

Preparations and plans from the Austrian EHR towards FHIR

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HL7 FHIR DevDays 2023 | Hybrid Edition, Amsterdam | June 6–9, 2023 | @HL7 | @FirelyTeam | #fhirdevdays | www.devdays.com

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International

■ Current

- Data Content
- ELGA's IHE XDS
- Austrian Health Integration Network
- Terminologies

■ Prepared

- TerminoloGit

■ Planned

- Proof of Concept REST/OIDC
- CDA Lab 2 FHIR

Current - Data Content (all CDA)



■ e-Reports (since 2015)

Total: > **59 million** documents

→ 55% **Lab**, 26% **Radiology**,
16%+3%=19% **Discharge Letters**

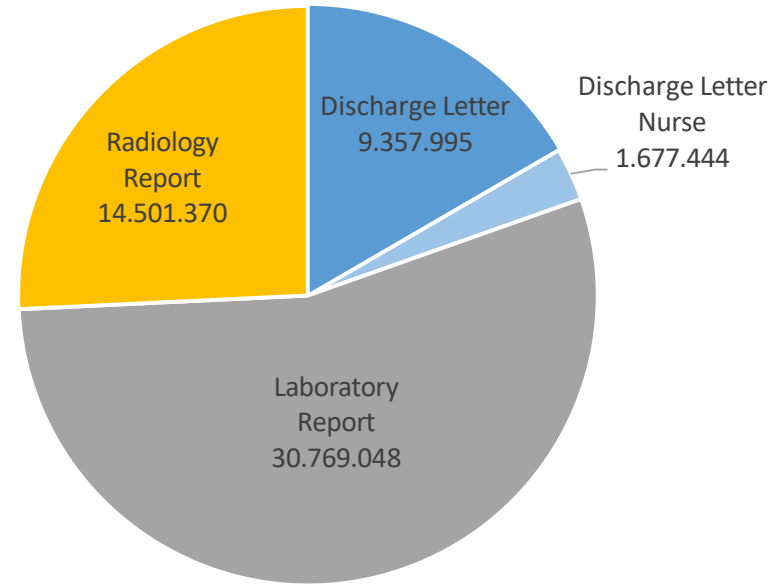
~**1.2 M** new per month

■ e-Medication (since 2018)

6-7 M new prescriptions **per month**

■ e-Vaccination (since 2020)

Total: 14.5 M vaccinations (90% COVID)



11/2021 data

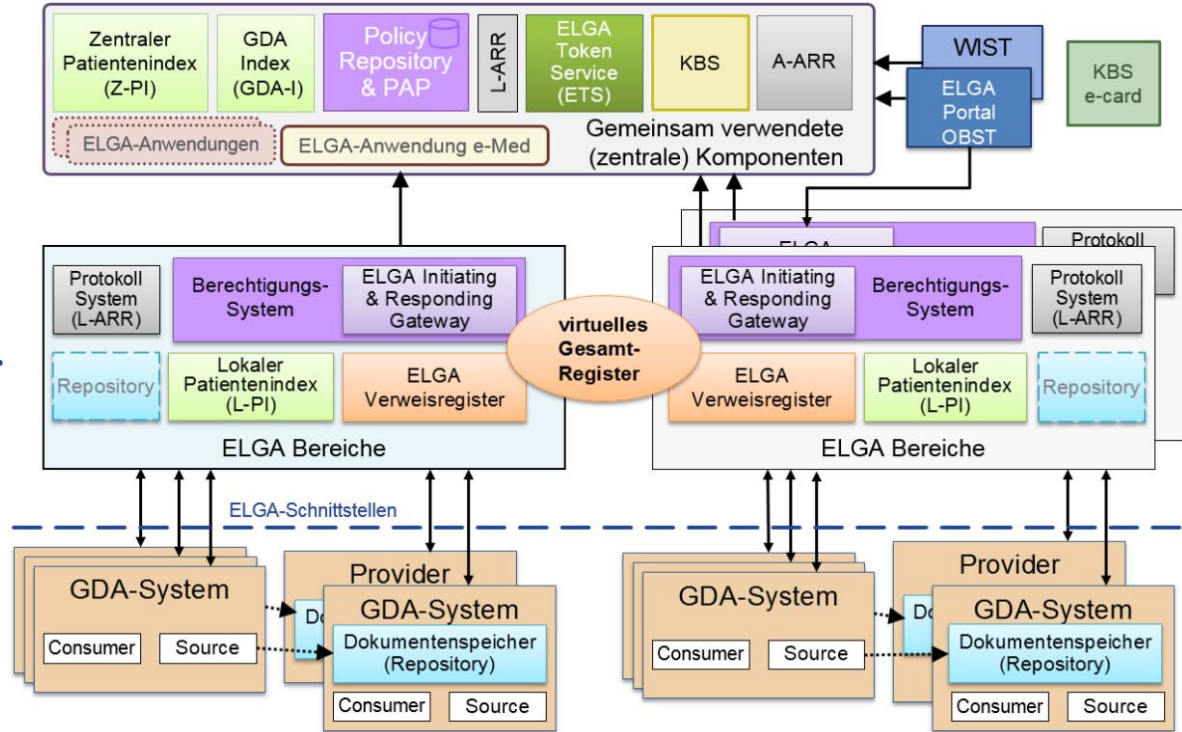
Current - ELGA's Cross-Enterprise Document Sharing Architecture (IHE XDS)



