



OSEHRA

Open Source Electronic Health Record Agent

Hands-On Exercises with OSEHRA's Software Development Tools

December 14th, 2011





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Main Set of OSEHRA Open Source Software Development Tools

- Web Site www.osehra.org
- Code Repository code.osehra.org/gitweb
- Software Quality Dashboard code.osehra.org/CDash
- Auto Generated Docs code.osehra.org/dox
- Code Review Tool review.code.osehra.org
- Technical Journal code.osehra.org/journal
- Bug and Feature Tracker issues.osehra.org
- Architecture Reference architecture.osehra.org

Getting Started

<http://www.osehra.org/wiki/instructions-establishing-and-testing-osehra-code-base-main-page>

<http://www.osehra.org/wiki/virtual-machine-testing-osehra-code-base-pre-configured>



Step 1 – Virtual Machine

- Install VirtualBox from the DVD
 - “VirtualBoxInstallers” directory
- Import the Virtual Machine file.
 - Select the “.ovf” file
 - About 10 minutes to import
- Launch the Virtual Machine



Step 1.5 – Verification

- If you are using the VM:
 - OSEHRA-CPRS-Enabled
- Open a terminal and edit the file `~/.bashrc`
 - `gedit ~/.bashrc`
- Go to line 102 (close to the end of the file)
- Comment out the line:
 - `export gtm_dist="opt/gtm"`
 - By adding a “#” at the beginning of the line, like:
 - `# export gtm_dist="opt/gtm"`



Step 1.5 – Verification

- Go to line 103 (the next line)
- Replace the current line:
 - `source ${gtm_dist}/gtmprofile`
 - With
 - `source /opt/gtm/gtmprofile`
- Save the file and quit the editor
- Quit the terminal (to refresh the environment)



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Step 2 – Rename Site

- **Open the Terminal**
- `cd ~/Dashboards/OSEHRA-Automated-Testing-build`
- `make edit_cache`
- **Replace “SITE” value with your machine name (e.g. use your name)**



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Step 3 – Submit Experimental Build

- Type: `ctest -D Experimental`
- Create your Login in the Dashboard

code.osehra.org/Cdash

<http://code.osehra.org/CDash/register.php>

- Claim your SITE
 - (Click in my Cdash, then computer icon)



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Step 4 – Git Repository

- Create Github Account

<https://github.com/signup/free>

- Create your SSH keys

<http://help.github.com/ssh-key-passphrases/>

- Fork Vista

<https://github.com/OSEHRA/VistA-FOIA>



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Step 4 – Git Repository

- `cd ~/Dashboards/VistA-FOIA`
- `git remote add mygithub`
- `git fetch mygithub`



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Step 5 – Gerrit Code Review

- Create Gerrit Account

<http://review.code.osehra.org/>

- Upload your public SSH key

<http://review.code.osehra.org/#/settings/ssh-keys>



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Step 6 – Git Repository

- `cd ~/Dashboards/Vista-FOIA`
- `./Scripts/SetupForDevelopment.sh`



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Step 7 – Create Branch

- `cd ~/Dashboards/Vista-FOIA`
- `git checkout -b MyTestBranch`



Step 8 – Change a Routine

- `cd ~/Dashboards/Vista-FOIA`
- `cd ./Packages/Adverse\ Reaction\ Tracking`
- `cd ./Routines`
- Edit the file `GMRAOR.m`



Step 8 – Change a Routine

- `gvim GMRAOR.m` or `gedit GMRAOR.m`
- Remove the blank space at the end of the line in lines
 - 79
 - 106



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Step 9 – Submit Patch

- `git add GMRAOR.m`
- `git commit -m "ENH: Removed blank spaces"`
- `git gerrit-push`



Step 10 – Assign Reviewers

Change Ic694315a: ENH: Re x

review.code.osehra.org/#/c/43/

[Permalink](#)

Reviewer	Verified	Code-Review	Safe	Compliant	Functional
OSEHR Agent	☒ ✓				
Joseph Snyder	☒				
Bill Hoffman	☒				

- Need Code-Review
- Need Safe
- Need Compliant
- Need Functional

► **Dependencies**



Step 11 – Sign to Review Others

Change Ic694315a: ENH: Re x

review.code.osehra.org/#/c/43/

[Permalink](#)

