Accurate and Precise Time Is a Foundational Element in Zero Trust Networks

Time is central to accurate log files that define the who, what, when and where of all activity in a Zero Trust network.

Time that is accurate, reliable and secure is foundational to Zero Trust networks. Without it, authentication mechanisms will fail, essential log file timestamps will not align, Zero Trust analytics will be unreliable, forensics will be hampered, and other network issues will occur.

Not only must the time be correct, but the time server synchronizing other equipment like servers, routers and switches must also be compliant to Zero Trust principles and fit accordingly in a Zero Trust architecture.

As the most secure Trusted Time™ network devices, SyncServer® time servers are best suited to support Zero Trust initiatives. They ensure the security of time and its sources, as well as comply with the fundamental pillars of Zero Trust, including users, devices, network and analytics.
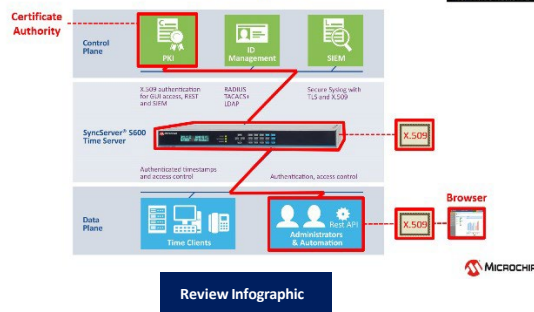
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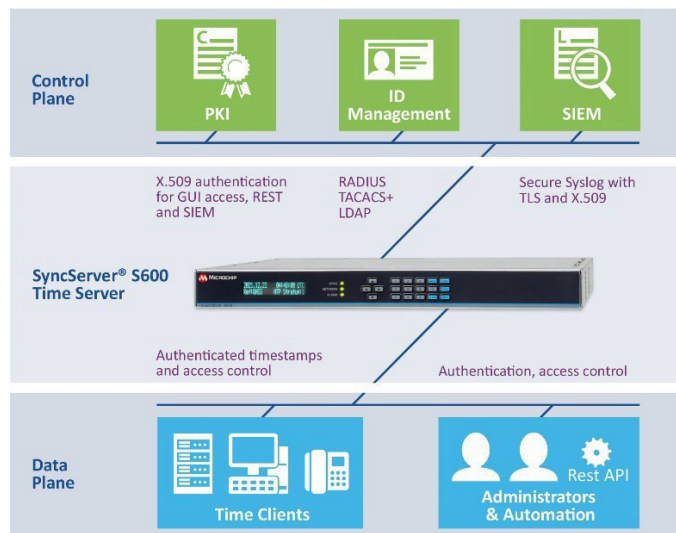
Trusted Time™ for Zero Trust Networks

Explore SyncServer Time Server Security in a Zero Trust Architecture
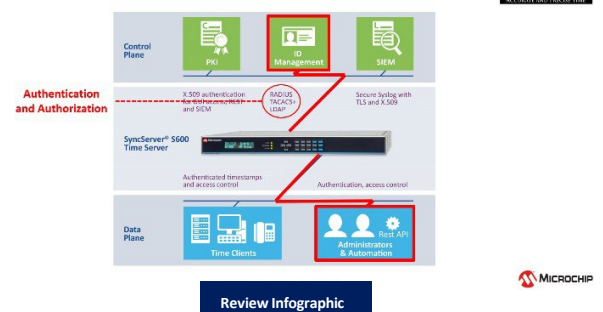

Authenticating the S600/S650
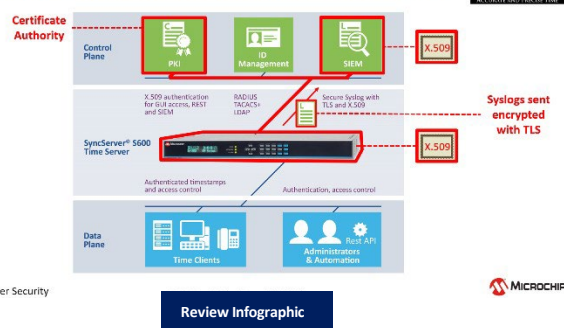Web GUI browser authenticates S600/S650 with PKI
Review Infographic

