Honeywell

Light Commercial Building Solution (LCBS) Products
IT MANAGER'S
FREQUENTLY ASKED QUESTIONS

This document addresses some of the common questions that IT managers have with using Honeywell's Light Commercial Building Solution (LCBS) products. It contains the following sections and questions:

Overview (see page 2)
- What is the XL15B product and the LCBS architecture?
- What Lon devices will be connected to or talking on my network?

Integrating Lon devices into your Environment (see page 3)
- How will the XL15B solution tie in with my current Windows NT Server, Windows 2000, or Windows XP infrastructure?
- Does the XL15B support DHCP and DNS? How about Dynamic DNS?
- Which software protocols and RFCs (Request for Comments) does the XL15B support?
- I use Netscape Navigator as a browser, are there any ActiveX compatibility issues that I need to be concerned with?
- What ports does the XL15B use for communication over the Ethernet?

Managing XL15B Hosts (see page 3)
- How do I back up this device?
- What LAN network management tools do I use to manage these devices?

Impacts on Network Traffic (see page 3)
- What does a system with an XL15B do to my network traffic and bandwidth?

Connecting XL15B Hosts on the Internet (see page 4)
- How do I access an XL15B over the Internet?
- Can I access the entire Lon network if only the XL15B is exposed to the Internet?

Impacts on Security (see page 4)
- How is the XL15B protected from viruses?
- How do I protect someone from hacking into my XL15B system?

More Information (see page 4)

70-2718

OVERVIEW

- **Question 1**   What is the XL15B product and the LCBS architecture?

The Excel 15B Building Manager is a Light Commercial Building Solution (LCBS) operator interface (Ethernet network server) and LonWorks® Bus supervisory device. On the Ethernet side it provides multi-user access to HTML pages for Building Manager configuration and LCBS monitoring and command functions. On the LonWorks® side it communicates with NX VFD, Excel 10 application specific devices, and Excel 15C plant managers to provide network wide alarm handling, scheduling, trend logging, and monitoring building's rate of energy consumption – Demand Limit Control service.

- **Question 2**   What Lon devices will be connected to or talking on my network?

It supports a maximum of 120 devices; a combination of Honeywell NX VFD, Excel 10 application specific devices and Excel 15C plant managers on the same subnet/domain. Your XL15B installation may consist of one or more of the following Lon devices on the network (see Figure 1):

NX VFD Variable Frequency Drive

Q7300H Communicating subbase for T7300 thermostat

T7350 Communicating thermostat

W7750A,B,C Constant Volume Air Handler Unit Device

W7751B,D,F,H,J Variable Air Volume II Device

W7752D,E,F,G,J Fan Coil Device

W7753A Unit Vent Device

W7760C&D Plant Managers

W7761A Remote Input/Output Device

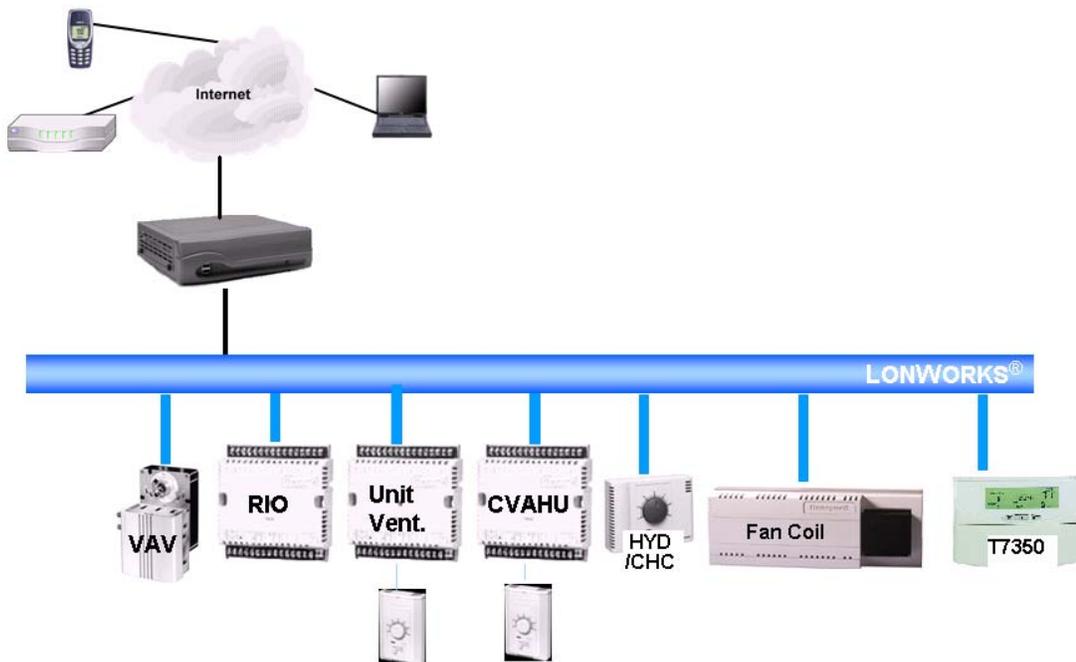W7762A,B Hydronic Device

W7763C Cold Ceiling Device

Fig. 1. Typical architecture on a corporate WAN

INTEGRATING LON DEVICES INTO YOUR ENVIRONMENT

- **Question 3**   How will the XL15B solution tie in with my current Windows NT Server, Windows 2000, or Windows XP infrastructure?

