Farallon°

StarCommand[™] 3.1.1 Release Notes

December 16, 1992

These release notes include information that was unavailable prior to the printing of the *StarCommand 3.1.1 User's Guide*. We urge you to read them carefully, along with the StarCommand manual. These release notes cover the following topics:

- StarCommand 3.1.1 tips
- Supplementary files

StarCommand 3.1.1 tips

These tips can help you to use StarCommand more effectively.

"Device not responding" vs. "Connection broken"

In the Session Event Log, you may occasionally see the messages, "Device not responding" and "Connection broken." Although these messages may seem similar, they actually report two different situations.

"Device not responding" means that StarCommand sent a message to the device, but did not receive a reply. This message may indicate that StarCommand has not been able to poll the device successfully within a certain time period. The device itself may still be functioning normally, however. If you actually experience networking problems, you may wish to try resetting the device. To reset a device that is not responding to your StarCommand session, briefly disconnect the device from its power source, then reconnect it.

"Connection broken" means that StarCommand is no longer able to communicate with the device over the search path it formerly used. This can occur if someone has changed the Communicate With Devices Via settings in the Set Preferences dialog box, or has physically broken a network connection. To correct this condition, make sure that all network connections are intact. Then, if necessary, either change the Communicate With Devices Via settings to their former state, or close the StarCommand file and open a new one.

StarCommand, serial ports, and AppleTalk

When you launch StarCommand, the program checks the status of AppleTalk, the printer port, and the modem port on the Macintosh. The results of this check affect the Communicate With Devices Via options available in the Set Preferences dialog box. If AppleTalk is disabled in the Chooser, the AppleTalk option is dimmed. If the printer port or modem port is not available (as, for example, when the modem port is being used for telecommunications), the option for using StarCommand over that port is dimmed.

Port names, network numbers, and AppleTalk

In order to obtain complete repeater port information from an extended management device, StarCommand requires that an active AppleTalk connection to the device be present. (This is true even if you select only the management bus in the Set Preferences dialog box.) If you have turned off AppleTalk in the Chooser, the Port List for an extended management device displays the word "Updating..." in the Port Name column, and Port Info windows for that device display no AppleTalk network information. To obtain repeater port information, quit StarCommand. connect your Macintosh to your AppleTalk network, turn on AppleTalk in the Chooser, and launch StarCommand again.

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Existing StarCommand documents and their search paths

A StarCommand file bases its information storage and search practices on network data and preferences that are current when the file is created. If the information becomes obsolete, StarCommand may not operate properly with the file. Any of the following types of changes can make an existing StarCommand file obsolete:

- Transferring the StarCommand file from the Macintosh and network where it was created to a Macintosh on another network
- Disabling one of the Communicate With Devices Via options in the Set Preferences dialog box
- Changing the location of a hub or router within your internetwork
- Reconfiguring a router to use a new network number, particularly if the router is part of your StarCommand communications path to other devices.

When you use StarCommand with an obsolete file, any of the following symptoms may occur:

- Error messages may report that certain zones are missing.
- Some devices may not be found.
- StarCommand may treat some devices as password-protected, even if they are not.

If you need to make any of the changes listed above, open a new StarCommand file to ensure that all devices are displayed correctly.

Take precautions while devices are resetting

Farallon recommends that you observe the following precautions whenever you are in the process of resetting a device:

- Do not physically break the network connection between your StarCommand session and the device that is resetting.
- Do not deselect any Communicate With Devices Via options.
- Do not turn Searching on or off.

If you do not observe the above precautions while a reset is in progress, the device may or may not actually be reset. StarCommand will display a "Resetting" message for the device in the Device List, whether the device is actually resetting or not. This message will be displayed until you close the StarCommand file and either reopen it or open a new file.

Communication preferences and passwords

If you change your StarCommand communication preferences while using a saved file, you may find that StarCommand will not accept a device password that was set under other communication preferences.

- If you are running StarCommand from a Macintosh computer with both modem and printer ports, this condition will correct itself within a few minutes, allowing you to reenter the device password you set earlier.
- If you are running StarCommand from a PowerBook 100, close the saved StarCommand file and open a new one. The device password you set earlier will work with the new file.

