SOFTWARE HOUSE

From Tyco Security Products

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Preface

The C•CURE 9000 Installation and Upgrade Guide is for new and experienced security system users responsible for installing either the Standalone C•CURE 9000 or a C•CURE 9000 Master or Satellite Application Server (MAS and SAS) and for troubleshooting any system problems.

NOTE For specifics on installing a MAS and/or SAS, see Chapter 6: Installing a Master Application Server and Chapter 7: Installing a Satellite Application Server.

In this preface

How to Use this Manual

This manual includes the following sections. Turn to the appropriate section for the information you need.

Chapter 1, "C•CURE 9000 Overview"

Provides basic information about the C•CURE 9000 network. It includes information on Clients and Servers, some system requirements, and optional hardware. Read both this chapter and Chapter 2 before you start the installation process. (See the current C•CURE 9000 data sheet for full system requirements.)

Chapter 2, "Setting Up Software and Hardware"

Provides guidelines for setting up your software and hardware in preparation for installing C•CURE 9000. Read both Chapter 1 and this chapter before you start the installation process.

Chapter 3, "Installing C•CURE 9000 Software"

Provides an overview of the installation process and step-by-step instructions for installing both the Servers and Clients for C•CURE 9000. This chapter also includes information about C•CURE 9000 services and server components and about repairing the C•CURE 9000 system.

Chapter 4, "Installing C•CURE 9000 Integrations and Services"

Provides an overview of the installation process for C•CURE 9000 Integrations and Services and where appropriate, step-by-step instructions for installing some of these. This chapter also includes information about installing the C•CURE 9000 language pack and about the Client Auto-Update Utility with step-by-step instructions for configuring and using it.

Chapter 5, "Upgrading C•CURE 9000 Software"

Provides step-by-step instructions for upgrading both C•CURE 9000 system Servers and Clients.

Chapter 6, "Installing a Master Application Server"

Provides an overview of the installation process and step-by-step instructions for installing a C•CURE 9000 Master Application Server (MAS) as well as information about upgrading a C•CURE 9000 MAS.

Chapter 7, "Installing a Satellite Application Server"

Provides an overview of the installation process and step-by-step instructions for installing a C•CURE 9000 Satellite Application Server (SAS). This chapter also includes information about upgrading a C•CURE 9000 SAS.

Chapter 8, "Licensing C•CURE 9000"

Provides license information and instructions for registering your C•CURE 9000 system.

Chapter 9, "Uninstalling the C•CURE 9000 Software"

Provides instruction for uninstalling the C•CURE 9000 system and the C•CURE 9000 language pack.

Chapter 10, "Troubleshooting C•CURE 9000"

Provides guidelines for troubleshooting both hardware and software problems.

Chapter 11, "Software House Customer Support"

Provides information on the Software House Customer Support Center, including guidelines for obtaining support.

Finding More Information

You can access manuals and online Help for more information about C•CURE 9000.

Software House Manuals and Documents

The Software House manuals and documents listed in the following three sections are available in Adobe PDF format on the C•CURE 9000 DVD and online at the Software House Member Center website ([redacted]).

You can access these manuals/documents if you copy the appropriate PDF files from the C•CURE 9000 Installation DVD English\Manuals folder. The available manuals appear as hyperlinks in the online.pdf file in the aforementioned C•CURE 9000 DVD English\Manuals folder. (Translated manuals for some of the supported languages are also available in Adobe PDF format in the LanguagePack folder on the C•CURE 9000 DVD.)

Software Manuals

- *C•CURE 9000 Area and Zones Guide*
- *C•CURE 9000 C•CURE ID User Guide*
- *C•CURE 9000 Card Formats and Smart Card Keys User Guide*
- *C•CURE 9000 Data Views Guide*
- *C•CURE 9000 Enterprise Architecture Guide*
- *C•CURE 9000 Guard Tour Guide*
- *C•CURE 9000 Getting Started Guide*
- *C•CURE 9000 Hardware Configuration Guide*
- *C•CURE 9000 Installation Quick Reference*
- *C•CURE 9000 Monitoring Station Guide*
- *C•CURE 9000 Personnel Configuration Guide*
- *C•CURE 9000 Server Configuration Application Guide*
- *C•CURE 9000 Software Configuration Guide*
- *C•CURE 9000 System Maintenance Guide*
- *C•CURE 9000 Video Guide*

Additional Helpful Documents

- *Beeps and LED Definitions* (Timing patterns for standard/alternate LED and beep cycles)
- *Capacity Planning for iSTAR Controllers* (iSTAR Capacity estimating in multiple card system)

Online Help

You can access C•CURE 9000 Help by pressing F1 or clicking Help from the menu bar in the Administration/Monitoring Station applications.

Conventions

This manual uses the following text formats and symbols.

Convention	Meaning
Bold	This font indicates screen elements, and also indicates when you should take a direct action in a procedure. Bold font describes one of the following items: ▪ A command or character to type, or ▪ A button or option on the screen to press, or ▪ A key on your keyboard to press ▪ A screen element or name
blue color text	Indicates a hyperlink to a URL, or a cross-reference to a figure, table, or section in this guide.
Regular italic font	Indicates a new term, or a book title.
<text>	Indicates a variable.

The following items are used to indicate important information.

NOTE Indicates a note. Notes call attention to any item of information that may be of special importance.

TIP Indicates an alternate method of performing a task.

Indicates a caution. A caution contains information essential to avoid damage to the system. A caution can pertain to hardware or software.

Indicates a warning. A warning contains information that advises users that failure to avoid a specific action could result in physical harm to the user or to the hardware.

Indicates a danger. A danger contains information that users must know to avoid death or serious injury.

1

C•CURE 9000 Overview

C•CURE 9000 has automated installation programs that install the software and the database. It has a separate licensing application to register the software. However, you must complete some manual network setup procedures before installing the C•CURE 9000 software.

This chapter provides information about clients and servers, as well as some system requirements.

NOTE For specifics on installing a MAS and/or SAS, see Chapter 6: Installing a Master Application Server and Chapter 7: Installing a Satellite Application Server.

For additional information, refer to the release notes file on the C•CURE 9000 Installation DVD, and for full system requirements, see the current C•CURE 9000 data sheet.

In this chapter

Understanding Clients and Servers

With C•CURE 9000, a computer can act both as a Server and a Client.

- A Server performs basic security functions and can be accessed by multiple users. A Server also functions as a Host for iSTAR controllers and apC panels, and other peripherals.
- A Client performs administrative and monitoring functions for a single user.

The Server for C•CURE 9000

You must have a Server computer on the C•CURE 9000 security system network for the system to operate. This Server is now the victor Application Server. It stores the C•CURE 9000 driver software and associated data files, including:

- C•CURE 9000 configuration database that contains data tables with information about system configuration and personnel records.
- iSTAR, apC, and Video support. (Video Support not evaluated by UL.)
- Historical information in database files called the **historical journal.**
- Journal Maintenance and Backup/Restore Tools.
- Client software.
  - Administration application.
  - Monitoring Station.
- Bi-directional interface for CCTV. (Not evaluated by UL.)

Supported Hardware

The Server supports the following hardware:

- C•CURE iSTAR Classic/Pro Controllers.
- C•CURE iSTAR eX Controllers.
- C•CURE iSTAR Edge Controllers.
- C•CURE iSTAR Ultra Controllers.
- apC Panels.

Readers

Card readers support a variety of card technologies, including magnetic stripe, Wiegand, Wiegand-compatible (such as proximity), biometric encrypted magnetic card types, Smart cards, and Government cards. The following readers have been evaluated by UL:

- RM1-MP, RM2-MP, RM2L-MP, RM3-MP
- RM1-PH, RM2-PH, RM2L-PH, RM3-PH, RM1-PI, RM2-PI, RM2L-PI
- Model RM1-W
- RM1-4000, RM2-4000, RM2L-4000, RM1-IC, RM2-IC, RM2L-IC

The C•CURE 9000 Client

A C•CURE 9000 Client contains the following features and options:

Administration Application

Allows you to:

- Configure system security objects such as:
  - Controllers
  - Panels
  - Doors and readers
  - Holidays
  - Schedules
  - System events and triggers
  - C•CURE and third-party Video hardware, and CCTV switchers (not evaluated by UL).
- Configure partitions, iSTAR areas, intrusion zones, keypad commands, and guard tours.
- Configure elevators, floors, and video tours.
- Configure personnel records, operators, and operator privileges.
- Display, import, and export personnel records and other system data.
- Configure events to respond to:
  - Inputs
  - Video alarms
  - Communications failures
- Configure events to activate actions such as:
  - Activating outputs and CCTV control
  - Activate other events
- Configure Application (Monitoring) Layouts.
- Use Dynamic Views to view configuration data and system status.
- Display, import, and export images.
- Design and print badges with C•CURE ID.
- Report on historical and configuration information and video clips.

Monitoring Station

Allows you to:

- View general activity and events.
- View the status of objects.
- Acknowledge events.
- Perform manual actions.

- View personnel data including images, live video display of an IP camera, and system maps.
- View live and/or recorded digital video.
- View alarm messages.
- Monitor cardholder admits and rejects.
- Configure each station to automatically display the image associated with a card access/reject.

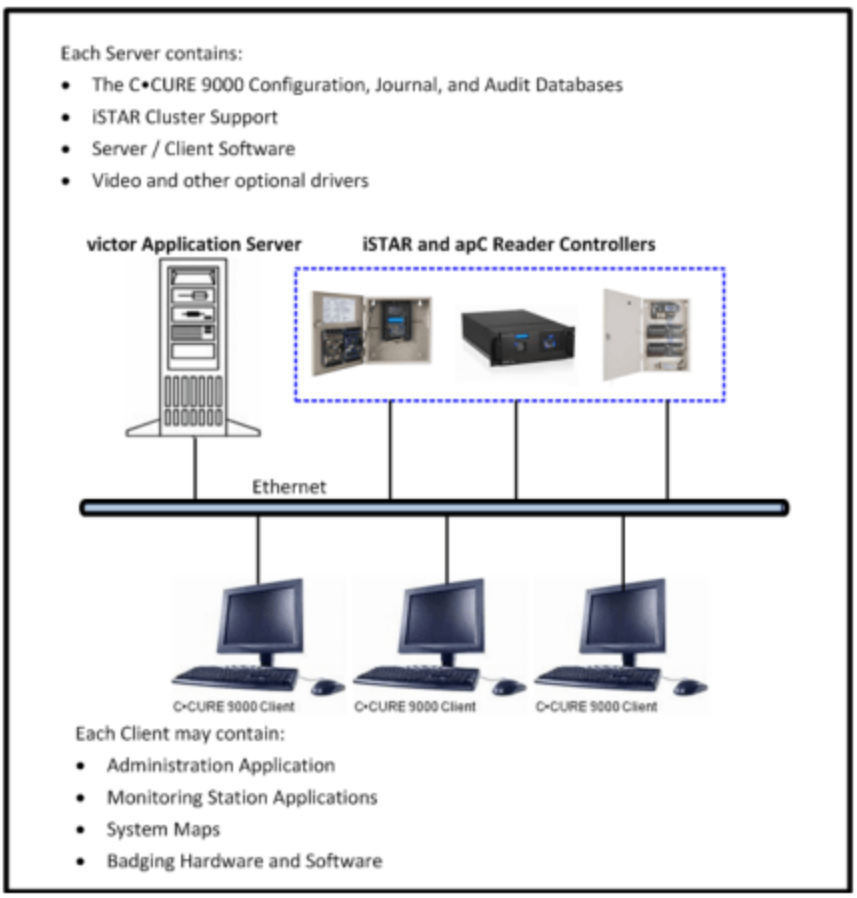
Networking Protocol

The Server and its Clients are usually separate computers connected via the TCP/IP networking protocol. You can also run the Client and Server functions on the same computer.

NOTE The C•CURE 9000 Operator is tied to the Windows login. When users start any client application, they are queried as to which Windows User/Principal they are. This value is used to ascertain which privileges they possess.

Figure 1-1 on page 1-4 illustrates how the Clients and Server function in C•CURE 9000 and how iSTAR and apC Controllers connect to them.

Figure 1-1: C•CURE 9000: Clients and Servers



Hardware - Controllers/Panels

NOTE The C•CURE 9000 documentation uses the term *controller* to refer to the different types of iSTARs and *panel* to describe apC/8X panels.

Communications between a server and multiple iSTAR controllers or apC/8X panels are via TCP/IP over an Ethernet network.

iSTAR Controllers

iSTAR Classic/Pro, iSTAR eX, iSTAR Edge, and iSTAR Ultra are Ethernet-ready controllers. C•CURE 9000 acts as a database and journal host, and networks to the iSTAR controllers for initial set-up—managing peripheral hardware and generating activity reports.

The host downloads personnel information, configuration information, and event-directed actions to the iSTAR controllers. The controllers enable local management of events without host intervention.

apC/8X Panels

The **advanced processing Controller** (apC) panel is an intelligent field device that performs basic access control tasks. The apC/8X access control field panels coordinate communication between the victor Application Server and the system security hardware, such as card readers.

Hardware/Software Capacities for the Server

Be sure to verify all hardware for compatibility with Windows. See the Microsoft web site for more information ([redacted]).

See the current C•CURE 9000 data sheet for up-to-date information about the hardware and software default capacities for the Server for the different model series. The data sheet also includes system requirements for the following items:

Processor	Network Adaptor Card
Hard Disk Drives	SQL Server Database
RAM	Windows Operating System
Backup device	DVD Drive
Video Card	Required Services
Monitor	

The installation program checks the free disk space on the system drive. If there is insufficient space, an error message displays and the install closes.

Hardware/Software Requirements for Clients

Be sure to verify all hardware for compatibility with Windows. See the Microsoft web site for more information ([redacted]).

You can configure one or more Clients in your C•CURE 9000 system. You must have at least 2 GB of free space on the installation drive prior to installation.

See the current data sheet for up-to-date hardware and software requirements information for a C•CURE 9000 Client for the following:

Processor	DVD Drive
RAM	Monitor/Video Adaptor Board
Disk Drive	Network Adaptor Card
Mouse	Windows Operating System
Keyboard	

Optional Hardware and Software

You can use the following items with the C•CURE 9000, but they are not required:

- Printer.
- Sound Card, for audible notifications of alarms and events.
- 24-bit or 32-bit color video adapter board for high resolution maps, including photographs.
- Additional backup software for network and scheduled backups.
- C•CURE Video Servers:
  - American Dynamics
    - VideoEdge NVR
    - Intellex
    - HDVR
    - TVR
  - ExacqVision
- CCTV switchers:
  - American Dynamics
- General Purpose Interface

See the *C•CURE 9000 C•CURE ID User Guide* for items related to the Badging option.

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Setting Up Software and Hardware

This chapter provides information on setting up the computer hardware and software before installing the C•CURE 9000 software.

NOTE For specifics on installing a MAS and/or SAS, see Chapter 6: Installing a Master Application Server and Chapter 7: Installing a Satellite Application Server.

For additional information on requirements and known limitations, refer to the Release Notes file on the C•CURE 9000 Installation DVD.

In this chapter

Installing Windows

Install the appropriate Windows operating system and service packs for both the victor Application Server and C•CURE 9000 Client, as described in the current C•CURE 9000 data sheet, following the installation instructions provided by Microsoft. For information on Windows servers, see the Microsoft web site ([redacted]).

The Windows operating system of the Server system must be configured to boot from the C:/ drive. Otherwise, your C•CURE 9000 license may not validate correctly and allow you to run C•CURE 9000. (C•CURE 9000 itself does not need to be installed on the C:/ drive.)

C•CURE 9000 Installation Location

You must install the C•CURE 9000 software on every computer that you will use in the security system. The installation program prompts you to install either the Server with the Client or the Client alone.

Table 2-1: C•CURE 9000 Installation Table

If your security system will use...	Then install...
Single computer	Server and Client software on that computer.
Two or more computers	• Server and Client software on the computer that will be the Server/Host. - and - • Client software on each computer to be used as a Client.

Connecting the Computer to the Network

If you are installing C•CURE 9000 on a pre-existing corporate network, you need to first perform some manual setup tasks to enable the C•CURE 9000 system to run on your network.

Server/Client Setup Requirements

Unless otherwise noted, you must perform all the tasks described on the following pages on the victor Application Server and on all C•CURE 9000 Clients that will run C•CURE 9000.

Network Protocol

The victor Application Server communicates using the TCP/IP network protocol.

Setting Fonts and Screen Resolution

C•CURE 9000 does not support large fonts. Select the **Display** icon in the Windows Control Panel to set the font size to small on the server and clients, and set the screen resolution to 1024 x 768 or higher.

Verifying TCP/IP

To Verify that TCP/IP Is Working before Installing C•CURE 9000

1. Select **Start>Run>cmd** to display the command prompt.
2. At the command prompt, enter the following command:

   PING [your IP address or computer name]

   Successful pings return a message beginning "Reply from," while unsuccessful pings return the message "Request timed out" or "host unreachable."

NOTE Use TCP/IP addresses or names for the verification. You will repeat this procedure after installing the software.

For more information on installing TCP/IP, see the Microsoft web site: [redacted]

Synchronizing Time for Networked Computers

Computers in a C•CURE 9000 network need to have their clocks synchronized to a user-selected time standard. Otherwise, C•CURE 9000 activity time stamps may not be correct.

For the computers in the C•CURE 9000 network there are basically three different situations, summarized in the following list.

NOTE

The list describes the three most common situations, but there can be other more rarefied cases.

Be aware that everything is configurable and defaults can be overridden manually or using group policy. Always confirm that your network is synchronizing the time as expected. In addition, for each case in the list there are additional options available.

For further information, see

- [redacted](WS.10).aspx

  - or -

- Search for "Windows Time Service" on the internet.

1. **All computers (the victor Application Server and all C•CURE 9000 Clients) are in the same Active Directory Forest.**

   In this case, all the computers have their time synchronized automatically by Active Directory by default. You do **not** have to do anything, but you should confirm that the time is being synchronized.

   However, Software House recommends that you synchronize the domain controllers (DCs) with an external clock. See "Setting a Domain Controller as Time Server and Synchronizing It with External Time Source" on page 2-5. In addition, to verify that a domain computer is synchronized with the domain time server, see "Manually Configuring Computers to Synchronize with Domain Time Server" on page 2-8.

2. **All computers (the victor Application Server and all C•CURE 9000 Clients) are in different Active Directory Forests.**

   In this case, you must synchronize the DCs in the different forests. Once their time is synchronized, the change propagates to all the other computers by default. See "Setting a Domain Controller as Time Server and Synchronizing It with External Time Source" on page 2-5.

3. **The computers are not using Active Directory at all** —you are using workgroups. The computers have time server built in. You can use either of the following two methods:

   - "Configuring a Separate Time Server" – The more robust method. See page 2-5.
   - "Configuring Each Computer To Get Time from Internet Independently"– the easier method. See page 2-5.

Configuring a Separate Time Server

To Configure a Separate Time Server

1. Configure one computer as the time server. For directions, see "Configuring a Non-domain Computer as Time Server" on page 2-6.

   Ideally the time server computer should then have its time set using an atomic clock standard. See "Setting a Domain Controller as Time Server and Synchronizing It with External Time Source" on page 2-5.

2. Configure the other computers to synchronize their time with the time server—set their time from the primary computer. For directions, see "Manually Configuring Computers to Synchronize with Time Server—When Not in a domain" on page 2-7.

Configuring Each Computer To Get Time from Internet Independently

This method is set up by default, so you merely need to verify its occurrence.

NOTE This method has the problem that it requires the ntp port (usually port 123, a UDP port) to be open on your firewall.

To Verify a Computer Gets its Time from the Internet

1. From the Windows desktop, go to **Start>Control Panel>Date and Time**. The **Date and Time Properties** window appears.
2. Open the **Internet Time** tab and click the **Change settings** button.
3. On the **Internet Time Settings** dialog box, select **the Synchronize with an Internet time-server** check box.
4. In the **Server** field, leave [redacted] or select another appropriate time source from the drop-down list.
5. Click the **Update Now** button to verify that the computer can successfully obtain the time.
6. Click **OK**.

Setting a Domain Controller as Time Server and Synchronizing It with External Time Source

This is part of domain administration. For information, see:

[redacted](v=WS.10).aspx

Synchronizing Non-domain Time Server Computers with External Time Source

To Synchronize a Time Server Computer with a Standard Time Source

- Go to [redacted], download their "Atomic clock sync" application, and install it on your computer.
  - Have this application synchronize once a day. (This method uses Http, so no additional ports are required to be open.)

  -or-

- Connect to a time server running Network Time Protocol (ntp) or Simple Network Time Protocol (sntp). (Uses UDP Port 123.)

  You can configure this to happen automatically:

  a. From the Windows desktop, go to **Start>Control Panel>Date and Time**. The **Date and Time Properties** window appears.

  b. Open the **Internet Time** tab and click the **Change settings** button.

  c. On the **Internet Time Settings** dialog box, select **the Synchronize with an Internet time-server** check box.

  d. In the **Server** field, leave [redacted] or select another appropriate time source from the drop-down list.

  e. Click the **Update Now** button to verify that the computer can successfully obtain the time.

  f. Click **OK**.

NOTE This second method has the following problems:

- It requires the ntp port (usually port 123, a UDP port) to be open on your firewall.
- It synchronizes **only** once a week. If you desire greater accuracy, you can change the frequency of synchronization by editing the registry. For information, see the Microsoft documentation.

Configuring a Non-domain Computer as Time Server

To Set Up a Windows Computer as a Time Server

1. Make sure that the "Windows Time" service is installed and set to start automatically on this computer. (Check in the Windows Control Panel Services window that Startup is set to Automatic).

   Ideally, this computer should synchronize with an external time source. For the procedure, see the preceding section.

2. Edit the following registry entry:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Config\

   a. In the right pane, right-click **AnnounceFlags**, and then click **Modify**.

   b. In the **Edit DWORD Value** dialog box, under Value data, type **5**, and then click **OK**.

3. Edit the following registry subkey:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\TimeProviders\NtpServer\

   a. In the right pane, right-click **Enabled**, and then click **Modify**.

   b. In the **Edit DWORD Value** dialog box, type **1** under Value data, and then click **OK**.

4. Restart the Windows Time service for the change to take effect by entering the following at the command line:

   net stop w32time
   net start w32time

Manually Configuring Computers to Synchronize with Time Server—When Not in a domain

To Synchronize the Computers with the Time Server Computer

1. Make sure that the "Windows Time" service is installed and set to start automatically on these computers. (Check in the Windows Control Panel Services window that Startup is set to Automatic).

2. Issue the following at the command line:

   w32tm/config/manualpeerlist:time_server_machine/syncfromflags:manual /update
   (Where time_server_machine is the computer name of the primary time server.)

3. Restart the Windows Time service for the change to take effect by entering the following at the command line:

   net stop w32time
   net start w32time

NOTE This time synchronization will happen by default every few days. Computers are typically synchronized to within a few seconds of each other.

Manually Configuring Computers to Synchronize with Domain Time Server

(This is the default setting, but it can be turned off depending upon the installation.)

To Ensure a Domain Computer is Set to Automatically Synchronize with Domain Time Server

1. Make sure that the "Windows Time" service is installed and set to start automatically on these computers. (Check in the Windows Control Panel Services window that Startup is set to Automatic).
2. Issue the following at the command line:

   w32tm /config /syncfromflags:domhier /update
3. Restart the Windows Time service for the change to take effect by entering the following at the command line:

   net stop w32time
   net start w32time

NOTE This time synchronization will happen by default a few times per day. Computers are typically synchronized to within a few seconds of each other.

Setting System Clock

Since C•CURE 9000 uses the system clock for tracking activity, it is important that it be correct.

NOTE The time zone for the Windows clock is set by default to Greenwich Mean Time (GMT), which is **not** correct for most users.

Verify that the time zone is correct for the system's location. If your location uses Daylight savings time, also verify that the "Automatically Adjust Clock for Daylight Saving Time" check box is selected. (Both the time zone and the time are set from **Start>Control Panel>Date and Time**.)

- If you are **not** automatically synchronizing the clocks (Software House recommends that you automatically synchronize them), you must set the system clock on every system running the C•CURE 9000 Server or Client.
- If you are synchronizing the clocks automatically, the clock should be set manually **only** on the time server computer, and the Windows Time service will set the clocks on all other computers.
- In either case, if the C•CURE 9000 system server time will change by more than a few seconds, or if you change the time zone, you must perform the following procedure on the victor Application server.

To Change the Time Zone, Date, or Time

1. Do a full shutdown of the C•CURE 9000 Service using the Server Configuration application.
2. Make the necessary changes (or wait for the Windows Time Service to make the changes).
   - If you are using automatic time synchronization and you want this computer to synchronize to the time server immediately, issue the following command at the command prompt:

     w32tm/resync
3. Do a full startup of the C•CURE 9000 Service using the Server Configuration application.

Configuring Network Communications

C•CURE 9000 supports network communications for the following security objects:

C•CURE 9000 Clients

C•CURE 9000 clients communicate with the host computer using TCP/IP protocol within a local area network (LAN) or across a wide area network (WAN).

iSTAR Controllers

iSTAR controllers communicate with the C•CURE 9000 host using TCP/IP protocol. The onboard ports are Ethernet; therefore, you must physically connect iSTAR controllers to an Ethernet LAN.

The host computer and the iSTAR controllers can be in a WAN only if the gateways/routers are specified in the iSTAR controllers.

You can specify the IP addresses for member slave controllers in the software by using the Hardware pane in the C•CURE 9000 Administration application.

You can specify IP addresses for controllers in the following ways:

- Use the supplied ICU.exe module to configure the IP addresses for the master controllers.
- You can specify gateways/routers by using the supplied ICU.exe module to configure the gateways/routers in the controllers.

NOTE When you are specifying IP addresses for controllers, Software House recommends that you obtain the IP address from a DHCP server—utilizing the method that retains the static IP address (based on the MAC address).

Connecting apCs

Advanced Processor Controllers (apCs) are wired to RS-232 or RS-485 serial connections, or connected to terminal servers. For detailed information, refer to the *apC Technical Manual* and the *apC/8X Technical Manual*.

NetVue Controllers

NetVue controllers communicate with the C•CURE 9000 host using the TCP/IP protocol within a Local Area Network (LAN) or across a Wide Area Network (WAN).

Refer to the individual controller installation guides for information about which ports to use with the controllers.

(NetVue Controllers are not evaluated by UL.)

Opening Ports in Windows Firewall

To help protect the security of your computer, you should keep Windows Firewall on, so that unsolicited requests to connect to your Server computer are blocked. However, C•CURE 9000 requires access to certain ports within the system. To allow this type of connection, you must allow an **exception** or open a **port** for a specific program or service.

Risks of Opening Ports

A port is an opening into your computer through which information can flow. Each time that you allow an exception or open a port for a program to communicate through Windows Firewall, your computer is made more vulnerable. Opening a port increases the risk that unknown intruders can find unprotected connections. If you have many open ports, your computer can become a victim of these intruders.

To help decrease your security risk if you open ports:

- Only open a port when you need it.
- Never open a port for a program that you do not recognize.
- Close a port when you no longer need it.

How Ports Work

Each port has a number, which is like an address. Many programs and services have a "permanent address" — they have predefined port numbers. You can find the correct port number for a program or service in Table 2-2 on page 2-12 which lists exceptions that may be added to the Windows Firewall to allow the C•CURE 9000 application to operate in a Shared Server List Format (SSLF) environment. The SSLF format has been developed to list servers in a standard, organized framework that can be used with many software tools and edited with every common text editor. Exceptions can be made for particular ports and for programs that use dynamically-assigned ports.

Some programs do not have predefined port numbers. These programs open ports automatically as needed—such as ICU.exe (shown in Table 2-2 on page 2-12). For a program like this to connect to your computer, Windows Firewall must allow the program to open the correct port. For these programs to work correctly, they must be listed on the **Exceptions** tab in the **Windows Firewall** application.

NOTE To enable Windows Firewall and add ports for the Windows 7, Windows 8.1, Windows 2008 R2, or Windows Server 2012 R2 operating systems, see Microsoft's directions. Be aware that you must be logged on as an administrator to perform the necessary procedures.

