EMR EHR Connectivity 2.1

Overview

July 13, 2020
Document Version & Status: 1.1 – DFC (Draft for Comment)

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1. INTRODUCTION

The purpose of the EMR EHR Connectivity Specification is to provide EMR vendors with the implementation of functional requirements and guidance to connect an EMR Offering to:

1. the Ontario Health (Digital Services) ONE Access Gateway (OAG), and
2. the provincial Health Information Access Layer (HIAL)

The provincial EHR relies on re-usable services to authenticate EMR users and orchestrate access to EHR products and services. EMR vendors benefit from having a single specification that describes the requirements for how EMR Offerings consume re-usable EHR products and services.

1.1 Documents

The EMR EHR Connectivity 2.1 Specification consists of the following documents:

ID	DOCUMENT NAME	PURPOSE
1.1	Overview	Provides an overview of the EMR EHR Connectivity Specification
1.2	Version History	Describes a history of changes made to this EMR Specification
2.1	Transport Layer Interoperability	Provides the business purposes, context and requirements for implementing connectivity to the provincial Health Information Access Layer (HIAL)
3.1	Provincial Gateway – Business View	Provides the business purposes and context for implementing connectivity to the Provincial Gateway
3.2	Provincial Gateway – Requirements	EMR requirements to implement connectivity to the Provincial Gateway
4.1	Federation Identity and Single Sign-On – Readme	Notice of change relating to Single Sign-On (SSO) requirements
4.2	Federation Identity and Single Sign-On – Business View	Provides the business purposes and context for implementing federated identity and SSO
4.3	Federation Identity and Single Sign-On – Requirements	EMR requirements to implement federated identity and SSO
4.4	Example Federated SSO Token	Sample Federated SSO token
4.5	Example User Registry Client Token	Sample UR client token
5.1	Context Management – Business View	Provides the business purposes for implementing context sharing for EHR products and services that leverage context management
5.2	Context Management – Requirements	EMR requirements to implement context sharing for EHR products and services that leverage context management
6.1	Viewlet Framework – Requirements	Provides the business purposes and context for implementing Viewlets for EHR products and services that leverage the Viewlet framework
6.2	Viewlet Framework – Business View	EMR requirements to implement Viewlets for EHR products and services that leverage the Viewlet framework

1.2 Gateways

Currently, two supported gateways host different EHR services:

1. ONE Access Provider Gateway (OAG)
2. Provincial Health Information Access Layer (HIAL)

The following diagrams provide a high-level view of an EMR Offering connecting to the OAG and the HIAL.

Figure 1 - Flow diagram of an EMR Offering connecting to the OAG

Figure 2 - Flow diagram of an EMR Offering connecting to the HIAL

Depending on which EHR service(s) an EMR Offering is implementing, it will need to implement different EMR EHR Connectivity requirements. The following tables identify which requirements and specification documents are needed.

GATEWAY	EMR EHR CONNECTIVITY SPECIFICATIONS DOCUMENT NEEDED	
	PROVINCIAL HIAL (USING SAML)	ONE ACCESS GATEWAY (USING OAUTH2)
EMR REQUIREMENTS FOR CONNECTIVITY TO GATEWAY	Transport Layer Interoperability (TLI)	ONE Access Gateway (OAG)
EMR REQUIREMENTS FOR USER IDENTITY AND AUTHENTICATION	Federation Identity and Single Sign-On (SSO)[1]	
VIEWLETS[2]	N/A	Viewlet Framework
CONTEXT MANAGEMENT[3]	N/A	Context Management
CURRENT EHR SERVICES	eConsult	DHDR, DHIR, future EHR products and services

Table 2 – EMR Specification documents needed for specific EHR Services

[1] SSO implementation uses the OAuth protocol, but supports legacy implementations of SSO that use SAML.
[2] Not required to connect to the gateway but required if the EHR service leverages Viewlets.
[3] Not required for connect to the gateway but required if the EHR service leverages Context Management.

1.3 Examples of Documents Pertinent to Specific EHR Services

The following are examples to identify the requirements to implement, depending on where it is hosted.

1.1.1 Implementing eConsult EHR Service on the Provincial HIAL

a) **Transport Layer Interoperability (TLI)** needs to be implemented to be able to interact with the provincial HIAL
b) **Federation Identity and Single Sign-On (SSO)** needs to be implemented to authenticate EMR users to the EHR service
c) Additionally, the **EMR eConsult Specification** needs to be referenced and implemented to integrate the eConsult EHR Service functionality in the EMR.

1.1.2 Implementing the DHDR EHR Service on the OAG

a) **ONE Access Gateway and OAuth2** needs to be implemented to interact with the ONE Access Gateway
b) **Federation Identity and Single Sign-On (SSO)** needs to be implemented to authenticate EMR users to the EHR service
c) Additionally, the **EMR DHDR Specification** needs to be referenced and implemented to integrate the DHDR EHR Service functionality in the EMR.
d) Since the DHDR EHR Service supports Viewlets, implement **Viewlets**
e) Since the DHDR EHR Service supports context sharing, implement **Context Management**