■ central components ->

■ decentral components ->

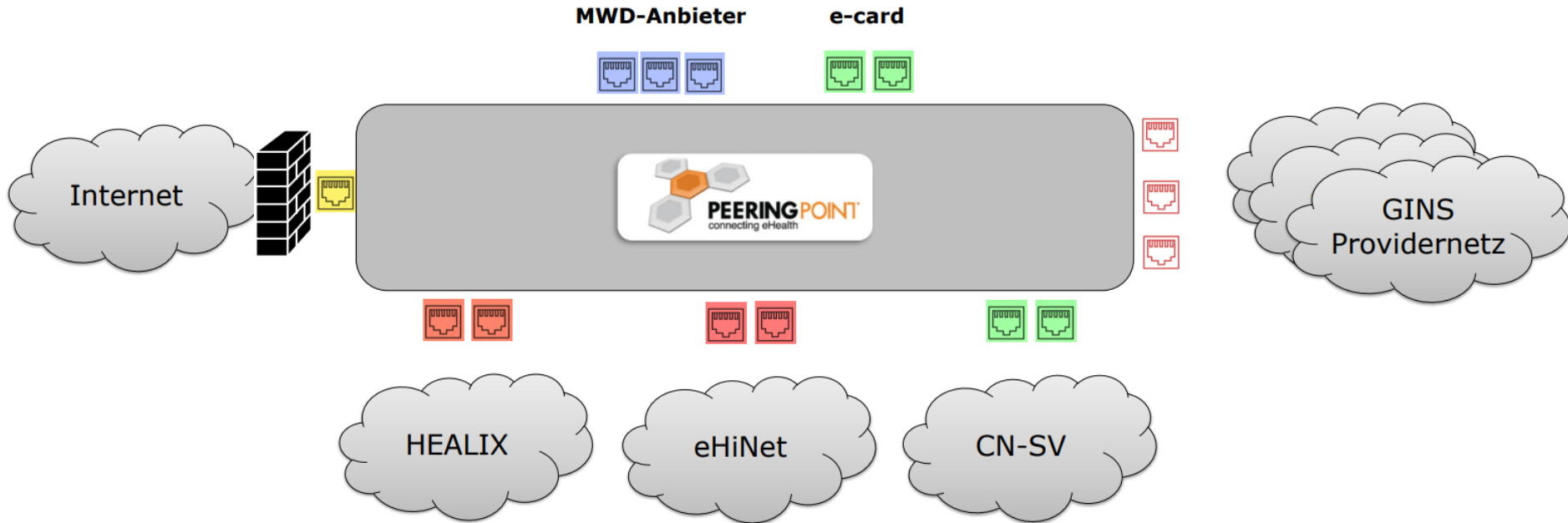
■ local components ->



for more information https://www.elga.gv.at/fileadmin/user_upload/Dokumente_PDF_MP4/Technisches/ELGA_Gesamtarchitektur_2.30b.pdf

only in german

Current - Austrian Health Integration Network



■ Content of the Austrian Terminology Server (including „Non-ELGA“)

- **Total: >310 Terminologies** (code systems + value sets)

■ >170 Code Systems

- 30% International CS, 90% of which English
- 70% national CS, 35% of which „ELGA“

■ >140 Value Sets – used by CDA implementation guides

- Value Sets provide the links between the information model and the terminology. They are a „view“ on a subset of concepts of one or more code systems

■ Change rate per terminology:

