

EMI SA2 Report



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- Some numbers since last AHM
- New ETICS platforms
- Infrastructure performance
- Infrastructure reliability
- Maven repositories
- Worker node images for users
- Support
- Next steps

Some numbers since last AHM

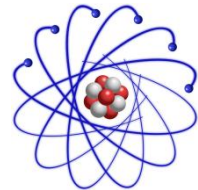
BUILDS	Total number	Nightly builds	SAKET
SL5 32bit	536	359	31
SL5 64bit	3193	357	1173
SL6 64bit	321	0	10

TESTS	Total number	SAKET
SL5 32bit	7	7
SL5 64bit	2761	2529



- Number of tests on SL5 64bit has increased up to 4 times

- Status at the end of previous AHM:
 - Few slow worker nodes in place
 - Client changes were needed
- Current situation:
 - **Client status**
 - New RC versions released (latest: 1.5.5-3@etics_3_5_0)
 - Around 300 builds sent to this platform by the users
 - **Nodes status**
 - Normal and High Performance nodes are in place
 - Issues
 - Feedback about packaging and reporting issues already integrated (Special thanks to Cristina, Andrea and Laurence)
 - Nightly builds of project configurations in place this week



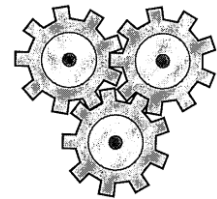
- Status at the end of previous AHM:
 - Not supported by ETICS
 - No experience in the team and not a CERN platform
- Current situation:
 - **Client status**
 - Debian Working group organized (Very useful given the limited experience available in the team for this platform)
 - RC version to be released (1.5.5-1.debian)
 - **Nodes status**
 - 3 worker nodes in place for testing
 - More will be added after testing
 - Issues
 - Very few configurations available at the moment: more are needed
 - Not supported officially by HyperV



debian

- **Worker node tuning**

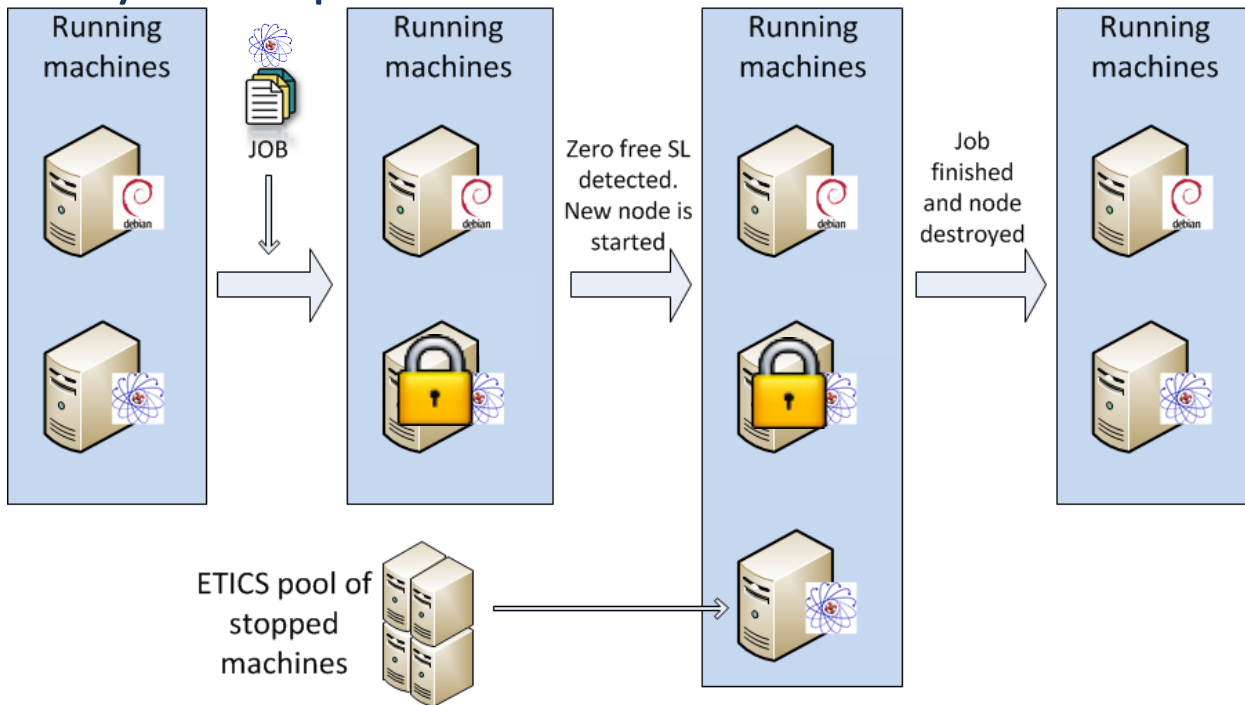
- New faster disk types (SCSI)
- Optimized file system without journaling
- **Benefit:** build time decreased



