

# Software Release Notice

## **TimeCraft Network Element Craft Software Version 2.1**

### **Introduction**

Thank you for choosing Symmetricom as your solution provider for carrier-class synchronization network management.

This document provides information about Version 2.1 of Symmetricom's TimeCraft Network Element Craft Software.

In addition to these release notes, the TimeCraft User's Guide is also located on the TimeCraft CD.

## Supported Network Elements – Support Matrix

The following table provides a list of the current supported hardware and firmware revisions.

Table 1-1. Hardware and Firmware Support Matrix

| System       | Version                                                                                                                                                                                                                   |                             |                 |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------|
| TimeProvider | IOC Fw 1.01.02 (Hw 1.0), IOC Fw 1.02.12 (Hw 2.1), IOC Fw 1.03.04 (Hw 2.2), IOC Fw 1.04.xx (Hw 3.0), TimeProvider 3.1, TimeProvider 3.2, IMC (1.04.03), IOC (1.04.07), TimeProvider 3.3 (Hw), IMC (1.05.04), IOC (1.05.00) |                             |                 |
| SSU-2000     | <b>4.1 (Hw)</b>                                                                                                                                                                                                           |                             |                 |
|              | <b>Module</b>                                                                                                                                                                                                             | <b>Firmware Part Number</b> | <b>Revision</b> |
|              | Communications                                                                                                                                                                                                            | 14313012-000-5              | N.00            |
|              |                                                                                                                                                                                                                           | 14313012-001-5              | L.00            |
|              |                                                                                                                                                                                                                           | 14313012-002-5              | L.00            |
|              |                                                                                                                                                                                                                           | 14313012-004-5              | G.00            |
|              | Multi-port Input                                                                                                                                                                                                          | 14313013-000-5              | D.05            |
|              | Clock                                                                                                                                                                                                                     | 14313015-000-5              | N.00            |
|              | DS1/E1 Output                                                                                                                                                                                                             | 14313017-000-5              | D.00            |
|              | GPS Input                                                                                                                                                                                                                 | 14313019-000-5              | B.00            |
|              | CC Output                                                                                                                                                                                                                 | 14313158-000-5              | C.01            |
|              | 2048 kHz Output                                                                                                                                                                                                           | 14313159-000-5              | D.00            |
|              |                                                                                                                                                                                                                           | 14313159-000-5              | D.01            |
|              | CC Input                                                                                                                                                                                                                  | 14313279-000-5              | B.01            |
|              | RS-422 Output                                                                                                                                                                                                             | 14313287-000-5              | B.01            |
|              | E1/2048 kHz Output                                                                                                                                                                                                        | 14313292-000-5              | B.01            |
|              |                                                                                                                                                                                                                           | 14313292-000-5              | C.00            |

Table 1-1. Hardware and Firmware Support Matrix (Continued)

| System           | Version                  |                             |                 |
|------------------|--------------------------|-----------------------------|-----------------|
| SSU-2000 (cont.) | <b>4.2 (Hw)</b>          |                             |                 |
|                  | <b>Module</b>            | <b>Firmware Part Number</b> | <b>Revision</b> |
|                  | Communications           | 14313012-000-5              | P.00            |
|                  |                          | 14313012-001-5              | M.00            |
|                  |                          | 14313012-002-5              | M.00            |
|                  |                          | 14313012-003-5              | M.00            |
|                  |                          | 14313012-004-5              | H.00            |
|                  |                          | 14313012-005-5              | H.00            |
|                  | DS1 Input                | 14313013-000-5              | E.00            |
|                  | DS1 Multi-Port Input     | 14313013-000-5              | E.00            |
|                  | E1 Input                 | 14313013-000-5              | E.00            |
|                  | E1 Multi-Port Input      | 14313013-000-5              | E.00            |
|                  | 3E Clock                 | 14313015-000-5              | P.00            |
|                  | Type-I Clock             | 14313015-000-5              | P.00            |
|                  | 2E Clock                 | 14313015-000-5              | P.00            |
|                  | DS1 Output               | 14313017-000-5              | E.00            |
|                  | E1 Output                | 14313017-000-5              | E.00            |
|                  | GPS Input                | 14313019-000-5              | C.00            |
|                  | Composite Clock Output   | 14313158-000-5              | D.00            |
|                  | 2048 kHz Output          | 14313159-000-5              | E.00            |
|                  | Composite Clock Input    | 14313279-000-5              | C.00            |
|                  | RS-422 Output            | 14313287-000-5              | C.00            |
|                  | E1/2048 kHz Output       | 14313292-000-5              | D.00            |
|                  | Dual-DS1 Line Retimer    | 14313301-000-5              | B.00            |
|                  | Quad-DS1 Line Retimer    | 14313301-000-5              | B.00            |
|                  | J/Sine Wave Output       | 14313304-000-5              | B.00            |
|                  | J/Sine Wave Input        | 14313305-000-5              | B.00            |
|                  | J/Composite Clock Output | 14313306-000-5              | B.00            |
|                  | J/Composite Clock Input  | 14313307-000-5              | C.00            |
|                  | Quad-E1 Line Retimer     | 14313309-000-5              | B.00            |

