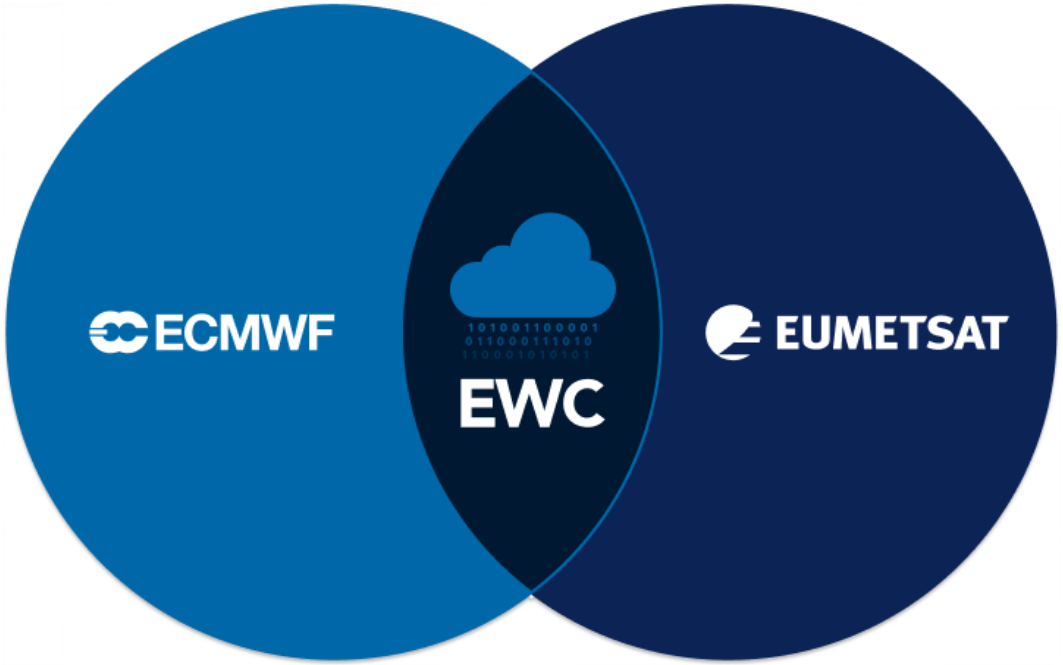
EUROPEAN WEATHER CLOUD

Introduction & overview of the EWC

Collaboration Platform for Meteorological Development from Research to Operations

Powered by: ECMWF EUMETSAT



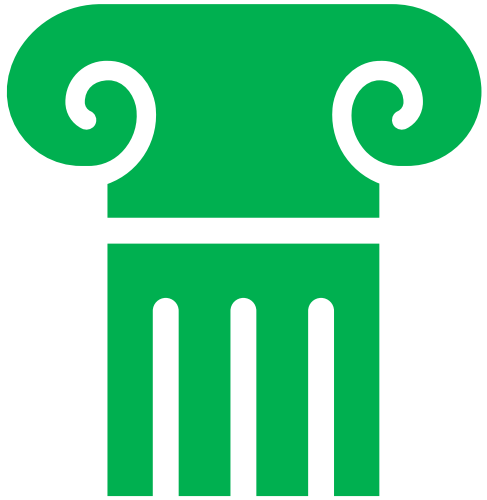
"The European Weather Cloud is the ***cloud-based collaboration platform*** for ***meteorological application development and operations*** in Europe and enables the digital transformation of the European Meteorological Infrastructure.

The European Weather Cloud is dedicated to support the National Hydro-meteorological Services of the Member States of both ECMWF and EUMETSAT in fulfilling their *official duties* to protect life and property from impending meteorological hazards."

