



Control Technical and Installation Notes Mitel/Marriott



Mitel Link is a joint venture between Control HPD and Mitel Communications Solutions to provide a custom interface for Marriott Hotels. The solution is the *InterChange Thin Server (ITS)* consisting of 8 serial port interfaces that interface the following over one port to the PMS.

- PBX
- Voice mail
- Call accounting
- In-room movies

The following hotel brands are supported:

- **Courtyard** with a *CYPMS* system
- **Residence Inns** and **Town Place Suites** with a *Ritchie* PMS system

The InterChange Thin Server (ITS) following part numbers correlate to these PMS system configurations:

PMS and Port Type	ITS Part Number
CYPMS (PBX, VM, PM)	51010-9
CYPMS (PBX, VM, PM, LodgeNet)	51015-4
CYPMS (PBX, VM, PM, OCV)	51013-0
Richie (PBX, VM, PM)	51009-3
Richie (PBX, VM, PM, LodgeNet)	51014-7
Richie (PBX, VM, PM, OCV)	51012-3

Product Definition

The Mitel/Marriott ITS Link is downloaded with the proper protocol prior to shipment for the required site. **All** units will have the following three ports assigned:

- L0 = PMS
- L1 = PBX
- L3 = Voice Mail

Some test units may have these ports assigned:

- L2 = Call Accounting
- L4 = Movies

The following voice mail types are supported:

Voice Mail Type	Format
Mitel Mail	Hyatt Encore, Marriott CFR
Mitel Express Messenger	Hyatt Encore, Marriott CFR
Centigram	Hyatt Encore, Marriott CFR
Baypoint Nupoint Messenger	Hyatt Encore, Marriott CFR
Hartford Communications Criterion	Hyatt Encore
VSR COVoice	Hyatt Encore

Installation Overview

The overall installation consists of the following steps:

1. Configure the Data Set and Switch using the appropriate [Configuring the Data Set and Switch for the SX200](#) or [Configuring the Data Set and Switch for the SX2000](#) subsection.
2. Install the ITS using the [Installing the ITS](#) discussion.
 - a. View activity between the ITS and various devices installed.
 - b. Test Switch and Voice Mail functionality.
3. Install modem supplied with kit.

Note: The modem uses a DB9 male to DB25 male null-modem cable.

Configuring the Data Set and Switch for the SX200

You can use this discussion to configure the data set and switch for the SX200.

Note: The source for this subsection was the Liteware 16 documentation. You may need to reference the Liteware 16 or higher documentation for more detailed or updated information.

SX200 Serial Setup - Manufacturers Default Settings

Baud	9600
Data Bits	8
Parity	N
Stop Bits	1
Flow Control	See below.

Physical Setup

The data set port can be set up entirely through CDE.

1. Enter System option form #4 and enable the PMS option.
2. If an appropriate *Data Circuit Descriptor* does not exist, enter form #11 and create one for the appropriate configuration.
3. Enter the Data Station Assignment form (form #12) and associate the descriptor with an unused data station.
4. Enter the directed I/O form (form #34) and associate the new data station with the PMS.

Option	Value
Session Inactivity Disconnect Timer	0 Minutes
Guard Time	2
Min / Max / Default Baud Rate	9600
DTR off disconnect timer	5
DTR to CTS delay timer	100mS
DTR forced high	Yes
RTS forced high	Yes
DSR high when device idle	Yes
CTS high when device idle	yes

SX200 - Programming Call Restrictions

Step	Action	Comments
1	Form 03	Select COS Option 101 (Attendant O/G Restriction/Room Status Setup) for the attendant console.
2	Form 04	Enable System Option 32 (Outgoing Call Restrictions) Set default Vacant Room Status Call Restriction type via System Option 57 (Vacant Room Default Call Restriction). By default, vacant rooms (and rooms that become vacant) have their call restriction set to Internal, the most restrictive option. This setting prevents unauthorized calls from vacant rooms. Set default Occupied Room Status Call Restriction type via System Option 58 (Occupied Room Default Call Restriction). By default, occupied rooms have the call restriction set to Internal, the most restrictive option. Typically, when a room becomes occupied, the guest is provided with a less restrictive setting.