Table 2-2 on page 2-12 lists port assignments and other C•CURE 9000 exceptions. The table uses the following abbreviations:

- victor Application Server = vAS
- Database Server = DB Server

NOTE

Other considerations for using Microsoft SQL Server may apply to your use of a firewall. For more information, see the following Microsoft technical articles:

- How to: Configure a Windows Firewall for Database Engine Access [redacted] ms175043(v=sql.105).aspx
- Configuring the Windows Firewall to Allow SQL Server Access [redacted](v=sql.105).aspx

Table 2-2: Port Assignments for C•CURE 9000

Port	Name	Exception Type	Location	Traffic Direction from vAS	Connection Initiate from
80	IIS	TCP	vAS	inbound	Client
80	VideoEdge NVR Admin/Alarm Port	TCP	vAS		
123	For Time synchronization	UDP			
389	Default LDAP Port	TCP	vAS	outbound	vAS to LDAP Server
443	HTTPS Port for SSL connections with C•CURE Go	TCP	Server		
554	VideoEdge NVR Live Port	TCP	Server		
1433	SQL Server	TCP	DB Server	outbound	vAS to SQL Server
1433	SQL Server	UDP	DB Server	outbound	vAS to SQL Server
1434	SQL Server	UDP	DB Server	outbound	vAS to SQL Server
1521	Oracle Listener	TCP	DB Server	outbound	vAS to Oracle Server
1999	iSTAR, Master Port for incoming slave connections	TCP	Master iSTAR	N/A	From Slaves
2001	ICU.exe, UDP Broadcast Port	Program	Laptop	Inbound to Laptop	iSTAR Panels
2600	apC Driver	TCP	vAS	inbound	apC Panels
2800	iSTAR Host Port for iSTAR Driver	TCP	vAS	inbound	iSTAR Panels
2801	iSTAR Fast Personnel Download Host Port	TCP	vAS	inbound	iSTAR Panels
2802	iSTAR Fast Image Download Host Port	TCP	vAS	inbound	iSTAR Panels
2803	iSTAR Encryption Port	TCP	vAS	inbound	iSTAR Panels
3001	apC Comm Port Default	TCP	Server		

Table 2-2: Port Assignments for C•CURE 9000, continued

Port	Name	Exception Type	Location	Traffic Direction from vAS	Connection Initiate from
5000	IntellexAPI Base Address*	TCP	Intellex Server	outbound	vAS to Intellex Server
5001	IntellexAPI Live Port*	TCP	Intellex Server	outbound	vAS to Intellex Server
5003	IntellexAPI Alarm Port*	TCP	Intellex Server	outbound	vAS to Intellex Server
5000-5003	Lantronix Terminal Server*	TCP	Lantronix Device	outbound	vAS to Device
7144-7145	EMC Replistor	TCP	Server/Client	inbound/outbound	One of the EMC vAS's to other Servers in the EMC Cluster
8005	System Trace URI	TCP	Server		
8006	Remote Hardware Interface List URI	TCP	Server		
8042-8045	EMC AutoStart	TCP	Server/Client	inbound/outbound	One of the EMC vAS's
8085	Auto Update	TCP	vAS	inbound	9000 Client
8985	Base Address of Driver Service	TCP	Server		
8995	Server Component Framework Driver Port (and Trace Viewer URI)	TCP	vAS	inbound	vAS
8996	CrossFire Service of Web Client Session	TCP	vAS	inbound	9000 Client
8997	Admin/Monitor Client Stream	TCP	vAS	inbound	9000 Client
8998	CrossFire Service of HTTP Client Session	TCP	vAS	inbound	9000 Client
8999	CrossFire Service of TCP Client Session	TCP	vAS	inbound	9000 Client
10001-10002	DSC through Lantronix device (or serial port)	TCP	Server		
10001-10002	Simplex 4100U through Lantronix device (or serial port)	TCP	Server		
22609	VideoEdge HDVR Admin/Line/Alarm Port	TCP	Server		
27000	TycoESS License Service	TCP	vAS	inbound	vAS/9000 Client
28001	iSTAR Edge/Ultra/eX. Fast Download Connection	TCP	vAS	inbound	Encrypted iSTAR Panels
28002	iSTAR Edge/Ultra/eX. Fast Image Download	TCP	vAS	inbound	Encrypted iSTAR Panels
28003	iSTAR Edge/Ultra/eX. Used by host to accept Edge/Ultra/eX requests for certificate signing	TCP	vAS	inbound	Encrypted iSTAR Panels

Table 2-2: Port Assignments for C•CURE 9000, continued

Port	Name	Exception Type	Location	Traffic Direction from vAS	Connection Initiate from
28004	iSTAR Edge/Ultra/eX. Used by Edge/ Ultra/eX to accept a signed certificate	TCP	Encrypted iSTAR Panels	outbound	vAS
28005	iSTAR Ultra/eX. for connection made to host 2nd IP/Name (Dual IP - Ultra/eX only)	TCP	Not supported on Host yet	N/A	N/A
28007	iSTAR Edge/Ultra/eX. For master's 2nd network connection	TCP	Master	N/A	iSTAR Panels
28009	iSTAR Edge/Ultra/eX. Master port for incoming slave connections	TCP	Master iSTAR	N/A	iSTAR Panels
28010	Host port for incoming slave connections	TCP	vAS	inbound	iSTAR Panels
32200-38200	VideoEdge NVR Streaming Port	UDP	Server		
47808	MZX	UDP	Server		
	SoftwareHouse.Crossfire.Server.exe	Program	Server		
	ICU.exeNextGen	Program	Server		
	SQL Server **	Program	DB Server		
	SoftwareHouse.NextGen.Client.Admin Workstation.exe	Program	Client		
	SoftwareHouse.Client.Monitoring Station.exe	Program	Client		

*Ports 5000-5003 may be used for Intellex and Lantronix. When there is a conflict, alternate ports such as 6000-6003 can be used.

* *See "Create Exception for SQL Server in Windows Firewall" on page 2-20.

Limiting Amount of RAM Memory Allocated to SQL Server

If your SQL Server/SQL Server Express **is running on the same computer** as the victor Application Server, you should limit the amount of memory SQL Server can use to around 50% of the total RAM on the server computer. The amount of memory SQL Server needs depends on how large a database your system has—50% is only a rule of thumb.

You must do this **after** you have installed SQL Server, but **before** you install the C•CURE 9000 software on the server. For instance, if the server has 4 GB of RAM, allocate 2000 MB to SQL Server. Follow the steps below to configure this allocation.

To Limit RAM Memory for SQL Server

1. Run SQL Server Management Studio and connect to SQL server.
2. Select your server name in the Object Explorer pane.
3. Right-click to select Properties.
4. Under Select a page on the upper left, click the Memory.
5. In the Server Memory options box, set the memory as follows:
   a. **Minimum server memory (in MB)** field

      set to 100 MB

   b. **Maximum server memory (in MB)** field (The default is 214748367.)
   Set to the maximum amount of memory allowed to SQL Server based on the formula in the introductory paragraph above.

      Example:

      Set to **2 GB** so enter **2048**.
6. Click **OK**.

Setting Up Security for SQL Server 2008 R2/2012/2014

SQL Server 2008 R2/2012/2014 decrease the surface and attack areas for the server and its databases by doing the following:

- Instituting a policy of least privileges.
- Increasing the separation of Windows administration and SQL Server administration.

Internal accounts are protected and separated into operating system functions and SQL Server functions. Consequently, new SQL Server 2008 R2/2012/2014 installations:

- No longer add the local Windows Group BUILTIN\Administrators to the SQL Server sysadmin fixed server role, but instead provide an option during SQL Server Setup to provision one or more Windows principals into the sysadmin server role inside SQL Server.
- Remove the Surface Area Configuration (SAC) tool and replace it with policy-based management and changes in the SQL Server Configuration Manager tool.

Security Mode

Select Windows authentication or Mixed Mode authentication for your installation.

Windows Principal Provisioning

In SQL Server 2008 R2/2012/2014, the BUILTIN\Administrators group is no longer provisioned in the sysadmin server role. Instead, you must explicitly provision a SQL Server administrator for new installations during setup.

NOTE If your organization's processes or code depend on Windows BUILTIN\Administrators local group access, setup will **not** allow you to continue until you **explicitly** provision at least one SQL Server administrator for the new installation.

Specify SQL Server Administrator(s)

You must specify at least one Windows principal for the instance of SQL Server.

To Add the Account that SQL Server Setup Runs Under

1. Click the **Current User** button.
2. Click **Add** or **Remove** to add or remove accounts from the list of system administrators.
3. Edit the list of users, groups, or computers that will have administrator privileges for the instance of SQL Server.

Setting Up Protocols for SQL Standard/Enterprise Editions

If you plan to install C•CURE 9000 on a computer with an existing SQL Server 2008 R2/2012/2014 Standard or Enterprise Edition already installed, you must have the following SQL Protocols turned on for proper communication with C•CURE 9000:

- Shared Memory
- Named Pipes
- TCP/IP

*To Verify SQL Protocols Are Turned On

1. Click **Start>All Programs>Microsoft SQL Server 2008 R2/2012/2014>Configuration Tools>SQL Server Configuration Manager**.
2. On the left of the **SQL Server Configuration Manager** window, click the **SQL Server Network Configuration** option.
3. If you are using the default instance of SQL Server, click **Protocols FOR MSSQLServer**.

   - or -

   If you are using a named instance, click the **Protocols** option for your instance.
4. On the right side of the window, check that the relevant Protocols already have a status of **Enabled**.

   - or -

   Right-click a Protocol and click **Enabled** on the context menu that appears.

Remote SQL Server Setup

Overview

When you try to connect to a remote instance of Micros oft SQL Server 2008 R2/2012/2014, you may receive an error message. This problem may occur when you connect to any one of the supported SQL Server editions.

Example:

Error 27502. Could not connect to Microsoft SQL Server 'localhost\SQLExpress'. [DBNETLIB][ConnectionOpen(Connect()).]Specified SQL server not found. (6):

- Enable remote connections on the instance of SQL Server that you want to connect to from a remote computer.
- Turn on the SQL Server Browser service.
- Configure the firewall to allow network traffic that is related to SQL Server and to the SQL Server Browser service.

You enable remote connections on the instance of any of these SQL Server editions and then turn on SQL Server Browser service with the SQL Server 2008 R2/2012/2014 Surface Area Configuration tool installed when you install SQL Server 2008 R2/2012/2014—as documented in the next section.

Enable Remote Connections for Existing SQL Server

You must enable remote connections for each instance of SQL Server 2008 R2/2012/2014 that you want to connect to from a remote computer.

To Enable Remote Connections

1. Click **Start>All Programs>Microsoft SQL Server 2008 R2/2012/2014>SQL Server Management Studio**.
2. In SQL Server Management Studio on the **Connect to Server** dialog box, click **Connect.**
3. Right-click the desired SQL Server instance in the left pane and click **Properties** from the context menu.
4. On the **Server Properties** dialog box, click **Connections** in the **Select a page** list in the left pane.
5. On the Connections page that opens in the right pane, you want to leave the default settings:
   - **Maximum number of concurrent connections (0 = unlimited)** – 0
   - **Allow remote connections** to this server) – selected
   - **Remote query timeout (in seconds. 0 = no timeout)** – 600
6. Click **OK** and then close SQL Server Management Studio.

Enable SQL Server Browser Service

If you are running SQL Server 2008 R2/2012/2014 by using an instance name and you are not using a specific TCP/IP port number in your connection string, you must enable the SQL Server Browser service to allow for remote connections.

Example:

SQL Server 2008 R2 is installed with a default instance name of *ComputerName*\SQLEXPRESS.

You are only required to enable the SQL Server Browser service one time, regardless of how many instances of SQL Server 2008 R2/2012/2014 you are running.

To Enable SQL Server Browser Service

1. Click **Start>All Programs>Microsoft SQL Server 2008 R2/2012/2014>Configuration Tools>SQL Server Configuration Manager**.
2. In **SQL Server Configuration Manager**, click **SQL Server Services** in the left pane, right-click **SQL Server Browser** in the main pane, and then click **Properties**.
3. On the **SQL Server Browser Properties** page, click the **Service** tab and click **Start Mode**.
4. Click the down-arrow on the right, select **Automatic** from the drop-down list, and then click **Apply**.

NOTE

- When you click the Automatic option, the SQL Server Browser service starts automatically every time that you start Microsoft Windows.
- When you run the SQL Server Browser service on a computer, the instance names and the connection information display for each instance of SQL Server running on the computer. You can reduce this risk by **not** enabling the SQL Server Browser service and by connecting to the SQL Server instance directly through an assigned TCP port.

Create Exceptions in Windows Firewall

If you are running a firewall on the computer running SQL Server 2008 R2/2012/2014, external connections to these SQL Server editions are blocked unless the SQL Server editions and the SQL Server Browser service can communicate through the firewall. You must create an exception for each instance of SQL Server 2008 R2/2012/2014 that you want to accept remote connections as well as an exception for the SQL Server Browser service.

Each of these SQL Server editions uses an instance ID as part of the path when you install its program files. To create an exception for each instance of SQL Server, you must identify the correct instance ID—obtain an instance ID.

To Obtain an Instance ID

1. Click **Start>All Programs>Microsoft SQL Server 2008 R2/2012/2014>Configuration Tools>SQL Server Configuration Manager**.
2. In **SQL Server Configuration Manager**:
   a. Click SQL Services in the left pane.
   b. Right- click the **SQL Server Browser** service in the right pane.
   c. Click **Properties**.
3. On the **SQL Server Browser Properties** screen, click the **Advanced** tab, locate the instance ID in the property list, and then click **OK**.

Create Exception for SQL Server in Windows Firewall

To Create Exception for SQL Server 2008 R2/2012/2014 in Windows Firewall

1. From the Windows desktop, go to **Start>Control Panel>Windows Firewall**.

   - or -

   Open the **Windows Firewall** by clicking **Start>Run**, typing **firewall.cpl**, and then clicking **OK**.
2. In **Windows Firewall**, click the **Exceptions** tab and **Add Program**.
3. In the **Add a Program** dialog box, click **Browse**.
4. Click the **C:\Program Files\Microsoft SQL Server*MSSQL.1*\MSSQL\Binn\ sqlservr.exe** executable program, click **Open** and then **OK**.

   NOTE The path may differ depending on where SQL Server 2008 R2/2012/2014 is installed. ***MSSQL.1*** is a placeholder for the instance ID you obtained in step 3 of the previous procedure.

5. Repeat steps 1 through 3 for each instance of SQL Server 2008 R2/2012 that needs an exception.

Create Exception for SQL Server Browser Service in Windows Firewall

To Create Exception for SQL Server Browser Service in Windows Firewall

1. In **Windows Firewall**, click the **Exceptions** tab, and then click **Add Program**.
2. In the **Add a Program** dialog box, click **Browse**.
3. Click the **C:\Program Files\Microsoft SQLServer\90\Shared\sqlbrowser.exe** executable program, click **Open**, and then click **OK**.

   NOTE The path may differ depending on where SQL Server 2008 R2/2012/2014 is installed.

Configuring IIS on Windows Server Operating Systems

C•CURE 9000 Web Client, C•CURE Mobile, C•CURE Go, victor Web Service, and Client Auto-Update require Microsoft Internet Information Services (IIS) Management Compatibility (version 7.5 or 8 depending on the version of your Windows operating system) to be installed, enabled, and properly configured on the victor Application Server computer.

If you are planning to install victor Application Server on a computer with a Windows 7, Windows 8.1, Windows 2008 R2, or Windows 2012 R2 operating system, you **must** enable IIS Management Compatibility before installing C•CURE 9000.

Enabling IIS allows the C•CURE 9000 Installation program to configure your Web services for C•CURE 9000. **Furthermore**, if you do not enable IIS Management Compatibility before installing C•CURE 9000 server, you will receive an error message.

Once you have enabled IIS for your Windows operating system, configure IIS by enabling **everything**—all the IIS services and the IIS Management options and IIS Hostable Web Core, as well—**except** for the FTP services (FTP Server, FTP Service, FTP Extensibility).

In addition, before installing victor Application Server, you must make sure the IIS Admin Service and the World Wide Web Publishing Service are both set to start automatically and are currently running. If either of them is **not**, you will receive another error message. To check, go to **Start>Control Panel>Administrative Tools>Services** and see that the **Status** for both is **Started** and the **Startup Type** is set to **Automatic**.

For more information about configuring IIS, see the Microsoft Help and Support Web pages.

IIS Web Services ASP.NET Setting

You must verify that Microsoft Internet Information Service **ASP.NET v4.0** is set to **Allowed** after enabling/installing IIS on Windows.

You may also need to verify that the **Allowed** setting is set after running a Repair. For more information, see "Repairing C•CURE 9000 Server or Client" on page 3-24.

Pre-installation Checklist

Do you have these items?

- ❒ The victor + C•CURE 9000 dual-layer DVD (or downloaded media)
- ❒ The C•CURE 9000 License file (Server + Client installation only)
- ❒ A computer configured as a victor Application Server that meets all hardware/software requirements for servers as described in the current C•CURE 9000 data sheet.
- ❒ Required apC and iSTAR hardware
- ❒ Required readers
- ❒ Correct apC and iSTAR firmware
- ❒ Installed network, with computers connected

Have you performed these steps on each computer?

- ❒ Installed and configured the appropriate Windows operating system
- ❒ Installed appropriate service packs and Windows updates
- ❒ Verified that the network is currently operational
- ❒ Set up time synchronization with all computers in the C•CURE 9000 network and set system clock to correct time zone

Log in with an account that has Administrative privileges on the computer where you are installing the C•CURE 9000 system.

3

Installing C•CURE 9000 Software

This chapter explains how to perform a new installation of C•CURE 9000 software on a Server and on a Client workstation. If you are performing an upgrade of C•CURE 9000 from an earlier version, see Chapter 5 for complete instructions. Chapter 8 describes the use of a separate licensing application to register the software. If you need to uninstall an existing version of the software, see Chapter 9.

NOTE For specifics on installing a MAS and/or SAS, see Chapter 6: Installing a Master Application Server and Chapter 7: Installing a Satellite Application Server.

In this chapter

Installation Overview

The new Unified Installer includes C•CURE 9000 and various Integration driver options. (It also allows you to install victor Unified Client along with C•CURE 9000.)

When installing C•CURE 9000, you must initially install software on all computers in the security system. Before installing the software, check that the system has sufficient free space to run the setup program and meets the minimum hardware and software requirements listed in the current C•CURE 9000 data sheet and read Chapter 2: Setting Up Software and Hardware for pre-installation tasks.

Install the software on each computer in your C•CURE 9000 security system separately, according to the order described in Table 3-1 on page 3-3.

Install the Server on a dedicated computer **before** installing C•CURE 9000 on Client computers. Before starting the installation process, you must have:

- A valid system license to install and run C•CURE 9000. Be sure you have the License Text File and the initial License File from Software House (sent via email) for the C•CURE 9000 system and options.
- Administrative privileges for the computer where you want to install C•CURE 9000 software. The installation process checks administrative privileges. If you do not have sufficient permissions, the installation displays an error message and exits. (Software House recommends using a domain account.)

The person who performs the C•CURE 9000 installation is expected to configure at least one other C•CURE 9000 user as an Operator in the C•CURE 9000 system. Any user who tries to log into the C•CURE 9000 Administration Workstation or Monitoring Station without being configured as an Operator is denied access. See the *C•CURE 9000 Software Configuration Guide* for information on Operators.

The installation program checks that the system meets the minimum hardware, software, and disk space requirements listed in the current C•CURE 9000 data sheet. If the computer does **not** meet these requirements, the system displays a warning message. You can continue the installation in some cases, but functionality may be affected. In other cases, if you do not have a supported operating system or supported DBMS, you are **not** allowed to continue a new installation.

The installation program installs third-party software first, and then installs the C•CURE 9000 software.

Steps to Install C•CURE 9000 Software

The Unified Installer allows you to follow different paths to install the following:

- victor Application Server and C•CURE 9000 Client.
- C•CURE 9000 Client only.
- C•CURE 9000 Integrations and Services – see Chapter 4.

To install C•CURE 9000, run the Setup file from the Unified Installer DVD. Once you have selected the **Software House** tile on the Unified Install Dashboard **Welcome** screen (see Figure 3-1 on page 3-6) and clicked **Next**, you can perform the basic installation process described in the following pages separately on each computer in your C•CURE 9000 security system. Be sure to close all C•CURE 9000 and anti-virus applications on client workstations before beginning the installation.

Table 3-1 lists the steps to install and register the C•CURE 9000 software on each computer in your security system. Perform these steps in order.

Table 3-1: Standard Installation Tasks

	Task
1	Check that victor Application Servers and C•CURE Clients have the correct hardware and software, and have sufficient disk space. Refer to the current C•CURE 9000 data sheet for the minimum hardware and software requirements for the Server and Clients.
2	Be sure to install either SQL Server 2008 R2 or SQL Server 2012 Standard or Enterprise, or SQL Server 2014 Express, Standard, or Enterprise Edition database software on a remote or local server if you are not planning on having C•CURE 9000 install SQL Server 2014 Express. Consult your database administrator for more information.
3	If you are upgrading from an earlier version of C•CURE 9000, see Chapter 5 for complete upgrade instructions.
4	Close any open applications and disable virus-checking software.
5	Start the C•CURE 9000 installation program. See "Beginning the C•CURE 9000 Installation" on page 3-6.
6	Specify whether you are installing Server and Client software together or **only** the Client software. Install the Server first, and then install the Client. Software versions must be the same for both. See the appropriate section(s): • "Installing victor Application Server and C•CURE 9000 Client" on page 3-8 • "Installing a C•CURE 9000 Client Only" on page 3-19
7	If you install Server software, register the software. See Chapter 8.
8	Start the Services that you will use on your victor Application Server using **Start>All Programs>Tyco>Server Configuration**. See "Starting C•CURE 9000 Services/Server Components" on page 3-22.
9	Start the C•CURE 9000 Administration Client or Monitoring Station Client software to begin using Version 2.50 of C•CURE 9000.

Installation Preparation

The following pages provide instructions for installing the software on the Server and each Client in your security system. If you are installing the Server and Client software on different computers, install the software on the Server first.

Check the installation sequence before installing the software. For additional information about pre-installation tasks, see Chapter 2 and the hardware, software, and disk space requirements in the current C•CURE 9000 data sheet.

Checking Network Status

If you are installing C•CURE 9000 on a corporate network, be sure to coordinate with your corporate network administrator. Check that the network is working properly before you install C•CURE 9000.

Checking System Privileges

To perform the installation, you must have appropriate Windows permissions. You must be in the local Administrators group, or have equivalent privileges. (Software House recommends using a domain account.) See the Microsoft online Help or your system administrator for information.

If you do not have sufficient permissions, you cannot finish the complete installation and you will receive an error message.

Database Installation

The victor Application Server requires connectivity to a local or remote database server. You must install SQL Server 2008 R2, 2012, or 2014 Standard, Enterprise, or Express Edition.

The Windows user account performing the installation must have sufficient privileges on SQL Server Standard, Enterprise, or Remote Editions. This can be achieved most easily by giving that user account the sysadmin role. See "SQL Server Database Permissions" on page 3-4.

SQL Server Database Permissions

NOTE Typically, the following applies only to full SQL Server or remote SQL Server, **not** to SQL Server Express.

Only two Windows user accounts normally need permissions to SQL Server databases:

- Account used to do the installation.
- Account used to run the Crossfire Framework Services.

Installation – To create the C•CURE 9000 databases, the Windows user account performing the installation must have sufficient privileges on the SQL Server. Giving that account the sysadmin role accomplishes this. After the initial install, when performing repairs or upgrades, you can reduce the privileges to that of the db_owner database role to each of the

following databases: ACVSCore, SWHSystemAudit and SWHSystemJournal. The preceding is required because the initial install must create these databases, while later installs need full access to these databases to update them.

Crossfire Framework Services – All other access to the SQL Server is done through the Windows user account that runs the Crossfire services. (Windows accounts used to access the C•CURE 9000 client do not need SQL permissions at all.) If you do not want this CrossFire service account to have sysadmin privileges within SQL Server, you can set up the permissions in one of the two following ways:

NOTE

- Software House strongly recommends that you use the first method. Only experienced SQL Server Administrators who absolutely require running with minimum privileges should use the second method.
- Whichever method you use, you must ensure that access to the Master database is **not** restricted. The Crossfire service account requires at least **Read Access** to this database.

1. **Method one** – Give this user db_owner role for all three databases.
2. **Method two**– Give this user the following privileges:
   - For SWHSYSTEMAUDIT and SWHSYSYTEMJOURNAL - db_owner role.
   - For ACVSCore, the following roles:
     - db_datareader
     - db_datawriter
     - db_backupoperator
     - db_ddladmin
   - In addition, the following script is necessary to allow this user to execute stored procedures:

     ```
     USE ACVSCORE
     GRANT EXECUTE TO <USERNAME>
     GO
     ```

Beginning the C•CURE 9000 Installation

You can install C•CURE 9000 to a local computer drive from a local dual-layer DVD or shared drive over the network. (Software House recommends copying to the local computer for better performance.)

To Install C•CURE 9000 to a Local Computer or over the Network

1. Log into the Server or Client with Windows administration privileges. See "Checking System Privileges" on page 3-4 for information.
2. Insert the Unified Installer dual-layer DVD into the system drive.

   - Or -

   Insert the Unified Installer dual-layer DVD into the shared drive on another computer, and from your system, map a share to the shared DVD drive over the network.

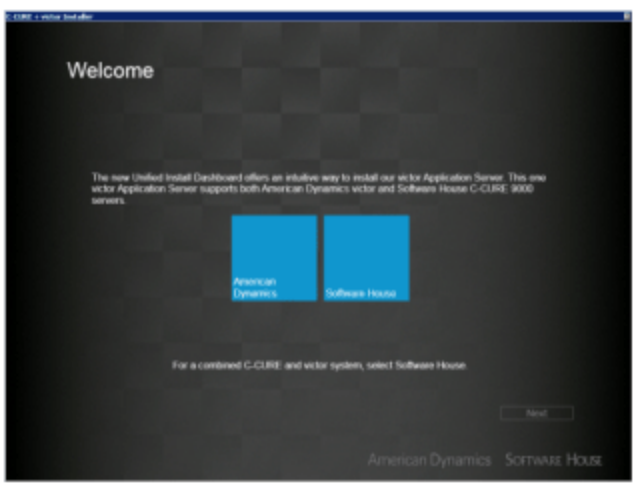
NOTE For information about sharing DVD drives, refer to your Microsoft documentation or see your system administrator.

3. Double-click Setup.exe. The Setup checks to see if the system meets certain requirements.
   - If it detects an unsupported operating system, an error message displays saying Windows 7/Windows Server 2008 R2 are minimum requirement and to upgrade. The setup then exits.
   - If Microsoft .NET Framework 4.5.2 is not yet on the system, a message notifies you. Click **Yes** to install .NET.

NOTE Certain prerequisite applications may require you to restart the computer. In that case, you will be prompted to restart only after the entire installation (of the Server and Client, for example) is completed.

If the minimum requirements are met, the Unified Install Dashboard Welcome screen appears, as shown in Figure 3-1 on page 3-6.

Figure 3-1: Unified Install Dashboard Welcome Screen



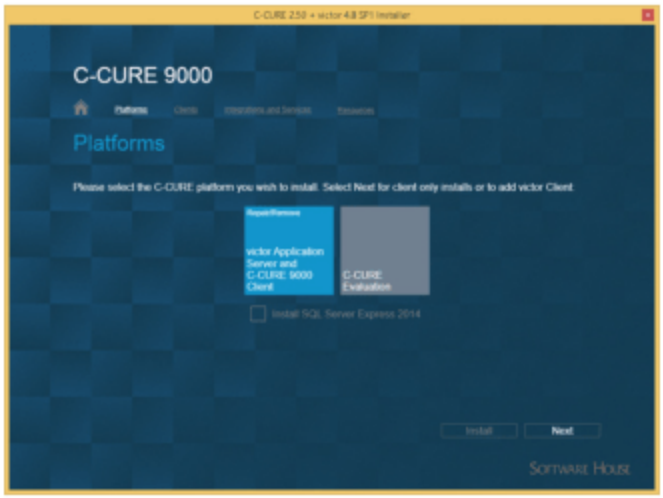
This screen allows you to select Software House to install the C•CURE 9000 system.

NOTE For details on navigating through the Installer selecting options, see Section 3 "Using the Installer Dashboard" in the Unified Installer Quick Setup Guide.