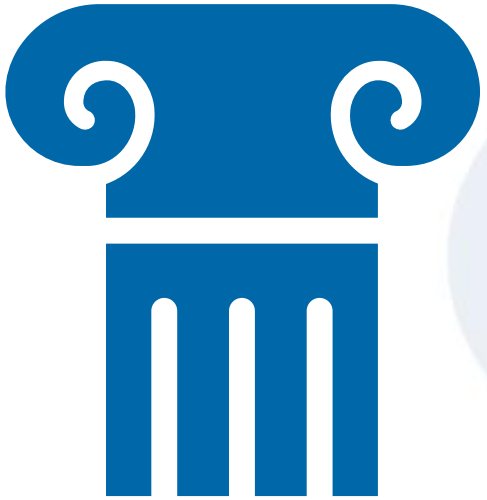
"a community cloud"

Key benefits

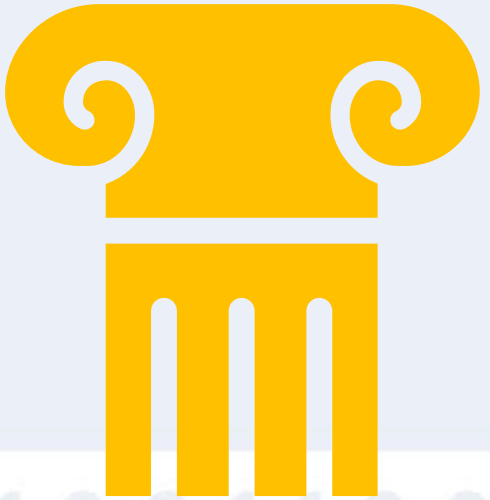
Data proximity



Flexibility

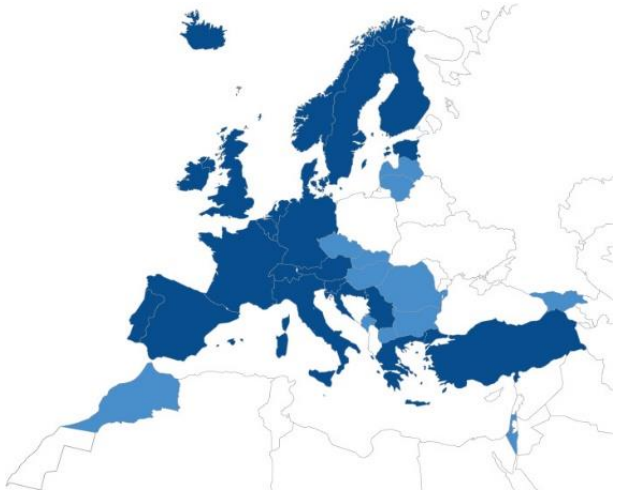


Community



Who is it for?

ECMWF and EUMETSAT Member and Cooperating States



ECMWF

Research & Development

ECMWF EMI R&D projects (formerly Special Projects)
EUMETSAT annual R&D calls

European Meteorological Infrastructure (e.g. EUMETNET)

