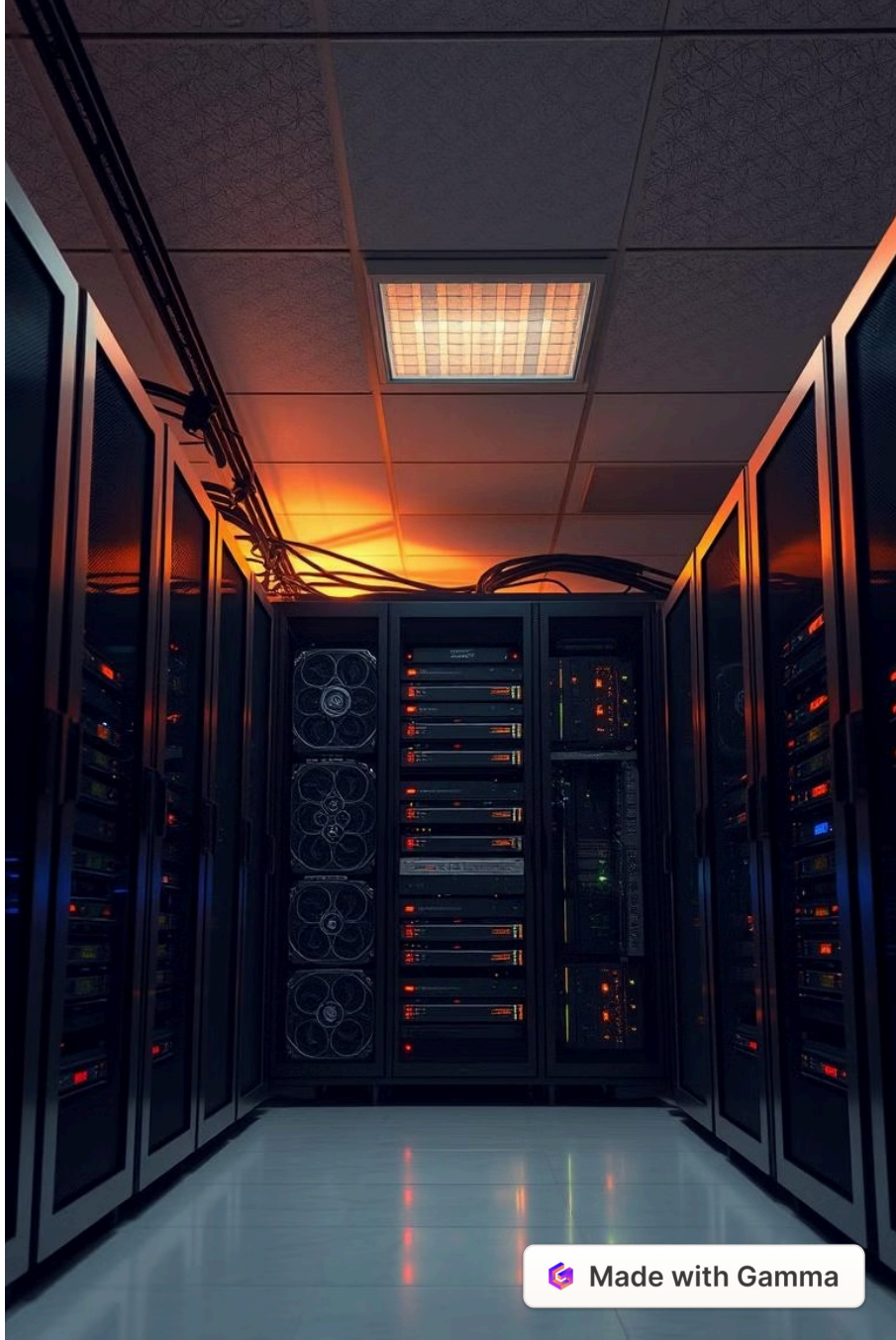
NPT Service in Linux

An NTP (Network Time Protocol) server helps synchronize the time across networked devices.



