EMR EHR Connectivity 2.0

Viewlet Framework – Requirements

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1. INTRODUCTION

1.1 Overview

This document defines functional requirements and provides guidance to integrate functionality within an EMR Offering to interact with Viewlet Framework Single-Page Applications (VFSPA) or viewlets, when accessing EHR products and services hosted on the Ontario Health ONE Access Provider Gateway (Provincial Gateway) that leverage them. The intended audiences of this document are business and technical implementers.

1.2 Scope

1.2.1 In Scope

- Functionality for EMR Offerings to interact with viewlets
- Rendering viewlets in a web-based user interface integrated within an EMR Offering
- Functionality for EMR Offerings to accept and handle responses returned from viewlets

1.2.2 Out of Scope

- Requirements that are specific to any viewlet implementation. Information pertaining to a specific viewlet implementation is available as requirements for that specific EHR service. Refer to the specific EMR Specification for more details.

1.3 Dependencies

- Where an EHR service incorporates the use of one or more viewlets, the endpoint value for each viewlet that the EMR Offering needs to connect to is provided as part of the OAuth2 interaction. To facilitate this interaction, the EMR Offering needs to align with the Provincial ONE Access Provider Gateway requirements of the EMR EHR Connectivity Specification.

1.4 Related Documents and References

ID	DOCUMENT NAME	VERSION	DATE PUBLICATION
1	EMR Integration with Viewlet Framework – Developer Guide (Ontario Health, 2019) Contact EMR@OntarioMD.com for the most current version available	0.1	2019-11-29

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2. EMR REQUIREMENTS

This section consists of the EMR functional requirements for leveraging Viewlets.

Support:

M = Mandatory. EMR offerings certified for this specification MUST support this requirement
O = Optional. EMR vendors MAY choose to support this requirement in their certified EMR offering

Status:

N = New requirement for this EMR Specification version
P = Previous requirement
U = Updated requirement from the previous EMR Specification version
R = Retired requirement from the previous EMR Specification version

OMD #:

A unique identifier that identifies each requirement within OntarioMD's EMR Requirements Repository

CONFORMANCE LANGUAGE

The following definitions of the conformance verbs are used in this document:

- **SHALL/MUST** – Required/Mandatory
- **SHOULD** – Best Practice/Recommendation
- **MAY** – Acceptable/Permitted

The tables that follow contain column headings named: 1) "Requirement," which generally contains a high-level requirement statement; and 2) "Guidelines," which contains additional instructions or detail about the high-level requirement. The text in both columns is considered requirement statements.

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2.1 Identifying a Viewlet-Enabled EHR Service

OMD #	REQUIREMENT	GUIDELINES	M/O	STATUS
VF01.01	The EMR Offering MUST use viewlets where they are available in an EHR service.	The EMR Offering MUST make use of all viewlets where available and applicable when interacting with an EHR service. It is not acceptable to develop EMR functionality to avoid and not make use of an available viewlet.	M	N
VF01.02	The EMR Offering MUST use the viewlet endpoint returned in the OAuth2 token.	The EMR Offering MUST retrieve the endpoint value (e.g., URL) from the returned OAuth2 token as the target location to launch the viewlet. The EMR Offering MUST NOT hardcode viewlet endpoint values within the EMR Offering. **Note**: When the EMR Offering authenticates to an EHR service, the endpoint values will be provided as part of the token returned. Refer to the "tconfig" parameter in the "PCOI e2e Architecture" document. (Where an EHR service is not Context-Aware, this information will not be provided.	M	N

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2.2 Viewlet Input Parameters and Functionality

The following EMR requirements identify the standard input parameters or data needed by any viewlet. Additional input parameters may be further identified for specific viewlets not identified in these EMR requirements.

OMD #	REQUIREMENT	GUIDELINES	M/O	STATUS
VF02.01	The EMR Offering MUST submit all required data when launching a viewlet.	The EMR Offering MUST provide all mandatory data required by the viewlet before it is launched. **Note**: Parameters may be defined for specific viewlets and is documented within the respective EMR Specification in which the viewlet is defined.	M	N
VF02.02	The EMR Offering MUST be able to render a viewlet.	The EMR Offering MUST be able to render all web-based content served by any viewlet. The following are browser client requirements to render viewlet content: a) HTML5 b) Angular client-side framework Refer to the Viewlet Framework Single-Page Framework Application Interface Specification for more details.	M	N

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2.3 Session Management

OMD #	REQUIREMENT	GUIDELINES	M/O	STATUS
VF03.01	The EMR Offering MUST have the functionality to manage the unsuccessful launching of a viewlet.	After attempting to launch a viewlet, the EMR Offering MUST be able to confirm if the content was received and rendered. Where no response or incomplete content was received by the EMR Offering from the viewlet, the EMR Offering MUST have the means to attempt to re-request or reload content. The EMR Offering MUST incorporate a finite number of attempts. Where all re-attempts fail, the EMR Offering MUST inform the EMR user of the failure to launch a viewlet and then continue in the absence of any acknowledge returned by the viewlet.	M	N

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2.4 Viewlet Responses

OMD #	REQUIREMENT	GUIDELINES	M/O	STATUS
VF04.01	The EMR Offering MUST have the functionality to be able to handle responses back from a viewlet.	The EMR Offering MUST be able to identify if the viewlet completed successfully or if it failed and continue accordingly.	M	N
VF04.02	The EMR Offering MUST wait for a return response from a viewlet.	The EMR Offering MUST wait for results from a viewlet for a configurable maximum amount of time. The maximum amount of time MUST be a value configurable by an EMR user. The EMR Offering MAY restrict access to change the value to specific (administrative) EMR users. The EMR Offering MUST inform the EMR user if no response is returned by a viewlet within the configured maximum time.	M	N

2.5 Logging and Auditing

OMD #	REQUIREMENT	GUIDELINES	M/O	STATUS
VF05.01	The EMR Offering MUST log all connection attempts with a viewlet.	The EMR Offering MUST log the following information when attempting a connection with a viewlet. a) Date and Time of connection attempt to a viewlet b) Viewlet endpoint attempting to connect c) Status (i.e., success or failure) d) Return codes from viewlet, if provided e) EMR user ID who attempted the connection	M	N

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