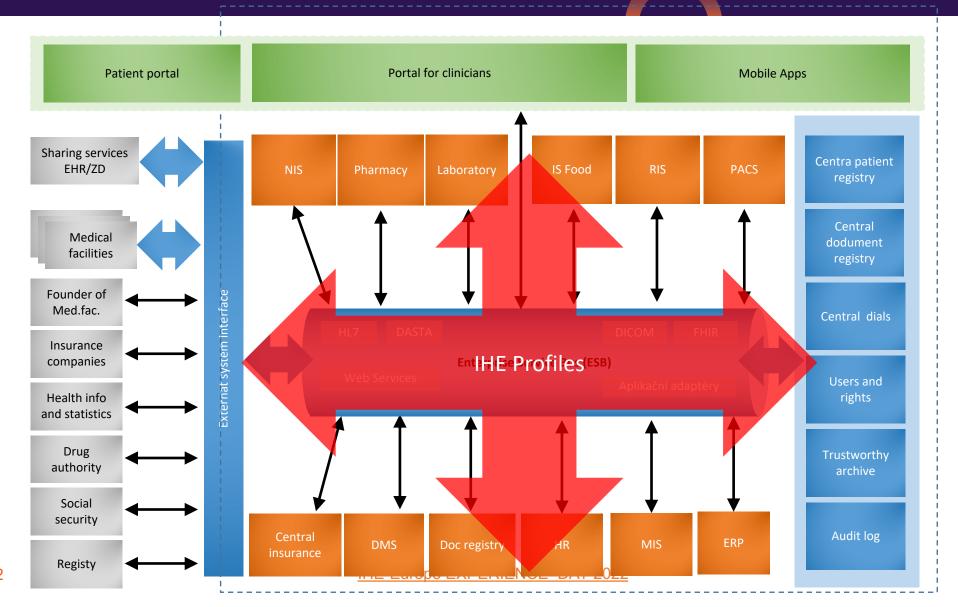


### Integration solution in University Hospital Olomouc





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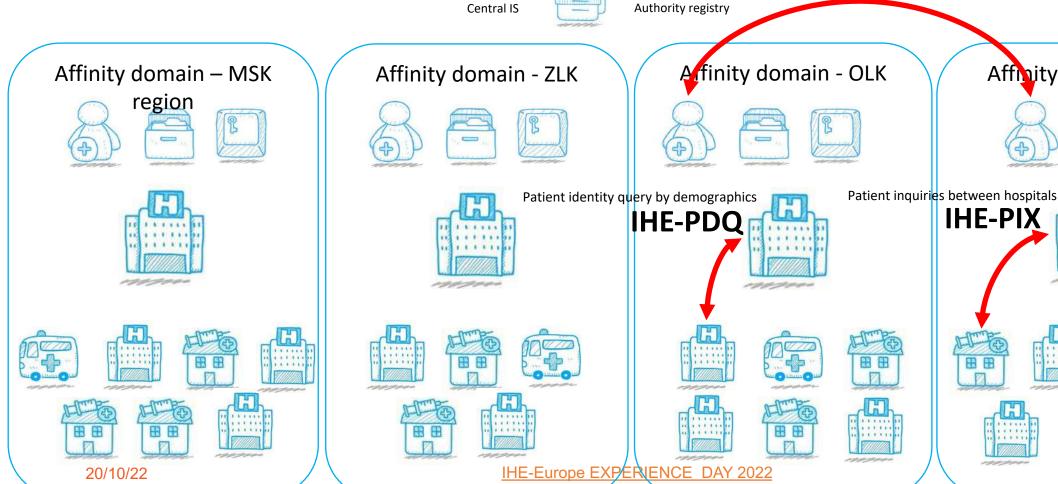




# A possible solution for connecting the Moravian Regions in Czechia

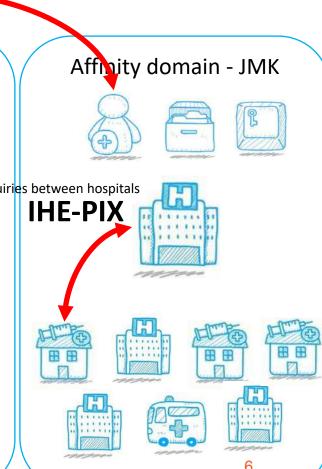
Cross-domain patient search

**IHE-XCPD** 



Central popul.registry

(ROB...)





