Vaisala viewLinc Enterprise Server software allows you to network several types of Vaisala data loggers or Modbus devices, using a combination of wired and wireless connections. It supports small installations of one or two measurement points, or large systems that monitor thousands of locations. Designed for regulated and critical environmental monitoring, viewLinc ensures data integrity with a secure audit trail, access controls, encryption, and authorization levels that fulfill regulatory requirements.

**Continuous Reliability**

viewLinc runs as a Microsoft® Windows® service. If you are required to reboot your server, the viewLinc service restarts automatically. Users log in to viewLinc on any network computer or mobile device with a supported browser and can display viewLinc in several languages: English, German, French, Portuguese, Spanish, Swedish, Chinese, and Japanese. viewLinc supports UTF-8 compliant multi-byte character sets.

**Licensing**

A license key is required for each viewLinc Enterprise Server or Device Host installation (the number of devices permitted is defined by the license key). Obtain additional licenses to enable voice or SMS web notifications, to integrate with Vaisala OPC UA Server or the viewLinc Web API, or to add third-party Modbus devices.

**Upgrading**

Previous versions of viewLinc, 3.6.1 and higher, can upgrade to 5.1 directly. Depending on the server/database size, upgrade may take a few minutes or several hours (4 to 6).

**System Requirements**

- A dedicated server continuously available 24/7 to run viewLinc Enterprise Server software.
- One or more Vaisala data loggers, Vaisala wireless data loggers, or Vaisala HMT300 series transmitters.
- Vaisala cables, for connecting data loggers and setting up wireless transmitters.

**Optional Requirements**

- Vaisala or third-party Modbus-enabled devices
- A dedicated or shared server to manage devices at multiple sites (running viewLinc Device Host software).
- Remote display terminals to monitor sites without user PCs.
- vNet, single or multi-port devices, to connect data loggers, transmitters or probes through Ethernet.
- Voice/SMS web service provider account (Twilio). Voice call delivery requires an Internet-accessible port (service limited in some regions).
Technical Data

Requirements Based on System Size

<table>
<thead>
<tr>
<th>System Size in Data Points</th>
<th>&lt; 20</th>
<th>21...399</th>
<th>400+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated or shared server</td>
<td>Either</td>
<td>Either</td>
<td>Dedicated</td>
</tr>
<tr>
<td>CPU</td>
<td>1.6 GHz dual core</td>
<td>1.6 GHz dual core</td>
<td>3.2 GHz quad core</td>
</tr>
<tr>
<td>RAM</td>
<td>8 GB</td>
<td>12 GB</td>
<td>16 GB</td>
</tr>
<tr>
<td>Disk space increase/year</td>
<td>1.5 GB/year for 20 data points</td>
<td>15 GB/year for 200 data points</td>
<td>75 GB/year for 1000 data points</td>
</tr>
<tr>
<td>Continuous free disk space for reports</td>
<td>2 GB</td>
<td>4 GB</td>
<td>10 GB</td>
</tr>
</tbody>
</table>

1) 1 month duration with 1 minute scan/sample

Server Requirements

Availability
24 hours a day, 7 days a week

Server management
Connected to an uninterruptible power supply (UPS)
Backup solution with support for open file backup

Operating System
Windows Server® 2019 (64-bit)
Windows Server® 2016 (64-bit)
Windows Server® 2012 R2 (64-bit)
Windows® 10 (64-bit)

Virtual server support
VMware

Application disk space
350 MB

Database disk space 1)
200 KB/data point 2)/day

Network traffic 3)
Approx. 100 KB/minute/device

Web interface protocol 4)
TLS 1.2

Security certificate for web interface
Authorized TLS certificate and key 5)

Email encoding
RFC 2047

Security email protocol
TLS 1.2

Wireless Device Connectivity

RFL100 series 1) Connects using Vaisala VaiNet protocol. Requires installation of an AP10 access point.

HMT140 series Connects using Wi-Fi protocol. Requires configuration with an HMT140 configuration cable.

300-series transmitter Connects using WLAN or LAN interface.

1) VaiNet devices not available in all regions.

Wired Device Connectivity

DL series using vNet device vNet Power-over-Ethernet devices are 802.3af compliant and work with both end-point and mid-span systems. viewLinc Aware automatically detects and configures vNet devices. 1) Requires vNet device drivers (provided).

DL series using single or multi-port Ethernet device Ethernet connectivity devices must be configured with static or reserved IP addresses. If the devices are being installed on different subnets, they need to be configured before being installed. Ethernet device drivers must be installed on each server used to connect Vaisala devices.

DL series using USB cable Connect devices directly to viewLinc Device Hosts using a USB-to-ladder cable. Requires USB ports.

Modbus devices (RTU or TCP) Connect devices directly to viewLinc Device Hosts using a USB-to-device cable (TCP) or Ethernet-to-device serial drivers and serial connector cables. RTU devices require serial COM ports. TCP devices require a static IP address.

Signal tower (light and/or buzzer) Connects devices according to manufacturer directions. Preconfigured device settings are selectable in viewLinc.

Client Requirements

Internet browser
Google Chrome™
Microsoft® Internet Explorer” 11
Microsoft® Edge™

Computer clients
Any network computer with a supported Internet browser, a minimum 2.4 GHz CPU, and 4 GB of RAM.

Display and tablet clients
Touchscreen or mouse-operated panel with a supported Internet browser. Must be connected to the same network as viewLinc Enterprise Server.

Network Ports

<table>
<thead>
<tr>
<th>Default</th>
<th>Type</th>
<th>Used By</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>TCP</td>
<td>Signal towers</td>
</tr>
<tr>
<td>443</td>
<td>TCP</td>
<td>Client connections to user interface (Internet-accessible)</td>
</tr>
<tr>
<td>502</td>
<td>TCP</td>
<td>Modbus TCP-enabled devices</td>
</tr>
<tr>
<td>771</td>
<td>TCP</td>
<td>vNet and multi-port Ethernet devices</td>
</tr>
<tr>
<td>950</td>
<td>TCP</td>
<td>Moxa serial-to-Wi-Fi devices</td>
</tr>
<tr>
<td>6767</td>
<td>UDP</td>
<td>HMT140</td>
</tr>
<tr>
<td>12600</td>
<td>TCP/UDP</td>
<td>VaiaNet access points, viewLinc Enterprise Server connection with vNet or Device Host</td>
</tr>
<tr>
<td>55000</td>
<td>TCP</td>
<td>Vaisala OPC UA Server</td>
</tr>
</tbody>
</table>

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