SAFE Service Integration

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Service integration

- Can support several levels of integration between SAFE and services
  - Lightweight integration
    - Minimal requirements on service operators
    - Greatest flexibility
    - Lowest level of SAFE features available
  - Full integration
    - Highest level of SAFE features
    - Slightly more prescriptive
    - More requirements on service operators

Change tickets

- SAFE requests changes via pre-defined change tickets
- Fairly large number of these but services do not need to support all of them
- Simplest interface is just email request tickets completed via webpage
  - More advances scripting interfaces also available
  - Ticket contents can be downloaded as XML or JSON

Reporting only

- Minimum integration level
- Services provide data-feeds to SAFE for reporting purposes
  - No service requests come from the SAFE
  - All accounts allocations etc. handled by service
  - However also need additional data/mechanism to match user accounts and projects/budgets to SAFE users/projects
    - Could match users via email address
    - Having a consistent naming scheme for budgets would help
    - Exact mechanism will depend on local service details so service and SAFE teams will need to design and implement a mechanism

Partially managed

- Equivalent to DIRAC model
- Centrally managed projects come from the SAFE
- User accounts for these projects requested via the SAFE
  - Can co-exist with local projects/users
    - Life will be easier if we reserve ARCHER style project codes for use by SAFE
  - Solves project/user matching problem
- Devolved project management features may be limited if SAFE is only managing sub-set of projects

Fully managed

- Equivalent to ARCHER and EPCC local systems
- All projects and accounts are allocated through SAFE
  - May be worth scripting the SAFE change tickets
    - Normally we keep an admin in the loop but implementation script downloads change parameters from SAFE
    - Also possible to fully script the implementation
  - Batch system resource limits can also be integrated
    - SAFE maintains internal resource budgets decremented when accounting data uploaded
    - Budget state and access lists can be pushed/pulled from SAFE
    - Need to add hook to batch system to implement these limits
    - Project managers have devolved control over project budgets

Missing requirements?

- What to users/projects what to be able to manage via the SAFE?
- What do service operators want managed via the SAFE?
  - Local constraints?
  - Local policies?
  - etc.