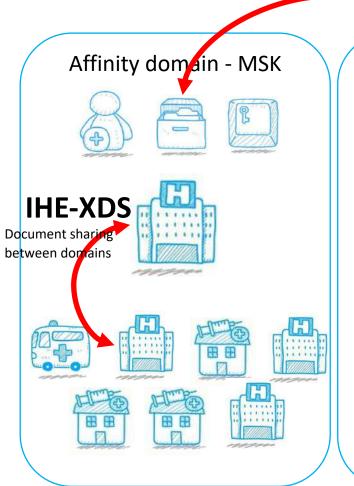
### A possible solution for connecting the Moravian Regions in Czechia

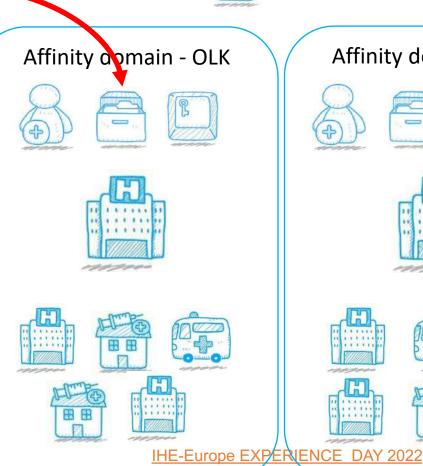
Queries and retrieves medical records between domains

