DHS move - MARS and ECFS

The DHS-Move started on 8 September and finished on 11 Nov 2022, see **DHS move in detail**

- Transition plan
- Main service disruptions
- Impact to MARS service
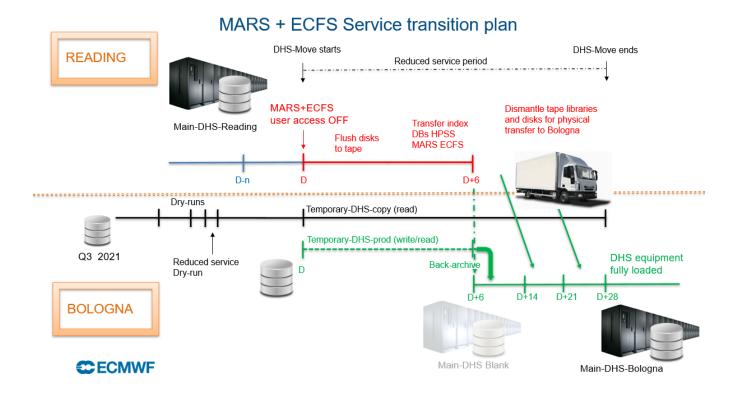- Impact to ECFS service
- Recommended user action

Transition plan

The Data Handling System (DHS), providing the MARS and ECFS services, needs to be moved to Bologna before the new Atos HPCF will produce an increased archive load. A detailed migration timeline is shown in the transition plan below where all events are relative to day D, the day when the MARS and ECFS service will stop accessing the Main-DHS-Reading. Instead the MARS and ECFS service will be provided by a temporary DHS which has been pre-filled with data necessary to continue operational and time-critical activities at ECMWF, with the aim to minimise the impact of the DHS move. After 6 days we will start filling the new Main-DHS-Blank with the data from the Temporary-DHS-prod and from the Main-DHS-Reading. At the end of the DHS-Move, expected to take 5-6 weeks, a new main DHS will become operational in Bologna. In preparation of the DHS move we will conduct a number of dry-runs during which the access to the main DHS in Reading will be blocked. The purpose of the dry runs is to verify that the Temporary-DHS does contain all essential data necessary to continue all critical activities during the move. A longer dry-run, lasting 5-7 days, expected to happen at least 4 weeks before the move, will help to establish the exact date of day D.

MARS + ECFS Service transition plan

Main service disruptions

The table below gives an indication of disruptions to the MARS and ECFS service foreseen as part of the DHS-Move. Dates are subject to change depending on experience with preceding dry-runs.

Event	Start Date /Time	Duration	Impact
Dry-run 1	5 April 2022, 8 UTC	10 hours	access limited to available data, see DHS move dry-run for more details
Dry-run 2	26 April 2022, 10 UTC	48 hours	access limited to available data, see DHS move dry-run for more details
Reduced service dry-run	28 June	7 days	access limited to available data, see DHS move dry-run for more details
DHS Move	**8 September**	**5-6 weeks**	**access limited to available data, all archive content becoming gradually available again during the move, see DHS move in detail**

Summary of impact by user group

This table highlights how specific user groups will be affected by the DHS-Move. See further below for more details on the availability of specific data.

User group	Impact
Member State User (fully registered computer user)	mars-client/WebAPI/ECFS - Access limited to available data mars-client/WebAPI - No access to historical operational data and IFS research experiments mars-client/WebAPI - No access to public datasets (TIGGE, S2S, etc.)
Web User (registered by MS)	WebAPI - Access limited to available data WebAPI - No access to historical operational data and IFS research experiments WebAPI - No access to public datasets (TIGGE, S2S, etc.)
Commercial and research user (maxch*, comarc*, resarc*, nm*)	WebAPI - No access to historical operational data and IFS research experiments WebAPI - No access to public datasets (TIGGE, S2S, etc.)

Public users	WebAPI - No access to public datasets (TIGGE, S2S, etc.)
	ADS/CDS - No access to data served from MARS tapes

⚠️ Commercial users (comarc_*) with a valid licence during the outage will have the equivalent length of the outage added to their existing contract length.

Users may also opt to terminate their licence with 4 weeks notice.

Impact to MARS service

No impact expected

The following list of **available data**, not expected to be impacted during dry-runs and the DHS-Move, will be updated in light of further migration progress:

- Recent output (~ one month) from operational production systems: All products listed in the Catalogue of ECMWF real-time products, ERA5T (near real-time), ADS data on disk or from external providers, CDS data on disk or from external providers
- Observations, analysis input, tropical cyclones for the entire period
- ERA5 data required as initial conditions for the operational hindcasts (20 years for the relevant weeks)

The following services are not expected to be impacted by dry-runs and the DHS-Move:

- Archiving into MARS
- MS Time-critical suites
- Atos HPC testing

Unavailability of service/data

Any data not listed as available during dry-runs and the DHS-Move will not be accessible, in particular:

- Public datasets
- IFS Research experiments
- Historical operational data
- ADS datasets served from MARS tapes
- CDS datasets served from MARS tapes

Impact to ECFS service

During dry-runs and the DHS-Move ECFS will be impacted as follows:

No impact expected

The following list of **available data**, not expected to be impacted during dry-runs and the DHS-Move, will be updated in light of further migration progress:

- Recent output (~ one month) from operational production systems
- Observations
- Any data written during dry-runs and DHS-Move

The following services are not expected to be impacted by dry-runs and the DHS-Move:

- Writing into ECFS
- All 'metadata' operations (listing, renames, moves, deletions, changing ownership/permissions).
- MS Time-critical suites
- Atos HPC testing

Recommended user action

- Users of MARS and ECFS are urged to check if and how their work might be affected by the DHS-Move and plan accordingly.
- Major changes to production processes etc. are best avoided during this period. For some activities the best course of action might be to avoid the migration period entirely...
- ECMWF computer users missing access to data for any critical activity during the DHS-Move should contact us at their earliest convenience with their requirements via the ECMWF Support Portal.
- Since the start of the DHS Move users need to use the modules metview/new (on Reading systems) and ecmwf-toolbox/new (on Bologna systems) to have a working MARS client inside Metview.