# EMR EHR Connectivity 2.0

## Overview

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# 2. 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 ONE Access Provider Gateway (Provincial Gateway), and
2. the provincial Health Information Access Layer (HIAL)

## 2.1 Business Context

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.

## 2.2 EMR EHR CONNECTIVITY

Currently, there are two supported gateways that host different sets of EHR services:

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

The following is a flow diagram of how an EMR connecting to either the HIAL or Provincial Gateway.

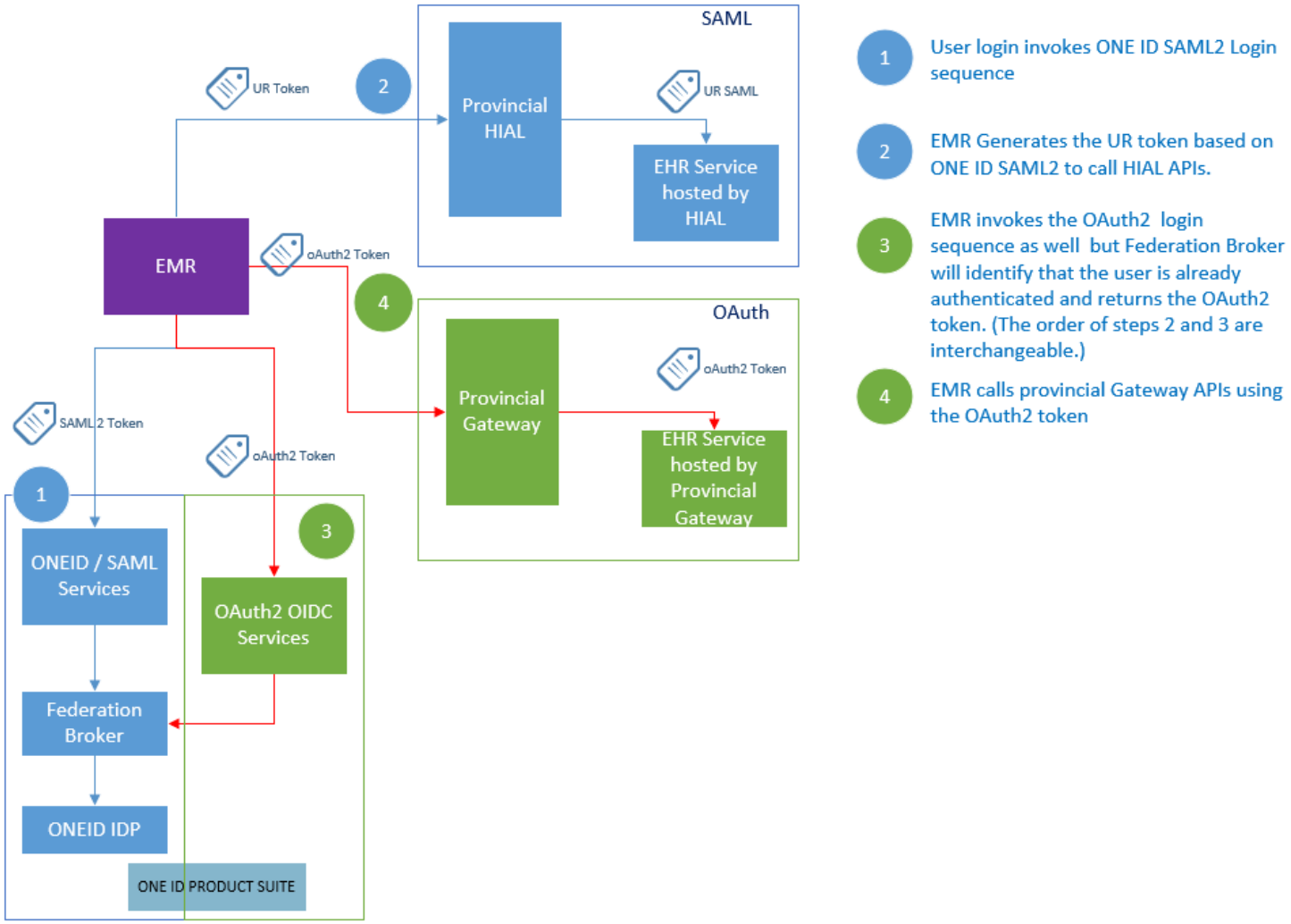


*Figure 1 - Flow diagram of an EMR Offering connecting to the provincial HIAL and the Provincial Gateway*

Depending on which EHR service(s) an EMR Offering is implementing, it will need to implement different EMR EHR Connectivity requirements. The following table identifies which requirements are needed.

| GATEWAY | PROVINCIAL HIAL | PROVINCIAL GATEWAY |
|---|---|---|
| **PROTOCOL/STANDARD** | • SAML | • OAuth2 and OpenID Connect |
| **EMR EHR CONNECTIVITY REQUIREMENTS NEEDED** | | |
| **EMR REQUIREMENTS FOR CONNECTIVITY TO GATEWAY** | Transport Layer Interoperability (TLI) | Provincial Gateway and OAuth2 |
| **EMR REQUIREMENTS FOR USER IDENTITY AND AUTHENTICATION** | Federation Identity and Single Sign-On (SSO)[1] | |
| **VIEWLETS[2]** | N/A | Viewlets |
| **CONTEXT MANAGEMENT[3]** | N/A | Context Management |

**Note**: Additionally, the EMR Specification relating to the specific EHR product or service to implement is also required.

[1] SSO uses SAML, but not the same SAML rules that apply to the HIAL.

[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.

## 2.3 Examples

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

### 2.3.1 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.

### 2.3.2 Implementing the DHDR EHR Service on the Provincial Gateway

a) **Provincial Gateway and OAuth2** needs to be implemented to interact with the Provincial 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**