Note: Make sure that you program the call restriction. System Features 32 (Outgoing Call Restriction) and 33 (Room Status) are mutually exclusive.

Configuring the Data Set and Switch for the SX2000

You can use this discussion to configure the data set and switch for the SX2000.

The source for this subsection was the Liteware 27 documentation. You may need to reference the Liteware 27 or higher documentation for more detailed or updated information.

1. Select System Forms --> Hotel Options Form --> Property Management System Installed -->Yes

2. Data Set Circuit Descriptor:

- a. Set to defaults
- b. Change Active Indicator (also called Active Indicator or AI **Always**)
- c. Change Flow Control **None**

The descriptor should look like this:

DATASET CIRCUIT DESCRIPTOR ASSIGNMENT

Circuit Descriptor Number:	
Descriptor	Value
Device Class	DS1100
Usage	BASIC
Defaults (Yes, No) ** Yes asserts MITEL default values, according to the above Device Class and Usage, for all the parameters below.	NO
Common Parameters for All Datasets	
Connection Timers	
Guard Timer (0 to 99 secs)	0
Connect Confirmation Timer (0 to 99 minutes)	0
Session Inactivity Timer (0 to 240 minutes)	0
Interface Characteristics	
Interface type (RS-232, X.21, V.35, V.24)	RS232
Interface Controlled Active Indicator (Never, DTR on, RTS on, Either on, Always)	ALWAYS
Interface Controlled Active Indicator to CTS Delay Timer (0 to 99 in 1/10 sec intervals)	0
Interface Controlled Originate Indicator (Active on, Active off>on, User Action)	ACTIVE OFF>ON
Interface Controlled Disconnect Indicator (Never, Active on>off, DTR on>off)	ACTIVE ON>OFF
Interface Controlled Disconnect Indicator OFF Timer (0 to 99 in 1/10 sec intervals)	0
Incoming Call Action (Refuse, RI, DCD, DSR, Accept)	ACCEPT
Interface Controlled Call Accepted Indicator (DTR, RTS, None)	DTR
DTE Min Baud Rate (110, 150, 200, 300, 600, 1200, 2400, 4800, 9600, 19200, 48000, 56000, 64000)	110
DTE Max Baud Rate (110, 150, 200, 300, 600, 1200, 2400, 4800, 9600, 19200, 48000, 56000, 64000)	19200
DCD Fixed High (Yes, No)	NO
Maintenance Parameters	
DATASET Auditing (Yes, No)	YES
Attached Device Loopback (Yes, No)	NO

3. Data Set Assignment:

- a. Program as normal
- b. Set the Port Field to **yes**

4. CDE Programming for PMS

The following forms must be completed for the PMS to operate:

- a. System Port Assignment.

Assign PMS_IN and PMS_OUT to a system port. (See the [System Port Assignment Form](#) illustrated below.)

- b. Application Logical Port Assignment.

Assign the Port Physical Name entered in the System Port Assignment form to the PMS Input and Output Port Logical names.

- c. Hotel Options Assignment.

Enter **Yes** in the *Property Management System Installed* field (see [Step 11](#)). If this field is set to “No”, the system assumes there is no PMS interface.

System Port Assignment Form

Port Address

Cab	Shlf	Slot	Cir	Chan	Port	Flow	Port Type	Port Name	Baud Rate	Parity
1	1	1	1		1	Output	Maint	LPR1	9600	8N2
1	1	1	1		2	Output	Maint	LPR2	9600	8N2
1	1	1	1		3	Output	Aux	LPR3	1200	8N2
1	4	1	1		1	Input	SS7		1200	8N2
1	4	1	1		2	Output	SS7		1200	8N2
1	4	1	2		1	Input	SS7		9600	8N2
1	4	1	2		2	Output	SS7	SS7PRT	9600	8N2
1	4	1	3	2	1	Input	SS7	PMS_IN	9600	8N2
1	4	1	3	2	2	Output	SS7	PMS_OUT	9600	8N2
1	4	1	4	2	1	Output	DNIC	MSGCTR	1200	8N2

Installing the ITS

This discussion provides setup instructions for the Mitel Link product. Following these step-by-step instructions, a Mitel Vendor will be able to seamlessly integrate the Mitel PBX and Dataset to the Property Management System using the Control Interchange Thin Server.

