Brief Updates on IT Services for ITUM-18

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ITUM Chair

Version 1.0

Conference Rooms refurbished

- **Rooms recently refurbished**
  - 1/1-025
  - 4/2-037
  - 4/3-006
  - 53/1-006
  - 54/2-037
  - 54/3-037
  - 513/1-024
  - 3862/1-001

Videoconferencing and Vidyo

- **Vidyo infrastructure/client upgraded to v3.6.3**
  - mostly bug fixes

- **Direct access to CERN telephone exchange: discontinued**
  - The service which allowed calls to the CERN telephone exchange using videoconference devices in CERN meeting rooms has been dropped (expensive and very limited usage)

- **ESNet phone access point in the USA will be dropped**
  - in Sep 2016
  - the BNL number will stay
  - alternative candidates are welcome

Indico

- **Indico version 1.9.7 released**
  - Overhaul of meeting style
    - Ongoing iterations following users' feedback
    - "CDS Agenda" theme discontinued
      (recent usage extremely low, no advantage over standard theme)
  - Improved contribution management
  - Change to contribution descriptions
    - now accept only basic HTML tags and/or Markdown syntax
  - New session management page
  - Improved widgets
    - E.g. for author & speaker management, auto-completion for room selection
  - More details are here: http://indico.cern.ch/news
- **To be informed of Indico updates**
  - subscribe to the E-group: *indico-cern-announce*

> **Note: it is recommended to inform the Indico team of upcoming important event to avoid major upgrade of Indico during the event!**

Project: Review with User Communities

- **Project Objective**
  - Review together user communities needs and trends, especially:
    - current and future use cases
    - which devices are preferred/desired for accessing which services
    - what software is being used
    - why users/groups made their choices
    - which public services they prefer using instead of central IT services and why

- **Project Deliverables**
  - The project will provide reports as input for selecting tools and evolving services
  - Data will be gathered by Interviews, Surveys and Data-mining
    - e.g. an IP telephony survey will soon be announced in the Bulletin
  - Contact the project lead Pete.Jones@cern.ch for more details

IP Telephony

- **New Handsets**
  - We are in the process of evaluating new models of IP Phones
  - People willing to participate in the evaluation and testing process are kindly asked to contact the team (via Pawel Grzywaczewski)

- **IP Telephony Use Cases**
  - The LCEB (LHC Collaboration Environment Board) will discuss future plans for IP telephony at CERN
    - To be expanded and re-named to '*CERN Collaboration Environment Board*'
    - Representatives are requested from Departments and other Experiments in addition to the LHC Experiments' representatives already in place
    - If you think that your user community is not sufficiently represented then please contact the Chair (Thomas Baron)

- **IP Telephony Survey:** http://cern.ch/tel-survey
  - To understand your working environment, expectations and suggestions
  - Your feedback is important - please respond to this survey!

Windows Desktop Service

- **Windows 10 pilot service**
  - Installed on more than 300 computers (needs recent hardware)
  - From Jul 2017, new PCs will need to run Windows 10
    - as Windows 7 & 8.1 will no longer be supported on new hardware

- **Apple Quick Time for Windows is no longer supported**
  - Needs to be removed for security reasons
    - already two actively exploited security vulnerabilities
    - emails will be sent to inform affected users

- **Oracle Java 7 is no longer supported**
  - Users are strongly encouraged to test applications with Java 8 and upgrade as soon as possible

  Note: it affects ABP application that use Java (e.g. Online Model) or Python + Java API (e.g. Long term LHC data storage)

Mac Desktop Service

- **Mac OS X 10.11 is the only fully supported version by Apple**
  - Security updates may not be available for earlier versions
  - Migration information:
    - http://information-technology.web.cern.ch/services/fe/mac-support/howto/about-os-x-1011-el-capitan

- **Mac OS X 10.11.4 is the default netboot installer image**

- **Mac OS X 10.6.8 stays available for migration purposes**

Microsoft Office 365 ProPlus

- **Microsoft Office 365 ProPlus is available for standalone installation**
  - For Windows and Mac
  - upon request to the Service Desk
  - Includes Word, Excel, PowerPoint, Outlook
    - Windows version also includes: OneNote, Access and Publisher
- **Can be installed on up to 5 computers per user**

