

# EWD.JS INTRO

## WHAT IS EWD.JS AND HOW DO I USE IT?

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# WHAT IS EWD.JS?

- EWD.js is a Node.js framework that is designed to talk to M based (NoSQL) databases using the same API calls:
  - GT.M
  - Caché
- EWD.js also has support for:
  - MongoDB
    - EWD Blog on supporting MongoDB -  
"<http://robtweed.wordpress.com/2013/12/02/a-new-chapter-for-ewd-js-now-supporting-mongodb/>"
  - Disk based JSON data store
    - EWD Blog on EWD.js for Raspberry Pi where the disk db is used -  
"<http://robtweed.wordpress.com/2013/11/12/ewd-js-for-the-raspberry-pi/>"

# HOW DO I GET EWD.JS INSTALLED?

- If you want to have it hooked up with VistA:
  - The OSEHRA Vagrant installation scripts
  - dEWDrop
- You can walk through the directions manually and install an M(UMPS) environment, node.js, node.js M(UMPS) module, and EWD.js
- I'm going to focus on the OSEHRA Vagrant installation scripts, cause I'm the developer of them </shameless plug>

# M(UMPS) MODULE?

- EWD.js relies upon 2 different M(UMPS) modules to provide connectivity to the M database depending on the M(UMPS) environment that is in use
  - `nodem`
    - Used to support the opensource GT.M M(UMPS) environment
    - GT.M website - "<http://www.fisglobal.com/products-technologyplatforms-gtm>"
  - `cache.node`
    - Used to support either the licensed Caché product or `globalsDB`
    - Globals DB website - "<http://www.globalsdb.org/>"

# GETTING STARTED

- If you have git, virtualbox, and vagrant installed you are ahead of the game. If not, they are simple installers and open source
- Documentation is available at the OSEHRA github site
- <https://github.com/OSEHRA/VistA/blob/master/Documentation/Install/Vagrant.rst>

# EWD PAGES IN VM

- Main managemnet console
  - <https://localhost:8080/ewd/ewdMonitor/index.html>
- VistA Demo
  - <https://localhost:8080/ewd/VistADemo/index.html>

# EWD FILE LOCATIONS

- Debug log
  - /home/osehra/log/ewdStartOut.log
- Error log
  - /home/osehra/log/ewdStartOut.log
    - Only used for severe EWD.js errors (EWD.js didn't start)
- EWD Rest log
  - /home/osehra/log/ewdRestOut.log
  - /home/osehra/log/ewdRestErr.log
    - I haven't seen anything written to this log. Only for severe errors

# EWD VISTA DEMO LOCATIONS

- Backend JavaScript
  - `/home/osehra/node/node_modules/VistADemo.js`
- Frontend JavaScript
  - `/home/osehra/www/ewd/VistADemo/app.js`
- Frontend Application
  - `/home/osehra/www/ewd/VistADemo/`
  - This is a bootstrap V3 (<http://getbootstrap.com/>) application
- Recommended resources
  - EWD.js & VistA: A Technical Deep-Dive into the VistA Demo Application -  
"<http://robtweed.wordpress.com/2014/03/02/ewd-js-vista-a-technical-deep-dive-into-the-vista-demo-application/>"
  - EWD.js Documentation -  
"<http://gradvs1.mgateway.com/download/EWDjs.pdf>"



# EWD REST VISTA DEMO LOCATIONS

- Webservice
  - <httpS://localhost:8000/ec2/vista>
    - I use the Postman chrome application -  
"<https://chrome.google.com/webstore/detail/postman-rest-client-packa/fhbjgbiflinjbdgggehccddcbncdddop?hl=en>"
- Service JavaScript
  - [/home/osehra/node/node\\_modules/VistARestServer.js](/home/osehra/node/node_modules/VistARestServer.js)
  - [/home/osehra/node/node\\_modules/VistADemo.js](/home/osehra/node/node_modules/VistADemo.js)
- Recommended resources
  - EWD.js & VistA: Rest Interface -  
"<http://robtweed.wordpress.com/2014/03/02/ewd-js-and-vista-rest-interface/>"
  - EWD.js Documentation -  
"<http://gradvs1.mgateway.com/download/EWDjs.pdf>"

# RESTARTING EWD.JS

- As root (or sudo access)
  - "sudo service osehravista-ewdjs restart"
    - Will restart both the EWD.js service and EWD REST service
- Web Service Fake Restart
  - Start 2 new EWD Worker processes
  - Stop the old EWD Worker processes
    - Works to refresh the M code (it is cached)
    - Refreshes the backend JavaScript code (also cached)

# RESOURCES

- EWD Files Blog
  - <http://robtweed.wordpress.com/>
- EWD.js Documentation
  - <http://gradvs1.mgateway.com/download/EWDjs.pdf>
- EWD google group
  - <https://groups.google.com/forum/#!forum/enterprise-web-developer-community>
- OSEHRA Vagrant VM installation
  - <https://github.com/OSEHRA/VistA/blob/master/Documentation/Install/Vagrant.rst>