Table 1-1. Hardware and Firmware Support Matrix (Continued)

| System           | Version                  |                      |          |
|------------------|--------------------------|----------------------|----------|
| SSU-2000 (cont.) | 5.0 (Hw)                 |                      |          |
|                  | Module                   | Firmware Part Number | Revision |
|                  | Communications           | 14313012-000-5       | R.00     |
|                  |                          | 14313012-001-5       | N.00     |
|                  |                          | 14313012-002-5       | N.00     |
|                  |                          | 14313012-003-5       | N.00     |
|                  |                          | 14313012-004-5       | J.00     |
|                  |                          | 14313012-005-5       | J.00     |
|                  | DS1 Input                | 14313013-000-5       | E.00     |
|                  | DS1 Multi-Port Input     | 14313013-000-5       | E.00     |
|                  | E1 Input                 | 14313013-000-5       | E.00     |
|                  | E1 Multi-Port Input      | 14313013-000-5       | E.00     |
|                  | 3E Clock                 | 14313015-000-5       | R.00     |
|                  | Type-I Clock             | 14313015-000-5       | R.00     |
|                  | 2E Clock                 | 14313015-000-5       | R.00     |
|                  | DS1 Output               | 14313017-000-5       | E.00     |
|                  | E1 Output                | 14313017-000-5       | E.00     |
|                  | GPS Input                | 14313019-000-5       | C.01     |
|                  | Composite Clock Output   | 14313158-000-5       | D.00     |
|                  | 2048 kHz Output          | 14313159-000-5       | E.00     |
|                  | Composite Clock Input    | 14313279-000-5       | C.00     |
|                  | RS-422 Output            | 14313287-000-5       | C.00     |
|                  | E1/2048 kHz Output       | 14313292-000-5       | D.00     |
|                  | Dual-DS1 Line Retimer    | 14313301-000-5       | B.00     |
|                  | Quad-DS1 Line Retimer    | 14313301-000-5       | B.00     |
|                  | J/Sine Wave Output       | 14313304-000-5       | B.00     |
|                  | J/Sine Wave Input        | 14313305-000-5       | B.00     |
|                  | J/Composite Clock Output | 14313306-000-5       | B.00     |
|                  | J/Composite Clock Input  | 14313307-000-5       | C.00     |
|                  | Quad-E1 Line Retimer     | 14313309-000-5       | B.00     |
|                  | PackeTime                | 17313325-000-5       | A.00     |

Table 1-1. Hardware and Firmware Support Matrix (Continued)

| System           | Version                  |                             |                 |
|------------------|--------------------------|-----------------------------|-----------------|
| SSU-2000 (cont.) | <b>5.1 (Hw)</b>          |                             |                 |
|                  | <b>Module</b>            | <b>Firmware Part Number</b> | <b>Revision</b> |
|                  | Communications           | 14313012-000-5              | S.00            |
|                  |                          | 14313012-001-5              | P.00            |
|                  |                          | 14313012-002-5              | P.00            |
|                  |                          | 14313012-003-5              | P.00            |
|                  |                          | 14313012-004-5              | K.00            |
|                  |                          | 14313012-005-5              | K.00            |
|                  | DS1 Input                | 14313013-000-5              | E.00            |
|                  | DS1 Multi-Port Input     | 14313013-000-5              | E.00            |
|                  | E1 Input                 | 14313013-000-5              | E.00            |
|                  | E1 Multi-Port Input      | 14313013-000-5              | E.00            |
|                  | 3E Clock                 | 14313015-000-5              | S.00            |
|                  | Type-I Clock             | 14313015-000-5              | S.00            |
|                  | 2E Clock                 | 14313015-000-5              | S.00            |
|                  | DS1 Output               | 14313017-000-5              | E.00            |
|                  | E1 Output                | 14313017-000-5              | E.00            |
|                  | GPS Input                | 14313019-000-5              | C.02            |
|                  | Composite Clock Output   | 14313158-000-5              | D.00            |
|                  | 2048 kHz Output          | 14313159-000-5              | E.00            |
|                  | Composite Clock Input    | 14313279-000-5              | C.00            |
|                  | RS-422 Output            | 14313287-000-5              | C.00            |
|                  | E1/2048 kHz Output       | 14313292-000-5              | D.00            |
|                  | Dual-DS1 Line Retimer    | 14313301-000-5              | B.00            |
|                  | Quad-DS1 Line Retimer    | 14313301-000-5              | B.00            |
|                  | J/Sine Wave Output       | 14313304-000-5              | B.00            |
|                  | J/Sine Wave Input        | 14313305-000-5              | B.00            |
|                  | J/Composite Clock Output | 14313306-000-5              | B.00            |
|                  | J/Composite Clock Input  | 14313307-000-5              | D.00            |
|                  | Quad-E1 Line Retimer     | 14313309-000-5              | B.00            |
|                  | PackeTime                | 17313325-000-5              | B.00            |