  Note: this includes private installation for your familly

Visual Studio for Windows

- **Visual Studio Community 2015**
  - now available for installation from CMF
  - licensed for development of Open Source software or for performing academic research

- **Visual Studio Enterprise 2013 Professional**
  - for use-cases not covered by the Community edition licence
    - Professional version needs to be requested through Service Desk
  - Owners of PCs where the Professional edition has not been used for at least 6 months will be contacted to uninstall it

CERN Linux & Docker

- **Scientific Linux CERN 6.8 was released on 30 May 2016**
  - http://cern.ch/linux/news.shtml#slc68

- **Software Collections for SLC6 and CentOS 7:**
  - http://cern.ch/linux/centos7/docs/softwarecollections.shtml
  - http://cern.ch/linux/scientific6/docs/softwarecollections.shtml

- **Docker Registry pilot running since a few months:**
  - http://cern.ch/docker/docs

AFS Phase-Out - Reminder

- **Concern for the long-term viability of the OpenAFS project**
  - Maintenance continues but little new investment
  - We need to be prepared for reduced future interest
  - Acknowledged by the project [link to S.Wiesand talk at HEPIX2016: https://indico.cern.ch/event/466991/contributions/1143633/attachments/1259319/1860355/hx16s-oafs.pdf]
- **No "hard" deadline yet for AFS end-of-life**
  - Expect final clean-up during LS2 (2019)
- **Review of usage is ongoing with user communities**
  - Experiment / Department contacts have been named
    - If your Group/Experiment does not have a AFS phase-out coordinator then please contact AFS support
- **New use cases are encouraged to use alternatives**
  - E.g. CVMFS, CASTOR, EOS/CERNBOX, CEPH
  - To reduce future reliance on AFS
- **For more information: see AFS presentation at ITUM-17**

CERNBox

- **CERNBox - CERN file synchronisation service**
  - Service is available to all CERN users (1TB/user)

  - Updated both the web interface and the storage backend (April)
    - Minor bugfixes and performance improvement
    - Support for next generation CERNBox Desktop clients
    - Embedded Jupiter/IPython notebook viewer
    - Integration with Service for Web-based ANalysis (SWAN) pilot

  - CERNBox iOS client now deployed via AppStore

  - CERNBox Desktop client update targeted for 2016Q3

  - SSO support postponed and targeted for 2016Q3

- **The service is growing very fast (almost 5000 users)**
- **Interested users communities can request a walk-though of the system's features**
- **More information: http://cern.ch/cernbox**

CERN Private Cloud Service: http://openstack.cern.ch

- **New default flavours introduced: m2.***
  - Adapted to match new hardware deliveries
  - m1.* flavours deprecated, but still available

- **New EC2 service is available**
  - Users are invited to test
  - Nova EC2 API support will be removed in Mitaka release (4Q2016)

- **Hardware retirement campaign is ongoing**
  - Services are being moved to new hardware
  - Transparently whenever possible, otherwise you'll be contacted

- **EduGain access to the CERN cloud is available**
  - Login is possible using an EduGain Federated Account
  - Limited functionality, more configurable via tenant attributes

- **Container Orchestration as a Service (Magnum) available in pre-prod**
  - See later talk at this meeting

Batch Service Migration to HTCondor

- **Batch service is being migrated to HTCondor**
  - LSF has limitations, including number of nodes
  - Licensing costs of LSF
  - HTCondor has a big, and expanding community within HEP

- **Grid workload is already using HTCondor**
  - Used by LHC Experiments for production Grid jobs

- **Local job submission to HTCondor will be available soon**
  - Early volunteers are welcome – please contact the team (via Ben Jones)
  - Large local LSF users will be contacted later this year

- **Support for LSF is committed until the end of Run2**
  - Tutorials/consultancy for migrations available where needed

Centralised ElasticSearch Instance (1)

Note: https://www.elastic.co/products/elasticsearc

- **Project goals**
  - Consolidate existing ElasticSearch installations
  - Give fast, easy and secure access for users to a shared ElasticSearch installation

