

AP-GTR250

GPS based Embedded NTP Server

NTP Server Duplication



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Product Overview

AP-GTR250 Embedded GPS NTP Server

- Compact Size Embedded NTP Server Solution for SMB
- IP based GPS Time Receiver (Location Free, etc)
- Embedded NTP Server Solution
- Simple NTP Protocol Support
- External Antenna Interface Support
- Various Antenna Support for GPS Signal (Option, Default : 10m GPS Antenna)
- Hour/Minute/Sec GPS Time Display LED
- LED Support for GPS SYNC Indication
- RS232C Console Support for Command Line Interface
- One(1) 10/100Mbps Fast Ethernet Interface Support
- Smart Web Manager for System Configuration & Management
- Window, Linux Simple Socket API Program Support
- Firmware Upgradeable Architecture

Hardware Specification

AP-GTR250 Embedded GPS NTP Server

RISC
CPU

High-end
GPS

- RISC Microprocessor Computing Power
- High-end GPS Hardware Architecture
- External GPS Antenna Interface Support
- GPS Time Display LED (Hour/Minute/Sec)
- GPS Status LED Support at Front Side
- One(1) 10/100Mbps Fast Ethernet Interface
- External Power Supply with Power On/Off Switch
- GPS Antenna (Option) : Default 10M
- Dimension : 28mm x 125mm x 90mm (H x W x D)
- Weight : 0.5Kg

