Secure Web Service Transportation for HL7 V 3.0 Messages

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Abstract- Web service is a significant way for large enterprises to exchange information in an interoperable way but people are reluctant to use it due to lack of security. The key challenge is to provide a robust end-to-end security model which can operate in an interoperable way without caring about the heterogeneity of platform, language, network protocol and transport protocol in general but particular in healthcare scenario. In order to achieve interoperability, HL7 V3 provides specifications for the transportation of messages securely in the form of web service security profiles including WS-Security, WS-Trust, WS-SecureConversation and WSSecurePolicy. This paper discusses the design mechanism of proposed security model in the context of HL7 V3 web service security profiles to achieve secure HL V3 message exchange and interoperability among the systems. These web services security profiles laid the foundation of web service interoperability basic profiles to promote interoperability.