Table 1-1. Hardware and Firmware Support Matrix (Continued)

| System                   | Version                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------|
| TimeHub                  | R4209C, R4315C, R4328E, 3.2.2 (Hw) IMC (3.2.2), CLK (3.2.2), 4.1.3 (Hw) IMC (4.1.3), CLK (4.1.3), NTP (2.0.7) |
| TSG 3800                 | D.04, E.06, E.16, E.17                                                                                        |
| PRR10                    | D.00, E.02, E.03                                                                                              |
| OT21                     | Latest release as of April-2006                                                                               |
| DCD                      | MIS 5.02.xx, 5.03.xx, 5.04.xx, 5.05.xx                                                                        |
| TimeSources<br>3500/3000 | 1.06.06, 1.06.07, 1.06.10, 1.07.02, 1.07.04, 1.07.06                                                          |
| TimeSources<br>3600/3100 | 1.06.04, 1.06.09, 1.06.11, 1.07.05                                                                            |

## System Requirements

The following are the recommended minimal requirements to support this product:

- Operating Systems:
  - Window Vista
  - Windows XP
  - Windows 2000 SP1 or later
- 1 GHz Pentium Processor
- 512 MB RAM
- 1 GB Free Disk Space
- 8x CD-ROM drive
- SVGA display (minimum screen resolution set at 1280 x 1024)

## Installing The TimeCraft Application



### Notes:

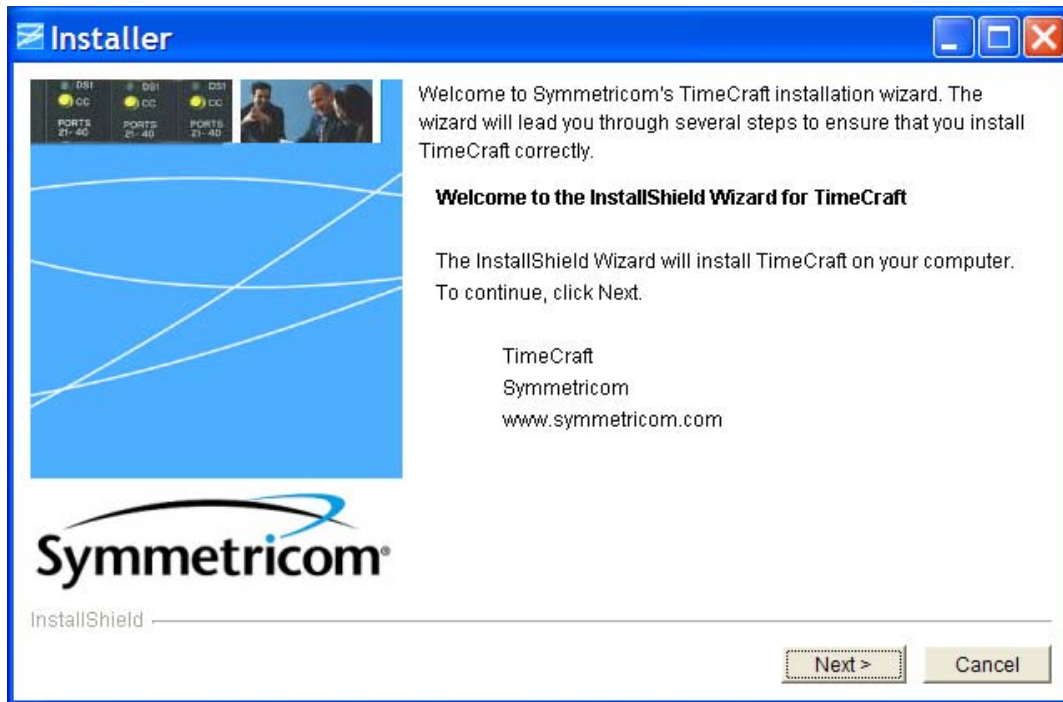
Administrative privileges may be required to install this product.

TimeCraft 2.1 is not upgradable from previous versions. Before installing this version, ensure all previous versions are removed (see [Uninstalling The TimeCraft Application](#), on page 9).

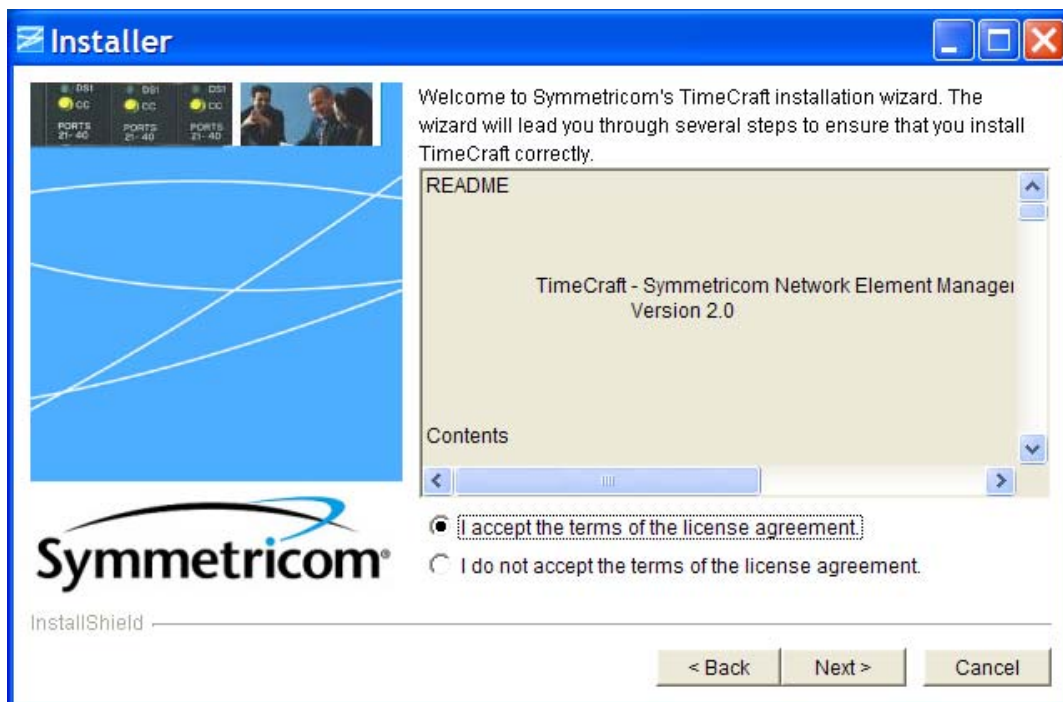
Use the following procedure to install TimeCraft:

