

# Happyface 4 – status & plans

DCMS computing team meeting | 8 March 2022

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# Happyface

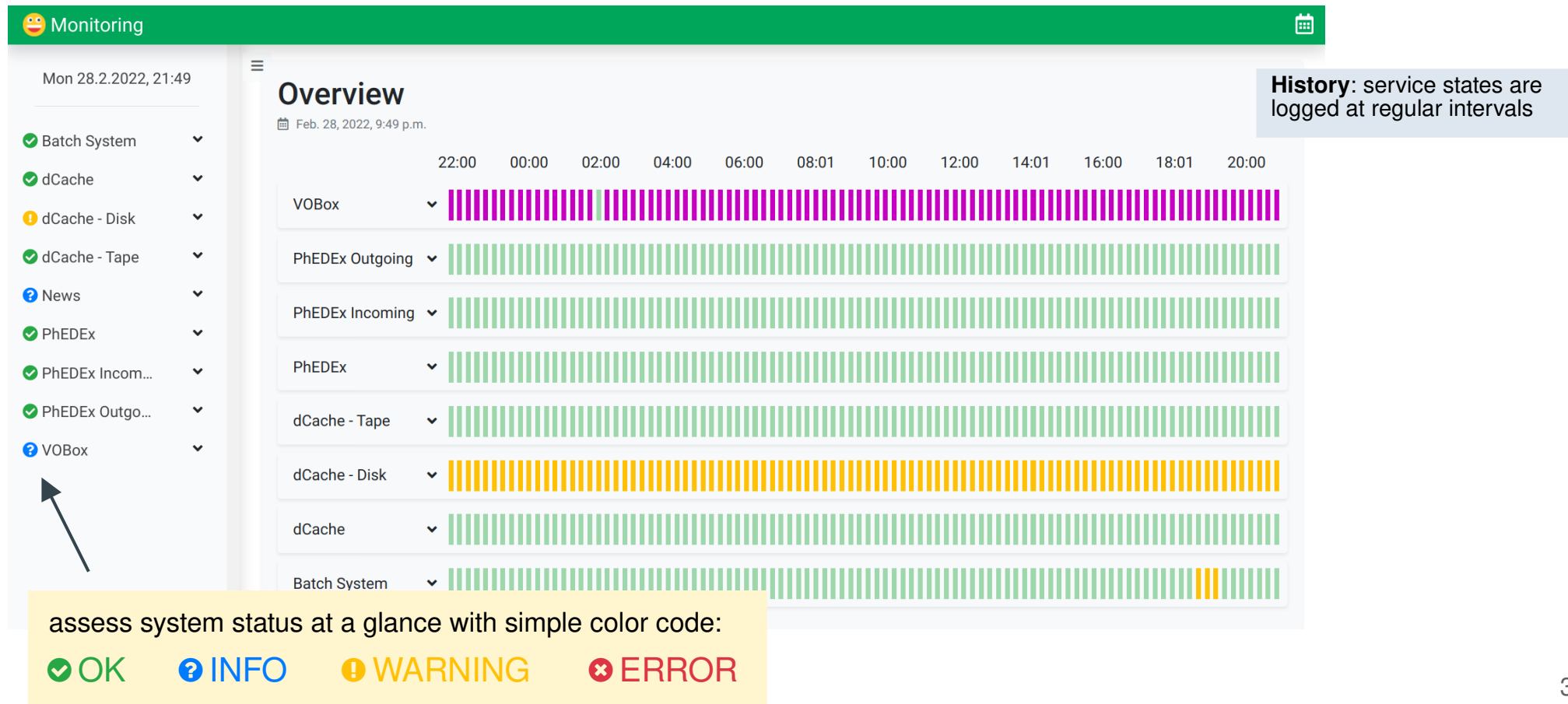
- web-based tool for meta-monitoring computing infrastructure
  - collect information from multiple different data sources
  - aim to provide quick overview of the status of systems
- version 4 → completely new code base based on modern technologies
  - main application coded in Python using the **django** web framework
  - modern, responsive front-end using HTML5 + CSS3 + various JS libraries
  - modular design separating **core** functionality from extendable system of **analysis modules**



# UI overview

<https://happyface.etp.kit.edu/>

Happyface instance deployed at ETP for monitoring the status of CMS services at GridKa



