Subject: How to Sync computer Time in a network? Posted by sinpeople on Mon, 28 Dec 2020 09:05:04 GMT

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Hi folks,

In a network where multiple clients reporting timing-sensitive information to a server, how can the synchronization of computer time be done in this situation? Time accuracy needs to be <10ms difference in all computers.

Thank you!

Best Regards David

Subject: Re: How to Sync computer Time in a network? Posted by dolik.rce on Mon, 28 Dec 2020 12:21:18 GMT

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Hi,

This should be the job of the system administrator(s) of those computers:) Network time protocol is usually used to take care of this. There are many implementations of NTP servers and clients for all platforms, so it should be an easy task.

Best regards, Honza

Subject: Re: How to Sync computer Time in a network? Posted by mr_ped on Mon, 28 Dec 2020 13:22:48 GMT View Forum Message <> Reply to Message

sinpeople wrote on Mon, 28 December 2020 10:05Time accuracy needs to be <10ms difference in all computers.

With modern 100Mbit networks you have some chance to achieve this, but it's far from "guaranteed", and also I'm struggling to see how you will verify it.

Plus the PC itself will drift over time from the accurate time, not sure what modern PC numbers are, but back in 90's the PC RTC did drift couple of seconds per day, so you should resync often.

Overall if you *must* have all computers synced all the time, and you have no fallback/recovery plan, I have very bad feel about this, you probably shouldn't use PC and Internet for such task.

Subject: Re: How to Sync computer Time in a network? Posted by deep on Mon, 28 Dec 2020 15:42:57 GMT

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Check these links for NTP

https://stackoverflow.com/questions/97853/whats-the-best-way-to-synchronize-times-to-millisecond-accuracy-and-precision-b

https://www.meinbergglobal.com/english/sw/ntp.htm

Subject: Re: How to Sync computer Time in a network? Posted by jjacksonRIAB on Mon, 08 Feb 2021 05:34:41 GMT View Forum Message <> Reply to Message

Without further details I feel compelled to ask: are you sure you need it? I remember one case where a client wanted synchronized times for some software and he ran into tons of trust-related issues, even with NTP. The solution to this problem was simple - just let the server track all the times based on when it receives an event. Then you don't need any complex synchronization across the network.

Everyone else gave you the common answer so I just wanted to make sure you weren't overthinking it and trusting client machines too much (especially when there is money involved - imagine if someone realized they could manipulate value by simply changing their system clock).