1. Insert the CD-media into the CD-ROM drive.

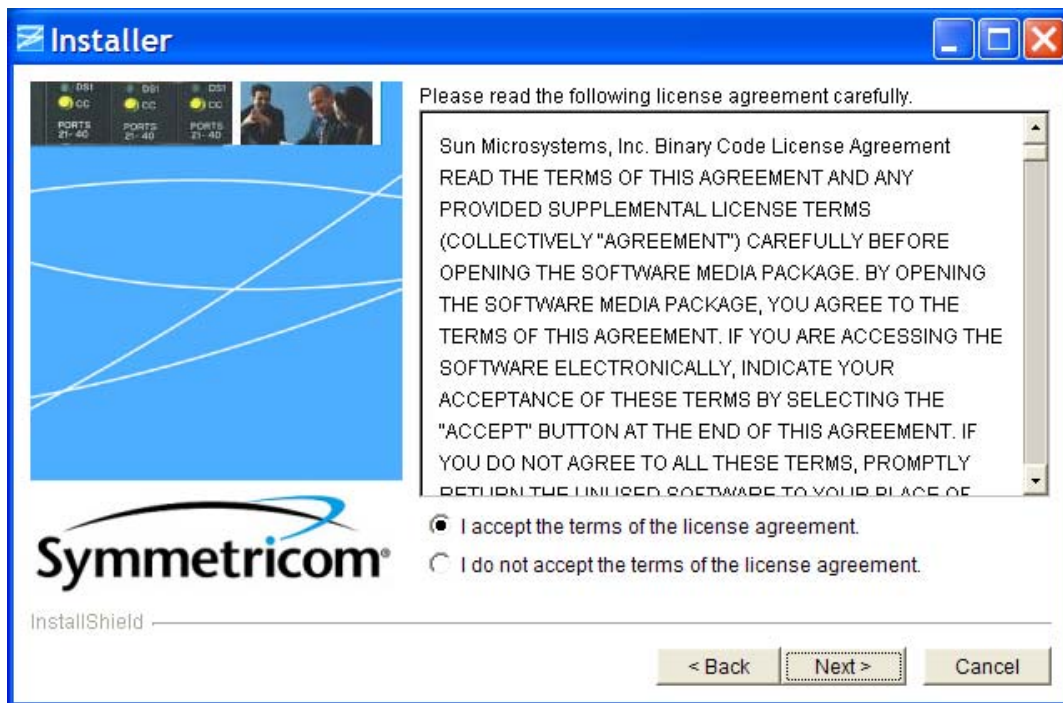
2. Open the CD-ROM folder and double click on "TimeCraftSetup.exe".
3. When the installer screen appears, click **Next**.



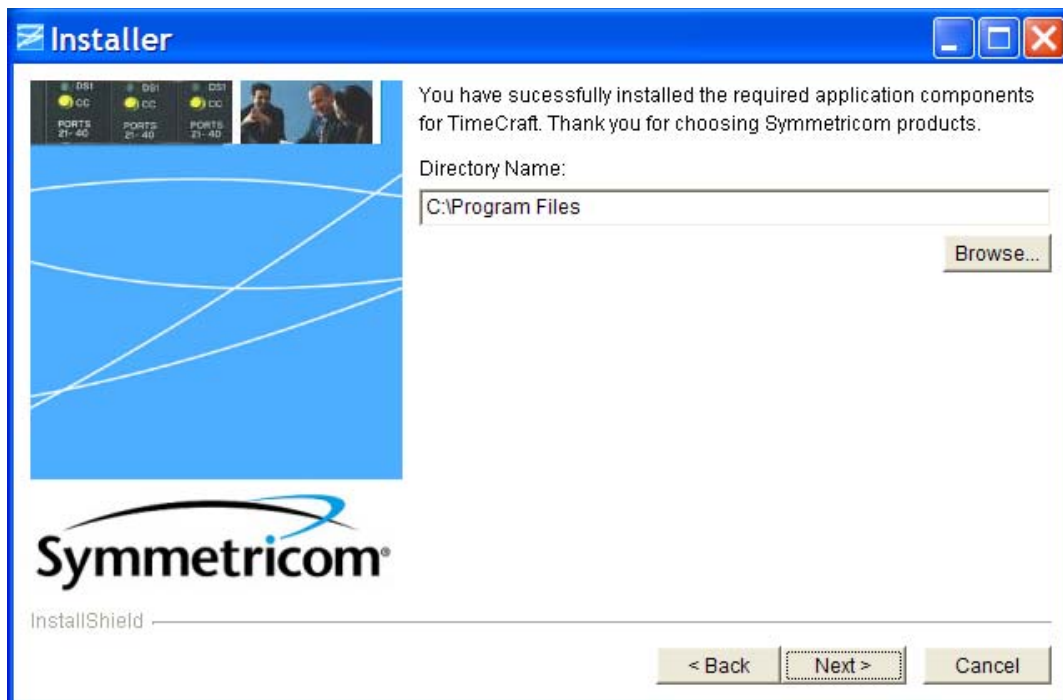
4. Click the "I accept the terms of the license agreement" radio button and click **Next**.



