

WIS2 Gateway Hands-on

TSUBOI Kentaro

Information and Communications Technology Division
Information Infrastructure Department
Japan Meteorological Agency



WIS2 Gateway

Provisions for the Transition from the WMO Information System (WIS) 1.0 and Global Telecommunication System to WIS 2.0 (WMO-No.1323)

The following principles are appropriate for the transition.

Principle 1: Each National Meteorological and Hydrological Service (NMHS) will be able to make the migration during the agreed period 2025–2030:

- NMHSs will migrate between 2025 and 2030 at a time convenient for them. There will not be a simultaneous migration of all the WIS centres from WIS1 to WIS2.

Note: WIS centres are Global Information System Centres (GISCs), Data Collection or Production Centres (DCPCs) and National Centres (NCs).

WIS2 Gateway

Principle 2: No GTS data loss during the transition:

- During the pre-operational phase, and in coordination with the regional associations and Global Information System Centres (GISCs), WIS2 infrastructure will be established, in order to avoid data loss during the transition. The aim of this infrastructure is to ensure that data sent on the GTS can be received by a site having migrated to WIS2, and the data, previously sent on the GTS, sent on WIS2, can be received by a site still on the GTS.

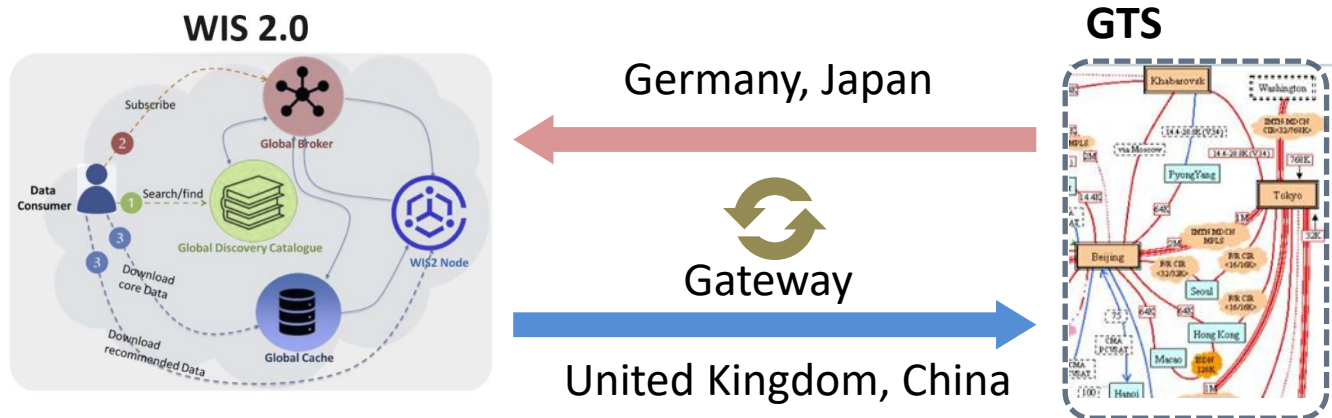
Principle 3: Each WIS centre will decide when to decommission WIS1 and GTS:

- Decommissioning WIS1 and GTS services will be the decision of each National Centre (NC), Data Collection and Production Centre (DCPC) or GISC, when they have considered that the migration is complete for them and their users;
- After migration to WIS2, there is no requirement to run a Message Switching System (MSS) to receive or send data from centres that have not made the transition. The centre will decide when and if it wishes to stop its MSS. It can also stop data dissemination to GTS.

WIS2 Gateway

Principle 4: New data (such as from the Global Basic Observing Network (GBON), or related to climate, hydrology and the cryosphere) will be exchanged solely on WIS2:

- WIS2 is designed to enable Resolution 1 (Cg-Ext(2021)) – WMO Unified Policy for the International Exchange of Earth System Data (*World Meteorological Congress: Abridged Final Report of the Extraordinary Session* (WMO-No. 1281)) and to support the WMO Global Basic Observing Network. The new data will be available on WIS2. A centre not having made the migration to WIS2 will not receive the new data. This data will not have GTS TTAAii headers and will not be exchanged over the GTS.