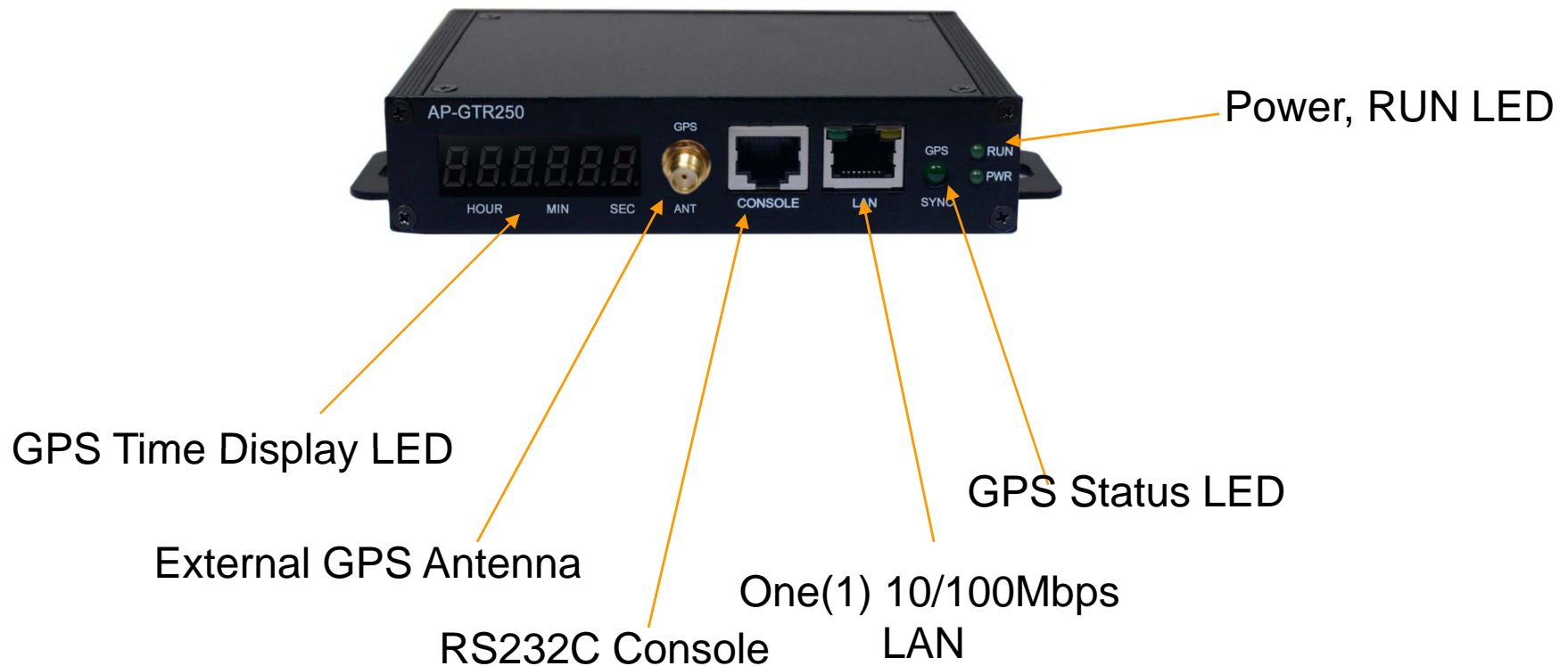
Hardware Specification

AP-GTR250 Embedded GPS NTP Server

RISC
CPU

High-end
GPS

Front Side



Hardware Specification

AP-GTR250 Embedded GPS NTP Server

RISC
CPU

High-end
GPS

Back Side



External Power
Supply

Power Switch

Hardware Specification

AP-GTR1000 Embedded GPS NTP Server

RISC
CPU

High-end
GPS

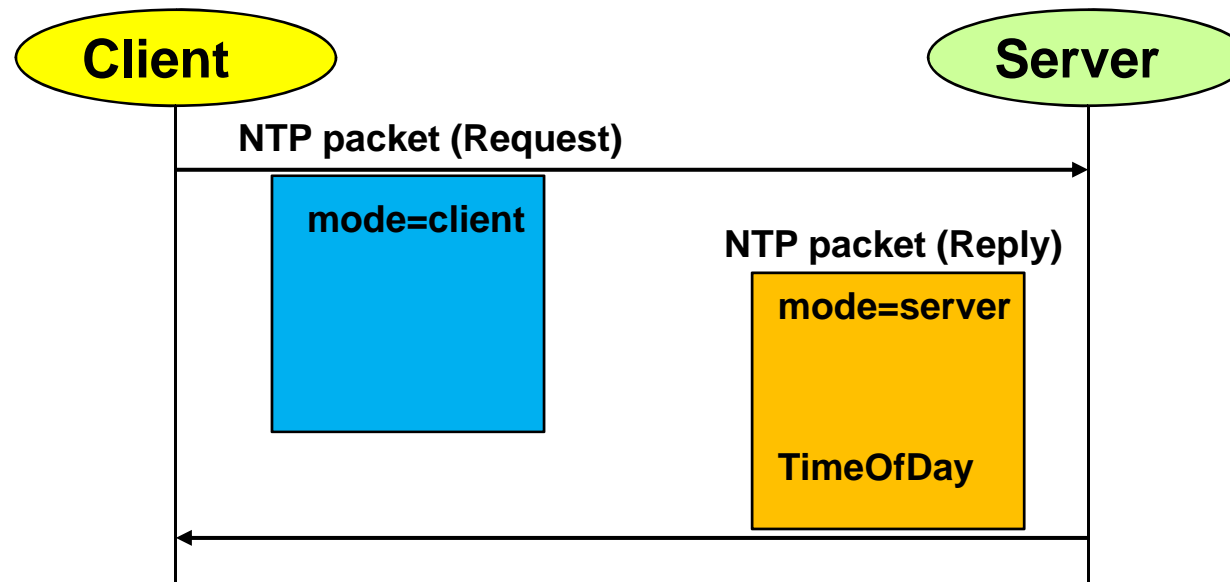
GPS Antenna



SNTP (Simple Network Time Protocol)