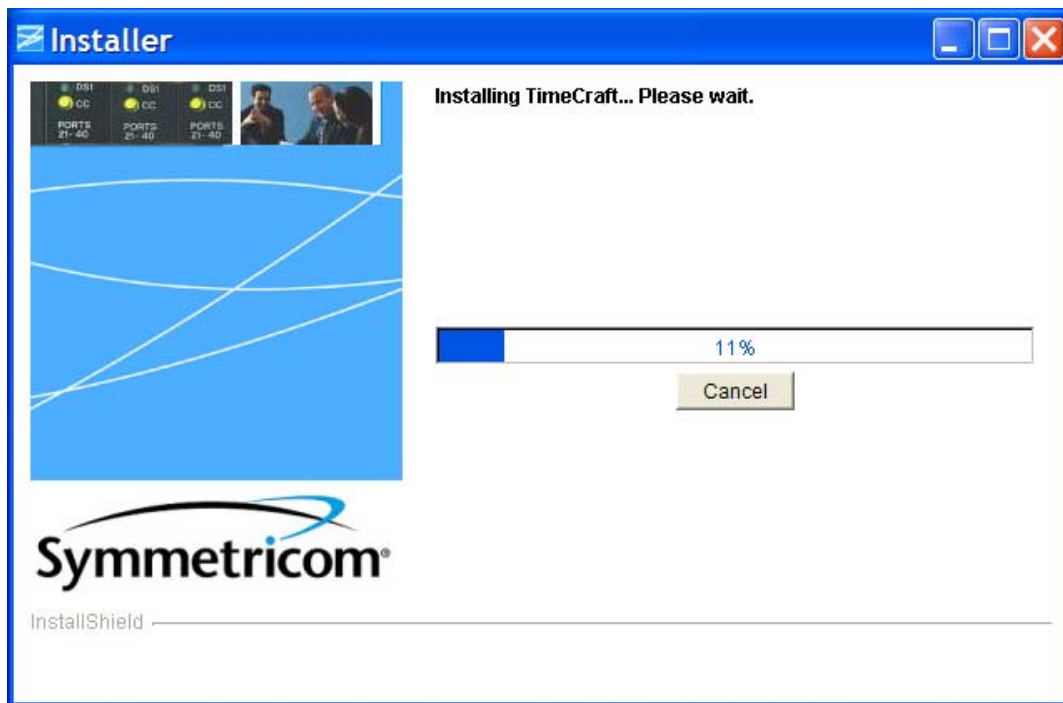
5. Click the "I accept the terms of the license agreement" radio button and click **Next**.



6. Enter a directory name or click **Browse** to navigate to a desired directory for installing the application. The default directory is C:\Program Files and the installer automatically creates the \Symmetricon\TimeCraft directory. Click **Next** to continue.



7. During installation, a status bar indicates the installation progress.



8. When the installation is complete, the Installer screen automatically closes and an application short cut icon appears on the display screen.

