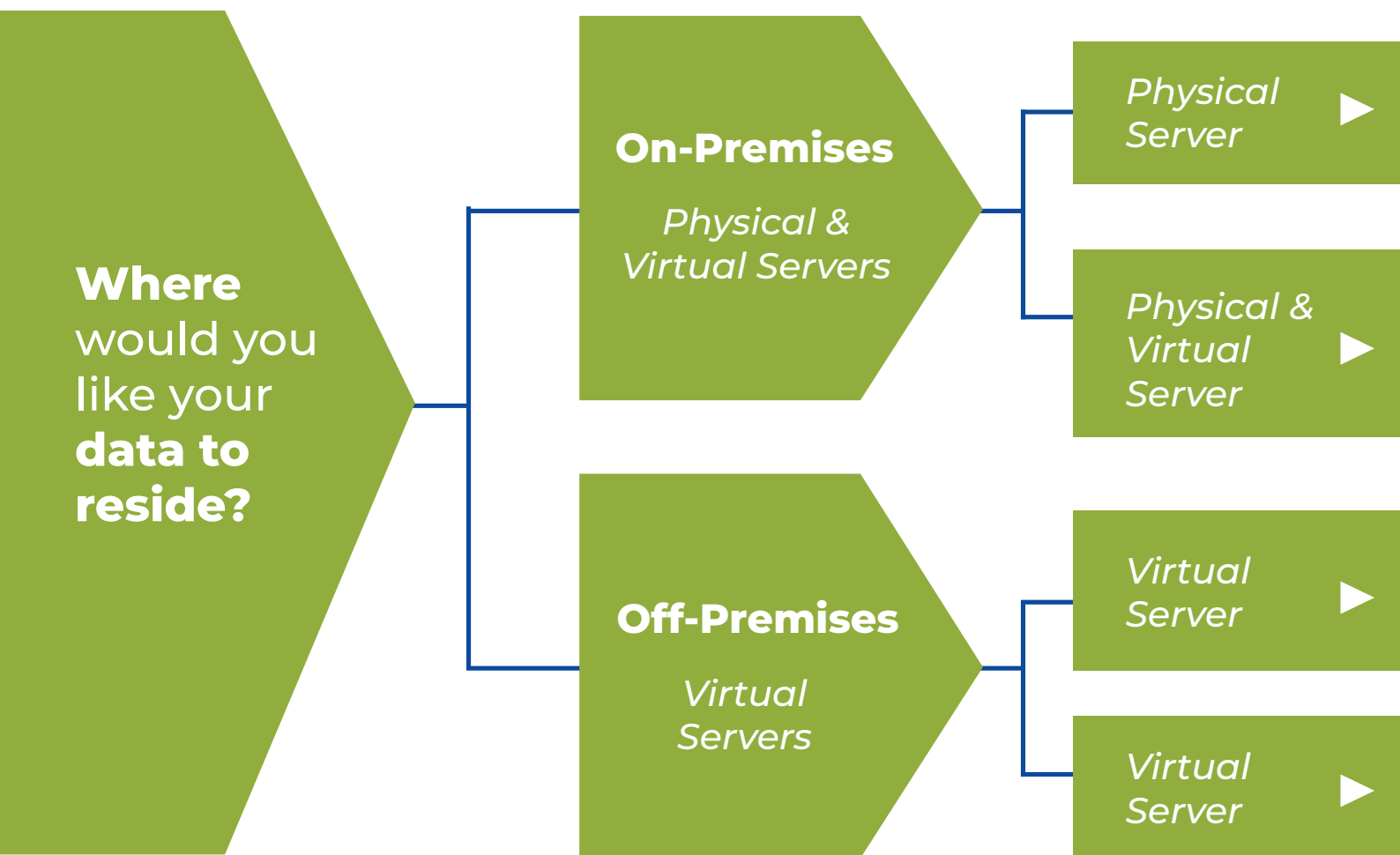


Zoneworks HIVE System Hosting Options



Clevertronics Zoneworks HIVE system is a versatile solution that can be tailored to diverse client needs and infrastructure. With four customizable network configurations, **Zoneworks offers unmatched flexibility, accommodating various hosting demands.**

Whether for single-site or multi-site applications, our system's **adaptable hosting options** ensure optimal performance aligned with your specific requirements.





