

HP NonStop Time Synchronization software

Data sheet



The HP NonStop Time Synchronization product synchronizes clocks between NonStop, Linux, and Microsoft® Windows® systems, as well as NTP sources.

The HP NonStop Time Synchronization product provides a low-cost solution to your time synchronization needs for many types of HP Integrity NonStop server configurations. Available for NonStop Integrity, NonStop S-series, and hybrid systems, this package allows you to choose a time source and keep your system clocks synchronized throughout your business.

There are many reasons to synchronize time across complex system configurations. You need to have the capability to correlate events and activities across systems as well as have the ability to recognize the time and order in which events have occurred. This is an important consideration in understanding data flow and application behavior, as well as how the sequence of events and operational commands have impacted system behavior. In general, it is necessary to keep all system clocks synchronized when managing hybrid and complex system environments.

The HP NonStop Time Synchronization product was created to address two separate but related objectives. The first is to synchronize clocks within a network and the second is to synchronize clocks with the outside world. While the first objective is sufficient for many installations because it allows local system activity to be correlated, the second becomes more important in cases where local systems must interact with systems and networks outside of a business.

HP NonStop Time Synchronization consists of three products—a special edition for each of the NonStop, Linux, and Windows platforms. Any platform or system in a network can be designated as a Time Synchronization Server. This includes establishing the NonStop, Linux, or Windows-based machine as a Time Server. In addition, HP NonStop Time Synchronization can utilize any Network Time Protocol (NTP) or Simple NTP (SNTP) server as a Time Server.

The NonStop Edition of the product supports both the HP Integrity NonStop and NonStop S-series platforms for Guardian and Open System Services (OSS) executables. The Linux Edition supports Red Hat Enterprise Linux 3.0 or later as well as SUSE 9 or later. The Windows Edition supports Microsoft Windows XP, Windows Server 2003, and Windows Vista®.

NonStop Time Synchronization provides a low-cost solution to your time synchronization needs.

Key features and benefits

- Allows NonStop system clocks to be synchronized between all systems within a cluster or Expand network
- Allows system clocks to be synchronized between NonStop, Linux, and Windows systems
- Allows system clocks to be synchronized with an NTP source
- Synchronizes clocks between systems automatically in a cluster or network; requires no user intervention to invoke synchronization
- Helps ensure that time updates occur safely on all platforms, and prevents time from moving backward unless it is configured to do so

General features include:

- Allows any platform to act as a Time Synchronization Server
- Allows any platform to operate as a Time Synchronization Client
- Supports both Guardian and OSS environments on NonStop servers
- Runs as a service on Microsoft Windows and as a daemon on Linux
- Integrates with native event management service on each platform to enable logging of critical events
- Maintains a time synchronization log file of activities
- Involves no system overhead or impact on performance
- Provides the Timecom command interpreter (CI), which can be used to dynamically alter the configuration and obtain status information

Client Features include:

- Provides up to microsecond accuracy, depending on the system
- Can be configured to safely update system clocks by preventing both backward time changes and drastic jumps in time
- Includes Multisource mode, which permits clocks averaging from among multiple sources to yield a more accurate reference time
- Provides configurable offset for system clocks not kept in GMT or UTC
- Offers a report-only mode, which can be used to report time differences between the local system and reference sources without updating the local system time

Server features include:

- Provides the ability to act as time source for any system running time synchronization in Client mode
- Has the capability to act as the time source for any system running an NTP or SNTP client
- Allows systems that do not keep system time in GMT or UTC to act as time sources via configurable offset

While time synchronization has always been an issue for computer systems, it is even more critical today because of the increasing number of distributed applications being deployed. This is the case not only on Integrity NonStop servers but also in hybrid environments. In order

to effectively understand and manage those applications and systems, it is imperative that system clocks be synchronized. Without such synchronization, it quickly becomes impossible to correlate data from multiple system sources, which, in turn, makes it extremely difficult to understand transaction flow, pinpoint bottlenecks, and resolve problems that arise. HP NonStop Time Synchronization addresses these issues by providing a robust and reliable mechanism for maintaining synchronization between the system clocks in your enterprise network.

Technical specifications

HP NonStop Time Synchronization—NonStop Edition

Hardware	Any HP NonStop server
Software	HP NonStop operating system, any supported release, includes OSS support

HP NonStop Time Synchronization—Linux Edition

Hardware	Any i386, AMD32, or AMD64-based system
Software	Red Hat Enterprise Linux 3.0 or later; SUSE 9.0 or later

HP NonStop Time Synchronization—Windows Edition

Hardware	Any i386, AMD32, or AMD64-based system
Software	Microsoft Windows XP, Windows Server 2003, and Windows Vista

Ordering information

HP Integrity NonStop NS-series servers

Part number	Description
HNTS01V1	HP NonStop Time Synchronization—NonStop Edition
HNTS02V1	HP NonStop Time Synchronization—Linux Edition
HNTS03V1	HP NonStop Time Synchronization—Windows Edition

HP NonStop S-series servers

NTS01V1	HP NonStop Time Synchronization—NonStop Edition
NTS02V1	HP NonStop Time Synchronization—Linux Edition
NTS03V1	HP NonStop Time Synchronization—Windows Edition

HP Services

HP's end-to-end service solutions, built on the Solution Lifecycle (SLC) process, offer consistent quality and service levels for the Integrity NonStop servers. The SLC process helps to achieve rapid productivity and maximum availability by examining specific needs at each of five distinct phases (Plan, Design, Integrate, Install, and Manage) and then designing solutions based upon those needs. We offer three different service solutions designed to meet customer needs:

HP Critical Service Solution

- Startup and Deployment Services—build the solution to your exact specifications, complete the installation, and make the solution application ready
 - Assessment and Design Services—define requirements and translate your business and technical needs into a solution that melds the necessary hardware and software
 - Deployment Management Services—up-front project coordination from HP
 - Education Services—training curricula relevant to needs and existing expertise based upon a needs analysis
- HP Critical Service—comprehensive, ongoing support designed to help minimize the business impact of downtime on mission-critical applications

HP Proactive Service Solution

- Startup and Deployment Services
- HP Proactive 24 Service—integrated hardware and software support, including proactive and reactive services to improve stability and availability throughout your IT environment

HP Foundation Service Solution

- Startup and Deployment Services
- HP Support Plus 24 Service—integrated hardware and software support services designed specifically for your technology

For more information: www.hp.com/services/nonstop

For more information

To learn more about HP NonStop Time Synchronization software and solutions provided for NonStop servers, contact your HP sales representative.

HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire and manage your HP solutions. For more information about these services, contact your HP sales representative or visit:

www.hp.com/go/hpfinancialservices

© Copyright 2007 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft, Windows, and Windows Vista are U.S. registered trademarks of Microsoft Corporation. .

For more information, visit www.hp.com

4AA1-4561ENW, August 2007

Document available in electronic format only.

