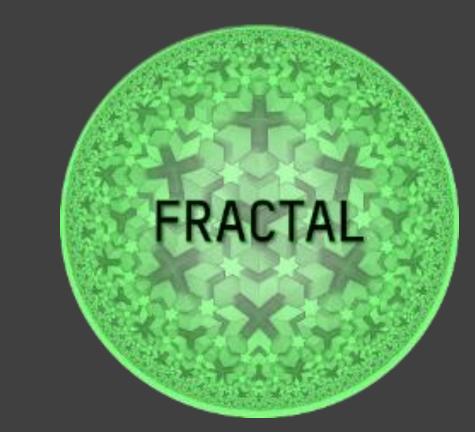
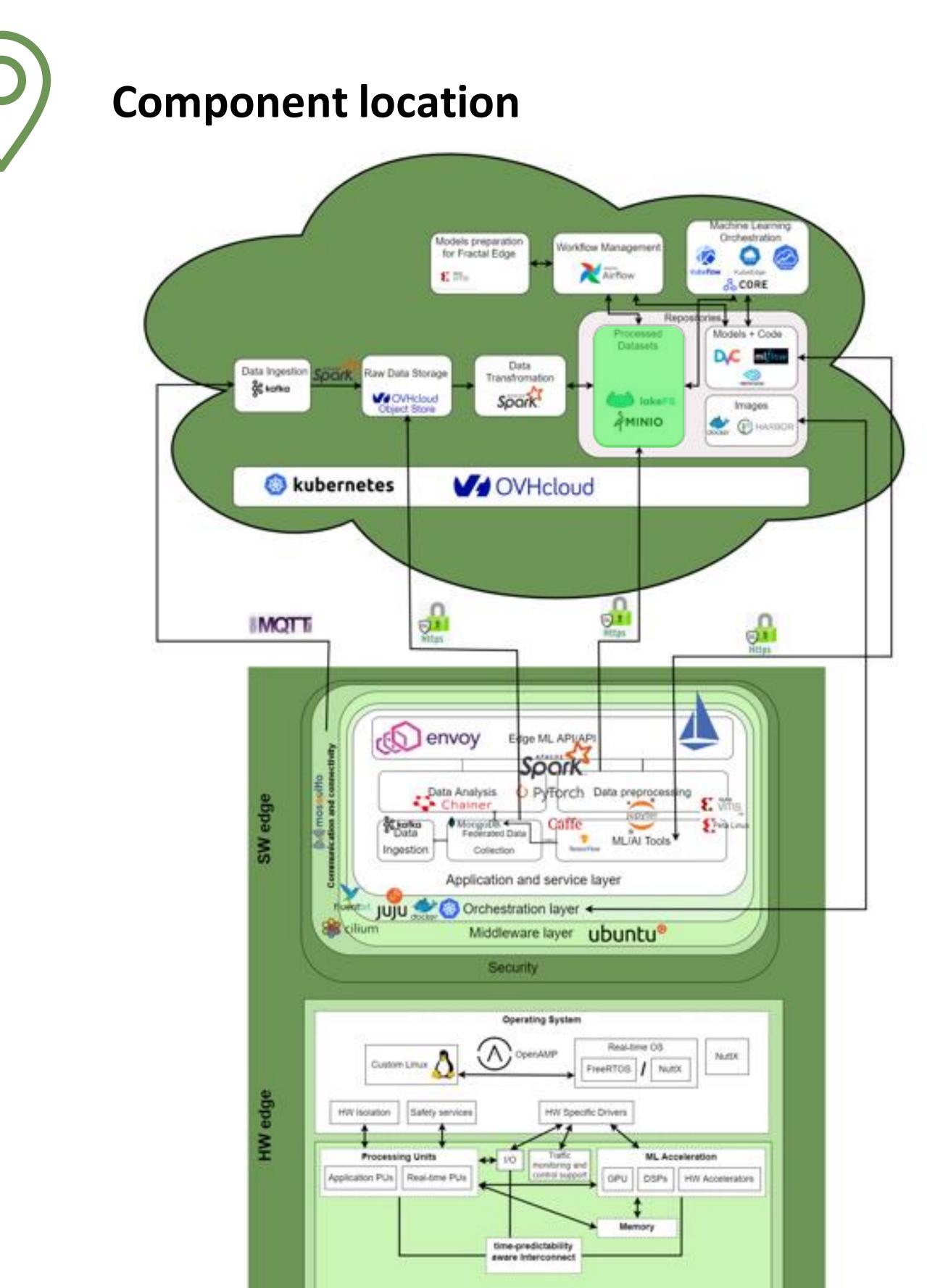
P5 AI & Safe Autonomous Decision

WP5T52-04-03 & WP5T52-04-05 : Dataset version control repository **Developed by: Ikerlan**