Use this chart to guide your selection of optimized network selection and reference further details on the following pages.

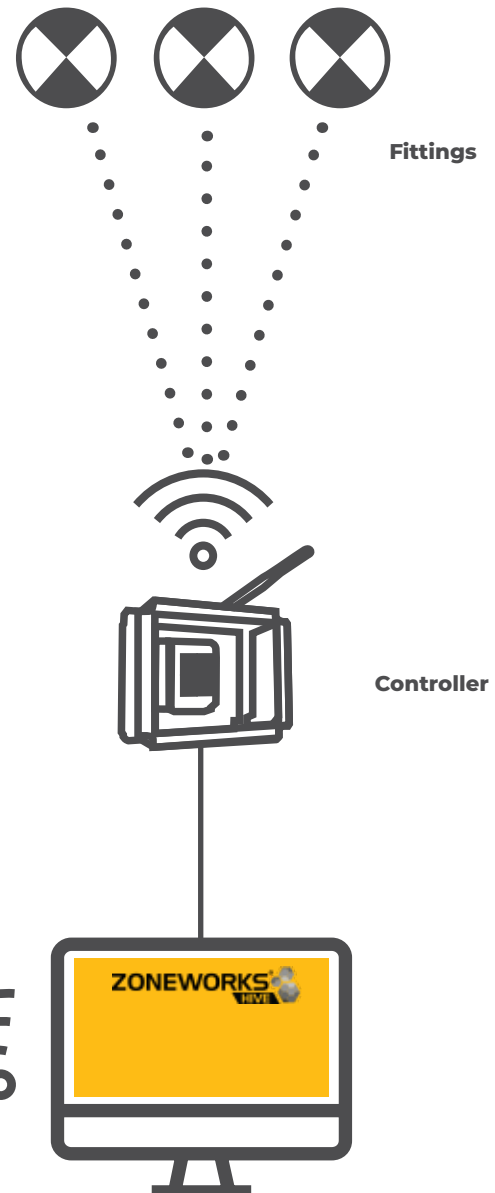
	OPTION	SUITABLE FOR / REF#	SINGLE SITE	MULTI SITE
Dedicated Network	1	Single sites without a structured network or common server environment. See Page 4	✓	—
Shared Network	2	Single, multi-building or campus style sites with existing on-premises network or common server environment. See Page 5	✓	✓
Public Cloud Hosted	3	Multi-building or campus style site without existing infrastructure. See Page 6	✓	✓
Private Cloud Hosted	4	Multi-building or campus style site hosted in an off-premises data center managed by a third-party service provider or client. See Page 8	✓	✓

1

Option 1

Physical Server - Dedicated Network (Data On-Premises)

- **Dedicated on premises physical server**, hosting the Zoneworks software only
- **Zoneworks Controller** connected to on premises server via ethernet cable
- Additional Controllers may be connected to the dedicated network via ethernet cable and network switch
- Access to Zoneworks from the server
- USB 4G/5G Internet dongle connected to server is required for **remote management** (commissioning and software updates)
- Ideally Controller to have **dedicated IP address**
- **BMS integration** via dry contact outputs from Controller and direct Zoneworks Database access.