EUMETSAT

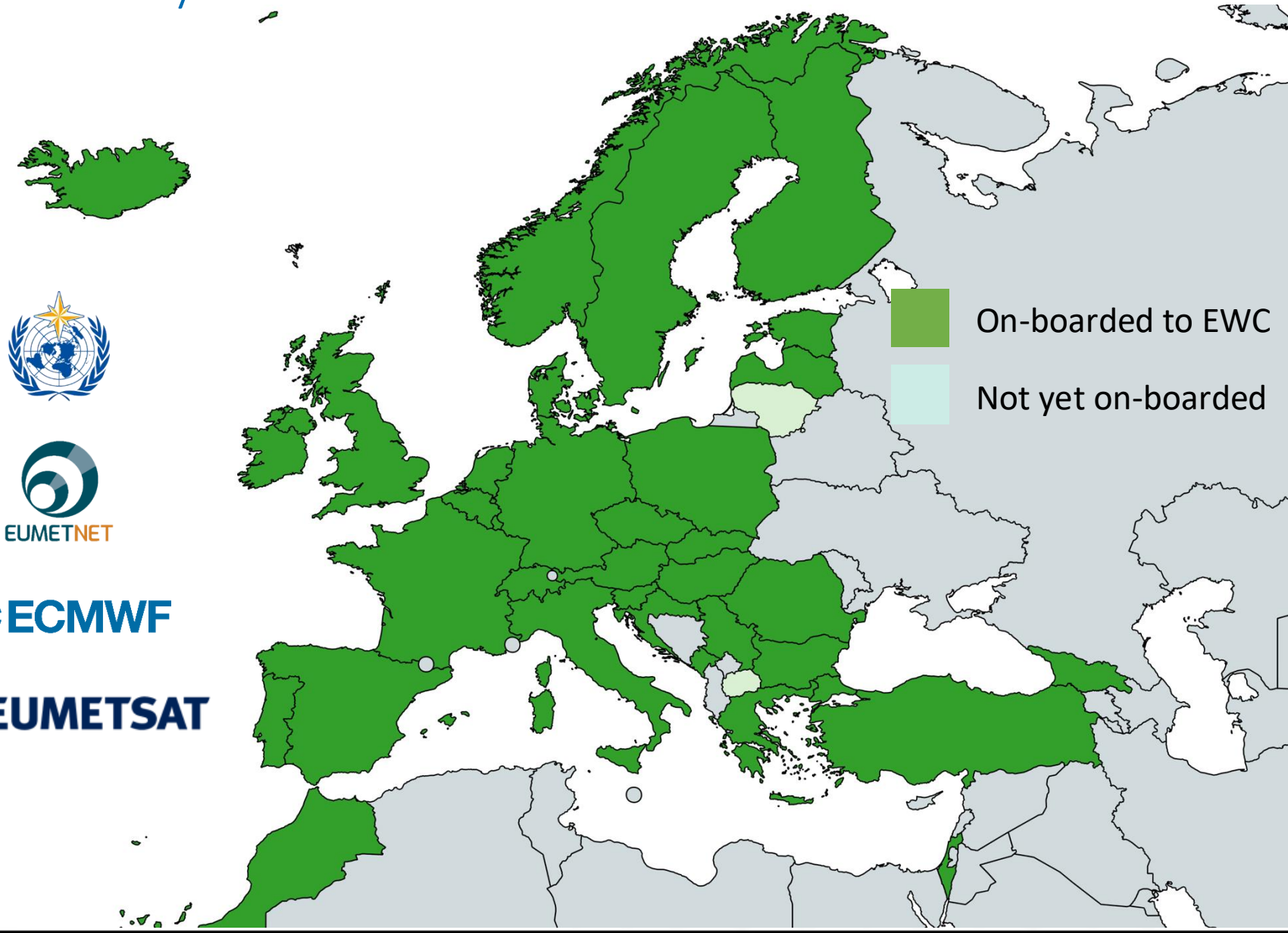
Internal use

SAFs
Support training / hackatons
International partners, contractor interaction

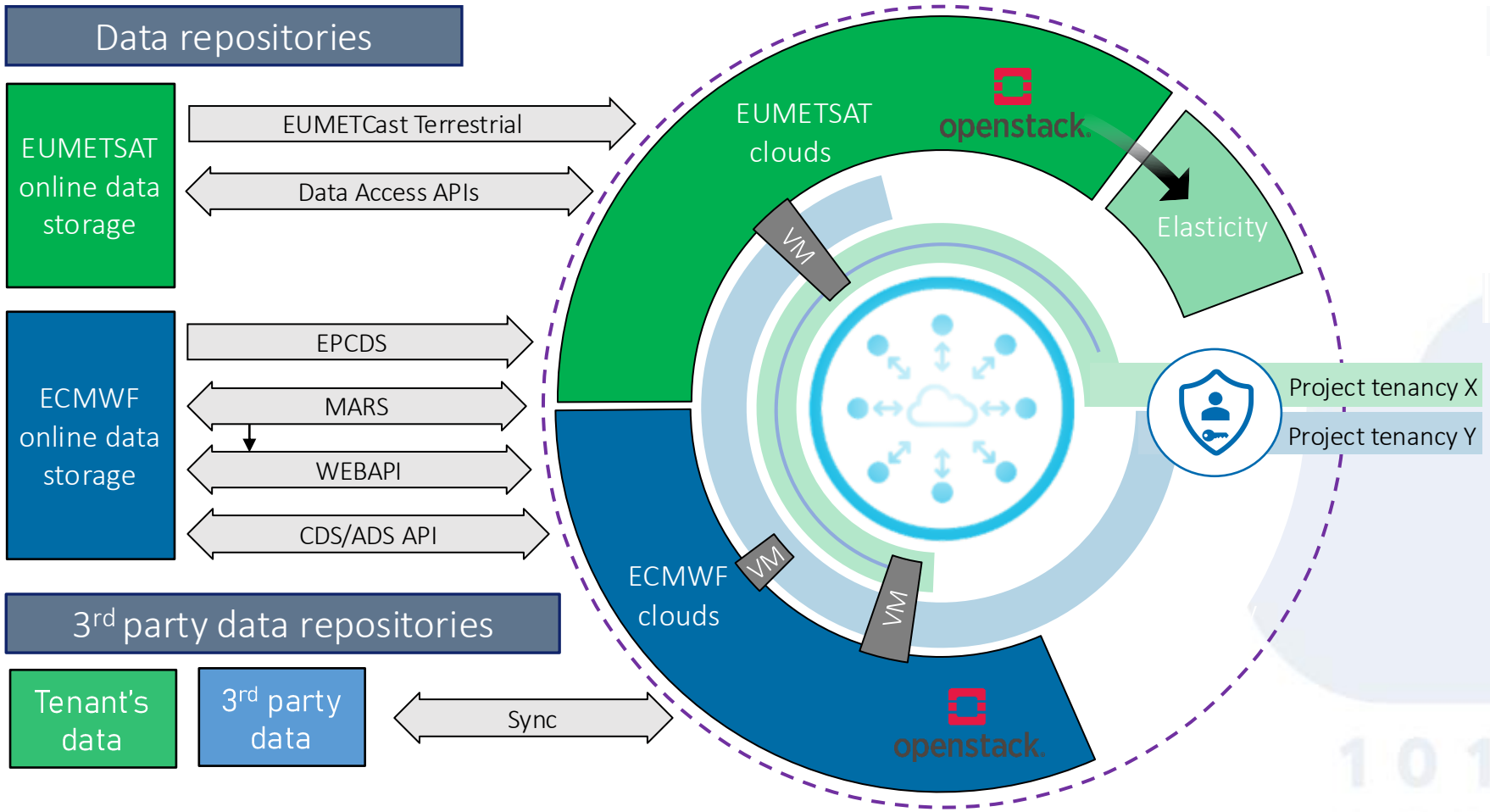
From Inception to Operations

Growing community

>20 new tenancies in 2026



Service Overview



Self-hosted services

VM and applications

- IaaS (i.e. VMs, storage, network)
- User applications
- Community-hub deployments

Centrally hosted services

Community tools

- EWC Community Hub
- Rocket chat
- Container registry

Platform services

- Kubernetes
- Batch processing
- ...

Member and Co-operating State allocations

EUMETSAT

		Example average usage			
Member state	CBUs	vCPU	Mem (GB)	Storage (TB)	vGPU
Austria	48012	64	512	63	4
Belgium	48012	64	512	63	4
Bulgaria	36009	48	384	47	3
Croatia	36009	48	384	47	3
Czech Republic	36009	48	384	47	3
Denmark	48012	64	512	63	4
Estonia	36009	48	384	47	3
Finland	48012	64	512	63	4
France	156038	208	1664	206	13
Germany	204050	272	2176	269	17
Greece	36009	48	384	47	3
Hungary	36009	48	384	47	3
Iceland	36009	48	384	47	3
Ireland	48012	64	512	63	4
Italy	120029	160	1280	158	10
Latvia	36009	48	384	47	3
Lithuania	36009	48	384	47	3
Luxembourg	36009	48	384	47	3
Netherlands	72017	96	768	95	6
Norway	48012	64	512	63	4
Poland	48012	64	512	63	4
Portugal	36009	48	384	47	3
Romania	36009	48	384	47	3
Slovakia	36009	48	384	47	3
Slovenia	36009	48	384	47	3
Spain	96023	128	1024	127	8
Sweden	60015	80	640	79	5
Switzerland	60015	80	640	79	5
Turkey	72017	96	768	95	6
United Kingdom	156038	208	1664	206	13
SAF Basic allocation	24006	32	256	32	2
SAF Specific allocation	72017	96	768	95	6
				0	
R&D calls	600146	800	6400	791	50

