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# JAVELIN/LANTRONIX INTERFACE SETUP

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### Abstract...

This technical bulletin describes the procedure for connecting a Javelin CCTV system to EnterpriseSMS through a Lantronix terminal server. Included are instructions for host setup, terminal server configuration, and troubleshooting the installation.

### ASSUMPTIONS

This bulletin makes the following assumptions:

- The *Alias Name of the Lantronix Terminal Server* is: `lantronix`
- *Connection* is over TCP/PORT 4001 and port 2
- *Communications Parameters* are 9600 baud, 8 bit, no parity, XON/XOFF
- The host computer is running the AIX or SCO operating systems. *These procedures are not valid for Windows NT.* Please see the appropriate technical bulletin for WindowsNT or e-mail [support@commandsystems.com](mailto:support@commandsystems.com).

### PROCEDURE

1. *Setup (or verify) the IP address of the Lantronix terminal server.*
  - Connect a PC communications port to port 1 of the terminal server.
  - Establish a communications session between the PC and the terminal server, setting the communications port to 9600 baud, 8 characters, no parity.
  - Login to the terminal server as `access`, then enter `set privilege`. The password for a privileged user is `system`.
  - If this is a first-time installation, set the IP address of the terminal server by entering `set server ipaddress XXX.XXX.XXX.XXX`. Save the new address by entering `save server`.
  - If this is not a first-time installation, verify the IP address by entering `show server`. The terminal server will display its IP address.
2. *Configure the host computer to communicate through the Lantronix to the Javelin CCTV system. Add the IP address and alias name to the host computer's hosts file.*
  - Open a terminal window on the host computer. Login using the `root` password.
  - Change directories to `/etc`. (`cd /etc`).
  - Open the `hosts` file using the `vi` editor (`vi hosts`).
  - Add the IP address and the alias name you wish to use for the terminal server in the `hosts` file, using the same format used for other entries in that file.
  - Save your changes and exit `vi`.
3. *Add a service on the host computer for the Javelin CCTV system.*
  - Again while logged in as `root`, and in the `/etc` directory, open the `services` file using the `vi` editor (`vi services`).
  - Page down until you find the section entitled `ICS ADDED SERVICES`.
  - Find the line containing the *Javelin* entry. Change the `TCP/PORT#` to `4001`.

- Find the line containing the `monsim` entry, where `TCPPORT#` is also `4001`. Comment out this line by adding a number sign (`#`) in front of the line. The 4001 port may be used for the Javelin only. Save your changes and exit `vi`.
  - Log out from the root terminal window (`exit`).
4. *Set the Lantronix configuration to match the terminal connection settings of the CCTV system and the hosts and services files of the host computer.*
- Telnet into the terminal server from the host using its alias name [`telnet lantronix`]. Log in as a privileged user (`system`).
  - Enter the following, pressing *Enter* after each command:
    - `set port 2 speed 9600`
    - `set port 2 character 8`
    - `set port 2 parity NONE`
    - `set port 2 flow XON`
    - `set service javelin`
    - `set service javelin tcpport 4001`
    - `set service javelin port 2`
    - `save port 2`
    - `save service_javelin`
5. *Edit the host computer's `amm_mon` file to send commands to the Javelin.*
- Login to a terminal window using a standard user password.
  - At the prompt, enter `pro` to move to the process directory.
  - Open the `amm_mon` file using the `vi` editor (`vi amm_mon`).
  - Scroll to the `cctv` command lines and make the following changes<sup>1</sup>:
    - `cctv_dummy:off:cctv_dummy > cctv_dummy.out`
    - `cctv_if:respawn:cctv_if -t lantronix -s javelin -v javelin > cctv_if.out`
6. *Define your monitors, cameras, and views in the DCS. After doing so, you should be able to control cameras and monitors from the Operator Command Station using the CCTV button.*

## TROUBLESHOOTING

- Check the wire connection from the terminal server port to the CCTV system. Refer to the wiring diagrams from the Lantronix and Javelin manuals. If a non-Lantronix terminal server is used, the wiring is likely to differ.
- Using a PC communicating with port 1 of the Lantronix, log in as a privileged user and verify that data is reaching the terminal server by entering `monitor port 2 counters` and pressing the *Enter* key. The screen will display Bytes Input and Bytes Output counters. These should change when a control command is issued by selecting a monitor-to-camera from the OCS CCTV screen.

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<sup>1</sup> `-t` precedes the host alias name in the `hosts` file of the terminal server; `-s` precedes the service name in the `services` file on the host computer; `-v` precedes the technology name of the CCTV system.

- Check if you can select a monitor-to-camera using the CCTV controller. If this cannot be done through the CTV system, it is unlikely to work from the Operator Command Station.
- Insert a data analyzer between the terminal server and Javelin. When monitor-to-camera views are selected at the OCS, verify that the message you see matches the protocol in the Javelin documentation.
- Connect a PC to the communications port of the Javelin controller, establish a communications session, and enter Javelin\_protocol. If functioning properly, you will be able to control the Javelin from the menu interface.