

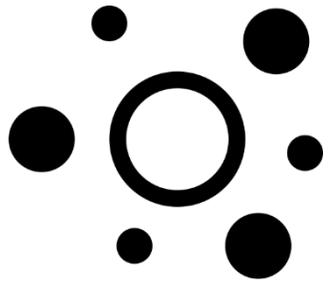
MyCERN scoping sub-WG

Presentation to myCERN WG - 9th May 2017

Mandate

- ▶ Establish the boundaries of the work to be done for the detailed study stage of the MyCERN project with a view on reducing the scope presented by the conceptual design report while preserving the essence of the project.
- ▶ The MyCERN scoping working group will list and define the various modules that could be part of MyCERN, and if needed will complete their specifications. For each of them, it will evaluate its relevance taking into account various factors: expected short term and long term benefits, potential overlap with other computing services, needed resources. It will then propose which modules should be part of the detailed study stage and confirm the needed resources and timeline.

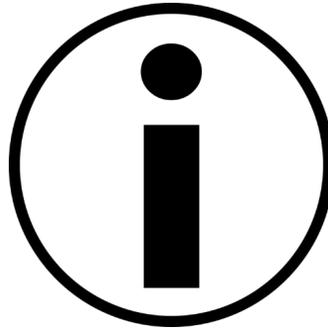
MyCERN Modules



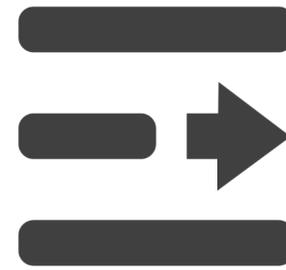
Personal Assets
Aggregator



Communication
Hub



Information
Hub



Procedures
Engine



Convenience
Tools

Personal Assets Aggregator

- ▶ Goal: Create one central place where CERN users can view all their personal data and assets stored in various CERN departments
- ▶ Benefits: Easy access and transparency of assets and information linked to a person, data sanitization, guidance to final service through simple redirection, seamless experience accessing data which otherwise would be accessible in very different contexts.
- ▶ Duplication: data exists outside but is scattered; no other gathering project
- ▶ Challenges: asynchronous connections to multiple data sources, multiple concurrent calls



Personal Assets Aggregator

CERN Accelerating science Thomas Baron CERN Settings Logout

Menu MyCERN > My CERN Assets > My Personal Data Search MyCERN... Emergency 74444



Thomas Baron
IT-CDA-IC section leader
IT-CDA-IC
28/R-022
73828, 160500
thomas.baron@cern.ch
G06200

Edit Data

Family Situation

Relation	Name
Spouse	Sophia Baron
Child	John Baron
Child	Sylvia Baron

Modify

My Keys

Plan	Key	Number	Local
1330	SB59	032	510/R-401
154872	DD1.5	034	513/R-402
RZ1054	210102SA	011	62/S-003

Modify

My Registered Vehicles

Type	Immatriculation
Peugeot 306	4132XM01
Volvo Break V34	GE-01324563

Modify

My Payslips

Month	Link
Oct 2016	Link
Sep 2016	Link

View all

CERN Accelerating science Thomas Baron CERN Settings Logout

Menu MyCERN > My CERN Assets > My Accesses Search MyCERN... Emergency 74444

My Identifiers

Card Situation Valid

Card end date 26-MAY-2017 00:00

SALTO situation Valid

SALTO end date 24-DEC-2016 23:59

Dosimeter situation Invalid

Biometric ID situation Invalid

View all

My Accesses

0028-1-019 Access to IT-CDA restricted zones

CR-TECH Access to the technical cabins of the main conference rooms

B513 Building 513 outside working hours

T Tunnel Transit authorization

CMS-GEN CMS Centre (Meyrin, 354/1-002)

CC513T CC 513 - MACHINE ROOMS - TEMPORARY

0513-1-21T IT Data Centre Visit Point - TEMPORARY

Request Access

This page gives you a quick summary of your access situation. For more details and actions, please go to [DaMS3](#)

CERN Accelerating science Thomas Baron CERN Settings Logout

Menu MyCERN > My CERN Assets > My IT Resources Search MyCERN... Emergency 74444

toggle all

Basic

ACCOUNT MANAGEMENT
List of owned computing accounts

indibot	Official	Service Account
workflow	Official	Service Account
avmgr	Official	Service Account
indico	Official	Service Account
webcast	Official	Service Account
tbaron	Personal	Primary Account
admtb	Personal	Secondary Account
cdsconv	Personal	Secondary Account