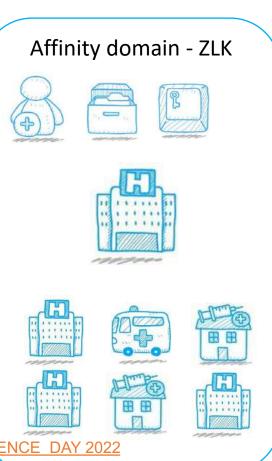
**IHE-XCA** 

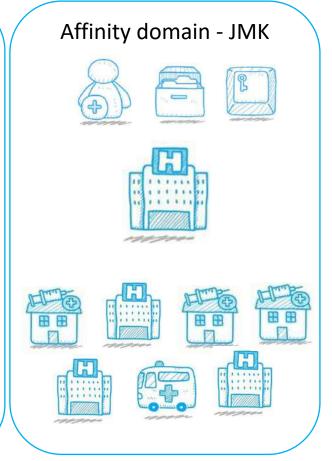






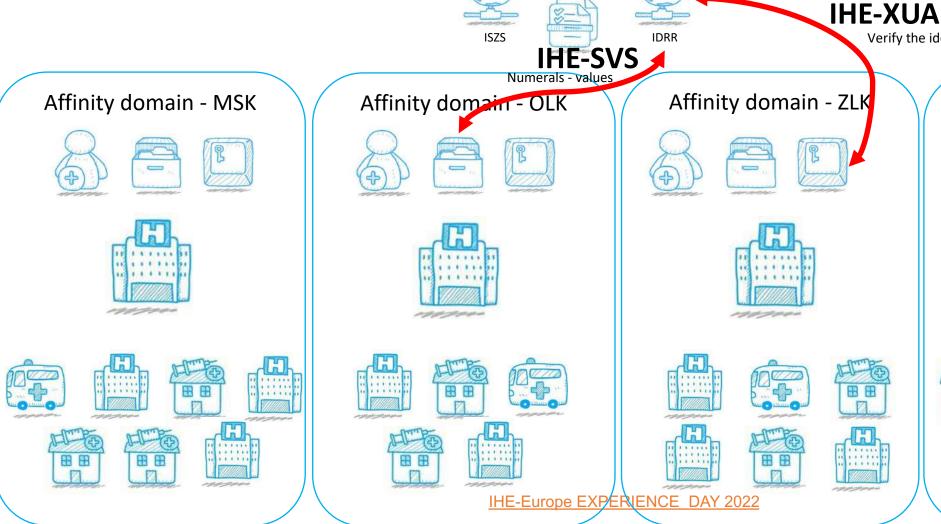




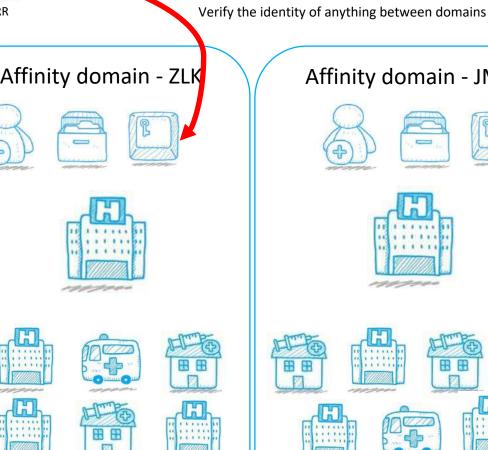


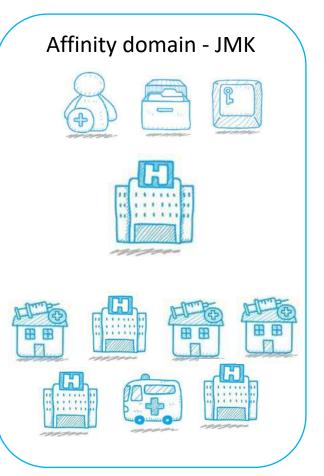


#### A possible solution for connecting the Moravian Regions in Czechia



Basic popul. registy (ROB...)







# A possible solution for connecting the Moravian Regions in Czechia



Basic popul. registry (ROB...)



