Medical Domain Web Services (MDWS)

Version 2.0

C3-C1 Conversion Project Release Notes

(MWVS*2)



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Release Notes for MDWS v2.0

Medical Domain Web Services (MDWS) (pronounced *meadows*) is a suite of Service Oriented Architecture (SOA) middle-tier web services that exposes medical domain functionality, Medical Domain Objects (MDO). MDWS is equipped with the capacity to virtualize any legacy Veterans Health Information Systems and Technology Architecture (VistA) Remote Procedure Call (RPC) as a web service. A web service is an Application Programming Interface (API), which uses Simple Object Access Protocol (SOAP), the standardized protocol to communicate with subscribed client applications.

The MDWS suite of web services provides the client application developer with common SOAP web services and documentation necessary to create client applications, which incorporate the organization's business rules, as well as provide access to data from multiple VistA instances and other disparate data sources.

About MDWS

MDWS provides a new way for developers, providers and researchers in OI&T, VHA, and the vendor community to interface client applications with VistA and other data sources. Often developers only have access to data at one site. Consequently, the developers spend a great deal of time gaining access to data, trying to understand the data, learning business rules involved in using that data, and writing code to extract, format and assemble the data.

- MDWS provides re-usable XML data objects for data, such as all medications for a patient or lab
 results for a data range. Client applications can request these re-usable objects via a standard web
 service interface.
- MDWS provides read/write access to all VistA systems, plus an unlimited number of other data sources (SQL databases, HL7 feeds, text files, images).
- MDWS facilitates access to and provisioning of data for purposes of interoperability and data exchange (C32 documents are an example).
- MDWS will be a key component in the VA's effort to establish an open source development community.

All types of client applications can use MDWS.

- MDWS provides a SOAP standard interface that allows different types of client applications to access data sources (Java, .Net, Delphi, etc.).
- MDWS provides data to client GUI applications, and allows client applications to extract data from one source and transfer it another source (VistA to SQL tables for example).
- MDWS extracts data from multiple sources and combines the data into numerous re-usable formats, such as HITSP documents and HL7 message formats for data exchange.

MDWS is currently used by a number of national applications with high user load (MyHealtheVet, NUMI, Suicide/Homeless Hotline), and several research, registry, and public health efforts.

Initial Release Information

SPECIFIC TO THIS RELEASE:

Initial release of MDWS 2 will have the following Class I instances:

- 1. Austin Automation Center: used solely by MyHealtheVet
- 2. Orlando VAMC: used solely by National Suicide Hotline and National Homeless Hotline
- 3. Falling Waters/Hines: used solely by NUMI
- 4. Ann Arbor VAMC: used by all other client apps like TBI and MOVE

Note: A KIDS build (Patch XU*8*557) needs to be installed nationally to support the grandfathered applications. The patch enters the *pass-phrase* in each site's REMOTE APPLICATION file, as well as, installs the new MDWS context in each site.

In the future, it will be each application's responsibility to handle the REMOTE APPLICATION file entries. This is done via the KIDS patch. For any new applications that may use MDWS, it will also require populating entries in the REMOTE APPLICATION file. For C1 applications, the installation of the KIDS patch would be national; any other applications would also require the sites to install an entry for them, which make these entries voluntary on the part of the local IRM staff.

Specific Installation Notes

Before installing MDWS:

- Ensure target VistA data sources have all Kernel and RPC Broker patches up-to-date.
- Patch XU*8*557 Remote Application File Entries for MDWS client applications must be installed before the implementation of MDWS 2.0.

MDWS is a web service application, which clients access directly. Information, including installation instructions, is available on the Medora Development Group website: http://trac.medora.va.gov/web/wiki/Projects/MDWS

Additional Information

- Instructions from UDDI Refer to the MDWS Developer's Guide
- Updating PSSG Table Refer to the MDWS Installation Guide or MDWS Systems Management Guide
- Updating ZIPCodes Table
 Refer to the MDWS Installation Guide or MDWS Systems Management Guide

MDWS Services

MDWS runs in a multi-site environment recognizing an enterprise perspective while fully supporting local health care delivery. A single MDWS instance is one code base that can access all VistA instances.

- 1. EmrSvc
 - The Electronic Medical Record Service shall act as a façade for applications where the user is a healthcare provider.
- 2. CallService

The Call Service shall allow the user to develop call center applications.

3. NumiService

The National Utilization Management Integration Service shall allow inpatient bed movements to be tracked.

4. MhvService

The MyHealtheVet Service shall allow the creation of use cases for the Patient Health Record (PHR).

Documentation

MDWS Manuals

Medical Domain Web Services (MDWS) Installation Guide (mwvs2_0ig)

Medical Domain Web Services (MDWS) Developer's Guide (mwvs2_0dg)

Medical Domain Web Services (MDWS) Systems Management Guide (mwvs2_0smg)

Medical Domain Web Services (MDWS) Release Notes (mwvs2_0rn)

Location of MDWS Manuals

 $\label{localization} \textbf{Documentation is available on the VA Software Document Library in the Infrastructure Section \\ \underline{\text{http://www4.va.gov/vdl/}}$

Support Information

If you have any questions concerning the implementation of this application, contact the VA Service Desk at 1-888-596-4357 or directly log a Remedy ticket via Remedy Requester application using the category: Level 2 support team that will receive the Remedy Tickets is MDWS.

Field Developers/Ann Arbor

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References

- UDDI Services (Microsoft), Getting Started https://medora.va.gov/uddipublic/
- Medical Domain Web Services http://medora.sharepoint.med.va.gov/sites/mdws/
- Web Services Description Language (WSDL) <u>http://www.15seconds.com/issue/011204.htm</u>
- MDWS History http://trac.medora.va.gov/web/wiki/Projects/MDWS/history