4. Select **Software House** and click the **Next** button.

   The **Platforms** screen opens, as shown in Figure 3-2 on page 3-7.

Figure 3-2: C•CURE 9000 Platforms Screen



This screen allows you to install the following C•CURE 9000 products:

- victor Application Server and C•CURE 9000 Client (US English) – Go to "Installing victor Application Server and C•CURE 9000 Client" on page 3-8.
  - Microsoft SQL Server Express 2014. (If a supported version of SQL Server Express is already installed on the computer, the check box does **not** appear.)
- Client only – Go to "Installing a C•CURE 9000 Client Only" on page 3-19.
- C•CURE Evaluation. (An **Evaluation** C•CURE 9000 automatically licenses you for a 60-day period for a Model L system. To go to a permanent Licensed full C•CURE 9000 system, contact Software House Customer Service.) For information, see Section 11 "Selecting C•CURE Evaluation" in the Unified Installer Quick Setup Guide.
- C•CURE 9000 Integrations and Services – See Chapter 4.

Installing victor Application Server and C•CURE 9000 Client

The Server and Client are both installed together on the same computer.

1. Install the Server first – see the next section.
2. Install the Client once the Server install completes – see "Installing the Client (with the Server)" on page 3-15.
3. License the C•CURE 9000 system at the end of both installs. (You could if you wished validate the license at the completion of the Server install.)

Installing the Server

The steps to install a Server are described in this section.

To Install the Server (and Client) for C•CURE 9000

1. Select **victor Application Server and C•CURE Client** on the **Platforms** screen (see Figure 3-2 on page 3-7).
2. If you need to install a SQL Server instance, select the **Install SQL Server Express 2014** check box and click **Install**.

   The **Final Review** screen appears, listing your selections:

   - Prerequisites
   - victor Application Server
   - C•CURE 9000 Client

   NOTE If you chose to install the victor Web Service (which is selected by default), a screen appears asking you to fill in either the Local System account information or the Windows authentication credentials for a domain account to run the victor Web Service. See "Installing victor Web Service" on page 4-2 for more information.

3. Click **Install**.

   The **Prerequisites** screen opens with a list of the services/applications that must be installed first—including SQL Server 2014 Express if you chose to have it installed.

   - Select the **By clicking this box...third party software licenses shown here. EULA** check box to accept the license agreements and then click **Install** again.

   The Installation of the prerequisites begins. The screen display tracks the progress down the list. (If SQL Server 2014 Express is being installed, a message box/screens display its progress.)

   NOTE If you click **Cancel** to close the installation while a prerequisite is being installed, 'Cancel' will **not** activate until the current prerequisite install completes.

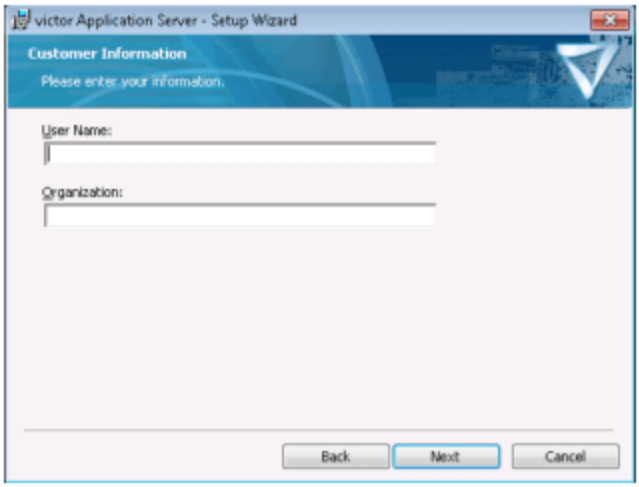
Then the Windows Installer **Preparing to Install** box, Install Setup Wizard messages, and the **Welcome to the victor Application Server Installer** screen appear in turn.

4. Click **Next**. An **End User License Agreement** screen opens.
5. Click **I accept the terms in the license agreement**, and then click **Next**—Or if you choose **I do not accept the terms...**, click **Cancel** to close the installation process.

   (You can also click **Print** to print a hard copy of the EULA for your records.)

   The **Customer Information** screen then opens, as shown in Figure 3-3 on page 3-9.

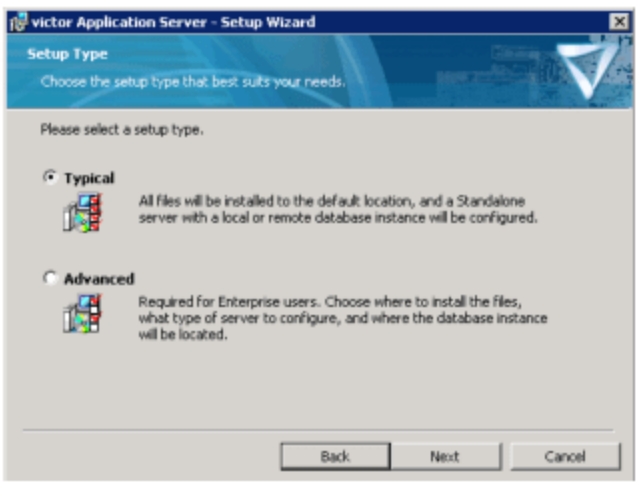
Figure 3-3: Customer Information Screen



6. Type the appropriate information in the **User Name** and **Organization** entry fields and click **Next**. (The application is installed for all users—anyone who uses this computer.)

   The Setup Type screen opens, as shown in Figure 3-4 on page 3-9.

Figure 3-4: Setup Type Screen



This screen allows you to choose the type of Server installation, whether:

- Typical — For a Standalone Server installed in the default location and using:
  - Local/remote SQL Server 2008 R2 **or** SQL Server 2012 standard or enterprise, or SQL Server 2014 express, standard, or enterprise. Go to Step 9 on page 3-12.

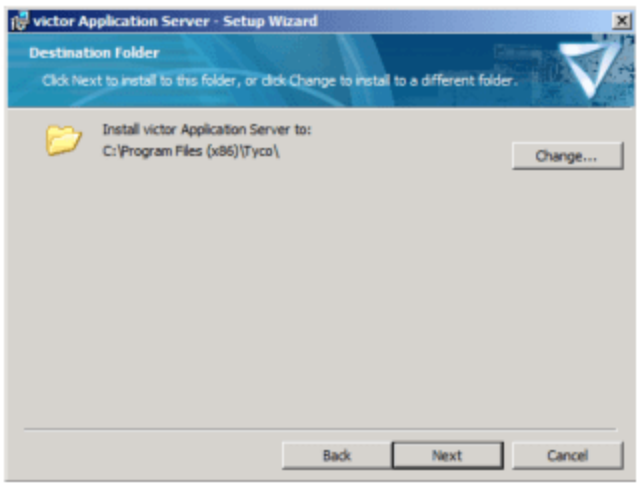
- SQL Server 2014 express, installed already or by this install process. Go to Step 12 on page 3-13.

- Advanced — For installing:
  - An Application Server. (See Chapter 6 and Chapter 7.)
  - A Standalone Server in a non-default location and/or with redundancy (using a local/remote database). Go to Step 7 on page 3-10.

7. Click **Next**.

   If you selected **Advanced** as the setup type because you need to install redundancy and/or in a location other than the default, the **Destination Folder** screen displays, as shown in Figure 3-5 on page 3-10.

Figure 3-5: Destination Folder Screen



8. To install the Sever in the default folder in the **Destination Path** screen, click **Next**.

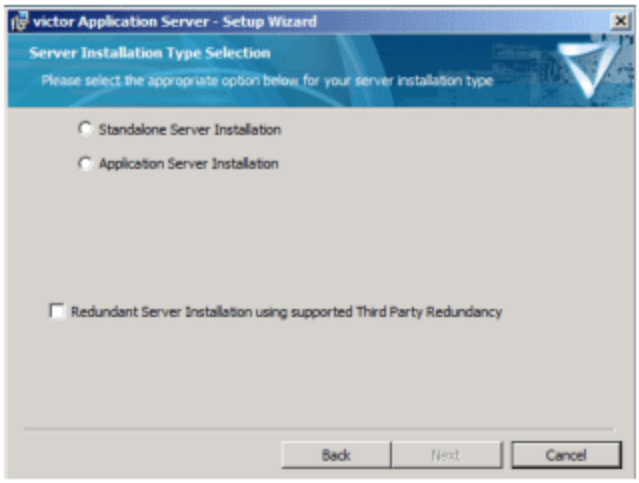
   - or -

   To install to a different location, click **Change**. The **Change Current Destination Folder** screen opens.

   - Type the path or browse to the folder or drive on which you want to install the software. You can also create a new folder into which the C•CURE 9000 System will be installed.
   - Click **OK** to select the new path and then click **Next**.

   The **Server Installation Type Selection** screen appears, shown in Figure 3-6 on page 3-11.

Figure 3-6: Server Installation Type Selection Screen



This screen allows you to choose the type of Server installation, whether:

- A Standalone Server— For this installation type continue with the procedure in this section.
- An Application Server— For this installation type, see Chapter 6 and Chapter 7.

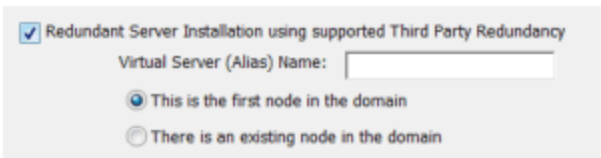
In addition, once you have selected the initial Server type on this screen, you can also choose to install a Redundant Server.

Software House requires that Redundant Server Installation only be performed by an integrator trained and certified in Redundancy.

If you choose to install a Redundant Server, other selections appear, as shown in Figure 3-7 on page 3-11.

(If you are not installing a Redundant Server, go to Step 9 on page 3-12.

Figure 3-7: Server Installation Type Selection for Redundant Support



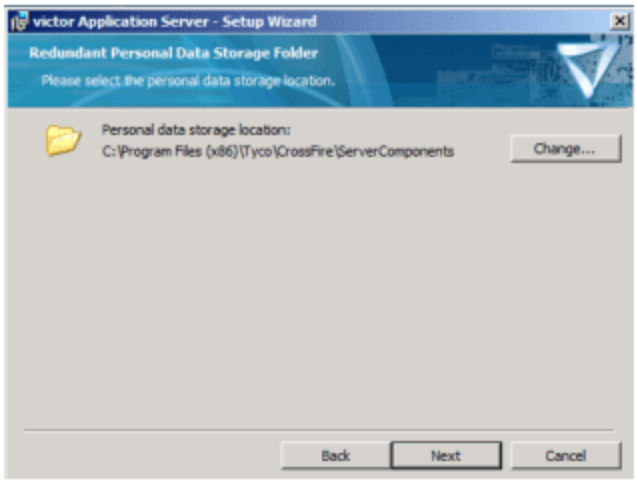
- Enter the name of the Virtual Server in the relevant field.
- If this is the first redundant Server in the AutoStart domain, choose the first option, **This is the first node in the domain**.
- If this is not the first redundant Server in the AutoStart domain, choose the second option, **There is an existing node in the domain**.

The install process validates that the Virtual Server is on the network. (This option is designed for solutions using third-party redundancy software such as EMC Autostart.)

- Click **Next**.

The **Redundant Personal Data Storage Folder** screen opens, shown in Figure 3-8 on page 3-12.

Figure 3-8: Redundant Personal Data Storage Folder Screen



- To have the SQL Server CE-related personal data storage saved in the default folder (should be the D: drive where SQL Server is installed), leave the path in the **Personal data storage location** field.

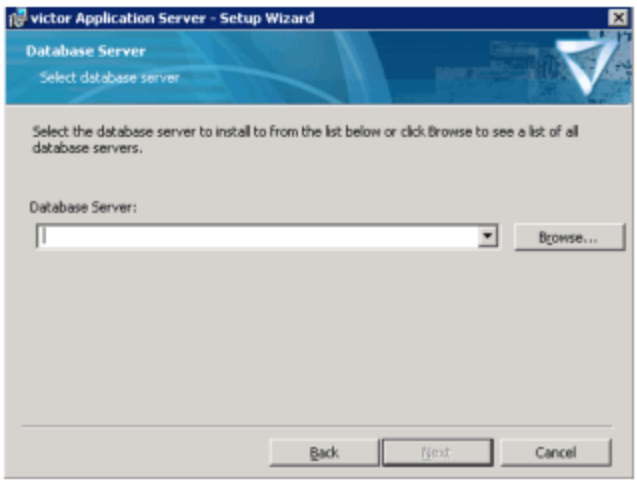
  - or -

- To have this data saved in a different location, click **Change,** and on the **Change Current Destination Folder** screen:
  - Type the path or browse to the folder or drive on which you want to save the data. (You can also create a new folder into which the personal data will be saved.)
  - Click **OK** to select the new path, which is entered into the **Personal data storage location** field.

9. Click **Next**.

   The **Database Server** screen shown in Figure 3-9 on page 3-12 opens — if you are planning to use an already installed SQL Server 2008 R2 or SQL Server 2012 standard or enterprise or SQL Server 2014 express, standard, or enterprise.

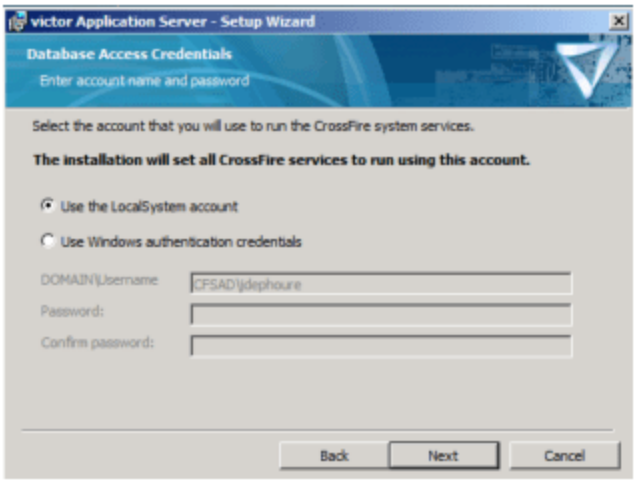
Figure 3-9: Database Server Screen



10. Use the drop-down list, enter the name, or click **Browse** to select the correct database server for your C•CURE 9000 System and then click **Next**. (The correct database server may already be entered.)

    The **Database Access Credentials** screen opens, as shown in Figure 3-10 on page 3-13.

Figure 3-10: Database Access Credentials Screen

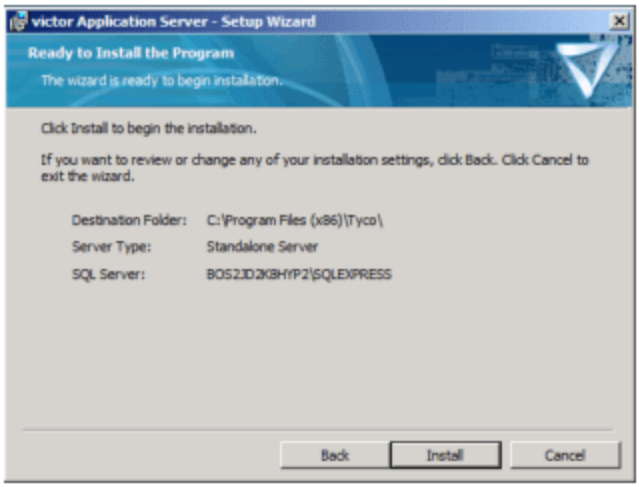


11. Choose the account for running the CrossFire Services.
    - **Use the Local System account**—Select this option if you are using a local SQL Server Express or SQL Server Standard or Enterprise instance.
    - **Use Windows authentication credentials**—This option is required for an Application Server (see Chapter 6 and Chapter 7) and to access a remote SQL Server. You can also select it when using a local SQL Server instance if you need to use a domain account.
      - Enter the Domain Account\Username (this may be entered already) and your Password, and then confirm the Password.

12. Click **Next**.

    The **Ready to Install the Program** screen, shown in Figure 3-11 on page 3-14, appears, listing the location of the installation directory, the system server type, and the SQL Server.

Figure 3-11: Ready to Install

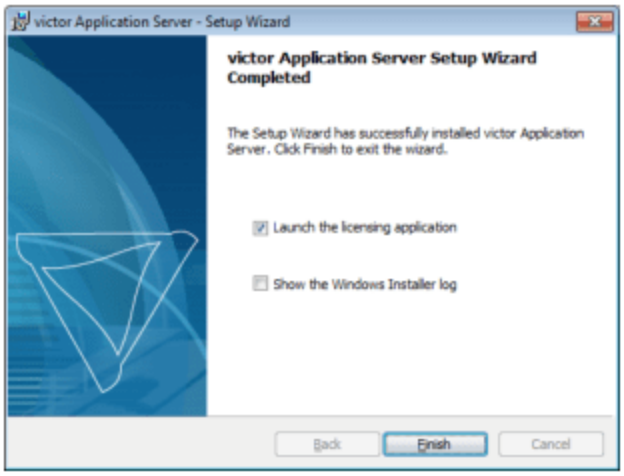


13. Click **Install** to begin the victor Application Server installation.
    - The Install wizard checks that there is enough disk space on the drive to install C•CURE 9000.
      - If there is not enough space, the **Out of Disk Space** screen displays with a list of the drives in question and advises you to remove files from the highlighted drives, install fewer features onto local drives, or select different destination drives.
      - Click **OK** to cancel the installation, return to the **Ready to Install the Program** screen, and fix the problem.
    - If there is enough space, the **Installing victor Application Server** screen then appears with a progress bar and installation status messages. (This process can also take a considerable amount of time.)

NOTE Microsoft **Internet Information Services** (IIS) must be installed prior to the C•CURE 9000 Server installation to use the Web Client, C•CURE Mobile, C•CURE Go, and victor Web Service (see "Configuring IIS on Windows Server Operating Systems" on page 2-21).

If the installation completes without errors, the **victor Application Server Setup Wizard Completed** screen, shown in Figure 3-12 on page 3-15, displays.

Figure 3-12: victor Application Server Installation Completed



- The **Launch Licensing Application** check box is selected by default, prompting you to register the software. Although you could do this now, you can also wait to register the software when the associated C•CURE 9000 Client finishes installing.
  - Leave the check box selected so the License opens. Go to Step 7 on page 3-17.
- The **Show the Window Installer log** check box is unselected by default. To open the log and view the information in that file, select the check box.

14. Click **Finish**.

    The Unified Install Dashboard **Final Review** screen reappears, indicating that it is now installing the Client. A **Preparing to Install** box displays and then the License Manager opens. After that the **Welcome to the C•CURE 9000 Client Installer** screen appears.

15. Let the License Manager remain open and click **Next** to begin the Client install. Go to "Installing the Client (with the Server)" on page 3-15.

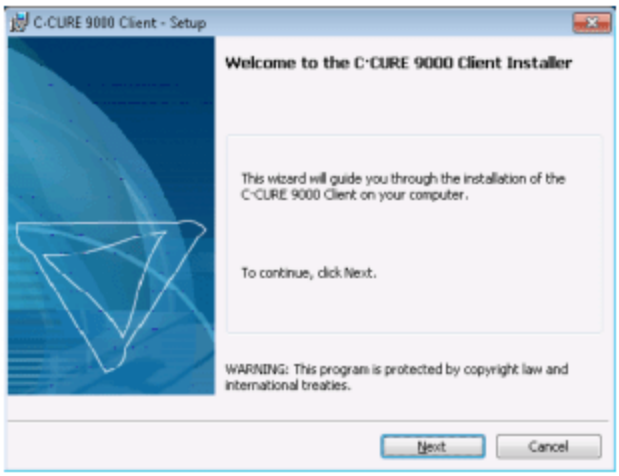
Installing the Client (with the Server)

The steps to install the Client with the Server are described in this section.

To Install the Client (with the Server)

1. On the **Welcome to the C•CURE 9000 Client Installer** screen, shown in Figure 3-13 on page 3-16, click **Next**.

Figure 3-13: C•CURE 9000 Client Installer Welcome Screen



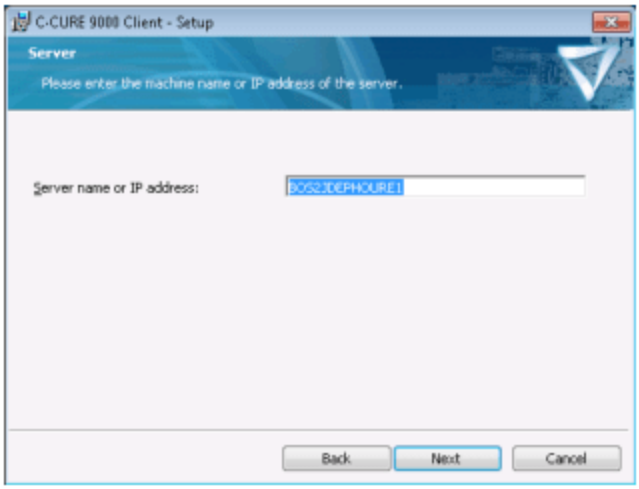
The **End User License Agreement** screen opens.

2. Click **I accept the terms in the license agreement**, and then click **Next**. The **Customer Information** screen then opens (see Figure 3-3 on page 3-9).

3. Click **Next**. The **Destination Folder** screen opens (see Figure 3-5 on page 3-10 for an example of this screen) and follow the directions in Step 8 on page 3-10, applying them to the Client.

4. The **Server** screen opens, displaying the Name of the host computer that will act as the victor Application Server for this client, as shown in Figure 3-14 on page 3-16.

Figure 3-14: Server Screen



5. If necessary, enter the corrected computer name or the IP address and click **Next**.

   The **Ready to Install the Program** screen appears (see Figure 3-11 on page 3-14), but listing only the location of the installation directory and the system server type.

6. Click **Install** to start installing the C•CURE 9000 Client.

   The **Installing C•CURE 9000 Client** screen then appears displaying progress messages.

   Once the installation process is done, the **C•CURE 9000 Client Wizard Completed** screen appears.

- Both the **Show the Window Installer log** and the **Show the release notes file** check boxes are unselected by default. To open either of them to view the information in the file, select the check box.

If you received any warnings during the installation—such as "Installation ended with errors", you can view them in the %TEMP% directory in the following log files:

- UnifiedInstallDashboard.log– for installing the Unified Dashboard.
- UnifiedServerInstall_[Date/Time].log file– for installing the victor Application Server.
- DBManager_Deploy_UNIFIEDSERVER-[Date/Time].log file – for installing the database.
- CCure9000ClientInstall_[Date/Time].log file – for installing the C•CURE 9000 Client.

(On systems with UAC (such as Windows Server 2012 R2, Windows Server 2008 R2 and Windows 7), you may need to go up one level to get to the root of the Temp directory.)

Example:

On Windows 7, %TEMP% typically defaults to **C:\Users\<username>\AppData\Local\Temp**

7. Validate your license now (if you have not already done so).

Once the entire install completes, you must validate your C•CURE 9000 license immediately to use your C•CURE 9000. You could have done this after the Server install or you can do it now after the Client install has also completed. For licensing information, see Chapter 8.

If the License is valid, a message displays 'License Information is correct."

8. Click **OK** and close the License Manager Application. A message then displays saying:

"The services have not been started to allow you to configure your system. You must start all services by hand before using the product"

After installing C•CURE 9000, you **must** run the Server Configuration Application (**Start>All Programs>Tyco>Server Configuration**) one time to start the CrossFire Framework and CrossFire Server Component Framework Services. (You **cannot** access C•CURE 9000 functions until you start these services.)

In addition, you need to enable and start the Extension Service (Hardware Driver) for each type of controller, video, or network component that will be used on the server. (The Extension Services [Drivers] are **not** automatically started by default because enabling drivers for devices that are not used by the server can affect system performance.)

For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and"Starting C•CURE 9000 Services/Server Components" on page 3-22.

9. Click **Finish**. An Installation Complete message displays.
10. Click **OK**. The Unified Install Dashboard closes.

Customizing the Software House Services

You **must** set a customized user account to run your services if your C•CURE 9000 is using full SQL Server or remote SQL Server. (You can also optionally choose to do this if your C•CURE 9000 is using SQL Express.) Your system must meet the following requirements:

- With the exception of the two Auto Update services, all Software House services, including all the Hardware Interfaces (drivers), must be run under a Windows user account. They cannot use LOCAL_SYSTEM or similar pre-built accounts.
- The services must all be run under the same Windows user account.
- This account must be a C•CURE 9000 Operator with SystemAll Privileges.
- This account must be assigned full Windows local administrator privileges on the local server machine.
- The Hardware Interfaces Services (drivers) should be set to **manual**, not automatic.

NOTE If the Hardware Interfaces are not set to an account but are left running under Local System, the iSTARs, etc., will come online, but they will not communicate fully to the victor Application Server.

Installing a C•CURE 9000 Client Only

The Unified Installer allows you to install C•CURE 9000 on a client computer, either locally or from a remote location. The client installation is executed via the setup file called **Setup.exe**.

Table 3-2 on page 3-19 lists the steps to install the C•CURE 9000 software on each client computer in your security system.

Table 3-2: Client Installation Tasks

	Task	See...
1	Check that C•CURE servers and clients have the correct hardware and software and have sufficient disk space.	Minimum hardware and software requirements in the current C•CURE 9000 data sheet.
2	Close any open C•CURE 9000 applications and disable virus-checking software.	
3	Start the C•CURE 9000 installation program.	"Beginning the C•CURE 9000 Installation" on page 3-6
4	When the installation is complete, click **Finish**.	

NOTE Close all C•CURE 9000 applications before installing the C•CURE 9000 Client.

To Install Only the C•CURE 9000 Client

1. To install the C•CURE 9000 Administration and Monitoring Station client applications, double-click the **setup.exe** file to start the installation.
   - If certain applications required to begin the **C•CURE 9000** installation are missing, a message displays listing the applications and asking permission to install them.
     - Click **Yes** to proceed.

   Extracting Files and Installation Progress screens display and then the **Unified Install Dashboard Welcome** screen appears (see Figure 3-1 on page 3-6).
2. Select **Software House** and click the **Next** button.

   The **Platforms** screen opens, as shown in Figure 3-2 on page 3-7.
3. Without selecting a platform, click **Next**, or **Clients** on the **Navigation** bar.

   The **Clients** screen opens, as shown in Figure 3-15 on page 3-20.

Figure 3-15: C•CURE 9000 Clients Screen

4. Select **C•CURE 9000 Client** and click **Install**.

   The **Final Review** screen appears, listing your selection: **C•CURE 9000 Client**.

5. Click **Install**.

   The Windows Installer **Preparing to Install** box, Install Setup Wizard messages, and the **Welcome to the C•CURE 9000 Client Installer** screen appear in turn.

6. Go to Step 1 on page 3-15 and follow the directions through Step 4 on page 3-16.

   The **Server** screen opens, as shown in Figure 3-14 on page 3-16, but with the **Server name or IP address** field blank.

7. Enter the Name/IP Address of the host computer that will act as theC•CURE 9000 Server for this Client and click **Next**.

   The **Ready to Install the Program** screen appears.

8. Click **Install** to start installing the **C•CURE 9000** applications.

   The **Installing C•CURE 9000 Client** screen appears displaying progress messages.

   Once the installation process is done, the **C•CURE 9000 Client Wizard Completed** screen appears.

   - The **Show the Window Installer log** check box is unselected by default. To open and view the information in the file, select the check box.

9. Click **Finish**. An Installation Complete message displays.

10. Click **OK**. The Unified Install Dashboard closes.

Services/Server Components for C•CURE 9000

After you have finished installing/upgrading C•CURE 9000, you must start the CrossFire services and determine which driver services you need to enable/start for C•CURE 9000.

The following two services **must** be started and running for the C•CURE 9000 system to function:

- CrossFire Framework Service
- CrossFire Server Component Framework Service

C•CURE 9000 also uses the following Windows Services (some of them hardware drivers):

- Import Watcher
- Report Server
- iSTAR Driver
- apC Driver
- GPI Service
- American Dynamics Intellex Driver
- American Dynamics TVR Driver
- American Dynamics HDVR Driver
- American Dynamics VideoEdge Driver

NOTE You should **only** enable and start drivers in use with your system. Starting additional unneeded drivers can affect system performance.

There are other optional Window Services that you can enable/start as needed for your Server, such as: BiDirectional Hardware Interface, Nextiva, and VideoEdge.