ECMWF

		Example average usage			
Member / Cooperating State	CBUs	vCPU	Mem [GB]	Storage [TB]	vGPU
Austria	83103	209	986	76	4
Belgium	94187	236	1118	86	5
Bulgaria	37444	94	444	34	2
Croatia	40537	102	481	37	2
Czech Republic	47082	118	559	43	3
Denmark	75113	189	891	69	4
Estonia	37202	93	441	34	2
Finland	64355	162	764	59	3
France	342036	859	4060	312	18
Georgia	34570	87	410	32	2
Germany	484115	1215	5746	442	26
Greece	55589	140	660	51	3
Hungary	42530	107	505	39	2
Iceland	36287	91	431	33	2
Ireland	70320	177	834	64	4
Israel	56457	142	670	52	3
Italy	254835	640	3025	233	14
Latvia	35598	89	422	32	2
Lithuania	36764	92	436	34	2
Luxembourg	39361	99	467	36	2
Montenegro	33949	85	403	31	2
Morocco	40653	102	482	37	2
Netherlands	135663	341	1610	124	7
North Macedonia	34323	86	407	31	2
Norway	80940	203	960	74	4
Portugal	59399	149	705	54	3
Romania	47480	119	563	43	3
Serbia	39483	99	469	36	2
Slovakia	39560	99	469	36	2
Slovenia	39726	100	471	36	2
Spain	182689	459	2168	167	10
Sweden	98207	247	1165	90	5
Switzerland	113451	285	1346	104	6
Türkiye	115369	290	1369	105	6
United Kingdom	336783	845	3996	307	18
EMI R&D	336516	845	3993	307	18

EWC entirely funded by ECMWF and EUMETSAT Member and Co-operating States

ECMWF

Cores	5632
Memory	53 TB
Storage	4.2 PB usable
GPUs	32 x A100 80 GB (10 GB partitioning)

EUMETSAT

Cores	6400
Memory	51 TB
Storage	6.4 PB usable
GPUs	400 vGPUs

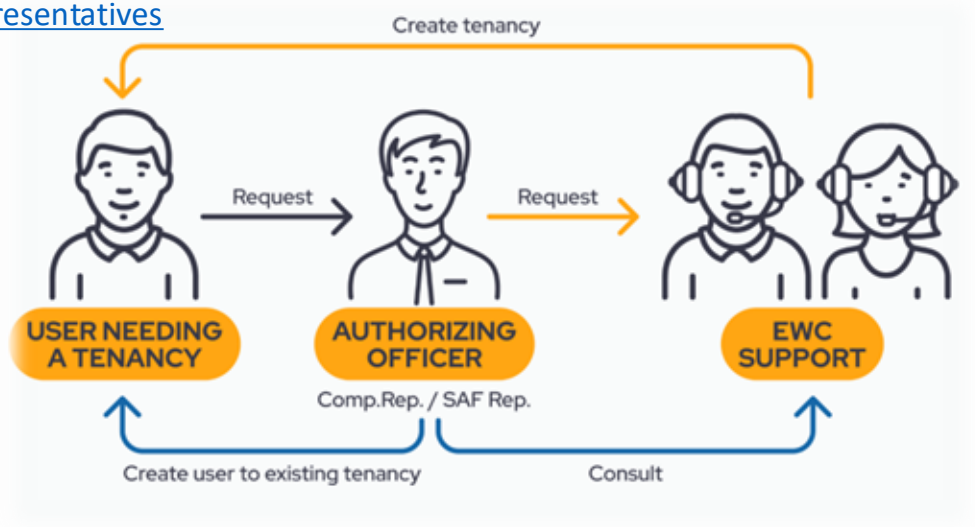
Member State shares are managed by the Computing Representatives