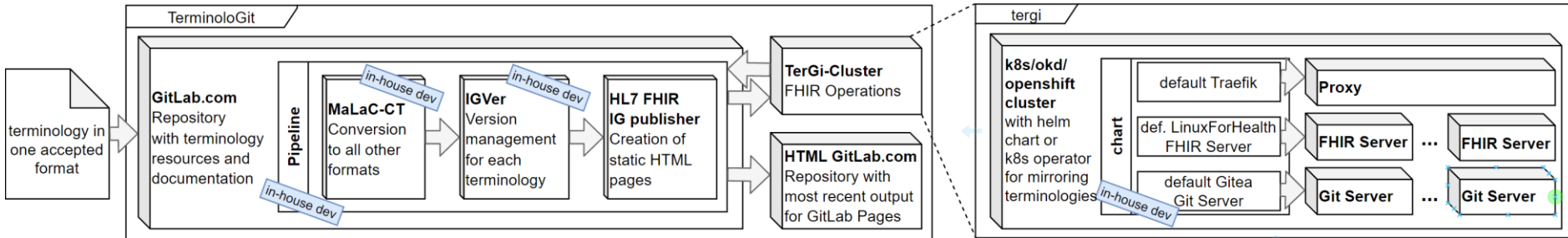
- 88% annually or less
- 9% quarterly or half-yearly
- 3% monthly (or more often)

- Transition phase from old to new terminology server
 - New terminology server based on open-source components and FHIR runs in parallel since 01/2022.
 - Fully operational since 10/2022
 - Access via browser and documentation for api's: <https://termgit.elga.gv.at/>
- Using many existing open-source tools and developed some
 - Git, Gitlab, GenerateDS, FHIR IG Publisher, (LinuxForHealth) FHIR Server
 - MaLaC-CT, IGVer, TerminoloGit, tergi (all can be found under gitlab.com/elga-gmbh)

Prepared - TerminoloGit – Interaction of Comp.



- All terminologies are provided in a **GitLab repository**, forked from **TerminoloGit**
- Automatically: When a terminology is updated in a **TerminoloGit Repo**
 - first **MaLaC-CT** is called as part of the **GitLab pipeline** → this converts the file into all desired formats
 - than **IGVer** takes care of version management for terminologies, before the **FHIR IG Publisher** creates static HTML and make them available in a separate GitLab repo
 - All updates are passed on to known tergis and unknown tergis may pull regularly

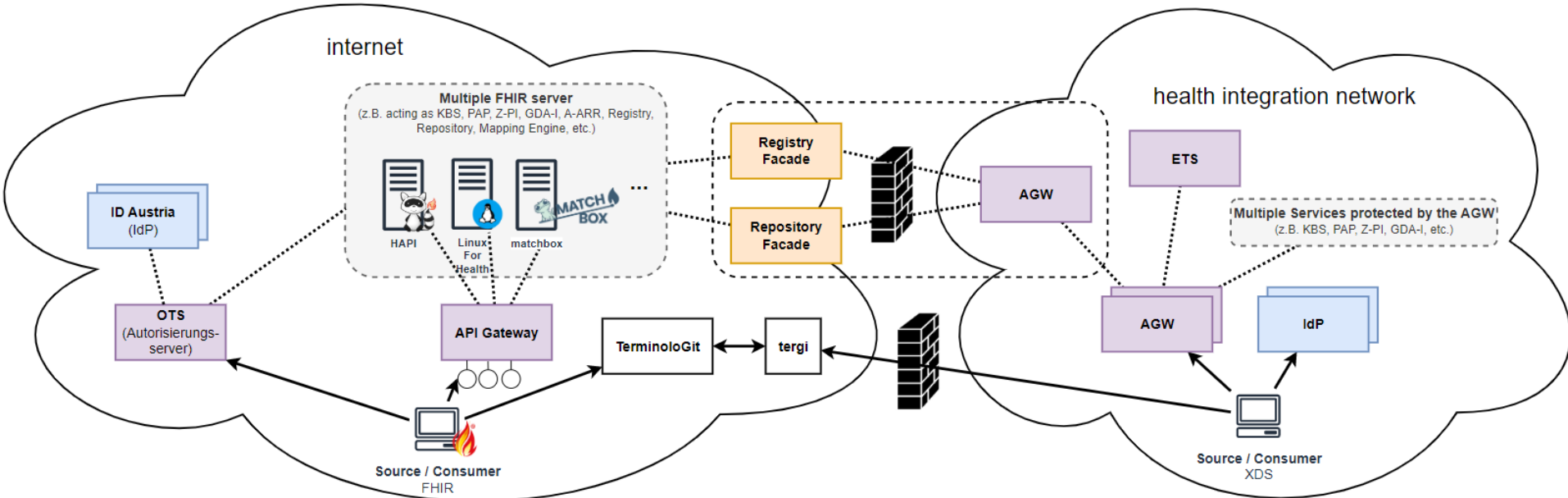


Planned - Proof of Concept REST/OIDC (draft)