For information on starting the foregoing drivers/server components, see "Starting C•CURE 9000 Services/Server Components" on page 3-22. For more information, see the *C•CURE 9000 Server Configuration Application Guide*.

Starting C•CURE 9000 Services/Server Components

By default, none of the C•CURE 9000 services in the Server Configuration Application are started automatically when you license your newly installed C•CURE 9000 system.

- The CrossFire Framework and CrossFire Server Component Framework Services in the **Framework Services** box on the **Services** tab must be started and running for C•CURE 9000 to open and function. Once you have started these services, they will start up automatically whenever you restart your system.
- The Drivers in the **Extension Services** box on the **Services** tab are *disabled*. You must *enable* and *start* the driver service(s) for which you have hardware or whose system function you want to use. Once a service is enabled, it starts automatically when the server computer starts up; you can manually *stop* the service, but it will still autostart at computer startup.

To Start C•CURE 9000 Services

1. Open the Server Configuration Application as follows:
   - **Start>All Programs>Tyco>Server Configuration**.

     - or -

   - Double-click the **Server Configuration** icon.

   NOTE On certain operating systems you may need to right-click to open the context menu and then click **Run as Administrator**. Otherwise, the Server Configuration opens in read-only mode.

   The application opens with the **Services** tab displayed.
2. To start the CrossFire services, in the **Framework Services** box:
   a. Click Start next to the CrossFire Framework Service.

      The Status changes to **Start Pending**. When the status changes to **Running** (in green) the Service has been successfully started.

   b. Click Start next to the CrossFire Server Component Framework Service.

      The Status changes to **Start Pending**. When the status changes to **Running** (in green) the Service has been successfully started.
3. To enable and start Driver Services/Server Components, in the **Extension Services** box or on the **Server Components** tab:
   a. Make sure that the desired Service/Server Component is enabled. If not, select the **Enabled** option.

   b. Click **Start Service**. The status changes to **Start Pending**.

   When the status changes to **Running** (in green) the Service/Server Component has been successfully started.

You can verify that a Service/Server Component is running as a Windows Service by selecting **Start>Control Panel>Administrative Tools>Services** and viewing the status of the CrossFire and SoftwareHouse Services.

Table 3-3 on page 3-23 provides a list of the Driver Services as they appear on the **Services** tab with their descriptions.

Table 3-3: Service Definitions

Driver Service Name	Description
Framework Services	
CrossFire Framework Service	Provides support for applications using the CrossFire Framework technology
CrossFire Server Component Framework Service	Provides management of Server Components in the CrossFire Framework
Extension Services	
SoftwareHouse CrossFire Import Watcher	Windows Service for CrossFire Import Watcher
SoftwareHouse CrossFire Report Server	Windows Service for CrossFire Report Server
SoftwareHouse CrossFire iStar Driver Service	Controls the Software House iStar Driver
SoftwareHouse CrossFire apC Driver Service	Controls the Software House apC Driver
CrossFire GPI Service	Windows Service for CrossFire GPI
American Dynamics Intellex Driver Service	Windows Service for Intellex Driver
American Dynamics TVR Driver Service	Windows Service for TVR Driver
American Dynamics HDVR Driver Service	Windows Service for HDVR Driver
American Dynamics VideoEdge Driver Service	Windows Service for VideoEdge Driver

Repairing C•CURE 9000 Server or Client

A repair operation allows you to repair your C•CURE 9000 System installation by replacing registry entries and missing or corrupted files, or by fixing shortcuts.

Example:

If a file was inadvertently deleted or a registry setting was changed or removed, you could run the C•CURE 9000 installation in repair mode and automatically re-install the files on your system.

The repair mode compares what is actually installed on the computer to what is supposed to be installed and restores the files and registry entries to their previous state, should corrupted or missing files be detected.

NOTE

You can perform a repair in either of the following ways:

- From Windows Program and Features – see the following procedure.

  Be aware that you can repair the Server and Client in any order, but you will have to first repair one and then do the other.
- From Unified Installer DVD or a download – see Section 26 "Repair or Remove a Software Installation" and Section 27 "Repair/Remove a victor Application Server and Client Installation" in the Unified Installer Quick Setup Guide.

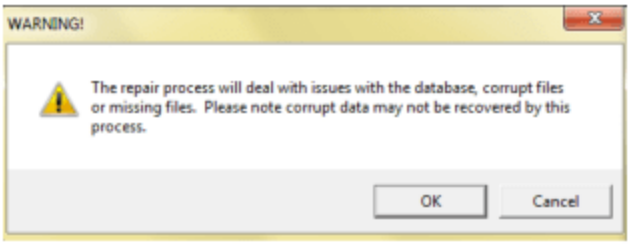
Before running a repair, you must close the Administration, Monitoring Station, and Server Configuration applications.

To Repair victor Application Server or C•CURE 9000 Client

1. Select **Start>Control Panel>Programs and Features**.
2. Select **victor Application Server** or **C•CURE 9000 Client** from the list and then right-click to display the **Change** button (if necessary), and click **Change**.

   If an unsupported operating system is detected, an error message displays telling you that Windows 7, Windows 8.1, Windows Server 2008 R2, Windows Server 2012, or Windows Server 2012 R2 are the minimum requirement and to upgrade. The setup then exits.
3. On the **Welcome Setup Wizard** screen, click **Next** to continue.
4. On the **Program Maintenance/Repair or Remove Operation** screen, select the **Repair** option and click **Next**.
5. When the **Ready to Repair the Program** screen opens, click **Repair**.

   If you are repairing a victor Application Server, the following Warning message displays.



- Click **OK** to continue the repair or **Cancel** to exit the repair.

The **Installing victor Application Server/Repairing C•CURE 9000 Client** screen appears, displaying installation progress and advising that this process may take several minutes.

Then,

- The **victor Application Server Setup Wizard Completed** screen appears for a Server repair (see Figure 3-12 on page 3-15).
- The **C•CURE 9000 Client Wizard Complete** screen appears for a Client repair.

6. Click **Finish** to complete the repair process.

   If you receive a message to restart, click **Yes** to restart immediately or **No** to restart manually later on.

4

Installing C•CURE 9000 Integrations and Services

This chapter provides an overview of the installation process for C•CURE 9000 Integrations and Services and where appropriate, gives detailed information for installing some of these. Step-by-step instructions for installing the C•CURE 9000 language pack and installing/configuring the C•CURE 9000 Client Auto-Update are covered—as well as using the latter utility to upgrade remote client systems.

NOTE The details for installing the others are covered in the respective user guide for the Integration/Service.

In this chapter

C•CURE 9000 Integrations and Services Overview

The Unified Installer allows you to install the following:

- C•CURE 9000 Web Client — "Installing C•CURE 9000 Web Client" on page 4-2.
- C•CURE Go Web Service — "Installing C•CURE Go Web Service" on page 4-2.
- victor Web Service — "Installing victor Web Service" on page 4-2
- C•CURE 9000 Client Auto-Update
- C•CURE 9000 Language Pack

"Installing C•CURE 9000 Client Auto-Update and C•CURE 9000 Language Pack" on page 4-3.

The first three items—C•CURE 9000 Web Client, C•CURE Go Web Service, and victor Web Service—do **not** require C•CURE 9000 to be on the same computer. You must install the last two—C•CURE 9000 Client Auto-Update and C•CURE 9000 Language Pack—on a computer that already has C•CURE 9000 installed.

Installing C•CURE 9000 Web Client

You can install C•CURE 9000 Web Client on the victor Application Server or an IIS Server in the network that can communicate with victor Application Server.

Installing C•CURE Go Web Service

You can install C•CURE 9000 Go Web Service in the following three ways:

- On a computer with victor Application Server, C•CURE 9000 Client, and IIS Server all on the same system.
- On an IIS Server in your network that can communicate with the victor Application Server and C•CURE 9000 Client together on another system.
- On an IIS Server in your network that can communicate with the victor Application Server on a second system and with the C•CURE 9000 Client(s) on one or more other systems.

NOTE The C•CURE 9000 Go Web Service is **not** supported on a MAS and the C•CURE 9000 MAS license does **not** allow it.

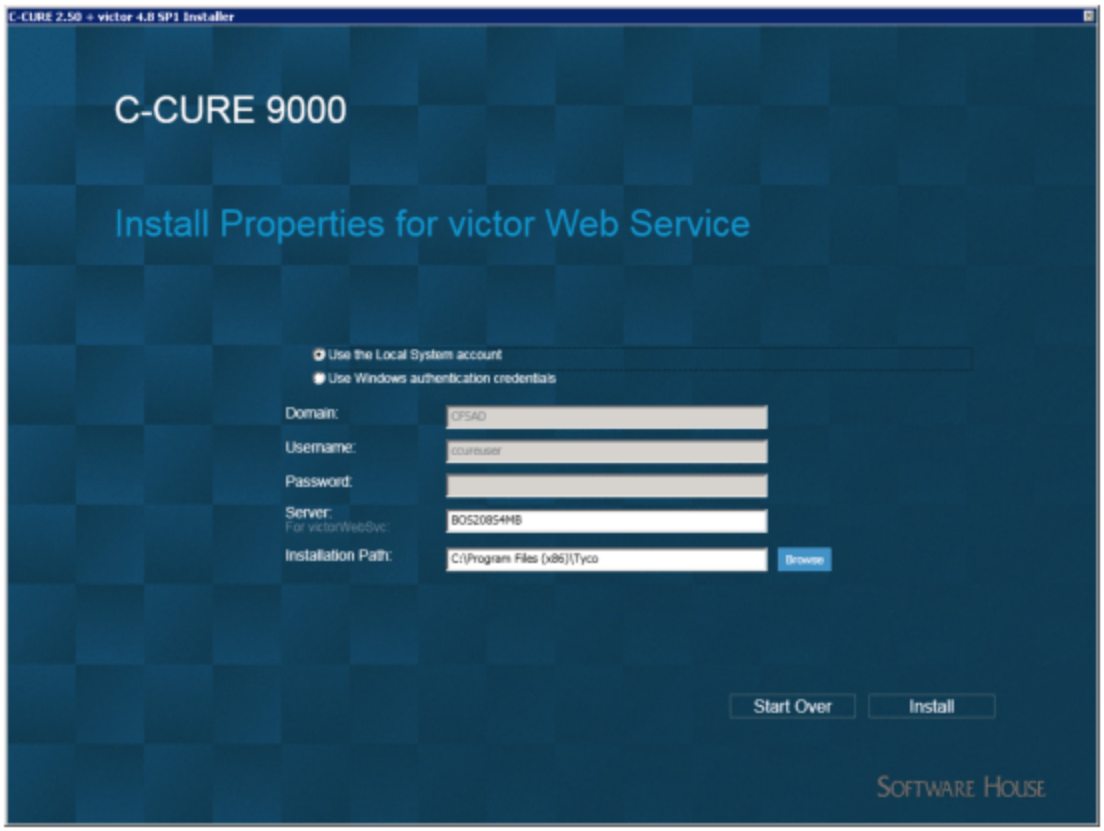
Installing victor Web Service

You can install the victor Web Service on your victor Application Server or on an IIS Server in your network that can communicate with your victor Application Server.

The victor Web Service is enabled by default to be installed because it is used as the basis for any partner-developed web-based integrations with C•CURE 9000. You can clear the victor Web Service check box on the Integrations and Services screen if you do not wish to install the victor Web Service at this time.

If you leave the victor Web Service installation enabled, a screen appears prior to the installation of C•CURE 9000 prerequisites asking you to provide information about the system account that will be starting the victor Web Service. See Figure 4-1 on page 4-3.

Figure 4-1: victor Web Service Install Properties



You can choose either:

- **Use the Local System account** - If you are installing on the same system as the C•CURE 9000 server, you can use the local system account.
- **Use Windows authentication credentials** - if you are installing on an IIS server that is not the C•CURE 9000 server, you will need to fill in a Windows Domain account and password of a valid C•CURE 9000 or victor Operator, as well as identify the C•CURE 9000 server that the victor Web Service will be using, by entering either the server's Domain name or it IP address.

Click **Install** to proceed with the C•CURE 9000 installation.

Installing C•CURE 9000 Client Auto-Update and C•CURE 9000 Language Pack

Before you install either Client Auto-Update or the Language Pack, you must install victor Application Server and C•CURE 9000 Client on the computer. In addition, you must install the Language Pack on every C•CURE 9000 Client computer in your network.

See Chapter 3 for information on installing C•CURE 9000.

Beginning the Installation of the Integrations and Services

For detailed information on navigating through the Installer and selecting options, see Section 3 "Using the Installer Dashboard" in the Unified Installer Quick Setup Guide.

To Begin the Install of a C•CURE Integration/Service

1. Log into the Server or Client with Windows administration privileges. (See "Checking System Privileges" on page 3-4 for information.)

   If you are installing C•CURE 9000 Client Auto-Update or the C•CURE 9000 Language Pack, you must do this on a system that already has C•CURE 9000 installed. If it is not installed, an error message displays.

2. Insert the Unified Installer dual-layer DVD into the system drive.

   - Or -

   Insert the Unified Installer dual-layer DVD into the shared drive on another computer, and from your system, map a share to the shared DVD drive over the network.

   NOTE For information about sharing DVD drives, refer to your Microsoft documentation or see your system administrator.

3. Double-click **Setup.exe**.

   The Setup program then checks the system to see if it meets certain requirements.

   NOTE Certain prerequisite applications may require you to restart the computer. In that case, you will be prompted to restart only after the entire installation is completed.

   If the minimum requirements are met, the Unified Install Dashboard **Welcome** screen appears (see Figure 3-1 on page 3-6).

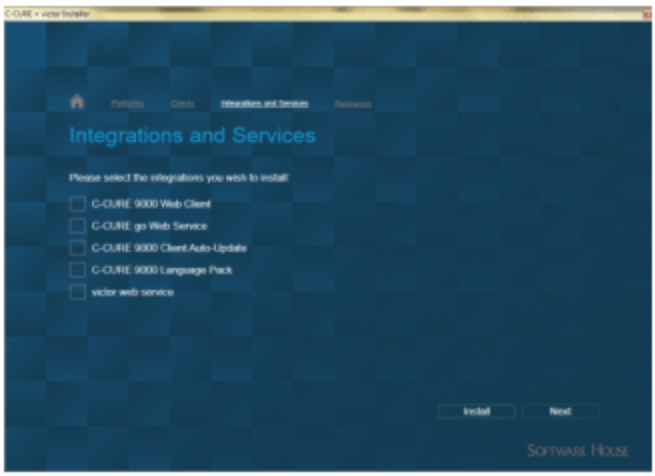
   If installing on a system that already has C•CURE 9000 installed, the C•CURE 9000 **Platforms** screen opens instead. Go to Step 5 on page 4-4.

4. Select **Software House** and click the **Next** button.

5. When the C•CURE 9000 **Platforms** screen opens (see Figure 3-2 on page 3-7), click **Integrations and Services** on the Navigation bar on the top of the screen.

   The C•CURE 9000 **Integrations and Services** screen opens, shown in Figure 4-2 on page 4-5.

Figure 4-2: C•CURE 9000 Integrations and Services Screen



6. Click the check box to the left of the desired Integration/Service and then click **Install**.
7. When the **Final Review** screen appears with your selection, click **Install** again.
8. To continue installing the individual Integration/Service, see the following:
   - C•CURE 9000 Web Client – the *C•CURE 9000 Web Client User Guide*.
   - C•CURE Go – the *C•CURE Go User Guide*.
   - victor Web Services – the *Web Service User's Guide*.
   - C•CURE 9000 Client Auto-Update – "Client Auto-Update Utility" on page 4-6.
   - C•CURE 9000 Language Pack – "Installing C•CURE 9000 Language Pack" on page 4-10.

Client Auto-Update Utility

The Client Auto-Update Utility allows you to upgrade your remote clients automatically without having to physically upgrade each client separately.

When you open the Unified Installer Setup.exe file on a computer that already has C•CURE 9000 installed, the Installation setup program allows you to Configure Auto-Update.

Installing Client Auto-Update copies the update for remote clients to your Server's automatic distribution location. The installation also gives you an opportunity to select when you want the automatic update to occur. Once the date is selected, the installation program copies the update.exe and manifest.xml to the Server's AutoUpdate distribution location.

NOTE

- To use Client Auto-Update to upgrade your clients to C•CURE 9000 v2.50, your C•CURE 9000 system must be at version 2.30 or higher.
- The **Auto-Update Configuration** utility should only be run on the Server computer and only if the system is using Auto-Update functionality for Remote Clients.
- Before you use Auto-Update to update remote clients to a new version, you must perform an upgrade of the C•CURE 9000 system victor Application Server to the new version. If you attempt to update the Clients first, the resulting version mismatch will render the Client applications inoperable.
- Auto-Update does **not** update clients with new versions of Connected Program Kit products. Client updates/installs for these products must be performed manually at the client.

NOTE

You must install Microsoft IIS (version 7.5 or 8, depending on the version of your Windows operating system) on your victor Application Server if the system is using Auto-Update functionality for remote clients. (You must install IIS before you install Auto-Update.) For more information see "Configuring IIS on Windows Server Operating Systems" on page 2-21.

Installing/Configuring Client Auto-Update

Once you have enabled/installed IIS, configured client privileges, and set and started the Software House AutoUpdate Installer service, you can configure C•CURE 9000 Auto-Update on the server using the following steps.

To Configure Client Auto-Update

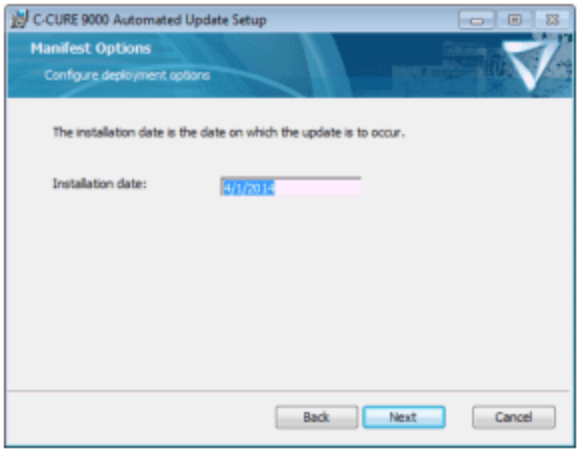
1. Make sure that your C•CURE 9000 client is at version 2.20 or higher.
2. On a victor Application Server computer with C•CURE 9000 installed, follow Step 1 on page 4-4 through Step 3 on page 4-4.
3. On the Unified Install **Platforms** screen (see Figure 3-2 on page 3-7), click **Integrations and Services** on the Navigation bar on the top of the screen.

   The Unified Install C•CURE 9000 **Integrations and Services** screen opens (see Figure 4-2 on page 4-5).

4. Click the check box to the left of the **C•CURE 9000 Client Auto-Update** item and then click **Install**.
5. When the **Final Review** screen appears with your selection, **C•CURE 9000 Client Auto-Update**, click **Install**.
6. On the **Welcome to the C•CURE 9000 Automated Update Setup Wizard** screen, click **Next.**
7. On the **End User License Agreement** screen, click **I accept the terms in the license agreement and** click **Next**.

   The **Manifest Options** screen appears, as shown in Figure 4-3 on page 4-7.

Figure 4-3: C•CURE 9000 Client Auto-Update Manifest Options

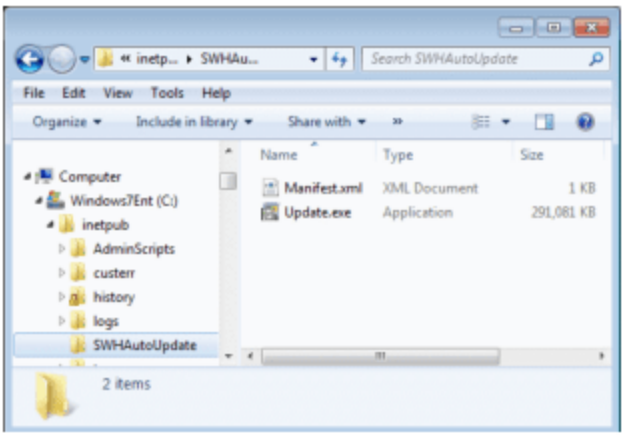


8. Enter a date on which you want the Auto-Update to occur in the **Installation Date** field. Use the mm/dd/yyyy format and click **Next**.
9. On the **Ready to Install**, click **Install**.

   When the installation is finished, the **Completed the C•CURE 9000 Automated Update Setup Wizard** screen displays.
10. Click **Finish**.An Installation Complete message displays.
11. Click **OK**. The Unified Install Dashboard closes.

12. The **Auto-Update Configuration** utility creates an **AutoUpdate** folder on the Server's HDD within the **Inetpub** directory containing the **manifest.xml** and **setup.exe** files (see Figure 4-4 on page 4-8).

Figure 4-4: C•CURE 9000 Client SWHAutoUpdate Folder



- Clients poll the server when the auto-update services start and at 12-hour intervals after that to check the **SWHAutoUpdate** folder on the server. If the manifest.xml and setup.exe files have been updated since the last client poll, they are downloaded to each client.
- Once the manifest.xml and setup.exe files are downloaded to the client, the next time you attempt to launch either the Administration Workstation or the Monitoring Station, the manifest.xml file is checked for the correct server build version and install date.
- The server version must match or be more recent than the version that is installed on the client. The client upgrade will proceed if the build version and install date match the manifest.xml update criteria.

Using Client Auto-Update

After you have configured Auto-Update, your remote client systems will be able to update to the latest C•CURE 9000 version on/after the date configured.

NOTE To use Client Auto-Update to upgrade your clients to C•CURE 9000 v2.50, your C•CURE 9000 system must be at version 2.30 or higher.

To Update C•CURE 9000 Using Client Auto-Update

1. Start the Monitoring Station or the Administration Client application.

   A screen informs you that the client is going to be upgraded to Version 2.50.

2. Click **OK** to proceed.

   If certain applications required to begin the Client Installation are missing, the system displays a screen listing the applications and asking permission to install them.

   - Click **Install** to proceed.

3. When the Client Auto-Update Wizard appears, click **Next**.

4. When the License Agreement screen appears, click **I accept the terms in the license agreement** and click **Next** again.
5. On the **Ready to Install** screen, click **Install**. The **Installation in Progress** screen appears.

   When the client installation process is completed, the **C•CURE 9000 Client Wizard Completed** screen appears.
6. Click **Finish** to complete the installation.

Installing C•CURE 9000 Language Pack

The C•CURE 9000 Language Pack provides the ability to display C•CURE 9000 graphical user interfaces in various supported languages. Localized manuals and online help topics are also provided.

When the Language Pack is installed with an **existing** C•CURE 9000 installation, the localized user interface can be displayed by simply changing the Windows locale to the desired region and restarting the Administration and/or Monitoring Workstation.

The Windows locale is changed by using the **Standards and formats** drop-down list in the first tab of the **Regional and Language Options** control panel.

NOTE

- All Language Packs need to be installed on the victor Application Server computer as well as on the C•CURE 9000 Client computer(s).
- You can install the C•CURE 9000 Language Pack application only after C•CURE 9000 has already been installed.

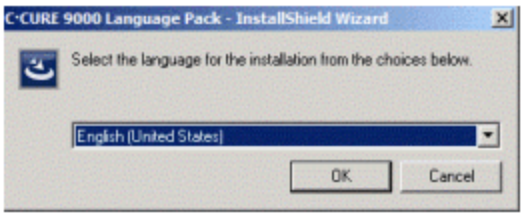
To Install the C•CURE 9000 Language Pack Software

1. On a victor Application Server computer with C•CURE 9000 installed, follow Step 1 on page 4-4 through Step 3 on page 4-4.
2. On the Unified Install **Platforms** screen (see Figure 3-2 on page 3-7), click **Integrations and Services** on the Navigation bar on the top of the screen.

   The Unified Install C•CURE 9000 **Integrations and Services** screen opens (see Figure 4-2 on page 4-5).
3. Click the check box to the left of the **C•CURE 9000 Language Pack** item and then click **Install**.
4. When the **Final Review** screen appears with your selection, **C•CURE 9000 Language Pack**, click **Install**.

   The **Choose Setup Language** message displays, shown in Figure 4-5 on page 4-10.

Figure 4-5: Select a Setup Language



5. Select a **Setup Language** from the drop-down list and click **OK**.

   The **C•CURE 9000 Language Pack Install Setup Wizard** progress message appears notifying you of various essential installation preparations and then the **Welcome to the C•CURE 9000 Language Pack Installer** screen appears.
6. Click **Next** to continue the installation.

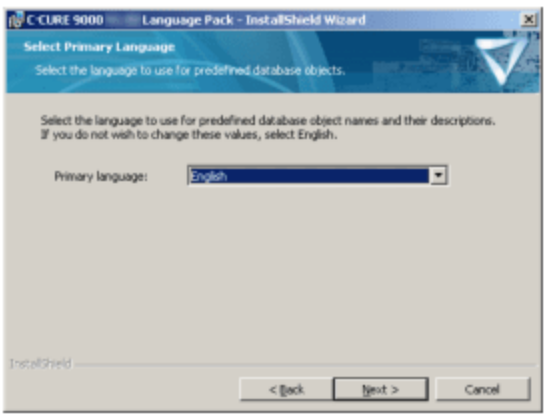
   An **End User License Agreement** screen opens.

7. Click **I accept the terms in the license agreement**, then click **Next**.

   The Language Pack installation automatically detects if the local computer on which you are installing the Language Pack is a victor Application Server or C•CURE 9000 Client. If the local computer is a Server, the **Select Primary Language screen** appears, shown in Figure 4-6 on page 4-11.

NOTE The **Select Primary Language** screen does **not** display if the local computer is a Client.

Figure 4-6: Select Primary Language Screen



8. Select a **Primary Language** from the drop-down list and click **Next**.

   The **Ready to Install the Program** screen appears.

9. Click **Install** to continue.

   The **Installing C•CURE 9000 Language Pack screen** appears, tracking the status of the install.

10. When the installation process is done and the **C•CURE 9000 Language Pack Wizard Completed** screen appears, click **Finish** to exit from the install program.

To Verify the C•CURE 9000 Language Pack Is Installed

- Re-open the C•CURE 9000 Administration and Monitoring Stations with the Windows locale set to the desired region.

5

Upgrading C•CURE 9000 Software

This chapter explains how to upgrade C•CURE 9000 software to Version 2.50 on a Server and on a Client workstation.

In this chapter

Overview of the Upgrade Process

C•CURE 9000 version 2.50 supports direct upgrades only from the previous versions: 2.40, 2.30 R2, and 2.30.

NOTE If you try to upgrade to C•CURE 9000 version 2.50 from a version prior to 2.30, the Install program displays an error message and exits. You must upgrade your application to version 2.30 and run the setup again.

When upgrading the C•CURE 9000 software, you must **update all** computers in the security system. Update each computer in your C•CURE 9000 security system separately and according to the order described in Table 5-1 on page 5-3.

- Update all Servers before updating any Clients.
- You must have administrative privileges for each computer running C•CURE 9000 software you want to upgrade.

NOTE If you are using any of the Connected Program Kit products (such as Simplex 4100U or ONSSI), you should **not** upgrade to the next version of C•CURE 9000 until you have obtained the updated version of the 'Connected' product. If you do upgrade C•CURE 9000, your Connected Program Kit product will **not** work.

When the upgrade process begins, it checks the computer for an existing version of C•CURE 9000 and verifies that you have administrative privileges. If a C•CURE 9000 installed version does not exist, or is the incorrect version, or you do not have sufficient permissions, the installation program displays an error message and exits.

The upgrade process also checks that the system meets the minimum hardware, software, and disk space requirements. If the computer does not meet these requirements, the upgrade process displays a warning message and you can continue the update.

NOTE Before starting the upgrade process, back up your system and have a valid C•CURE 9000 license for v2.50. After the upgrade process finishes, a license screen displays for you to point to the encrypted license file received via email. For information about licensing, see Chapter 8.

Upgrading Your SQL Server Version

You may have been running your previous version of C•CURE 9000 with SQL Server 2008 R2 or SQL Server 2012—either Express, Standard, or Enterprise Edition. You can run your upgraded C•CURE 9000 2.50 with SQL Server 2008 R2, SQL Server 2012, or SQL Server 2014. Software House recommends the following upgrade procedure.