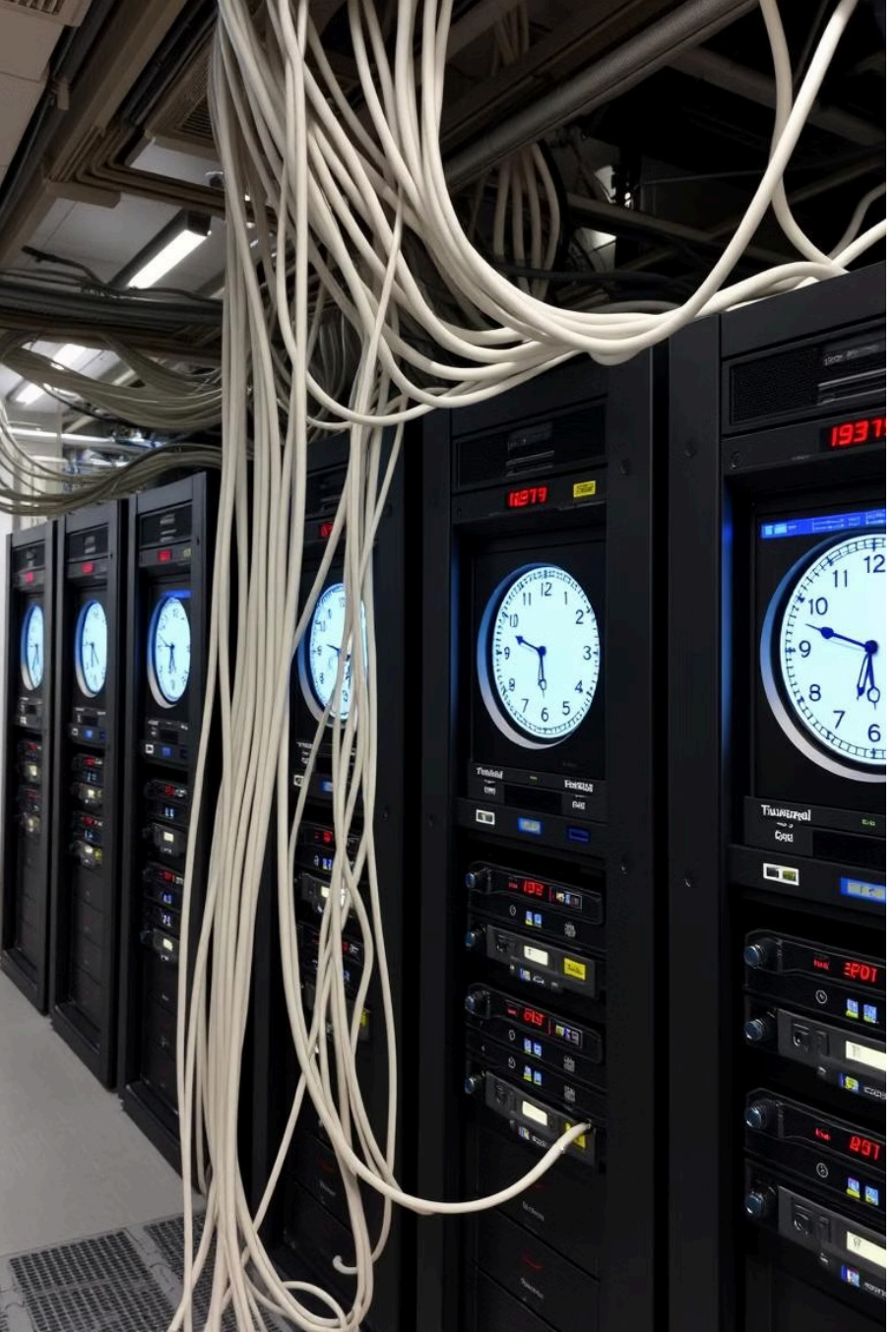
What is NPT Service?

Time Synchronization

NPT is a network protocol for synchronizing clocks on computers.

Accuracy and Reliability

NPT ensures accurate and reliable timekeeping across a network, essential for various applications.



