

**NETCLOCK
MODEL 9188
MANUAL ADDENDUM
SOFTWARE v2.3.0 TO v2.3.1**

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Manual Addendum

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1 Changes for v2.3.0 to v2.3.1

This addendum to the operations and maintenance manual for the Spectracom NetClock® Model 9188 (current to software version 2.3.0) describes the changes made to software features for version 2.3.1. These changes include additions and enhancements to the Web User Interface (Web UI), to the command line, and in SNMP.

2 Network and Web User Interface Changes

The user may now enable and disable all network interfaces. The HTTPS port has been added to the Web UI and may be controlled on the System Setup web page on the Network tab.

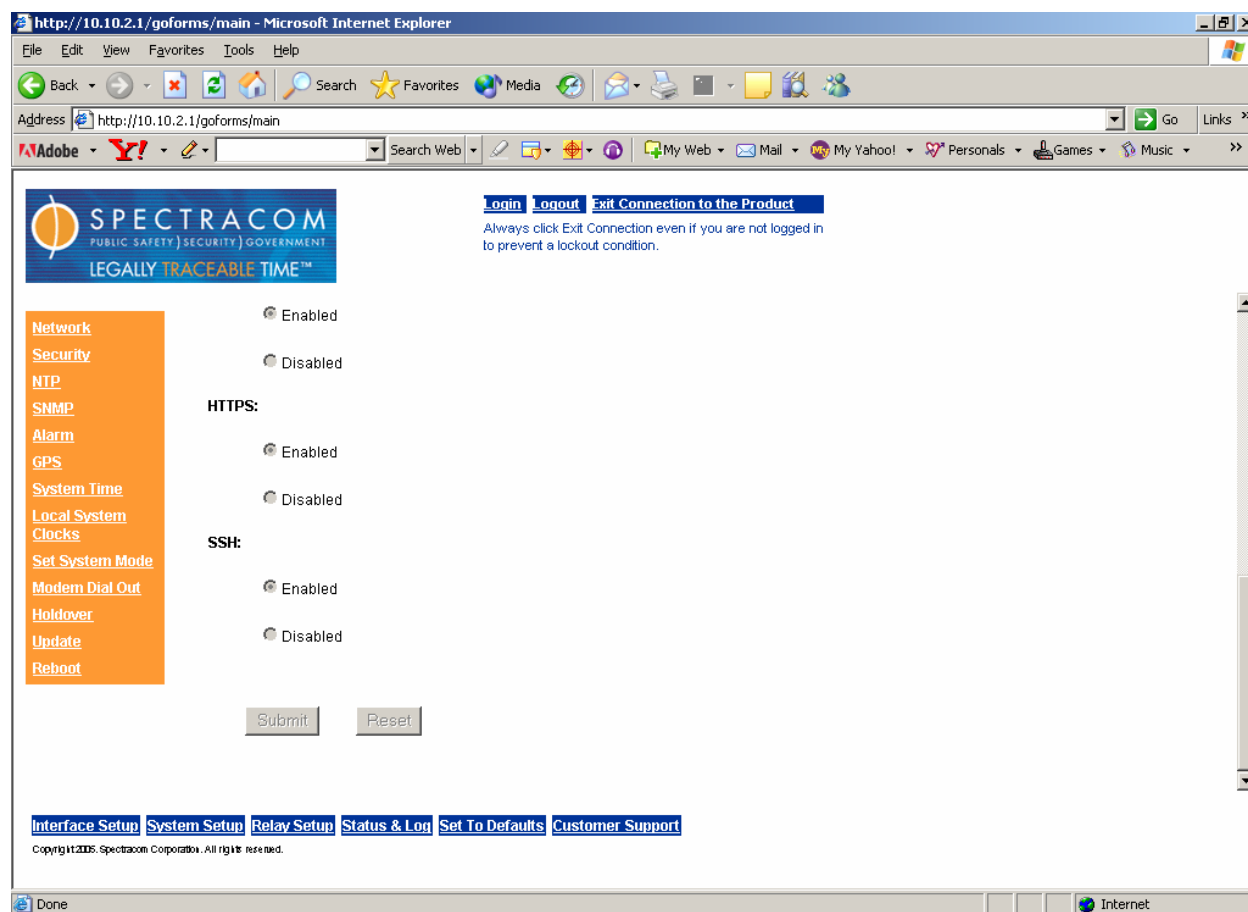


Figure 2-1: Enabling and Disabling Network Interfaces

Allowing the user to enable and disable at will all network interfaces provides greater security and stability of the NetClock in hostile network environments. It also allows users to comply with corporate security policies regarding network access.

2.1 Command Line Changes

The network interface command line now allows the user to enable and disable all ports for Telnet, FTP, HTTP, HTTPS and SSH.

The new commands for the network interface are:

| | |
|---------------|---|
| telnet | net telnet [yes,no] – Enable or disable telnet on port 23 |
| ftp | net ftp [yes,no] – Enable or disable ftp on port 21 |
| https | net https [yes,no] – Enable or disable https on port 443 |
| sshd | net sshd [yes,no] – Enable or disable ssh on port 22 |

2.1.1 net telnet

This command allows user to enable or disable the telnet port. Input yes to enable no to disable. Input **net telnet yes** to enable and **net telnet no** to disable.

2.1.2 net ftp

This command allows user to enable or disable FTP the port. Input **net ftp yes** to enable and **net ftp no** to disable.

2.1.3 net https

This command allows the user to enable or disable the HTTPS port controlling access to the secure web server. Enter **net https yes** to enable and **net https no** to disable.

2.1.4 net sshd (Includes SSH, SCP, and SFTP)