- **Dynamic pool for worker nodes**

- Previous paradigm does not allow to allocate the resources properly → waste of resources and not able to manage high demand
- New paradigm:
 - Developed a new system for dynamic allocation in the pool
 - Always one machine free of each platform ready to receive a job → easier to balance the pool according demand
 - VMs started when a job arrived and uses the VM waiting
- With the same number of hypervisors, there are now 270 worker nodes (before there were 35)
- **Benefits:**
 - New platforms without extra hypervisors
 - Able to handle when there is high demand of some platforms

• Dynamic pool for worker nodes



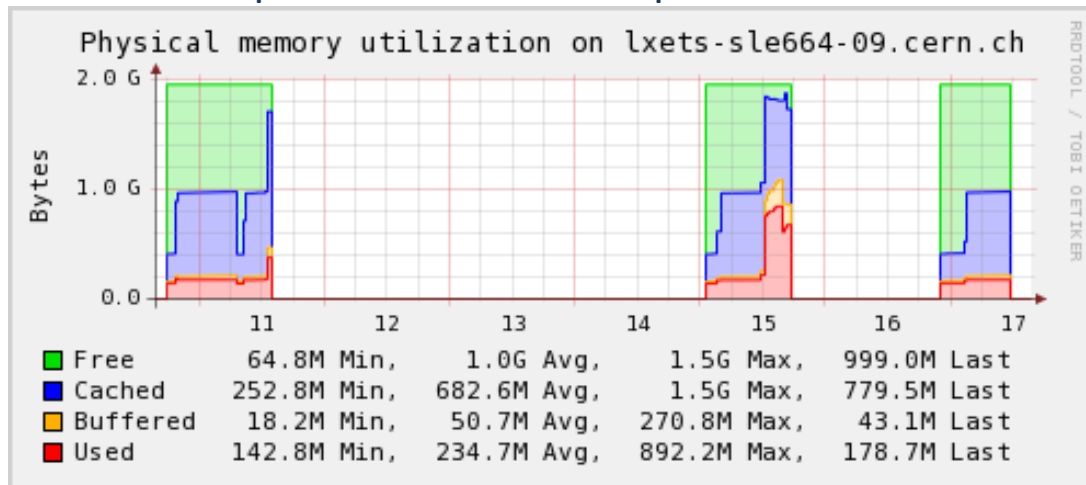
• Monitoring system

- Improved to have better and earlier alerts in case of issues
- Some **recurrent cases** have been **automated** to be solved by the monitoring system (such as rebooting of hung nodes)
- Examples of new alerts added
 - *AFS spaces and backups checking*
 - *Worker nodes submitter status*
 - *Certificates expiration dates*
- **Benefits**: better issue reporting even before it occurs



- **KPIs and post-mortem analysis**

- **Collectd** installed in the worker nodes
- Monitor CPU, memory, disk, etc. through the time
- **Benefit:** improve worker nodes performance



- New Maven repository is available for developers at *itgt-maven.cern.ch:8081/nexus/*
- Mirror from the official repository
- Not accessible from outside CERN at the moment, but it will be in few days



- Wiki page* created with the procedure to create a ETICS image from scratch
- SL5 and SL6 HyperV images are available for download directly from the same page
- Debian 6 image will be provided after its validation
- List of free conversion tools available in the same place



* <https://twiki.cern.ch/twiki/bin/view/EMI/EticsImages>

- Since last AHM...
 - 38 GGUS tickets closed
 - *Most tickets were about repository issues and building issues getting and/or resolving dependencies*
 - 49 externals registered
 - Many direct questions answered
 - *Some of them about how plugins work: a new plugins twiki page* created*
 - ***What other documentation/training is needed?***



*<https://twiki.cern.ch/twiki/bin/view/EMI/EticsPluginsFramework>

- **ETICS infrastructure (Oct. 2011)**
 - New release procedure to do more frequent and faster releases
- **New client versions (Oct. and Nov. 2011)**
 - New client version with the Debian changes (October)
 - Integrating changes for SL6, Debian, build multiple RPM and other improvements (November)
- **New versions of ETICS service (Nov. 2011)**
 - Configuration tab updates to solve problems with the new version of the browsers
 - New option to skip plugins execution
- **Improved metrics reports as specified in the Quality Model (Dec. 2011)**
- **Generation of APT repositories (Dec. 2011)**
- **Documentation improvements (Dec. 2011)**

Thank you