Database Services

DBONDEMAND
List databases you own

scala	Official
scalard	Official
scalacm	Official
scalacmr	Official

Communication & Collaboration

FAX SERVICE
List of fax numbers

+41 22 76 68644	Personal
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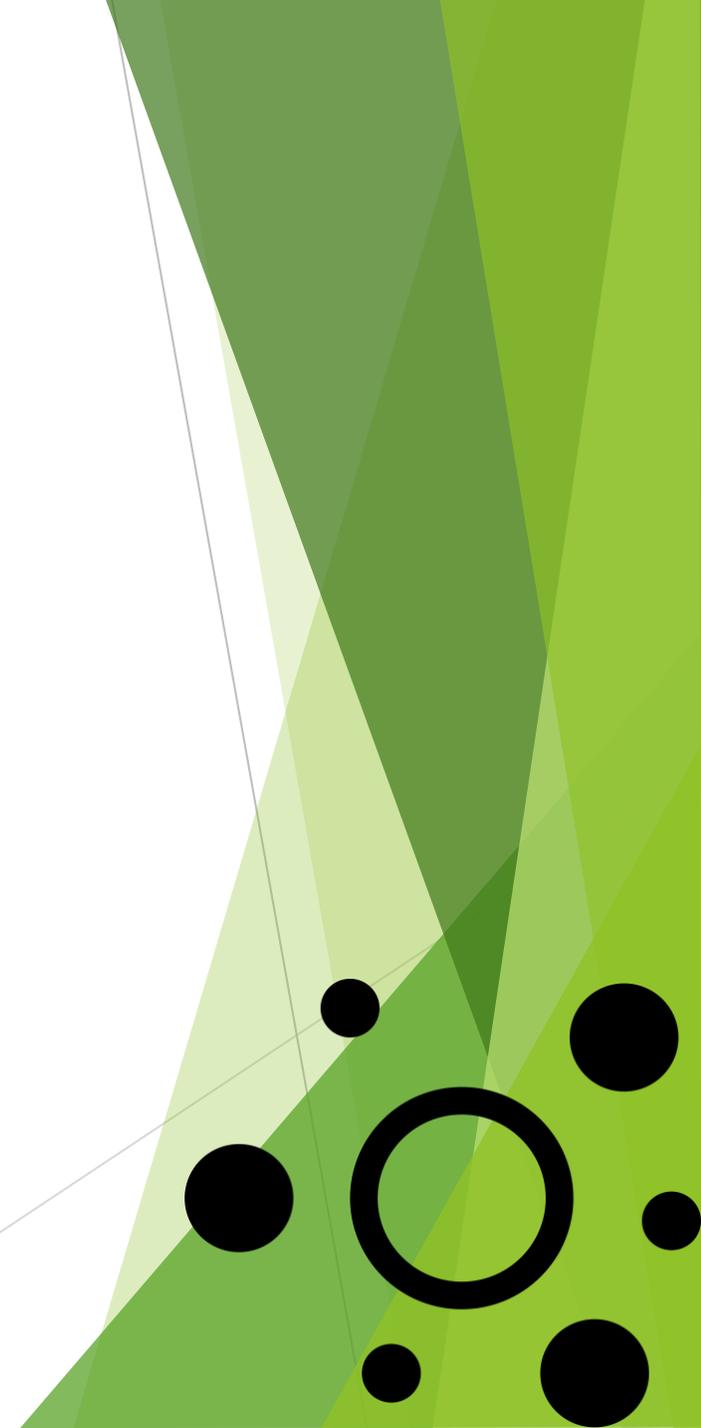
E-GROUPS
List of groups

indico-d	Official
crbs-500-1-001	Official
project-indico	Official

Operating Systems

Personal Assets Aggregator: Scope

- ▶ Resources for detailed design: 5m
- ▶ Contact all owners of data considered (see backup slides)
 - ▶ Evaluate the cost of implementation of all connectors + OAuth compliance
- ▶ Prototype with at least two data sources:
 - ▶ One AIS (some targetted information), one IT
 - ▶ Stress tests



Communication Hub

- ▶ Goal: Centralising all CERN official and services communications through one interface with a possibility to redirect messages to other channels
- ▶ See more detailed specifications in backup slide
 - ▶ Service specs are still work in progress on the push notification service side
- ▶ Benefit: Better reach of CERN users, lower email usage, simplify access to notifications for users, avoid multiplying notification initiatives
- ▶ Duplication: None
- ▶ Challenges: Create new service from scratch