Importance of Time Synchronization

1 Log Auditing

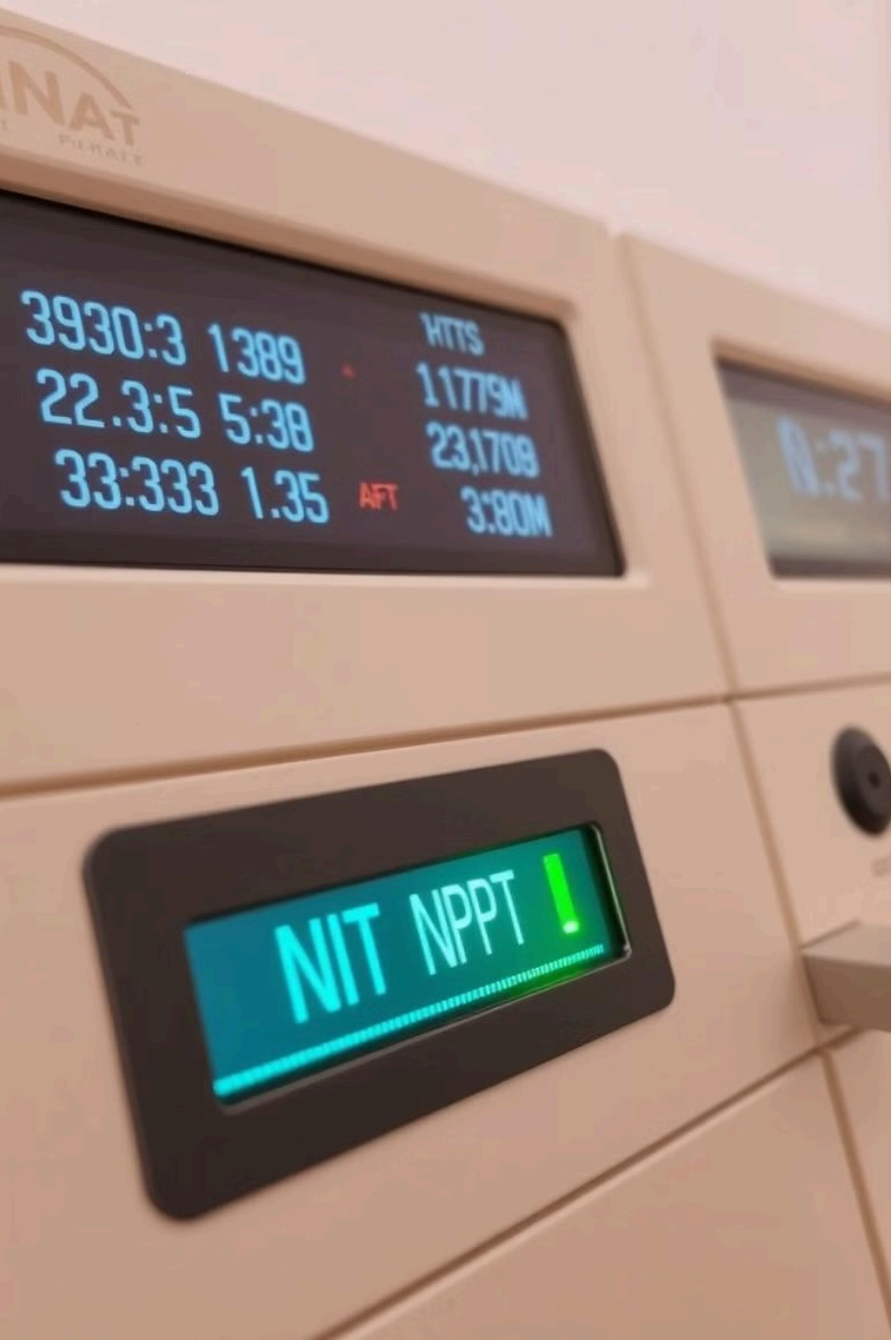
Accurate timestamps are crucial for tracking system events and security breaches.

2 Network Monitoring

Synchronized clocks help diagnose network issues and track performance metrics.

3 Distributed Applications

Time synchronization is essential for coordinating processes in distributed applications.



NPT Server Configuration Requirements.

Installation

Install the `ntp` package using your package manager.

Ex - yum install chrony

Configuration

Edit the `/etc/chronyd.conf` file to specify time sources and settings.

Service Management

Start, stop, and enable the `**chronyd**` service.

Configuration

1. **Go to /etc/chrony.conf**
2. **comment the already running pool.**
3. **Do the entry of the npt server from the google and provide iburst parameter.**
4. **Restart the chronyd service as we made chnages in the conf file.**
5. **check with chronyc sources -v.**
6. **Also check with timedatectl command.**

TAR

`tar` (short for **Tape Archive**) is a command-line utility in Linux used for archiving multiple files and directories into a single file, often called a **tarball**. It is commonly used for backup, compression, and file distribution.

Syntax

tar [options] [archive-file] [files/directories]

1. Create a `.tar` Archive (Uncompressed)

tar -cvf backup.tar /home/user/Documents

- `-c`: Create a new archive
- `-v`: Verbose (show files being added)
- `-f`: Specify archive file name

Example

tar -cvf backup.tar /home/user/Documents

check with du -sch

Compression with `tar`

-z → Compress with gzip (.tar.gz)

-j → Compress with bzip2 (.tar.bz2)

-J → Compress with xz (.tar.xz)

Examples

1. **tar -cvzf backup.tar.gz /etc.**
2. **tar -cvjf backup.tar.bz2 /etc.**
3. **tar -cvJf backup.tar.xz /etc.**

check with du -sch filename.

Tar extract

1. **tar -xvf backup.tar**

2 **tar -c /etc_backup -xvf backup.tar.bz2 (extract at custom location)**

Tar View or Preview

1. **tar -tvf backup.tar**

Find

1 find / -size +50M

2 find / -inum 1234

3 find / -perm 775

4 find / -name "filename"

5 find / -user username

6 find / -uid 1001

7 find / -gid 1001