CBU – Cloud Billing Unit

Getting a tenancy workflow for MS/CS use

Default flow

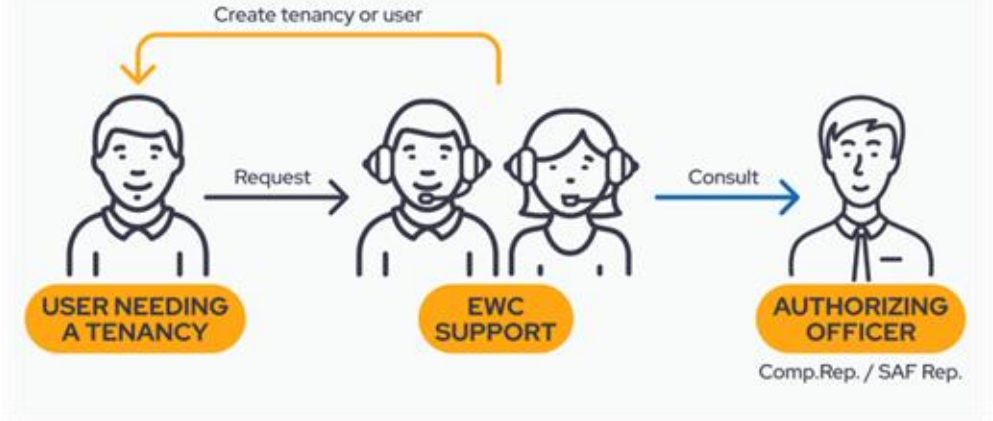
Computing Representatives



Tenancy will be created to either ECMWF or EUMETSAT side based on the primarily use case

- Tenancy can have resources at both sides
- Member states can have tenancies at both sides

Alternative flow



Users may be directly in contact with EWC support in which case support will consult authorizing officer or forward the request

EUMETSAT R&D and ECMWF EMI R&D Projects

Research & Development

Objectives on improving, development and using products in applications and using the cloud infrastructure