Cross-domain patient search

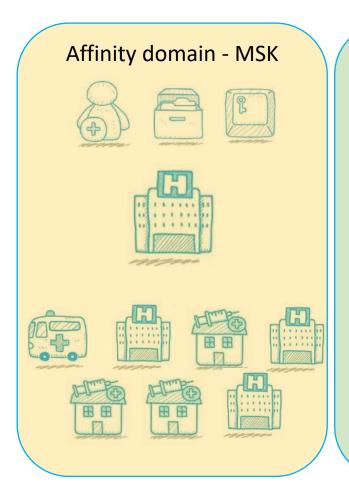
**IHE-XCPD** 

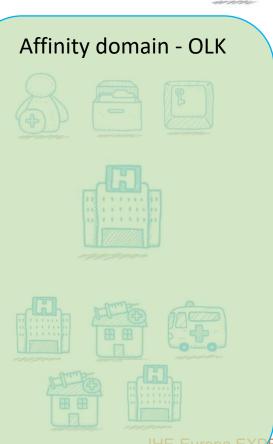
Contractor 1

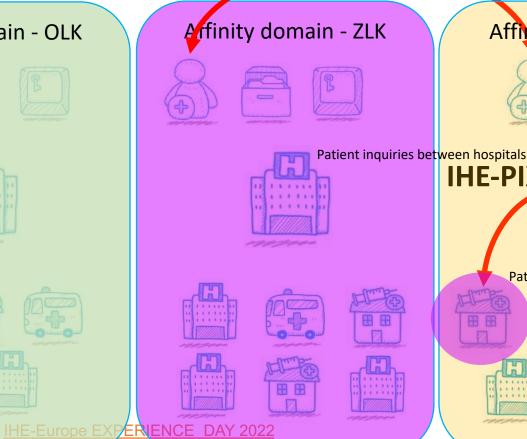
**Contractor 3** 

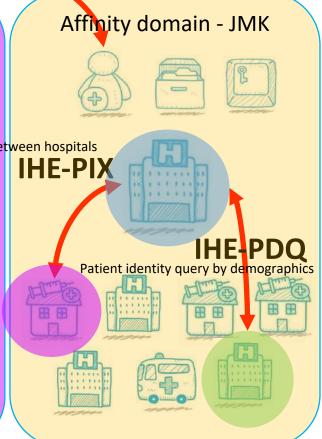
Contractor 2 Co

Contractor 4







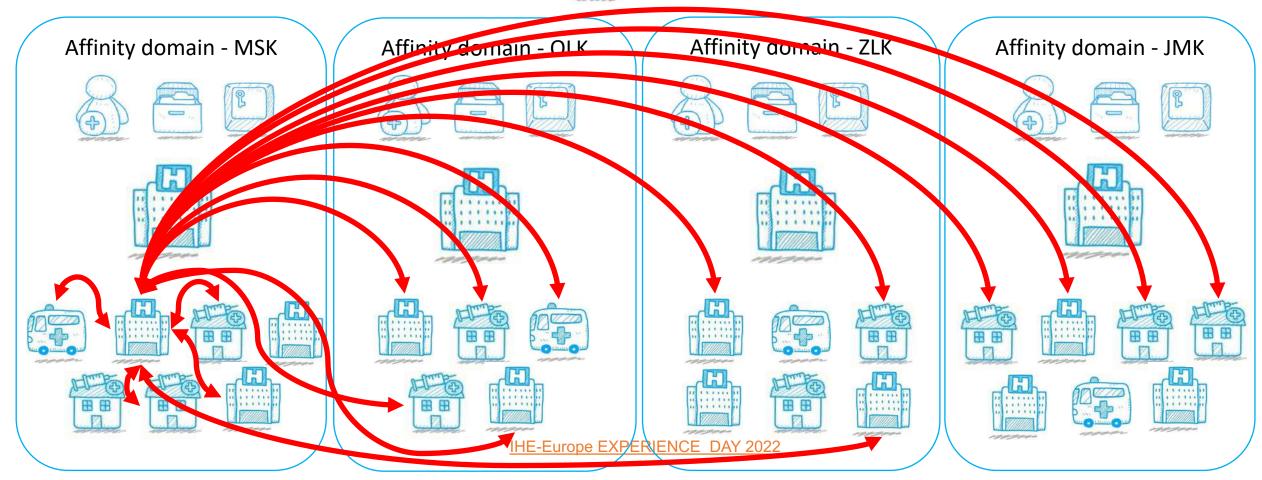




#### How does it look like w/o IHE

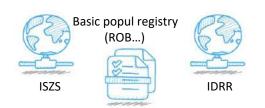
### Example – possible connection with one hospital from MSK