Note: These setup instructions pertain to the setup of the Control Unit **specifically**. For setup information on the PBX and Data Set, see your Mitel Documentation.

Each ITS (InterChange Thin Server) unit consists of eight programmable RS-232 ports, one *Ethernet* Port, and a *Console* port. The RS-232 ports (RJ45 connectors on the back of the unit) are labeled as L0 through L7. The ITS unit is supplied with RJ45 to DB25 adapters.

- The *Ethernet* port can be used to connect the ITS to the network. The Ethernet port is used if you are connecting devices over IP as opposed to serially. If any devices talk over IP, then connect the Ethernet port to the network hub at the property. **It is not for the specific device to connect to**, just to get the unit on the local network. (The Ethernet port is also used to load new software images on the ITS unit, if necessary.)
- The *Console* port is used to change RS-232 port parameters and for viewing the activity between the Mitel/Marriott ITS and the various connected devices. The *Console* port is a DB9 female connector and requires a straight-through cable to a COM port on a PC.

Note: The Configuration Host can be either the PMS or any other PC or laptop running Windows 95/98/NT.

To begin installation, you will need the following (in addition to what comes with the Control ITS unit and Marriott installation kit):

- Windows 95/98/NT PC with TCP/IP installed and 10MB network adapter (NIC)
- HyperTerminal or another serial communications software, such as ProComm
- DB9M/F (male or female) serial cable for the **Console** port connection

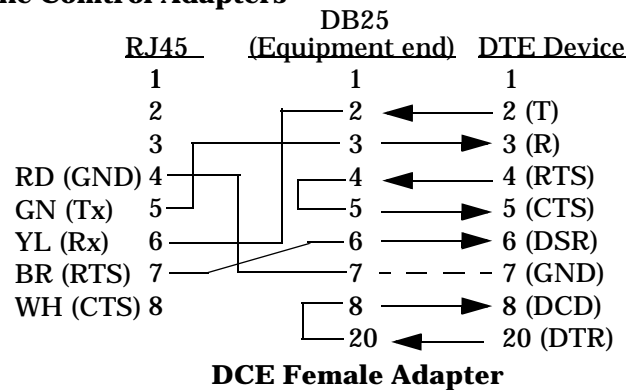
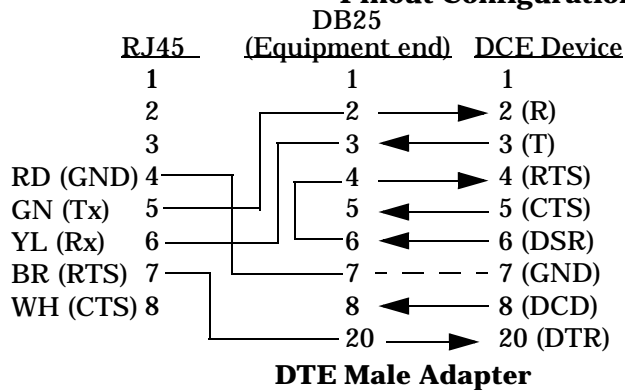
1. Unpack the Control ITS. The kit should contain the following:

- 1 Interchange Thin Server with one power supply
- 4 Male Adapters – 25 pin on one side, RJ45 on the other
- 4 Female Adapters - 25 pin on one side, RJ45 on the other
- 8 Category 5 Ethernet patch cables with RJ45 connectors



Detailed information is available in the [Hardware Installation](#) documentation.