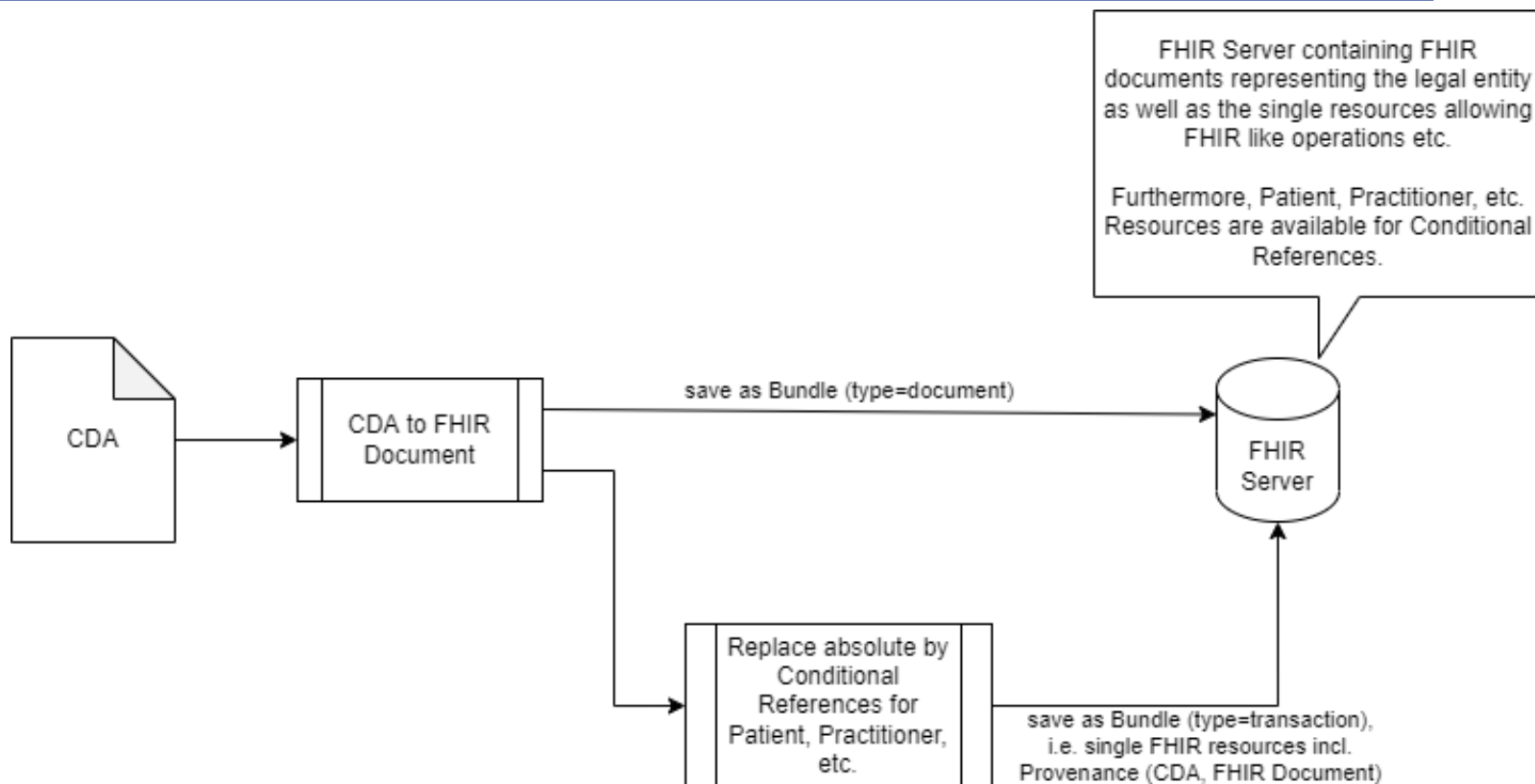


REST/OIDC authorization system

SOAP/WS-Trust authorization system



Planned - CDA Lab 2 FHIR (draft)





Questions?

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