Project Convert Control

Nirmal Krishnan, Tuomas Simula

Our project

- Work as part of the TE-EPC-CCS team (converter control software section)
- Design the UI for the FortLogs archive browser of the PowerSpy application
  - Save data from FGCs (function generator controller) and project MIDAS
  - FGCs control the power converters of the magnets in the particle accelerators
  - MIDAS is an API used to acquire data from various instruments
  - PowerSpy is a tool for visual analysis of FGC data
- Our tools
  - regular pen and paper
  - Figma interface design software

Deleted "Calibrate Temperature @ 18/06/2019 - 17h36"

Delete
Export Logs

Add Signals

FGCs | MIDAS Acquisitions | Archive

User | Procedure | Period | Tag

Results | Search | + Add Selected | Order by

Calibrate Temperature @ 18/06/2019 - 17h36	annie	*Nightly test during LS2, ran at 300 K for FGC in room 866-1-A*	*LS2*	...
Calibrate Zenner				
read dvm				
streaming				
Calibrate Temperature @ 18/06/2019 - 17h32	nulauren			
Calibrate Zenner				
read dvm				
streaming				
Calibrate Temperature @ 18/06/2019 - 12h47	nulauren			
Calibrate Zenner				
read dvm				
streaming				
Calibrate Temperature @ 18/06/2019 - 12h47	nulauren			
Calibrate Zenner				
read dvm				
streaming				
Calibrate Temperature @ 18/06/2019 - 12h47	nulauren			
Calibrate Zenner				
read dvm				
streaming				
Calibrate Temperature @ 18/06/2019 - 12h47	nulauren			
Calibrate Zenner				
read dvm				
streaming				

