Visonic PowerManage Pre-Installation Requirements and Specifications

Preface

This document provides details and defines the requirements needed on the customer side prior and during a Visonic PowerManage server installation.

The installation will be performed by a Visonic engineer.

The customer is required to read the relevant sections throughout the entire document and to verify to the point of contact at Visonic that all of the requirements will be met on the installation date.

Hardware

The following hardware will be provided by Visonic:

HP Proliant DL360 G6/G7

- Form Factor: 1U Rack Server
- Dimensions (HxWxD, cm): 4.32 x 42.62 x 69.22
- Chipset: Intel 5520
- Processor: Intel Xeon 5504 2Ghz / 5506 2.13Ghz
- RAM: DDR3, 4 GB / 8 GB
- Storage Control: Smart Array P410i SAS RAID
- Hard Drives: 2 x 72 GB / 2 x 300 GB
General

Make sure you have enough room in your designated server rack for a 1U sized server and at least one free power outlet. A second power outlet is recommended as the server has two redundant power supplies. More outlets may be required according to the server configuration that is explained in this document.

Network & Firewall

Visonic recommends connecting the PowerManage behind a firewall or a NAT device and using a restrictive policy for access; the PowerManage server is not secured against Internet attacks. For support purposes, it is recommended to allow access from Visonic's address range 91.207.90.0/23.

- Allocation of 1 fixed public IP address.
- DNS hostname with A and PTR records for the allocated IP address, this should be done by whoever is in charge of your domain whether it's your IT department, your ISP or an online DNS registrar.
- A symmetric uplink connection of 1 Mbit is required at all times
- No blocking of outgoing server connections to the Internet
- The server receives control panel events via TCP and UDP ports 5001 and 8080; these must be accessible from the Internet.
- The web management interface of the PowerManage server can be reached by port 80. The back-end management interface is accessible on port 22 (SSH).
HP Lights-Out Management System

The HP iLO (Integrated Lights-out) management system provides a better type of access and control of the server from a remote machine making server administration and support easier and more reliable. For more details about iLO:


The iLO interface uses a separate Ethernet port and thus it needs a separate IP address and port forwarding for the following TCP ports: 443, 23*, 22 (Optional).

* This port will not be used for regular unencrypted telnet sessions but for a secure remote console from the web interface.

CMS Software

This section applies when connecting Visonic’s PowerManage server using a serial/TCP port to a server running CMS software for reporting.

- The supported protocols are: Contact ID, SIA Level 2, FEP (Bold Manitou), VisNAP.
- Allocate a serial or any TCP port for the connection on your CMS server.
- When using a serial connection:
  - Have a serial cable ready for the installation. In most cases, it will have to be a crossed cable.
  - Make sure you know the serial connection details for your CMS server, the common settings are:
    - Baud : 9600
    - Data bits: 8
    - Parity bit: None
    - Stop bit: 1
PowerLink (Broadband)

This section applies when using control panels that connect to the server using a PowerLink broadband adaptor.

**URL Redirection**

The server is able to provide a name based redirection service for end-users, allowing them to get to their PowerLink unit's login page from anywhere on the Internet.

This functionality can be achieved by entering the PowerManage's hostname into the browser along with the user's PowerLink ID in the following format:


For example:

http://secure.visonic.com/JohnDoe

For this function to work, incoming internet traffic to the server's TCP port 80 must not be blocked.

**PowerLink Firmware Upgrade**

The server is able to upgrade the firmware of PowerLink units that are connected to it. The PowerLink unit connects to the server via FTP and downloads a firmware image which it then applies onto itself.

For this process to work, FTP ports (TCP 20 and 21) on the PowerManage server must be accessible from the internet.
Remote Control Panel Configuration over GPRS

This section applies when performing remote configuration of control panels that connect to the server using GPRS communication or when using the backup SMS receiver.

The following hardware will be supplied by Visonic:

- 1 Cinterion GSM modem
- 1 GSM Antenna for Cinterion GSM modem
- 1 Type C (European) power adaptor – contact Visonic sales for alternatives.

The GSM modem has two functionalities:

1. "Wake up" control panels by a voice call and make them connect to the PowerManage server via GPRS.
2. SMS Receiver backup* function.

Requirements:

- 1 Free power outlet for the GSM modem.
- A SIM card with voice call and SMS receiving capabilities is required; make sure that the SIM card is in a post-paid and not a pre-paid plan to avoid issues.
- Make sure that the SIM card does not require a PIN code to be entered before it can be accessed.
- GPRS capability is not required for this SIM card.
- Make sure you note the phone number on this SIM card as it will need to be entered upon a security system installation.
- Good reception of the GSM network at the installation site.

* SMS receiver function should only be used as a backup receiving interface and not as the primary as it can only be used for a small number of control panels simultaneously.
Messaging

PowerManage supports the dispatching of e-mail, SMS and MMS messaging as notifications for end-users about security system alarms or alerts. Email is also used to report server warnings and faults to the server administrator via email.