Reviewer	Verified	Code-Review	Safe	Compliant	Functional
OSEHR Agent	☒ ✓				
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- Need Code-Review
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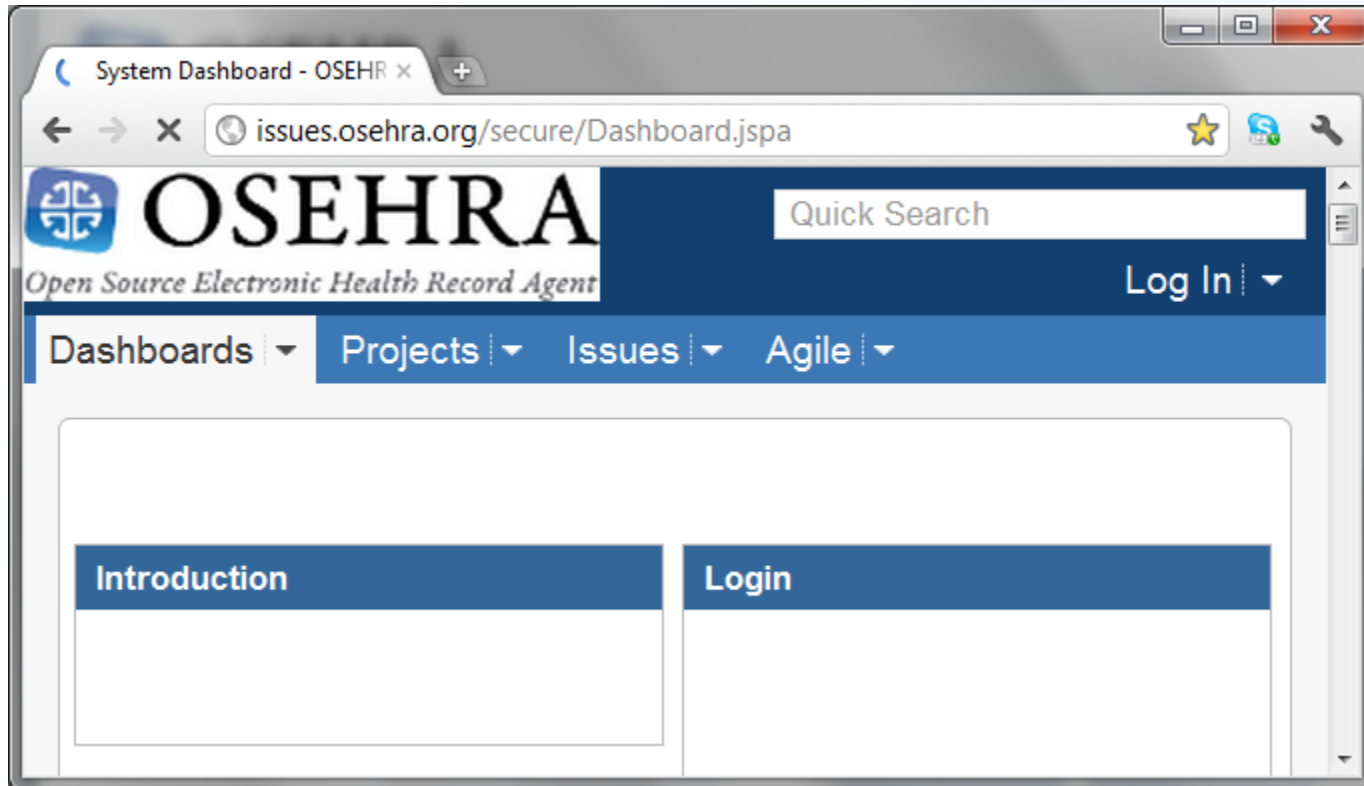
► **Dependencies**



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Step 12 – Issue Reporting



- <http://issues.osehra.org/secure/Dashboard.jspa>
 - Create your Account



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Step 13 – Technical Journal

The OSEHRA Technical Journal is an Open Access, on-line publication covering technical topics related to open source software for management of electronic health records. The goal of the Journal is to foster innovation and to channel this innovation in the form of concrete working pieces of software that can later be integrated into the OSEHRA open source platform.

The unique characteristics of the "OSEHRA Technical Journal" include:

- **Open Access:** all material is freely distributed under open licenses
 - Source code: Apache 2.0 License
 - Documents: Creative Commons by Attribution 3.0 License
 - Data: Open Data License (by science commons)
- **Open peer-review:** inviting discussions and exchange of ideas. reviewers are also publicly rated, creating a public system of checks and balances.
- **Reproducibility:** all contributions are required to include the source code of working implementations. These are tested in an automated build system.
- **All materials are made available to readers**, enabling them also to experiment with the contributions and to improve upon them.
- **Contributed source code is directly put in a sandbox repository** where it can evolve and mature, with the final goal of being incorporated into the OSEHRA platform, if vetted by the community.
- **Support for continuous revisions:** the technical reports, and associated source code contributions can be revised by the authors at any time. In this way the reports are corrected, improved and extended as needed, in response to the online discussions with the community.

Journals
OSEHRA Technical Journal

Publication of the Month
Vista Install and Testing Instructions
by Snyder J., Turner W.

Issues Accepting Submissions
2011-October-December
44 days
[+]

- code.osehra.org/journal
- Create your Account



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Step 14 – Journal Template

- `cd ~/Documents`
- `git clone`
<https://github.com/OSEHR/OSEHRA-Technical-Journal-Templat.git>
- `cd OSEHRA-Technical-Journal-Template`
- `cmake .`
- `make`



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Next Session

- **Wednesday December 21st - 3:00-4:00pm EST**
- **Walk-through VistA Cross Reference Documentation**
 - Review
 - Discussion about new features and improvements
 - Relationship to the VDL Mirror



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End