16 active R&D projects

Annual calls: Deadline 30 June

Fast-track / late requests possible for small projects

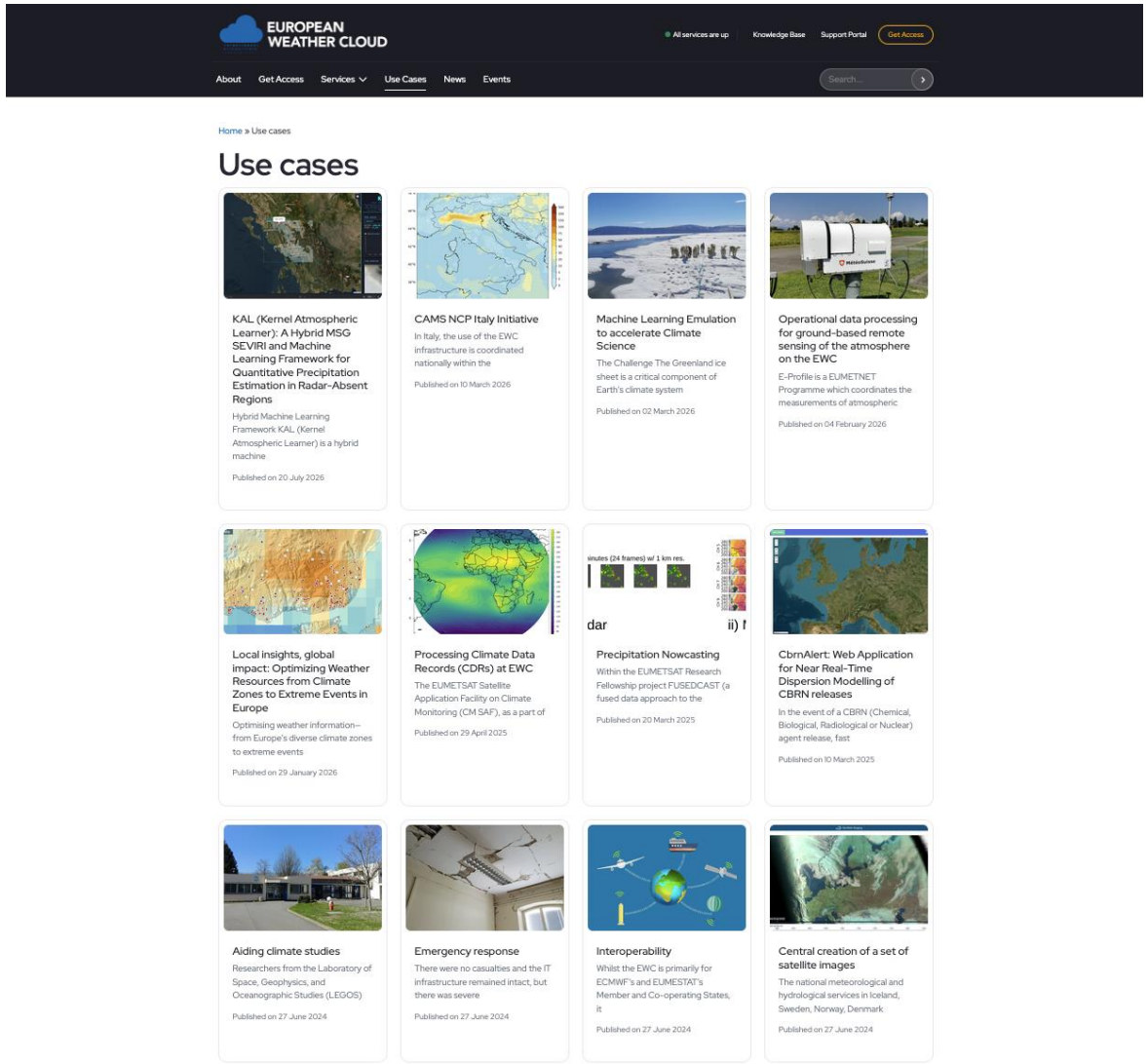
EMI Research & Development

(formerly Special Projects)

Experiments or investigations of a scientific or technical nature likely to be of interest to the general scientific community

8 active EMI R&D projects

Use Cases examples on EWC website

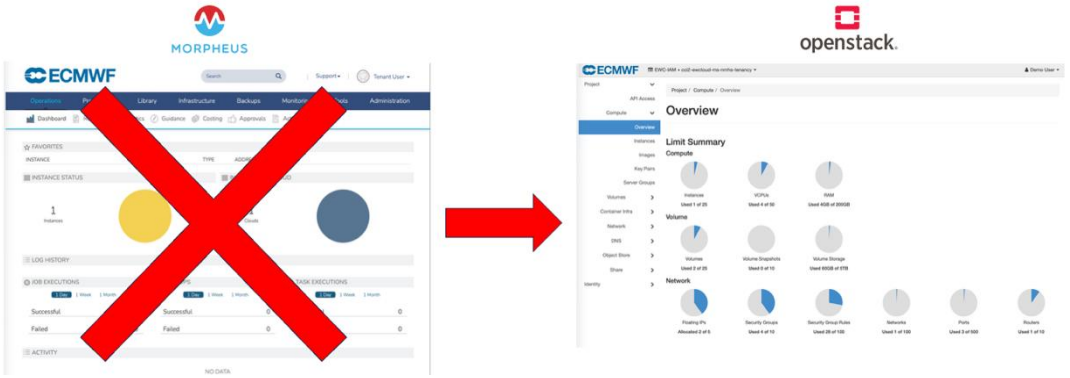


Let us know if willing to feature your use case on the website!

https://europeanweather.cloud/use-cases

Morpheus decommissioning

Both **Morpheus interfaces at ECMWF and EUMETSAT will be decommissioned in December 2026** and is replaced by **OpenStack Horizon** for the respective infrastructures