Pinout Configuration for the Control Adapters

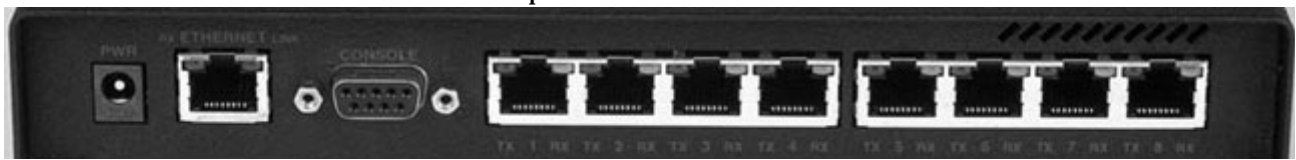


2. Unpack the *Marriott Installation Kit*, which contains the following:

Marriott Installation Kit for Control ITS

Item	Qty	Part number	Source
Dataset 1103	1	9141-110-300-NA	Mitel via Graybar
DB25M to DB25M null modem cable 2 ft.	1	D10425-002	Graybar
DB25M to DB9M null modem cable 2ft.	2	C53354-002	Graybar
DB25M to DB9M straight cable 6 ft.	1	GBDB25MDB9M-6	Graybar
Female to female gender changer	1	ATGM9FF	Graybar
Female to female gender changer	1	ATGM25FF	Graybar
USR modem	1	940707	USR via Graybar

3. Connect one end of the DB9 serial cable to the COM port on the back of your PC or Laptop other end of the DB9 serial cable to the back of the ITS port labeled *Console*.



4. Using the Cat 5 Ethernet patch cables and DB25 adapters provided, connect each device to the specific port listed:

- All units will have the following three ports assigned:
 - L0 = PMS
 - L1 = PBX
 - L3 = Voice Mail
- Some test units may have these ports assigned:
 - L2 = Call Accounting
 - L4 = Movies

New Installations Using IO Lan Server (L0 to PMS):

- a. Connect the DB25 male adapter and patch cable supplied with the Control unit.
- b. Connect the DB25 female adapter (labeled RJ45/DB25F) supplied by Marriott.
- c. Connect this cable assembly into the PMS.

Existing Installs With Mitel Mail Interface and Utilizing a Terminal Server (L0 to PMS):

- a. Connect the DB25 male adapter and patch cable supplied with the Control unit.
- b. Connect the DB25 female adapter (labeled Datatec 9-979R) supplied by Marriott.
- c. Connect this cable assembly to the cable that was originally the Mitel Mail interface to the PMS.

L1 to PBX Data Set:

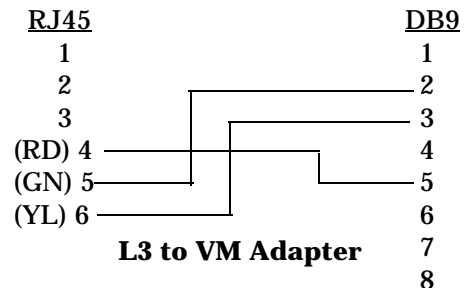
Use the DB25 male adapter and patch cable supplied with the Control unit and connect to the data set.

L3 to VM

Use the L3 to VM figure at the right to build an adapter to attach to a Control patch cable:

For example: Connect the Ritchie PM to L0, your Mitel Dataset to L1, and the Mitel Express Messenger to L3.

Note: There are two indicator lights at the back of each port. Green indicates power and amber indicates connectivity to your device when the device is receiving power.



5. [Set up a HyperTerminal](#) (or ProComm) session on the Laptop/PC that you are using to set up the ITS.
- a. Connect *Direct to Com X*, where *X* is the free COM port on the system you are using

- b. Set the parameters for the system to **9600 N 8 1**.
6. Plug in the power supply to the ITS unit. You should see the unit boot up and run test procedures. The following is an example of what you should see at boot up:

```

Booter Initialized.
                Press any key for boot menu or wait to run current image
.....
Decompressing FEPROM image to DRAM.
/
Image decompressed, booting.}Listening for ethernet connection [Port: 28673]
[PWatchDogApp] 1 'Initialized status information'
[PWatchDogApp] 1 'Created Debug Monitor'

```

```

**** Image Information ****
Site : 9600 Baud Console
Image: Demo Image
Logical Physical Device
=====
0         L0  MitelLink [424] (These are DMM #s 424,333,223,513: An identifier
1         L1  Mitel 200D [333] for each device.)
3         L3  Centigram Hyatt [223]
4         L4  OnCommand Single Rev A [513]
This is your header information that lets you know what interface software is loaded
on your device.