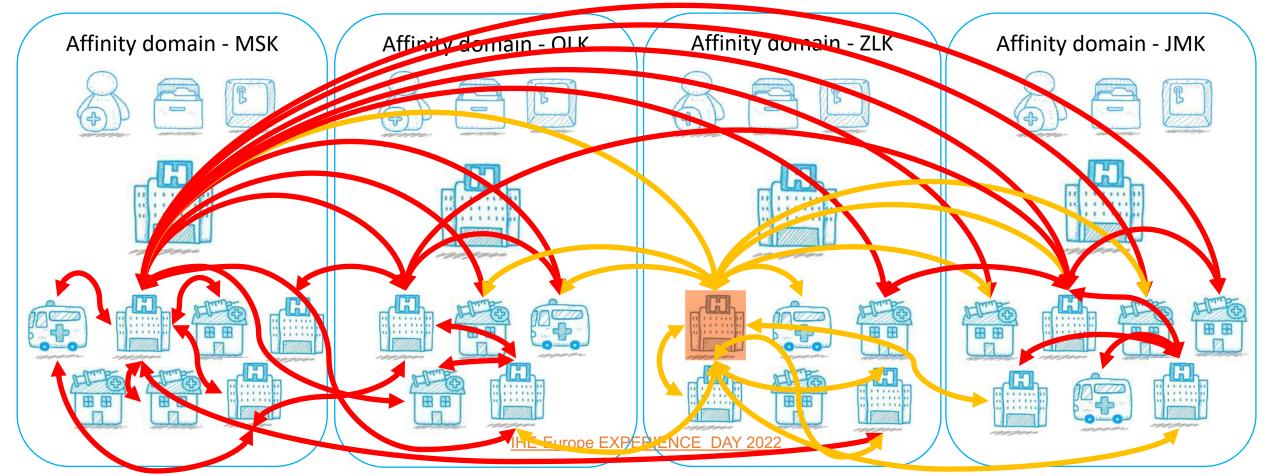






#### How does it look like w/o IHE







### Comparsion with or w/o IHE

	Introperability based on national and proprietary solutions	Interoperability based on IHE profiles
Workload	Unpredictable (in the thousands of MD)	In units of days
Price	Unpredictable ("not small")	Thousands of CZK - in case of own resources = 0
Delivery time	Unpredictable (on the order of dozen months/years)	Several days (in case of compatibility with IHE)
Connection to new IS/EHR/national eHealth	Price and time unaccountable	If the new SW IHE is available, in units of days
Vendor-Lock	"Forever and ever"	0
Summary	The entire solution is conceived as a relatively closed (technologically) solution, which is based mainly on proprietary solutions of the participating suppliers and significantly limits both the participation of foreign suppliers and involvement in foreign projects. Interoperability is supported mainly in the technical and syntactic part, which, however, is not sufficient for full functionality.	The solution is built on proven/internationally used IHE profiles, allowing expansion to any (even foreign) suppliers, ensuring mutual interoperability both nationally and internationally.



- Patients sharing between Cardiology in UHO a CKTCH Brno
- Cooperation occurs when one or the other cardio center is unavailable
- In the case of performances in a non-home workplace, it is necessary to share EHR
- Always available and up-to-date data for both parties
- Update on patient demographics
- TESTING BED! (live data, but both project are in progress...)





Live demonstration of patient record and EHR sharing between UHO and CKTCH...