Suitable for

- **Single sites** without a shared network or common server environment



Advantages

- Data remains **on premises**
- Low infrastructure cost
- **No internet connection required** to access data
- Client IT can monitor and maintain server



Single Site

2

Option 2

Physical & Virtual Server - Shared Network (Data On-Premises)

- **Dedicated on premises server (physical or virtual machine)** on local shared network, hosting the Zoneworks software only
- **Zoneworks Controller** connected to the local shared network infrastructure via ethernet cable
- Access to Zoneworks from the server
- USB 4G/5G Internet dongle or client internet with optional client **VPN connection is required** for remote management (commissioning and software updates)
- Ideally Controller to have **dedicated IP address**
- **BMS integration** via dry contact outputs from Controller, direct Zoneworks Database access and MQTT API



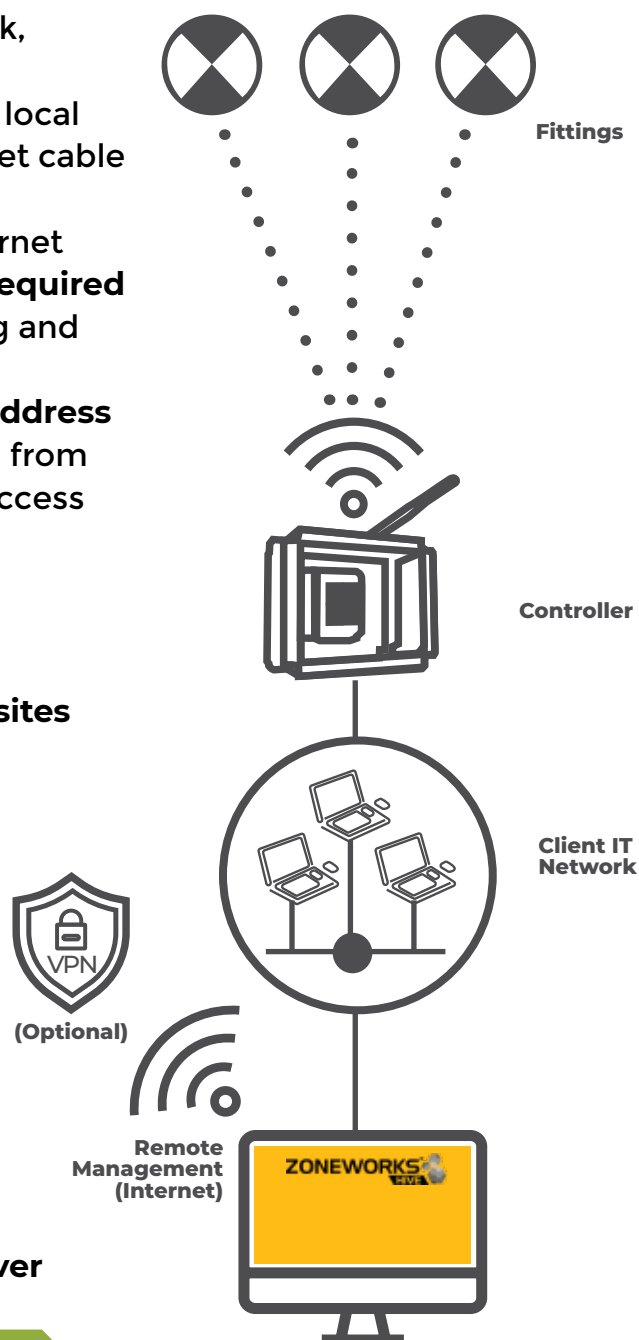
Suitable for

- **Single, multi-building or campus style sites** with existing on-premises network



Advantages

- Integrates into existing on-premises network
- **Scalability:** Environment can grow with the business
- **Centralization of management systems**
- **No internet connection required** to access data
- **Client IT can monitor and maintain server**



