

Harvester Control Center

Motivation, Requirements, Implementation and Documentation

This document is meant as a brief overview of the aims, technical considerations (API design), and few of the HCC demo screen shots.

Aims

This service is an overall interface used to register, control and deploy new harvesters. It also comes with a *scheduling service* to refresh the GeRDI index based on a time- and date schedule, as well as auto-detect changes on a repository to re-index in case changes are detected. The HCC has a built-in user management and gives users a neat interface to visualize each harvester with its current state, including other helpful metrics.

API consideration

Following is an overview description of the HCC-API design and features.

API component	URL	Description
Harvester		
GET	/v1/harvesters/	List all registered harvesters
POST	/v1/harvesters/start	Start all harvesters
POST	/v1/harvesters/stop	Stop all harvesters
GET	/v1/harvesters/:harvesterName	List information of a harvester with :name
POST	/v1/harvesters/:harvesterName/start/	Start a single harvester
PUT	/v1/harvesters/:harvesterName	Add a harvester to the list
DELETE	/v1/harvesters/:harvesterName	Remove a harvester from the list
Schedule		
GET	/v1/harvesters/schedule/	Show schedule time plan for all harvesters
DELETE	/v1/harvesters/schedule/delete/	Delete the schedule for all harvesters
GET	/v1/harvesters/:harvesterName/schedule/	Show schedule time plan for a harvester with :name
POST	/v1/harvesters/:harvesterName/schedule/	Set a time schedule for a single harvester
DELETE	/v1/harvesters/:harvesterName/schedule/	Delete a schedule for a specific harvester
Config		
GET	/v1/harvesters/:harvesterName/config/	List config of harvester with :id
POST	/v1/harvesters/:harvesterName/config/:configid	Set config parameter of a harvester
Status		
GET	/v1/harvesters/status/	get status of all harvesters
GET	/v1/harvesters/:harvesterName/status/	get status of a single harvester

Figure 1 API design overview

GUI Demo

The HCC provides an intuitive UI for its functionality. Below, there are few screen shots from registering, deploying and managing a harvester. The activities with each operation are pretty straightforward given the UI.

