Brief updates on IT Services

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ITUM Chair

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Version 1.2

Information Technology Department

Conference Rooms update

- Newly equipped rooms:
  - 107-E-B01
  - 30-2-029
  - 593-R-013

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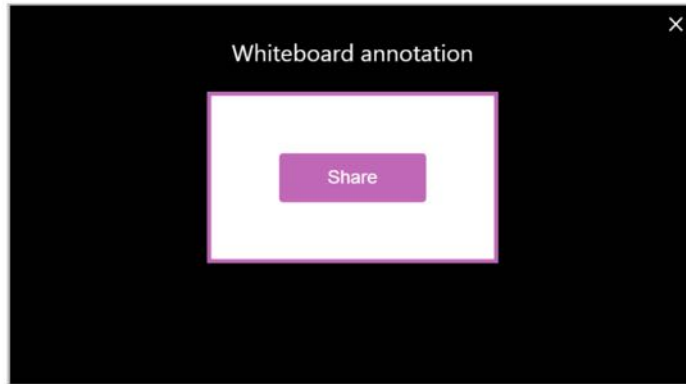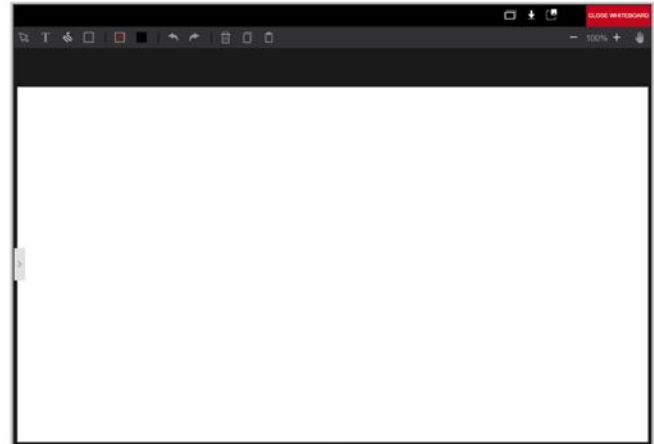
Vidyo

- A new client will be deployed soon (VidyoConnect) which includes a whiteboard feature

The Whiteboard annotation window appears.

A blank whiteboard appears. You are now the owner of the whiteboard, which means that you can now accept or deny requests to annotate on this whiteboard.

Indico

- New CERN site access granting process through Indico
    - More info: http://cern.ch/go/gj8z

- Indico 2.1 released (5th of April)
    - Import of registrants and contributions
    - Creation of customized roles
    - More info: http://indico.cern.ch/news

Providing access to the CERN site   Learning Indico
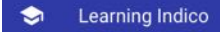
It is now mandatory for everyone at the CERN site to wear a valid access badge at all times.

If you are organizing an event which includes non-CERN participants you will have to use Indico's registration workflow to collect their personal data and produce access badges that will allow them to enter the CERN site. These badges can be either printed:

- At home by the participants and subsequently placed in a plastic cover attached to a lanyard (*Print at home*).
- By the CERN Printshop and handed to them at CERN site entrance, by the conference organizers.

Step-by-step instructions

- Create your Indico event
- Create a registration form
- Let users register, register them yourself, or import a participants list
- Activate the site access module
- Optionally setup your own badge template
- Grant access to individual participants
- Optionally print the badges yourself

Email

- Junk folder policy change

  - Exact dates will be announced on the SSB (ETA Summer/Autumn 2018)

  - Currently SPAM messages are blocked and the sender is notified

  - Plan to change this policy to accept SPAM and deliver it to the Junk folder

Skype for Business

- **Lync** to **Skype for Business** change of branding completed

- Common Area phones can be managed from the Resources Portal
  - http://cern.ch/go/dc8L

Telephony

- Working on an alternative to the current phone application
  - To be presented at the next ITUM
  - Migration of personal analogue phones foreseen H2 2019