Single Site



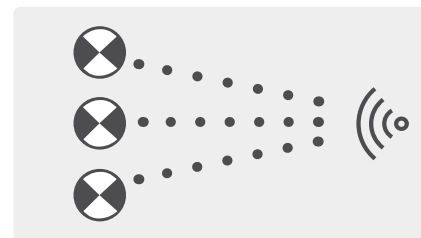
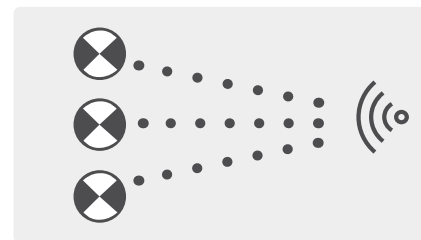
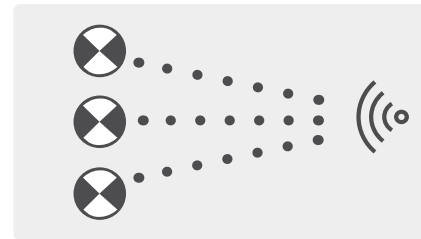
Multi-Site

3

Option 3

Virtual Server - Public Cloud Hosted (Data Off-Premises)

- **Zoneworks software hosted in an off premises Public Cloud environment** which is managed by Clevertronics or the client
- Hosted on **Amazon Web Services (AWS)** with **secure, encrypted communications**
- **Multi-tenancy** cloud environment
- Each client will have a separate instance of Zoneworks hosted in the cloud
- **Zoneworks Controller** connected to the local network infrastructure via ethernet cable
- **Internet connection** required for communication between the on-premises Controller and off-premises Zoneworks software in the public cloud.
- Allows access to Zoneworks from anywhere via internet connection without a VPN
- **Robust security features** including user authentication via **AWS Cognito and encryption over the internet**
- Traffic routed directly through the internet, with **outbound ports opened for Web Portal and MQTT traffic**
- Ideally Controller to have **dedicated IP address**
- **BMS integration** via dry contact outputs from Controller and cloud based MQTT API
- Clevertronics offers **support and documentation for client-managed cloud infrastructure**



Suitable for

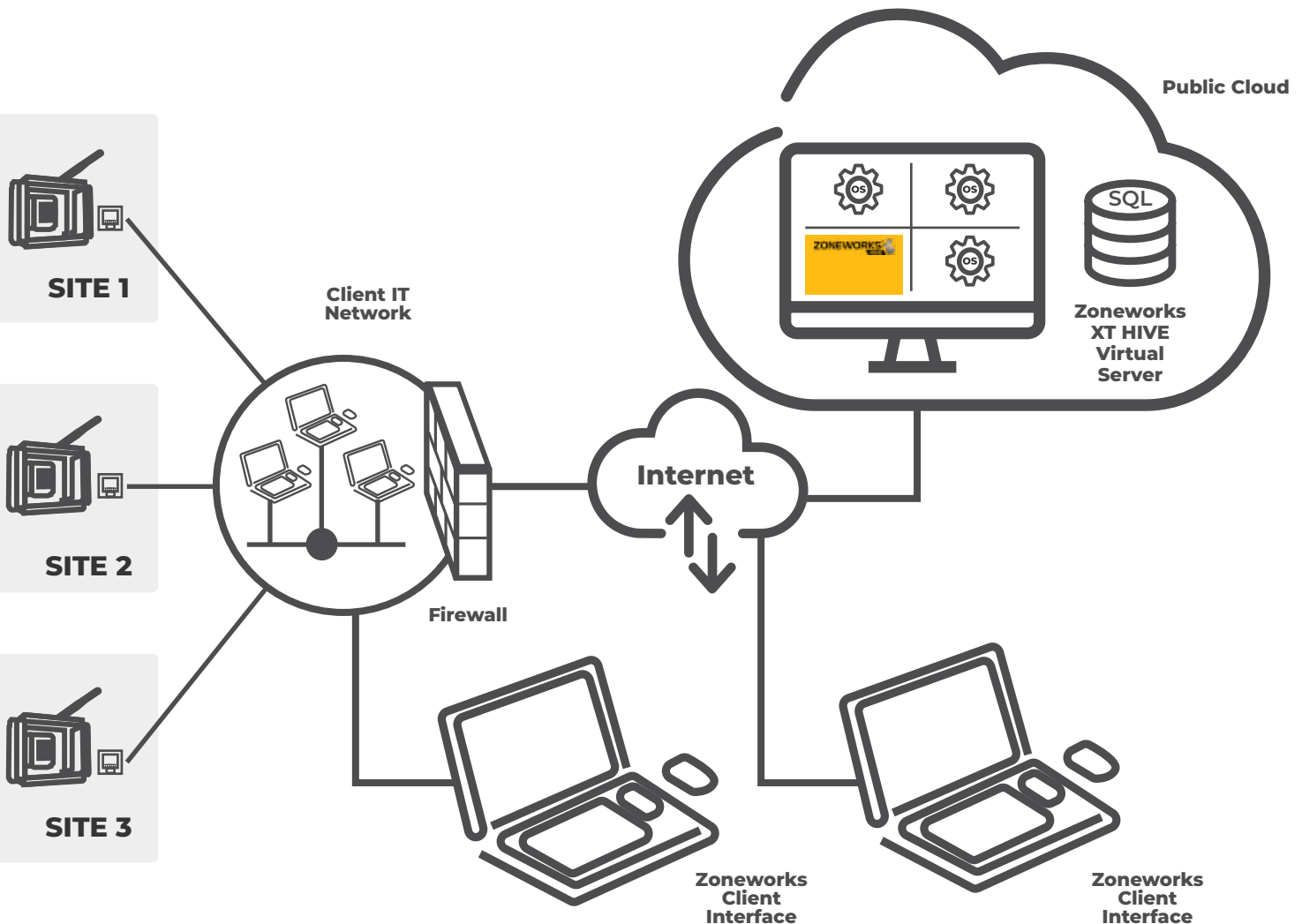
- **Multi-building or campus style sites** with limited server room space
- Clients wanting to reduce IT infrastructure costs