# Analysis modules

<https://happyface.etp.kit.edu/>

raw monitoring data processed for extracting status information

The screenshot displays a monitoring dashboard with a green header bar labeled "Monitoring". On the left is a sidebar menu with various system components, including "Batch System", "dCache", "News", "PhEDEx", and "VOBox". The main content area shows two modules. The first module, "HammerCloud Interface", has a green checkmark icon and a status of "OK". It includes a table with columns for Site, TestID, Submitted, Running, Completed, Failed, Killed, Total, and Efficiency. The data row for "T1\_DE\_KIT" shows a Total of 222 and an Efficiency of 1.0. A green arrow points from the "OK" status to the table, with the text "(simple threshold)". A callout box on the right provides the data source: "Data source: HammerCloud status page" with the URL <http://hammercloud.cern.ch/hc/app/cms/>. The second module, "SAM Status of Compute Elements", has a yellow warning icon and a status of "WARNING". It includes a table with columns for Type, Name, and Status. The data rows show four HTCONDOR-CE instances with statuses of Warning, Ok, Ok, and Ok. A yellow arrow points from the "WARNING" status to the table, with the text "(weakest link)". A callout box on the right provides the data source: "Data source: CERN Grafana monitoring" with the URL <https://monit-grafana.cern.ch>.

Monitoring

Mon 07.3.2022, 9:00

Batch System

- Batch System Completed Jobs
- Batch System Job Status
- HammerCloud Interface
- SAM Status of Compute Elem...
- dCache
- dCache - Disk
- dCache - Tape
- News
- PhEDEx
- PhEDEx Incom...
- PhEDEx Outgo...
- VOBox

## HammerCloud Interface

March 7, 2022, 9 a.m. [More analysis informations](#)

OK (simple threshold)

Site	TestID	Submitted	Running	Completed	Failed	Killed	Total	Effiency
T1_DE_KIT	98418	91	5	126	0	0	222	1.0

Data source: HammerCloud status page  
<http://hammercloud.cern.ch/hc/app/cms/>

## SAM Status of Compute Elements

March 7, 2022, 9 a.m. [More analysis informations](#)

WARNING ("weakest link")

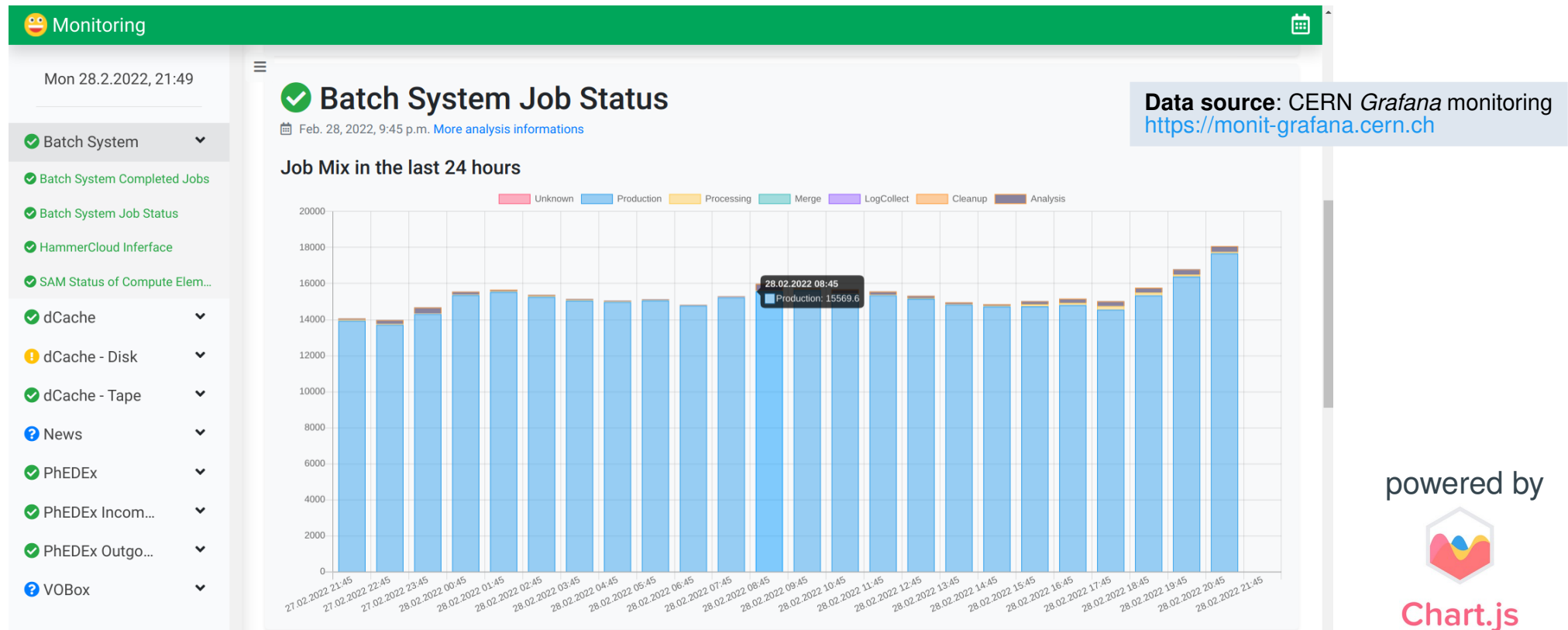
Type	Name	Status
HTCONDOR-CE	htcondor-ce-1-kit.gridka.de	Warning
HTCONDOR-CE	htcondor-ce-2-kit.gridka.de	Ok
HTCONDOR-CE	htcondor-ce-3-kit.gridka.de	Ok
HTCONDOR-CE	htcondor-ce-4-kit.gridka.de	Ok

