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
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
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
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 favored
  - 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 PoIs: 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