

MW Readiness WG Update

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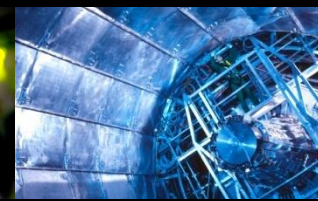
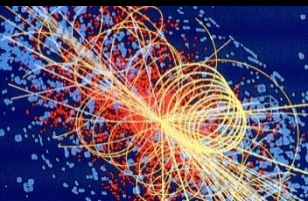
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On behalf of the WG participants

GDB 09/09/2015



Outline

- The Products
- The VOs workflows
- The Volunteer Sites
- Verification results
- EGI Liaisons
- The Software
- Next Steps

The Products tested

- DPM (ATLAS and CMS)
- CREAM CE (ATLAS and CMS)
- dCache (ATLAS and CMS)
- StoRM (ATLAS)
- EOS (CMS)
- HTCondor (Condor-g) (ATLAS)
- ARC-CE (CMS)
- VOMS-Clients (LHCb)

in RED products that started to be tested since the latest GDB report in DEC 2014

The Products yet to test

- WN (CMS)
- Xrootd (CMS)
- ARGUS, as discussed in the ARGUS Collaboration
- FTS3 , first decided not to be included but IT-SDC would like to
 - some MW readiness tests are done using the FTS3 CERN pilot
- Any others?
 - https://twiki.cern.ch/twiki/bin/view/LCG/MiddlewareReadiness#Product_Teams

The VOs

- ATLAS, [workflow](#) made for this effort
 - Panda jobs and Rucio transfers
- CMS, [workflow](#) made for this effort
 - HC jobs and Phedex transfers
- LHCb, generic [document](#) for certification
- ALICE, not yet...

The Volunteer Sites

- Edinburgh (DPM for ATLAS)
- INFN-Napoli (CREAM CE for ATLAS)
- Triumpf & NDGF (dCache for ATLAS)
- **QMUL & CNAF** (StoRM for ATLAS)
- GRIF (DPM and WN for CMS)
- Legnaro (CREAM CE for CMS)
- **PIC** (dCache for CMS)
- CERN (EOS for CMS and ARGUS - pending)
- **Brunel** (ARC-CE for CMS)

in RED the sites that started testing after the latest GDB report in DEC 2014

Versions recently verified for ATLAS

- DPM-Xrootd
 - 3.5.2 (with Xrootd4) OK
- CREAM-CE :
 - 1.16.5 OK
- dCache
 - 2.10.x at TRIUMF. Issue found on 2.10.22 FTS -> SRM interaction, fixed
 - 2.12.x, 2.13.x at NDGF, OK
- Storm
 - 1.11.[5,9] at QMUL (issue found on 1.11.8 fixed in 1.11.9)
 - CNAF still some issues when running HC jobs
- HTCondor (condor-g)
 - 8.3.2 OK

Versions recently verified for CMS

- DPM-Xrootd
 - 3.5.2 (with Xrootd4) OK
- CREAM-CE :
 - 1.16.5 OK
- dCache
 - 2.12.5 , issue reported with Xrootd monitoring plugin
- EOS
 - 0.7.x OK
- ARC-CE
 - 15.0 : issue found with WMS submission by Brunel (not more relevant to WLCG)

Versions recently Verified for LHCb

- voms-clients
 - 3.0.4. One option in voms-proxy-init compared to the v2 was not working and it could not be integrated within LHCb framework.
 - 3.0.6 should have fix this, waiting for feedback

Argus

- During the Argus collaboration meeting in December it has been agreed to perform Argus scalability tests in the context of Middleware Readiness WG
- Mainly to understand what is causing strange service outages under high load
- It has been agreed with CERN T0 to have a testbed installed here
- The Argus collaboration has then discussed to wait for a new CentOS7 version of the service running with JAVA 8
 - newer versions of Java and other 3rd party dependencies might already have issues fixed that are relevant to Argus