## Uninstalling The TimeCraft Application



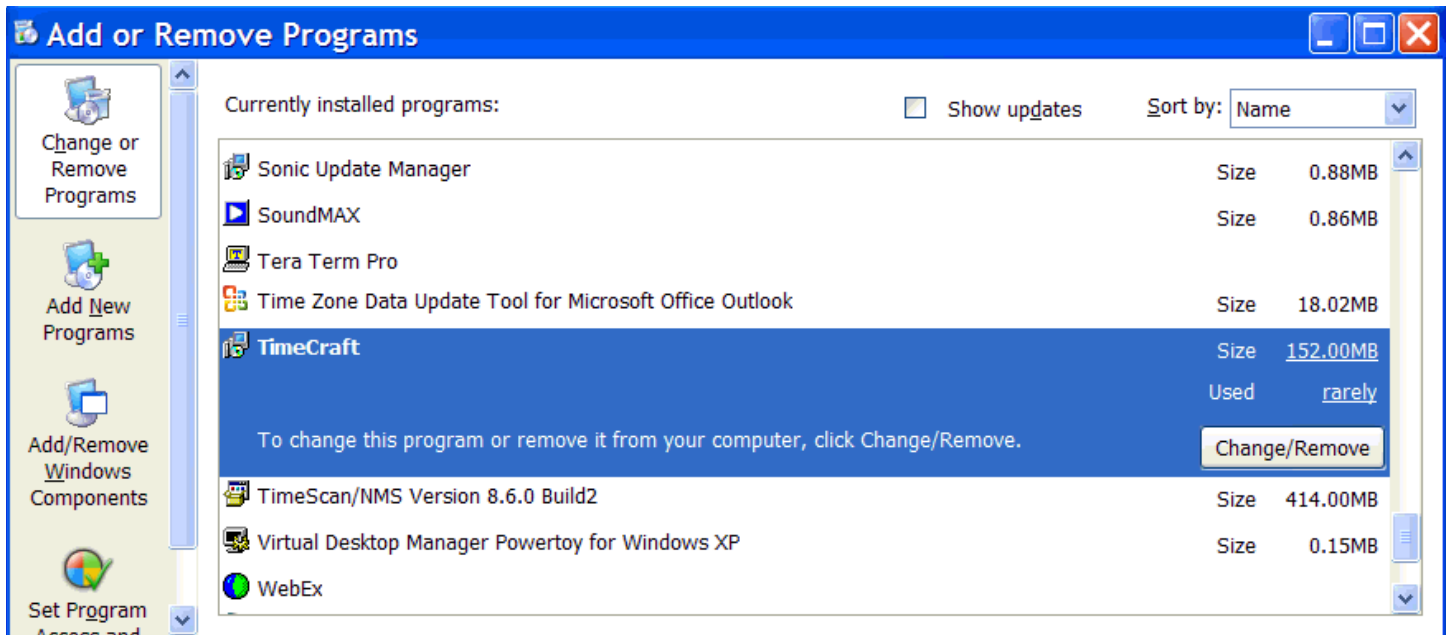
**Note:** Before you uninstall either SynCraft or TimeCraft, if you want to retain your list of connections make a copy of the connections folder located in the \Program Files\Symmetricon\SynCraft or \TimeCraft directory. Move the copy of the connections folder out of the application directory so that it is not deleted during the uninstall. After you install TimeCraft, copy the connections folder to the \Program Files\Symmetricon\TimeCraft directory.

Use the following procedure to uninstall the applications associated with TimeCraft:

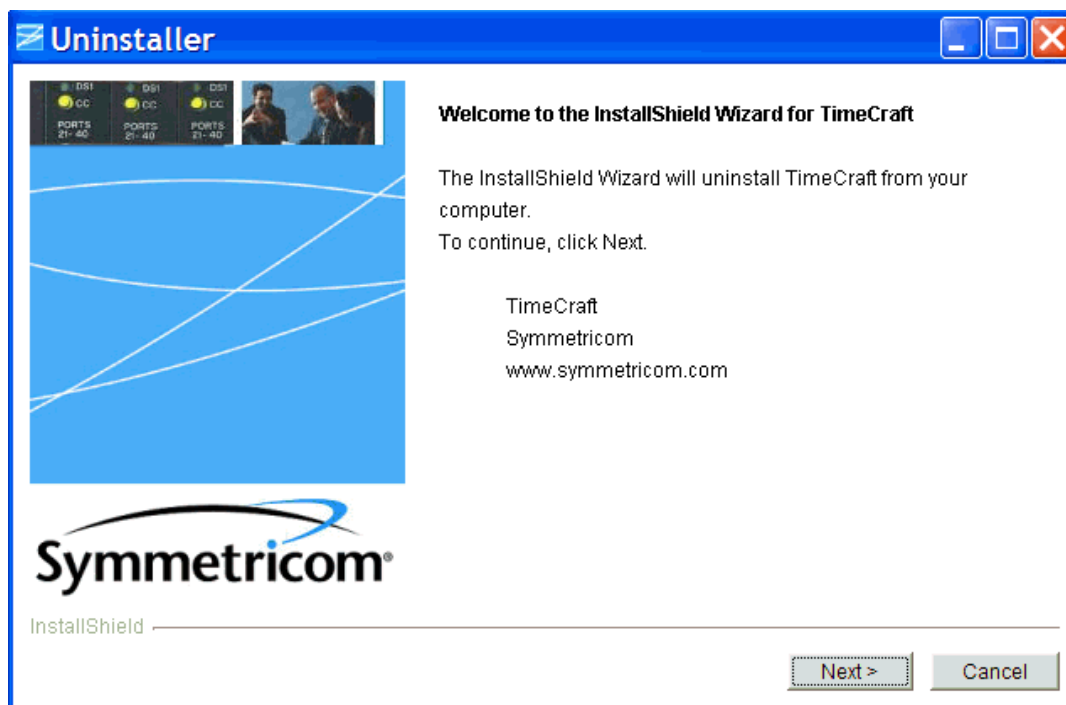


**Note:** Use the standard Windows procedure for uninstalling a program. This should be repeated individually for every program.

