

Plugin VIP-girder: a bridge to the future

GIRDER : data warehouse

Free and open source web-based data management platform developed by Kitware

Several instances deployed at Creatis : H2P, cad-warehouse, ultrasound-warehouse, acdc...

Different uses of girder: simple warehouse, challenge, cohort, ...

Data Mangament can be performed through an API.

Different plugins are available: Dicom Viewer,

Or in development:

Dashboard, metadata extraction and search, nifti viewer

The screenshot shows the H2P web interface. At the top, there's a navigation menu with 'Collections', 'Users', 'Groups', and 'Admin console'. Below this, a list of collections is displayed, including 'CMRDiffTools Data', 'CMRDiffTools Plugin', 'CMRDiffTools Study Group', 'CTO', 'HHeartP Tools', and 'HBISCUS STEMI'. The main content area shows a specific file 'f13d_51seg_ir_SA_200_ORIG_105' with a DICOM viewer on the left and a metadata table on the right. The metadata table includes fields like 'AcquisitionMatrix', 'AcquisitionNumber', 'AngioFlag', 'BitsAllocated', 'BitsStored', 'BodyPartExamined', 'CardiacNumberOfFrames', 'Columns', 'ContrastBolusAgent', 'ContrastBolusIngredientConcentration', 'ContrastBolusTotalDose', 'ContrastBolusVolume', 'dBc', 'DeviceSerialNumber', 'EchoNumbers', 'EchoTime', and 'EchoTrainLength'. Below the metadata, there's an 'Info' section with file size and creation/updated dates, a 'Metadata' section, and a 'Files & links' section with download buttons for 'Download test dataset', 'Download ground truth data', and 'Submit your results'. At the bottom, there's a 'LEADERBOARD' section with two tables for 'LV' and 'RV' metrics, showing columns for Rank, User, Mean DICE ED, Mean DICE ES, Mean Hausdorff ED, Mean Hausdorff ES, EF correlation, EF bias, EF standard deviation(std), Volume ED correlation, Volume ED bias, and Volume ED std.

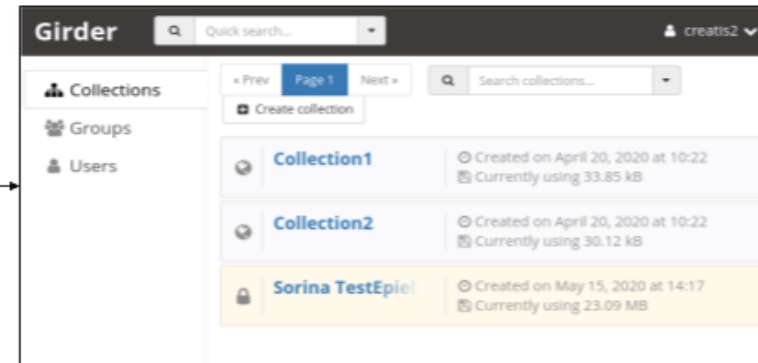
Rank	User	Mean DICE ED	Mean DICE ES	Mean Hausdorff ED	Mean Hausdorff ES	EF correlation	EF bias	EF standard deviation(std)	Volume ED correlation	Volume ED bias	Volume ED std
LV											
1	Fabian Bensee	0.968	0.931	7.384	6.905	0.991	0.178	3.058	0.997	2.668	5.726
2	Mahendra Khened	0.964	0.917	8.129	8.968	0.989	-0.548	3.422	0.997	0.576	5.501
3	Yeonggil Jang	0.959	0.921	7.737	7.116	0.989	-0.330	3.281	0.993	-0.440	8.701
4	Christian Baumgartner	0.963	0.911	6.526	9.170	0.988	0.568	3.398	0.995	1.436	7.610
5	Marc-Michel Rühl	0.957	0.900	7.483	10.747	0.989	-0.094	3.215	0.993	4.182	8.622
6	Jelmer Wolterink	0.961	0.918	7.515	9.603	0.988	-0.094	3.421	0.993	3.046	8.692
7	Clement zotti	0.957	0.905	6.641	8.706	0.987	-1.186	3.573	0.997	9.640	6.381
8	Shubham Jain	0.955	0.885	8.212	10.929	0.971	1.734	5.476	0.997	9.864	6.671
9	Ilias Grivas	0.948	0.865	8.898	11.568	0.975	-1.560	4.972	0.992	2.002	11.699
10	Xin Yang	0.864	0.775	47.873	53.050	0.926	1.496	8.731	0.894	12.232	31.964
RV											
1	Fabian Bensee	0.946	0.899	10.123	12.146	0.901	-2.724	6.203	0.988	4.404	10.823
2	Clement zotti	0.941	0.882	10.318	14.053	0.872	-2.228	6.847	0.991	-3.722	9.255
3	Mahendra Khened	0.935	0.879	13.994	13.930	0.858	-2.246	6.953	0.982	-2.896	12.650

