Commander™ Site Controller Software Installation Guide

July 25, 2013

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Before We Start

Congratulations on your purchase of the VeriFone Commander Site Controller.
Before we start, please read the following important information:

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY VERIFONE, INC.
COULD VOID THE USER’S AUTHORITY TO OPERATE THIS EQUIPMENT.
THIS EQUIPMENT IS NOT INTENDED TO BE REPAIRED BY THE USER.

Regulatory Compliance

1. THIS EQUIPMENT COMPLIES WITH THE REQUIREMENTS IN PART 15 OF FCC RULES
   FOR A CLASS A DIGITAL DEVICE. OPERATION OF THIS EQUIPMENT IN A
   RESIDENTIAL AREA MAY CAUSE UNACCEPTABLE OR HARMFUL INTERFERENCE TO
   RADIO AND TV COMMUNICATIONS REQUIRING THE USER TO TAKE WHATEVER
   STEPS NECESSARY TO CORRECT THE INTERFERENCE.

2. THE COMMANDER SITE CONTROLLER COMPLIES WITH PART 68 OF THE FCC RULES.
   LOCATED ON THE BOTTOM PANEL OF THIS UNIT IS A LABEL THAT CONTAINS,
   AMONG OTHER INFORMATION, THE FCC REGISTRATION NUMBER AND RINGER
   EQUIVALENCE NUMBER (REN) FOR THIS UNIT. IF REQUESTED, THIS INFORMATION
   MUST BE PROVIDED TO THE TELEPHONE COMPANY. REGISTERED EQUIPMENT
   USOC: RJ11C.

3. IF EQUIPPED WITH A MODEM, THIS EQUIPMENT IS DESIGNED TO CONNECT TO THE
   TELEPHONE NETWORK WIRING USING THE TELEPHONE CORD AND MODULAR
   PLUG PROVIDED.

4. THE REN DETERMINES THE QUANTITY OF DEVICES THAT MAY BE CONNECTED TO
   THE TELEPHONE LINE. CONTACT THE LOCAL TELEPHONE COMPANY TO
   DETERMINE THE TOTAL RENs THAT MAY BE CONNECTED TO A LINE.

5. THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

6. CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003
   DU CANADA.
The unit should be powered up for at least 24 hours prior to initial application download. This is to prevent loss of data and to ensure that the battery pack is fully charged.
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1 INTRODUCTION

The VeriFone Commander™ Site Controller is a high-powered server that increases the capacity and functionality of VeriFone’s Ethernet-capable Point of Sale (POS) workstations by extending the processing and communications bandwidth for managing peripherals.

Future needs are designed into the hardware to provide support for additional serial ports and PCI boards along with additional fan and/or power connections that may be needed as a result. Use of these expansion capabilities will be determined by VeriFone.

System peripherals, such as fuel dispensers, dispenser card readers (DCRs), and car wash controllers connect directly to the Commander Site Controller.

Site Management Suite (SMS) provides additional functionality with four separate software modules:

- Journal Browser
- Configuration Client (for browser-based configuration)
- Transaction Manager
- Report Navigator

Figure 1: Commander Site Controller and Workstations
The Commander Site Controller contains the functionality of a V950™ to perform on-site upgrades. The addition of a router allows the Commander Site Controller to:

- Receive configurations remotely using available Internet protocols and tools, including a Web browser interface.
- Connect with VeriFone Technical Support Center computers for software downloads and diagnostics.

### Hardware and Software Requirements

The minimum hardware and software requirements are as follows:

- Commander Site Controller Unit (M149-101-00-NAA)
- Ethernet Cable
- Computer/Laptop with Ethernet port
- VeriFone Approved Router
- Software Installation CD
- Java 6 or Java™ Runtime Environment 1.6 or higher installed on the PC
- Internet Browser on the Laptop must have one of the following:
  - IE 8
  - Chrome
  - Safari 5.0.5
  - Opera 11.10
  - FireFox 13.0.1
2. DIAGRAMS

Front Panel

- **System Status Display** — The backlit, rectangular display on the front panel of the Site Controller.
- **CPU A Indicators and Controls** — The indicators and controls in this section of the front panel are specific to CPU A. A detailed description follows in the next section.
- **CPU A Device Port LEDs (RX/TX)** — Displays activity for devices connected to serial ports of CPU A.