Date
Name
Tag
User

Calibra Tempera...
Rearm Function
Zenner Cal
Zenner Test

annie
bob
chris
dean

Last 24h
1 Week
2 Weeks
1 Month
3 Months
6 Months
Custom Range

LS1
LS2
CMS

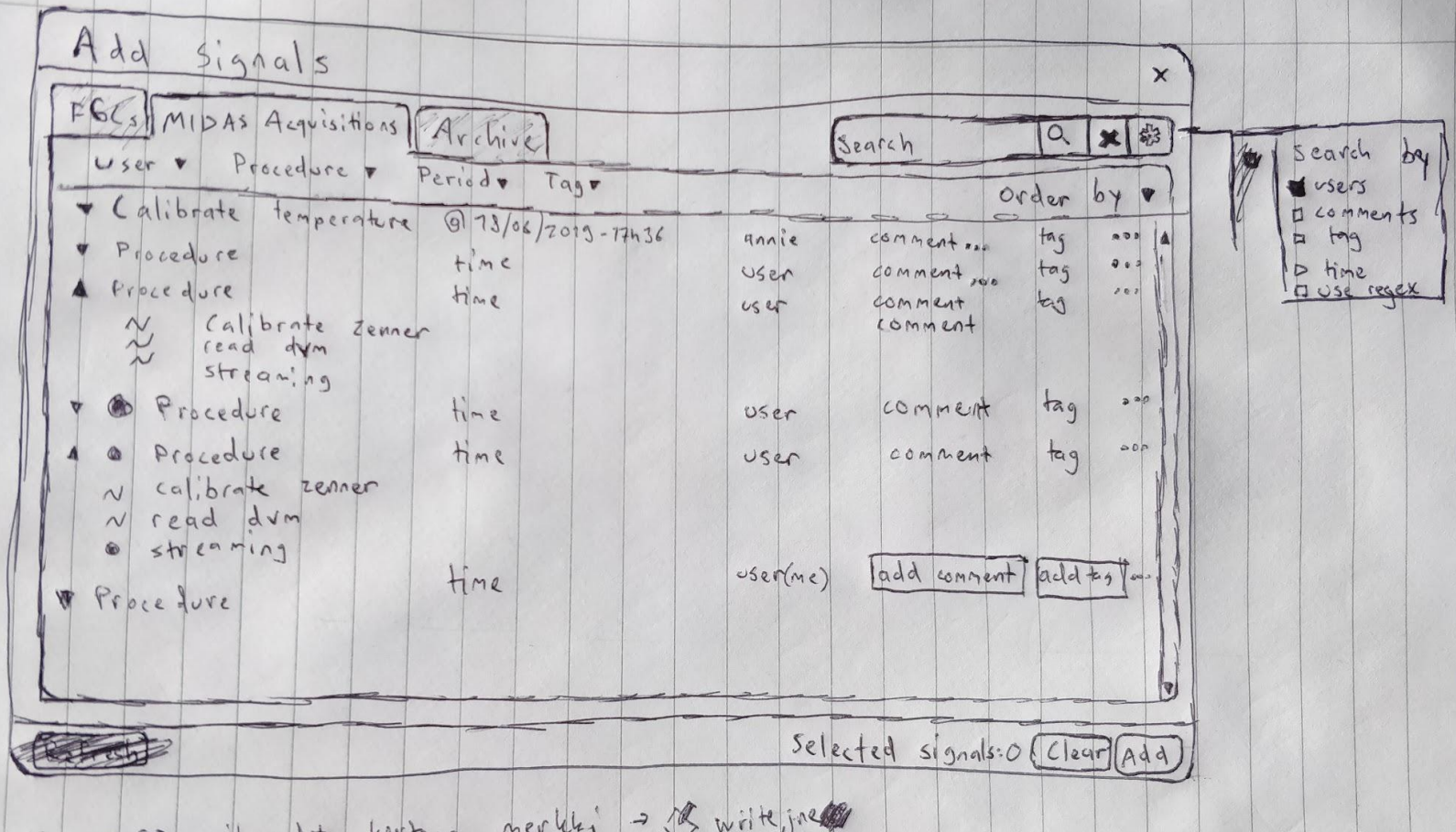
Add Logs

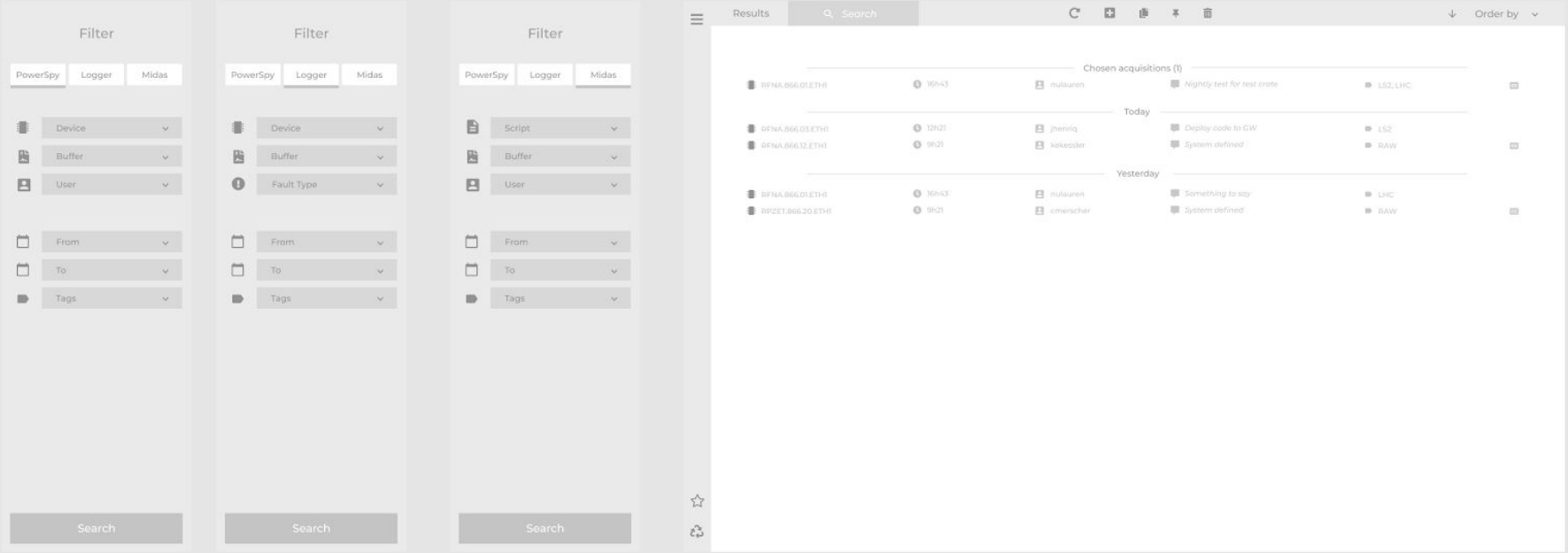
Browse Devices | Search Results

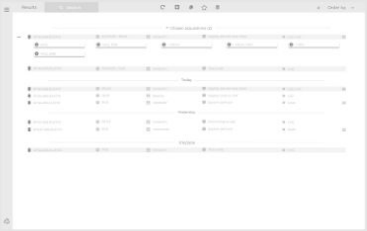
Search device (regex)

