dCache-View

Olufemi S. Adeyemi
On behalf of the project team
<Objective/>

To create a web application that provide an easy to use user interface for dCache Storage System.
This means we want to expose all the necessary features in dCache through our web application.
And this has to be **clean** and **intuitive** to the end-user.
A user interface is like a joke.

If you have to explain it, it’s not that good.
"It's easy even for great teams building great products to make big UX mistakes because it's not always clear what's going to resonate with users.” - @Real_CSS_Tricks
Cache-View (dV) is part of Frontend service

dV uses the RESTful API to communicate with dCache

At times dV talk to the WebdaV door
We started from the basic dCache View v1.0.0 in dCache 2.16

Features:

- **Authentication** – with username and password
- directories listing
- Rename
- Download
- Hover context menu
- User info – home directory path, gid and uid
- File metadata
What we’ve done?

- Migrate to Polymer 2.x
- Redesign of some elements
- Add new elements
- Add accessibility features
- dCache view Admin – see AI talk
Migration to Polymer 2.X
Result of Migration to Polymer 2.x

- Adopt new design paradigm
- Code readability
- Small library - Polymer 1.x > Polymer 2.x in size
- Modular components
- Easy to detect error
- Trouble-free migration to v3
Added new elements & redesign some:

- Rename
- Context menu
- View-file
- Pagination buttons – support drag & drop
- Add support for Roles
- New user information page
Version 1.3.x

Version 1.4.x
Version 1.3.x

System-test (built from 0f3390)

- Example.sdf: 28/05/2018, 17:43:53, Tape, 36.2 KB
- blp_bark_bunny_720p_sumwund.mp4: 28/05/2018, 17:43:53, Tape, 61.5 MB
- building.root: 28/05/2018, 17:43:53, Tape, 48.8 KB
- disk: 28/05/2018, 17:23:01, Disk, -
- door-root: 28/05/2018, 17:22:61, Disk, -
- geometry.png: 28/05/2018, 17:43:53, Tape, 53.4 KB
- lost+found: 28/05/2018, 17:23:55, Disk, -
- private: 28/05/2018, 17:23:01, Disk, -
- public: 28/05/2018, 17:23:01, Disk, -
- public-file.txt: 28/05/2018, 18:44:08, Tape, 178 Bytes
- replica: 28/05/2018, 17:23:01, Disk, -
- reserved: 25/05/2018, 17:23:01, Disk, -
- resilient: 28/05/2018, 17:23:01, Disk, -
- tape: 28/05/2018, 17:23:01, Tape, -

Version 1.4.x

System-test (built from 5f4e0a6)

- Example.sdf: 28/05/2018, 17:43:53, Tape, 36.2 KB
- blp_bark_bunny_720p_sumwund.mp4: 28/05/2018, 17:43:53, Tape, 61.9 MB
- building.root: 28/05/2018, 17:43:53, Tape, 48.8 KB
- disk: 28/05/2018, 17:23:01, Disk, -
- door-root: 28/05/2018, 17:23:01, Disk, -
- geometry.png: 28/05/2018, 17:43:53, Tape, 53.4 KB
- lost+found: 28/05/2018, 17:22:05, Disk, -
- private: 28/05/2018, 17:23:01, Disk, -
- public: 28/05/2018, 17:23:01, Disk, -
- public-file.txt: 28/05/2018, 18:44:08, Tape, 178 Bytes
- replica: 28/05/2018, 17:23:01, Disk, -
- reserved: 28/05/2018, 17:23:01, Disk, -
- resilient: 28/05/2018, 17:23:01, Disk, -
- tape: 28/05/2018, 17:23:01, Tape, -
Now – dCache View v1.4.2 in dCache 4.1

- Authentication – with OpenID connect + username and password
- directories listing
- Rename – redesign
- Download + Upload
- Move – with multiple selection
- File Metadata
- Context menu – redesign
- User Information Page
- Drag and Drop
- Quality Of Service
  - Backend information
  - Change QoS
- Create new directory
What is next? - dCache View >= v1.5.0

- File sharing with macaroon <demo>

- Viewer
  - PDF <demo> -- Video Player
  - Image <demo> -- Root
  - Hdf5 -- ODF e.g. word, spreadsheets, presentations, etc.

- Notification – see Paul’s talk

- Progressive Web Apps (PWAs)

- Upgrade to polymer v3
  - (may be) Android App
<Demo/>
I’m sorry
Cat ate my home
<thank-you />