```

```

**** Network Information ****
IP address: 134.199.191.147
Subnet mask: 255.255.255.0
Gateway IP: INVALID
[PWatchDogApp] 2 'Invalid gateway specified (85.85.85.85) and not used'
MAC address: 00:10:C5:55:55:55
This is your network information.

```

```

**** Component Information ****
Component Version
=====
BSP        1.3
Watchdog   2.1
PTILibrary 2.0
LL2AuxLibrary 2.0
LL2Library 2.0
Derivations 1.0
MessageRouter 1.0
TimerApp   1.0
DebugMonitor 1.0
EthernetPort 1.1
SerialPort 1.1
[PWatchDogApp] 1 'Created timer application'
Copyright (c) Integrated Systems, Inc., 1992.
[PWatchDogApp] 0 'Creating process TA (PMessageRouterApp)'
[PMessageRouterApp] 1 'Created shared router data module'
Welcome to pSOSystem...
[PWatchDogApp] 0 'Creating process TB (POnCommandSingleRevADeviceApp)'
Thin Server specific software information.

```

```

[513] 1 'Initialized device 4'
[PMessageRouterApp] 1 'Device 4 attached'
Howdy->[PWatchDogApp] 0 'Creating process TC (PLGSPort)'
[PWatchDogApp] 0 'Creating process TD (PCentigramHyattDeviceApp)'

```



```

[223] 1 'Initialized device 3'
[PMessageRouterApp] 1 'Device 3 attached'
[PWatchDogApp] 0 'Creating process TE (PLGSPort)'
[PWatchDogApp] 0 'Creating process TF (PMitel200DDeviceApp)'
[333] 1 'Initialized device 1'
[PMessageRouterApp] 1 'Device 1 attached'
[PWatchDogApp] 0 'Creating process TG (PLGSPort)'
[PWatchDogApp] 0 'Creating process TH (PMitelLinkDeviceApp)'
[424] 1 'Initialized device 0'
[PMessageRouterApp] 1 'Device 0 attached'
[PWatchDogApp] 0 'Creating process TI (PLGSPort)'
[PWatchDogApp] 0 'All processes created'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TA (PMessageRouterApp'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TB (POnCommandSingleR
[513] 0 'Received PTISIG_DEVICE_INITIALIZE'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TC (PLGSPort)'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TD (PCentigramHyattDe
[223] 0 'Received PTISIG_DEVICE_INITIALIZE'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TE (PLGSPort)'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TF (PMitel200DDeviceA
[333] 0 'Received PTISIG_DEVICE_INITIALIZE'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TG (PLGSPort)'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TH (PMitelLinkDeviceA
[424] 0 'Received PTISIG_DEVICE_INITIALIZE'
[PWatchDogApp] 1 'Sending PTISIG_DEVICE_INITIALIZE to task TI (PLGSPort)'
[PWatchDogApp] 1 'Sent initialization signal to all tasks'
[Task 0x3c0000] 0 'PMessageApplication: Could not find entry for signal 5001'
[Task 0x440000] 0 'PMessageApplication: Could not find entry for signal 5001'
[Task 0x4c0000] 0 'PMessageApplication: Could not find entry for signal 5001'
[Task 0x540000] 0 'PMessageApplication: Could not find entry for signal 5001'
[PWatchDogApp] 1 'Sent the go signal to all tasks'
[Task 0x330000] 0 'PMessageApplication: Could not find entry for signal 5001'

```

[513] 0 'Received PTISIG_DEVICE_GO'	<u>DMM Number Definitions</u> 424 = PMS 333 = PBX 223 = Voice Mail 513 = On Command Movie System 544 = Lodgenet Movie System
[223] 0 'Received PTISIG_DEVICE_GO'	
[333] 0 'Received PTISIG_DEVICE_GO'	
[424] 0 'Received PTISIG_DEVICE_GO'	
[513] 0 'Received PTISIG_DEVICE_GO'	
[223] 0 'Received PTISIG_DEVICE_GO'	
[333] 0 'Received PTISIG_DEVICE_GO'	
[424] 0 'Received PTISIG_DEVICE_GO'	
OR	
[333] 2 'Device not responding'	

Note: As the Mitel/Marriott ITS communicates with a device you can see the code between them, that is, the PMS enquires the PBX.

