

2019-05 CDS Hooks Track

Submitting WG/Project/Implementer Group

CDS

Justification and Objectives

CDS Hooks allow for a very important use of both FHIR and SMART that is outside of the normal transactional flow of data. With CDS Hooks, EHRs can further integrate FHIR and SMART into the workflow with clinical decision support. Over the previous Connectathon tracks, the CDS Hooks project has garnered immense support and interest from a variety of organizations. The CDS Hooks track is now consistently one of the largest tracks at each Connectathon and is near a 1.0 release.

Organizing a CDS Hooks track at the May 2019 Connectathon would allow the community to further develop and explore the possibilities with CDS Hooks. Holding another Connectathon track for CDS Hooks will further draw more developers and companies to HL7 and allow the community to work within the FHIR ecosystem. Additionally, the CDS Hooks community has found great benefit from participating in the Connectathons, so continuing that participation would be appreciated.

Lastly, with CDS Hooks Argonaut discussions beginning around [SMART Web Messaging](#) and [decision workflows](#) for use-cases like PAMA (targeting direct attention in the *September 2019 Connectathon*), it's important to continue bringing the community together and supporting the growing maturity of the specification.

This track will use R2-R4 versions of FHIR.

Related tracks

[2019-05 Da Vinci - Documentation Templates and Rules \(DTR\) Track](#)

Proposed Track Lead

Dennis Patterson (<https://chat.fhir.org/#narrow/sender/191358-dennis.patterson>)

Expected participants

- Cerner
- First Databank
- many, many more

Participant Tracking: <https://bit.ly/cds-hooks-connectathon-tracking>

Track Orientation

Orientation recording from 4/24: <https://cernermeeting.webex.com/cernermeeting/ldr.php?RCID=05874a4759285b8b972858d09b813aab>

A webinar will be hosted over Webex to share further participation information about this track.

Wednesday, Apr 24, 2019 10:00 am | 1 hour | (UTC-06:00) Central Time (US & Canada)

Meeting number: 599 537 732

Password: iM9BJ42D

<https://cernermeeting.webex.com/cernermeeting/j.php?MTID=m990a976f71a4c7b0bb31bcc7898b234c>

Join by video system

Dial [599537732@cernermeeting.webex.com](tel:599537732)

You can also dial 173.243.2.68 and enter your meeting number.

Join by phone

+1-210-795-1110 US Toll

+1-866-662-9987 US Toll Free

Access code: 599 537 732

System Roles

CDS Service - The CDS Service role provides real-time clinical decision support as a remote service. The CDS Server is invoked on a desired hook and returns the decision support in the form of CDS cards.

CDS Client / EHR - The CDS Client will allow for the registration of interested CDS services on various CDS hooks, triggering each appropriately. The EHR will also display the CDS cards (obtained from the CDS services) to the user.

Scenarios

Information Card

Action: CDS Service returns info card, CDS Client (EHR) accepts display info card.

Precondition: Read the [Quick Start Guide](#). Explore the [CDS Hooks sandbox](#).

Success Criteria: CDS Client (EHR) or sandbox displays info card.

Bonus point: CDS Service queries FHIR server while generating card.

App Link Card

Action: CDS Service returns app link card, CDS Client (EHR) accepts app link card.

Precondition: N/A

Success Criteria: CDS Client (EHR) or sandbox displays app link card.

Bonus point: CDS Client (EHR) generates SMART launch token, SMART app performs SMART handshake with OAuth2 server.

App Link Card w/SMART Web Messaging

Action: CDS Client (EHR) displays app link card from CDS Service and is used to launch SMART app. App sends SMART Web Messages to interact with the CDS Client (EHR).

Precondition: App Link Card scenario successful. Read [SMART Web Messaging](#) spec.

Success Criteria: CDS Client (EHR) or sandbox displays received [scratchpad.* messages](#) requesting CRUD-like scratchpad interactions and/or [ui.* messages](#) suggesting UI flow activities.

Bonus point: SMART App makes use of smart_messaging_origin launch context parameter to dynamically identify the target origin.

Suggestion Card

Action: CDS Service returns suggestion card, CDS Client (EHR) accepts suggestion card.

Precondition: N/A

Success Criteria: CDS Client (EHR) displays actionable suggestion card.

Bonus point: N/A

Security and Privacy Considerations

<https://cds-hooks.org/specification/1.0/#security-and-safety>