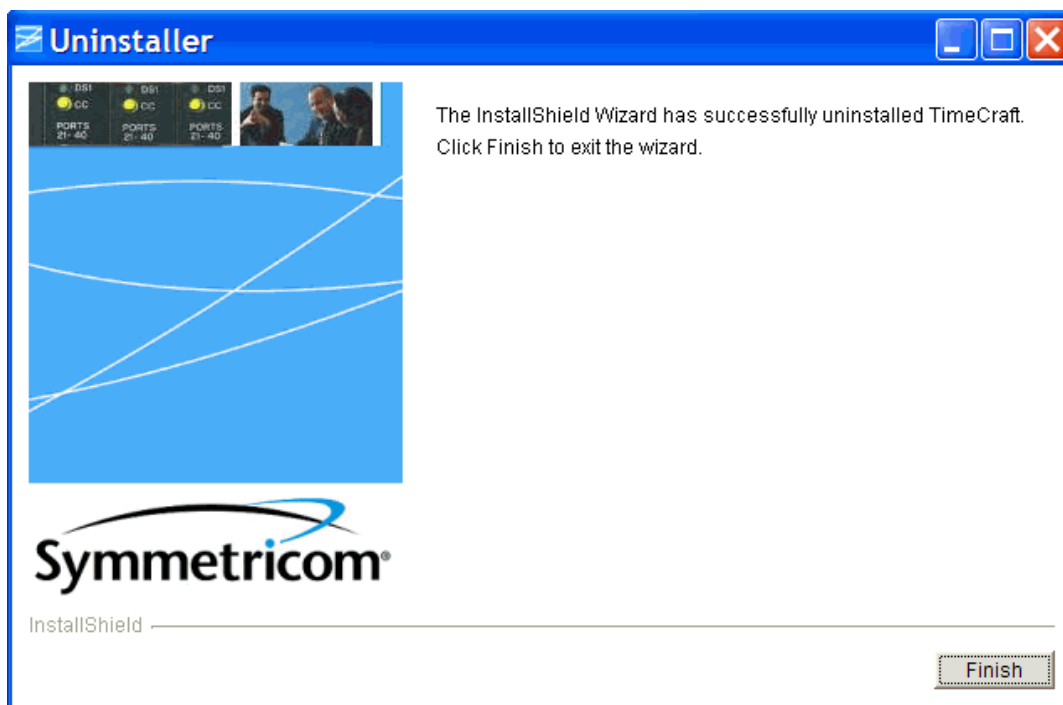
1. From the **Start** menu select **Control Panel > Add or Remove Programs**.
2. Locate and highlight the craft application (such as TimeCraft Installer, SynCraft, or TimeCraft) in the list of programs that you want to uninstall.
3. Click **Change/Remove** and follow the uninstall instructions.



4. In the Uninstaller screen, click **Next** to start the uninstall.



5. When the uninstall is complete, click **Finish**. The Add or Remove Programs window refreshes and the application is removed from the list.



6. Repeat these steps to remove any other installed applications.
7. Ensure the \Program Files\Symmetricon directory is empty after uninstallation.

## Installing TimeProvider Firmware And Boot Code

When installing new TimeProvider firmware to support the SNMP feature, there are three files that must be uploaded using the TimeCraft firmware upload tool:

- IOC\_1\_05\_00.dld
- IMC\_1\_05\_04.srec
- IMCBOOT\_1\_05\_02.srec



**Note:** Users should check their existing IMC boot code with the command `RTRV-COND : : IMC : CTAG ;`. This command reports the IMC boot code only when the IMC is at firmware release 1.05.04 or higher.

Use the following procedure to upload TimeProvider firmware and boot code that supports the SNMP feature:

1. Open the TimeCraft application, click the **Tools** menu item, select **Firmware Upload...**, and select **TimeProvider Firmware Upload**.



**Note:** For detailed instructions on installing firmware, refer to the TimeCraft online help titled Upload New Firmware. This information is also provided in the TimeCraft User's Guide.

2. Upload the IOC firmware (IOC\_1\_05\_00.dld) first and allow it to be fully loaded, which can take up to thirty minutes if dual IOC cards are installed.
3. Upload the IMC firmware (IMC\_1\_05\_04.srec) next and allow it to be fully loaded.
4. Upload the IMCBOOT code (IMCBOOT\_1\_05\_02.srec) and allow it to be fully loaded.
5. After installing the firmware and boot code, you must re-seat the IMC card by removing it from the chassis connector and re-inserting it.
6. After re-seating the IMC card it may take a few minutes to re-establish communication.



**Warning:** If the system is using GPS, it will be restarted and the system will take approximately fifteen minutes to re-acquire the signal.

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## What's New In This Release

The following changes and additions were made to this document.

- Added G812 Predefined mask for SSU-2000 input ports
- Added new functions for the SSU-2000 PackeTime NTP blade as follows:
  - New events
  - MD5 authentication key setup and status
  - VLAN tagging configuration setup and status (VLAN identification and priority of service port interface)
  - Static route table setup and status
  - Redundant operation and port bonding (port, card, and static route protection) setup and status
  - NTP service configuration setup and status (enable or disable)
  - NTP probe mode configuration setup and status (enable or disable)
  - TOD timeout support for clock module

## Resolved Issues

The following issues are resolved:

- 22385: TimeProvider file information is now correct if the IOC file is selected.
- 23295: The SSU-2000 E1/2048 KHZ Alarm Configuration help file now shows the correct information within the Edit Alarm Configuration help view.
- 23312: All error messages in TimeCraft that appear supporting the SSU-2000 now are shown in black color only; the multi-colored scheme has been removed.
- 23343: TimeCraft now displays MONITORING CONFIGURATION in the GPS modules using all Comm modules with firmware versions including -000, -001, -002, -003, -004, -005.

