

Status of KM3NeT Detector Manager

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Status of KM3NeT Detector Manager

◉ What CU-DM does

- > Control one or more CLB's using a flexible configuration (no hardcoded parameters)
- > Remember the last status even in case of process kill
- > Write Datalog files to keep track of all events and data
- > Write human-readable log files
- > Expose data for realtime monitoring
- > Depend on centralized authentication for service startup
- > Provide a GUI interface
- > Allow manual control
- > Allow multiple GUI interfaces for diverse purposes

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◉ What CU-DM does not (yet)

- > Authenticate users to the centralized authentication provider
- > Transmit monitoring data to ROyWeb to make plots
- > Take data from DB
 - Runsetup and Detector files are static
 - Runsetup/Detector file format in DB-compliant format
 - Some work is needed to shrink them down: with 10^4 - 10^5 PMT's individual settings might really make the files huge

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- ⦿ What CU-DM does and should not do
 - > Allow setting runnumber
 - > Allow setting detector
 - > Allow setting runsetup
 - > Allow setting the target

- ⦿ These tasks should be left to the CU Manager for centralized operation
 - > For the purpose of development and debugging, they have been provided but will be removed in the final version

Status of KM3NeT Detector Manager

◉ Interfaces

Console mode (Command line)

- Configure DM
- Startup/shutdown DM
- Archive logfiles
- Define the current target
- Define the current runsetup
- Define the current runnumber
- Define the current detector

GUI (Web-based)

- Query runtime parameters
- Monitor a CLB
- Design user-defined control panels
- Define the current target

SAWI (Web-based)

- Notify target change
- Notify detector change
- Notify runnumber change
- Notify runsetup change

Status of KM3NeT Detector Manager

- ◉ Developing your own GUI
 - > Custom GUI's can be used to automate tests
 - > Standard GUI works through HTTP, no «backdoors»
 - > Get a security token (login)
 - > Read data using virtual directory for MON parameters
 - > Send commands using URL's
 - > Instructions on Wiki

Status of KM3NeT Detector Manager

- ◉ Version 0.9 deprecated
- ◉ Version 0.91 functional, still bugged
- ◉ Current SVN «bin» version running:
 - > DM tested at NIKHEF, 1 CLB
 - > DM tested at Bologna test bench, 4 CLB's
 - > DM tested in Catania, 2 CLB's
- ◉ Release planned in the next days
- ◉ Exe upgrade possible through SVN
 - > no recompilation needed

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- ◉ Interactive parameter setting
 - > Requires switch from «auto» to «manual» mode
 - > Authorization by LocalAuthenticationProvider is required
 - > Parameter set with 4 possible scopes:
 - 0: by UPI (for PMT's and array parameters)
 - 1: by DOM
 - 2: by DU
 - 3: by Detector
 - > Scopes 2 and 3 require that each individual DOM be switched to «manual»

CU activities

- ◎ Current activity on DM
 - > Working with Vincent to reduce thread spawning when CLB's are unreachable
 - > Working with Vincent to remove program hang at shutdown
 - Vincent has made a new SVN check-in yesterday – tests ongoing
 - > «QA» on program: individual support to users to track and fix bugs
- ◎ Current activity on TriDAS Manager
 - > CHOO (ControlHost) porting to C#