

WM Technical Evolution Group Report

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GDB – November 9, 2011

The WM TEG

- Suggested scope (from the TEG WG document v3):
 - Pilots and frameworks
 - CE's – what is needed from them?
 - WMS? Required
 - Clouds
 - Virtualization
 - Security model (MUPJs etc.)
 - Whole node scheduling
 - How to ask for / use GPUs etc.
 - How to make use of parallelism
 - Information services
 - What is still the requirement for non-private IP for the WN's?
- Deliverables:
 - An assessment of the current situation, covering middleware, operation, support
 - A strategy document defining the needs, and a plan to satisfy these needs for the next 2 to 5 years

Organization

- Mailing list, wlcg-teg-workload-mgmt@cern.ch
 - 33 people currently subscribed; representation from experiments, EMI, EGI and about 10 sites; still missing reps from some T1s, though (e.g. IN2P3, NL, RAL)
 - Contact Torre/Davide if interested to join (you can also self-subscribe to the list)
- Indico page,
<https://indico.cern.ch/categoryDisplay.py?categId=3768>
- Wiki page,
<https://twiki.cern.ch/twiki/bin/view/LCG/WorkloadManagementTechnicalEvolution>
- Cross-participation to our meetings from other TEGs is encouraged
 - We will also try to be present at other TEG meetings

WM TEG current members

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Kick-off phone meeting, Oct 25

- Minutes in the ml archive
 - Prioritize topics, e.g. review frameworks and existing reqs first, let topics like GPUs and to some extent cloud to a second phase (within the boundary of the WM TEG time limits)
 - Given the interconnection of many of the WM TEG areas, do not partition in subgroups
 - Focus on what should be covered at the F2F, e.g. rationale behind the choices that were made in the frameworks, how are pilots submitted, scheduling at a site, how is security shared between expts and sites.

Agenda:

- Around the table for introductions
- Quick recap of mandate and deliverables
- Discuss the list of topics, initial perspectives, do we have the expertise to cover them, people's focus areas, is anything missing
- How do we organize our activities (address full scope as one WG, create subgroups by topic, ...)
- Discuss activity timeline, objectives and agenda for F2F/EVO meeting next week, plans for future meetings

F2F, Nov 3-4, CERN

- Fairly dense agenda, lots of interesting discussions
 - <https://indico.cern.ch/conferenceDisplay.py?confId=161080>
 - Minutes will be sent to the ml soon

Thursday, 3 November 2011	
09:00 - 12:30	Thursday am 13-3-005 is booked (Thanks, Pablo) from 9:00 to 14:00. It is a small room (up to 20 people), and it has a Projector, telephone conference capability and wireless. Location: 13-3-005
09:00	icloud experience 45' Speaker: Dr. Ulrich Schwickerath (CERN) Material: Slides
09:45	Virtualization, cloud computing discussion 45'
10:30	Coffee 15'
10:45	LCG pilot factory 20' Speaker: Mr. Andrey Kiryanov (B.P. Konstantinov Petersburg Nuclear Physics Institute - PNPI) Material: Slides
11:05	EMI roadmap for WM 40' Speaker: Marco Cecchi (Istituto Nazionale Fisica Nucleare (IT)) Material: Slides
11:45	Resource allocation and management discussion 45' <i>Role of CEs, need for WMS, WN access reqmts</i>
13:30 - 15:15	Thursday pm 1 We have 11am - 3.15pm (sharp) booking for 31-S-023. We can use this for a first short post-lunch session, then we have to move. Booking an EVO capable extended meeting as late as this one means bearing some inconvenience... Location: 31-S-023
13:30	glideinWMS (CMS) 40' Speaker: Mr. Igor Sfiligoi (University of California San Diego) Material: Slides
14:10	WMAgent (CMS) 15' Speaker: Simon Metson (University of Bristol (GB)) Material: Slides
14:30	DIRAC (LHCb) 45' Speaker: Ricardo Graciani Diaz (University of Barcelona (ES)) Material: Slides
15:30 - 18:30	Thursday pm 2 We have the TH conference room 4-3-006 from 3:30-8:00pm Location: 4-3-006
15:30	ALiEn (ALICE) 45' Speaker: Pablo Saiz (CERN) Material: Slides
16:15	PanDA (ATLAS) 45' Speaker: Dr. Torre Wenaus (Brookhaven National Laboratory (US)) Material: Slides
17:00	Coffee 15'
17:15	Common ground, common lessons on pilots and frameworks discussion 1h15'
19:00 - 21:00	Dinner: Currently 12 people according to Doodle. Proposal: La Meyrinoise pizza place in Meyrin

Friday, 4 November 2011	
10:00 - 12:30	Friday am On Friday we have 10am - 8pm: 31-S-023 Location: 31-S-023
10:00	Security requirements and models discussion 1h0' <i>Maarten seed discussion with some slides?</i> Speaker: Maarten Litmaath (CERN) Material: Slides
11:00	Use of information services discussion 30' <i>Lawrence seed discussion with some slides?</i> Speaker: Laurence Field (CLRC-RAL)
11:30	Second cloud/VM discussion 1h0' Cloud WM 15' ATLAS R&D – Cloud Factories and Schedulers Speaker: Daniel Colin Van Der Ster (CERN) Material: Slides
13:30 - 16:00	Friday pm Location: 31-S-023
13:30	Drafting a joint presentation on pilots and frameworks 45'
14:15	Document outline - assessment of the current situation with middleware, operations, and support structure 30'
14:45	New computing models discussion 45' <i>Framework evolution, potential commonality, role of virtualization and clouds, whole node, special resources (CPU, parallel)</i>
15:30	Strategy for evolution of the technical implementation of WLCG WM discussion 30' <i>Including clear statement of needs for WLCG, which can also be used to provide input to any external middleware and infrastructure projects</i>

Next steps

- Bi-weekly phone meetings
- Next F2F, January 2012 (date TBD)
- Prepare outline for deliverables
 - Identify possible commonalities for a “future framework”
 - Interaction with technology (middleware) providers
 - Liaison with the Security TEG wrt MUPJs (aka AAI_WN)
 - Identify use cases and existing experiences for stronger experiment/site collaborations on e.g. clouds, whole nodes
 - Identify missing/partial info
 - E.g. use of Info Systems – update the WLCG IS use cases doc (Jan 2011); see also presentations at the May 2011 GDB