To Upgrade SQL Server

1. Open your C•CURE 9000 software.
2. Click **Options & Tools>System Backup** and back up all the databases (SWHSystem with ACVSCore, SWHSystemAudit, SWHSystemJournal).

3. Close all C•CURE 9000 applications on the server and every client and stop the Crossfire service.
4. Upgrade SQL Server following Microsoft's instructions.

   [redacted](v=sql.105).aspx
5. Upgrade your C•CURE 9000 software to version 2.50, as detailed in the rest of this chapter.
6. Start the C•CURE 9000 system to ensure that everything is stable.

Steps to Upgrade the C•CURE 9000 Software

You must have a license for the new version of C•CURE 9000 before updating the software. When you update to a later software version, only the computer on which you run the update is changed. Update the server computer first, then all of the client computers. Otherwise, the client computers will not be able to communicate with the server.

Before updating from a previous version, you must shut down C•CURE 9000. Software House strongly recommends that you make a backup of all databases before you shut down.

Table 5-1 on page 5-3 lists the steps to upgrade the C•CURE 9000 system. Perform these steps in order.

Table 5-1: Process for Upgrading your C•CURE 9000 Security System

Step	Task
1	Check the hardware, software, and disk space requirements and upgrade your system to v2.20 at least, if needed.
2	Obtain a new valid license from Software House for your C•CURE 9000 v2.50 upgrade.
3	Before beginning the upgrade process, perform a Full System Backup of all CCURE 9000 databases (SWHSystem with ACVSCore, SWHSystemAudit, and SWHSystemJournal) using **Options & Tools>System Backup**. For instructions, see the *C•CURE 9000 System Maintenance Guide*.
4	If the C•CURE Administration, Monitoring Station, or Server Configuration applications are open, close them.
5	Close any other open applications and disable virus-checking software.
6	Update to the appropriate version of Windows and install both the correct Service Packs and Windows updates.
7	Start the C•CURE 9000 installation/upgrade program. See "Upgrading C•CURE 9000" on page 5-5.
8	When the Upgrade is completed, validate the license for your upgraded C•CURE 9000 server software.
9	Start the Services that you will use on your C•CURE 9000 Server using **Start>All Programs>Tyco>Server Configuration**. See "Starting C•CURE 9000 Services/Server Components" on page 3-22.
10	Start the C•CURE 9000 Administration Client or Monitoring Station Client software to begin using Version 2.50 of C•CURE 9000. When you start C•CURE 9000 after upgrading from an earlier version of C•CURE 9000, your server automatically updates your existing C•CURE 9000 database to communicate properly with the new database parameters. You may experience a delay until this process is completed. The duration of this delay can vary and depends on the existing database size.

If you are upgrading a MAS or a SAS system from a prior version, before you follow any of the directions in this chapter see the important pointers in the following respective sections:

- "Upgrading a MAS" on page 6-14.
- "Upgrading a SAS" on page 7-14

If you are migrating a standalone system to a SAS system, first make sure you are at version 2.30 and then see the *C•CURE 9000 Standalone to SAS Migration Utility User Guide*.

Upgrading C•CURE 9000

Back up your existing database files prior to upgrading the C•CURE 9000 System. The installation will upgrade the existing databases, which may result in the loss of data.

Steps to Upgrade C•CURE 9000

1. Follow Step 1 through Step 3 on page 3-6.

   If C•CURE 9000 is already installed, the Unified Install Dashboard C•CURE 9000 **Platforms** screen appears (see Figure 3-2 on page 3-7).

2. Select the **victor Application Server and C•CURE Client** (see Figure 3-2 on page 3-7**)**. In this case, the tile displays **Upgrade** in the upper left.

3. Click **Install** to proceed.

   The **Final Review** screen appears, listing your selections:

   - Prerequisites (if necessary).
   - victor Application Server.
   - C•CURE 9000 Client.

4. Click **Install**.

   The **Prerequisites** screen opens with a list of the services/applications that must be installed first, as necessary.

   - Select the **...third party software licenses..** check box and then click **Install.**

   The install process shuts down the services. If any service(s) cannot be stopped, a message displays telling you to stop them manually and then proceed with the upgrade.

   The Installation of the prerequisites begins. The screen display tracks the progress down the list.

   NOTE If you click **Cancel** to stop the upgrade while a prerequisite is being installed, 'Cancel' will **not** activate until the prerequisite install completes.

   Then the Windows Installer **Preparing to Install** box, "The Setup Wizard will install Victor Application Server..." message, and the **Program Maintenance** screen appear in turn.

5. Click **Next**. An **End User License Agreement** screen opens.

6. Click **I accept the terms in the license agreement and** click **Next**.

   The **Customer Information** screen then opens (see Figure 3-3 on page 3-9).

7. Enter the appropriate information in the **User Name** and **Organization** entry fields, if necessary, and click **Next**. (The application is installed for all users—anyone who uses this computer.)

   The **Setup Type** screen opens (see Figure 3-4 on page 3-9) with the type, whether **Typical** or **Advanced**, defaulted to the choice made when the Server was initially installed. You cannot change the type.

- Typical — This is for a Standalone Server, wherever installed, that uses a local/remote database. Go to Step 10 on page 5-6.
- Advanced — This is for both an Application Server and a Standalone Server with redundancy. Go to Step 8 on page 5-6.

Software House requires that Redundant Server Upgrade only be performed by an integrator trained and certified in Redundancy.

8. Click **Next**.

   If you selected **Advanced** as the setup type because you need to upgrade a MAS or SAS or a redundant system, the **Destination Folder** screen opens, as shown in the example in Figure 3-5 on page 3-10 for a new install, but with two differences:

   - The Install path shows the location to which C•CURE 9000 was originally installed — whether the default C:\ drive or another custom (non-default) drive, such as D:\.
   - The **Change** button displays, but is **unavailable**.

9. Click **Next**.

   The **Server Installation Type Selection** screen opens as follows:

   - For a MAS/SAS upgrade, the **Application Sever Installation** option is pre selected and depending which you are upgrading, either the **Install as a Master Application Server/Install as a Satellite Application Server** option.The options are all unavailable.
   - For a redundant system upgrade, with the Redundancy fields, as shown in the example in Figure 3-7 on page 3-11, with the following difference:

     All of the entries on the screen are unavailable, including the displayed Virtual Server name, except for the two node options. The first node option is selected by default.

     – If this is **not** the first redundant Server in the domain, select the second option **There is an existing node in the domain**, and click **Next**.

     The **Redundant Personal Data Storage Folder** screen then opens displaying the default personal data storage location (see Figure 3-8 on page 3-12).

     – If you wish to have this data saved in a different location, follow the directions on page 3-12 and then click **Next**.

10. Click **Next**.

    The **Database Server** screen appears (see Figure 3-9 on page 3-12), but with the Server entry and the Browse button unavailable. (You cannot change the SQL Server on an upgrade.)

11. Click **Next**.

12. When the **Database Access Credentials** screen opens (see Figure 3-10 on page 3-13), the screen option defaults to that chosen on the Install:

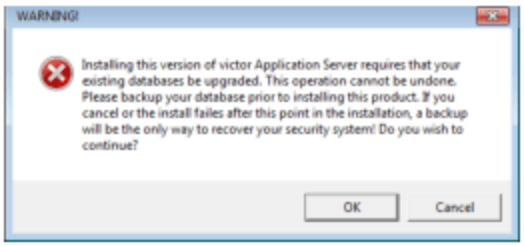
    - If the **Use the Local System account** option, leave the screen alone.
    - If the **Use Windows authentication credentials** option, enter the Domain Account\Username (this may be entered already), your Password, and Password confirmation.

13. Click **Next** to continue the upgrade.

The **Ready to Install the Program** screen now appears listing the location of the installation directory, the system server type, and the SQL Server (see Figure 3-11 on page 3-14).

14. Click **Install** to begin the upgrade of the C•CURE 9000 applications.

    The following Warning message displays.



15. Click **OK** to continue or **Cancel** to exit the upgrade, and then click **Next**.

    The Unified Install Dashboard **Final Review** screen reappears indicating that it is installing the Server and then the **Installing victor Application Server** screen opens with a progress bar and installation status messages. (This entire process can take a considerable amount of time.)

NOTE As soon as you complete the installation upgrade, your server automatically updates your existing C•CURE 9000 database to communicate properly with the new database parameters. You may experience a delay until this process is completed. The duration of this delay varies, depending on the size of the existing database.

Once the upgrade process is completed, the **victor Application Server Setup Wizard Completed** screen displays (see Figure 3-12 on page 3-15).

- The **Launch Licensing Application** check box is selected by default, prompting you to register your upgraded software. Although you could register now, you can also wait until the associated C•CURE 9000 Client finishes upgrading.
  - Leave the check box selected so the License opens but do not validate it yet. Go to Step 8 on page 5-9.

NOTE Remember you will not be allowed to actually begin using C•CURE 9000 until the License Application is completed.

- The **Show the Window Installer log** check box is unselected by default. To open the log and view the information in that file, select the check box.

16. Click **Finish** to complete the upgrade of the victor Application Server.

    A **Preparing to Install** box now appears and the Unified Install Dashboard **Final Review** screen indicates that it is installing the Client. The License Manager then opens and after that the **Welcome to the C•CURE 9000 Client Installer** screen.

17. Let the License Manager remain open and click **Next** to begin the Client upgrade. Go to "Upgrading the Client (with the Server)" on page 5-8.

Upgrading the Client (with the Server)

The steps to upgrade the Client with the Server are described in this section.

To Upgrade the Client (with the Server)

1. On the **Welcome to the C•CURE 9000 Client Installer** screen, which opens at the finish of the Server upgrade, click **Next** to begin upgrading the C•CURE 9000 Client.
2. When the **End User License Agreement** screen opens, click **I accept the terms in the license agreement**, and then click **Next.**

   The **Customer Information** screen then opens.
3. Click **Next**. The **Destination Folder** screen opens (see Figure 3-5 on page 3-10).
4. To install the Client in the default folder in the **Destination Path** screen, click **Next**.

   - or -

   To install to a different location, click **Change**. The **Change Current Destination Folder** screen opens.

   – Type the path or browse to the folder or drive on which you want to install the software. (You can also create a new folder into which the C•CURE 9000 System will be installed.)

   – Click **OK** to select the new path.
5. The **Server** screen opens with the Name of the host computer that will act as the victor Application Server for this client (see Figure 3-14 on page 3-16).
6. If necessary, correct the computer name/IP address and click **Next**.

   The **Ready to Install the Program** screen appears (see Figure 3-11 on page 3-14), but listing only the location of the installation directory and the Server computer.
7. Click **Install** to start upgrading the C•CURE 9000 Client.

   The **Installing C•CURE 9000 Client** screen then appears displaying progress messages, and once the upgrade process is done, the **C•CURE 9000 Client Wizard Completed** screen appears.

   • Both the **Show the Window Installer log** and the **Show the release notes file** check boxes are unselected by default. To open either of them to view the information in the file, select the check box.

   If you received any warnings during the installation—such as "Installation ended with errors", you can view them in the %TEMP% directory in the following log files:

   • UnifiedInstallDashboard.log– for installing the Unified Dashboard.

   • UnifiedServerInstall_[Date/Time].log file– for installing the victor Application Server.

   • DBManager_Deploy_UNIFIEDSERVER-[Date/Time].log file – for installing the database.

   • CCure9000ClientInstall_[Date/Time].log file – for installing the C•CURE 9000 Client.

(On systems with UAC (such as Windows Server 2012 R2, Windows Server 2008 R2 and Windows 7), you may need to go up one level to get to the root of the Temp directory.)

Example:

On Windows 7, %TEMP% typically defaults to
C:\Users\<username>\AppData\Local\Temp

8. Validate your license now (if you have not already done so).

Once the entire upgrade completes, you must validate your C•CURE 9000 license immediately to use your C•CURE 9000. You could have done this after the Server upgrade or you can do it now after the Client upgrade has also completed. For licensing information, see Chapter 8.

If the License is valid, a message displays 'License Information is correct."

9. Click **OK** and close the License Manager Application. A message then displays saying:

"The services have not been restarted to allow you to set up your system. Open the Server Configuration Application to restart the services before using the product"

After upgrading to Version 2.50, you **must** run the Server Configuration Application (**Start>All Programs>Tyco>Server Configuration**) one time to start the CrossFire Framework and CrossFire Server Component Framework Services. (You **cannot** access C•CURE 9000 functions until you start these services.)

In addition, you need to enable and start the Extension Service (Hardware Driver) for each type of controller, video, or network component that will be used on the server. (The Extension Services [Drivers] are **not** automatically started by default because enabling drivers for devices that are not used by the server can affect system performance.)

For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and"Starting C•CURE 9000 Services/Server Components" on page 3-22.

10. Click **Finish**. An Installation Complete message displays.
11. Click **OK**. The Unified Install Dashboard closes.

NOTE Software House recommends that you back up your database now that it has been upgraded. See the *C•CURE 9000 System Maintenance Guide* and/or Table 5-1 on page 5-3 for more information.

Upgrading a C•CURE 9000 Client Only

The Unified Installer allows you to upgrade a C•CURE 9000 installed by itself on a client computer.

To Upgrade Only the C•CURE 9000 Client

1. To upgrade the C•CURE 9000 Administration and Monitoring Station client applications, double-click the **setup.exe** on the client computer.
   - If certain applications required for the latest version of C•CURE 9000 are missing, a message displays listing the applications and asking permission to install them.
     - Click **Install** to proceed.
2. Once the Unified Install **C•CURE 9000 Clients** screen appears (see Figure 3-15 on page 3-20) with the **C•CURE 9000 Client** tile displaying **Upgrade** in the upper left, select the tile and click **Install**.

   The **Final Review** screen appears, listing your selections:
   - Prerequisites.
   - C•CURE 9000 Client.
3. Click **Install**.

   The **Prerequisites** screen opens with a list of the services/applications that must be installed first, if necessary.
   - Select the **By clicking this box...third party software licenses shown here. EULA** check box and then click **Install.**

   The Installation of the prerequisites begins. The screen display tracks the progress down the list.
4. When the **Welcome to the C•CURE 9000 Client Installer** screen (see Figure 3-13 on page 3-16) opens after all prerequisites are installed, click **Next**.
5. On the **End User License Agreement** screen, click **I accept the terms in the license agreement** and then click **Next.**

   The **Ready to Install the Program** screen appears (see Figure 3-11 on page 3-14), but listing only the location of the installation directory and the name of the Server computer.
6. Click **Install** to start upgrading the C•CURE 9000 Client.

   The **Installing C•CURE 9000 Client** screen then appears displaying progress messages.

   Once the upgrade process is done, the **C•CURE 9000 Client Wizard Completed** screen appears.
   - Both the **Show the Window Installer log** and the **Show the release notes file** check boxes are unselected by default. To open either of them to view the information in the file, select the check box.
7. Click **Finish**. An Installation Complete message displays.
8. Click **OK**. The Unified Install Dashboard closes.

6

Installing a Master Application Server

This chapter explains how to perform a new installation of C•CURE 9000 software to create a Master Application Server (MAS) for the Enterprise Architecture option. In addition, although upgrading a MAS is mainly covered in Chapter 5, the section"Upgrading a MAS" on page 6-14 provides some important pointers about a MAS upgrade.

The installation or upgrade of a MAS should be performed by either Software House Professional Services or by an Enterprise Architecture Certified Integrator.

NOTE If you are performing an Enterprise upgrade by upgrading the MAS and all SAS systems connected to it, you should read the section on Multi-version Support to see if you can take advantage of the Multi-version feature during the upgrade process. Multi-version allows you to keep your MAS in contact with both the upgraded SAS systems, and SAS systems that have not yet been upgraded. See "Multi-version Support" on page 6-14, and the *C•CURE 9000 Enterprise Architecture Guide* for more information.

See the *C•CURE 9000 Release Notes* for the upgrade version to determine the previous versions that are supported for Multi-version support in a given release.

For an overview of the Enterprise Architecture option and the MAS see the *C•CURE 9000 Enterprise Architecture Guide*.

In this chapter

Installation Guidelines for a Master Application Server

When installing C•CURE 9000 Master Application Server, you should observe the following guidelines:

- Be sure to read Chapter 1 for general information and Chapter 2 for pre-installation tasks.
- Before installing the software on a system, check that the system has sufficient free space to run the setup program and meets the minimum hardware and software requirements listed in the current C•CURE 9000 data sheet. The installation program checks that the system meets the minimum hardware, software, and disk space requirements. If the computer does **not** meet these requirements, the system displays a warning message. You can continue the installation, but functionality may be affected.
- All workstations in the security system must be running the correct version of the Windows operating system and have the correct Service Packs, as listed in the current C•CURE 9000 data sheet.
- You cannot upgrade an existing standalone Server to a version 2.50 MAS. A MAS install must be a new install of C•CURE 9000 or an upgrade of a prior version MAS.
- Install the MAS server in your C•CURE 9000 security system on a dedicated computer prior to installing each SAS server and additional client systems.
- You must have a valid system license for a Master Application Server to install and run C•CURE 9000. Be sure you have the License Text File and the initial License File from Software House (sent via email) for the C•CURE 9000 system and options.
- The person who performs the C•CURE 9000 installation is automatically added as a Global Operator in the C•CURE 9000 system. It is good practice to configure at least one other C•CURE 9000 user as a Global Operator. Any user who tries to log into the C•CURE 9000 Administration Workstation or Monitoring Station without being configured as an Operator is denied access. See the *C•CURE 9000 Software Configuration Guide* for information on Operators.
- The MAS and each SAS have to be installed either on the same domain or on trusted domains so they can communicate with each other.

MAS Installation Prerequisites

The following requirements must be met for a successful MAS installation.

Table 6-1: MAS Installation Prerequisites

	Prerequisite
❒	The system where the MAS software will be installed must be a dedicated system on a domain. The system should not host any other major applications.
❒	The system must have the following operating system: • Windows Server 2008 R2 Standard or Enterprise Edition SP1 or later (64-bit) or Windows Server 2012/2012 R2 Standard (64-bit).
❒	It is important that the clocks are synchronized between the MAS and the SASs. For more information, see "Synchronizing Time for Networked Computers" on page 2-4.
❒	The system must have one of the following database versions installed, or accessible as a remote database (SQL Server Express is **not** supported as a MAS database): • SQL 2008 Server R2 Standard or Enterprise Edition (64-bit), SQL Server 2012 Standard or Enterprise Edition (64-bit), or SQL Server 2014 Standard or Enterprise Edition (64-bit).
❒	The Windows domain user account of the MAS installer must be a system administrator for the system where the MAS will be installed. (This account you install under must be a domain account, not a local computer account.)
❒	The Windows user account of the MAS installer must have been configured as a SQL Administrator (sysadmin role). See "SQL Server Database Permissions for MAS Installation" on page 6-4.
❒	The SQL Browser Service must be enabled and running. See "Enable SQL Server Browser Service" on page 2-19.
❒	You must have or obtain a MAS software license with the Application Server option enabled.

SQL Server Database Permissions for MAS Installation

The MAS installer must be configured as a SQL Server user on the MAS SQL Server 2008 R2/ SQL Server 2012/SQL Server 2014 database with the sysadmin role in order to successfully complete a MAS installation. This is necessary because actions that affect the MAS database are performed by the C•CURE 9000 installation program in the installer's name during MAS installation.

Configuring the MAS Installer on the MAS SQL Server Database

The person who installs C•CURE 9000 on your MAS must have specific database roles configured in the SQL Server installation on the MAS system, so that the C•CURE 9000 installation program can authenticate and communicate with the MAS SQL Server databases.

Perform the following steps to configure access to the MAS SQL Server database.

NOTE

- If the person planning to install the MAS also installed SQL Server 2008 R2/SQL Server 2012/SQL Server 2014, he/she will already be configured as a sysadmin and the following procedure need not be performed.
- Do not enable the SQL Server Reporting services unless you plan to configure and use these services.

To Configure MAS Installer in SQL Server 2008 R2/SQL Server 2012/SQL Server 2014

1. On the MAS system, using a SQL Server account with the **sysadmin** Server Role enabled, select **Start>All Programs>Microsoft SQL Server 2008 R2/SQL Server 2012/ SQL Server 2014>SQL Server Management Studio.**
2. In the **Object Explorer** pane on the left, navigate to **Security>Logins,** right-click, and choose **New Login** from the context menu.
3. On the **Login - New** screen:
   a. Configure the MAS installer login as [domainname]\loginname.
   b. In the upper-left pane **Select a page**, click **Server Roles** and then select the **sysadmin** check-box from the **Server roles** list on the right.
4. Click **OK** to save your changes.

Installation Preparation

The following pages provide instructions for installing the MAS software on the Server and each Client in your security system. If you are installing the Server and Client software on different computers, install the software on the Server first.

Check the installation sequence before installing the software. For additional information about pre-installation tasks, see Chapter 2 and the hardware, software, and disk space requirements in the current C•CURE 9000 data sheet.

Checking Network Status

The MAS system must be on a domain. If you are installing C•CURE 9000 on a corporate network, be sure to coordinate with your corporate network administrator. Check that the network is working properly before you install C•CURE 9000.

Installing from a Shared Network DVD Drive

If you are installing C•CURE 9000 using a shared DVD drive on your network:

1. Log into your system with the appropriate Windows privileges. For information, see "MAS Installation Prerequisites" on page 6-3.
2. Insert the Unified Installer dual-layer DVD into the shared drive on another computer.
3. From your system, use the Windows **Map Network Drive** function to mount the shared DVD drive over the network.

NOTE For information about sharing DVD drives, refer to your Microsoft documentation or see your system administrator.

4. Access the DVD drive using Windows Explorer and double-click Setup.exe on the DVD.

Checking System Privileges

To perform the installation, you must have appropriate Windows permissions. You must use a domain account that is in the local Administrators group, or have equivalent privileges. See the Microsoft online Help or your system administrator for information.

If you do not have sufficient permissions, you cannot finish the complete installation and you will receive an error message.

Database Installation

The C•CURE 9000 server requires connectivity to a local or remote SQL Server 2008 R2/SQL Server 2012/SQL Server 2014 database. You must install SQL Server 2008 R2/SQL Server 2012/SQL Server 2014 Standard or Enterprise Edition.

C•CURE 9000 MAS Installation Summary

Table 6-2 lists the steps to install and register the C•CURE 9000 software on each computer in your security system. Perform these steps in order.

Table 6-2: Standard Installation Tasks

	Task
1	Check that C•CURE Servers and Clients have the correct hardware and software, and have sufficient disk space. See the current C•CURE 9000 data sheet for the minimum hardware and software requirements for the Server and Clients.
2	Be sure to install SQL Server 2008 R2/SQL Server 2012/SQL Server 2014 Standard or Enterprise Edition database software on a remote or local server. Consult your SQL database administrator and Microsoft SQL documentation/help for more information.
3	Close any open applications and disable virus-checking software.
4	Start the Unified installation program. See "Installing a New MAS" on page 6-7.
5	Register the software using your MAS license. See Chapter 8.
6	Make sure that the C•CURE 9000 Services are running (**Start**>**All Programs**>**Tyco**>**Server Configuration**).See "C•CURE 9000 Services/Server Components" on page 6-13.
7	Start the C•CURE 9000 Administration Client or Monitoring Station Client software to begin using Version 2.50 of C•CURE 9000.

Installing a New MAS

A Master Application Server is installed on a SQL Server 2008/SQL Server 2012/SQL Server 2014 Standard or Enterprise edition database. This database must be installed, configured, and running prior to MAS installation.

You can install the software to a drive on the local computer either from a local DVD or from a shared drive over the network, or from a download from the Tyco Security Products customer web site.

To Install a C•CURE 9000 MAS

1. Follow Step 1 through Step 4 on page 3-6 through page 3-7.
2. On the Unified Dashboard C•CURE 9000 Platforms screen (see Figure 3-2 on page 3-7), select **victor Application Server and C•CURE Client** and click **Install**.

   The **Final Review** screen appears, listing your selections:

   - Prerequisites (if needed)
   - victor Application Server
   - C•CURE 9000 Client
3. Click **Install**.

   The **Prerequisites** screen opens with a list of the services/applications that must be installed first.

   - Select the **By clicking this box...third party software licenses shown here. EULA** check box and then click **Install.**

   The Installation of the prerequisites begins. The screen display tracks the progress down the list.

NOTE If you click **Cancel** to close the installation while a prerequisite is being installed, 'Cancel' will **not** activate until the prerequisite install completes.

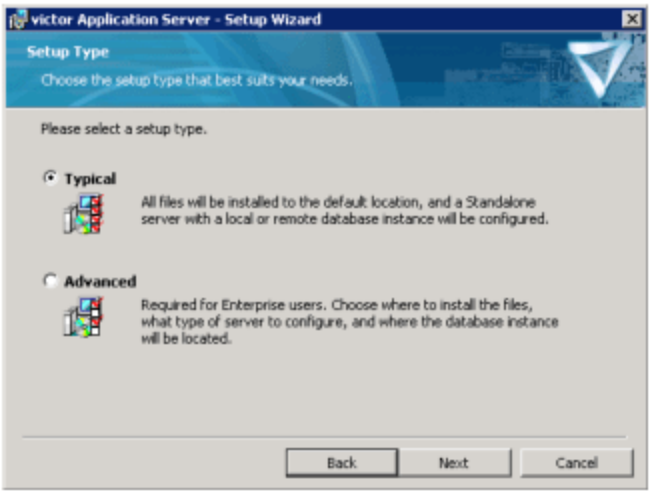
   Then the Windows Installer **Preparing to Install** box, Install Setup Wizard messages, and the **Welcome to the victor Application Server Installer** screen appear in turn.
4. Click **Next**. An **End User License Agreement** screen opens.

   Click **I accept the terms in the license agreement**, and then click **Next**

   The **Customer Information** screen opens (see Figure 3-3 on page 3-9).
5. Type the appropriate information in the **User Name** and **Organization** entry fields and click **Next**. (The application is installed for all users—anyone who uses this computer.)

   The **Setup Type** screen opens, as shown in Figure 6-1 on page 6-8.

Figure 6-1: Setup Type Screen



This screen allows you to choose the type of Server installation.

6. Choose the **Advanced** option to install a Master Application Server. (This option also allows you to install the MAS as a redundant Server.)
7. Click **Next**.
8. The **Destination Folder** screen opens (see Figure 3-5 on page 3-10).
9. To install the MAS in the default folder in the **Destination Path** screen, click **Next**.

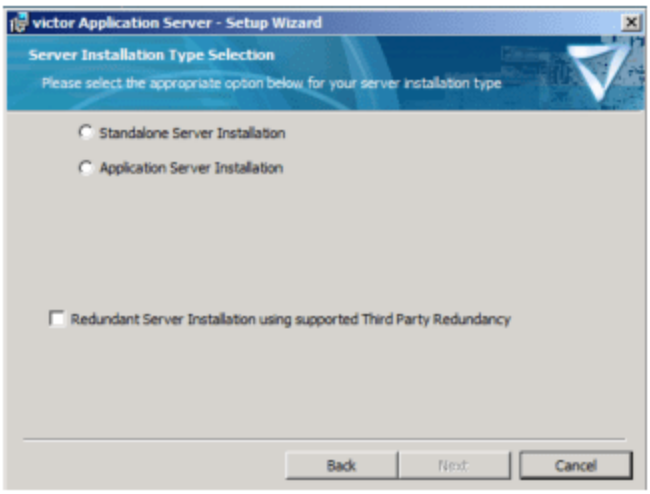
   - or -

   To install to a location different from that listed in the **Destination Path** screen, click **Change**. The **Change Current Destination Folder** screen opens.

   - Type the path or browse to the folder or drive on which you want to install the software. You can also create a new folder into which the MAS will be installed.
   - Click **OK** to select the new path and then click **Next**.

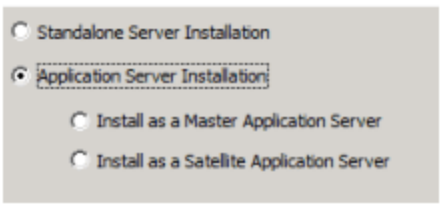
   The **Server Installation Type Selection** screen appears, shown in Figure 6-2 on page 6-9.

