



What is CDNOT and what is it we want to achieve ?

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What is the CDNOT ?

A CMIP Data Node Operations Team has been appointed by the WGCM Infrastructure Panel (WIP) and include representatives from groups responsible for CMIP data nodes.

The CDNOT scope covers functions and resource issues (hardware, networks, people) related to: installing, configuring and operating all the nodes and node services in the CMIP data federation and the policies and processes involved in both managing data on a data node (including acquisition, quality assurance, citation, versioning, and publishing) and providing access services.

What is the CDNOT ?

Providing formal input to the WIP with regard to data node operations, resource issues, and other concerns related to meeting WIP requirements.

Providing formal input to any software providers as to software requirements and constraints arising from the operational environment/experience.

Maintaining documentation outlining the required resources, configuration and mandatory access services on a data node.

Agreeing how to configure federation-level services and service nodes to support WIP requirements.

Where necessary, establishing a timetable and methodology for federation-wide software migrations, upgrades or configuration changes.

What is the CDNOT ?

Drafting and maintaining guidelines describing how the CMIP data management plans should be implemented on data nodes (e.g. to cover how identifiers should be obtained and used, metadata requirements, quality control and the addition and removal of data with versioning).

Monitoring for compliance the implementation of the CMIP data management plans across the federation, and providing feedback to the WIP.

CMIP6 data challenges



Ok let's go



« Better be together from now on guys »



Progress this year

- ~60 persons on the CDNOT mailing list
- ~52 teleconference call this year
 - One slot EU/US
 - One slot EU/Australia/Asia
- Defined 5 data challenges (nickname DC1 → DC5)
 - From low complexity to high complexity
 - DC5 only is on production
- 01/2018 → 04/2018 Ready on test
- 05/2018 → 06/2018 CMIP6 data on production
- 07/2018 → 12/2018 Documentation and outreach

CMIP6 Guide

See <https://pcmdi.llnl.gov/CMIP6/Guide> (really 3 guides):

- ▶ Part 1: For participating climate modelers
 - Requirements and expectations
 - Experiment design
 - [...]
- ▢ Part 2: For ESGF data node managers and operators (under review)
 - From ESGF installation/upgrade
 - To configuration and QC control
 - Down to making the data publicly available
- ▢ Part 3: For Users of CMIP6 model output (being drafted)
 - Registering published work based on CMIP6
 - Obs4MIPs
 - [.....]

CMIP6 Guide

- 1)ESGF stack installation & upgrade,** Authors: Prashanth, Reviewers: Hans
- 2)Validation with ESGF test suite,** Authors: Sébastien G., Reviewers: Hans
- 3)Configuring data/metadata publication on the data node,** Authors: Sasha, Ag, Martina, Reviewers: Sergey, Kate
- 4)Configuring data publication on the index node,** Authors: Sasha, Reviewers: Sébastien
- 5)Configuring CoG,** Authors: Luca, Reviewers: Sébastien
- 6)Configuring data access on the data node,** Authors: Sasha, Reviewers: Eric
- 7)(Optional) Checking and fixing CMIP time coordinate,** Authors: Guillaume, Reviewers: Ruth
- 8)(Optional) Running PrePARE standalone,** Authors: Guillaume, Reviewers: Serguey
- 9)Preparing directory structure and files organization to fulfill CMIP6,** Authors: Guillaume, Reviewers: Sergey, Clare Richards
- 10)Publishing a CMIP6 dataset for the first time,** Authors: Guillaume, Katharina, Sasha, Reviewers: Sergey, Kate
- 11)Describe datasets issues and errata using the errata service,** Authors: Guillaume, Atef, Reviewers: Laurent, Kate
- 12)Unpublish data (before new version is ready),** Authors: Sasha, Reviewers: Laurent, Clare, Sergey
- 13)Publishing a new version of a CMIP6 dataset,** Authors: Guillaume, Katharina, Reviewers: Sergey, Kate
- 14)ESGF data usage metrics through the esgf-dashboard,** Authors: Alessandra, Maria, Reviewers: Laurent, Clare

Registration/Participation status

- 44 institutions/consortia have officially registered for CMIP6
- 100 models/source_id's are registered
- List of groups (with expressed intent) who have not yet registered (**missing in red**)
- List of groups who **made data available**
- List of groups who should have **data available early 2019**

ACCESS-ESM (Australia)	CESS-THU (China)	HadGEM3 (UK)	MRI-AGCM3 (Japan)
AWI-CM (Germany)	CMCC (Italy)	INM (Russia)	NICAM (Japan)
BCC (China)	CNRM (France)	IITM-ESM (India)	NorESM (Norway)
BESM (Brazil)	EC-Earth3 (Europe)	IPSL-CM6 (France)	NUIST (China)
BNU (China)	EMAC (Germany)	K-ACE (Republic of Korea)	TaiESM (Taiwan)
CAMS-CMS (China)	FGOALS (China)	MIROC-CGCM (Japan)	UKESM (UK)
CanESM (Canada)	FIO (China)	MIROC-ESM (Japan)	VRESM (South Africa/Australia)
CasESM (China)	GFDL (USA)	MPI-ESM (Germany)	
CESM2 (USA)	GISS (USA)	MRI-ESM2 (Japan)	

Feeling the heat ?

All dates in **red** are official dates from IPCC plenary in Nairobi, 2016-04, and IPCC XC meeting 2016-05-19.

2022-09: AR6 Synthesis Report

2021-02: WG1 Report Approved

2020-12: Final WG1 Draft goes to inter-governmental review

2020-06: 4th Lead Author meeting

2020-02: Post 3rd LA meeting, second-order draft sent out for expert review. **Any citations here will have to have been submitted for peer review by this date.** First-order draft can use pre-citation material.

2018-12: IPSL runs complete.

Early 2018 : IPSL data starts to flow in.

Earlier special reports (1.5C, cryosphere, land) not based on CMIP6.

Take home messages

ESGF release cycle versioning document needs to be clear outside this room also (proposal out to adopt the « ESGF docker base versioning »)

CMIP6 opening announcement has been made to the Modelling Group Community

But no announcement made globally (coordinated media announcement ?)

When will the announcement be made ? Groups that were ready early are keen to communicate on this.

A huge satisfaction



But we are not there yet...





Questions ?

