Final presentation


Marcin Ciupiński

EP-DT-FS

Supervisor:
Michał Zimny EP-DT-FS

In cooperation with:
Loïc Thomas Davoine EP-DT-FS
Wojciech Krzysztof Hulek EP-DT-FS
Tasks overview

- Heaters measurement
- SciFi development
- Calibration station activities
- Interventions on all experiments gas systems
- New ELMB tests
- Diagnostic panel development
Heaters measurement for DEMO Dummy Load

Mission

• Test of heaters to decide which one of 3 distributors should be used in Dummy Load

Tasks

• Assembly of Interlock protection setup
• Leakage current measurement
• Help Paweł with thermocouple and heating area position determination

Result

• Defining parameters of WATLOW, MAPAG and KMT heaters
• Presentation of the results on DEMO meeting

What did I learn?

Planning and connecting electrical setups
Heaters measurement procedure
Working with mechanic

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Mission

- Working on Sci Fi JIRA for development of new detector

Tasks

- Preparing trendtree code for displaying channel trends in SCADA
- Preparing windowtree code for displaying the navigation bar in SCADA
- Creating Flushing Distribution panel
- Correcting Logic, Functional Analysis and project files naming

Result

- Distribution panel already implemented to SCADA
- Dew point measurement channel trends implemented
- Other tasks already ongoing

What did I learn?

Using Gedi for creating SCADA panels
Creating trendtree and windowtree code
Using JIRA for working with team
Mission

• Create intervention log and webmas log generator

Tasks

• Creating xlsx file for adding intervention
• Creating application in python for generating logs from webmas logs
• Propagation for all detectors on SVN

Result

• New CANbus folder with all above features implemented in every detector folder

What did I learn?

Python programming
Using Visual Studio environment
Respect for programmers

Files stored at: \cern.ch\dfs\Departments\PH\Groups\DT\PD\Cooling activities\students\mciupinski\Intervention Log
Calibration station

**Mission**
- Calibration and storing of Motherboards, ELMBs and flowcells for all gas systems

**Tasks**
- Motherboards + ELMBs calibration for flowscan
- Flowcells calibration

**Result**
- 200+ flowcells calibrated for several Gas Systems
- 20+ Motherboards calibrated
- Refreshment of calibration station place

**What did I learn?**
- How (not) to use LabView environment
- Motherboards calibration procedure
- Dealing with calibration station problems
Mission
• Configuration of new ELMB2 and preparing them for use in gas systems

Tasks
• Contact with person responsible for past firmware development
• ELMB2 flowscan firmware upload
• Test on working gas system

Result
• New ELMB2 firmware created by Henk Boterenbrod
• Firmware upload procedure created in cooperation with Grzegorz Łacinnik

What did I learn?
Always ask for permission to work on gas racks
How to create CMS eLog
CANbus monitoring tools

ELMB128  ELMB2  ELMBLoader interface
Dynamic Diagnostic Panel development

Mission
- Creating diagnostic panel for digital and analog alarms

Tasks
- Getting acquainted with WinCC OA
- Analysis of Hierarchy and HVAC diagnostic scripts
- Creating new panel and script for MAUVE usage

Result
- Diagnostic panel can be used, but it still need improvement such as dynamic screen width
- UAB template for generating list of alarms in development

What did I learn?
WinCC OA environment
Patience

Files stored at: \cs-ccr-epdfs1.cern.ch\PVSS_projects\EP_DT_FSV\EP_DT_FSV_\panels\vision\diagnostic
Gas Group activities

**OT migration**
- Application name change
- Migration to EP-DT-FS CCM
- PLC file update

**DAI orders**
- Add R-Stahl Supplier to CERN database
- Order ATEX plugs for all systems Purifiers
- Add Novli Supplier to CERN database
- Acquire offer for Freon bottle Heating Jacket

**CLOUD upgrade**
- Add new objects to Profibus, Festo and Wago files
- Add labels to new Mass Flow Controllers

Tasks

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Gas Workshop activities

Siemens SIPART Positioner calibration
- Learn the calibration procedure
- Calibrate 8 valves
- Prepare manual (to be done)

Distribution chassis for ATLAS RPC assembly
- Assembly new ATLAS RPC Racks distribution chassis

Power supplies for flowscan ELMBs check
- Prepare test setup
- Test several PS
- Prepare manual (to be done)
Compact Muon Solenoid activities

**IO Check**
- Check correction of Wago I/O on RPC and CSC
- Correction of Wago documentation

**Webmas correction**
- Flowcells calibration constants data file correction
- Adding racks 63 and 66 for CMS GEM
- Webmas configuration files generation for RPC and GEM

**Interventions**
- Motherboards, ELMBs, Power Supplies, Switches exchange
- Distribution racks connectors check
- Flowcells numbers check

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Dear all,

This week I was mostly lazy and pretended to be working. I think that next week I should get more tasks. It’s possible to take again computer security training because I forgot to logout my mail box on one of your computers.

Bon weekend
Marcin

Thank you!