Figure 6-2: Server Installation Type Selection Screen



10. Choose Application Server Installation, and two additional options appear, shown in Figure 6-3 on page 6-9.

Figure 6-3: Application Server Selections



11. Choose **Install as a Master Application Server**.

    If you are installing this MAS as a Redundant Server, choose **Redundant Server Installation**. In this case, other selections appear (see Figure 3-7 on page 3-11).

> Software House requires that Redundant Server Installation only be performed by an integrator trained and certified in Redundancy.

- Enter the name of the Virtual Server in the relevant field.
- If this is the first redundant Server in the AutoStart domain, choose the first option: **This is the first node in the domain**.
- If this is not the first redundant Server in the AutoStart domain, choose the second option: **There is an existing node in the domain**.

The install process validates that the Virtual Server is on the network. (This option is designed for solutions using third party redundancy software such as EMC Autostart.)

12. Click **Next**.

    The **Redundant Personal Data Storage Folder** screen opens (see Figure 3-8 on page 3-12).

- To have the SQL Server CE-related personal data storage saved in the default folder, leave the path in the **Personal data storage location** field.

  - or -

- To have this data saved in a different location, click **Change,** and on the **Change Current Destination Folder** screen:
  - Type the path or browse to the folder or drive on which you want to save the data. (You can also create a new folder into which the personal data will be saved.)
  - Click **OK** to select the new path, which is entered into the **Personal data storage location** field.

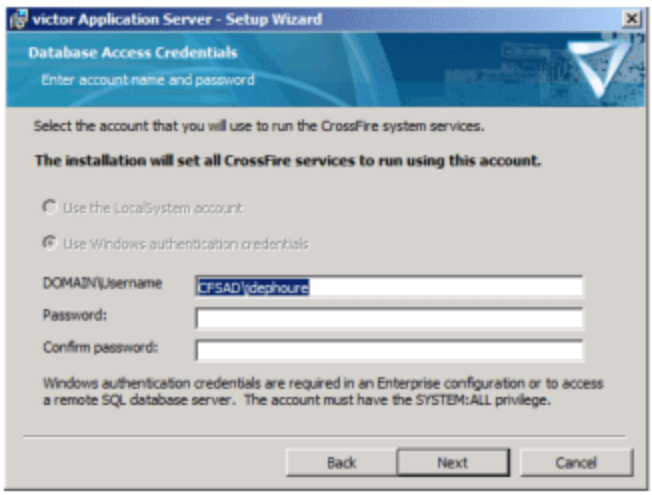
13. Click **Next**.

    The **Database Server** screen opens (see Figure 3-9 on page 3-12).

14. Use the drop-down list, enter the name, or click **Browse** to select the correct database server for your MAS and then click **Next**. (The correct database server may already be entered.)

    The **Database Access Credentials** screen opens, where you choose the account for running the CrossFire Services, as shown in Figure 6-4 on page 6-10.

Figure 6-4: Database Access Credentials screen – for MAS



15. The **Use Windows authentication credentials** option is required for an Application Server. Consequently, it is pre-selected and you cannot change it.

    A MAS has to have services run as a domain user account. Make sure that the same Windows account is used for all services. In all cases, the selected account must meet the following requirements:

    - Have rights to the Software House SQL databases.
    - Be a C•CURE 9000 Operator with SystemAll Privileges and belong to the Local Administrator group.

16. Enter the Domain Account\Username (this may be entered already), your Password, the Password confirmation, and then click **Next**.

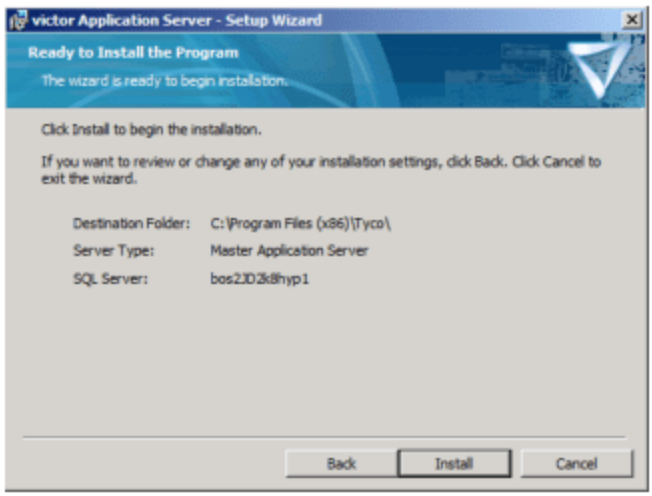
NOTE Use a **Domain Account\Username** whose password will **not** be automatically updated as this will adversely affect future connectivity. If your Windows password **should change**, you will need to update the password used by the C•CURE 9000 Windows services.

If the credentials you enter cannot be validated, an error message displays suggesting that you check the username and password again.

- Click **OK** and then correct the information.

The **Ready to Install the Program** screen, shown in Figure 6-5 on page 6-11, appears, listing the location of the installation directory, the system server type, and the SQL Server.

Figure 6-5: Ready to Install



17. Click **Install** to begin the MAS installation.
    - The Install wizard checks that there is enough disk space on the drive to install C•CURE 9000.
      - If there is not enough space, the **Out of Disk Space** screen displays with a list of the drives in question and advises you to remove files from the highlighted drives, install fewer features onto local drives, or select different destination drives.
      - Click **OK** to cancel the installation, return to the **Ready to Install the Program** screen, and fix the problem.

NOTE Microsoft **Internet Information Services** (IIS) must be installed prior to the C•CURE 9000 Server installation to use Web Client and victor Web Service (see "Configuring IIS on Windows Server Operating Systems" on page 2-21).

If there is enough space, the **Installing victor Application** screen then appears with a progress bar and installation status messages. (This process can take a considerable amount of time.)

If the installation completes without errors, the **victor Application Server Setup Wizard Completed** screen displays (see Figure 3-12 on page 3-15).

- The **Launch Licensing Application** check box is selected by default, prompting you to register the software. Although you could do this now, you can also wait to register the software when the associated C•CURE 9000 Client finishes installing.
  - Leave the check box selected so the License opens. Go to Step 7 on page 3-17..
- The **Show the Window Installer log** check box is unselected by default. To open the log and view the information in that file, select the check box.

18. Click **Finish**.

    The Unified Install Dashboard **Final Review** screen reappears, indicating that it is now installing the Client. A **Preparing to Install** box displays and then the License Manager opens. After that the **Welcome to the C•CURE 9000 Client Installer** screen appears.

19. Let the License Manager remain open and click **Next** to begin the Client install.

Installing the Client (with the Server)

1. Go to "Installing the Client (with the Server)" on page 3-15 and follow the directions in that procedure from Step 1 through Step 7 on page 3-17.

Once the entire install completes, you must validate your C•CURE 9000 license immediately to use your C•CURE 9000. You could have done this after the Server install or you can do it now after the Client install has also completed. For licensing information, see Chapter 8.

If the License is valid, a message displays 'License Information is correct."

2. Click **OK** and close the License Manager Application. A message then displays saying:

   "The services have not been restarted to allow you to set up your system. Open the Server Configuration Application to restart the services before using the product"

3. After installing C•CURE 9000, you **must** run the Server Configuration Application (**Start>All Programs>Tyco>Server Configuration**) one time to start the CrossFire Framework and CrossFire Server Component Framework Services. In addition, if you are planning to perform Imports and/or run reports on the Server, you must enable and start the Server Component Service for Import Watcher and/or the Report Server.

   For information, see "C•CURE 9000 Services/Server Components" on page 6-13.

4. Click **Finish**. An Installation Complete message displays.

5. Click **OK** to close the Unified Install Dashboard.

If both the IP address and the machine name of a MAS or SAS change at the same time, C•CURE 9000 will not automatically recognize that this is the same computer. However, you can run a repair install to fix the problem.

C•CURE 9000 Services/Server Components

You have to start the following two C•CURE 9000 Services once you have finished **installing** C•CURE 9000 for the first time (and have validated the license):

- CrossFire Framework Service
- CrossFire Server Component Framework Service

You **cannot** start any of the other drivers on a MAS. Because you cannot connect controllers or video equipment to the MAS, C•CURE 9000 hardware drivers must be disabled on this system.

NOTE There are two exceptions to the preceding rule: you can start the Import Watcher and/or the Report Server (which you need if you plan to perform imports or run reports on the Server).

Once a service is enabled, it starts automatically when the server computer starts up; you can manually *stop* it, but it will still autostart at startup.

To Start C•CURE 9000 Services

Follow Step 1 on page 3-22. The application opens with the **Services** tab displayed.

1. To start the CrossFire services, in the **Framework Services** box:
   a. Click Start next to the CrossFire Framework Service.

      The Status changes to **Start Pending**. When the status changes to **Running** (in green) the Service has been successfully started.

   b. Click Start next to the CrossFire Server Component Framework Service.

      The Status changes to **Start Pending**. When the status changes to **Running** (in green) the Service has been successfully started.

2. To enable and start Import Watcher and/or Report Server services, in the **Extension Services** box:
   a. Make sure the Service is enabled. If not, select the **Enabled** option.

   b. Click **Start Service**. The status changes to **Start Pending**.

   When the status changes to **Running** (in green) the Service has been successfully started.

You can verify that the Service is running as a Windows Service by selecting **Start>Control Panel>Administrative Tools>Services** and viewing the status of the SoftwareHouse Services.

For further information on enabling/starting/stopping services, see the *C•CURE 9000 Server Configuration Application Guide*.

Upgrading a MAS

When you are upgrading your MAS and SAS systems, you must first upgrade the MAS and then upgrade the SAS systems to the same version.

For basic upgrade information and procedures, see "Steps to Upgrade the C•CURE 9000 Software" on page 5-3, including Table 5-1 on page 5-3, and "Upgrading C•CURE 9000" on page 5-5. Be sure, however, to follow the instructions in this section.

- A status message particular only to MAS and SAS systems displays on the **Installing C•CURE 9000** screen during the MAS upgrade, warning that it **may** take a long time for the re-provisioning process to be completed— although this usually proceeds quickly.
- However, the first time you run each SAS after upgrading your Enterprise system, the SAS has to synchronize with the MAS—which **does** take a long time.

  Consequently, if you are upgrading a MAS and multiple SASes, Software House recommends that you upgrade one SAS at a time and the wait until the upgraded SAS synchronizes with its upgraded MAS before moving on to the next SAS.

Multi-version Support

The Multi-version support feature allows you to maintain certain connections and synchronization between an upgraded MAS and the SAS systems that have not yet been upgraded. This feature provides a temporary solution during the upgrade period for sites with multiple SAS systems that can take substantial time to fully upgrade.

If an Enterprise currently has a MAS at one version and SAS systems with differing versions, it is necessary to upgrade all SAS systems to be at the same version as the MAS before beginning to upgrade the MAS to take advantage of Multi-version support.

After you upgrade the MAS (and all the MAS-connected client systems), you can proceed to upgrade your SAS systems (and all of the SAS-connected client systems). During this process, all the SAS systems can participate in the Enterprise, within version-specific limitations.

See the *C•CURE 9000 Release Notes* for the upgrade version to determine the previous versions that are supported for Multi-version support in a given release.

See the *C•CURE 9000 Enterprise Architecture Guide* for more details on Multi-version Support.

7

Installing a Satellite Application Server

This chapter explains how to perform a new installation of C•CURE 9000 software on a Satellite Application Server (SAS) and on a Client workstation. In addition, although upgrading a SAS is mainly covered in Chapter 5, "Upgrading C•CURE 9000 Software", the section"Upgrading a SAS" on page 7-14 provides some important pointers about a SAS upgrade. To migrate a prior version C•CURE 9000 server to a SAS, you must first upgrade the server to the current version of C•CURE 9000. (For information on migrating a current-version C•CURE 9000 server to a SAS, see the *C•CURE 9000 Standalone to SAS Migration Utility User Guide*.)

The installation or upgrade of a SAS should be performed by either Software House Professional Services or by an Enterprise Architecture Certified Integrator.

For an overview of the Enterprise Architecture option and the SAS see the *C•CURE 9000 Enterprise Architecture Guide*.

In this chapter

Installation Guidelines for a Satellite Application Server

When installing a Satellite Application Server, you should observe the following guidelines:

You must perform a backup of the MAS databases **prior** to each installation of a new SAS system. You must have this backup available when you add another SAS system, because a MAS database crash (such as a power outage) during a SAS installation could potentially cause irreparable damage to the MAS.

There is no way to point an existing SAS at a new MAS. Consequently, it is critical to perform a system backup of the MAS and SAS **after** each new SAS is added.

- Be sure to read Chapter 1, "C•CURE 9000 Overview" for general information and Chapter 2, "Setting Up Software and Hardware" for pre-installation tasks.
- Before installing the software on a system, check that the system has sufficient free space to run the setup program and meets the minimum hardware, software, and disk space requirements listed in the current C•CURE 9000 data sheet. The installation program checks that the system meets the minimum requirements. If the computer does **not** meet these requirements, the system displays a warning message.
- All workstations in the security system must be running the correct version of the Windows operating system and have the correct Service Packs as listed in the current C•CURE 9000 data sheet.
- When installing a C•CURE 9000 SAS, you must initially install the C•CURE 9000 SAS Server on a dedicated computer **before** installing C•CURE 9000 on Client computers.
- If you are performing a repair install on a SAS, the MAS must be up and running or the installation fails. You will receive an error message that it could not connect to the MAS [servername].
- Install each computer in your C•CURE 9000 security system separately, according to the order described in Table 7-2 on page 7-8.
- You must have a valid system license to install and run C•CURE 9000. Be sure you have the License Text File and the initial License File from Software House (sent via email) for the C•CURE 9000 system and options.
- The person who performs the C•CURE 9000 installation **must** be a Global Operator on the MAS. It is good practice to configure at least one other C•CURE 9000 user as an Operator in the C•CURE 9000 system after completing the installation. (All Global Operators are automatically replicated to the SAS when it is started.) Any user who tries to log into the C•CURE 9000 Administration Workstation or Monitoring Station without being configured as an Operator is denied access. See the *C•CURE 9000 Software Configuration Guide* for information on Operators.
- The MAS and each SAS have to be installed either on the same domain or on trusted domains so they can communicate with each other.

If both the IP address and the machine name of a SAS or MAS change at the same time, C•CURE 9000 will not automatically recognize that this is the same computer. However, you can run a repair install to fix the problem.

SAS Installation Prerequisites

The following requirements must be met for a successful SAS installation.

Table 7-1: SAS Installation Prerequisites

	Prerequisite
❒	The system where the SAS software will be installed must be a dedicated system on a domain. The system should not host any other major applications.
❒	The system must have one of the following operating systems: ▪ Windows 7 Professional, Enterprise SP1 (32- or 64-bit) – client only. ▪ Windows 8 Professional, Enterprise SP1 (32- or 64-bit) – client only. ▪ Windows Server 2008 R2 Standard, Enterprise SP1 (64-bit) – server or client. ▪ Windows Server 2012 Standard, Enterprise (64-bit) – server or client. ▪ Windows Server 2012 R2 Standard, Enterprise (64-bit) – server or client.
❒	It is important that the clocks are synchronized between the MAS and the SAS. See "Synchronizing Time for Networked Computers" on page 2-4.
❒	The C•CURE 9000 installation will install SQL Server 2014 Express or one of the following database versions must have been installed previously or accessible as a remote database: ▪ SQL Server 2008 R2 Standard or Enterprise edition (32- or 64-bit). ▪ SQL Server 2012 Standard or Enterprise edition (32- or 64-bit). ▪ SQL Server 2014 Standard or Enterprise edition (32- or 64-bit) NOTE: Software House recommends using full SQL Server Standard/Enterprise with C•CURE 9000 v2.50 for the best performance.
❒	The Windows domain user account of the SAS installer must be a system administrator for the system where the SAS will be installed.
❒	The Windows user account of the SAS installer must have been previously configured as a C•CURE 9000 Global Operator with the SYSTEM ALL Privilege at the MAS to which this SAS will connect. See the *C•CURE 9000 Software Configuration Guide* for information on configuring Operators.
❒	The CrossFire Services must be configured to run using a domain user account on the SAS. That account must also be a MAS operator able to access the MAS SQL database. See "SQL Server Database Permissions for SAS Installation" on page 7-4.
❒	The SQL Browser Service must be enabled and running after SQL Server is installed. See "Enable SQL Server Browser Service" on page 2-19.
❒	You must have a SAS software license with the Application Server option enabled.
❒	The MAS server that will be the master server for this SAS must be reachable via the network (its name or IP address must be resolvable).
❒	The MAS server that will be the master server for this SAS must be running, as well as the Software House CrossFire Framework and Component Framework Services.

SQL Server Database Permissions for SAS Installation

The following typically applies only to full/remote SQL Server, **not** to SQL Server Express.

Only two Windows user accounts normally need permissions to SQL Server databases:

- Account used to do the installation.
- Account used to run the Crossfire Framework Services.

Installation – To create the C•CURE 9000 databases, the Windows user account performing the installation must have sufficient privileges on the SQL Server. Giving that account the sysadmin role accomplishes this. After the initial install, when performing repairs or upgrades, you can reduce the privileges to that of the db_owner database role to each of the following databases: ACVSCore, SWHSystem, SWHSystemAudit and SWHSystemJournal. The preceding is required because the initial install must create these databases, while later installs need full access to the four databases to update them.

Software House Crossfire Framework Services – All other access to the SQL Server is done through the Windows user account that runs the Crossfire services. (Windows accounts used to access the C•CURE 9000 client do not need SQL permissions at all.) If you do not want this CrossFire server account to have sysadmin privileges within SQL Server, you can set up the permissions in either of the following two ways:

NOTE

- Software House strongly recommends that you use the first method. Only experienced SQL Server Administrators who absolutely require running with minimum privileges should use the second method.
- Whichever method you use, you must ensure that access to the Master database is **not** restricted. The Crossfire service account requires at least **Read Access** to this database.

1. **Method one** – Give this user db_owner role for all four databases.
2. **Method two** – Give this user the following privileges:
   - For SWHSYSTEMAUDIT and SWHSYSYTEMJOURNAL - db_owner role.
   - For ACVSCore, the following roles:
     - db_datareader
     - db_datawriter
     - db_backupoperator
     - db_ddladmin
   - The following script is also necessary to allow this user to execute stored procedures:

     ```
     USE ACVSCORE
     GRANT EXECUTE TO <USERNAME>
     GO
     ```

For additional details and up-to-date information, please consult a tab at [redacted]

Configuring SQL Server Database Permissions for Services Account

The SAS services must be configured as a SQL Server user on the MAS and SAS databases with the sysadmin role to successfully complete a SAS installation. This is necessary because the login the crossfire services run under has to be a SQL Server operator login for the MAS.

The services account for the SAS must have specific database roles configured in the SQL Server installation on the MAS system, so that the C•CURE 9000 can authenticate and communicate with the MAS to configure a connection between the SAS and MAS SQL databases.

If this services account is the same as the MAS services account, the correct permissions will already exist. If a different services account is used for running the C•CURE 9000, perform the following steps to configure access to the MAS SQL database.

To Configure Services Account in SQL Server 2008 R2/SQL Server 2012/ SQL Server 2014 on the MAS

1. On the MAS system, using a SQL Server account with the **sysadmin** Server Role enabled, select **Start>All Programs>Microsoft SQL Server 2008 R2/SQL Server 2012/ SQL Server 2014>SQL Server Management Studio.**
2. In the **Object Explorer** pane on the left, navigate to **Security>Logins,** right-click, and choose **New Login** from the context menu.
3. On the **Login - New** screen:
   a. Configure the login for the SAS services account as [domainname]\loginname.
   b. In the upper-left pane **Select a page**, click **Server Roles**, then select the **sysadmin** check-box from the **Server roles** list on the right.
4. Click **OK** to save your changes.

Configuring the SAS Installer on the SAS SQL Server Database

The person who installs C•CURE 9000 on your SAS must have specific database roles configured in the SQL Server installation on the SAS system, so that the C•CURE 9000 installation program can authenticate and communicate with the SAS SQL Server databases.

If the SAS installer also installed SQL Server 2008 R2/SQL Server 2012/SQL Server 2014, then the installer will already be configured as a sysadmin and this procedure need not be performed.

NOTE Do not enable the SQL Server Reporting services unless you plan to configure and use these services.

If a different person (or login) is installing the SAS, perform the steps in the following procedure to configure access to the SAS SQL Server database.

To Configure SAS Installer in SQL Server 2008 R2/SQL Server 2012/SQL Server 2014 on the SAS

1. On the SAS system, using a SQL Server account with the **sysadmin** Server Role enabled, select **Start>All Programs>Microsoft SQL Server 2008 R2/SQL Server 2012/ SQL Server 2014>SQL Server Management Studio.**
2. In the **Object Explorer** pane on the left, navigate to **Security>Logins,** right-click, and choose **New Login** from the context menu.
3. On the **Login - New** screen:
   a. Configure the login for the SAS services account as [domainname]\loginname.
   b. In the upper-left pane **Select a page**, click **Server Roles**, then select the **sysadmin** check-box from the **Server roles** list on the right.
4. Click **OK** to save your changes.

Installation Preparation

The following pages provide instructions for installing the software on the SAS Server and each Client in your security system. If you are installing the Server and Client software on different computers, install the software on the SAS Server first.

Check the installation sequence before installing the software. For additional information about pre-installation tasks, see Chapter 2, "Setting Up Software and Hardware" and the hardware, software, and disk space requirements in the current C•CURE 9000 data sheet.

Checking Network Status

If you are installing C•CURE 9000 on a corporate network, be sure to coordinate with your corporate network administrator. Check that the network is working properly before you install C•CURE 9000.

Installing from a Shared Network DVD Drive

You can use a a shared DVD drive on your network to install C•CURE 9000.

To Install from a Network DVD Drive

1. Log into your system with the appropriate Windows privileges. For information, see "SAS Installation Prerequisites" on page 7-3.
2. Insert the Unified Installer dual-layer DVD into the shared drive on another computer.
3. From your system, use the Windows **Map Network Drive** function to access the shared DVD drive over the network.

NOTE For information about sharing DVD drives, refer to your Microsoft documentation or see your system administrator.

4. Access the DVD drive using Windows Explorer and double-click **Launch.exe**.

Checking System Privileges

To perform the installation, you must have appropriate Windows permissions. You must use a domain account that is in the local Administrators group, or have equivalent privileges. See the Microsoft online Help or your system administrator for information.

If you do not have sufficient permissions, you cannot finish the complete installation and you will receive an error message.

Steps to Install C•CURE 9000 Software

Table 7-2 lists the steps to install and register a C•CURE 9000 Satellite Application Server. Perform these steps in order.

Table 7-2: SAS Installation Tasks

	Task
1	Check that C•CURE Servers and Clients have the correct hardware and software, and have sufficient disk space. (See the current C•CURE 9000 data sheet for the minimum hardware and software requirements for the Server and Clients.)
2	Be sure to install a supported version of SQL Server database software on a remote or local server if are not planning to have C•CURE 9000 install SQL Server 2014 Express. (Consult your database administrator for more information.)
3	Close any open applications and disable virus-checking software.
4	If you are upgrading, perform a Full System Backup of all CCURE 9000 databases (SWHSystem with ACVSCore, SWHSystemAudit, and SWHSystemJournal) using **Options & Tools**>**System Backup**. (See the *C•CURE 9000 System Maintenance Guide*.)
5	Start the C•CURE 9000 installation program. • To install a new SAS, see "Installing a New SAS" on page 7-9. • To install a C•CURE 9000 client-only to connect to a SAS, see "Installing a C•CURE 9000 Client Only" on page 3-19. NOTE: To migrate a C•CURE 9000 standalone system to a SAS, see the *C•CURE 9000 Standalone to SAS Migration Utility User Guide*.
6	After you install the SAS Server software, register the software. (See Chapter 8, "Licensing C•CURE 9000".)
7	Start the Services that you will use on your C•CURE 9000 SAS using **Start**>**All Programs**>**Tyco**>**Server Configuration**. (See "Starting C•CURE 9000 Services/Server Components" on page 3-22.)
8	Start the C•CURE 9000 Administration Client or Monitoring Station Client software to begin using Version 2.50 of C•CURE 9000.

Installing a New SAS

Perform the following steps to install a C•CURE 9000 SAS server.

You can install the software to a drive on the local computer either from a local DVD or from a shared drive over the network, or from a download from the Tyco Security Products customer web site.

To Install C•CURE 9000

1. Follow Step 1 through Step 4 on page 3-6 through page 3-7.

NOTE The installer must already be a C•CURE 9000 Global Operator with the SYSTEM ALL Privilege at the MAS to which this SAS will connect. See the *C•CURE 9000 Software Configuration Guide* for more information on configuring Operators.

2. On the Unified Dashboard C•CURE 9000 Platforms screen (see Figure 3-2 on page 3-7), select **victor Application Server and C•CURE Client** and click **Install**.

   The **Final Review** screen appears, listing your selections:

   - Prerequisites (if needed)
   - victor Application Server
   - C•CURE 9000 Client

3. Click **Install**.

   The **Prerequisites** screen opens with a list of the services/applications that must be installed first.

   - Select the **By clicking this box...third party software licenses shown here. EULA** check box and then click **Install.**

   The Installation of the prerequisites begins. The screen display tracks the progress down the list.

NOTE If you click **Cancel** to close the installation while a prerequisite is being installed, 'Cancel' will **not** activate until the prerequisite install completes.

   Then the Windows Installer **Preparing to Install** box, Install Setup Wizard messages, and the **Welcome to the victor Application Server Installer** screen appear in turn.

4. Click **Next**. An **End User License Agreement** screen opens.

   Click **I accept the terms in the license agreement**, and then click **Next**.

   The **Customer Information** screen opens (see Figure 3-3 on page 3-9).

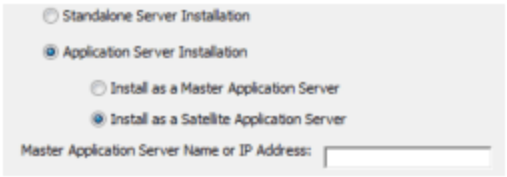
5. Type the appropriate information in the **User Name** and **Organization** entry fields and click **Next**. (The application is installed for all users—anyone who uses this computer.)

   The **Setup Type** screen opens (see Figure 6-1 on page 6-8). This screen allows you to choose the type of Server installation.

6. Choose the **Advanced** option to install a Satellite Application Server.

The Master Application Server Name or IP Address field appears, as shown in Figure 7-1 on page 7-10.

Figure 7-1: C•CURE 9000 Server Installation Type Selection for SAS



7. Enter the name or IP address of the MAS for this SAS.

You cannot remove a SAS from a MAS once the SAS has been installed into the Enterprise Architecture System.

If you are installing this SAS as a Redundant Server, choose **Redundant Server Installation**. In this case, other selections appear (see Figure 3-7 on page 3-11).

Software House requires that Redundant Server Installation only be performed by an integrator trained and certified in Redundancy.

- Enter the name of the Virtual Server in the relevant field.
- If this is the first redundant Server in the AutoStart domain, choose the first option: **This is the first node in the domain**.
- If this is not the first redundant Server in the AutoStart domain, choose the second option: **There is an existing node in the domain**.

The install process validates that the Virtual Server is on the network. (This option is designed for solutions using third party redundancy software such as EMC Autostart.)

8. Click **Next**.

   The **Redundant Personal Data Storage Folder** screen opens (see Figure 3-8 on page 3-12).

   - To have the SQL Server CE-related personal data storage saved in the default folder, leave the path in the **Personal data storage location** field.

     - or -

   - To have this data saved in a different location, click **Change,** and on the **Change Current Destination Folder** screen:
     - Type the path or browse to the folder or drive on which you want to save the data. (You can also create a new folder into which the personal data will be saved.)
     - Click **OK** to select the new path, which is entered into the **Personal data storage location** field.

9. Click **Next**.

   The **Database Server** screen opens (see Figure 3-9 on page 3-12).

10. Use the drop-down list, enter the name, or click **Browse** to select the correct database server for your SAS and then click **Next**. (The correct database server may already be entered.)

11. Click **Next**.

12. Use the drop-down list, enter the name, or click **Browse** to select the correct database server for your MAS and then click **Next**. (The correct database server may already be entered.)

    The **Database Access Credentials** screen opens, where you choose the account for running the CrossFire Services (see Figure 6-4 on page 6-10).

    The **Use Windows authentication credentials** option is required for an Application Server. Consequently, it is pre-selected and you cannot change it.