- Work continues on the clean-up of non-personal analogue phones
  - Non personal means no responsible person nor entry in the phonebook
  - Clean-up process will start this summer with the involvement of TSOs (for phones outside of offices) and departmental phone responsibles (for phones inside offices)

- Automatic Switchboard Service (for external calls) active since April 2017 ☎ 79999

Windows Desktop Service

- **Windows 7/2008R2** End of life

  - For Windows 7: CMF package available to upgrade to Windows 10 without reinstalling your applications and settings

  - For Windows 2008 R2: clean installation required with Windows 2012R2 or Windows 2016

- **Windows 10 1709 Falls Creator** will be the new default installation image in **June**

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Video and Graphical Editing

- Openshot available on Windows (CMF) and Mac (Self-Service)
  - http://www.openshot.org

- Vector graphic software
  - Inkscape replace Corel Draw X5 (decommissioned)
    - Available Windows (CMF) and Mac (Self-Service)
    - https://inkscape.org/en/

- Bitmap graphic software
  - Paint.net on Windows (CMF)
  - https://www.getpaint.net/

REMINDER: software should be downloaded from CMF or Self-Service

Web Editing: BlueGriffon

- BlueGriffon on Windows (CMF) and Mac (Self-Service)
  - Adobe Dreamweaver is now decommissioned
  - BlueGriffon is also a WYSIWYG editor
  - User Documentation :
    - Windows : http://cern.ch/go/dvx8
    - Mac : http://cern.ch/go/Q7k7
  - http://bluegriffon.org/

REMINDER: software should be downloaded from CMF or Self-Service

MS Project

- A Survey to understand the use cases for scheduling and planning tools was launched
  - It was open from 09.04.2018 to 03.05.2018
  - Sent to 1500 users
    - 300 replies: Thanks for participating!
    - Confidence level: 95%, margin of error: 5
  - Detailed survey results will be presented at an upcoming meeting

- Tool evaluation on going
  - Special focus on Project Libre, which meets most use cases
  - Gantt Project and Open Project also being considered

Scientific Linux and CentOS

- CERN CentOS 7.5 was released on 24th May 2018
  - Includes locmap v2 configuration tool (puppet based)
  - http://cern.ch/linux/news.shtml

- Scientific Linux CERN 6.10 will be available in few months
  - Red Hat released Beta in April 2018

Lxplus/Lxbatch Service Evolution

- January 2019 (LS2):
  - Start migrating 30% of lxbatch to CC7
    - lxplus.cern.ch alias still pointing at SLC6 nodes
    - lxplus7.cern.ch points to CC7 nodes
    - lxplus6.cern.ch points to SL6 nodes

- June 2019 (LS2 + 6 months):
  - Migrate 80% of the lxbatch resources to CC7
  - Change **lxplus.cern.ch alias to point to CC7**
    - Remaining SLC6 nodes in lxplus6.cern.ch

- June 2020 (LS2 + 18 months):
  - Migrate remaining lxbatch SLC6 resources to CC7
  - Stop lxplus6.cern.ch

- Before December 2020 (tbd):
  - CERN end of support for SLC6

Batch Service Migration

- The HTCondor batch service now has a capacity of over 150k cores

- LSF will be retired at the end of Run 2
  - Support from the supplier ended in Dec 2017

- The batch team remains available for your migration or training requirements

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Elasticsearch

- Currently supported Elasticsearch versions:
  - ES 6.2.4 (new)
  - ES 5.6.4 (recommended)
  - ES 5.5.2 (deprecated)

- Elasticsearch storage nodes hardware has (mostly) been replaced

- User documentation https://cern.ch/esdocs

CERN Tape Archive (CTA)

- The development of the new tape software back-end that will interface with EOS is advancing significanlty

- Designed to replace CASTOR as the CERN tape archive
  - Addressing scalability and performance challenges arriving with LHC Run-3