Email

E-mail dispatching can be done in two ways:

1. PowerManage will perform mail delivery directly to the recipient's mail server. This option requires the following prerequisites:
   - A and PTR type records, specified in the "General" section of this document, must exist.
   - *An MX type record should be set on the server's DNS domain with the correct hostname.
   - Outgoing communication from the server to TCP port 25 must not be blocked on your network or on your ISP's public network.
     * If another mail server exists on the same domain, make sure to set the "preference" field accordingly so that PowerManage gets the lowest priority – this means a higher preference number.

2. PowerManage will relay the e-mail messages to another mail (SMTP) server to perform the delivery; this option requires the following prerequisites:
   - The e-mail messages will be relayed to the mail server by using it's hostname and not it's IP address.
   - PowerManage currently supports the following SMTP authentication methods: PLAIN, LOGIN, DIGEST-MD5, CRAM-MD5.
SMS

The following hardware will be supplied by Visonic:

- 1 Cinterion GSM modem
- 1 GSM Antenna for Cinterion GSM modem
- 1 Type C (European) power adaptor – contact Visonic sales for alternatives.

Additional requirements:

- 1 Free power outlet for the GSM modem.
- SIM card with SMS sending capabilities, make sure that the SIM card is in a post-paid and not a pre-paid plan to avoid issues.
- Make sure that the SIM card does not require a PIN code to be entered before it can be accessed.
- Good reception of the GSM network at the installation site.

MMS

The following hardware will be supplied by Visonic:

- 1 Cinterion GSM modem
- 1 GSM Antenna for Cinterion GSM modem
- 1 Type C (European) power adaptor – contact Visonic sales for alternatives.

Additional requirements:

- SIM card with MMS sending capabilities, make sure that the SIM card is in a post-paid and not a pre-paid plan to avoid issues.
- Make sure that the SIM card does not require a PIN code to be entered before it can be accessed.
- 1 Free power outlet for the GSM modem.
- Good reception of the GSM network at the installation site.
- Your cellular provider's MMS settings are necessary for connecting to the network, please supply the following information before the installation:
  - APN/WAP gateway
  - Username and password
  - MMSC
  - MMS Gateway
  - MMS Gateway Port (usually 9201 or 8080)
During the installation

A local network engineer must be available at the time of installation.

In most cases, the following equipment will be on site during the installation:

- QWERTY keyboard, either USB or PS/2
- Monitor
- In order to verify proper service functionality, a Visonic control panel with a communication module is required; this can be either a PowerLink with a separate, working Ethernet link or a GSM module with a GPRS SIM card.
Appendix A:  Summary Table of Transport Layer Session Parameters

**PowerManage**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Initiator</th>
<th>Proto.</th>
<th>PowerManage Port</th>
<th>Peer Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPRS events</td>
<td>Remote</td>
<td>TCP</td>
<td>5001</td>
<td>N/A</td>
</tr>
<tr>
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<td>Remote</td>
<td>TCP</td>
<td>5001</td>
<td>N/A</td>
</tr>
<tr>
<td>GPRS event video</td>
<td>Remote</td>
<td>TCP</td>
<td>8080</td>
<td>N/A</td>
</tr>
<tr>
<td>PowerLink events &amp; video</td>
<td>Remote</td>
<td>TCP</td>
<td>8080</td>
<td>N/A</td>
</tr>
<tr>
<td>PowerLink software upgrade (FTP)</td>
<td>Remote</td>
<td>TCP</td>
<td>21</td>
<td>N/A</td>
</tr>
<tr>
<td>PowerLink software upgrade (FTP Data)</td>
<td>Remote</td>
<td>TCP</td>
<td>20</td>
<td>N/A</td>
</tr>
<tr>
<td>Web based interface (HTTP)</td>
<td>Remote</td>
<td>TCP</td>
<td>22</td>
<td>N/A</td>
</tr>
<tr>
<td>Management console (SSH)</td>
<td>Remote</td>
<td>TCP</td>
<td>161</td>
<td>N/A</td>
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<tr>
<td>Health monitoring (SNMP)</td>
<td>PowerManage</td>
<td>UDP</td>
<td>N/A</td>
<td>53</td>
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<tr>
<td>Domain Name lookups (DNS)</td>
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<td>UDP</td>
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<tr>
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<td>PowerManage</td>
<td>UDP</td>
<td>N/A</td>
<td>21</td>
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<td>Control panel template updates (FTP)</td>
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<tr>
<td>Control panel template updates (FTP Data)</td>
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<tr>
<td>E-mail notifications (SMTP)</td>
<td>PowerManage</td>
<td>TCP</td>
<td>N/A</td>
<td>25</td>
</tr>
</tbody>
</table>

1 Can be changed upon request

**ILO**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Initiator</th>
<th>Proto.</th>
<th>PowerManage Port</th>
<th>Peer Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web based interface (HTTPS)</td>
<td>Remote</td>
<td>TCP</td>
<td>443</td>
<td>N/A</td>
</tr>
<tr>
<td>Text based interface (SSH)</td>
<td>Remote</td>
<td>TCP</td>
<td>22</td>
<td>N/A</td>
</tr>
<tr>
<td>Remote Console (HP Proprietary)</td>
<td>Remote</td>
<td>TCP</td>
<td>23</td>
<td>N/A</td>
</tr>
</tbody>
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