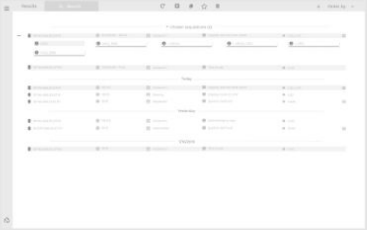
ADE	Calibration	cfc-866-reth1	RFMAG.866.19.ETH1	ACQ
CCR	FGC2	cfc-866-reth2	RFNA.866.01.ETH1	ACQ_FLTR
CPS	FGC3		RFNA.866.02.ETH1	TIMING
Development	FGCD		RFNA.866.03.ETH1	MEAS
ELENA	FGClite		RFNA.866.04.ETH1	FAST_MEAS
ISOLDE	ISEG		RFNA.866.05.ETH1	I_EARTH
LEIR	Mugef		RFNA.866.06.ETH1	TEMP
LHC			RFNA.866.07.ETH1	ST_FLTS
LHC_Calibration			RFNA.866.08.ETH1	SUB1
LN4			RFNA.866.11.ETH1	SUB2
NORTH			RFNA.866.12.ETH1	EVENTS
PSB			RFNA.866.14.ETH1	CONFIGURATION
SPS			RFNA.866.18.ETH1	
SVC			RFNA.866.22.ETH1	
Test_EPC			RPAAL.866.17.ETH1	
Test_Magnet			RPAAO.866.09.ETH1	
Test_Reception			RPADO.866.16.ETH1	
Validation			RPAGM.866.21.ETH1	

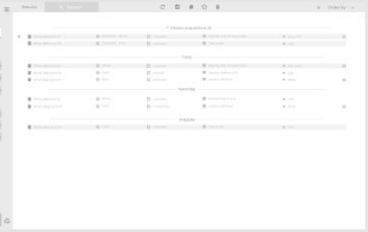
Selected Logs: 0 Clear Add

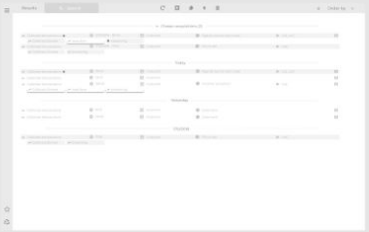

user useless, can be searched?
Add signals
FGCs
MIDAS Acquisitions
Archive
Search
user
Procedure
Period
Tag
Order by
Search by
users
comments
tag
time
use regex
Calibrate temperature
@ 13/06/2019 - 17h36
annie
comment ...
tag
Procedure
time
user
comment ...
tag
Procedure
time
user
comment
comment
tag
calibrate zenner
read dvm
streaming
Procedure
time
user
comment
tag
Procedure
time
user
comment
tag
calibrate zenner
read dvm
streaming
Procedure
time
user(me)
add comment
add tag
Refresh
Selected signals: 0
Clear
Add
lisäoikeudet kertova merkki → write jne

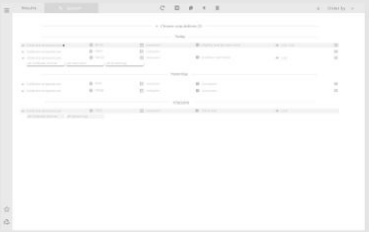

Filter
PowerSpy
Logger
Midas
Device
Buffer
User
From
To
Tags
Search
Filter
PowerSpy
Logger
Midas
Device
Buffer
Fault Type
From
To
Tags
Search
Filter
PowerSpy
Logger
Midas
Script
Buffer
User
From
To
Tags
Search
Results
Search
Order by
Chosen acquisitions (1)
RFNA.866.01.ETH1
16h43
nulauren
Nightly test for test crate
LS2, LHC
Today
RFNA.866.03.ETH1
12h21
jhenriq
Deploy code to GW
LS2
RFNA.866.12.ETH1
9h21
kekessler
System defined
RAW
Yesterday
RFNA.866.01.ETH1
16h43
nulauren
Something to say
LHC
RPZET.866.20.ETH1
9h21
cmenscher
System defined
RAW

