Report on Installed Resource Capacity

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Outline

- **Summary of the comments received on the previous published version of the document**
  - **Computing**
  - **Storage**

- **The new version of the document is v1.8 publicly available**
  - **A few more comments received from OSG**

- **Operational plan in preparation**

Computing Capacity: changes

- **Glue attributes**
  - GlueSubClusterLogicalCPUs = *Total number of core/hyperthreaded CPUs in the subcluster (<u>including machines in state offline or down</u>)*
  - ***GlueHostBenchMarkSI00 = <u>Average SpecInt2000 rating per LogicalCPU</u>***
  - *CECapability: Fairshare=<VO>:<share> ; This value is used to express a specific VO share if VO shares are in operation.*
  - *CECapability: CPUScalingReferenceSI00=<refCPU SI00> the CPU SI00 for which the published GlueCEMaxCPUTimes are valid.*

$$F(WLCGSubCluster)_{Site} = \begin{cases} \sum_{WLCG\,VOs} GlueCECapability(Fairshare)/100 & \text{if WLCG fairshare are published} \\ 1 & \text{if WLCG fairshare are not published} \end{cases}$$

Then the total installed capacity at a site is given by the following formula:

$$Total\ Installed\ Computing\ Capacity_{Site}\ (KSI00) = \sum_{WLCG\,SubClusters} GlueHostBenchMarkSI00 * GlueSubClusterLogicalCPUs * \frac{F(WLCGSubCluster)_{Site}}{10^3}$$

Storage Capacity: changes

■ Glue attributes

- ■ GlueSACapability: Installed[Online|Nearline]Capacity = *Online or Nearline space part of a Storage Area. This attribute has been introduced for accounting purposes only.*

$$\textbf{\textit{Installed Capacity}} = (\sum_{\text{WLCG GlueSA}} \textbf{\textit{GlueSACapability(InstalledCapacity)}}$$

■ SA can overlap

- ■ GlueSACapability: Installed[Online|Nearline]Capacity = *0*

■ SE Unique ID = SRM host FQDN

■ If ReservedSize > 0 => TotalSize <= ReservedSize

Installed Capacity: status

- **The new version of the document (v1.8-1) has been published with all details, operational instructions for site administrators and explicative examples (OSG missing)**
  - https://twiki.cern.ch/twiki/pub/LCG/WLCGCommonComputingReadinessChallenges/WLCG_GlueSchemaUsage-1.8.pdf

- **Technical agreement on the essential content of the he document :**
  - Last phone conf on storage info providers last Friday (December 5th)
  - OSG requested one more month to digest the proposals.
  - OGF informed us about the concept of a "site sponsor" that publishes global (?) fairshares for all VOs. We need to accommodate that. Details are needed.

- **Minor changes are still expected**
  - Operative instructions and examples from OSG needed

Installed Capacity: plan

- **Operational plan in preparation. We will start as soon as the document is officially approved and OSG details received and agreed.**
- **Client tools**
  - Gstat sanity checks already available.
  - GridMAP is being adapted.
  - Client tools gfal/lcg-utils will improve resource selection algorithm with next releases.
  - Reviewing SAM tests
  - Nothing yet done for APEL
  - What else ? OSG ?
- **Coordination with WN working group**
  - A few bug reports already submitted.
  - Many site admins ask for support. Support group needed.
- **Storage is mostly automatic**
  - GRIF and RAL have new info providers for DPM and CASTOR. dCache and StoRM expected in January.
  - dCache requires info about nearline storage to be set by hands.
  - *gstat checks should ensure coherence of published information.*