Development of girder plugin to launch applications deployed on VIP with data stored in girder warehouses.

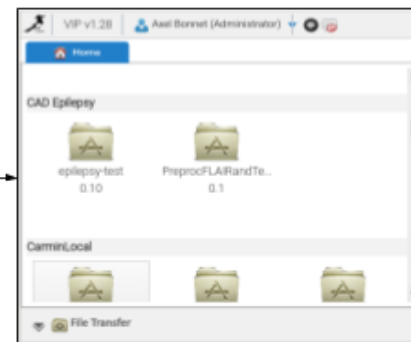
Use girder rest API, VIP rest API, CARMIN rest API to allow the exchange of informations and data.

- 1. Choose VIP application and input files
- 2. Launch and see progress
- 4. Consult results

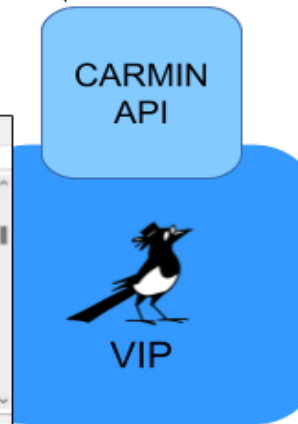
0. Only once : create account and configure API key



Girder web portal



VIP web portal



CARMIN API

VIP

[1&2&4].
Girder / VIP
communication
through APIs

3. Execution runs.
Inputs/outputs
transfers with girder



DEMO

(sponsored by **Camille**)



VIP v1.28 | Axel Bonnet (Administrator)

Home

General

My Account Publications File Transfer Execution Monitor Documentation

Gallery Messages Application Importer

System

File Transfer



VIP v1.28 | Axel Bonnet (Administrator) | Experiencing problems?

Home My Account

Already a member (user)

Note: modifications will only take effect on portal.

Change email

Password

Current

New

Re-type new

Save Changes

Forgot Password?

Link Dropbox account

Link your Dropbox account to facilitate data import.

Link Dropbox Account

Delete Account

Removing your account will remove all your data.

Yes, I want to delete my account

Delete VIP Account

Terms Of Use

You accepted [the terms of use](#) on 2019-0

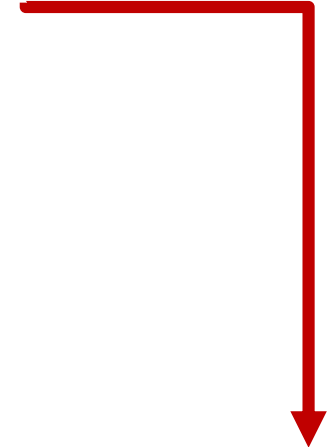
API key

Current key

m9pgol...n5agv

Delete key Generate new key

File Transfer



Collections

Groups

Users

Admin console

Creatis3 Creatis3

creat3

Profile Password API keys Two-factor authentication VIP API key

Attention : VIP applications will only be available on the files from some collections. Please contact your administrators to know which collections are eligible.

- To use VIP applications on gilder files, it is necessary to have an VIP account
- Then generate your API key in VIP > My Account > API key, and copy/paste it here

VIP - API key

Update