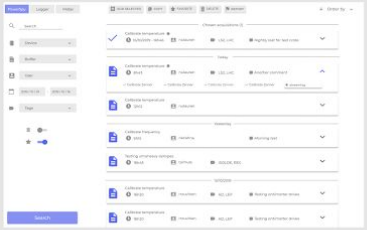
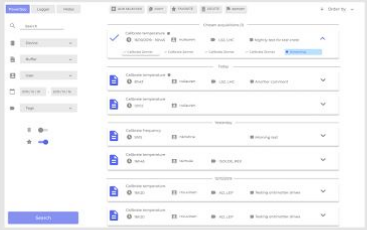
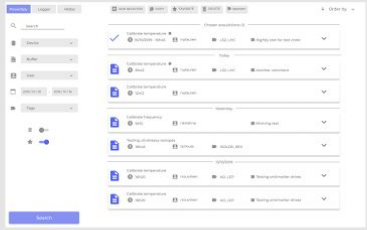
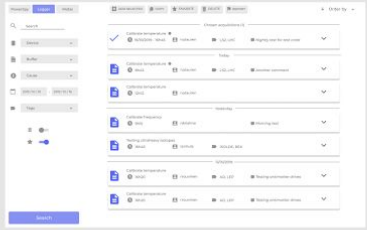
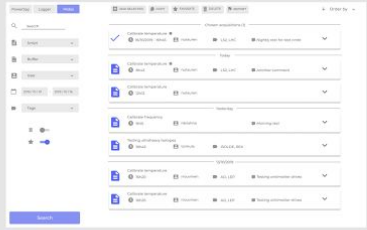
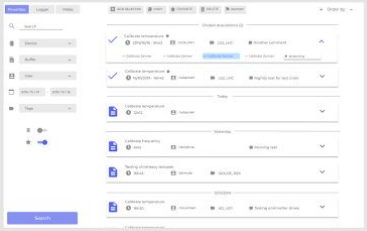
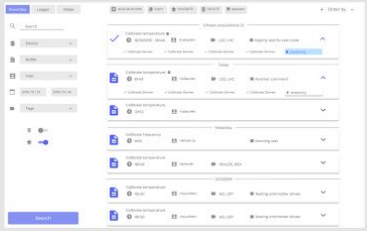
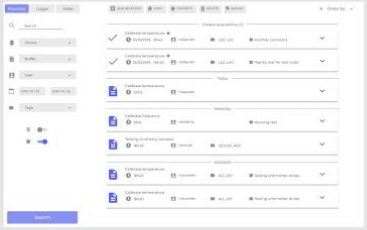
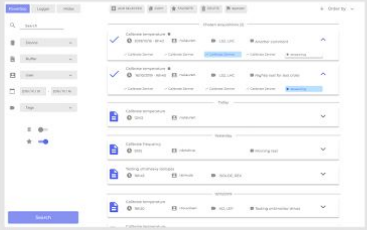
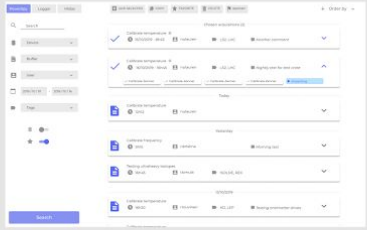