- First release expected this year

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AFS replacement

- Concentrating on improving the stability of FUSE and the new catalogue (tested above 4B entries)

- Testing the deployment model
  - Migration of users from the old to the new infrastructure (for the moment IT-ST internal only)

CVMFS

- New use cases requiring evolution of the software (with EP-SFT)
  - Main goal to further reduce the publication time

- In 2017 CVMFS grew by nearly 300%
  - New repositories for conditions databases, nightly builds and usage by non-LHC experiments

CephFS

*CephFS = EOS + EOSFUSE
widely used worldwide [LD]*

- Serves the HPC infrastructure for BE and TH and gaining usage as replacement/evolution of the NFS-FILER service

  - http://docs.ceph.com/docs/master/cephfs/
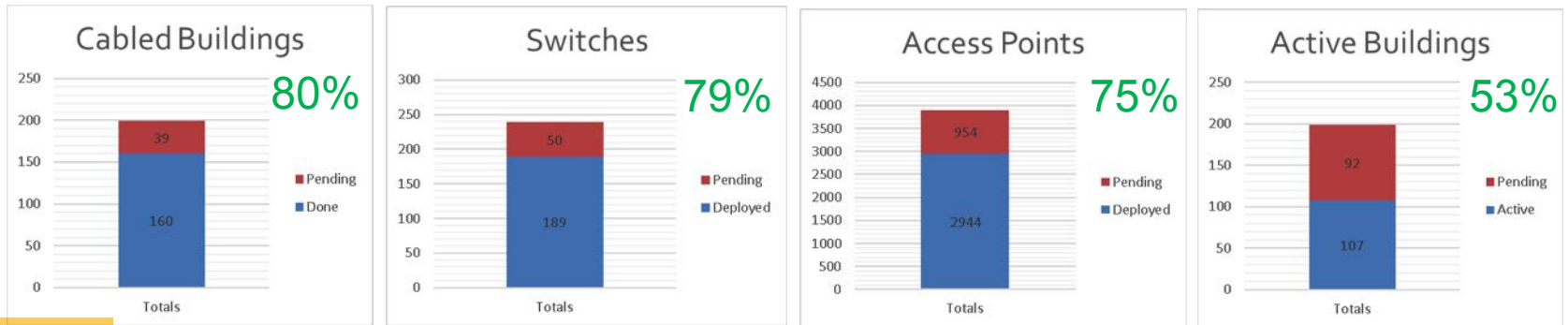
S3 object storage

- S3: storage protocol from Amazon cloud
  - Object storage, PUT/GET, static websites

- IT-ST is recently offering s3.cern.ch
  - Internal IT service to provide tactical disk backup
    - Notably for Elasticsearch
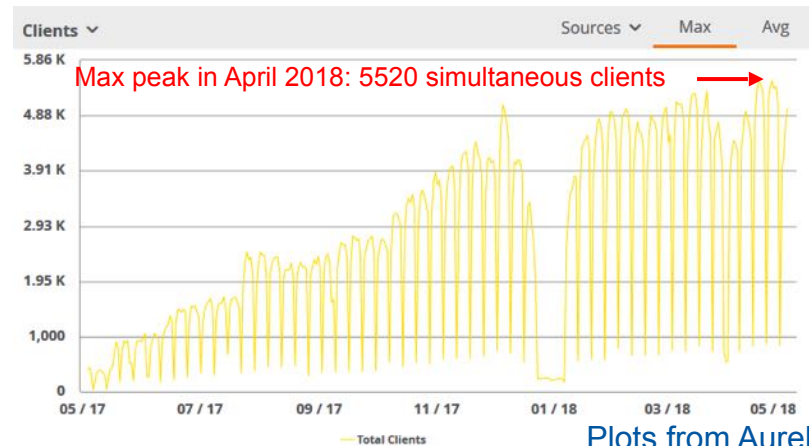 - ATLAS event service and index (test)