Figure 2: Commander Site Controller - Front Panel
CPU A Indicators and Controls

![Indicator Diagram]

**Figure 3: Indicators and Controls for CPU A**

- **Reset Switch** — For emergency use only and should never be touched unless instructed by the VeriFone Technical Support Center.

- **Service Console Port** — This port is for use by a VeriFone Authorized Service Contractor. It connects the PC/Laptop to the Site Controller. The connection communicates at 19200 bps 8N1. It provides access to a serial diagnostic connection and boot-up functions.

- **Switch Bank**
  - **DIAG** — Toggles between normal boot mode and Diagnostic Kernel (DK) boot mode (normal = UP, DK = DOWN). This **MUST** be in the down position.
  - **LOGIN** — Used for remote support by the VeriFone Technical Support Center.
  - **SP1** — Not used at this time.
  - **SP2** — Not used at this time.
■ **Dual 7-Segment Status Display** — Displays codes showing the current state of the system. (See the “Status Display Code List” in the *Site Controller Software Installation Guide*.)

■ **System Heartbeat LED** — Pulsing red on and off indicates that the Site Controller is operational.

■ **Power LED** — Steady Green indicates that the Site Controller is powered.
CPU A Device Port LEDs (RX/TX)

Figure 4: Transmit/Receive Indicators for CPU A Serial Ports

Device Port LEDs (RX/TX) — Shows the status of Site Controller software polling of peripherals connected at the rear panel through the Device Port Banks A1 and A2. The following are the LED descriptions:

- Red ON = receive data
- Green ON = transmit data.
Rear Panel

- **Device Ports for CPU A** — Serial Port Connections for CPU A, Banks A1 and A2
- **Activity LEDs for CPU A** — LEDs flicker to show LAN activity
- **USB Port** — One USB 2.0 Port
- **LAN** — For Card Processing Network
- **Modem Port** — Connection used for dedicated telephone line.

**Note:** Actual modem may not be present in all configurations. Only UL listed USB Modem permitted.

- **Ethernet Port** — Ethernet port for POS and external connectivity (WAN, VPN)
- **Power Connector** — Connector for applying power to the Site Controller
3 SOFTWARE INSTALLATION

Before you begin

The following is required near the end of the installation.

- Make sure to have a piece of paper and writing utensil to record the user name, secure user ID, and password that will be displayed on the screen.
- Name of the Installer
- IP address for the Security Log Server. Up to 4 may be defined (or enter ‘none’).
- Make note of the time zone

Download Software

Download the Commander Site Controller Suite Software file from the VASC portal. The Commander Site Controller software is installed from a PC with the appropriate software stored on its hard drive or on a CD.

The Commander Site Controller software suite contains three files:

- Executable Jar File (Petro_Suite_Installer.jar)
- ZIP File (overlay.zip)
- Signature File (overlay.sig)
- Import/Export Utility

Connections

When installing the software on the Commander Site Controller from the PC, both must be connected to the LAN side of the same router via Ethernet cables (both should be connected within the “VeriFone zone”).

The Ethernet cable should be connected to the Net LAN port on the Commander Site Controller in the slot labeled “N”.

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Installing Commander Site Controller Software

**Note:** The “red” boxes are displayed only in this guide to bring attention to the details in these steps. They are not displayed on the screen.

1. On the PC, browse to the Commander Site Controller Suite Software folder and open it.

<table>
<thead>
<tr>
<th>Name</th>
<th>Size</th>
<th>Type</th>
<th>Date Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>overlay.sig</td>
<td>1 KB</td>
<td>SIG File</td>
<td>9/7/2012 3:01 AM</td>
</tr>
<tr>
<td>overlay.zip</td>
<td>131 KB</td>
<td>Compressed/zip</td>
<td>9/7/2012 2:58 AM</td>
</tr>
<tr>
<td>Petro_Suite_Installer.jar</td>
<td>76 KB</td>
<td>Executable Jar File</td>
<td>9/7/2012 3:01 AM</td>
</tr>
</tbody>
</table>

3. Reboot the Commander Site Controller by removing power cord from the back of the unit or from the outlet.
4. After the Commander Site Controller has completely shutdown, plug in the power cord. The Commander Site Controller permits installation of software only within the first five minutes after a reboot.
5. Allow the Commander Site Controller to come up fully. “A9” displays in the LED window.
6. On the PC, click Install. Do not powercycle or reboot the system during installation. Also, it is normal for the Commander Site Controller to reboot during the various installation steps.
7. Browse to the directory where the files are stored.