This command allows the user to enable or disable the SSH port controlling access to secure SSH protocols SSH secure shell, SCP secure copy, and SFTP secure file transfer. Input **net sshd yes** to enable and **net sshd no** to disable.

2.2 Web Server Timeout

The manner in which the GoAhead Web Server functions requires users to terminate Web UI sessions by clicking “Exit Connection to the Product”. Clicking the “X” button on the browser does not end the session, but closes the window – which means the user cannot log in again until the session expires. In some versions of the software, this is 15 to 30 minutes, which some users find inconvenient.

Version 2.3.1 software includes new console commands that allow administrator-level to users to exit the current locked Web UI session using telnet or ssh. Also added is a command to set the timeout to a user-defined value, which means users may now dictate the length of time it takes for the session to expire.

Use the 'web help' command to see a list of net commands. These include **web exit** and **web timeout minutes** (to set the connection timeout).

2.2.1 web exit

This command allows the user to exit the current web session from telnet or ssh connections.

2.2.2 web timeout

This command allows the user to set the web session timeout to any value between 1 and 60 minutes (inclusive). Spectracom recommends selecting a timeout interval of 10 to 15 minutes.

2.3 HTTPS Certificate 20-Year Life

The HTTPS Certificate Creation Web UI page has been changed to indicate required parameters (with a red asterisk). Refer to the Security tab on the System Setup page.

The default Spectracom HTTPS Web Server Certificate is now 20 years. The new default Certificate life is therefore 7300 days (20 years, in days) and appears on the page as:

* Self Signed Certificate Expiration (Days):

http://10.10.2.1/goforms/main - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Mail Print

Address http://10.10.2.1/goforms/main Go Links >>

Adobe Y! Search Web My Web Mail My Yahoo! Personals Games Music >>

SPECTRACOM
PUBLIC SAFETY | SECURITY | GOVERNMENT
LEGALLY TRACEABLE TIME™

[Login](#) [Logout](#) [Exit Connection to the Product](#)
Always click Exit Connection even if you are not logged in to prevent a lockout condition.