Network

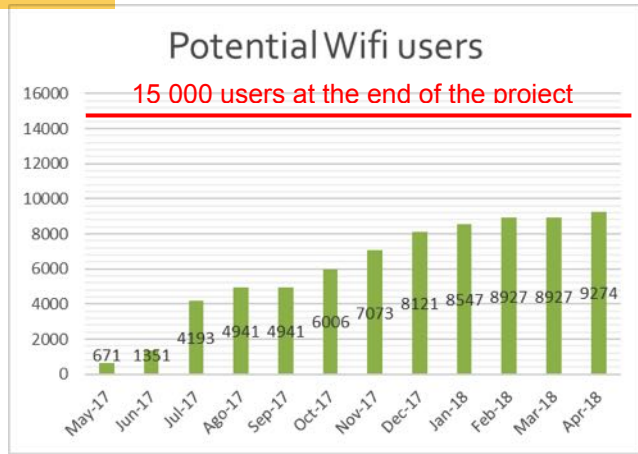- Planning the replacement of the routers and switches for the campus network
  - In contact with EN, BE and SMB

- Expected increase of Wi-Fi usage by "user" devices: laptops, tablets, phones and even desktops

- Growing demand of "non-user" devices: cameras, sensors, etc

- If special need for PoE (Power over Ethernet) or dedicated VLANs please contact network@cern.ch

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Wi-Fi project: status and stats

Deployment status

Cabled Buildings — 80%
Pending 39, Done 160

Switches — 79%
Pending 50, Deployed 189

Access Points — 75%
Pending 954, Deployed 2944

Active Buildings — 53%
Pending 92, Active 107

Usage stats

Potential Wifi users
15 000 users at the end of the project
671 1351 4193 4941 4941 6006 7073 8121 8547 8927 8927 9274