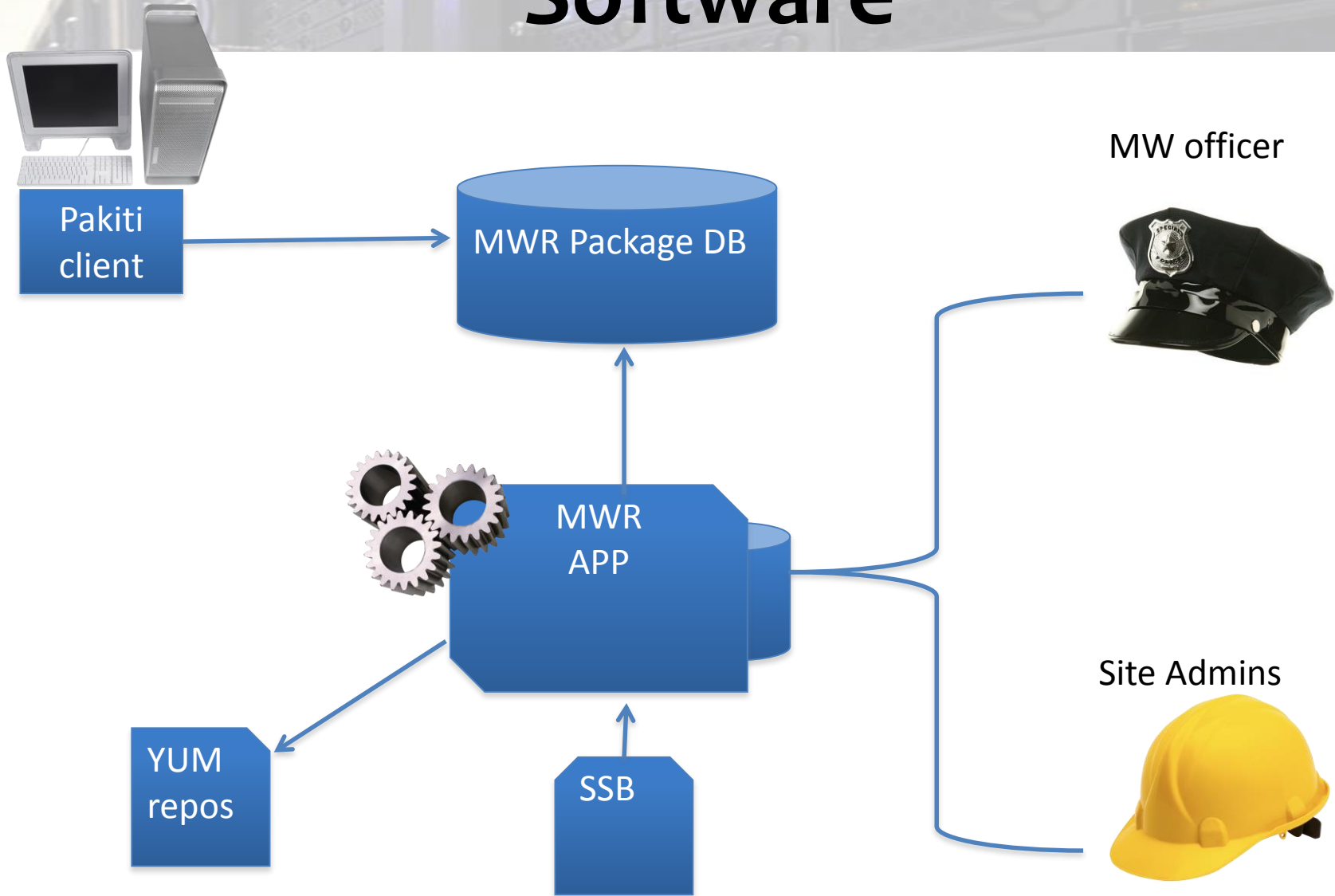
CentOS 7

- We started collecting info from the different volunteer sites about their availability in testing CentOS 7 versions of MW.
- GRIF and Edinburgh are available for now
- We are waiting for the first versions certified by the PTs
 - At the moment we know that FTS3, DM Clients, dCache should be ready
- We have also to discuss with the Experiment representatives the priorities of Products to validate, because with a new platform in theory all MW components have to be verified..