Access to Horizon via EWC IAM

EUMETSAT side of EWC is migrating to a new OpenStack cloud infrastructure

- Horizon access is being given directly on the new infrastructure (new cloud not accessible from Morpheus)

ECMWF side of EWC is NOT migrating the OpenStack cloud infrastructure

- VMs and workloads continue to run on the same ECMWF infrastructure, only the UI will change from Morpheus to OpenStack Horizon

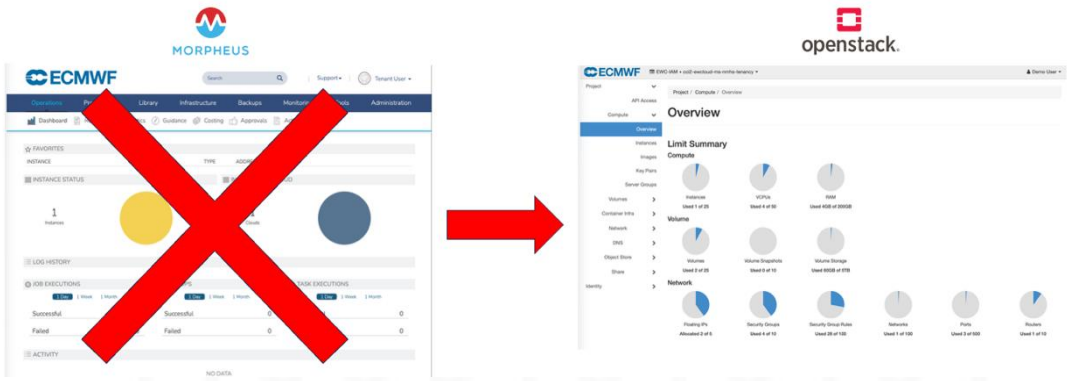
Migration of the EUMETSAT infrastructure

- The new infrastructure successfully became operational in June 2026
- Tenant migration is ongoing
  - All EUMETSAT tenants have been contacted
  - Tenants can have self-migration or assisted migration (latter one requiring downtime). All users need to migrate their data from SFS and Object Storage themselves
  - It will be sent a reminder to all users not migrated yet on bi-weekly basis in October
  - Considering holiday season and required time for the platform team for the cleanup all tenants are **strongly encouraged** to finish the migration by **end of November 2026**
  - **Hard deadline by end of 2026 – can't be extended**

Should you have any questions, please be in touch as soon as possible!

https://support.europeanweather.cloud

https://chat.europeanweather.cloud

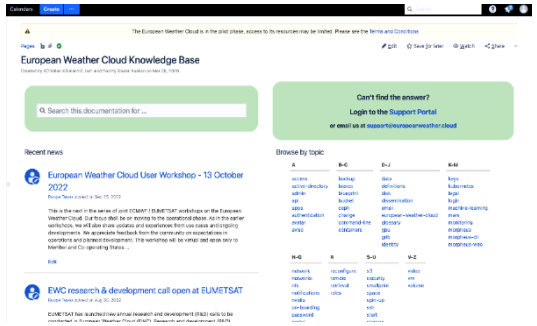


Working together

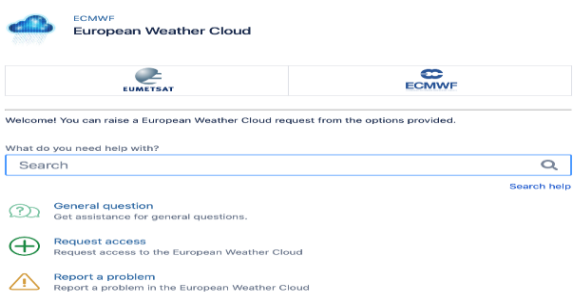
https://chat.europeanweather.cloud

Users are invited to the EWC **discussion platform**

- Three public channels for #general, #peer-support, and #random discussion
- EWC users can create their own private channels and send direct messages
- EWC staff are present
- Official documentation and support via Confluence and Jira
- Very important tool for users to stay in connect and for EWC staff to get direct feedback



Knowledge Base



User Support

https://europeanweather.cloud

Trainings and workshops

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