Data source: CERN Grafana monitoring  
<https://monit-grafana.cern.ch>

# Plotting modules

<https://happyface.etp.kit.edu/>

raw monitoring data processed for building interactive graphical representations

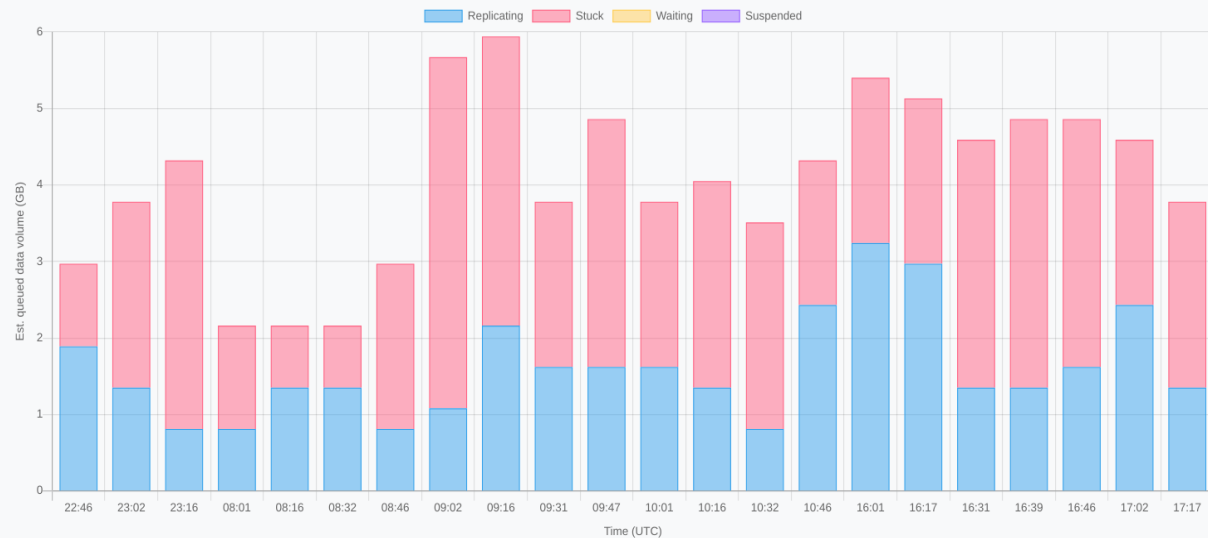


# Ongoing development – integration of Rucio

replacement of old PhEDEx modules with new data transfer monitoring based on Rucio

## ? Queued Data Transfers from KIT Disk

[More analysis informations](#)



**Data source:** *Rucio* via Python client  
<https://cms-rucio-webui.cern.ch/>

- authentication via X509 user proxy
- certificate bundle from CVMFS required
- long term → move to token-based authentication

Show Rucio rules

[Replicating](#) [Stuck](#) [Waiting](#) [Suspended](#)

[Replicating](#) [Stuck](#) [Waiting](#) [Suspended](#)

→ detailed information on Rucio rules

Rule ID	Dataset	Activity	Account	State	Last Updated
f7b2618890064b55917fffec7b54ea41	/LoadTestSource/T1_DE_KIT_Disk/TEST#270MB	Functional Test	transfer_ops	REPLICATING	March 7, 2022, 6:14 p.m.

# Summary & plans

- development of Happyface meta-monitoring tool ongoing at KIT
  - small but active team of developers
  - recent work on implementing data transfer monitoring with Rucio
  - larger topic is transition to token-based authentication
- interested in collaboration with other grid sites
  - plan to work with UHH for setting up Happyface 4 instance + testing
  - interest in Aachen?
- long-term aims:
  - make code publicly available (some things still to clarify → hosting, CI setup, secrets...)
  - collaboration beyond CMS, e.g. with ATLAS sites