Clients — Sources — Max — Avg
Max peak in April 2018: 5520 simultaneous clients
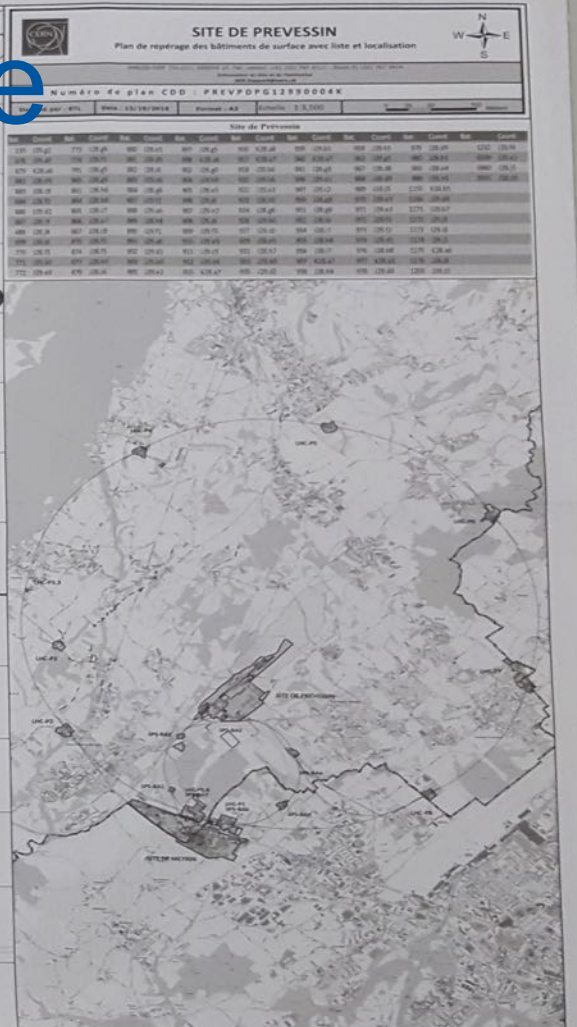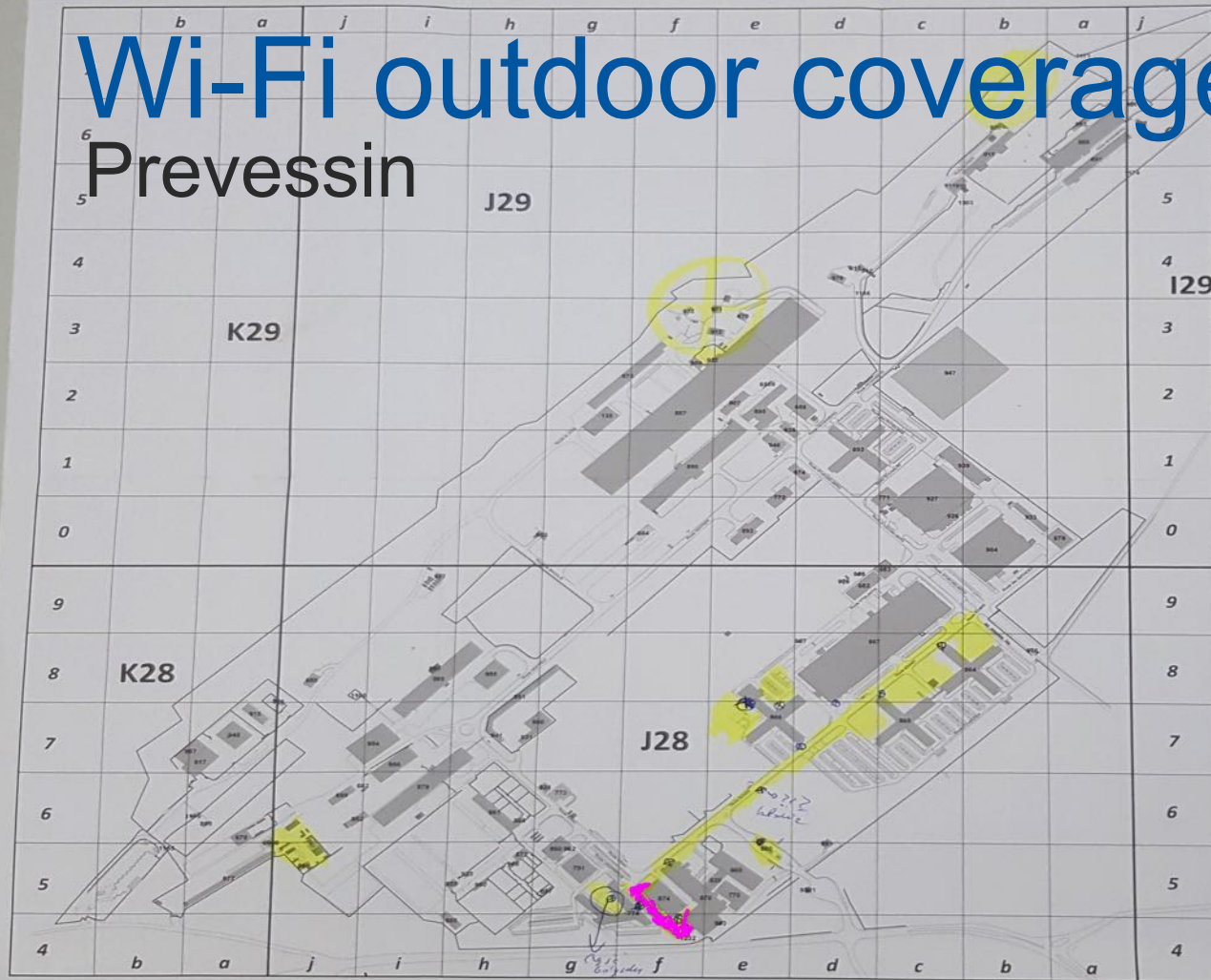Total Clients