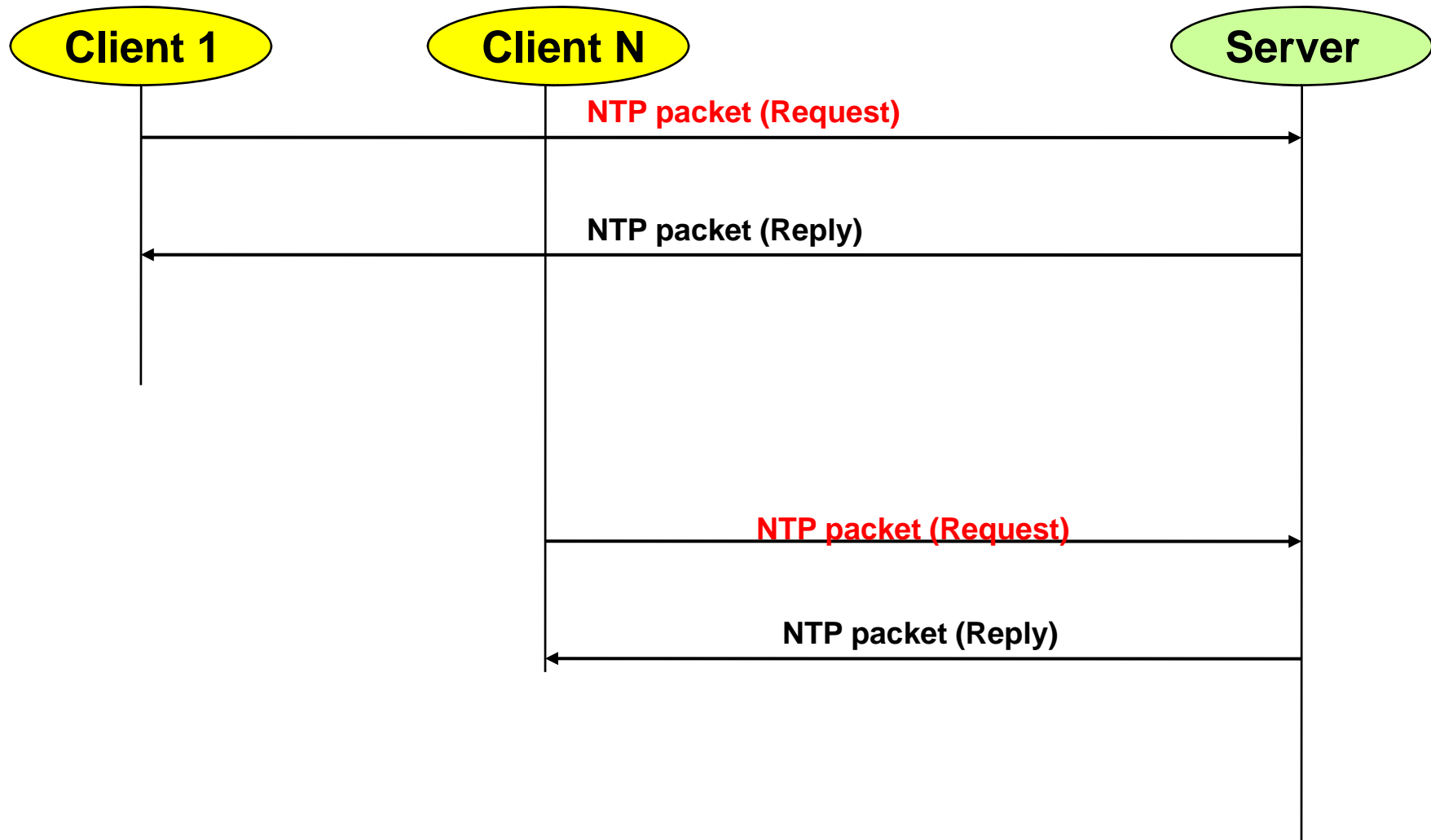
AP-GTR250 Embedded GPS NTP Server

- Transport : UDP (port number 123)
