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# **SLS Tape metrics proposal: Implementation status**

WLCG MB meeting, 29/11/2011

German Cancio  
CERN/IT

`German.Cancio@cern.ch`



# Agenda

- Background
- Proposal and specification
- Implementation status



# Background: SLS tape metrics review

- As agreed at the [WLCG MB meeting](#) last year

## Proposal to review SLS tape metrics

- Utility of current SLS WLCG Tape MSS displays questionable
  - Not (regularly) checked by (all) site admins
  - Not clear if/how used by experiments
- Work needed for making the display more useful and usable for site admins and experiments
  - As agreed at the HEP tape experts workshop (June 2011)
- Proposal: Review, clean up and tighten
  - 1. Is SLS the right vehicle?
  - 2. Review metrics being displayed. Which ones can be streamlined? Are there missing metrics to be added?
  - 3. Tighten up weak metrics using common specifications
  - 4. Follow-up with sites for (re)implementation of SLS

WLCG Tape Metrics Questionnaire – slide 3 – German.Cancio@cern.ch

## Questionnaire

- Small questionnaire for SLS usage and metrics
  - Target: site admins and experiments (via computing coordinators)
  - 9 questions, reviewed by HEP tape experts
  - Can be answered in 20-30 minutes
  - To be sent out by mail; request to be returned by December 6<sup>th</sup>
  - Attached to the MB agenda page ([link](#))
- Topics
  - SLS usage vs other displays
  - Relevance of existing metrics
  - Potential additional metrics
  - Definition of availability
- A new metric set proposal will be produced based on questionnaire results
  - To be agreed upon with site admins and experiments
  - Goal is not to duplicate site-specific monitoring but to provide a reduced set of common basic and meaningful metrics
- Implementation to follow, replacing existing metric set

WLCG Tape Metrics Questionnaire – slide 4 – German.Cancio@cern.ch



# Proposal specification (1)

- Questionnaire used for identifying relevant metrics and dropping unused ones, based on site/VO feedback
  - Focus on VO's as target audience – sites have their own monitoring
  - Removed “internal” metrics such as tape repeat mounts
  - Streamlined units (storage, reporting time window, etc)
  - Defined mandatory and optional metrics
- Proposal defined and presented at MB meeting (02/11)
- Refined via mailing list

<https://twiki.cern.ch/twiki/bin/view/HEPTape/TapeMetricsSpec>



# Proposal specification (2)

- Specification:

## Table of Metrics

metric ID	description	type	unit	reporting time window
<code>availability</code>	service availability (as defined by each site)	mandatory	0-100	since last update (1h)
<code>readsize_VOx</code>	DATA READ: average file size in MB	mandatory	MB	last 24h
<code>writesize_VOx</code>	DATA WRITE: average file size in MB	mandatory	MB	last 24h
<code>readspeed_VOx</code>	DATA READ: data transfer rate in MB/s	mandatory	MB/s	last 24h
<code>writespeed_VOx</code>	DATA WRITE: data transfer rate in MB/s	mandatory	MB/s	last 24h
<code>datastored_VOx</code>	DATA REPOSITORY: total data stored in TB (experiment perspective)	mandatory	TB	last 24h
<code>readwait_VOx</code>	TAPE QUEUES: average wait for read in secs	optional	seconds	last 24h
<code>writewait_VOx</code>	TAPE QUEUES: average wait for write in secs	optional	seconds	last 24h
<code>dataactive_VOx</code>	DATA REPOSITORY: percentage of active data (read over last 12 months)	optional	0-100	last 24h

mandatory

optional

- XML specification, FAQ and example provided under <https://twiki.cern.ch/twiki/bin/view/HEPTape/TapeMetricsSpec>



# Implementation status

Updated 28/11/2011

- implemented: metrics are implemented and visible in SLS
- no timeline: commitment for implementation but no timeline for completion available
- not foreseen: metrics will not be implemented
- unknown: no feedback received from site on implementation status

site	mandatory metrics	optional metrics
ASGC	unknown	unknown
BNL	implemented	implemented
CC-IN2P3	end Q4 2011	end Q4 2011
CERN	implemented	end Q1 2012
CNAF	end Q4 2011	no timeline
KIT	end Q2 2012	end Q2 2012
FNAL	implemented	not foreseen
NDGF	no timeline	no timeline
NL-T1	end Q4 2011	not foreseen
PIC	implemented	Q2 2012
RAL	no timeline	no timeline
TRIUMF	unknown	unknown



# Links

- WLCG SLS Tape metrics main page:  
<https://twiki.cern.ch/twiki/bin/view/HEPTape/TapeMetrics>
- Proposal specification:  
<https://twiki.cern.ch/twiki/bin/view/HEPTape/TapeMetricsSpec>
- Implementation status:  
<https://twiki.cern.ch/twiki/bin/view/HEPTape/TapeMetricsImplementation>