    A SAS has to have services run as a domain user account. Make sure that the same Windows account is used for all services. In all cases, the selected account must meet the following requirements:

    - Have rights to the Software House SQL databases.
    - Be a C•CURE 9000 Operator with SystemAll Privileges.

13. Enter the Domain Account\Username (this may be entered already), your Password, the Password confirmation, and then click **Next**.

    NOTE Use a **Domain Account\Username** whose password will **not** be automatically updated as this will adversely affect future connectivity. If your Windows password **should change**, you will need to update the password used by the C•CURE 9000 Windows services.

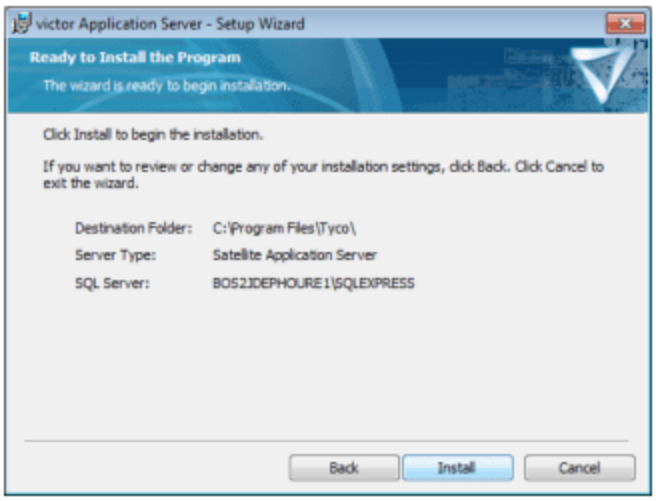
    If the credentials you enter cannot be validated, an error message displays suggesting that you check the username and password again.

    - Click **OK** and then correct the information.

14. Click **Next**.

    The **Ready to Install the Program** screen, shown in Figure 7-2 on page 7-12, appears, listing the location of the installation directory and the system server type, and the SQL Server.

Figure 7-2: Ready to Install



15. Click **Install** to begin the SAS installation.

    - The Install wizard checks that there is enough disk space on the drive to install C•CURE 9000.
      - If there is not enough space, the **Out of Disk Space** screen displays with a list of the drives in question and advises you to remove files from the highlighted drives, install fewer features onto local drives, or select different destination drives.
      - Click **OK** to cancel the installation, return to the **Ready to Install the Program** screen, and fix the problem.

NOTE Microsoft **Internet Information Services** (IIS) must be installed prior to the C•CURE 9000 Server installation to use Web Client, C•CURE Mobile, C•CURE Go, and victor Web Service (see "Configuring IIS on Windows Server Operating Systems" on page 2-21).

If there is enough space, the **Installing victor Application** screen then appears with a progress bar and installation status messages. (This process can take a considerable amount of time.)

If the installation completes without errors, the **victor Application Server Setup Wizard Completed** screen displays (see Figure 3-12 on page 3-15).

- The **Launch Licensing Application** check box is selected by default, prompting you to register the software. Although you could do this now, you can also wait to register the software when the associated C•CURE 9000 Client finishes installing.
  - Leave the check box selected so the License opens. Go to Step 7 on page 3-17.
- The **Show the Window Installer log** check box is unselected by default. To open the log and view the information in that file, select the check box.

16. Click **Finish**.

    The Unified Install Dashboard **Final Review** screen reappears, indicating that it is now installing the Client. A **Preparing to Install** box displays and then the License Manager opens. After that the **Welcome to the C•CURE 9000 Client Installer** screen appears.

17. Let the License Manager remain open and click **Next** to begin the Client install.

Installing the Client (with the Server)

1. Go to "Installing the Client (with the Server)" on page 3-15 and follow the directions in that procedure from Step 1 through Step 7 on page 3-17.
2. Click **Finish** to close the C•CURE 9000 Setup program and start the **Licensing Application**.

Once the entire install completes, you must validate your C•CURE 9000 license immediately to use your C•CURE 9000. You could have done this after the Server install or you can do it now after the Client install has also completed. For licensing information, see Chapter 8, "Licensing C•CURE 9000".

Once a SAS is successfully licensed and installed, removing the SAS license will prevent the SAS from being able to start. Consequently, there is no way that a SAS can be changed back into a Standalone C•CURE 9000 system.

If the License is valid, a message displays 'License Information is correct."

3. Click **OK** and close the License Manager Application. A message then displays saying:

"The services have not been restarted to allow you to set up your system. Open the Server Configuration Application to restart the services before using the product."

After installing C•CURE 9000, you **must** run the Server Configuration Application (**Start>All Programs>Tyco>Server Configuration**) one time to start the CrossFire Framework and CrossFire Server Component Framework Services. (You **cannot** access C•CURE 9000 functions until you start these services.)

In addition, you need to enable and start the Extension Service (Hardware Driver) for each type of controller, video, or network component that will be used on the server. (The Extension Services [Drivers] are **not** automatically started by default because enabling drivers for devices that are not used by the server can affect system performance.)

For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and"Starting C•CURE 9000 Services/Server Components" on page 3-22.

4. Click **Finish**. An Installation Complete message displays.
5. Click **OK**. The Unified Install Dashboard closes.

If both the IP address and the machine name of a MAS or SAS change at the same time, C•CURE 9000 will not automatically recognize that this is the same computer. However, you can run a repair install to fix the problem.

Upgrading a SAS

When you are upgrading your MAS and SAS systems, you must first upgrade the MAS (and its client systems) and then upgrade the SAS systems (and their client systems) to the same version.

Then after the MAS has been upgraded, the MAS must be opened and running in order to upgrade its SASes.

For basic upgrade information and procedures, see "Steps to Upgrade the C•CURE 9000 Software" on page 5-3, including Table 5-1 on page 5-3, and "Upgrading C•CURE 9000" on page 5-5. Be sure, however, to follow the instructions in this section.

- A status message particular only to MAS and SAS systems displays on the **Installing C•CURE 9000** screen during the SAS upgrade warning you that it **may** take a long time for the re-provisioning process to be completed— although this usually proceeds quickly.
- However, the first time you run each SAS after upgrading your Enterprise system, the SAS has to synchronize with the MAS—which does take a long time.

  Consequently, if you are upgrading a MAS and multiple SASes, Software House recommends that you upgrade one SAS at a time, waiting until the upgraded SAS synchronizes with its upgraded MAS before moving on to the next SAS.

Multi-version Support

The Multi-version support feature allows you to maintain certain connections and synchronization between an upgraded MAS and the SAS systems that have not yet been upgraded. This feature provides a temporary solution during the upgrade period for sites with multiple SAS systems that can take substantial time to fully upgrade.

The MAS and every SAS must be running the same baseline version of C•CURE 9000 prior to beginning the upgrade process, in order to take advantage of Multi-version support.

If an Enterprise currently has a MAS at one version and SAS systems with differing versions, it is necessary to upgrade all SAS systems to be at the same version.

After you upgrade the MAS (and all the MAS-connected client systems), you can proceed to upgrade your SAS systems (and all of the SAS-connected client systems). During this process, all the SAS systems can participate in the Enterprise, within version-specific limitations.

The intention still is to proceed with upgrading every SAS to match the MAS version. The difference is that until that point, all the SAS systems can participate in the Enterprise, within version-specific limitations.

Example:

If a Global Operator on the MAS opens the Monitoring Station, and that Operator is currently interactive with SAS systems that have been upgraded and some SAS systems that have not been upgraded, separate Monitoring Station windows open:

- The current upgraded version of the Monitoring Stations is opened for upgraded SAS systems that are interactive.
- The previous version of the Monitoring Station is opened for SAS systems that have not been upgraded and are interactive.

See the *C•CURE 9000 Release Notes* for the upgrade version to determine the previous versions that are supported for Multi-version support in a given release.

See the *C•CURE 9000 Enterprise Architecture Guide* for more details on Multi-version Support.

The following table summarizes the capabilities provided by Multi-version support.

Table 7-3: Multi-version Support Summary

Category	Effects
Multi-version Server Synchronization	Synchronization is allowed to occur between the upgrade MAS and the previous version SAS, but data differences resulting from the upgrade are not synchronized. When the SAS is upgraded, the MAS and SAS re-synchronize to take care of any data not previously synchronized.
Multi-version Client Support	An upgraded client Monitoring Station can connect to a previous version SAS by launching the previous version Monitoring Station as a separate window. A previous version client Monitoring Station cannot connect to an upgraded SAS or MAS. An upgraded Administration client cannot connect to a previous version SAS. A previous version Monitoring Station or Administration client can connect to a previous version SAS, but will not be able to edit Global objects with the exception of adding and removing Personnel Clearances.
Multi-version Integration Impact	A previous version Integration that is not enterprise-aware will continue to operate with a previous version SAS, but not with an upgraded MAS or SAS. An upgraded Integration will only work correctly with an upgraded SAS, because the Integration's installer will not retain the previous version of the integration to launch when communicating with a previous version SAS.

See the ***C•CURE 9000 Enterprise Architecture Guide*** for more information about the specific capabilities and restrictions of Multi-version support.

8

Licensing C•CURE 9000

To access C•CURE 9000 functions, you must activate a valid C•CURE 9000 software license. Your software license reflects the specific model, system capacities, and options that you purchased. You can activate the software license only after you install a victor Application Server for C•CURE 9000.

This chapter describes the license requirements and how you activate and maintain your C•CURE 9000 software license.

(For information on licensing the C•CURE 9000 SiteServer, see the License Process section in the *C•CURE 9000 SiteServer Installation and Configuration Guide*.)

In this chapter

Overview

The software license maps information about the computer designated as the victor Application Server to information on file with Software House regarding the specific C•CURE 9000 model, capacities, and options specified on your order. This combination uniquely defines your C•CURE 9000 installation.

Software House provides a separate license manager application with C•CURE 9000 to activate, validate, and maintain the software license. By default, the License Manager launches automatically when you complete the installation process. You can open the License Manager application again at any time after installation.

NOTE In the event that you need to repair your license, see the following section: "Repairing Licensing in a System Crash" on page 8-21.

About C•CURE 9000 Licensing

After installing C•CURE 9000, you must activate a valid software license to be able to use C•CURE 9000. You first activate a temporary license immediately after installation, followed by a request for a permanent license.

A temporary license allows access to the functions and capacities specified in your order with Software House for a limited time—60 days from the date when the license was created. If you do not activate a permanent software license before your temporary license expires, C•CURE 9000 functions become unavailable the next time the Server restarts. On any computer, you can activate a temporary license only once.

Once you have a license, temporary or permanent, **do not** map a drive **before** the system boot drive—doing so **will invalidate** your license. If the system boot drive is C:, for example, **do not** map a drive as A: or B:. You can map it to any drive after, such as D: through Z:.

Considerations for Licensing C•CURE 9000

C•CURE 9000 employs a licensing model that is different from the one used by the widely installed C•CURE 800/8000 Access Control and Security Management system. Important differences include the following:

- C•CURE 9000 does not use the Sentinel hardware. Instead, the license process introduces the encrypted License file that contains a Host ID to map your victor Application Server C•CURE 9000 feature set to a specific computer.
- A separate license application provided with C•CURE 9000 automatically generates the information that Software House requires to register the unique combination of C•CURE 9000 and your computer.
- By default, the licensing process for C•CURE 9000 initiates automatically, immediately following successful system installation.

License Scope

The C•CURE 9000 license covers:

- Specific operating features and system capacities, including:
  - System serial number, software version number, and model.
  - Warranty/SSA expiration date and system expiration date.
  - Online inputs, outputs, and readers.
  - Simultaneous badging stations managed by the system.
  - Number of cardholders managed by the system.
  - Number of simultaneous Client computers that can access the victor Application Server (includes Web clients).

  The license defines these characteristics in terms of the maximum number allowed on the security network at any time. Each C•CURE 9000 model specifies different quantities for each of the features listed, and you have the option to buy additional capacity after your initial purchase.
- System Options purchased such as DSC Intrusion Integration and Simplex 4100U Integration Licensing Elements.

The most important elements in the licensing process to be followed by the Integrator/Installer are:

- A separate License Manager application that lets you activate, validate, and manage the C•CURE 9000 software license, as well as generate the XML file used for the software registration.
- Host ID – the unique identifier for your Server computer.
- An encrypted license file with information about your order. You copy this file to a folder on the Server computer and point to it during the licensing process. There is a temporary license file and a permanent license file.
- A License text file containing a description of your purchase and the unique License Code (CC9xxxxxxxxxxx) required to register online for the permanent license.
- A generated XML file containing the system information necessary to register online for the license.
- Internet access to complete the C•CURE 9000 software registration and receive your license file via email.
- Valid login credential for the Software House web site required to access the Register a Product page.

NOTE Access is not granted to profiles with the End User role, only to the registered Integrator.

Accessing the License Manager Application

When you install C•CURE 9000, the License Manager application is also installed on the computer you designate as the victor Application Server. You must access the License Manager application to activate and validate your C•CURE 9000 license—whether temporary or permanent.

The License application opens automatically when you complete the installation process for a new C•CURE 9000. To open it in other situations, use the following procedure.

To Access the License Manager Application:

- From the Windows Start menu, select **All Programs>Tyco>Licensing**.

  Figure 8-1 on page 8-4 illustrates how the License Manager **Unified** tab displays when it opens for a new installation, while Figure 8-2 shows the **Unified** tab once you have validated the C•CURE 9000 license.

Figure 8-1: License Manager Unified Tab – New Installation

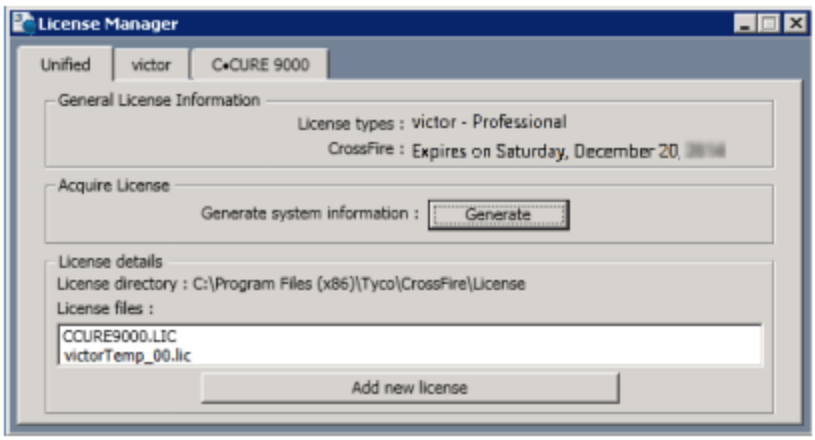
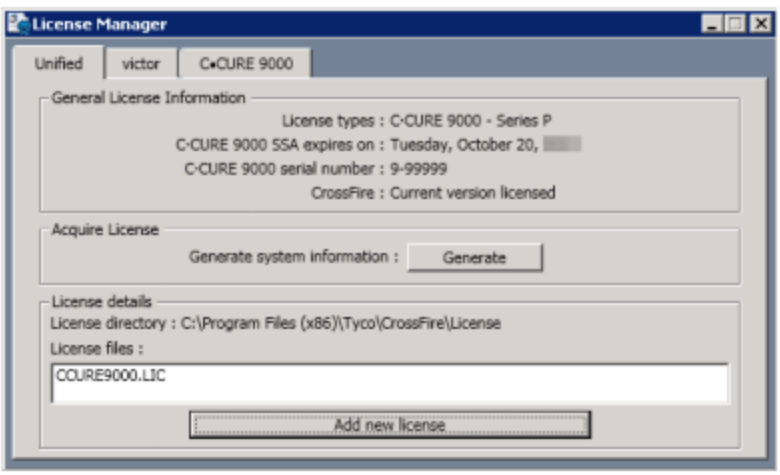
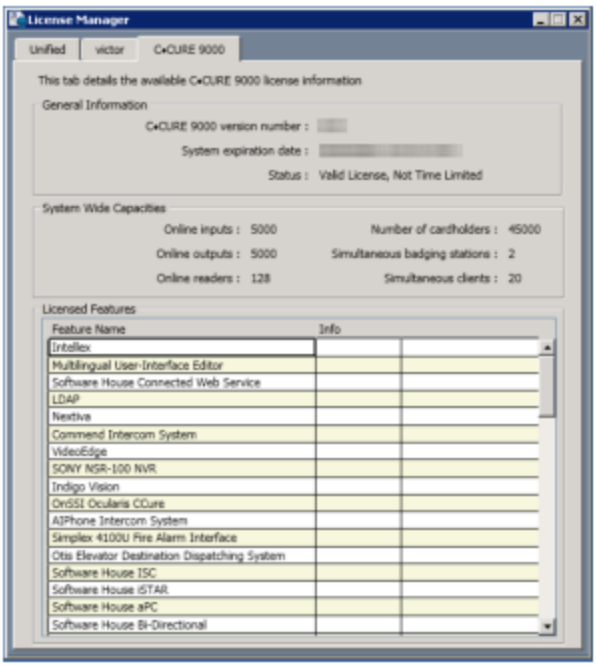


Figure 8-2: License Manager Unified Tab – New Installation Validated



Before you validate your license, the **C•CURE 9000** tab displays zero (0) for all quantities. Only the version number is current. Once you validate your C•CURE 9000 license (and the Services are running), the **C•CURE 9000** tab includes the detailed information about your system, shown in Figure 8-3 on page 8-5.

Figure 8-3: License Manager C•CURE 9000 Tab – New Installation Validated



The **Unified** tab has the fields described in Table 8-1 on page 8-6. The **C•CURE 9000** tab has the fields described in Table 8-2 on page 8-7. (All fields are read-only for both tabs.)

Table 8-1: License Manager Unified Tab Fields

Fields/Buttons	Description
General License Information	
License Types	• Before you validate the C•CURE 9000 license (whether Temporary or Permanent), this field displays: **No valid license detected**. • Once you validate your license, this field displays: **C•CURE 9000 - Series X**. This identifies the C•CURE 9000 model purchased and licensed for this computer that determines the available system capacities and options.
C•CURE 9000 SSA expires on (This field only appears once you have validated your permanent license.)	Specifies the date that the software maintenance agreement expires. The default setting displays a warning 30 days before the agreement is scheduled to expire each time a user logs in to the Monitoring Station or Administration application.
C•CURE 9000 serial number (This field only appears once you have validated your license.)	Identifies your purchase in the Software House License database.This number is generated at time of shipment.
CrossFire	• Before you validate the C•CURE 9000 license (whether Temporary or Permanent), this field displays: **Not licensed**. • Once you validate your license, this field displays: **Current version licensed**.
Acquire License	
Generate system information: **Generate button**	Click this button to create an XML file containing the C•CURE 9000 system information necessary for registering online for a C•CURE 9000 permanent license.

Table 8-1: License Manager Unified Tab Fields

Fields/Buttons	Description
License Details	
License directory	Shows the default path for the location of the encrypted license file that Software House emailed to you: C:\Program Files (x86)\Tyco\CrossFire\License
License Files	▪ Before you validate the C•CURE 9000 license (Temporary or Permanent), this field displays: **CURE9000.LIC** and **victorTemp_00.lic**. ▪ Once you validate your license, this field displays only: **CCURE9000.LIC**. NOTE: If the victor Application Server is used for a Unified victor and C•CURE 9000 system, both victor and C•CURE 9000 permanent license files need to be present.
Add new license button	Click this button to navigate to the default directory where you placed the license file and open the license.

Table 8-2: License Manager C•CURE 9000 Tab Fields

Field	Description
General Information	
C•CURE 9000 Version number	Identifies the specific release of C•CURE 9000 that was purchased.
System Expiration Date	▪ Before you validate the C•CURE 9000 license (whether Temporary or Permanent), this field displays nothing. ▪ Once you validate your license, this field indicates when the license expires. After this date, C•CURE 9000 will open, but it will not operate and clients cannot connect to the server. The default setting displays a warning 30 days before the agreement is scheduled to expire each time a user logs in to the Monitoring Station or Administration application.
Status	▪ Before you validate the C•CURE 9000 license (whether Temporary or Permanent), this field displays nothing. ▪ Once you validate your license, this field displays: "Valid License. [date on which the 60-day temp license expires.]" - Or - "Not Time Limited" for a permanent license.

Table 8-2: License Manager C•CURE 9000 Tab Fields

Field	Description
System Wide Capacities Before you validate the C•CURE 9000 license (whether Temporary or Permanent), this field displays zero (0) for all quantities. Only the version number is current.	
Online inputs	Maximum number of inputs allowed simultaneously online, not the overall number of items configured in the system. If the number exceeds the limit, you can configure new inputs as off-line only.
Online outputs	Maximum number of outputs allowed simultaneously online, not the overall number of items configured in the system. If the number exceeds the limit, you can configure new outputs as off-line only.
Online readers	Maximum number of readers allowed simultaneously online, not the overall number of items configured in the system. If the number exceeds the limit, you can configure new readers as off-line only.
Number of Cardholders	Maximum number of enabled cardholders this installation of C•CURE 9000 supports.The total number of cardholders is infinite, but the number of enabled cardholders is enforced by the license.
Simultaneous Badging Stations	Maximum number of badging/layout printing stations allowed on this C•CURE 9000 system at one time.
Simultaneous Clients	Maximum number of client applications, including web clients, that can simultaneously open a connection with the server and use the C•CURE 9000 software. If two client computers are both running one Administration Station and a Monitoring Station, the total number of Simultaneous Clients is four.
Licensed Features ▪ Before you validate the C•CURE 9000 license (whether Temporary or Permanent), no features display—only "The CrossFire Framework Service is not running. Options are unavailable." ▪ Once you validate your license, all of the licensed features you purchased display below.	
Feature Name	**Info**

C•CURE 9000 Licensing Tasks

Licensing C•CURE 9000 is an interactive process involving an exchange of information between Software House and the individual activating the C•CURE 9000 software license.

The steps you take when you are activating your C•CURE 9000 license vary depending on the specific situation, whether it is for a new installation, an upgraded installation, or a modification of your licensed options. All C•CURE 9000 functions are locked until you activate a C•CURE 9000 license, as described in the task list that follows.

The tasks related to the various licensing situations are:

- "Licensing a New C•CURE 9000 – Temporary to Permanent License" on page 8-10.
- "Enabling and Disabling Your Current License Options" on page 8-14.
- "Licensing a C•CURE 9000 Upgrading to Version 2.50" on page 8-15.
- "Monitoring Your Current License" on page 8-16.
- "Modifying Your Current License to Add Capacity/Options" on page 8-19.
- "Modifying Your Current License to Evaluate an Option" on page 8-20.
- "Repairing Licensing in a System Crash" on page 8-21.

For technical assistance with license activation and validation, send an email to the C•CURE License group at [redacted] or call 978-577-4000.

Licensing a New C•CURE 9000 – Temporary to Permanent License

This section describes how you license a new C•CURE 9000 installation by:

1. Obtaining and validating a temporary license.
2. Then obtaining and validating a permanent license.

Once you have purchased C•CURE 9000, you receive the following files via the e-mail address you supplied:

- An encrypted temporary license file.
- A text file of the preceding encrypted license.

To Activate the Temporary License

The License Manager Application opens by default to the License Manager **Unified** tab after you successfully install C•CURE 9000, as shown in the example for a brand new installation in Figure 8-1 on page 8-4.

- If the License application did not open by default, follow the steps in "Accessing the License Manager Application" on page 8-4 to launch it.

1. Copy the temporary license file you received to the victor Application Server default location as follows:

   C:\Program Files (x86)\Tyco\CrossFire\License.

2. In the open License Manager Application on the **Unified** tab, click the **Add new license** button below the **License directory** and **License files** fields, which display the default license path and file name.

3. Navigate to the default License directory (named in Step 1)and double-click the temporary license file, or select it and click **Open**.

   The file is entered into the **License files** field.

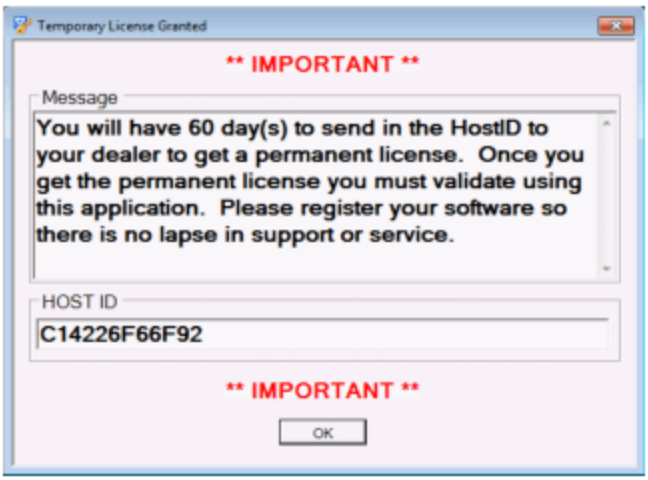
   If the license validates successfully, the **Unified** tab updates to display as shown in the example in Figure 8-2 on page 8-4.

4. When the system displays the **Valid License** message, saying the license information is correct, click **OK**.

   If this is a **standalone** C•CURE 9000 installation **without redundancy**, a message then displays "Restarting Services. Please be patient;\this may take a few minutes."

   Then the Temporary License Granted screen, shown in Figure 8-4 on page 8-11, displays.

Figure 8-4: Temporary License Granted Dialog Box



This dialog box indicates that 60 days remain until the temporary license expires and also displays the Host ID, which you must submit when requesting a permanent license.

5. Click **OK** to acknowledge the successful validation.

   The system enters values in all the License Manager fields according to your purchase order, similar to the example of the **C•CURE 9000** tab shown in Figure 8-3 on page 8-5.

6. The **Status** field in the **General Information** box on the **C•CURE 9000** tab of the **License Manager** application, now displays: "Valid License, Days Left: 60".

NOTE To maintain access to C•CURE 9000 functions, you must activate a permanent license **before** the temporary license expires. You cannot use a temporary license on the same computer more than once. (You can always review the number of days remaining in the life of the license in this field.)

7. Click (close) to exit the License Manager application.

   A message displays saying:

   "The services have not been restarted to allow you to set up your system. Open the Server Configuration Application to restart the services before using the product"

   For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and "Starting C•CURE 9000 Services/Server Components" on page 3-22. (You cannot access C•CURE 9000 functions until you start the Framework services.)

Requesting Your Permanent License

Once you have validated your C•CURE 9000 temporary license and started using your system, you have 60 days to obtain and activate your permanent license.You must make a formal license request to Software House for this permanent license.

To Request the Permanent License

1. Open the License text file that was e-mailed to you. (**Please note** the unique License Code [CC9xxxxxxxxxxx] that is required to register online for the permanent license.)
2. Open the License Manager following the steps in "Accessing the License Manager Application" on page 8-4.
3. Review the information on the **Unified** and **C•CURE 9000** tabs and confirm that the version, model, capacities, and options displayed match those specified in both the text file you received and in your purchase order.
4. Click the **Generate** button to create an XML file containing the C•CURE 9000 system information necessary for generating your permanent C•CURE 9000 license.

   A standard Windows **Save As** box opens for you to save the file with the default name: UnifiedServer_[ComputerName]_SysInfo.xml.
5. Click **Save** and then go to the Software House web site Software Registration Page:

   [redacted]

   a. Fill in the information in the required fields.

   b. Browse to find and attach the system XML file that was generated.

   c. Fill in the C•CURE 9000 License Code (CC9xxxxxxxxxxx)—included in the License text file emailed to you along with the Temporary license file.

   d. Fill in the email address of the license recipient(s).

   e. Click the **Submit** button to complete the online Software Registration process — faxes are **not** accepted:

   Once you have successfully registered, a summary page displays informing you of the approximate wait time for completing your registration.

   Software House then responds to your license request by emailing you an encrypted license file for your permanent license. The file includes information about the license's duration and the licensed capacities and options. You will also receive a text file of the preceding encrypted license.

   If you do **not** receive this email from Software House within the time period specified on the registration summary page, send a message to the licensing group at [redacted]. They will respond accordingly.

NOTE Some products require manual processing—which occurs during normal business hours.

Validating Your Permanent License

Once you receive an email with your permanent license, you must validate it.

To Validate the Permanent License.

1. Copy the permanent license file to the default location:

   C:\Program Files (x86)\Tyco\CrossFire\License.