- Protocol Version : 4
- Client/Server Mode



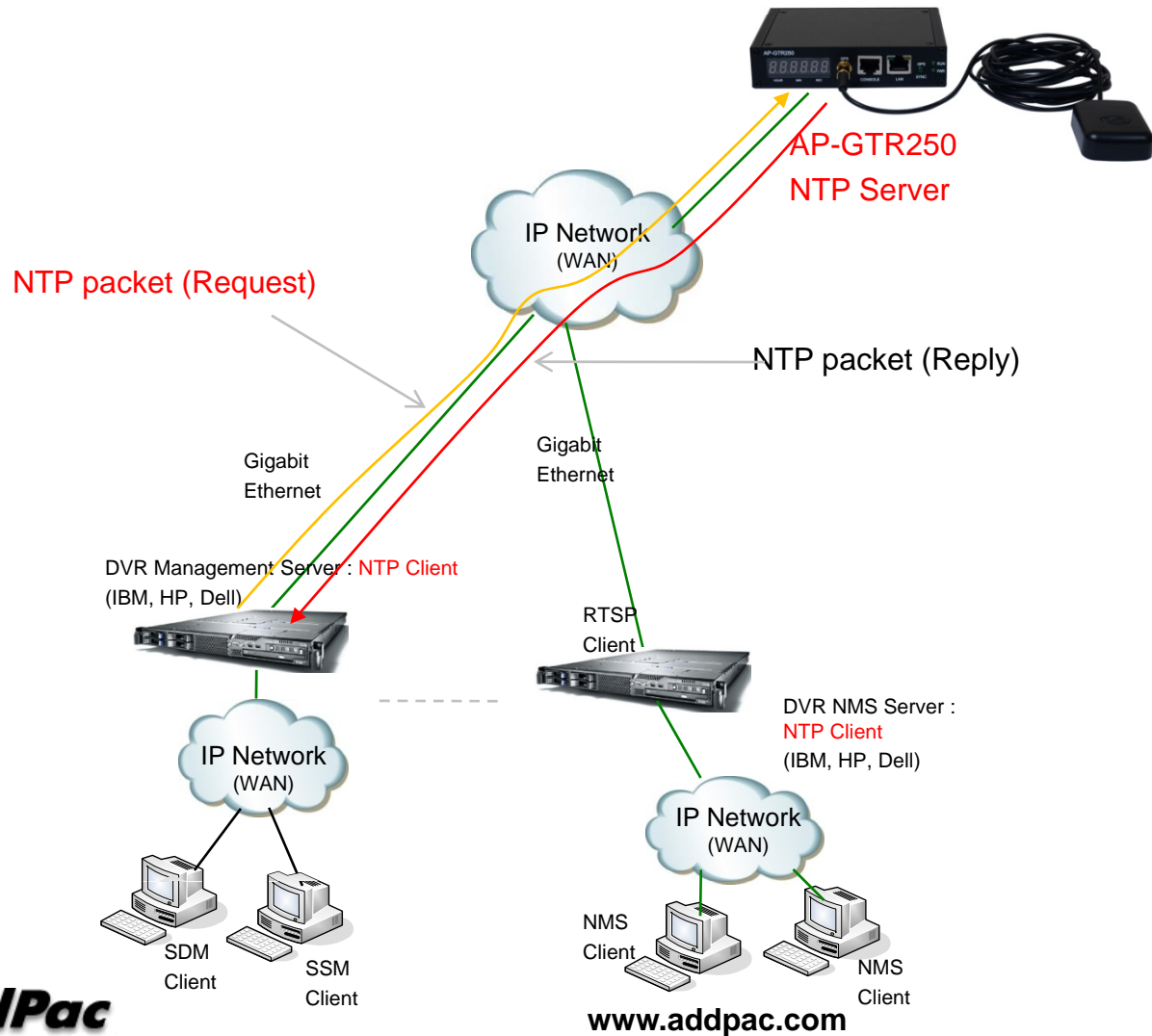
SNTP (Simple Network Time Protocol)

