

GlideinWMS - Support #24637

Feature # 24546 (Work in progress): Add the ability to use CVMFS on sites that do not provide local installations

Integrate CVMFS feature with GlideinWMS code base

07/17/2020 01:45 PM - Namratha Urs

Status:	Work in progress	Start date:	07/17/2020
Priority:	Normal	Due date:	
Assignee:	Namratha Urs	% Done:	80%
Category:		Estimated time:	0.00 hour
Target version:	v3_7_4	Spent time:	0.00 hour
Stakeholders:			
Description			
Document all updates with respect to the integration of CVMFS feature with GlideinWMS code base (including running all required tests).			

History

#1 - 07/31/2020 06:36 PM - Namratha Urs

- % Done changed from 0 to 30

- Status changed from New to Work in progress

Started work on the CVMFS feature integration with GlideinWMS this week:

- Gained a fair understanding of the integration process and how the configurations work internally
- Reviewed the *glidein_startup.sh* script to understand what happens during startup of glideins
- Experimented with *<file>* and *<attr>* settings to understand how the configurations in the factory xml map to the glidein configuration file
- Completed configuration for the shipping of the executable script and the tarball with the glidein
- Successful in incorporating parts of the prototype code into the executable script that performs system checks and logs system information during glidein startup
- Continuing to work on integrating the remaining of the prototype code with GWMS

Issue(s) encountered:

- **(RESOLVED)** Tarball containing cvmfs utilities was not being unpacked in the glidein's main directory
 - Defined sequence in the factory config xml had the executable script first followed by the tarball (file named *file_list.xxx.lst* under the glidein main directory had the exact same sequence)
 - The contents of the tarball do not get untarred until the executable script completed, thereby making the untar location inaccessible while the script was in execution
 - Reordered the sequence under *<file>* parameter to have the tarball first followed by the executable script that uses the tarball (xml snippet below)

```
...
<files>
  <file absfname="/etc/gwms-factory/cvmfs_gwms/cvmfs_utils.tar.gz" executable="False" wrapper="False"
  untar="True" const="True" relfname="cvmfs_utils.tar.gz" comment="Tarball containing utilities for CVMFS." />
  <file absfname="/etc/gwms-factory/cvmfs_gwms/cvmfs_test.sh" executable="True" wrapper="False" untar="
  False" const="True" relfname="cvmfs_test.sh" comment="Wrapper script used for CVMFS detection/setup." />
</files>
...
```

#2 - 08/05/2020 10:45 AM - Namratha Urs

- % Done changed from 30 to 50

Code refactoring in progress for feedback received during the code review meeting and 1:1 discussions. Intermittent code changes will be pushed to the **refactor-code** branch on the following github repository - <https://github.com/namrathurs/gwms-cvmfs/tree/refactor-code>

#3 - 08/21/2020 07:28 PM - Namratha Urs

- % Done changed from 50 to 80

- Completed testing of the CVMFS-related scripts (including the tarball) with the glideins.
- Working on the last step of the integration process, i.e. to include the script and the tarball to the default list of uploads.

- Having trouble locating the *cgWParamDict.py* script to make the modifications.

#4 - 11/09/2020 12:15 PM - Dennis Box

- *Target version changed from v3_7_1 to v3_7_2*
- *Assignee set to Namratha Urs*

#5 - 12/02/2020 10:35 AM - Marco Mambelli

- *Target version changed from v3_7_2 to v3_7_3*

#6 - 04/12/2021 10:31 AM - Marco Mambelli

- *Target version changed from v3_7_3 to v3_7_4*