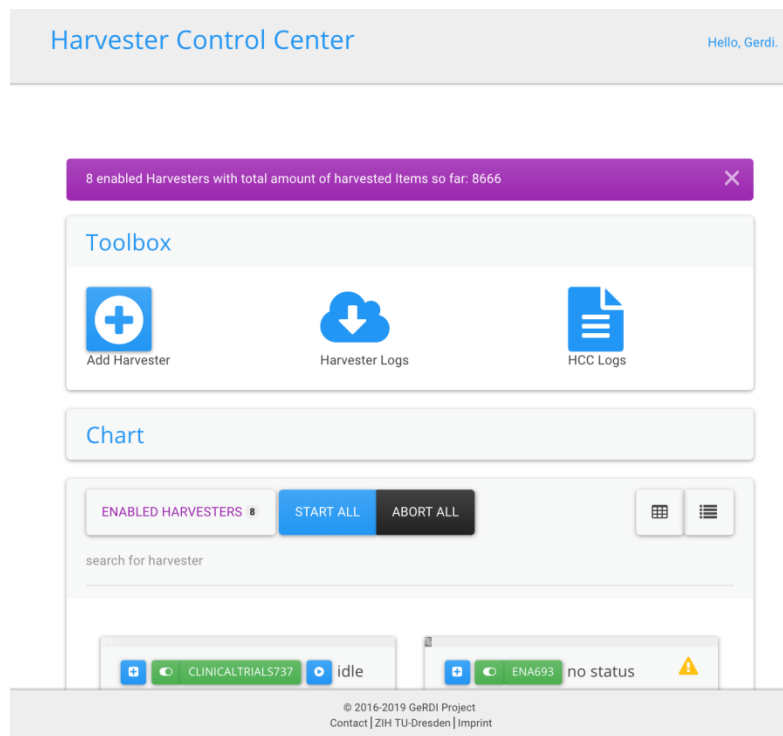


Figure 2 HCC start page: Add harvester and/or check logs

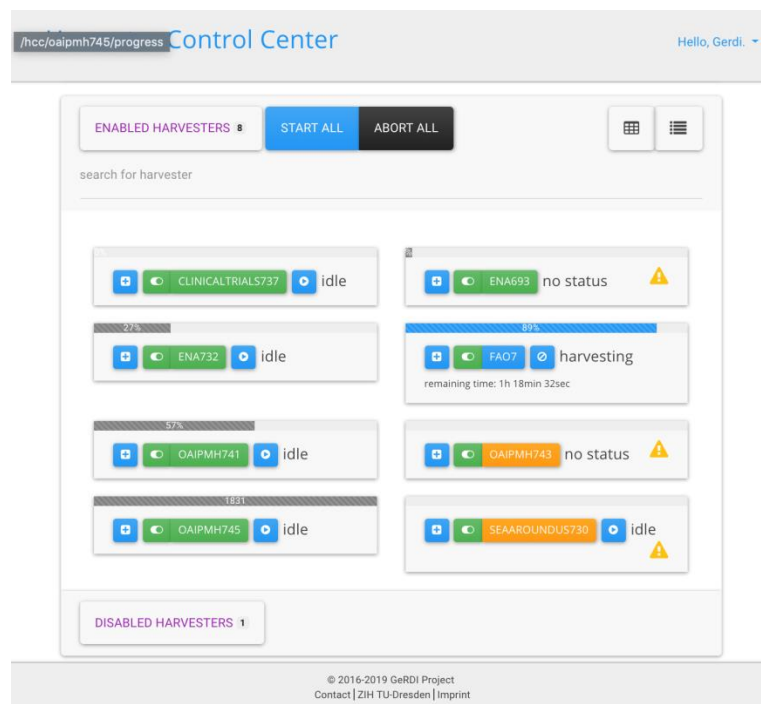


Figure 3 Active harvesters

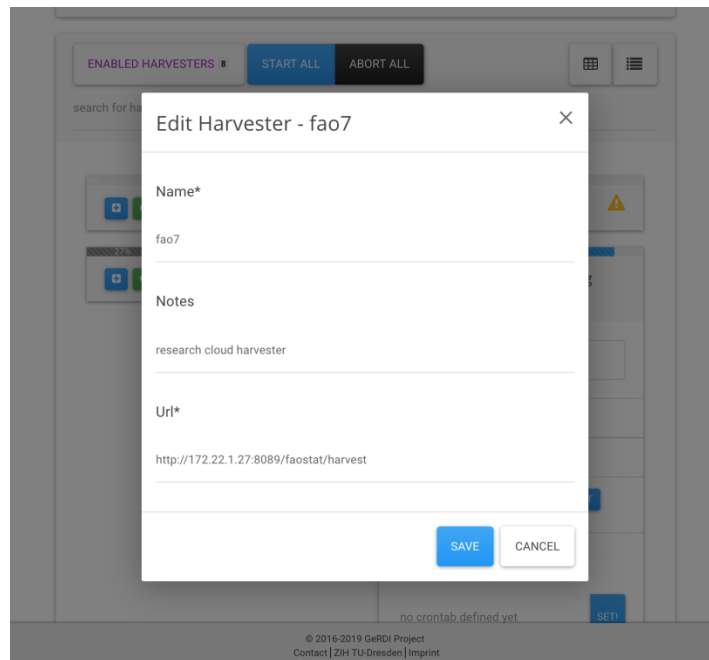


Figure 4 Information edit example