Using StarCommand with multiple Farallon Concentrators

To make any management bus connections between multiple Farallon Concentrators, use the External Management Bus connectors located on the rear of each Concentrator chassis. StarCommand does not support other methods of making management bus connections between Concentrators. If you install unsupported management bus connections, a sorted StarCommand Device List may show incorrect information about which devices reside in which Concentrator.

If you experience this problem and believe your management wiring is correctly installed, close and reopen the StarCommand file. As StarCommand reestablishes communication with the devices, the Device List should show the correct relationship between Concentrators and the devices they contain.

Using StarCommand with Daystar Universal PowerCache cards

If you use StarCommand on a Macintosh containing a Daystar Universal PowerCache CPU accelerator, you may experience StarCommand software crashes when you open a Port List, Port Info window, or Device Info window. Current reports limit this problem to PowerCache circuit boards bearing a 1990 copyright date. If you wish to use StarCommand on a Macintosh containing a 1990 PowerCache card, use the Control Panel to turn off the PowerCache card before you launch StarCommand. For information on upgrading to the latest version of the PowerCache card, contact Daystar.

Router configuration displays

If you use StarCommand to change the configuration of a StarRouter[™] or InterRoute/5[™] router, StarCommand displays your newly-entered settings in the configuration dialog boxes. Most router configuration settings only go into effect after the router is reset. If you do not reset the router immediately, the settings displayed will not match the settings actually being used by the router. The Routing Table window, the Router Event History window, the Device Info window, and the zone list in the Set Preferences dialog box all display information reflecting the current router configuration settings.

Similarly, if you enter new IP or gateway settings for a StarRouter or InterRoute/5, but do not reboot the device, the settings displayed in most dialog boxes will not match the settings actually being used by the device. The exceptions are the SNMP dialog boxes, which do display current SNMP configuration settings for the device.

Most reliable reprogramming methods

When you reprogram a device, you are replacing the actual operating instructions that make the device function correctly. Try to avoid interrupting this process! For maximum reliability, Farallon recommends that you take the following precautions when reprogramming a device:

- If you have the appropriate hardware, software, and experience, use BOOTP or TFTP to reprogram any Farallon router. This is the quickest and most reliable method.
- If you plan to use the Reprogram Device command from StarCommand, install and use StarCommand on a Macintosh that is connected to the same network as the device you want to reprogram. Set your StarCommand preferences to communicate with the device via AppleTalk, rather than via the management cable.
- If you must use the Reprogram Device command with a management bus connection, temporarily disconnect the device from your management bus, and use the original 10-foot (3 meter) management cable to connect it to your Macintosh while you reprogram. Before launching StarCommand, quit all other applications. You may also wish to disable any System Extensions (INITs) residing on your Macintosh. While reprogramming, leave StarCommand in the foreground.

IP packet encapsulation formats

In the StarCommand IP Setup dialog box, the Packet Encapsulation radio buttons refer to the following standards:

- Ethernet: refers to the traditional packet format used when Internet Protocol (IP) packets travel over Ethernet cabling. This standard is defined in RFC 894, "Standard for the transmission of IP datagrams over Ethernet networks."
- 802.3: refers to the packet format used when IP packets travel over 802 networks. This standard is defined in RFC 1042, "Standard for transmission of IP datagrams over IEEE 802 networks."

Running StarCommand on a PowerBook with an internal modem

You must disable the internal modem if you want StarCommand to communicate with Farallon hubs or routers via the Modem Port. To do this, open your Portable Control Panel and select External Modem.

Finding PN207 StarController hubs

StarCommand may take longer to find PN207 StarController® hubs than more recent hubs. StarCommand finds PN207 StarController hubs in ascending numerical order, starting at address 240, then 241, then 242, and so on up to 254. It then starts looking at address 1, then 2, and so on. You can reduce the time StarCommand takes to find PN207 StarController hubs by changing their addresses to the 240 to 254 range, or by using the Quick Find command from the Control menu.