8. Click and open the “overlay.zip” file. The installer package is unzipped and the installation begins. The following windows display during the installation.
Step 5 of 6
Installing Customizations

Estimated Time Remaining: 02 minutes 59 seconds
File Transfer Progress: 0%

Step 6 of 6
Finalizing Install

Estimated Time Remaining: 02 minutes 29 seconds
File Transfer Progress: Please Wait
9. Make note of the user name, secure ID#, and password and then click to confirm. The password will have one alphabetic character. Depending on the laptop font, it may be difficult to recognize a capital 'I' or 'O'.

**Note:** If the information is not written down and is lost, you will need to call the help desk or re-install.

10. Enter your name in the “Installed By” text box.

11. Enter up to four IP addresses or “none” in lowercase.
Note: Use “none” only when there is no device to capture security log messages.

12. Select the Time Zone and click OK.

13. Do one of the following three common choices (a, b, or c) that matches your Hard Disk Drive configuration.
   a. Use the drop-down menu and select [FCC] if the HDD is not formatted and is in the Commander Site Controller and then click OK.
b. Use the drop-down menu. Select [MIF] if the HDD is to be used for V950SC applications and is required to be formatted. Click [OK].

**Note:** If there is no need to recover data from the HDD, choose [MIF].
c. Use the drop-down menu. Select [KCC] if the HDD is already enabled and formatted. Click [OK].
14. If displayed, click [Yes] to format the HDD.
15. If the installation fails, the following windows display.
The installation can also fail for the following reasons.
- The diagnostic (diag) switch is in the down position. See the Diagrams chapter.
- The Commander Site Controller was not rebooted and/or the installer was not initiated within five minutes between steps 5 and 6.
## Troubleshooting and Service

### Troubleshooting

#### Symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fails to boot up or “A9” fails to display after boot-up</td>
<td>1. Put the DIAG Switch in the DOWN position.</td>
</tr>
<tr>
<td></td>
<td>2. Remove the power from the Commander Site Controller and if necessary press and hold the reset switch until it shuts off.</td>
</tr>
<tr>
<td></td>
<td>3. Plug the controller back in and wait for it to complete booting into the Diagnostic Kernel (DK). The displayed code will depend on the hardware and DK version. If in doubt, check for a login prompt on the serial console.</td>
</tr>
<tr>
<td></td>
<td>4. Put the DIAG Switch back to the UP position.</td>
</tr>
<tr>
<td></td>
<td>5. Run the Petro Suite Installer as in the Software Installation chapter. It will detect the DK and take appropriate action.</td>
</tr>
</tbody>
</table>
Hex Error Codes

**Note:** To avoid confusion, uppercase letters displayed in the error codes are A, C, E, F and the lowercase letters are d and b.

<table>
<thead>
<tr>
<th>Hex Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8</td>
<td>Operating System is installed, but there is no application running.</td>
</tr>
<tr>
<td>A9</td>
<td>Operating System and Application are installed and running.</td>
</tr>
<tr>
<td>b1, b2, b3</td>
<td>An error occurred during bootup due to possible tampered software</td>
</tr>
</tbody>
</table>

Display Error Messages

**Note:** “XXX” is a placeholder for the installed application.

<table>
<thead>
<tr>
<th>Display Message</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX 1.00.02</td>
<td>Application is installed and running</td>
</tr>
<tr>
<td>B011.00 System OK</td>
<td>System OK</td>
</tr>
<tr>
<td>No Application Error: 0001</td>
<td>No application is installed</td>
</tr>
<tr>
<td>XXX 1.00.02</td>
<td>Error occurred at startup</td>
</tr>
<tr>
<td>B011.00 Call HD C-01</td>
<td>Cannot detect internal Hard Drive.</td>
</tr>
<tr>
<td>XXX 1.00.02</td>
<td>Call HD C-04</td>
</tr>
</tbody>
</table>

Service

For service and repair, contact the VeriFone Technical Support Center, which is available for assistance 24 hours a day, 7 days a week, at 888-777-3536.

**Note:** Changes or modifications not expressly approved by VeriFone could void the user’s authority to operate this equipment.
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