AP-GTR250 Embedded GPS NTP Server



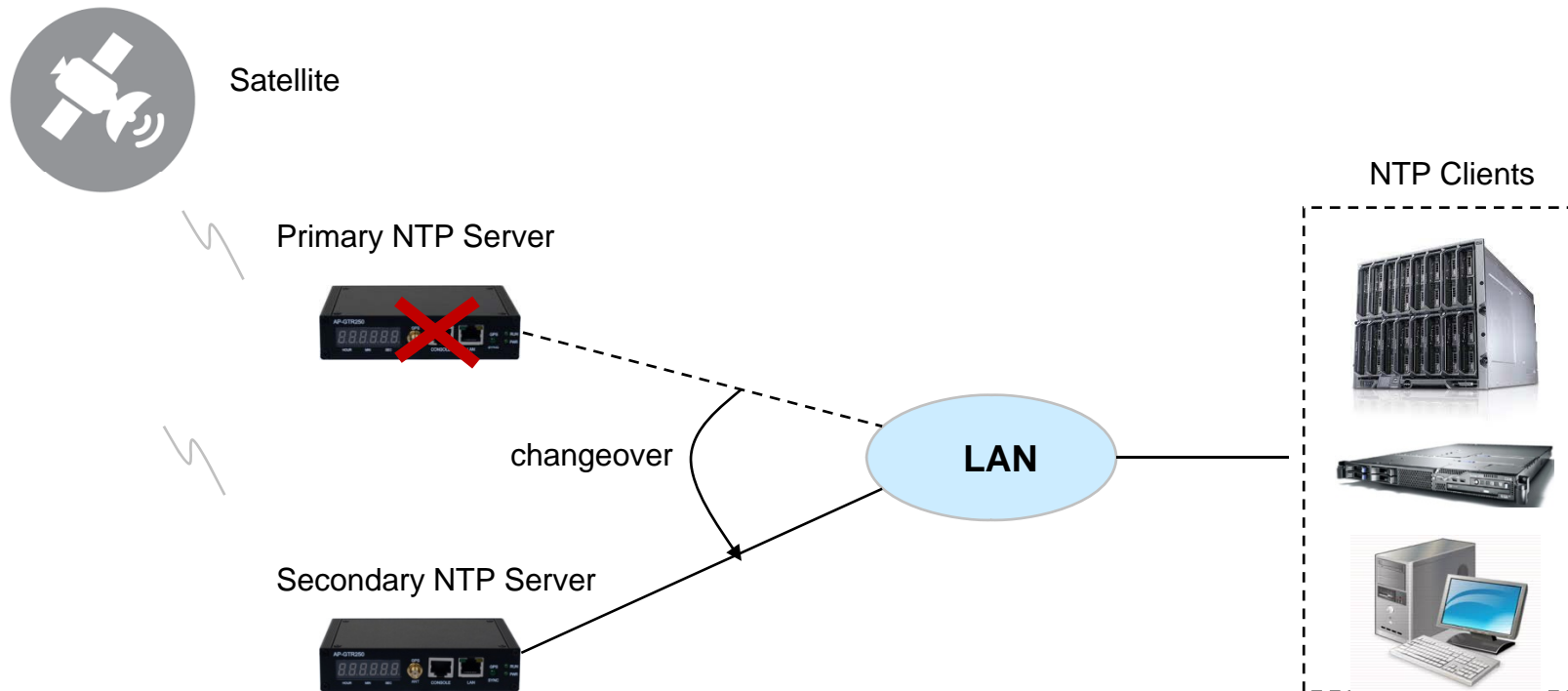
SNTP (Simple Network Time Protocol)

AP-GTR250 Embedded GPS NTP Server



NTP Server Failure

AP-GTR250 Embedded GPS NTP Server



NTP Client Configuration for Redundancy

AP-GTR250 Embedded GPS NTP Server

- Linux Example

```
$ vi /etc/ntp.conf
```

```
server 172.16.1.100 ← Primary NTP Server
```

```
server 172.16.1.101 ← Secondary NTP Server
```

