Technical Overview

Secure, cloud-based workflow, alert, and notification platform built on top of Amazon Web Services (AWS)

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PRIMEX ONEVUE™ TECHNICAL OVERVIEW

Primex recognizes today's organizations have complex network infrastructures, a division of responsibilities, and standard information security policies associated with data confidentiality, network bandwidth, and security of the systems deployed at their facilities.

The following overview of the OneVue platform is intended to provide the information to answer the technical questions you or your staff may have regarding the Primex OneVue platform and Primex devices.

Overview

The OneVue platform is built on top of Amazon Web Services (AWS).

- Power over Ethernet (PoE)/Ethernet and Wi-Fi enabled devices connect to OneVue using the Hypertext Transfer Protocol Secure (HTTPS) protocol (port 443); all communication is encrypted.
- Power over Ethernet (PoE)/Ethernet and Wi-Fi devices, and the OneVue web interface only initiate outbound network connections and do not initiate inbound network connections.
- OneVue client and device data is encrypted in transmit and at rest.
- Primex devices support an array of network communication options for secure network connectivity.
- Users can access OneVue from any internet enabled device, improving flexibility and mobility.
- User access to the OneVue user interface is through a web browser by way of the HTTPS protocol (port 443).

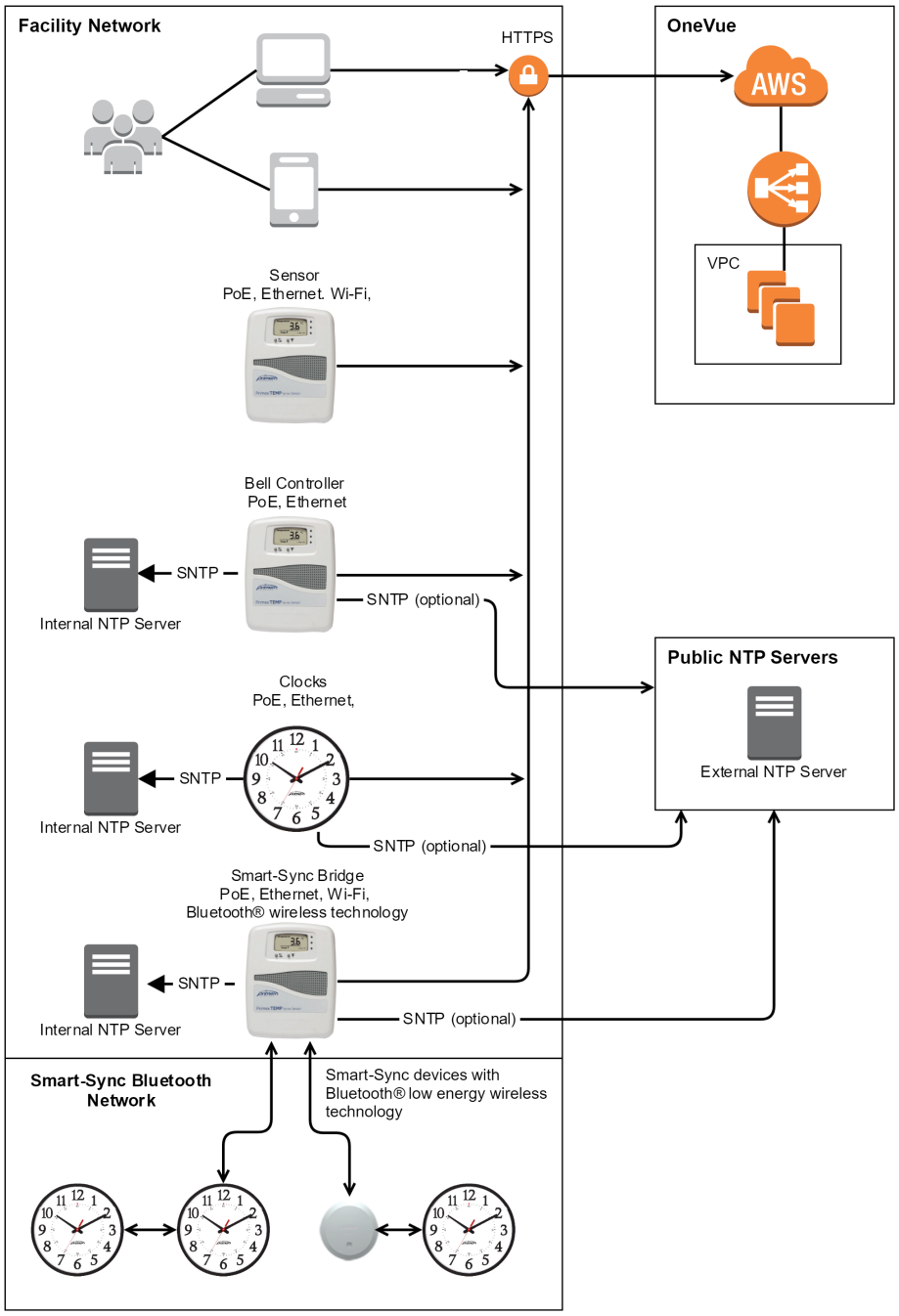
Network Communication Protocols

The complete technology stack of the OneVue platform is designed in-house, allowing Primex to control the user experience and provide the highest level of reliability and security.