Network
Security
NTP
SNMP
Alarm
GPS
System Time
Local System Clocks
Set System Mode
Modem Dial Out
Holdover
Update
Reboot

* State Or Province Name:

* Locality Name:

* Organization Name:

* Organizational Unit Name:

* Common Name (e.g. IP Address):

* Email Address:

Challenge Password:

Optional Company Name:

* Self Signed Certificate Expiration (Days):

Certificate Request:

[Interface Setup](#) [System Setup](#) [Relay Setup](#) [Status & Log](#) [Set To Defaults](#) [Customer Support](#)

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Done Internet

Figure 2-2: HTTPS Certificate Creation Web UI Page

2.4 NTP

The NTP Daemon has been extended to allow the user to define the Reference Identifier string. A Reference Identifier is a 4-byte field in the NTP packets indicating, in either numerical or ASCII format, the time source used.

The user can set the Reference Identifier to indicate the actual time source, such as WWVB for a 9188 NetClock using the Serial Time Code Interface (STCI) to connect to a NetClock/2 or some other WWVB receiver. The user may also use the 4-byte field as an abbreviation for the location of the unit, such as NYC, CHI, BOS, etc. Refer to Figure 2-3.

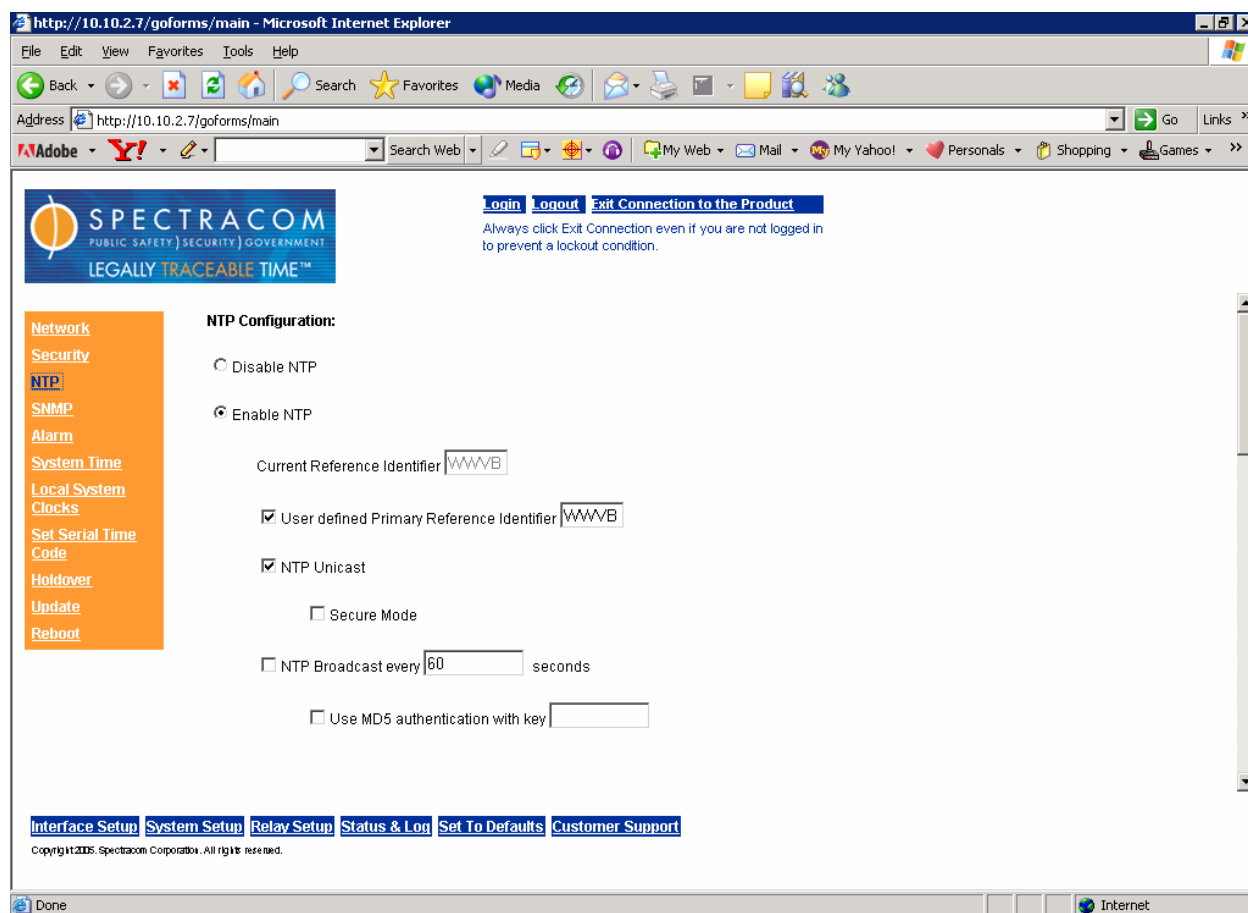


Figure 2-3: Reference Identifier Field

Spectracom provides a means to set a Reference Identifier for the primary time sources, such as GPS, Serial Time Code Input, or User Defined.

2.4.1 NTP Command Line

The NTP Daemon also supports new commands for software version 2.3.1:

ntp refsrc ntp refsrc [primary|modem] [on|off] ['4-character-string] – Sets NTP reference source
ntp timeout ntp timeout [seconds] – Used to set timeout for remote access tool

2.4.1.1 ntp refsrc

This command allows the user to set the primary and modem user-defined reference identifiers. Input this as **ntp refsrc [primary|modem] [on|off] ['4-character-string]** with the appropriate entries.

2.4.1.2 ntp timeout

This command allows the user to set the time difference allowed between the remote Network Access Tool and the NetClock. This is a security feature avoiding replay attacks. Enter **ntp timeout [seconds]** to set the value.

2.5 System Time