MW Readiness and EGI

- Quite good communication with EGI via participation in URT meetings
- Some sites participating in MW readiness are also reporting to EGI their verifications (e.g. QMUL and Brunel)
- We already discussed to work together for CentOS7 MW verification as they are preparing the first release (UMD4)

Software



Pakiti-client

- Software responsible for publishing packages installed on a node to a set of Collectors.
 - MWR Package DB
 - Pakiti Server 2.0 adapted by EGI CSIRT
- The new 3.0.1 version supporting the "tag" option is in EPEL
 - <https://admin.fedoraproject.org/updates/pakiti>
- the next version will support Debian, FreeBSD and OpenBSD
 - thanks to patches submitted through GitHub
 - no release date yet since these are not a priority for MWR

MWR Package Database

- The service has been moved to new virtual machines (puppet based)
- the package database fully supports the "tag" option
 - default is "UNKNOWN" if not given via the Pakiti client
 - should be set to "MWR" for volunteer sites' machines, and to "PROD" for future production nodes
- the instructions on Twiki have been updated to use the new VMs
 - [https://twiki.cern.ch/twiki/bin/view/LCG/Middlewar
ePackageReporter](https://twiki.cern.ch/twiki/bin/view/LCG/Middlewar
ePackageReporter)

Pakiti client related actions for sites

- for all volunteer sites:
 - upgrade the pakiti-client rpm (yum update)
 - change the configuration file to use the new service
 - set the tag by adding "--tag MWR" to Pakiti client's invocation
- switch off the old VMs when everybody has moved
 - Deadline was the end of August (waiting for few sites)

MW Readiness App v0.1

- The software responsible for storing and accessing information about MW Products, baselines, Products version and related packages, input for SSB metrics
- Production Instance is available
- <https://wlcg-mw-readiness.cern.ch/>
 - This first version offers WLCG MW products and baseline management
 - Admin interface (local accounts for now, integration with SSO next)
 - REST APIs

Baselines/Product Views

Baseline current

| | | |
|------------------|----------------|-------------------------------|
| APEL-SSM | 2.1.5 | Release notes |
| APEL-client | 1.3.1 | Release notes |
| ARC-CE | 3.0.3 | Release notes |
| ARC-infosys | 3.0.1 | Release notes |
| ARGUS | 1.6.1 | Release notes |
| BDII | 1.6.0 | Release notes |
| CASTOR | 2.1.14-14 | Release notes |
| CASTOR-SRM | 2.11-0 | |
| CREAM-CE | 1.6.5 | |
| CernVM-FS | 2.1.19 | |
| DPM | 1.8.9 | |
| FTS | 3.2.33 | |
| Frontier-Awstats | 6.9-1.1 | |
| Frontier-Squid | 2.7.STABLE9-22 | |
| Frontier-Tomcat | 6.0.37_3.31-1 | |
| GFAL2 | 2.7.8 | |
| GFAL2-utils | 1.1.0 | |
| GridSite | 2.2.5 | |
| PerfSonar | 3.4.1 | |
| StoRM | 1.11.8 | |
| Torque | 2.5.13 | |
| UI | 3.1.0 | |
| VOBOX | 1.0.0 | Release notes |
| WN | 3.1.0 | Release notes |
| rdCeph | 2.10.20 | Release notes |