The XL15B can co-exist on your Windows NT Server/Windows 2000/XP infrastructure. The XL15B uses any internet web browser to access the web server.

- **Question 4**   Does the XL15B support DHCP and DNS? How about Dynamic DNS?

DHCP is supported in the XL15B, though static IP addresses provide the most reliable connectivity. To reliably use DHCP we recommend that you reserve an IP address in the DHCP server for the MAC address of the XL15B. This ensures that the XL15B receives the same IP address whenever it requests one from the DHCP server.

DNS is supported in the XL15B.

DDNS is a service that is provided by the ISP and is outside the scope of the XL15B.

- **Question 5**   Which software protocols and RFCs (Request for Comments) does theXL15B support?

The XL15B primarily uses the HTTPS protocol to communicate between the XL15B and the web user interface. SMTP is used as a client for e-mail alarm notifications.
— SMTP (as a server for e-mail alarm notifications) – RFC 821
— Time Protocol (as a client or server for time synchronization) – RFC 868

- **Question 6**   I use Netscape Navigator as a browser, are there any ActiveX compatibility issues that I need to be concerned with?

The XL15B does not use any ActiveX in its software.

- **Question 7**   What ports does the XL15B use for communication over the Ethernet?

The XL15B uses the following ports for communication over the Ethernet:
— 25 - SMTP for e-mail alarm notification
— 80 - HTTP for login page before authentication
— 443 – Secure shell (SSH) used for all encrypted traffic (i.e. all pages from the 15B)

MANAGING XL15B HOSTS

- **Question 8**   How do I back up this device?

XL15B utilizes an internal hard drive to store all the data. Good practices dictate that you take a backup of the system data and store it in another location. The "Save DB" and "Restore DB" options are used for the data backup and restore process.

- **Question 9**   What LAN network management tools do I use to manage these devices?

The XL15B application provides all the tools required to monitor all and command certain specific points in Honeywell's Lon devices. The LonSpec configuration tool is needed to configure the controllers on the network but the XL15B will manage the individual devices.

IMPACTS ON NETWORK TRAFFIC

- **Question 10**   What does a system with an XL15B do to my network traffic and bandwidth?

The XL15B needs minimal bandwidth on the LAN network when the web server is both being used and not being used.

CONNECTING XL15B HOSTS ON THE INTERNET

- **Question 11**   How do I access an XL15B over the Internet?

The XL15B must have a public (routable) IP address. You can assign one from your pool of public addresses, or use name/address translation (NAT) through a firewall or router to assign an address.

- **Question 12**   Can I access the entire Lon network if only the XL15B is exposed to the Internet?

Any controllers that are on the same Lon network as the XL15B can be viewed through the XL15B web server. Most controllers also have limited ability to be modified by the XL15B. For example a user can change the setpoints of the T7350H.

IMPACTS ON SECURITY

- **Question 13**   How is the XL15B protected from viruses?

The XL15B functions as a proprietary web server, not typical client machines. As part of normal station operations, they do not download any files. Along with this, the XL15B is designed and run on a Linux platform with its own firewalls and is not as susceptible to viruses as a Windows platform may be.

- **Question 14**   How do I protect someone from hacking into my XL15B system?

Concerns about hacking typically fall into three categories:
— Viruses—See Question 13.
— Web Servers—The XL15B does not use the Microsoft IIS server, instead it is a Linux server. This eliminates many security holes associated with the Microsoft IIS server. Also without the XL15B source code it is highly unlikely that someone could hack the system without reverse engineering the product.
— Host Access—Any host connected to the Internet is vulnerable to attacks. The XL15B uses a firewall system called Ipchains to set up, maintain, and inspect the IP firewall rules in the Linux kernel.

MORE INFORMATION

For more information please click the following links:

Installation Instructions
http://customer.honeywell.com/Techlit/Pdf/95-0000s/95-7668.pdf

Specification Data
http://customer.honeywell.com/Techlit/Pdf/74-0000s/74-3472.pdf

Software Release Bulletin
http://customer.honeywell.com/Techlit/Pdf/74-0000s/74-3985.pdf

Users Guide
http://customer.honeywell.com/Techlit/Pdf/74-0000s/74-3471.pdf

By using this Honeywell literature, you agree that Honeywell will have no liability for any damages arising out of your use or modification to, the literature. You will defend and indemnify Honeywell, its affiliates and subsidiaries, from and against any liability, cost, or damages, including attorneys' fees, arising out of, or resulting from, any modification to the literature by you.