User Access to S600/S650
Users/REST API authenticated with ID Management
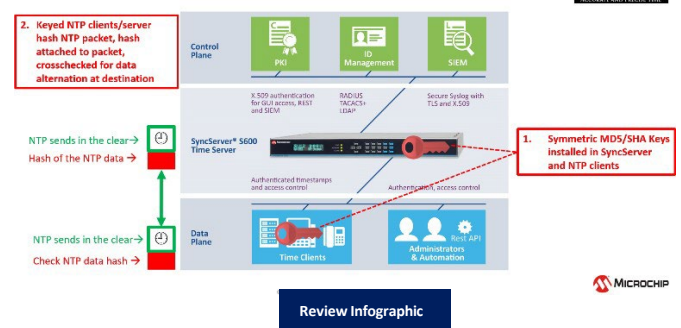Review Infographic

Secure Syslog
Authenticate endpoints with PKI, Syslogs Sent Over TLS*
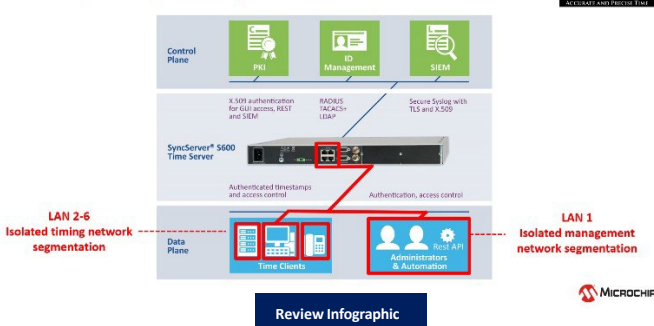*TLS – Transport Layer Security
Review Infographic

NTP Server/Client Authentication
NTP packet authentication using symmetric keys
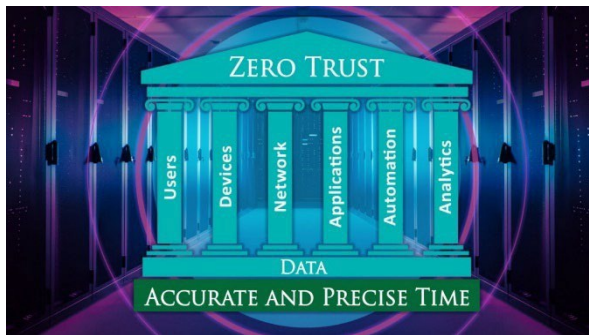Review Infographic

Network Segmentation
Isolated, multiport NTP prevents lateral movement
Review Infographic

Trusted Time™ for Zero Trust Networks

Application Note on the Dual Role of Trusted Time for Zero Trust Networks

Compliance With the Pillars of Zero Trust

Trusted Time is an essential aspect of a properly functioning and adequately hardened Zero Trust network. Without the most basic notion of accurate and synchronized time across the Zero Trust network, many of the pillars of Zero Trust will not function reliably.

Download Application Note

Secure Time Source for the Zero Trust Network

The time server is foundational in supporting the pillars of Zero Trust networking, enabling accurate log file timestamps through secure, accurate and reliable network-wide time synchronization.

Download Application Note

Featured Network Time Servers

SyncServer S600 Network Time Server

High-Performance, Enhanced Security Network Time Server

- Ultra-high-bandwidth NTP time server
- Stratum 1 operation
- Web-based management with high-security cipher suite
- TACACS+, RADIUS, LDAP, X.509, secure syslog and more
- PTP multi-port/profile output option
- Rubidium atomic clock or Oven-Controlled Crystal Oscillator (OCXO) upgrades

SyncServer S650 Time and Frequency Instrument

Accurate, Secure and Flexible Time and Frequency Instrument

- Modular timing architecture with innovative FlexPort technology
- Secure, hardened, web-based management
- IRIG A/B/C37/E/G/NASA/2137/XR3/ HaveQuick/PTTI available
- Superior 10 MHz low phase noise options
- PTP multi-port/profile output option
- Rubidium atomic clock or OCXO oscillator upgrades