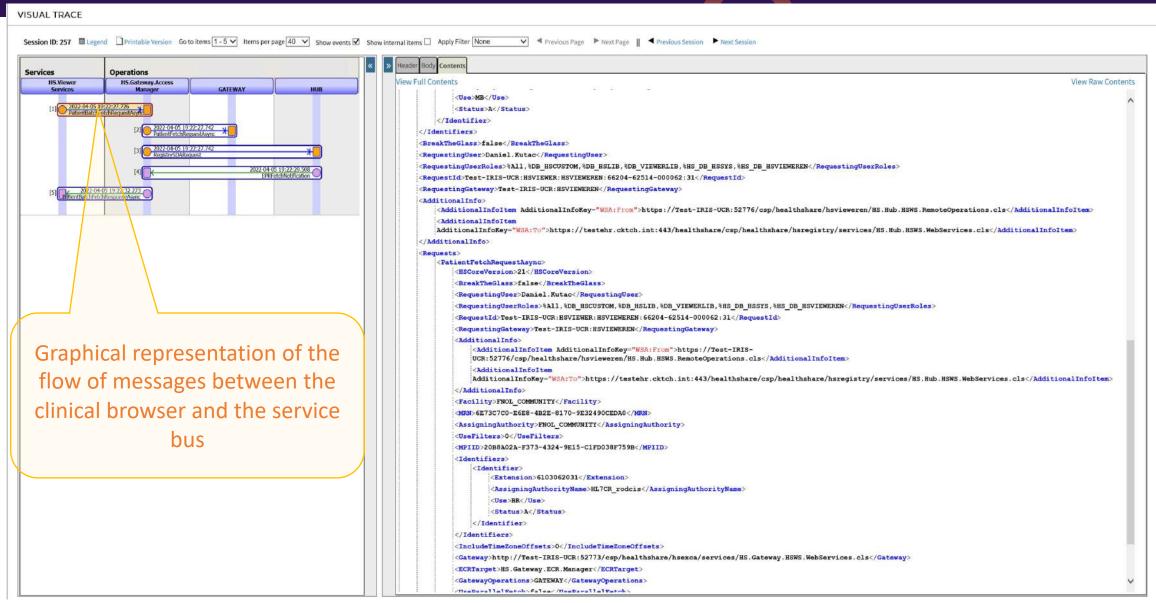


#### Situation in the background

What's going on in the background?

