

# NTS Deployment

Public accessible NTS enabled NTP Services

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# Former Hackathon Events

NTS Hackathon projects based on draft-ietf-ntp-using-nts-for-ntp

<b>Year</b>	<b>IETF</b>	<b>Draft version</b>	<b>Implementations</b>	<b>Objectives</b>
2018	101	11	Ostfalia Univ. Franke	Proof-of-Concept
2018	102	12	Ostfalia Univ. NTF Netnod (Golang)	Proof-of-Concept Interoperability
2019	104	17	Ostfalia Univ. Chrony NTPsec Netnod (Python)	Interoperability
2019	105	20	Golang implementation (Netnod)	Interoperability
2019	106	20	Scripts for monitoring	Operation

# NTS enabled NTP Services

Organization	Access Policy	Address	Port KE	Port NTP	Implementation	Contact / URL	Level
Ostfalia Univ	Public	nts3-e.ostfalia.de	443	123	Ostfalia NTP and NTS	Martin Langer <mart.langer@ostfalia.de>	testing
Cloudflare	Public	time.cloudflare.com	1234	123	Cloudflare	<ul style="list-style-type: none"><li>– time-services@cloudflare.com</li><li>– <a href="https://developers.cloudflare.com/time-services/nts/">https://developers.cloudflare.com/time-services/nts/</a></li></ul>	testing
Netnod	Public	<ul style="list-style-type: none"><li>– nts.ntp.se (anycast)</li><li>– nts.sth1.ntp.se &amp; nts.sth2.ntp.se (unicast)</li></ul>	4443	4123	KE (Python) TS (Chrony)	<a href="https://www.netnod.se/time-and-frequency/netnod-launch-one-of-the-first-nts-enabled-time-services-in-the-world">https://www.netnod.se/time-and-frequency/netnod-launch-one-of-the-first-nts-enabled-time-services-in-the-world</a>	Between testing and production
PTB	Registration	ptbnts1.ptb.de	123	123	NTPsec	ntpadmin@ptb.de	testing
NTPsec	Public	<ul style="list-style-type: none"><li>– ntp1.glypnod.com (San Francisco)</li><li>– ntp2.glypnod.com (London)</li></ul>	123	123	NTPsec	devel@netsec.org	Between testing and production
	Public	ntpmon.dcs1.biz	123	123	NTPsec	ghane0@gmail.com	Between testing and production

# More Information

Organization	Address	Note
Ostfalia Univ	<a href="https://gitlab.com/MLanger/nts">https://gitlab.com/MLanger/nts</a>	C++
Cloudflare	<a href="https://github.com/cloudflare/cfnts">https://github.com/cloudflare/cfnts</a>	Rust
Netnod	<a href="https://github.com/Netnod/nts-poc-python">https://github.com/Netnod/nts-poc-python</a>	Python
	<a href="https://gitlab.com/hacklunch/ntsclient">https://gitlab.com/hacklunch/ntsclient</a>	Golang
NTPsec	<a href="https://gitlab.com/NTPsec/ntpsec">https://gitlab.com/NTPsec/ntpsec</a>	C

# More Information

- Martin Langer (Introduction to NTS)
  - <https://blog.webernetz.net/network-time-security-new-ntp-authentication-mechanism/>
- Cloudflare (Aanchal Malhotra)
  - <https://blog.cloudflare.com/secure-time/>
- Netnod (An introduction to NTS and how to use it)
  - <https://www.netnod.se/blog/what-network-time-security-and-why-it-important>
  - <https://www.netnod.se/time-and-frequency/how-to-use-nts>
- NTPsec (how to start using NTS)
  - <https://docs.ntpsec.org/latest/NTS-QuickStart.html>