Communication hub

official notifications

Your French card will expire in 25 days [Take action](#)

Your access to CMS Control room will expire in 2 days [Take action](#)

requiring your attention

EDH 3 **CDS** 1 **InforEAM** 0

SNow 16

official news

Schengen Area - Entry, stay and exit - Documents required

Opening hours of UNIQA offices during end-of-year closure

Service availability during CERN annual closure 2016/2017

News

LOUD experiment sharpens climate predictions
Data from CLOUD has been used to build a model of aerosol production, which could help researchers establish the main cause of [...]

Reinforcing cooperation between the emergency services
A tripartite agreement between CERN, France and Switzerland reinforces cooperation between their respective emergency services [...]

[view all](#)

Service Status Board

Most AIS applications incl. Impact, Phonebook, EDH, ... are down
Begin: Fri, Nov 04, 2016 16:30 [Ongoing](#)

Wigner T-Systems maintenance
Begin: Thu, Nov 03, 2016 20:00 End: Fri, Nov 04, 2016 06:00 [Ongoing](#)

[view all](#)



Communication Hub: Scope

- ▶ Resources for detailed design: 3m
- ▶ Liaise with the Push Notifications Project management team
- ▶ Establish detailed specs and mockups for
 - ▶ Push Notification Service configuration page
 - ▶ Notifications listing page and widgets
 - ▶ List the use cases for a more advanced filtering system, the available options for its implementation and their technical feasibility
 - ▶ Tagging of messages
 - ▶ Hierarchize the channels
 - ▶ Implement search of the messages content
- ▶ Evaluate the cost of implementation



Information Hub

- ▶ Goal: Group administrative and practical information from various sources (newcomers guide, admin e-guide, welcome brochure, regional information, Help at CERN...), give to the editors common practical tools to maintain this information, tag it and provide easy access through a powerful semantic search engine and a customizable ranking system.
- ▶ Benefit: Ease retrieval of practical information for CERN users
- ▶ Duplication: None (the new portfolio should become the master and not just a copy of existing sites)
- ▶ Challenges: Setup the semantic search engine, build up and maintain the CERN Ontology



Information Hub: Scope

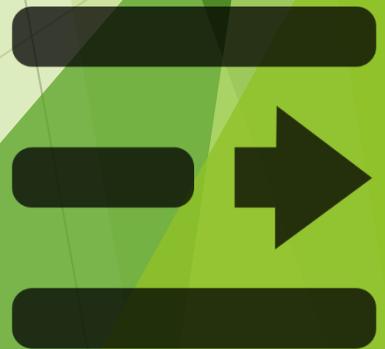
- ▶ Resources for detailed design: 3m
- ▶ Information sources
 - ▶ List all sources of information to be centralised in MyCERN
 - ▶ Select a common way to handle version management, cooperative editing, tagging of articles and automated deployment for this information
 - ▶ Drupal, Sharepoint, Gitbooks etc.
- ▶ Semantic Search and ranking engine
 - ▶ Study the requirements for the semantic search and ranking engine
 - ▶ Initial corpus: Above information sources
 - ▶ Possible extensions: Snow KBs, other CERN pages
 - ▶ Market survey and selection of product
- ▶ Evaluate the cost of implementation

- ▶ Re-scope: Ranking of search results according to personal preferences and personal data
- ▶ De-scope: No expert system



Procedures Engine

- ▶ Goal: Turn procedures currently existing on paper into computing workflows automatically adapting to the user's situation, and tracking progress
- ▶ Benefit: Simplify processes by tailoring them to users, better guidance of users; less work for service supporters/managers
- ▶ Duplication: Other services (EDH) already handle these kinds of processes, through workflow engines and expert systems
- ▶ Challenges: process complexity, reliance on external sources



Procedures Engine: Scope

- ▶ Re-scope: List procedures to be computerized and recommend priorities for their implementations; hand over their handling to AIS in their standard work plan
- ▶ Ensure that feedback (progress tracking) from ongoing procedures can be given to MyCERN (ongoing procedures widget) - Define interfaces - Pilot implementation on the EDH contract extension process
- ▶ Resources for detailed design: 1w (interface description); 2w (pilot implementation in EDH)



Convenience Tools

- ▶ Goal: Provide centralized, light-weight interfaces to existing practical tools, through interfaces suitable for mobiles and desktops
- ▶ Benefit: Usage on mobiles through web and app
- ▶ Duplication: Low (no such interfaces on a mobile app; m.cern.ch will be replaced by MyCERN)
- ▶ Challenges: None



Convenience Tools

The image displays four utility tool cards arranged horizontally. Each card has a green header with a title and a star icon, and a green button at the bottom labeled 'full version'.

