UCAP console: a simple GUI for UCAP

M. Hostettler, G. Trad

with thanks to T. Bukovics & the UCAP team
what we have: ucap-cli

- **nice tool for scripting**
- **a bit less user friendly to use directly in operation**
- **e.g. to restart a device**
  - find which node the device runs on (CCDE)
  - start ucap-cli, then
    - node-select `<node>`
    - device-stop `<device>`
    - device-start `<device>`
what we have: DIAMON & CMW Admin

main tools for OP to troubleshoot FESA frontends, Java Servers, …:
check status, start/stop/restart processes, reboot crates, …

→ very useful (spared experts many calls in the night!), but not available for UCAP
a "DIAMON like" interface for UCAP

- simple GUI for OP
  - python / Qt, using UCAP Java API through JPype
- global search/filter for nodes and devices
- display transformation status & metrics
- start/stop/reload device
- read installed bundles
- display log files
basic debugging capabilities

double-click

input subscriptions

converters

output(s)

flashing borders when an event occurs:

triggered (value)
exception
stopped / offline
timeout
how to run it ...

from the CCM (if added, e.g. in LHCOP config):

![Screenshot showing CCM page with UCAP Admin and Diamon Console]

from the shell on any CCC console or VM:

```
/acc/local/share/python/acc-py/apps/acc-py-cli/latest/bin/
acc-py app run ucap-console
```
demo
advanced usage: "expert mode"

---expert

exposes some more dangerous commands (still protected by RBAC)

- delete device(s)
- upload JSON
- bulk-reload devices
- install Java bundles
- install python packages
advanced usage: local nodes & environments

```--extra_nodes <nodes>```

add extra nodes in addition to those in CCS - e.g. for local test or docker nodes

```--env PRO/TESTBED/...```

switch the CCS environment
open points for UCAP management

● general strategy for UCAP devices in operation?
  ○ like FESA classes: if crashed or suspected to be misbehaving, **OP usually attempts a restart before calling in experts**
  ○ risk: if a new version has been deployed but devices have not been not reloaded, new version will be used
    ■ same for FESA & other servers
    ■ situation to be avoided over extended periods of time

● finer grained access control?
  ○ at the moment, **only full access (manager) or read-only, controlled per node**
  ○ need **equivalent of Remote-Reset-User role?**
    ■ start/stop/reload devices on ANY node
    ■ currently: lhcop is manager of all nodes, options hidden in the GUI
      ➔ not a nice long-term solution