424 enq are you there

333 ack.

7. Verify that you have received either the **GO (Received PTISIG_DEVICE_GO)** signal or a DNR (Device not responding) message. If you receive the "GO" signal, it means you have communication with the PMS.
8. Press the Enter key to get a **HOWDY>** prompt.

Howdy-->

9. View the PMS port settings from the Howdy-> prompt with the portconfig command:

```
Howdy->portconfig -i
```

where: -i displays verbose information about a port. If no port number is indicated, all ports display. The following example illustrates a typical first time installation:

Logical Port	Physical Port	Baud	Data	Parity	Stop	IP Address	Port
0	L0	1200	8	N	1		
1	L1	1200	8	N	1		
2	L2	1200	8	N	1		
3	L3	1200	8	N	1		
4	L4	1200	8	N	1		
5	L5	1200	8	N	1		
6	L6	1200	8	N	1		
7	L7	1200	8	N	1		

10. Configure the ports for your devices using the [Device Port Settings](#) table and the following syntax. For more detailed syntax information, see the [Command Line Syntax \(LL2 - V2\)](#) discussion.

For example: Howdy->-d=0 -baud=4800 -d=1 -baud=9600 -d=3 -data=7 -parity=e -d=4 -data=2400 -parity=o

Device Port Settings

Logical Port	Device	Baud	Data bits	Parity	Stop bits
L0	PMS	4800	8	N	1
L1	PBX	9600	8	N	1
L3	VM	1200	7	E	1
L4	Movie System	2400	7	O	1

	Parameter	Description	Value
All	-d=	The logical port number. This must always appear as the first parameter, as illustrated in the example above.	0 - 7
	-baud	Baud rate of the GSS device.	1200, 2400, 9600, 19200, 38400
Serial Parameters, Only	-data=	Number of data bits on the GSS device.	4, 5, 6, 7 or 8
	-parity=	Parity of the GSS device.	e=even, o=odd, or n=none.
	-stop=	Number of stop bits for the device.	1 or 2
	-t=serial	Specifies the type of device associated with a particular port. Should only be used when changing the port's device type (between serial and Ethernet). This switch must be followed by at least one of -baud , -data , -parity or -stop when the current device type is Ethernet and you wish to change to serial.	
Ethernet Parameters, Only	-a=	The IP address for the device. The -d switch must appear before this one.	Valid values are of the following form: 255.255.255.255
	-p	Sets the IP port number for the device. The -d switch must appear before this one	
	-t=ethernet	Specifies the type of device associated with a particular port. Should only be used when changing the port's device type (between serial and Ethernet). The -d switch must appear before this one. If using -t=ethernet this switch must be followed by at least one of -a or -p when the current device type is serial and you wish to change to Ethernet.	

After completing the port configuration, you will see this message:

You will need to reboot in order for changes to take effect

11. Review the PMS port settings from the **Howdy->** prompt:

```
Howdy->portconfig -i
```

This example illustrates what the PMS port setting should look like after configuration.

Logical Port	Physical Port	Baud	Data	Parity	Stop	IP Address	Port
0	L0	4800	8	N	1		
1	L1	9600	8	N	1		
2	L2	1200	8	N	1		
3	L3	1200	7	E	1		
4	L4	1200	7	O	1		
5	L5	1200	8	N	1		
6	L6	1200	8	N	1		
7	L7	1200	8	N	1		

12. Reboot the ITS with the following command:

```
Howdy->LL2 -reset
```

13. Verify that the green and amber port LEDs (L0 through L7) to which a GSS device is connected are lit on the Thin Server. If both LEDs are on, then you have a good connection between the Thin Server and the GSS device.