GTS to WIS2 Gateway (DWD, JMA)

- GTS bulletins to WIS2
- For countries that have completed the transition to WIS2

WIS2 to GTS Gateway (UK, CMA)

- WIS2 data converted to GTS bulletins
- For countries that have not yet transitioned to WIS2

GTS to WIS2 Gateway

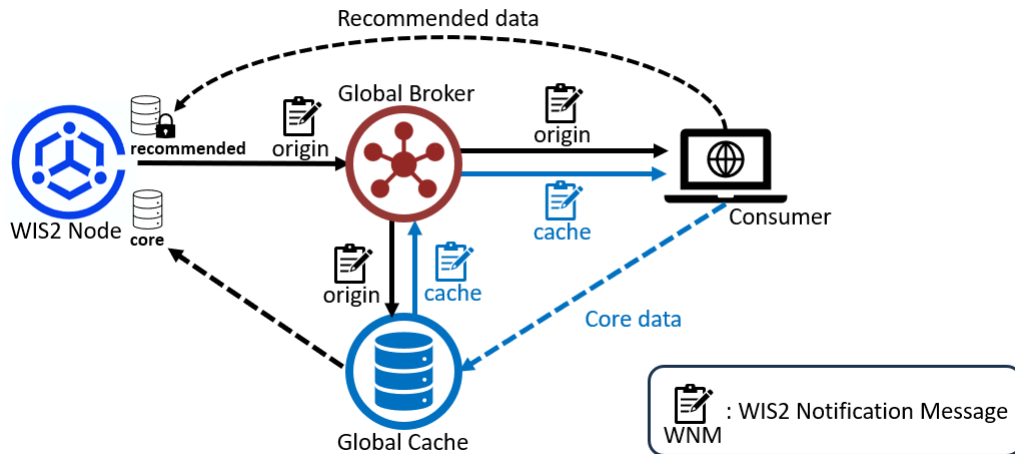
During the transition period, gateway functionality will be provided by Germany and Japan to enable access to data currently distributed via the GTS through WIS2.

- In addition to the standard WIS2 Node specifications, the GTS to WIS2 gateway will support the following:
 - The topic hierarchy for GTS data on WIS2 will be:
`origin/a/wis2/{centre-id}/data/[core|recommended]/T1/T2/A1/A2/ii/CCCC`

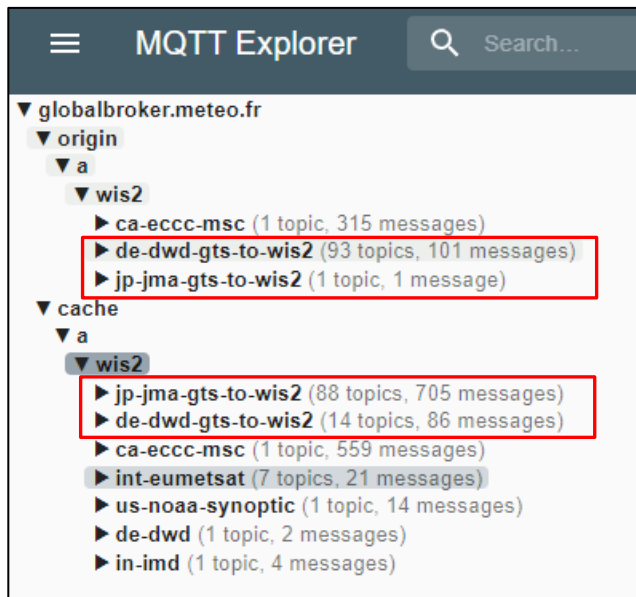
Example for DWD:
`origin/a/wis2/de-dwd-gts-to-wis2/data/[core|recommended]/T1/T2/A1/A2/ii/CCCC`

Example for JMA:
`origin/a/wis2/jp-jma-gts-to-wis2/data/[core|recommended]/T1/T2/A1/A2/ii/CCCC`
 - The `T1/T2/A1/A2/ii/CCCC` above is derived from the headers of the data received on the GTS

Hands-on: GTS to WIS2 Gateway Download



- Step1. Check Gateway's **WNMs** (origin/cache)
- Step2. Download the **core** data
- Step3. Check the **recommended** data



“Center-id” of WIS2 to GTS Gateway:
Germany (DWD) : **de-dwd-gts-to-wis2**
Japan (JMA) : **jp-jma-gts-to-wis2**