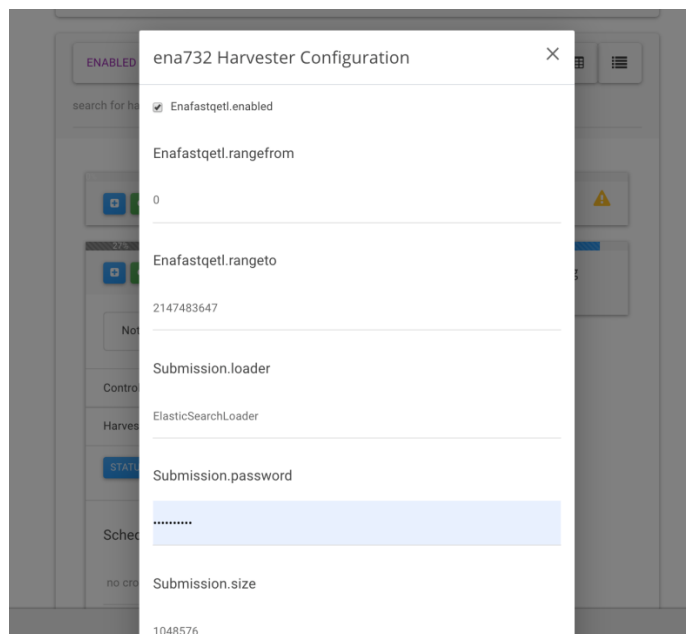


Figure 5 Harvester configuration example

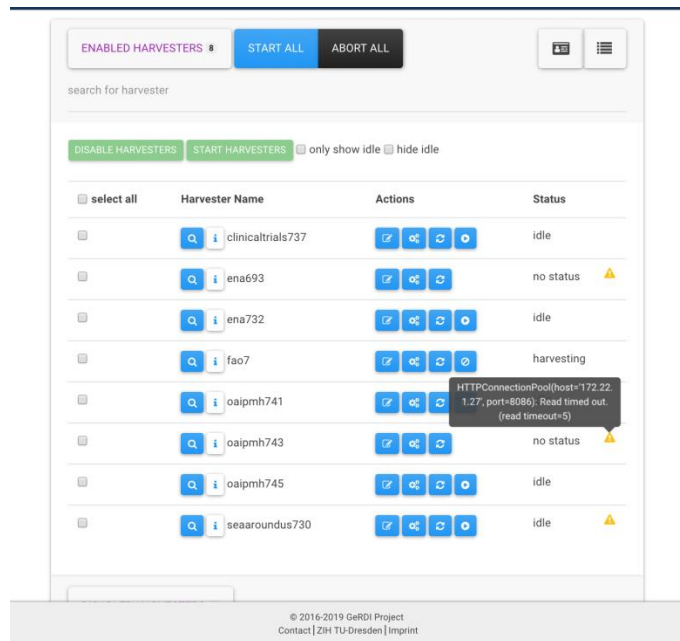


Figure 6 Harvester list

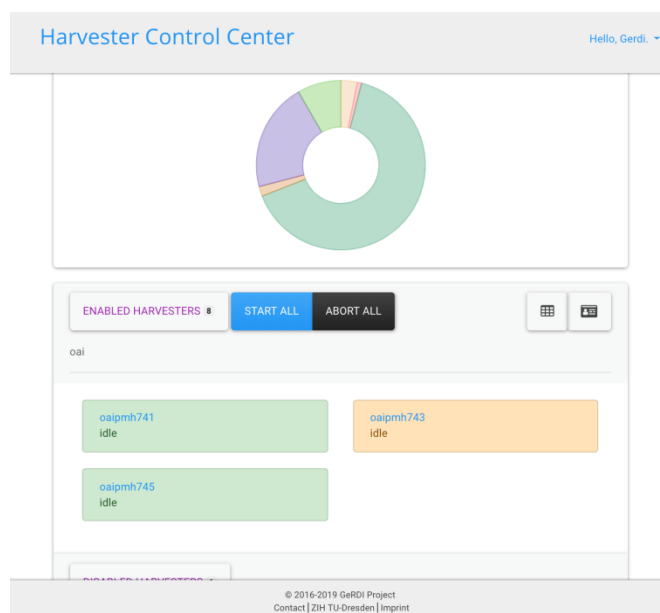


Figure 7 HCC reporting and visualization