- **Current status**
  - Identified >25 different use cases
  - Tracked in JIRA project ITES
  - Test installation up and running
    - Currently ES 2.2.0, Kibana4 provided "as is"
    - One large shared instance and a few small dedicated instances
    - Access granted to pilot use cases including batch, git, monitoring
    - First pilot users from outside IT are: ATLAS, BE
  - Moderate to low usage so far

Centralised ElasticSearch Instance (2)

- **Ongoing work**
  - Service hardening
  - Service availability and performance monitoring
  - Access security: evaluation started of
    - SearchGuard
    - Shield

- **Please report any issues via the Service Portal**
  - https://cern.service-now.com/service-portal/report-ticket.do?name=incident&fe=Elasticsearch&s=elasticsearch

- **For more information contact**
  - it-elasticsearch-project@cern.ch

Apex: Migration to Apex 5

- **Apex: Oracle Application Express**
  - is a rapid web application development tool for Oracle databases
- **Apex 5 migration process will start with Apex release available in Sep 2016**
  - Major upgrade, thorough validation required
- **New development database**
  - Will be available in Sep 2016
- **Devdb11 Apex upgrade**
  - Scheduled for Nov 2016
- **Production database upgrades**
  - Starting 2 weeks after the devdb11 upgrade
  - Schedule will be proposed after a validation period
- **No upgrades to Apex 4 foreseen**
  - Unless security threats are revealed

TWiki

- **Sustainability**
  - TWiki mirror in Wigner (Twiki servers and backend storage)
  - Service can failover to this read-only cluster
- **TWiki project – maintaining data integrity**
  - TWiki data continues to grow > 1000 new topics each month
  - Needs a clean-up to maintain data integrity and system performance
  - Proposed project will
    - Identify candidate topics for archiving
    - Provide better interfaces for indexing topics
    - Automatically archive candidates or
    - Offer users an interface for topic management
- **Input**
  - TWiki Web administrators input is essential
  - Follow up will be made with major users
    - CMS have already been in touch
  - Contact the project lead Pete.Jones@cern.ch for more details

Lifecycle for Websites in 'Test' category

- **Lifecycle policy for Test websites**
  - Blocked 6 months after creation or 2 months after the owner leaves CERN
  - Deleted 4 months after the blocking date
  - https://espace.cern.ch/webservices-help/GeneralUserInformation/Pages/Websites-Lifecycle-Policy.aspx

- **Lifecycle policy will be applied to Test Sites created prior to the implementation of the lifecycle policy**
  - Assigned a 6 months blocking date followed by their deletion 4 months later

- **Test websites that should be kept online can be moved and renamed to the "Official" category**

Version Control Services - Reminders

- **SVN is in maintenance mode**
  - Will be maintained until end of LS2. No new features
  - KB about migration from SVN to GitLab: KB0001905

- **git.cern.ch is being phased out**
  - To be set as Read-Only from 30 Jun 2016
  - KB about migration from to GitLab.cern.ch: KB0003111

- **Help/Advice with SVN and Git is available**
  - You can contact the support teams via the Service Desk

Plans to simplify the General Purpose Network (GPN) service

- **Merge fixed and dynamic IP allocation networks, encourage dynamic addressing**
- **Only service providers should need a fixed IP address, renumbering will be required**
- **Connections not used for 9 months will be disconnected automatically**
- **Motivation:**
  - Wise usage of our IPv4 address space and network hardware
  - Space is needed for cables and switches to support site-wide Wi-Fi services
- **Deployment:**
  - Bulletin article in Feb 2016 and a detailed article will follow soon
  - Ongoing pilot in IT buildings
  - *Users with fixed IP addresses will be required to take action in Sep 2016*
    - Further details are in the separate talk at this meeting
- **Data Centres and networks dedicated to specific user groups are not concerned**