To set the address of a PN207 StarController hub, open the case and find the SW1 block of DIP switches on the circuit board. Convert the new address to an 8-digit binary number, and set the switches to correspond to this binary number. Use switch 8 for the left-most digit, switch 1 for the right-most digit. Set each switch to ON for a 1, or to OFF for a 0.

Text strings composed only of spaces

StarCommand interprets all spaces entered in a StarCommand text box to be a valid text string, even if no other characters are entered. Using text strings composed only of spaces can lead to confusing displays, particularly in the case of zone names.

Autopartitioning alerts, statistics, and Session Event Log messages

You may find that more autopartitions are recorded in StarCommand statistics than are announced by an alert icon. The number shown in the statistics is the correct one. StarCommand does not display an alert if an autopartitioned port has been returned to service before StarCommand polls the device.

If you leave StarCommand running for several hours, you may find one or more of the following messages in the Session Event Log:

- "Port on/off settings were incorrect"
- "Port interconnect settings were incorrect"
- "Link Integrity Enable settings were incorrect".

If you receive these messages, try to find out if more than one StarCommand session is being run simultaneously on your internet. Only one StarCommand session at a time is supported. If only one session is being run, you may disregard the messages.

Window priority

StarCommand gives highest priority to the front-most window. Counters in a Port List or Info Window will update more quickly if you bring that window to the front.

Supplementary files

The following folders are included on the StarCommand User Support diskette:

- For PN357/377 Users—This folder contains a firmware program file called PN357/377 Firmware 1.2. This file contains code that is also stored in the currently shipping Farallon StarController hubs, PN357 and PN377. If you have any PN357 or PN377 hubs on your network with firmware older than version 1.2, you need to update them with the latest firmware. To check the version of the firmware currently installed on a PN357 or PN377, run StarCommand and open the Device Info window for the hub. The header will list the firmware version installed. If the version number is previous to 1.2, you need to reprogram the hub with the firmware on this diskette. You reprogram a StarController from the Control Menu using the StarCommand Reprogram Device command. The new firmware enables StarCommand to find PN357 and PN377 hubs much more quickly.
- For PN657 Users—This folder contains a firmware program file called PN657 Firmware 1.0. This file contains a self-extracting, compressed version of the code that is stored in the currently shipping Farallon StarRouter™ (PN657). To uncompress the file, double-click on its icon and specify a destination directory for the uncompressed file. When uncompressed, this file is identical to the firmware currently in all StarRouters. Reprogramming with this file will not change StarRouter functionality in any way.
- For PN670 Users—This folder contains a firmware program file called PN670 Firmware 1.2. This file contains the code that is stored in the currently shipping Farallon InterRoute/5TM (PN670). This file is identical to the firmware currently in all InterRoute/5 routers. Reprogramming with this file will not change InterRoute/5 functionality in any way.
- For Concentrator Users—This folder contains a firmware program file called PN701 Firmware 1.1. This file contains the code to be stored in the Interface Module of the Farallon Concentrator (PN701). If your Interface Module contains firmware version 1.0, you can reprogram using version 1.1 to increase the reliability of the Reset command.
- For StarCommand 2.2.1 Users—This folder contains a utility application called SC 2.2.1 File Converter. This application reads a StarInfo file created by StarCommand 2.2.1 and creates a new StarCommand 3.1.1 document out of it. It does not delete or change the original StarInfo file.
- For SNMP Users—This folder contains a Read Me file and two machine-readable ASCII MIB files. If you intend to use SNMP to manage a StarRouter or InterRoute/5 router, you must provide your SNMP management software with certain information about the Farallon hardware and firmware. The two MIB files in this folder provide much of this information. The rest of the information is contained in four Internet-standard MIBs: RFC 1213, RFC 1229, RFC 1243, and RFC 1284, which are available to the public. For information on how to obtain these RFCs, see the MIB Read Me file. For information on how to adapt your SNMP management software to manage your StarRouter or InterRoute/5 router, consult the documentation for your SNMP management software.
- Utilities—This folder contains Farallon's CheckNET[™] utility, which you may find helpful for gathering information about your AppleTalk networks.