Products

| | | |
|-----------------------------|-----------|-------------------------------|
| APEL-client | 1.3.1 | |
| APEL-SSM | 2.1.5 | |
| ARC-CE | 3.0.3 | |
| ARC-infosys | 3.0.1 | |
| ARGUS | 1.6.1 | |
| BDII | 1.6.0 | |
| CASTOR | 2.1.14-14 | |
| CASTOR-SRM | 2.11-0 | |
| CernVM-FS | 2.1.19 | |
| CREAM-CE | 1.6.4 | 1.6.5 |
| | | Release notes |
| | | Release notes |
| | | Release notes |

Admin Views

MW Readiness Web Application

Login

Username:

Password:

Log In

MW Readiness Web Application

Home

Site administration

| Auth | | |
|--------|-------|----------|
| Groups | + Add | ≡ Change |
| Users | + Add | ≡ Change |

| Mwdb | | |
|------------------|-------|----------|
| Archs | + Add | ≡ Change |
| Baselines | + Add | ≡ Change |
| Oss | + Add | ≡ Change |
| Product versions | + Add | ≡ Change |
| Products | + Add | ≡ Change |
| Report packages | + Add | ≡ Change |
| Reports | + Add | ≡ Change |
| Repositorys | + Add | ≡ Change |
| Rpm patterns | + Add | ≡ Change |
| Sites | + Add | ≡ Change |
| Vos | + Add | ≡ Change |

| Recent Actions |
|----------------------------------|
| My Actions |
| ≡ 1-0-4 Baseline |
| ≡ current Baseline |
| ≡ current Baseline |
| ≡ current Baseline |
| + 1-0-4 Baseline |
| + dCache_2.10.39 Product version |
| ≡ current Baseline |
| ≡ current Baseline |
| + StoRM_1.11.8 Product version |
| + xRootD_3.3.6 Product version |

REST-API

HTML View

- <https://wlcg-mw-readiness.cern.ch/apis/>
- Basic CRUD operations

Non CRUD ops examples:

- Get current baseline for a product
 - `curl 'http://wlcg-mw-readiness.cern.ch/apis/products/DPM/get_baseline/'`

MW Readiness App v0.2

- Integration with PK DB updated to make use of the TAG information:
 - To distinguish packages installed on the production and MWR nodes
- Correct handling of platforms/ packages repositories type (yum or url)
- New View to show the Product versions installed at the Site (based on the packages installed)
 - <https://mw-readiness-dev.cern.ch/sites/>
- New View to show the MW Product verification reports
 - <https://mw-readiness-dev.cern.ch/reports/>

MW Readiness App v0.2

- SSB Integration:
 - <http://mw-readiness-dev.cern.ch/ssb/DPM/>
- It calculates for each site running the given product, the percentage of hosts running a version \geq the current baseline
- Info cached and polled by SSB metrics
 - <https://wlcg-mon-dev.cern.ch/dashboard/request.py/siteview?view=MWR#currentView=MWR>

MW Readiness App v0.2

- New View to give site managers access to the packages installed at their site hosts (access based on certificates) is almost there
 - Similar to what Pakiti server does
- <https://mw-readiness-dev.cern.ch/sitedetail/CERN-DPM-TESTBED/>
- Access given to a predefined list of DNs.
 - TODO : gather info from GOCDDB in order to give access to Site Managers only to their host packages information

Software : What's next

- Perform MW app internal WG testing
- Complete SSO integration
- Start inputting data (i.e. packages from repositories)
- Give access to Volunteer sites' managers
- Based on the testing activity decide then the deployment in production
 - Pakiti-client in WLCG
 - MW app dedicated to WLCG prod

WG Desires / Next steps

- More Volunteer site participation in the meetings
- More involvement from LHCb & ALICE
- Note the next meeting date 2015/09/16 4pm CEST [Agenda](#)
- Check our [twiki](#) and [Jira tracker](#) (also its [dashboard view](#))

<https://its.cern.ch/jira/browse/MWREADY>

<https://gitlab.cern.ch/wlwg-mw-readiness/wlwg-mwreadiness-app>

Questions?

