VLab at 2 years

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https://vlab.ncep.noaa.gov/
The Goal of VLab

The Goal of VLab is to manage innovation, streamline Operations to Research (O2R), and accelerate Research to Operations (R2O) in NOAA.
VIRTUAL LAB COMPONENTS

Collaboration Services

Communities

Workflow

Forums

Virtual Lab (VLab)

Development Services

Project Mgmt/Issue Tracking (Redmine)

Document Libraries

Wikis

svn

Git

Code Review - Gerrit

Continuous Integration Jenkins

Web Content

Blogs
Growth of VLab

- Collaboration Services Users
- Development Services Users

Communities, Projects
Growth of VLab

Number of VLab Software Repositories

Date

0 10 20 30 40 50 60 70 80 90

VLab Development Services (Redmine): Actual Usage*

<table>
<thead>
<tr>
<th>VLDS</th>
<th>April 2014</th>
<th>December 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessions</td>
<td>1,784</td>
<td>3,005</td>
</tr>
<tr>
<td>Users</td>
<td>344</td>
<td>802</td>
</tr>
</tbody>
</table>

12.3% New Users
87.7% Returning Users

Average Session Duration: 10:30 min
526 Man-hours in December

* Google Analytics
VLab Collaboration Services (LIFERAY): Actual Usage*

<table>
<thead>
<tr>
<th></th>
<th>April 2014</th>
<th>December 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessions</td>
<td>1,090</td>
<td>2,313</td>
</tr>
<tr>
<td>Users</td>
<td>398</td>
<td>1,031</td>
</tr>
</tbody>
</table>

28.7% New Users
71.3% Returning Users

Average Session Duration: 5:08 min
196 Man-hours in December

* Google Analytics
Achievements

1. AWIPS VLab is now an essential and required component in the transition of research to operations (R2O) for the National Weather Service (NWS) Advanced Weather Interactive Processing System (AWIPS) II system
2. The VLab AWIPS Community is now the official source of AWIPS documentation
3. VLab has been successfully rehosted on NOAA IDP web farm
4. Many important NOAA projects rely on VLab for R2O: e.g., National Blend of Models, GOES-R, Hazards Services, Extra-Tropical Storm Surge, MRMS, MPAR, Impacts Catalog, NOAA Weather Wire, NDFD Verification, Aviation Forecast Verification Tool, and FACETS PHI Tool
Achievements

5. VLab Adjunct Program allows field staff to contribute to national R2O projects
6. VLab Support Team provides comprehensive user support M-F during business hours
7. Monthly VLab Focal Point meetings allows users to ask in-depth questions of VLab staff, share best practices and learn of upcoming changes
Lessons Learned

1. Easily accessible software code repositories are key to most transition projects.
2. Using the software management (e.g., Gerrit, Jenkins) tools in VLab improves the quality of the code developed.
3. Using VLab reduces direct (e.g., purchasing like COTS tools) as well as indirect (system administration) project transition costs. Applied to hundreds or thousands of projects across NOAA, this represents a significant cost reduction.
4. VLab allows for customized transition solutions which is essential in light of the diversity of NOAA R&D projects and operational systems.
Lessons Learned (cont.)

5. There is a significant learning curve for users to become proficient in using the VLab collaboration tools.
6. There is an ongoing need for marketing to potential user groups in NOAA.
7. There is a high demand to open up VLab more to non-NOAA users.
8. Sharing information enhances collaboration and raises all boats. VLab has benefitted from VLab!
Lessons Learned (cont.)

9. Establishing a local development environment for AWIPS is still far too problematic.
10. We must improve our expertise in user interface design.
11. There is an ongoing need for user training on VLab.
12. The Google suite of collaboration tools can be effectively integrated/leveraged within VLab.
13. We need to work on building a greater sense of community among VLab users.
Upcoming Enhancements

1. Single Sign-on (Google Pass-through)*
2. Closer integration of VLab components (e.g., My Development Projects Portlet, My Issues Portlet, Dynamic Development Projects Portlet)
3. Projects Repository portlet and Ideas Marketplace
4. VLab Trouble-Shooting Forum

* Investigating use of OpenID Connect – Google is shutting down support for OpenID 2.0 on April 20, 2015
On the Horizon

1. Open VLab
2. Enabling HIWPP/NGGFS development
3. Central Development and Testing Environment
4. Migration of AWIPS Software Collaboration Portal to Vlab
5. Customizable VLab Landing pages
6. VLab Subject Matter Experts portlet
Questions? Comments?