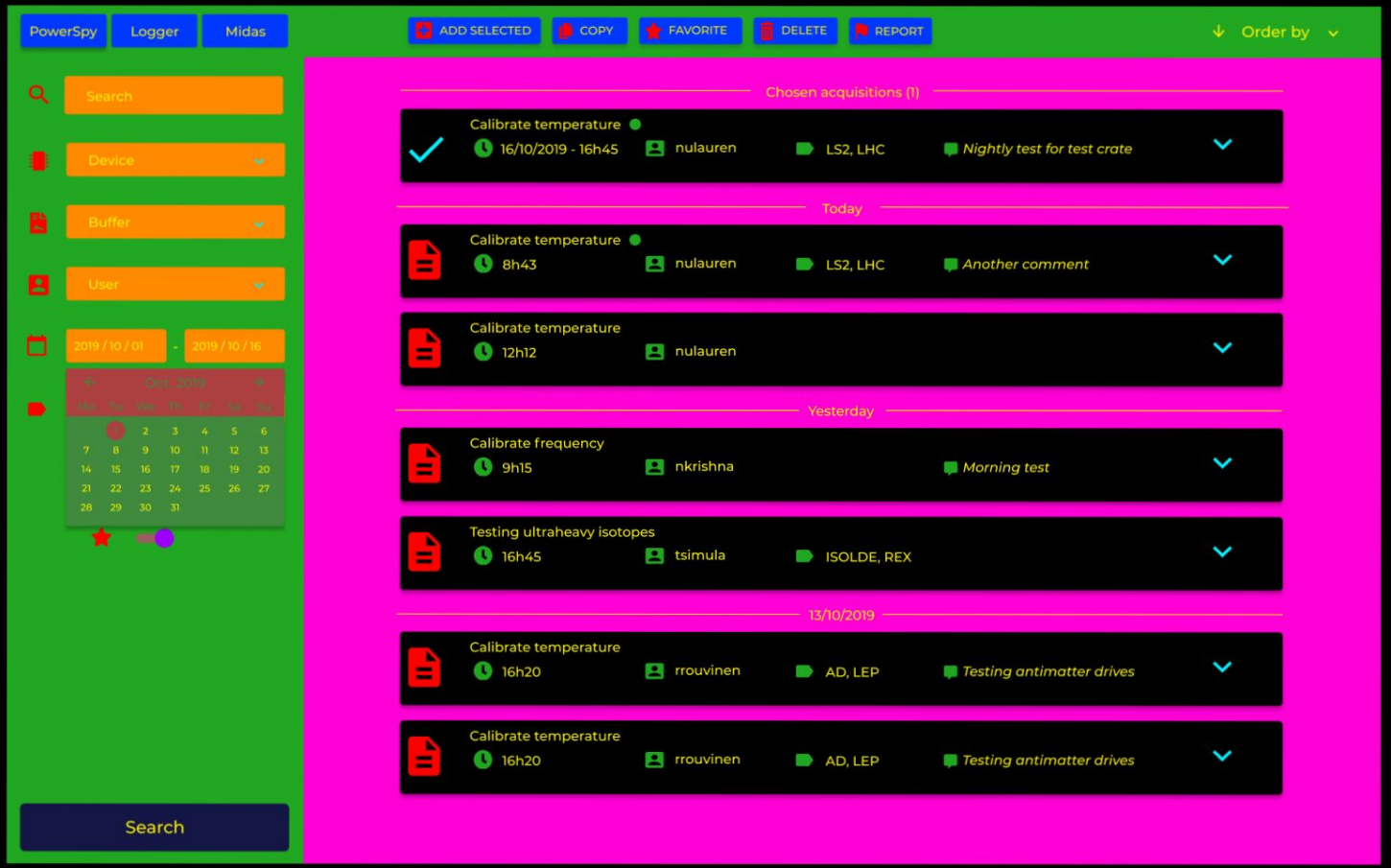









PowerSpy
Logger
Midas
ADD SELECTED
COPY
FAVORITE
DELETE
REPORT
Order by
Search
Device
Buffer
User
2019 / 10 / 01
2019 / 10 / 16
Search
Chosen acquisitions (1)
Calibrate temperature
16/10/2019 - 16h45
nulauren
LS2, LHC
Nightly test for test crate
Today
Calibrate temperature
8h43
nulauren
LS2, LHC
Another comment
Calibrate temperature
12h12
nulauren
Yesterday
Calibrate frequency
9h15
nkrishna
Morning test
Testing ultraheavy isotopes
16h45
tsimula
ISOLDE, REX
13/10/2019
Calibrate temperature
16h20
rrouvinen
AD, LEP
Testing antimatter drives
Calibrate temperature
16h20
rrouvinen
AD, LEP
Testing antimatter drives

Thank you

supervisor Joni Herttuainen
Nuno Mendes
rest of the TE-EPC-CCS team