The System Time Tab found on the System Setup web page allows the user to view the current time on the unit using UTC or a Local Clock defined by the user. This page also allows the user to set (manually) the system time. The page has been modified for version 2.3.1 software to include two additional check boxes. The “Allow user to set time using SNMP or Web UI” checkbox allows user inputs from SNMP or this Web UI to set the system time manually. If the checkbox is NOT checked, users may not manually input time. Refer to Figure 2-4.

NOTE: When a user sets the time manually, the serial time code messages from the unit and the NTP packets will indicate that the NetClock is NOT synchronized. Setting the time manually means the unit is NOT traceable to UTC. When entering time manually, you **MUST** use UTC time. If you enter local time (or a time from any other time zone), the time will be misinterpreted as UTC.

The screenshot shows a Microsoft Internet Explorer browser window displaying the Spectracom web interface. The address bar shows <http://10.10.2.3/goforms/main>. The page features the Spectracom logo with the tagline "PUBLIC SAFETY | SECURITY | GOVERNMENT" and "LEGALLY TRACEABLE TIME™". Navigation links include [Login](#), [Logout](#), and [Exit Connection to the Product](#). A warning message states: "Always click Exit Connection even if you are not logged in to prevent a lockout condition." On the left, a vertical menu lists various system settings: Network, Security, NTP, SNMP, Alarm, GPS, System Time, Local System Clocks, Set System Mode, Modem Dial Out, Holdover, Update, and Reboot. The "System Time" section is active, showing two options: ☒ "Allow user to set time using SNMP or Web UI" and ☐ "Set System Time using user specified UTC Time below". The time fields are set to Year: 2005, Month: Dec, Day: 6, Hour: 13, Minute: 5, and Second: 13. "Submit" and "Reset" buttons are at the bottom. A footer contains links for [Interface Setup](#), [System Setup](#), [Relay Setup](#), [Status & Log](#), [Set To Defaults](#), and [Customer Support](#), along with the copyright notice "Copyright © 2005, Spectracom Corporation. All rights reserved."

Figure 2-4: Setting System Time Options

2.6 Further Assistance

If you require additional assistance integrating this addendum with your operations and maintenance manual(s), please contact Spectracom Customer Service at 585.321.5800. Spectracom may also be reached through our website at www.spectracomcorp.com.

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