Notes of the 16th RCS-ICT Technical Committee

Date: 12th July 2024
Main topic: Critical Services Network IT Group
Agenda: https://indico.cern.ch/event/1318718/

Participants:

Benjamin Bergia (SIS), Latchezar Betev (ALICE), Eric Granger (IT-PW lead, invited), Gavin McCance (IT, Chief Architect), Dirk Duellmann (IT, Technical Delivery Lead), Wainer Vandelli (ATLAS), Armin Nairz (ATLAS), Zhechka Toteva (IT-CD, invited), Tony Cass (IT-CS lead, invited), Eukeni Pozo (ATLAS), Marco Cattaneo (LHCb), Andreas Peters (IT, TC co-chair), Xavier Espinal (IT, TC deputy chair), Alex Huss(TH), David South* (ATLAS), Flavio Pisano (LHCb), Giuseppe Avoglio* (ATLAS), Zach Marshall* (ATLAS), Andreas Morsch* (ALICE), Liz Sexton-Kennedy (CMS), Ben Couturier (LHCb), Stefan Roiser (IT-GOV Innovation), Lorenzo Moneta (EP-SFT), Jan Van Eldik (LHCb), Pere Mato* (EP, TC co-chair). (*) Remote participants*

Meeting notes: Xavier Espinal

Introduction

The **Engagement structure** has been presented, reflecting the changes in membership at the Technical Committee and at the Technical Coordination due to the planned rotation of these roles. In addition, the permanent membership of the RCS community (e-group) was discussed and the Technical Committee is asked to review this if there are any changes.

Adoption of Meeting Minutes

Minutes approved pro tempore. As they were released during the vacation period, if further comments are received, amendments will be proposed at the next meeting.

Critical Services

The activities in the area of the review of **critical services** and the **current status** were summarised. So far this has covered the services provided by the Compute and Devices (CD) group, the Storage and Data Management (SD) group and the Communication Systems CS) group (topic of today).

It has been proposed to have the Platforms and Workflows (PW) group on the 13th of September, the DataBase and Analytics (DA) and Collaborative Applications (CA) on the 4th of October.

The progress made after the first two meetings was summarised. **Improvement** of the points where **misunderstandings** and **ambiguities** (also in terms of dependencies) were identified in the definition/perception of services, e.g. Openstack vs Openstack API, the different "EOS-es" and "CEPH-es", LxPlus and AFS, WebEOS. After the discussion in the previous

committees this triggered a **new classification** to consolidate the services list. A new spreadsheet was introduced in which duplicates were removed and the entries in the old matrix were rationalised.

A comment has been made to be aware of potential second order dependencies, the example is a VM running on Openstack that could potentially have a highly critical role.

For some services, their presence in the list is unclear and needs to be better understood in terms of the provision and use of the services. The two examples discussed were the DCS data visualisation service and the ATLAS Windows terminals. Also software packages, which are services should be removed from the list.

Decision: It was agreed that a **full list of IT services should be available** to avoid confusion about who the service provider is. *Note: This is a defined deliverable in the Collaborative Tools PSO.*

Decision*:* The **next sessions** to discuss the **critical services** provided by IT are the Platforms and Workflows (**PW**) group on the 13th of September and the Databases and Analytics (**DA**) group with Collaborative Applications (**CA**) on the 4th of October.

Communication Systems and Network

The “network” services and components considered as critical by the community have been summarised in a table, these are: TN, GPN, Data Recording links (Px->IT), CERNPhone, WiFi, External Network, Landb and Eduroam.

Campus Network: discussion about flagging Campus Network (GPM) as a Critical Service: The GPN provides access to many important services, such as Indico, which is essential for experiment collaboration. Currently, the GPN is considered non-critical and is maintained on a best-effort basis rather than 24/7. Extending GPN support would have a significant impact on manpower requirements and should be the subject of wider discussion and possibly a separate analysis. It has been pointed out, that the Business Continuity and Disaster Recovery Activities (BC/DR) are covering these concerns as they are aimed to guarantee operations in terms of an eventuality, the current IT planning and actions taken towards BC/DR activities has been well received in a CERN-wide audit and no further actions were proposed.

No decision has been made. The TC chairs take note of this concern about the GPN criticality and support level. A potential follow-up action needs to be evaluated.

Telephony: from the CS group perspective CERNPhone is not labelled as a critical service, although telephony is considered essential. The advice is to use fixed lines and mobile phones as backup options.

The point about the usage of CERNPhone by on-call experts and shifters has been made, and the question was raised whether these phones would work in the event of a CERNPhone service failure or whether people could be located. There is currently no tool to search for mobile phone numbers in emergencies. The option to use fixed and mobile phones as the backup is reminded together with a list of names and phones in a piece of paper in the control rooms. The expectation gap between usual phone services and CERNPhones was highlighted, along with the discussions and concerns raised by the community about whether the CERNPhone service can meet their needs. Some recent issues in the experiment pits have been reported.

Decision: There are two distinct questions to address:

a) Is the **general quality** of the CERNphone **sufficient** to meet the community's needs, especially in critical cases for detector operations?

b) Is the **quality** of CERNPhone **better, equal to, or worse** than similar applications (e.g., WhatsApp, Teams)?"

Action: TC chairs and CS: to propose a plan to be able to technically assess these two questions. The goal should be to **provide** (or remind) **the community of a clear set of recommendations** for tools and procedures **to be used in critical cases.**

Tendering and purchases of Data Center equipment: CS confirmed that given the current LHC schedule, the tendering and purchasing timescale is still not aligned with the ATLAS and CMS purchasing plans. It was reminded and emphasised how important it is that the online teams and the IT department align their procurements (and therefore equipment) and that it is beneficial to combine efforts.
It was mentioned that if the LHC planning changes, the plans can be revisited, potentially creating an opportunity to align efforts.

Decision: This will have to be **re-assessed in September** when the timetables for LS3 and HL-LHC are known.

Action: CS (Tony), ATLAS online (Wainer, Giuseppe) and CMS online (Marc) to organise a meeting for a potential collaboration between ATLAS, CMS and IT for the tendering and purchase before end of October (which is still in the right time frame for a joint purchase).

AOB

Missing Migrations from CC7 to Alma9 has been presented by top level puppet hostgroup, the final effort needed by the community.

New topics for future meetings were proposed, e.g. ML activities, CERN analysis facility, generative AI, group management system (Grappa), authorisation/security, backup and archiving for users and others.

It was pointed out that there is a need to clarify how the input collected through the RCS-ICT Technical Committee is used to maintain the **5-year roadmap** mentioned in the original mandate from 2021. It was recalled that the input collected in the Technical Committee and approved by the Steering Committee in the form of PSOs or activity contributions is the basis for the IT Department's rolling 5-year roadmap. This rationale **needs to be clarified** and the TC should produce a formal document on a yearly basis (ideally in October in time for the annual IT department PoW).

A **survey** has been created to gather feedback on Technical Committee meetings, with the aim of improving its outcomes and purpose. The survey can be completed anonymously.

Actionlist:

Action Item	Who	What	Deadline
2024-16-A1	TC Chairs and CS	Assess if CERNphone meets the community's needs, especially for critical detector operations, and how its quality compares to similar apps like WhatsApp and Teams. Propose a plan to technically evaluate these questions and provide clear recommendations for tools and procedures in critical situations.	not specified
2024-16-A2	CS (Tony) ATLAS online (Wainer,Giuseppe) CMS online (Marc)	Organise a meeting for a potential collaboration between ATLAS, CMS and IT for the tendering and purchase	Before end of october 24