If there is a problem, go to the [Contacting Technical Support](#) discussion.

Command Line Syntax (LL2 - V2)

Command Line Syntax is the method by which a technician can if needed display port parameters or change them. Be careful when using this syntax and only do so with the assistance of PTI tech support or someone trained in their use such as someone in Northeastern Engineering.

Note: If you have BIOS V2.1, there is a different set of [syntax](#).

Each command available at the Lodging Link II (LL2) **Howdy>** prompt takes the following form:

where:

- Brackets " [] " denote optional parameters, but are not typed as part of the command.
- Pipe "|" indicates that one of the values that it separates should be chosen as the value.

command [-switch[=value[[value ... | value]]]

where:

- **command** is any of the available commands listed below.
- **switch[=value]** is specifically defined under each command listed below.

Note: Do not type a space between the **-switch**, **equal sign** and **value** when entering any command.

Available Commands

Command	Description
ll2	Sets and retrieves information about the overall status of the LL2 unit.
ipconfig	Sets and retrieves network parameters for the LL2 unit.
portconfig	Sets and retrieves the serial port parameters for each serial port on the LL2 unit.
ping	Issues an ICMP ping request from the LL2 unit to a destination machine.
Help	Provides a list of all commands available from the command line. Any of the commands listed can be invoked with the -? switch to their options.

Most command line applications in the Lodging Link II unit support this common set of switches.

Common Switches

Switch	Description
-I	Displays general information related to the command.
-l	Displays more verbose information related to the command.
-v	Displays the version number of the command software.
?	Displays usage information about the command.

ll2

Sets and retrieves information about the overall status of the ITS unit. It supports the [Common Switches](#), in addition to the following:

-start	Starts the LL2 unit if the -stop flag has been previously used. It does not perform any hardware resetting. <i>This is not currently implemented.</i>
-stop	Stops the LL2 unit if it is running. It simply stops all interfaces software except the command line. <i>This is not currently implemented.</i>
-reset	Resets the LL2 unit's hardware. This is equivalent to powering up the unit.
-debug=on off	Allows informational messages to be sent from the LL2 unit to the Messages, Link Monitor application. Messages are sent by default (the status is on).
-config=ip_address	Reboots the LL2 unit and attempts to connect to LL2 Configuration Server at the specified IP address.
-trace= none debugger console ethernet	Sets the debugging trace location to one of the specified values.

Example 1: To restart the LL2 Unit

```
Howdy> ll2 -reset
```

Example 2: To restart the Lodging Link Unit and connect to an LL2 Configuration Server:

```
Howdy> ll2 -config=192.168.0.55
```

ipconfig

Sets and retrieves the network parameters for the LL2 unit. It supports the [Common Switches](#).

-a= ip_address	Sets the IP address of the LL2 unit.
-s= subnet_mask	Sets the subnet mask of the LL2 unit.

Example: To set the IP Address of the LL2 unit

```
Howdy> ipconfig -a=192.168.0.100
```

portconfig

Sets and retrieves the serial or ethernet parameters for each logical port on the LL2 unit. (This command should now be used to instruct Lodging Link at which IP and Ethernet port it can find the Property Management System. It replaces the `pmsconfig` command. See Example 2.) It supports the [Common Switches](#).

