DIRAC services and agents

DIRAC Project

- ▸ Configuration of services and agents
- ▸ Running services and agents

Service configuration

- Common options for all the services
  - *MaxThreads*
  - *MaxWaitingPetitions*
  - *ThreadLimit/<method>*
  - *Port*
  - *Protocol*

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Agent configuration

- Common options for all the agents
  - *PollingTime*
  - *MaxCycles*
  - *MonitoringEnabled*
  - *WorkDirectory*
  - *ControlDirectory*

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Database configuration

▸ Options common to all the databases

    ▸ *Host*

    ▸ *Port*

    ▸ *DBName*

    ▸ *User*

    ▸ *Password*

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Running services with *Runit*

- The DIRAC services and agents are run using the **Runit** framework (http://smarden.org/runit/)
    - Running the component process with a watchdog process
        - Restarts automatically the component process in case of failure
    - The log files are managed in a circular manner
        - 10 last files of 10MB size are retained
        - Avoids exploding disk space with logs
    - Simple control of the component process
        - Start, stop, restart, etc

- With **Runit** each component should have a corresponding directory
    - Located in /opt/dirac/runit directory
    - Contains:
        - start-up script **run**
        - subdirectory **log** to contain log files

Running services with *Runit*

▸ Example of *run* script:

```
#!/bin/bash
rcfile=/opt/dirac/bashrc
[ -e $rcfile ] && source $rcfile
#
exec 2>&1
exec dirac-service DataManagement/FileCatalog /opt/dirac/etc/DataManagement_FileCatalog.cfg -o LogLevel=INFO
```

▸ **Runit** allows to run multiple components by operating on a directory where all the component directories are collected

    ▸ `> runsvdir /opt/dirac/startup`
       where links to all the component directories are collected

▸ Running **runsvdir** command at boot time allows to start all the services seamlessly by either

    ▸ putting it into `/etc/inittab`, or

    ▸ Putting it into `/vo/start` directory where the CC's startup scripts are looked for