To support the myriad of network security and protocol standards in today’s business environment, Primex's Power over Ethernet (PoE)/Ethernet and Wi-Fi enabled devices offer an array of options for secure network connectivity. This ensures our customers can use and leverage our full line of products without adding costly, additional IT infrastructure.

- Wireless (Wi-Fi) Networking Protocols: 802.11b, 11g, 11n single stream (2.4 GHz)
- Security Protocols: WEP (Open & Shared), WPA (TKIP & AES), WPA2 (TKIP & AES)
- Encryption Protocols: TLS 1.2
- Network Communication Protocols: Hypertext Transfer Protocol Secure (HTTPS)
- IP Addressing: Dynamic Host Configuration Protocol (DHCP), static IP addressing
- Data Packet Size: typically less than 5 kilobytes (kB)

OneVue Deployment Diagram



OneVue Network Requirements

Network port requirements

Primex PoE/Ethernet and Wi-Fi enabled devices communicate to OneVue over your facility's network using the Hypertext Transfer Protocol Secure (HTTPS) protocol. All device communication is secure and encrypted at rest and in transit to and from OneVue.

The following ports must be open to allow for outgoing OneVue device communication from your network.

- Port 443 TCP: used for Hypertext Transfer Protocol over TLS/SSL (HTTPS) communication with OneVue and Wi-Fi, Power over Ethernet (PoE)/Ethernet enabled devices.
- Port UDP 123: used by Wi-Fi, Power over Ethernet (PoE)/Ethernet devices to access an external NTP Server. Port is required to be open for use with external Network Time Protocol (NTP) Servers. Use of internal NTP Servers is also supported.

Network firewall requirements

The OneVue platform runs on the Amazon Web Services (AWS) cloud infrastructure. Organizations with network firewalls in place must proactively allow outbound network communication and file downloads through specific OneVue Domains and URLs. The files downloaded include the Smart-Sync Bridge clock list, Smart-Comm Message board configuration, Bell Controller schedule, and setting updates.

> NOTE:
> Primex Ethernet and Wi-Fi devices may communicate from any number of IP addresses, therefore OneVue does not support the use of firewall IP address filtering.

If firewall supports wildcards

Domain filters	URL filters
*.primexonevue.com	https://*.primexonevue.com
us-east-1-production.s3.amazonaws.com	https://us-east-1-production.s3.amazonaws.com

If firewall does not support wildcards

Domain filters	URL filters
console.primexonevue.com	https://console.primexonevue.com
deviceapi-alt.primexonevue.com	https://deviceapi-alt.primexonevue.com
deviceapi.primexonevue.com	https://deviceapi.primexonevue.com
onevueapi.primexonevue.com	https://onevueapi.primexonevue.com
us-east-1-production.s3.amazonaws.com	https://us-east-1-production.s3.amazonaws.com

Smart-Sync Bridge connection to a switch port

Spanning tree portfast (STP) must be enabled when a switch port is not connected to other routers or switches. Optionally STP can be turned off, which is not the same as disable.

Email communication requirements

OneVue generates system email communication, including alert and report notifications. To ensure notifications are received by system users, support@primexonevue.com is to be added to your email program's safe sender list.

OneVue Log in Requirements

OneVue is a cloud-based, mobile-first design that can be accessed from any web browser on a smartphone, tablet, laptop or desktop computer. The mobile-first design eliminates the need for separate mobile apps, plug-ins or downloads for optimal viewing on any size screen.

Log in to your OneVue account requires a user to have an active user account. A user account is assigned to a role(s), which grants their access to your OneVue account data and permissions to system features.

> NOTE:
> Be sure to bookmark or favorite the OneVue URL: https://console.primexonevue.com

Supported web browsers

OneVue can be accessed from any of the web browsers below.

- Google Chrome™, most recent version
- Mozilla Firefox®, most recent version
- Microsoft® Internet Explorer®, versions 9, 10, 11 and higher
- Microsoft Edge, most current version
- Apple® Safari®, most recent version

JavaScript must be enabled, PDF viewer

Supported mobile devices

OneVue can be accessed on any of the mobile devices below.

- Apple® mobile devices with iOS 7 and greater
- Android mobile devices with 4.2 and greater

JavaScript must be enabled

About Primex

Primex is a leading provider of solutions that automate and maintain facility compliance, increase efficiencies, enhance safety and reduce risk for enterprise organizations in the healthcare, retail pharmacy, education, manufacturing and business vertical markets.

The solutions delivered by Primex include Environmental Monitoring, Managed Time and School Bell Scheduling.

Worldwide Headquarters

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