VAISALA

Thunderstorm Manager™ Web Server

Features

- Provides you with browser-based access to the lightning that is being detected by your Vaisala lightning detection network

- Provides you with alerts based on user-defined alert locations

- Alerts can be generated based on lightning affecting up to 3 user defined radii around the site in a map

- All clear Alert notifications

- Notifications are available via e-mail, or visual (note that mobile phone text alerts can be set up if the cell phone carriers offer that service)

- Notifications can be sent to all, some, or none of the users with a login

- Alerts are archived on the server

Vaisala Thunderstorm Manager™ is a web based application for desktop computers or mobile devices that helps you track approaching storms in real time.

Overview

The Vaisala Thunderstorm Manager™ Web Server works with the Vaisala Total Lightning Processor (TLP) to provide a web site that delivers the Thunderstorm Manager™ web application. It uses data from your precision lightning detection network, and creates customized alerts for each user, based on site location and alert ring configuration (ring sizes, all clear timing, number of lightning events needed to trigger the alert). The server system will provide a web site, displaying the lightning detected by the Vaisala lightning sensors over a map. Access to the site is completed through a secure login.

Your organization will have the ability to create multiple groups, each one with multiple alert sites if necessary, each site with 3 (or more) regions delimited by rings of different radii, and multiple logins for getting alert information via e-mail, SMS text (via email if carrier allows it) or visual/audible. Each login can be configured to get alerts from one or multiple sites. And you can add your own assets to the map as additional layers.

The Thunderstorm Manager™ Web Server will be located in your data center or in a Cloud you can access, and will have secure access to your network, and a connection to the Total Lightning Processor.

Customer Requirements and Technical Data

Operating Environment

- A rack to house a 1U blade with power and access to the network
- Access for a Vaisala Service personnel to perform the installation, integrate with the TLP, and initial configuration of the administrator settings and the main organization
- Temperature, relative humidity, based on best practices of a data center

Environmental Specifications

The environmental specifications are equal to the hardware specifications by default. They are subject to change without notice based on hardware availability.

Operating temperature	+10 ... +35 °C (+50 ... +95 °F)
Storage temperature	-40 ... +65 °C (-40 ... +149 °F)
Operating relative humidity	20 ... 80 % non-condensing (noncondensing twmax = +29 °C)
Storage relative humidity	5 ... 95 % non-condensing (twmax = +38 °C)
Operating altitude	-16 ... 3048 m (-50 ... 10 000 ft)
Storage altitude	-16 ... 10 600 m (-50 ... 35 000 ft)

Power Requirements

- 100 ... 240 VAC; 47 ... 63 Hz; 0.4 kVA
- Cabling of each power supply to a different circuit (there are 2 power supplies)
- UPS or secondary power is recommended

Bandwidth

- Recommended 1 GB LAN bandwidth
- Cables: recommended Cat5e or Cat6 for uplinks

Web Browsers Supported

- Chrome
- Firefox
- IE
- Safari

Network

- 2 static IPv4 addresses on same subnet
  - IP address for the VMware ESXi management
  - IP address for TSMI application NAT
- Optional (recommended) DRAC static IP address can be in a separate subnet
  - Required for remote troubleshooting and support
- Network connectivity for the installers laptop/workstation
- Subnet masks
- Gateway IP
- One or more DNS IPs (optional but recommended)
- SMTP IP
- One or more NTP IPs
- Connection to the TLP to retrieve data
- One SSL certificate recommended

Other

Training for administrators to setup new customers and new alert sites is included

Certified Hardware

- DELL POWEREDGE R630 Rack Mount Server
- VMWare ESXi 6.0 with CentOS 6.7
- 4 x 16 GB RDIMM (64 GB RAM)
- 6 x 600 GB Drives RAID 5 (3000 GB Hard Drive capacity)
  - 1 Drive failure fault tolerance
  - 5 x read speed gain
- Two Intel Xeon E5-2680 v3 2.5 GHz
- 750 W dual, hot plug, redundant power supply
- DVD+/-RW SATA Internal

Support Services

Training and after-sales support services are available for maintaining optimal network and processor performance.
Contact your Vaisala Sales Representative for service agreement info.

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