- Phonebook:** Features a search bar with the placeholder text 'Search phonebook...'. Below the search bar, it provides instructions: 'Search for names, mails: 'john hill', 'marc@' departments/groups: 'BE/', 'IT/DI' building, floor, office: '864-', '5-4-003' or phone numbers: '71234', '161234'.
- Map:** Shows a Google Map with a red location pin and a yellow route line. The map includes labels for 'France', 'Schweiz', and 'Route de'. The Google logo and 'Map data ©2017 Google' are visible at the bottom.
- Mobility:** Displays two items: 'Closest bus stop' with a bus icon and 'bldg 513', and 'Next bus at stop' with a clock icon and '6 minutes'.
- On-site Services:** Lists 'Services close to you' with three entries: 'Users Office' (bldg 61), 'Medical Service' (bldg 57 - 1st floor), and 'Restaurant #2' (bldg 504).

The image shows a screenshot of an event calendar interface. At the top, there is a navigation bar with 'Menu', 'MyCERN', and 'Practical Information > Events'. The main content area lists five events, each with a calendar icon, a title, a time, and a location. A 'Now!' badge is present next to the first event.

- TODAY 14:00: MyCERN project Working Group Meeting** (Now!)
155/R-021
- TODAY 16:30: The Value of Hyperscale**
IT Amphitheatre
- TOMORROW 11:00: DG Address to Staff**
Main Auditorium
- Wed, Nov 21, 11:15-12:15: Instabilities of the Landau-Fermi liquid in lattice systems**
EPFL, Room 727
- Wed, Nov 21, 14:00-15:00: Symlifying Scattering Amplitudes**
TH Conference Room



Convenience Tools: Scope

- ▶ Resources for detailed design: 1m
- ▶ Study the interfacing with existing data sources (Indico, mapcern, phonebook)
- ▶ Evaluate cost of implementation



MyCERN: Scope

- ▶ Resources for detailed design: 1m
- ▶ Establish the detailed specs for the web interface
 - ▶ Customization of pages and widgets
- ▶ Establish the detailed architecture
- ▶ Select best suited technology stack
- ▶ Evaluate the cost of implementation for a real mobile app.

Summary - work needed in detailed study

- ▶ Personal Assets Aggregator: 5m
 - ▶ Evaluate cost of implementation of needed connectors (5 in total)
 - ▶ Prototype implementation with two connectors (from AIS and IT) + stress tests
- ▶ Communication hub: 3m
 - ▶ Establish detailed specs and mockups for
 - ▶ Evaluate cost of implementation
- ▶ Information hub: 3m
 - ▶ Select common documentation management system
 - ▶ Select semantic search and ranking engine
 - ▶ Evaluate cost of implementation
- ▶ Procedures engine: 1m
 - ▶ Pilot implementation of a feedback mechanism over one EDH workflow
- ▶ Convenience tools: 1m
 - ▶ Study the interfacing with existing data sources (Indico, Snow, mapcern, phonebook)
 - ▶ Evaluate cost of implementation
- ▶ Web and mobile apps: 1m
 - ▶ Evaluate cost of implementation of web (full feature set) and mobile (restricted feature set) apps
 - ▶ Select technology

Resource needs

- ▶ 14 months of work for one fellow
- ▶ Could continue on the full implementation after the detailed study phase.

- ▶ Timeline and deliverables
 - ▶ 14 months:
 - ▶ full implementation plan
 - ▶ First prototype with very limited feature set (limited asset aggregation, basic communication and notifications, limited map and events tools); mobile app with only notifications
 - ▶ 26 months (estimated):
 - ▶ Second release: full personal assets aggregation, full communication hub, limited information hub (no search), all convenience tools, procedures feedback; full mobile app
 - ▶ 36 months (estimated):
 - ▶ Final release: complete feature set (added semantic search and ranking engine)

Backup Slides

List of Personal Data to Consider (1/2)