Single Site



Multi-Site



+ Advantages

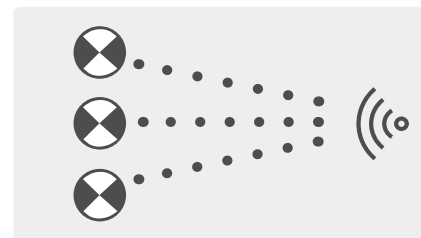
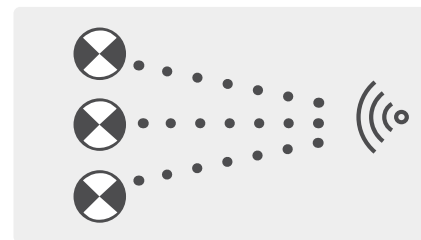
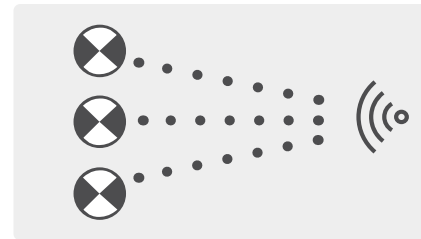
- **Scalability:** Virtual environment can grow with the business
- **Lower costs:** No need to purchase server hardware
- **No maintenance:** No ongoing server hardware maintenance cost as cloud service provider owns the resources

4

Option 4

Virtual Server - Private Cloud Hosted (Data Off-Premises)

- **Zoneworks software hosted in an off premises Private Cloud environment** which is managed by the client or a third-party service provider
- **Single tenancy environment** with all cloud resources dedicated to the client
- **Zoneworks Controller** connected to the local network infrastructure via ethernet cable
- **Internet connection** with a VPN is required for communication between the on-premises Controller and off-premises Zoneworks software in the private cloud.
- Access to Zoneworks via an internet connection and VPN
- Ideally Controller to have **dedicated IP address**
- **Protect your system** with encryption over the internet, ensuring secure communications
- **BMS integration** via dry contact outputs from Controller and cloud based MQTT API



