OR.NET e.V.

OR.NET & IHE Germany
SDC Plug-a-thons

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Outline

• Scope and Purpose
• Plug-a-thon #1
• Plug-a-thon #2
• Plug-a-thon #3
• Future Plug-a-thons
Scope and Purpose

- Informal collaboration of engineers within the boundaries of a joint meeting of OR.NET and IHE Germany
- Establish interoperability between different SDC implementations and between devices from different vendors
- Formalize SDPi transactions and test against those to facilitate conformance testing
- ~ bi-monthly meeting
- Documentation: Community Events - Gemini Public - Confluence (hl7.org)
PAT #1 Kick-off meeting 2020/10

- **2020.10.20-21 IHE Germany SDPi PAT - Gemini Public - Confluence (hl7.org)**
- Virtual venue due to the pandemic and in order to reduce expenses
- VPN hosted by OR.NET to allow all parties exchanging data in a virtual subnet, and by that utilizing UDP multicast
  - SoftEther VPN
  - Marcus Köny can provide access data and user accounts
- VPN paves the way for long-term offline testing, i.e. testing without the need to come together at plug-a-thons or connectathons
- The group devised a test sequence that covers large parts of the communication scope of SDC
- Mainly difficulties with certificates
• [2021.03.24 IHE DE SDC/SDPi PAT #2 - Gemini Public - Confluence (hl7.org)]

• Setup of an interoperability matrix to show which implementations are successfully connecting and exchanging data with each other

• Plug-a-thon was closed with a sketchy interoperability matrix and an almost working certificate infrastructure (SSL 1.2 vs 1.3 is still an issue)
• 2021.06.01 IHE DE SDC/SDPi PAT #3 - Gemini Public - Confluence (hl7.org)

• Continuing on the interoperability matrix – on a clean slate to verify reproducibility

• A docker container has been created with a VPN adapter connecting to the OR.NET SoftEther VPN → can be used as a base for containers that run test apps to test against offline
  • Introduction slide set will be published by the time the next PAT is going to be conducted

• First shot of a test sequence to SDPi transaction mapping: Reference Provider/Consumer Specification - Gemini Public - Confluence (hl7.org) (no full coverage yet)
• Detailing of test sequence
• Get coverage of test sequence to SDPi transactions mapping
  • Create provisional test app based on SDCri to generate JUnit test reports
  • SDCcc isn’t published as open source yet; a lean test app as first shot is good-enough for the moment
Challenge

- It’s still unclear how to test a consumer
  - A „golden device“ provider that checks specific interaction?

![Diagram showing test app and device under test connections](image)
Thank you!

David Gregorczyk