Leading Commercial Developer Streamlines Efficiencies and Hides Network Attack Surface

Simple, secure and segmented connectivity for vendor access and BACnet systems.

Customer Needs

- BACnet preservation and isolation
- Existing network infrastructure preservation
- Secure remote access for contractors
- Fast, easy provisioning and management for multiple properties, HVAC systems and contractor agencies

Solution

- IDN micro-segmentation isolates and cloaks each HVAC system – removing it from the 'attack surface'
- Easy adds, moves and changes to contractor access via centralized orchestration
- Transparent overlay to existing network

Benefits

- Heightened security via BACnet cloaking and 'attack surface' reduction
- Reduced operations cost via simplified contractor device identification and centralized orchestration
- Improved HVAC system SLAs through flexible, but secure, remote access – anytime and anywhere
- Eventual reduction in underlying network infrastructure cost and complexity

Is there anything inherently dangerous about managing heating, ventilation and air-conditioning systems for a large business? Ask the ex-CEO of Target. The famous 2013 breach—where 40 million credit card credentials were stolen—began when a hacker attacked Target's Point of Sale (PoS) network through a Pennsylvania-based HVAC subcontractor.

That incident served as a wakeup call for all BACnet users. One function of BACnet (Building Automaton and Control network) enables remote access to applications including HVAC, lighting control, access control, and fire detection systems.

A high-end commercial real estate developer and property management firm had become concerned that, like Target, they could be susceptible to an HVAC breach via BACnet—resulting in a costly incident, and a tarnished brand.

High-rise commercial properties can have 20-30 HVAC systems. With multiple properties, and dozens of outside contractors accessing the network for maintenance, the potential attack surface is huge. Just imagine the exposure from just one breach.

The reality is remote access for contractors is paramount to service level agreements, and IT knows it. The moment the A/C goes out, tenants are calling. But what is the best way to give contractors the secure access they need to maintain a large property?

Punching holes through firewalls is undesirable. And many VPNs—like those commonly used by margin-constrained contractors—are rife with security issues including malware/malvertising infections, user traffic leakage, and use of third party tracking libraries.

Adding to the problem is the cost, complexity, and time required to provision each system's firewall, VPN, and ACL to separate VLANs—a tiresome and error-prone task.

The customer inquired about Identify-Defined Networking (IDN) and its ability to easily provision cloaked network microsegments. Fortunately, network cloaking of BACnet infrastructure—where remote access is restricted to only identified, authenticated endpoints—is a core function of IDN.

IDN is a secure networking architecture based on centralized orchestration of crypto-IDs. With IDN, connection, segmentation, encryption and cloaking of critical assets and networks become, scalable, secure, and simple. And, IDN is deployed as a transparent non-disruptive overlay to existing network infrastructure—no rip-and-replace.

By fronting each HVAC system with a virtual or physical Host Identity Protocol (HIP) switch, HVACs disappeared from their grid. Hackers can't attack something they can't see or reach.

Next, by deploying a HIPrelay, remote access by any authorized contractor located anywhere, to specifically whitelisted HVAC systems, is easily provisioned and administered.

IDN's centralized orchestration now makes it easy to manage multiple contractor identities and crypto IDs. Each contractor is represented by a single identity, as opposed to several hundred ACLs. Gone are the days of needing to independently login to 200 firewalls to add, remove, or change a given contractor's permissions.

Best of all, Tempered Network's IDN solution provides compelling total cost of ownership and return on investment compared to firewall/VPN solutions. IDN made instant, simplified, and secure BACnet connectivity a reality for this commercial developer—all at a fraction of the cost of traditional approaches.

Native Security. Universal Mobility.

Segment Anything

Connect Everywhere

Manage Everything
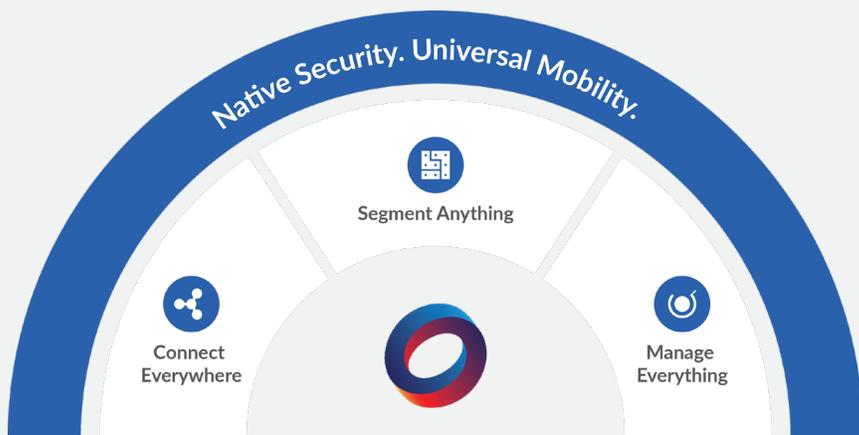
Experience the same simplicity, security, and cost-savings that our customers achieved.

To learn more or schedule a no obligation demo, email info@temperednetworks.com or visit www.temperednetworks.com