- Windows Example

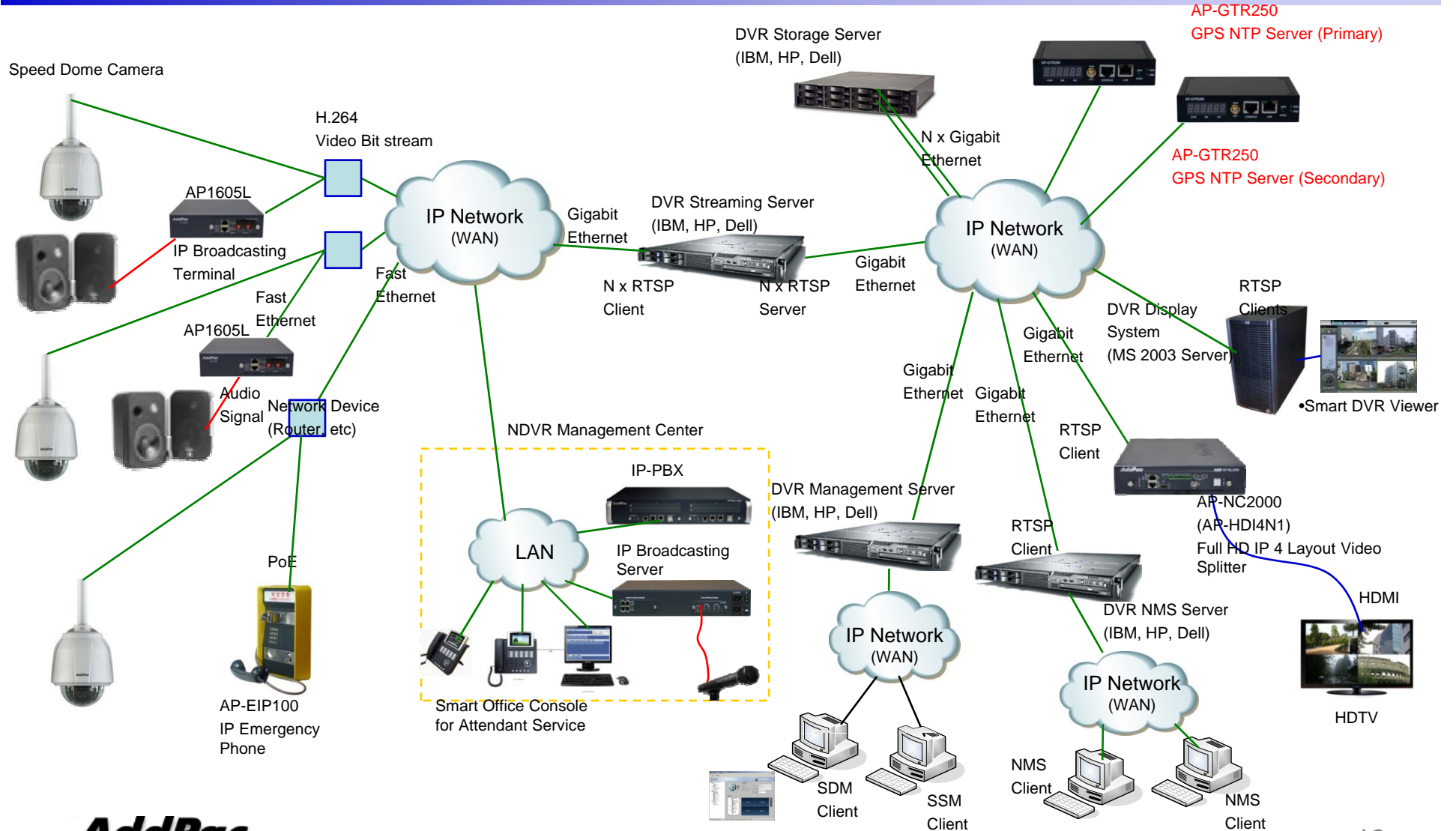
```
C:\>w32tm /config /syncfromflags:manual
```

```
/manualpeerlist:"172.16.1.100,0×1 172.16.1.101,0×1" /update
```

```
/reliable:yes
```

Network Diagram

AP-GTR250 Embedded GPS NTP Server





Thank you!

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