

Network time service

- All Janet services are governed by the [Janet policies](#) [1].

The Janet Network Time Service delivers to Janet customers a stable time reference to organisations using the Network Time Protocol (NTP) specified in [RFC 5905](#). [2]

The following information is available:

- [Technical Information](#)

For any queries, including joining the service, contact Janet Service Desk at help@jisc.ac.uk [3]

About the service

Janet provides five stratum-1 servers distributed across the network which peer with other time sources outside Janet. These servers are located at:

Server location	DNS names
London	ntp0.ja.net
Leeds	ntp1.ja.net
Manchester	ntp2.ja.net
Edinburgh	ntp3.ja.net
Harwell	ntp4.ja.net

It is recommended that an organisation should choose between two to four local systems to be stratum-2 servers. The local server systems do not have to be reserved systems - they can

do other work. However, they should be physically distributed around the organisation, so that they are not all on the same power supply or the same segment of a LAN. Each local server should be configured as a client of a Janet stratum-1 server, and as a peer to the other stratum-2s at the organisation.

Service updates

Continuation of planned infrastructure refresh 2021-2022

We are now continuing this upgrade work, following a temporary postponement due to the coronavirus pandemic.

Over the coming months, Jisc's critical services team will be undertaking a programme of infrastructure renewal:

- The introduction of GNSS (Global Navigation Satellite System) allowing us to access not just GPS, but also GLONASS, Galileo and BeiDou systems alongside DCF-77, MSF and Rubidium.
- The underlying NTP infrastructure will be refreshed to meet the challenges of a modern network.

In order to complete this programme of work, we will need to migrate our current infrastructure onto the new platforms with a small planned outage to each of the 5 server NTP appliances.

Our NTP1 appliance was the first to be refreshed and this was successfully completed on 12 March 2020.

Planned infrastructure refresh schedule

There will be further periods of maintenance (1 for each of the remaining NTP appliances **ntp0.ja.net**, **ntp2.ja.net**, **ntp3.ja.net**, **ntp4.ja.net**) with similar small planned outages whilst the refresh work is being completed. **A schedule will be posted here when confirmed.**

Please note that the NTP service will remain up at all times.

Whilst this infrastructure work is taking place, we strongly recommend that you configure more than 1 NTP server as a failover to ensure continuity of service using the geographically distributed servers given above.

If you have any questions regarding this service refresh or require any technical assistance, please do not hesitate to [contact us](#) ^[4] and we will get back to you.

Planned maintenance on ntp0.ja.net and ntp2.ja.net

Please note that from time to time the National Physical Laboratory carries out scheduled maintenance on their MSF transmission equipment which will affect the Janet NTP servers **ntp0.ja.net** and **ntp2.ja.net**. Any known maintenance dates are provided below. There shouldn't be any interruptions to the service, but the servers ntp0 and ntp2 will be running at stratum-2 instead of stratum-1 during these maintenance periods. For more information, please refer to the National Physical Laboratory website: <http://www.npl.co.uk/science-technology/time-frequency/products-and-services/time/msf-outages>

[5]. The remaining Janet NTP servers should be available as normal unless other maintenance work is being carried out.

2020-2021:

Scheduled maintenance by National Physical Laboratory:

- **09 December 2021 from 10:00 to 14:00 UTC**

The duration of each outage period will be kept to a minimum, and the signal may be back on-air prior to the times given above.

Current Service Issue:

ntp2 is currently running at stratum- 2

Source URL: <https://community.jisc.ac.uk/library/janet-services-documentation/network-time-service>

Links

[1] <http://community.jisc.ac.uk/library/library/janet-policies>

[2] <http://www.faqs.org/rfcs/rfc5905.html>

[3] <mailto:help@jisc.ac.uk>

[4] <mailto:securityservices@jisc.ac.uk?subject=NTP%20service%20refresh>

[5] <http://www.npl.co.uk/science-technology/time-frequency/products-and-services/time/msf-outages>