Service Management

- **ServiceNow was upgraded on 27 Apr 2016**
  - to the latest "Fuji Patch 12" with enhancements and fixes
  - More details in the KB Article: KB0003906
- **"What's new with ServiceNow?" communications**
  - Bi-monthly update, including a new "ServiceNowTips and tricks" section
  - Communications (last 6 months) are linked from:
    - https://cern.service-now.com/service-portal/news.do#snownews
  - To receive email updates, join the eGroup "*Snow-news-members*"
- **Closer monitoring and follow-up of IT tickets' feedback**
  - IT Service Management is following up on negative feedback
  - A graphical user interface has simplified feedback since Dec 2015:

Are you happy with the way that your ticket has been resolved?
(Click on one of the smileys)

PDF Replacement

- **IT-CDA is evaluating alternative PDF Readers and Editors**
  - for all 3 main OS (Windows, Mac, Linux)
  - with the aim of replacing Adobe if possible for security & cost reasons
  - plan to present results at the next ITUM (autumn 2016)
- **Main Reader features**
  - *Must-have:* correctly display & print documents generated by various CERN tools including with scientific & national characters, fill in forms & save, copy-paste text, read digitally-signed PDFs & show signature status
  - *Nice-to-have:* merge multiple pdf files, reorder, insert or extract pages, add comments, highlight parts, copy-paste graphics
  - Currently, **Mac Preview** and **Linux Evince** appear to fulfil most Reader needs
- **Main Editor features**
  - *Must-have:* all above plus: embed fonts, add digital signature, document protection, compatible with Printshop & plotter printing
  - *Nice-to-have:* change text, replace images, OCR
  - **PDF-XChange Editor Pro** looks promising for Windows
- **Testers and challenging/problematic files are welcome!**
- **Mac users** we are requesting your feedback on:
  - How Adobe Pro is used today
  - What other PDF editing tools are used
- **Please send Mac and other feedback to:** PDF.Project@cern.ch

Developers@CERN Forum: Python at CERN

- **2nd Developers@CERN Forum: Python at CERN**
  - Took place on 30-31 May (afternoons)
  - Slides and Recordings are/will be available in Indico:
    - https://indico.cern.ch/event/487416/timetable/#all

- **Forum is aimed at software developers across CERN**
  - Goal: promoting knowledge and sharing experience
  - Organised by developers, for developers

- **More information:**
  - If interested, subscribe to the mailing list: developers-forum-announce@cern.ch

IT Support outside Working Hours - Reminder

- **Problems should be reported via the CERN service portal during and outside working hours**
  - http://cern.ch/service-portal
  - To ensure direct routing to the relevant supporters, you must specify the technical service that corresponds to the problem
  - Generic tickets require the Service Desk personnel, available: 07:30 - 18:30 on working days

- **Most user-facing services are supported on a best-effort basis outside working hours**
  - Experts may check for and resolve issues, although there is no formal commitment
  - In practice, this has been sufficient for LHC Experiments, including services that are critical for their operations
  - outside of CERN working hours includes: evenings/nights, week-ends, CERN holidays

IT Consultancy Team - Reminder

- **IT Consulting Team Service started in Feb 2016**
- **Handles Service Desk cases covering system architecture and design**
  - Normally needing face to face discussion
  - Typically at the beginning of a project
  - Can help to formalise requirements and assess impact on security, software licenses and cost
- **To contact the IT Consulting Team:**
  - Submit a request to Service Element 'IT Consulting Service':
    - https://cern.service-now.com/service-portal/service-element.do?name=it-consulting
  - Or E-mail: It-consulting@cern.ch

ITUM Mandate

- **The mandate of this meeting was recently updated to clarify that:**
  - IT plans will be presented at this meeting
    - Including 'heads-up' for early plans
  - Feedback raised at this meeting, or directly to the meeting Chair, is passed to IT Management
  - When relevant, follow-up discussions will be organised on specific topics
    - Using existing meeting structures or on an ad-hoc basis
  - The ITUM meeting mandate is here: http://cern.ch/ITUM

- **Feedback is always welcome through existing structures**
  - E.g. Service Desk, WLCG Meetings, IT-Experiment Meetings, CNIC, …
  - IT Meeting Catalogue: http://information-technology.web.cern.ch/about/meeting/catalog

Questions?

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