- 23364: The SSU-2000 Comm Module status view has added a help button for the Alarm Cut Off, which also includes content about the Comm module.
- 23370: The SSU-2000 NTP Address help file has been edited to include an explanation of the 'Prefer' field, with an updated screen shot of the help file.
- 23454: The SSU-2000 PackeTime module now has the Alarm Status window included in the module view.
- 23482: TimeCraft no longer freezes when the SSU-2000 connection is left up and no user intervention occurs for a long period of time; even when no TimeCraft user interaction occurs for over 16 hours, TimeCraft is still operational and responsive after that time.
- 23560: The TimeHub Output Port Configuration menu can perform the ENABLE ALL and DISABLE ALL when their respective buttons are clicked, and OK is clicked. This works on both old and new IMC CPU types.
- 23647: To ENABLE Advanced Security during the initial installation of TimeCraft, where the username and password do not get stored on the local computer works on the Windows XP system only; this feature is not supported on Windows Vista.
- 23648: The SSU-2000 Events & Alarm History view has been updated to show two digit formats, with formatting scheme of YY-MM-DD, HH-MM-SS. This is now consistent with other NES including the TimeHub and TimeProvider.

## Known Issues

### Current Issues

- 23551: After new firmware has been uploaded to the TimeHub NTP blades, the NTP blade screen does not show the newest firmware just uploaded even though the refresh button on that screen is clicked.

*Workaround:* In the System Inventory menu, the new NTP firmware is shown after the refresh connection is clicked on that menu.

- The TimeHub System Configuration feature that allows for Saving, Configuration, and Verification of a new Clock Card is not supported on a Windows Vista OS.
- 23721: In the SSU-2000, when a card is removed from the main shelf or expansion shelf, the 'Logically Remove Card' does not appear in the TimeCraft screen until the user performs a manual refresh connection.

*Workaround:* Refresh the connection to get the correct display.

- 23722: After an SSU-2000 PackeTime firmware upload, the LEDs on the GUI do not match the shelf, the Software version window is not updated to show the newly uploaded firmware in the PackeTime status view, and the firmware image is not updated to show the latest uploaded firmware in the NTP Firmware Image window.

*Workaround:* Manually refresh the connection to get the correct display.

- 23791: After TimeCraft is connected to an SSU-2000 for long periods without any usage (24 hours), when you attempt to perform simple operations such as setting an Alarm Elevation time, TimeCraft is slow to update changes, however TL1 works fine. After restarting TimeCraft, response time returns to normal and commands are executed and updated quickly.

## Previous Issues

- (TimeProvider) When an output card is inserted that had been previously removed, it will correctly update itself to show the proper LED status for that card in the physical view. However, in the tree view it continues to show the card as removed.
- (SSU-2000) When printing a performance chart, if you select print preview and then print a chart, the chart screen contents disappears from view.

*Workaround:* Close the blank chart screen by clicking the “X” box in the upper right hand corner and use the Chart Palette to re-generate the performance chart to view it once again. Or, use the TimeMonitor tool for comprehensive performance monitoring and analysis.

- When you create a performance chart and select the Grid Lines menu, the More Vertical, Less Vertical, More Horizontal, and Less Horizontal menu items do not function in this release.

*Workaround:* Due to third-party tool limitations, this issue cannot be resolved. However, a performance monitoring tool such as TimeMonitor can be used to create the desired graph detail view. Or, use the TimeMonitor tool for comprehensive performance monitoring and analysis.

- The Show All Labels function for the Performance Chart Package is not working correctly in this release.

*Workaround:* Due to third-party tool limitations, this issue cannot be resolved. However, a performance monitoring tool such as TimeMonitor can be used to properly view the labels. Or, use the TimeMonitor tool for comprehensive performance monitoring and analysis.

## Manufacturing Discontinued Products

- (OT-21) The SID is reported by the OT-21 in quotes even though quotes haven't been entered which is reflected by TimeCraft. A new SID should be entered without quotes.
- (TSG3800) In the Security Window, pressing “Enable Security” requires closing the connection, editing the connection with login information, then connecting to the unit again.
- (TSG3800) It is recommended that the information in the Help File be supplemented with information in the TSG3800 User Manual as in certain cases information in the Help File is brief.
- (TSG3800, PRR10) In certain cases graphics are incomplete.
- (PRR10) Parameters can be configured from the primary module only.

## Technical Support

Technical support is provided 24 hours a day through Symmetricom’s Global Services. Telephone support is available by the hour, in multi-hour blocks, or on a contract basis.

### **U.S.A. Call Center:**

Symmetricom, Inc.  
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San Jose, CA 95131-1017

Toll-free North America: 888-367-7966  
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E-mail: [support@symmetricom.com](mailto:support@symmetricom.com)  
Internet: <http://www.symmetricom.com>

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Internet: <http://www.symmetricom.com>