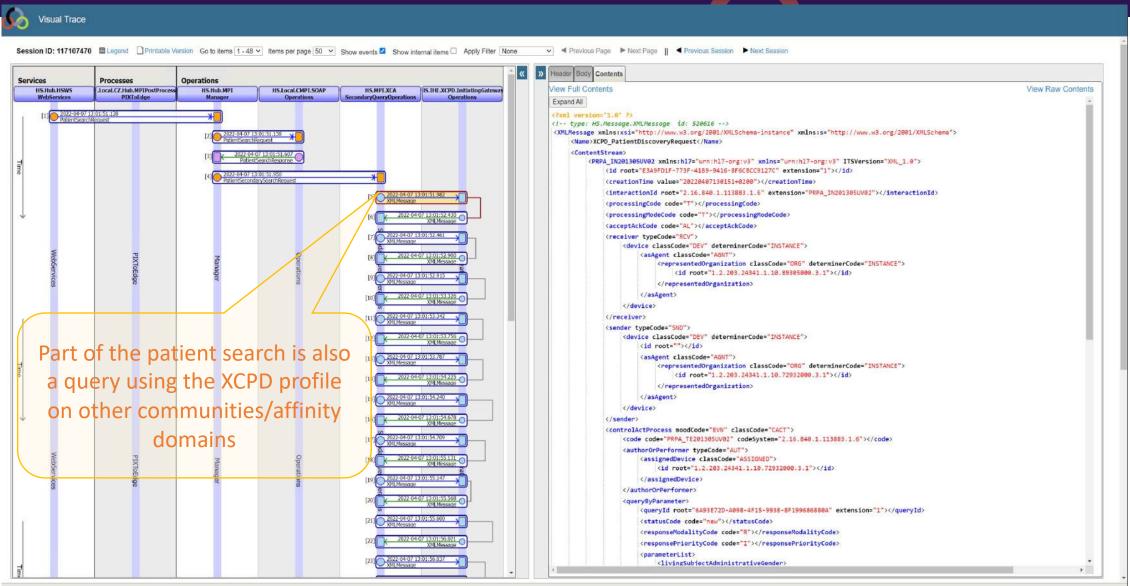


# Internal communication of the Browser to the integration bus



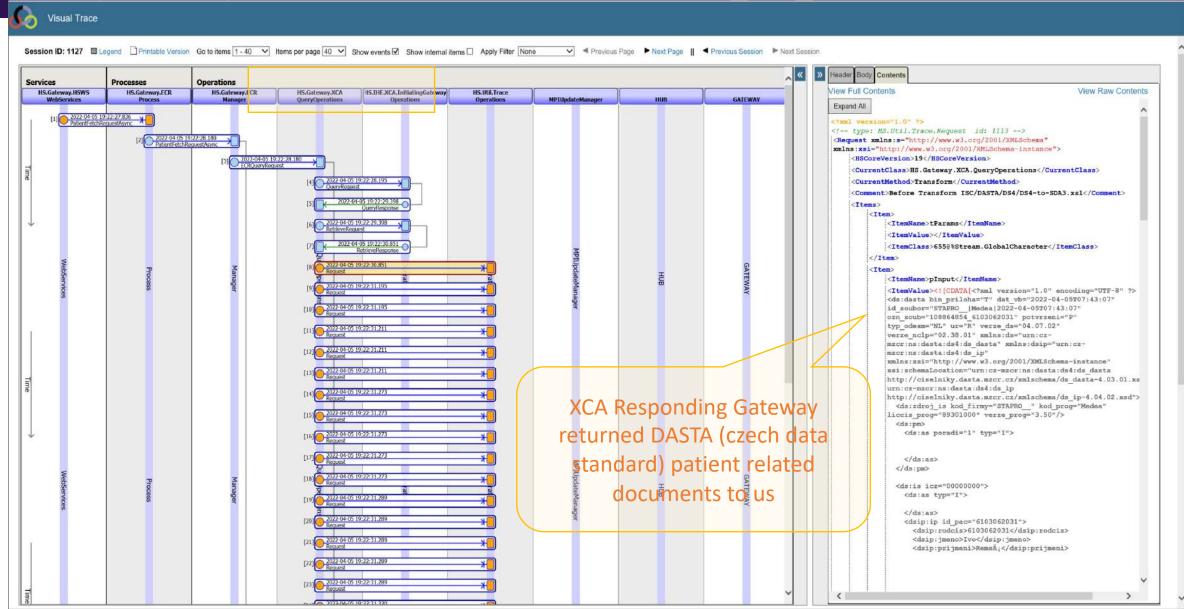


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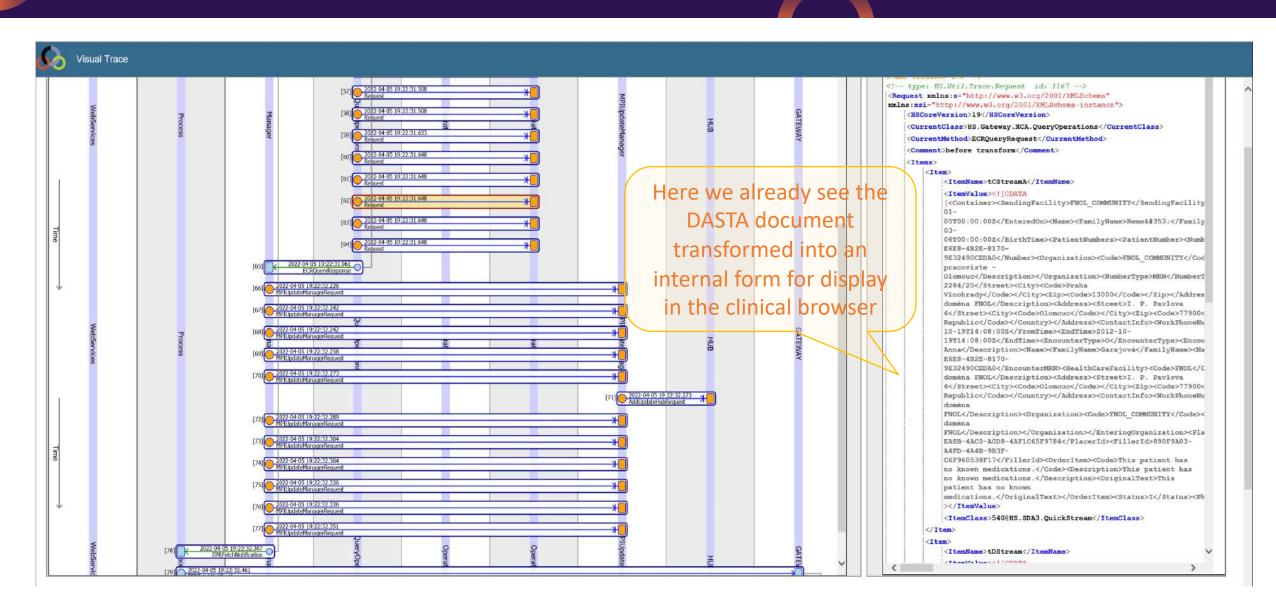


# Communication Bus to XCA Responding Gateway FNOL





# Communication Bus to XCA Responding Gateway FNOL





#### Thank you for your attention

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