✓ Suitable for

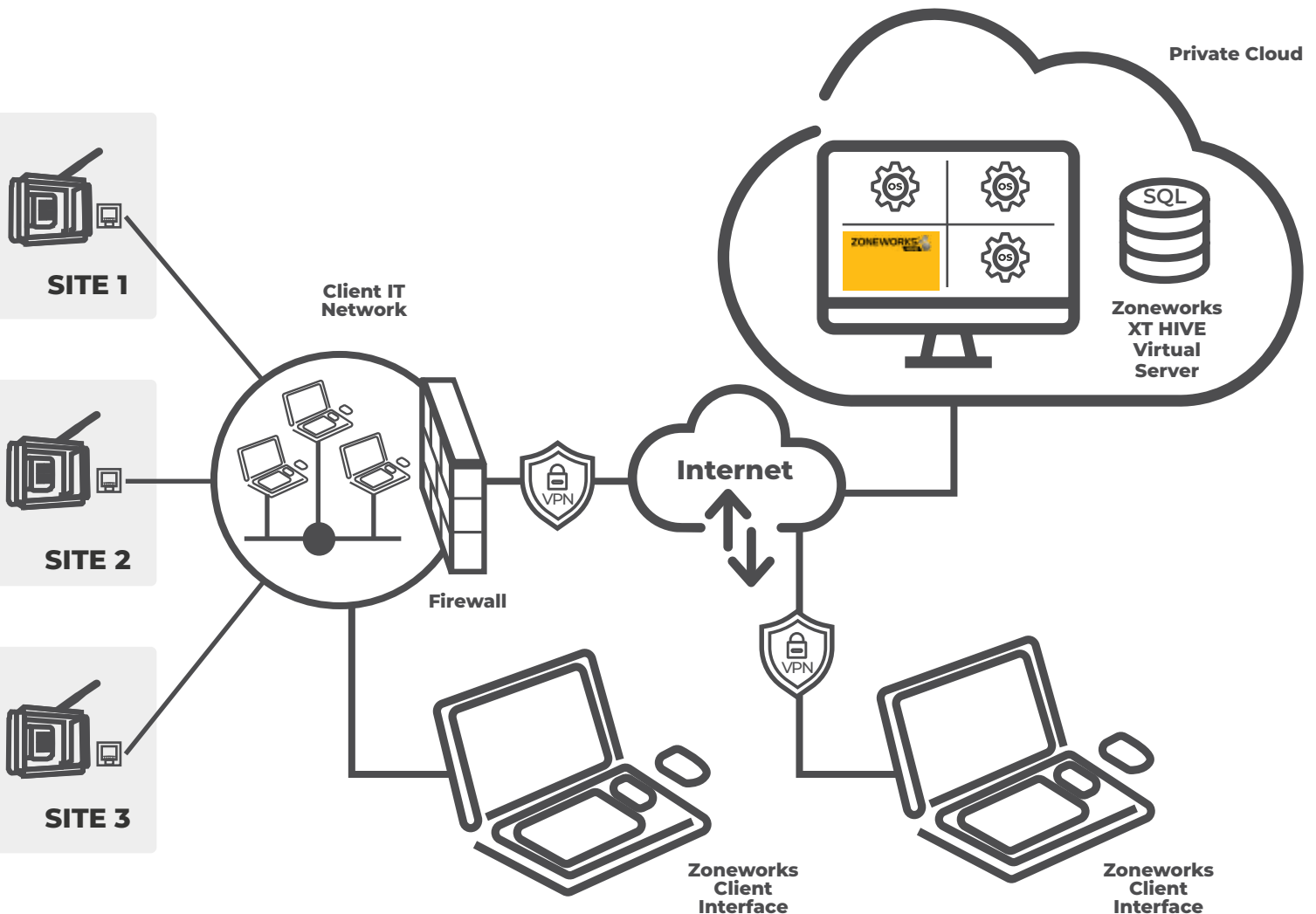
- **Multi-building or campus style sites** with infrastructure for private cloud hosting
- **Data sensitive sites** such as Government agencies, Healthcare organizations, Financial institutions, Educational institutions