2018   23
Plots from Aurelie Pascal (IT-CS)

Wi-Fi outdoor coverage

- Meyrin: covered R1, R2 and neighbourhood of cafeteria in B13

- Prevessin: covered neighbourhood of CCC

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Wi-Fi outdoor coverage
Meyrin

Wi-Fi outdoor coverage
Prevessin

IoT pilot - LoRaWAN

- LoRa network deployment on-going
  - Ideal for large amount of battery powered sensors/meters
  - Info about LoRaWAN technology
  - ASDF presentation (07/2017)

- Pilot after summer:
  - If interested please contact lora-support@cern.ch

Service Management (1/2)

- SNow releases after ITUM-23: v18.02/03/**04(Jakarta)**/05/06/07
  - New Visitor Cards request form in Service Portal (ADaMS integration)
    - Enables self service printing of visitors badges
  - New interface for SNow on mobile devices (more info KB0005465)
  - Privacy Notices: multiple notices per service, new Clone button
  - Better readability of SSB inputs: RSS clients and the Mattermost channel "IT Status Board"
  - Improvement of the global search, security and performance of the system

- More news at: http://cern.ch/go/j8bM

Service Management (2/2)

- JIRA to SNow interface is now bidirectional
  - Updates propagated from JIRA to SNow tickets (more info KB0002851)

- PLAN (the AIS application to organise activities related to LS2) is now integrated with SNow
  - Currently enabled for EN-EL (more info KB0005474)

- Please get in contact with IT or SMB Service Management Support if you would like to enable these features

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Heads-up on mixed topics

- Split of aiadm to aiadm and aivoadm
  - New aivoadm.cern.ch service available. Members of LxVoAdm-Authorized-Users invited to start using it
- New Puppet-managed VMs announced as IPv6-ready by default
  - Service change postponed until the end of June 2018
- ai-bs-vm and ai-kill-vm to be replaced
  - Renamed to ai-bs and ai-kill respectively (compatibility symlink expired 15th of May)
- Cloud Infrastructure - Identity API v2 removal
  - Openstack Identity service upgrade to the new API v3 (26/06/18)
- GitLab: removal of API v3
  - GitLab 9 introduced last year API v4. Old API v3 will be removed in GitLab 11(deployment expected end of July 2018)
- Gitlab: git-LFS functionality enabled on gitlab.cern.ch to help with the migration of certain SVN repositories
  - This allows storing large/binary files in your GitLab project alongside the git repository
- SVN Closure Plan:
  - Jun/18 (archive unused repos), Feb/19 (Read-Only for 6 months), Jun/19 (all repos archived, service dismantled)

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Upcoming Meetings & Workshops

- 3rd-9th June: **Thematic CERN School of Computing** Split, Croatia
  - http://indico.cern.ch/e/tCSC-2018
- 4th-5th June: **WLCG DOMA** at CERN
  - Evolution of Data Organisation, Management and Access
- 27th-29th June: **WLCG Security Operations Center** Workshop at CERN
  - https://indico.cern.ch/event/717615/
- 9th-13th July: **CHEP 2018** Sofia, Bulgaria
  - http://chep2018.org
- 1st-14th October: **CERN School of Computing** Tel Aviv, Israel
  - http://cern.ch/csc
- 8th-12th October: **HEPiX Fall 2018** Barcelona, Spain

Technical Coordination Meetings Update

- BE-IT Technical Coordination meeting

- Interested to have the same communication infrastructure with TE and EN departments

ITUM team news

- Core team

  - Xavier Espinal (chair), Dan van der Ster (secretary), Simone Campana, Romain Wartel

- Additional advisors:

  - Nils Høimyr, Bernd Panzer-Steindel, Stefan Luders, Arne Wiebalck

Questions?

IT Technical Users Meeting Web site:
http://cern.ch/ITUM

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