- ▶ Personal photos (official and social) (ADAMS and IT)
- ▶ Firstname, Lastname (AIS)
- ▶ Address at CERN (AIS)
- ▶ Stored email address (AIS or IT)
- ▶ Contract date, end date, type (category of MP) (AIS)
- ▶ Supervisor name (Team Leader and DTLs for Users) (AIS)
- ▶ Official documents (Swiss card, French card): start date, validation end date; if applicable date when a new card was requested and pending) (AIS)
- ▶ My local address (residence) (AIS)
- ▶ Family member names (names, registration date, birth date) and their legitimation cards as above (AIS)
- ▶ Registered vehicles: number, start date (AIS)
- ▶ Green number plates, start date (AIS)
- ▶ Rented radioactive source, details as available (HSE)
- ▶ Stored emergency contacts (or link to that) (AIS)
- ▶ Rented books (if the list is too long then a link instead of a list) (Library/CDS)
- ▶ Rented gas bottles (AIS)
- ▶ Rented electronic pool items (if the list is too long then a link instead of a list) (AIS)
- ▶ ~~List of CERN club memberships~~
- ▶ Generic links which leads to specific entries when logged in:
 - ▶ Link to my entry in HRT,
 - ▶ Link to print EDH CERN contract certificate
 - ▶ Link to personal pay info (if 'paid') and tax certificate
 - ▶ Link to my leave

List of Personal Data to Consider (2/2)

- ▶ **My Accesses (ADAMS)**
 - ▶ Overview list provided by BE plus link to ADaMS
- ▶ **My IT Resources (IT-CDA)**
 - ▶ Provided by IT; link to IT resources portal for actions
- ▶ **My IT Services (IT-CDA)**
 - ▶ Provided by IT; link to IT Services portal for actions
- ▶ **My Documents (CDS, EDMS, Indico, INSPIRE)**
 - ▶ Summary of documents owned by the user in CDS, EDMS, Indico, INSPIRE
- ▶ **My Snow tickets (IT)**
 - ▶ List of recent tickets and link to Snow for action
- ▶ **My CERN Social (IT)**
 - ▶ Citations in Facebook Workplace, Mattermost and social.cern.ch

Push Notifications Service Specs

- ▶ Notification channels
 - ▶ Restricted to specific posters
 - ▶ Subscribable by users
- ▶ Notifications targets
 - ▶ Individualized
 - ▶ Group
 - ▶ Mapped to existing E-group
 - ▶ Dynamic egroups for other criteria
 - ▶ Location
 - ▶ Geolocalisation
- ▶ Notification carriers
 - ▶ Desktop applications (Win, Mac, Linux)
 - ▶ Mobile Apps (iOS, Android)
 - ▶ SMS
 - ▶ Email
 - ▶ Web Portal
- ▶ Notification sources in MyCERN (channels)
 - ▶ Internal Communication - News
 - ▶ Internal Communication - Official news
 - ▶ Official notifications
 - ▶ Mandatory channel (everybody is subscribed) open to specific services
 - ▶ Card service
 - ▶ Account service
 - ▶ ADAMS
 - ▶ CERN SSB
 - ▶ Any other service
 - ▶ Indico-developers
 - ▶ IT-CDA
 - ▶ Etc.
- ▶ Notification history
 - ▶ Supported
- ▶ Acknowledgement (dismissal)
 - ▶ For individual messages only



List of Convenience Tools

- ▶ List of events of interest
 - ▶ List events taking place today and in the coming days
 - ▶ Events I am participating in
 - ▶ Events (in categories) I favorited
 - ▶ From indico APIs
- ▶ Phonebook
 - ▶ Search user in phonebook
 - ▶ Redirection to phonebook
 - ▶ Inclusion of search results in mobile app through API to be created
- ▶ Map of CERN points of interest
 - ▶ Show on a map various Pols: Services, Mobility, emergency
 - ▶ Integration with mapcern light
- ▶ List of on-site services
 - ▶ Display services classified in categories together with localisation, description, opening hours and contacts
 - ▶ Leverage existing DB (extract from mapcern or SNow)
- ▶ List of emergency contacts
 - ▶ Defibrillators, fire brigade, assembly points...
 - ▶ Mobile feature: closest emergency contact
 - ▶ Extracted from mapcern
- ▶ Mobility information
 - ▶ Mobility car sharing, bicycles, shuttles circuits
 - ▶ Mobile feature: closest bus stop or bicycle shed
 - ▶ Extracted from mapcern
- ▶ Weather
- ▶ My Links
 - ▶ Set up by the person; MyCERN can propose an initial list