Single Site



Multi-Site



+ Advantages

- **Scalability:** Virtual environment can grow with the business
- **Compliance:** Meet regulatory compliance requirements for sensitive data
- **Security:** Dedicated cloud resources per client
- **Customisation:** Customised hardware and software based on specific requirements

Frequently Asked Questions

Q: What is required to get the controllers and server online?

A: In a shared network environment. The bare minimum will be IP address, subnet, default gateway. There may be further questions beyond this depending on the site and client IT team.

Q: On a shared network, can the controllers and server be on different ranges/VLANS?

A: Yes, there is no issue with them being on different ranges/VLANS. The client IT team will need to ensure they can be networked to point at each other however this setup is common when it comes to campus setups or systems that may cover sites in other areas of the city/state.

Q: Are there specific ports required to be opened for the controllers and server?

A: Yes, on a shared network, particular ports will need to be opened for a variety of reasons. Commonly, networks open all ports so this won't be an issue however some specific sites will request these ports. As Clevertronics is continually enhancing the Zoneworks software and controllers, sometimes the port requirements vary slightly. When this request comes through from a client, it would be best that Clevertronics provide the latest list of ports at the time.

Q: Can you provide the MAC ID for the controllers and server so IT can allow them onto the network?

A: Yes, the controllers will have the MAC ID on a sticker or printed onto the controller (depending which controller you receive). This can be provided to the client for their network allowances. It is advised to determine if this is required prior to installing or shipping any controllers. Clevertronics prefers to provide this and then program any IPs in their office before attending site to simplify the setup process.

Q: Can the controllers run on PoE?

A: No, the controllers require a power outlet to run. The ethernet connection is purely for the network back to the server.

Q: Is remote access required?

A: Remote access is a requirement for software updates as they are released. This is a free service from Clevertronics, provided remote access is available.

Q: Are the light fittings reliant on the network running permanently?

A: No, the fittings will run in the event of a power outage regardless of the server. If the fittings haven't yet been commissioned or the server or controllers have lost their connection to the network, the fittings will still perform as they should when required.

Q: What happens to the scheduled tests if the computer loses connection to the controllers?

A: Provided the controllers remain powered, and a scheduled test has been programmed prior to the connection issues, the scheduled test will still run. Once the connection to the computer is restored, the test results will update on the Zoneworks system.

Victoria

1 Caribbean Drive
Scoresby VIC 3179
Phone: +61 3 9559 2700
Fax: +61 3 9559 2799

New South Wales

9 Distribution Place
Seven Hills NSW 2147
Phone: +61 2 8805 6400
Fax: +61 2 8805 6444

Queensland

1/140 Wecker Road
Mansfield QLD 4122
Phone: +61 7 3442 9700
Fax: +61 7 3442 9777

Western Australia

12 Milly Court
Malaga WA 6090
Phone: +61 8 9207 0000
Fax: +61 8 9248 3725

South Australia

U1/136 Mooringe Ave
North Plympton SA 5037
Phone: +61 8 8301 8800
Fax: +61 8 8351 8286

Auckland

Unit 22/761 Great South Road
Penrose Auckland 1061
Phone: +64 800 548 448

Christchurch

163C Wordsworth Street
Sydenham Christchurch 8023
Phone: +64 800 548 448

United Kingdom

806 Oxford Avenue
Slough Trading Estate SL1 4LN
Phone: 01895 430 255
Fax: 01895 430 254

clevertronics.com.au

clevertronics.co.nz

clevertronics.co.uk