Parameter	Description
<code>-d=device_id</code>	<p>This switch is required as the first parameter if you are setting any parameters for a logical port. Note the logical and physical port assignments.</p> <p>Logical Ports Lodging Link has eight logical ports numbered 0 through 7. These logical port numbers are shown in the table under the heading Logical when the Lodging Link Unit first boots up. These logical port numbers must be used as the <code>device_id</code> value for this parameter when changing any settings using the this command. This value should not be confused with the physical ports listed below.</p> <p>Physical Ports Lodging Link has nine physical ports, named L0 through L7 and Ethernet. These physical port names are shown in the table under the heading Physical when the Lodging Link Unit first boots up. These physical port names are provided to indicate to the installer which "hole" to plug a particular interface into on the Lodging Link unit. These physical names (L0, L1, etc.) usually correspond directly with their logical counterparts (0, 1, etc.), however, this is not always the case. Therefore, when issuing a <code>portconfig</code> command, make sure to use the logical port number and not the physical port number. The logical port values can be found when the Lodging Link unit first boots up.</p>
<code>-t=serial</code> or <code>-t=ethernet</code>	<p>Specifies the type of device associated with a particular port. Should only be used when changing the port's device type (between serial and Ethernet). The <code>-d</code> switch must appear before this one.</p> <p>If using <code>-t=serial</code> this switch must be followed by at least one of <code>-baud</code>, <code>-data</code>, <code>-parity</code> or <code>-stop</code> when the current device type is Ethernet and you wish to change to serial. If using <code>-t=ethernet</code> this switch must be followed by at least one of <code>-a</code> or <code>-p</code> when the current device type is serial and you wish to change to Ethernet.</p>
<code>-baud=baud_rate</code>	<p>Serial only: It is the baud rate for the device. The <code>-d</code> switch must appear before this one. Valid values are 1200, 2400, 9600, 19200, 38400.</p>
<code>-data=data_bits</code>	<p>Serial only: Sets the number of data bits for the device. The <code>-d</code> switch must appear before this one. Valid values are 4, 5, 6, 7 or 8.</p>
<code>-stop=stop_bits</code>	<p>Serial only: Sets the number of stop bits for the device. The <code>-d</code> switch must appear before this one. Valid values are 1 or 2.</p>
<code>-parity=parity</code>	<p>Serial only: Sets the parity for the device. The <code>-d</code> switch must appear before this one. Valid values are N, E or O.</p>
<code>-a=ip_address</code>	<p>Ethernet only: Sets the IP Address for the device. The <code>-d</code> switch must appear before this one. Valid values are of the following form: 255.255.255.255</p>
<code>-p=port</code>	<p>Ethernet only: Sets the IP port number for the device. The <code>-d</code> switch must appear before this one.</p>
<code>-r</code>	<p>Resets the port parameters of the specified <code>device_id</code>. If the <code>device_id</code> is not provided, the command resets the port parameters for all devices.</p> <p><i>Example: To set logical Port 2 to default values.</i></p> <pre>portconfig -d=2 -r</pre>

Example 1: To set the baud rate for a serial device on logical Port 4 to 9600 bps.

```
Howdy> portconfig -d=4 -baud=9600
```

Example 2: To set the IP Address and IP port for an Ethernet device on logical Port 0

```
Howdy> portconfig -d=0 -a=192.168.0.99 -p=28673
```

ping

Sends an ICMP ping request to a destination machine in an attempt to see if that machine is reachable from the Lodging Link II unit.

- If the destination machine is reachable and responds, you will see the message: "ip address is alive".
- If the destination machine is not reachable or does not respond, you will see the message: "ping wrote ip address 64 chars, ret=-1"

ip_address Destination address of the ping request.

-s Performs 10 sequential ping requests of the same host and reports the results of the attempts.

Example: To ping a machine with IP address of 192.168.0.99

```
Howdy> ping 192.168.0.99
ping (192.168.0.99): 56 data bytes
192.168.0.99 is alive
Howdy>
```

Contacting Technical Support

Control has a staff of support technicians available to help you. Before you call, you may want to go through [Troubleshooting](#) section in the *LL2 Software Installation* document.

Please have the following information available, if you contact Technical Support:

- Thin Server serial number
- Thin Server BIOS version
- Image number
- Site name
- Use Hyperterminal or Procomm to create a capture file. The capture can be sent by email to Control Technical Support at the email listed below and they can help diagnose the problem.

Note: *The capture should be accompanied by a detailed written description of the problem. [The capture should begin with a boot](#), followed by the `portconfig -i` command from the Howdy prompt, followed by the device operations that demonstrate the problem.*

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Email	support@protocoltech.com	
FTP site	ftp.comtrol.com/HPD/default.htm	PMS Problems
web site	www.comtrol.com/HPD	632-240-6000

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