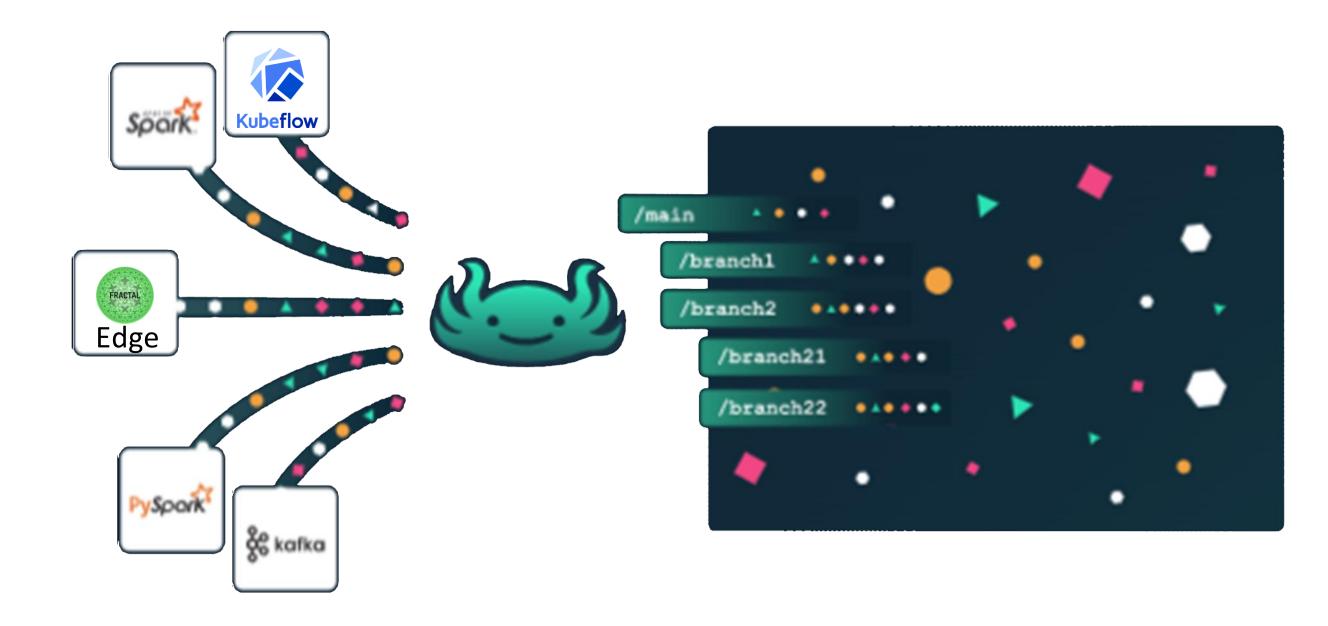
Component description

- Objective of the component: Store & manage datasets that can be used...
- Fractal Features associated:
 - ADAPTABILITY --> DATA ORCHESTRATION --> DATASET --> VERSION CONTROL
 - ADAPTABILITY --> DATA ORCHESTRATION --> DATASET --> STORAGE
 - FRACTALITY --> ORCHESTRATION --> DATA



- Integration: workflow management, machine learning orchestrator, other edge components (data preprocessing)...
- 2 Components are used for the dataset repository service:
 - MinIO (neccessary to run LakeFS on top of this service)
 - LakeFS (the actual component that provides the functionality) \bullet

Images/Diagrams to describe the component and its processes



Hardware	
Firmware	



URL: <u>http://fractal.ik-europe.eu/</u>

Ways to interact with this component:

Using the UI

• Creating users & permissions

lakeFS Repositories Administration		Create User	×
	Access Control	Usemane (e.g. jane.doe)	
	My Credentials		Create Cancel
		O kevin	09/29/2021 12:33:34
	Users	O mikel	09/29/2021 12:56:55

Access Control	Create Group Delete Selected
My Credentials	Group ID
	Admins
Users	Developers
Groups	

Using other interactions

• Python (Cloud / Edge)

<u>https://docs.lakefs.io/integrations/python.html</u>

• Airflow (Cloud)

<u>https://docs.lakefs.io/integrations/airflow.html</u>



SuperUsers Viewers

• Creating a repository & branches

C lakeFS Repositories Administration	Create A	New Repository
Q. Find a fractal created at an default brand	Repository ID Storage Name	space \$3;//example-bucket/

• Uploading & committing

Repositories ,	eFS Repositories Administration / fractal		Upload Object			
음 Objects	❶ Uncommitted Changes -⊶ Com	mits 😢 Branches 🐧 Compare 🧿 branch: main ~	fractal/main/ Object name Choose File No file chosen		G	<u>↑</u> Upload Object
		lakefs:// <u>fractal</u> / <u>main</u> /	Cancel Uplo	ad		

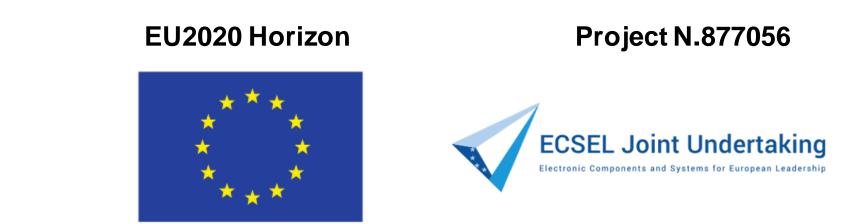
lak	eFS Repositories Admini				Create Branch	×
	/ fractal					~
-1	Uncommitted Changes	e Commite	U. Brancher	In Company	Branch Name	
cts	E oncommitted changes	Commis	p branches	C1 Compare	From branch: main 🗸	
			ev		c	ancel Create
		n	nain Default			
			nain_extended			

• Kubeflow (Cloud)

<u>https://docs.lakefs.io/integrations/kubeflow.html</u>

• Others (Cloud / Edge)

<u>https://docs.lakefs.io/integrations/</u>



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