2. Open the License Manager application, as described in "Accessing the License Manager Application" on page 8-4.

   It appears displaying information similar to that in the examples on the **Unified** and **C•CURE 9000** tabs shown in Figure 8-2 and Figure 8-3 on page 8-5.

3. On the **Unified** tab, click the **Add new license** button below the **License directory** and **License files** fields, which display the default license path and file name.

4. Navigate to the default License directory (named in Step 1) and double-click the permanent license file, or select it and click **Open**.

   The file is entered into the **License files** field. If the license validates successfully, the **Valid License** message displays.

5. Click **OK**.

   A message displays saying:

   "The services have not been started yet so you can install any third-party integrations purchased for your system. When all installations are complete, open the Server Configuration Application to start the Crossfire Framework Services (and any other licensed services) before using the product."

   For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and "Starting C•CURE 9000 Services/Server Components" on page 3-22. (You cannot access C•CURE 9000 functions until you start the Framework services.)

Enabling and Disabling Your Current License Options

You select various options when purchasing C•CURE 9000. Once you have validated your C•CURE 9000 license, the License Manager Application **C•CURE 9000** tab displays your licensed options in the **Licensed Features** list (see the example in Figure 8-3 on page 8-5).

The **Services** and **Server Components** tabs in the Server Configuration Application, which also display your purchased options, allow you to start and stop them. For information, see "Services/Server Components for C•CURE 9000" on page 3-21 and "Starting C•CURE 9000 Services/Server Components" on page 3-22.

Licensing a C•CURE 9000 Upgrading to Version 2.50

If you are upgrading to C•CURE 9000 2.50 from an earlier version for which you have a permanent license, you can license your upgraded application as described in the following procedure.

To Obtain/Validate a Permanent License When Upgrading to V2.50

1. Go the Software House web site Software Registration page:

   [redacted]

2. Click the **C•CURE 9000 Upgrade Center** icon on the page.

   The C•CURE 9000 v2.50 Upgrade Center page opens.

3. Enter any necessary information.

4. Click **Submit**.

   Software House responds by sending you the product DVD and emailing you two encrypted license files—one permanent and one temporary—as well as a License Text File.

5. Use the DVD to upgrade your C•CURE 9000 application to version 2.50.

6. When the Upgrade is completed, use the permanent license file received via email to validate your license. Follow the steps in "To Validate the Permanent License." on page 8-12.

   Keep the temporary license file for future use on another computer in case your permanently licensed system becomes unusable. For information on such a situation, see "Repairing Licensing in a System Crash" on page 8-21.

Monitoring Your Current License

Routinely monitoring your license status can help you to plan allocation of system resources and determine if you need to update the terms of the license to meet changes in your security needs.You can monitor the license using the License Manager Application. You can also view current license information on the **License** tab of the **About C•CURE 9000** dialog box.

Viewing License Status in the About C•CURE 9000 Dialog Box

The **About C•CURE 9000** dialog box is accessible from the C•CURE 9000 Administration Station and the C•CURE 9000 Monitoring Station. The **License** tab displays current information regarding capacities and options allowed by the license currently validated on the C•CURE 9000 server.

In the **License Type** field, the **License** tab indicates whether the license is a **Time Limited** (**temporary**) license or a **Not Time Limited** (**permanent**) license.

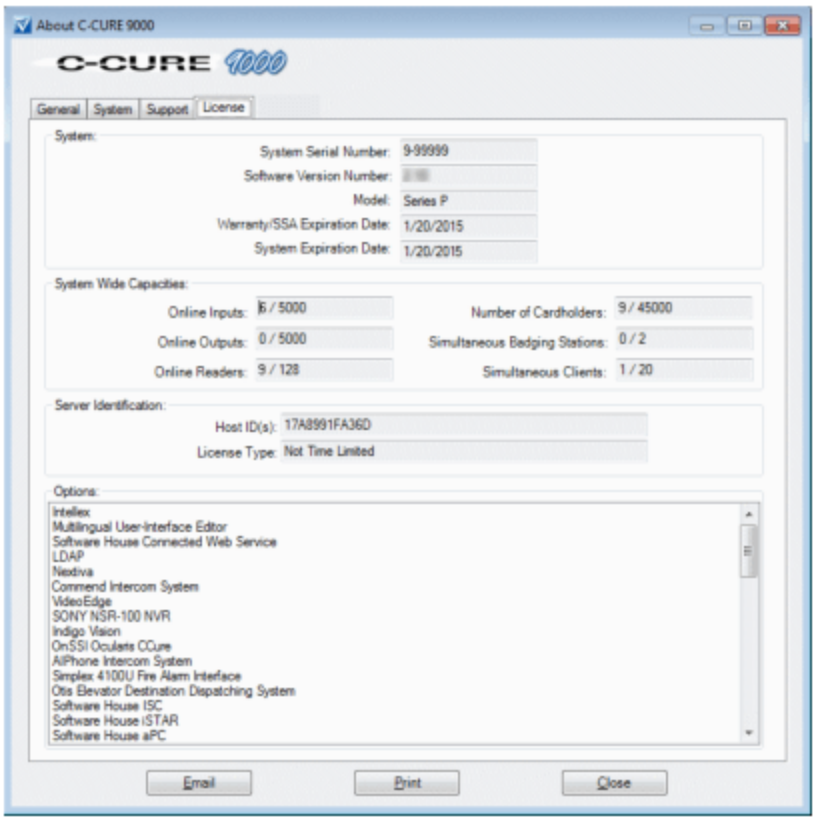
NOTE The **License** tab does not indicate the actual time remaining on a **temporary** license. To determine time remaining on a license, you must open the License Manager Application. See "Accessing the License Manager Application" on page 8-4.

You cannot modify the information displayed on the About **License** tab. To make changes to the license, you must open the License Manager Application.

To View License Status in the About C•CURE 9000 Dialog Box

1. In the C•CURE 9000 Administration Station/Monitoring Station, select **About** from the Help menu.
2. In the **About C•CURE 9000** dialog box, click the **License** tab, shown in Figure 8-5 on page 8-17.

Figure 8-5: About C•CURE 9000 License Tab



Review values in the fields displayed on the tab. All fields are read-only.

- The values displayed for **System**, **System Wide Capacities**, **Server Identification**, and **Options** are identical to those displayed on the License Manager Application. In addition, the **License Type** field indicates the type of license that is currently validated on the system.
- In the **System Wide Capacities** section, the entries in the format n/n indicate the number of that security object in use out of the number the system is licensed for.

  Example:

  In Figure 8-5 "Online Inputs 6/5000" means the system is using only 6 online Inputs while being licensed for 5000.

Viewing License Status in the License Manager Application

The License Manager application displays current information regarding capacities and options allowed by the license currently validated on the victor Application Server. In addition, unlike the **License** tab in the **About C•CURE 9000** dialog box, the License application also indicates the time remaining on a **temporary** license.

To View License Status in the License Manager Application

1. Open the License Manager application as detailed in "Accessing the License Manager Application" on page 8-4.
2. On the **Unified** tab, view the license type and the expiration date of your SSA
3. On the **C•CURE 9000** tab, view system details, system wide capacities, and the licensed features available for your C•CURE 9000 installation.

To Determine Time Remaining in a License

1. Open the License Manager application and click to open the **C•CURE 9000** tab.
2. In the **Status** field in the **General Information** box, review the number of days remaining in the life of the license.
   - If you have validated a **Temporary** license, this field displays: **Valid License, Days Left: nn** – the number of days remaining on the license.
   - If a **Permanent** license is validated on the system, this field displays: **Valid License, Not Time Limited**.

NOTE If you validated a **Permanent** license, the **System expiration date** field in the **General Information** box displays a date in the distant future, such as: **Thursday, January 01, 2099**.

Modifying Your Current License to Add Capacity/Options

This section describes how you modify your C•CURE 9000 permanent license to add capacity or options in response to changes in your security requirements.

To Modify Your C•CURE 9000 License

1. Enter a new purchase order with Software House.

   Software House emails you a new permanent license file to use, as well as a temporary license file.

2. Use the permanent license file to validate your license, as described in "To Validate the Permanent License." on page 8-12.

NOTE If you are adding SWH Connected Web Service Component as a new option, you must stop and then restart IIS after you have validated the new permanent license. (See the IIS documentation.)

You now have a valid license with the increased capacity/option(s) you just ordered.

Keep the temporary license file for future use on another computer in case your permanently licensed system becomes unusable. For information on such a situation, see "Repairing Licensing in a System Crash" on page 8-21.

Modifying Your Current License to Evaluate an Option

This section describes how to modify your C•CURE 9000 permanent license to evaluate a licensed option for a specified period of time.

To Evaluate a Licensed Option for a Period of Time

1. Contact Software House and request to evaluate a C•CURE 9000 option.

   You will receive via email a new license file that contains the licensed feature with an associated expiration date.

2. Repeat the license activation process, as described in "To Validate the Permanent License." on page 8-12 to validate your evaluation license.

NOTE If you are evaluating SWH Connected Web Service Component as a new option, after you have validated the new permanent license you must stop and then restart IIS. (See the IIS documentation.)

The new option is added to your license, tagged with an expiration date, and you can use it for that period of time.

Repairing Licensing in a System Crash

In some situations, such as a hardware failure on the computer designated as the victor Application Server, you may want to transfer C•CURE 9000 to another computer to keep your site operational. However—because the C•CURE 9000 license maps to a specific computer, you cannot use the same license file and Host ID to install C•CURE 9000 on another computer under the same software license.

To Transfer C•CURE 9000 to Another Computer

1. Locate your original C•CURE 9000 DVD and use it to install theC•CURE 9000 software on a different Server computer.
2. Find the temporary license file emailed to you and repeat the licensing process described in "Licensing a New C•CURE 9000 – Temporary to Permanent License" on page 8-10.

9

Uninstalling the C•CURE 9000 Software

This chapter describes the process of uninstalling an existing version of the C•CURE 9000 software from your system.

- If you uninstall a MAS, all the SASes connected to that MAS become permanently unusable, unless the MAS with the same database is installed on a different computer.
- If you uninstall a SAS, the SAS objects still exist at the MAS.

In this chapter

Uninstalling Overview

This chapter describes how to uninstall software from the Server computer and from each Client computer in your security system.

The Uninstall process removes all of the C•CURE 9000 software application and its corresponding files from the computer, including all the CrossFire components.

When the uninstall process completes, the C•CURE 9000 software will no longer be on the computer. Neither **C•CURE 9000 Client** nor **victor Server Application** will display in the Windows Control Panel **Programs and Features** list, and Software House- and CrossFire-related services will not appear in the Windows Control Panel **Services** list.

Before Uninstalling C•CURE 9000

Before uninstalling the software you **must** do the following:

1. **Back up** the system.
2. Close the C•CURE 9000 Client applications.
3. Close the Server Configuration application.
4. **Uninstall** any C•CURE 9000 hot fixes or service packs—as well as the Language Pack application. (See "Uninstalling C•CURE 9000 Language Pack" on page 9-5 for this procedure.)

Uninstalling C•CURE 9000

Should you need to uninstall the C•CURE 9000 application, use procedures in this chapter to remove the following:

1. victor Application Server for C•CURE 9000.
2. C•CURE 9000 Client(s).

You can also uninstall from the Unified Installer DVD or a download – see Section 26 "Repair or Remove a Software Installation" and Section 27 "Repair/Remove a victor Application Server and Client Installation" in the Unified Installer Quick Setup Guide.

To Uninstall the victor Application Server

1. Select **Start>Control Panel>Programs and Features**.
2. Select **victor Application Server** from the list and then right-click to display the **Change** button (if necessary), and click **Change**.

NOTE If there are C•CURE 9000 hot fixes or service packs, select and remove these components **before** removing the C•CURE 9000.

If an unsupported operating system is detected, an error message displays telling you that Windows 7, Windows 8.1, Windows Server 2008 R2, Windows Server 2012, or Windows Server 2012 R2 are the minimum requirement and to upgrade. The setup then exits.

3. On the **Welcome Setup Wizard** screen, click **Next** to continue.
4. On the **Program Maintenance** screen, select the **Remove** option and click **Next** to uninstall.

   The **Uninstall Options** screen appears.
5. Select the **Drop System Databases** check box and click **Next**. The SQL Server components will be removed with the victor Application Server application.

Selecting **Drop System Databases** in this screen will destroy all of your data.

The **Ready to Remove victor Application Server** screen opens informing you that you can click **Back** to review/change any settings.

6. Click the **Remove** button to uninstall.

Selecting **Remove** in the **Remove Program** screen will remove all C•CURE 9000 components from your system.

The victor Application Server screen displays informational messages about which components are being removed from the computer.

When the removal process is complete, the **victor Application Server Setup Wizard Completed** screen opens.

7. Select **Finish** to exit from the uninstall program.
8. Return to the Windows Control Panel **Programs and Features** window and verify that **victor Application Server** is no longer listed. (You may need to refresh the screen.)

NOTE If you want to remove SQL Server, use the Windows Control Panel - **Uninstall or Change a Program** feature.

9. Go to the next procedure to uninstall the C•CURE 9000 Client.

To Uninstall the C•CURE 9000 Client

1. On the Windows Control Panel **Programs and Features** window, select **C•CURE 9000 Client** from the list, right-click to display the **Change** button (if necessary), and click **Change**.
2. .When the **Welcome to the C•CURE 9000 Client Setup Wizard** screen appears, click **Next** to continue.
3. On the **Repair or remove installation** screen, select the **Remove** option and click **Next** to uninstall.

   The **Ready to remove C•CURE 9000 Client** screen opens informing you that you can click **Back** to review/change any settings.
4. Click **Remove** to uninstall the Client software.

   When the uninstall of the C•CURE 9000 Client is complete, the **C•CURE 9000 Client Wizard Completed** screen opens.
5. Select **Finish** to exit from the uninstall program.

   Return to the Windows Control Panel **Programs and Features** window and verify that the **C•CURE 9000 Client** are no longer listed. (You may need to refresh the screen.)

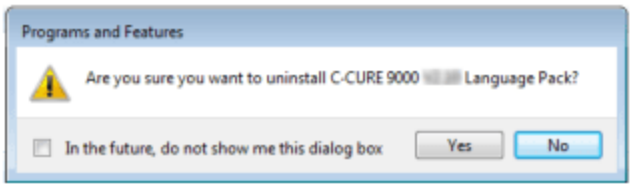
Uninstalling C•CURE 9000 Language Pack

Should you need to uninstall the C•CURE 9000 Language Pack application, use the following procedure.

To Uninstall the C•CURE 9000 Language Pack Software

1. Select **Start>Control Panel>Programs and Features.**
2. Select **C•CURE 9000 Language Pack** from the **Uninstall or change a program** list.
3. Click **Uninstall**. The **Programs and Features Language Pack Uninstall** screen appears (see Figure 9-1 on page 9-5).

Figure 9-1: Programs and Features Language Pack Uninstall screen



4. Click **Yes** to continue.

   Screens appear with status messages. When the uninstall of the C•CURE 9000 Language Pack software is complete, the Windows Control Panel **Programs and Features** window reappears.

5. Verify that the **C•CURE 9000 Language Pack** is no longer listed.

10

Troubleshooting C•CURE 9000

This chapter provides guidelines for troubleshooting both hardware and software problems that you may encounter.

In this chapter

Install Logs

C•CURE 9000 automatically creates four logs during installation that show errors as well as other relevant information:

- UnifiedInstallDashboard.log file– for installing the Unified Dashboard.
- UnifiedServerInstall_[Date/Time].log file– for installing the victor Application Server.
- DBManager_Deploy_UNIFIEDSERVER-[Date/Time].log file – for installing the database.
- CCure9000ClientInstall_[Date/Time].log file – for installing the C•CURE 9000 Client.

Check the %TEMP% directory to help identify the cause of the installation problem. On systems with UAC (such as Windows Server 2012 R2, Windows Server 2008 R2 and Windows 7), you may need to go up one level to get to the root of the Temp directory.

Example:

On Windows 7, %TEMP% typically defaults to **C:\Users\<username>\AppData\Local\Temp**

In addition, Software House recommends reviewing the following logs:

- **Program Files (x86)\Tyco\CrossFire\License\logfile.txt**
- Windows Application and System logs for errors generated by the C•CURE and CrossFire services.

  a. Click **Start>Computer>right-click Context Menu> Manage**.

  b. On **Computer Management** window, select **Event Viewer>Windows Logs>Application** and **System**.
- SQL Server logs.

Installation

Table 10-1: Troubleshooting Installation Errors

This problem...	May be caused by...	Check or do this...
Installation failed. Error Messages: Error reading DVD. Error decompressing files.	A bad DVD drive or only a CD-ROM drive. Hard disk errors.	Check the type of drive. Try reading the DVD on another system.
	A software problem.	Check the final summary message from the installation (success, warning, or error). ▪ A **warning message** indicates there is a problem, but you can still continue. ▪ A **severe error message** tells you what the problem is and then aborts the installation. ▪ All warning and error messages appear in the %TEMP% directory in the installation logs with a description. See "Install Logs" on page 10-2. Does the user name that you used to log into Windows have Administrator permissions? Are you running the correct version of Windows? (Check the Windows version and Service Pack number. The Service Pack is available on http://[redacted]) Did you close all other applications before starting the installation, such as anti-virus? If this is a remote SQL Server installation, contact the Software House Customer Support Center. For information, see Chapter 11, "Software House Customer Support".
Installing C•CURE 9000 on Laptop Systems Error Messages.	On laptop systems, a domain account cannot be used to perform the C•CURE 9000 installation, even if a remote connection to the domain is available. This is due to the possibility that a domain account's cached credentials will cause invalid user IDs to be created during the SQL Server 2008 R2/2012/2014 portion of the C•CURE 9000 installation. This results in "cannot generate SSPI context" error messages that will cause the installation to fail.	To work around this issue on laptop systems, the local administrator account must be used to run the C•CURE 9000 installation, preferably after rebooting the computer. The computer may also need to be rebooted after the installation. NOTE: This workaround will not work if you are installing a MAS or a SAS. You must install them on suitable computers. For additional information see Microsoft Knowledge Base article [redacted]/kb/811889.

Licensing

Table 10-2: Troubleshooting Licensing Errors

This problem...	May be caused by...	Check or do this...
License validation failed. Error Messages: License File does not exist. Assure the license file is there on disk. Unable to decrypt license file. Tampered license file, contact the dealer for a new license file. Version mismatch. You are not licensed for this version of the 9000. Unable to back up license file. Make sure that the license file, CCure9000.lic, is not set to Read-Only. Past evaluation period. License has already had its temporary period. You will need to get a new license letter and file that contains a valid HOST ID. Please contact your dealer with this HOST ID.	Registration not completed.	You must complete the License Registration Form on the Software House web site Software Registration Page: [redacted]software_registration.aspx. An updated license file will be sent to you at the email address you entered in the form. You should then validate your permanent license pointing to that file.
Invalid license	Host ID changed due to: ▪ Multiple NIC cards. ▪ Serial number of the Windows boot drive (Usually C:) changed. ▪ MAC address of the NIC card changed. Since the licensing application uses Host ID (a numeric composite of several unique values, including the serial number of the boot drive and the MAC address of the NIC) to verify identity of victor Application Server and ensure software is running on same system initially licensed, changes to any of those values changes the Host ID—thus invalidating the license. If the server computer is multi-homed with more than one NIC, any of the Host IDs can be used for the license, but the same rules apply if it changes,	Click the **Generate** button on the License Manager application **Unified** tab to re-create the XML file and re-submit for a new license.

Table 10-2: Troubleshooting Licensing Errors, continued

This problem...	May be caused by...	Check or do this...
Other Error Messages.	Upgrading C•CURE 9000 from a version that is not supported for upgrade.	Review the C•CURE 9000 release notes for the version you are attempting to install to verify that it supports an upgrade from your current version. Contact the Software House Customer Support Center. For information, see Chapter 11, "Software House Customer Support".
	Undetected error during installation.	If you overlook an error that occurs, or if an error message box appears and you decide to continue installation anyway, that error may cause conditions that make the License Validation fail. Contact the Software House Customer Support Center. For information, see Chapter 11, "Software House Customer Support".
C•CURE 9000 Computer restarts after shutting down, but Crossfire Services do not restart. (This can happen if the system goes down during the night and then reboots.)	The Network Services on the computer have not fully started even though there is a prerequisite in the starting of the TycoESS service. The problem is indicated by the following record in the LogFile.txt in the License sub-folder: 14:25:53 (TYCOESS) EXTERNAL FILTERS are OFF 14:25:53 (lmgrd) TYCOESS using TCP-port 27010 14:25:53 (TYCOESS) No valid hostids, exiting 14:25:53 (TYCOESS) EXITING DUE TO SIGNAL 25 Exit reason 2 14:25:53 (lmgrd) TYCOESS exited with status 25 (Invalid host) 14:25:53 (lmgrd) Please correct problem and restart daemons	Configure TycoESS to wait for a period of time before it begins, as follows: 1. Locate the registry entry for your license service manager service at: HKEY_LOCAL_MACHINE\SOFTWARE\FLEXlm\TycoEss (If 64-Bit this path would be: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\FLEXlm License Manager\TycoESS) 2. Optionally, to configure a delay longer than 20 seconds, add a string value to the registry and set the fields in this entry as follows: • NAME - unlimitedServiceDelay • TYPE - REG_SZ • DATA - no value set 3. Add a string value to the registry entry and set the fields as follows: • NAME - serviceDelay • TYPE - REG_SZ • DATA - the service delay in seconds. Suggested value of 60.

Communications

Table 10-3: Troubleshooting Communications Errors

This problem...	May be caused by...	Check or do this...
Error Messages: iSTAR in communications failure. Cannot communicate with the iSTAR Controller.	A firmware problem.	Do you have the correct firmware version of the iSTAR Classic, iSTAR Pro, iSTAR eX, iSTAR Edge, or iSTAR Ultra?
	A wiring problem. A problem with the iSTAR itself.	See the *iSTAR Classic/Pro Installation and Configuration Guide*, *iSTAR eX Installation and Configuration Guide*, *iSTAR Edge Installation and Configuration Guide*, or *iSTAR Ultra Installation and Configuration Guide*.
	A network issue.	Is TCP/IP installed correctly?. Try pinging the system to diagnose the problem.
An Administration Client on the Server is not communicating with the Server.	A configuration problem.	Check the name in Client configuration. Check the Event Viewer for error messages.
A Monitoring Station or Administration Client on a remote computer is not communicating with the Server.	A TCP/IP problem or a physical network problem.	▪ Is TCP/IP installed correctly?. ▪ Try using the PING command to diagnose the problem.
	A mismatch of versions.	Make sure that the Server and Clients are all running exactly the same C•CURE 9000 version and build number. Check from System Control Panel: **Programs and Features**>**C•CURE 9000** [current version] with **Show Updates** check box on top of window selected.
	The Server is not running.	Verify that the Server is running and that you can run the Administration and Monitoring Station applications on the Server computer. Check the Event Viewer for error messages.
If the victor Application Server cannot connect to the C•CURE 9000 database twice within a 60 second period, with both failures at least 10 seconds apart, it shuts down. An Activity Message appears on the Monitoring Station.	A TCP/IP problem or a physical network problem. A problem with the SQL Server database.	When the database connection is restored, restart the CrossFire Server Component Framework Service and the CrossFire Framework Service using the **Start**>**AllPrograms**>**Software House**>**C•CURE 9000**> **Server Configuration**.
	Problem with connection strings.	Test database connections in the Server Configuration Application on the **Database** tab.

Windows

Table 10-4: Troubleshooting Windows Errors

This problem...	May be caused by...	Check or do this...
Windows Error Messages indicating a resource problem with disk space or the pagefile.	The hard drive is too small or the pagefile, temporary database, or journal are growing.	▪ Enlarge page file from the System Control Panel **System>Advanced system settings> Performance>Settings>Advanced.** ▪ Move temporary database. ▪ Move journal or perform log volume management.
System is running out of Virtual memory.	The pagefile is too small.	Enlarge pagefile from the System Control Panel as described above.
The system is **very** slow, the hard disk is always busy, and the available memory is always less than 5,000 KB.	You need more physical memory.	Add RAM.
	The pagefile is too small.	Enlarge the pagefile as described in the box above.
	Another process is consuming the CPU.	Try following these steps in sequence: 1. Run Task Manager and check if there is consistently no idle CPU time. 2. Notice which process is using most of the CPU. 3. Restart everything and see if it gets better. 4. If system performance does not improve after taking the steps above, call the Software House Customer Support Center. For information, see Chapter 11, “Software House Customer Support”.
	SQL Server has either **not enough** or **too much** memory.	Check and limit maximum server memory in SQL Server, allocating memory depending on existing amount installed on the Server. For information, see “Limiting Amount of RAM Memory Allocated to SQL Server” on page 2-15.

Inputs and Outputs

Table 10-5: Troubleshooting Input and Output Errors

This problem...	May be caused by...	Check or do this...
The inputs and/or outputs are not functioning.	An object is either offline or undefined.	Check the **Status** tabs in the Input and Output Editors in the Administration application.

	Wiring problems.
	Configuration problems.
		• Is the controller online?
		• Are the outputs online? If not, try the following steps:
		  • Try manually activating the outputs.
		  • If the Status shows that the output is active, but it is not functioning, check wiring.
		  • Check cause list in the Monitoring Station.
		  • Are the inputs armed?
		  • Check the priority of the action you think should be active, increase the priority, and try again.

	The controller is not communicating.	See "Communications" on page 10-6.
	The driver is not running.	Check the list on the **Services** tab in the Server Configuration Application

Card Readers

Table 10-6: Troubleshooting Card Reader Errors

This problem...	May be caused by...	Check or do this...
Card swipes do not work.	The reader is ▪ offline. ▪ is not configured. ▪ is secured. ▪ Tamper.	▪ Configure reader ▪ Check that the reader is ◦ online ◦ not secure ◦ wiring ◦ whether tamper. ▪ Turn on iSTAR raw card read (set rotary switch to correct position) and then swipe card to show card-bit structure in hexadecimal. Can reveal reason for problem.
Personnel access is rejected when it should have been admitted.	▪ Clearance. ▪ Activation.	Check the reason for the rejection: ▪ If the reason is “Clearance,” check clearance in the Personnel record, the time specification and door in clearance. ▪ If the reason is “Expired” or “Disabled,” check the expiration and activation dates in the Personnel record. ▪ In Monitoring station, can view reason for the rejection, whether for “Clearance,” “Facility Code,” etc.
When a card was swiped, personnel access was rejected (card misread).	The card format may be improperly configured.	Check the **Card Format** dialog box.
	The card reader may not be configured with the correct card format.	Check the **Card Formats assigned to** the reader.
	A parity error on the card.	The card may have been corrupted. Try another card.

Monitor Display and Operation

Table 10-7: Troubleshooting Monitor and Display Option Errors

This problem...	May be caused by...	Check or do this...
Windows are too large for the screen.	The screen fonts are too large.	Make sure the monitor is set as follows in the Display Control Panel: ▪ A minimum of 1024 x 768 resolution. ▪ Small font size.
The color does not display properly.	The number of colors is set incorrectly.	Set to 32-Bit.
Cannot see or open pane function buttons, such as **Options & Tools** and **Configuration**, etc., in Administration application and therefore cannot use the application.	Font dpi is set to large.	Change font dpi to normal size.

Start Up

Table 10-8: Troubleshooting Start Up Errors

This problem...	May be caused by...	Check or do this...
Driver(s) did not start properly.	License information is incorrect. ▪ License has expired.	Check the Event Viewer System Log for error messages or logfile.txt in ProgramFiles\Tyco\CrossFire\License. ▪ Get an updated license. ▪ Reboot the system.
The Administration application and Monitoring Station on a Client computer in a Windows workgroup configuration do not open up after installation of C•CURE 9000.	May be caused by a mismatch between the operator account and the client configuration settings.	Verify the following: ▪ Client Operating System is Windows 7. ▪ Operator you are logged in as has a password. ▪ Server and client have the same user with the same password. Use the following steps to launch the Administration and Monitor application: 1. Start the Administration application on the client computer (it will not open completely). 2. Right-click the Administration application icon in the System Tray and select **Configure**. 3. Enter the C•CURE 9000 Server IP address in the **Server** box and click **Save and Close**. 4. Re-start the Administration application
A user name and/or password are rejected.	User permissions are not set up correctly.	Does the operator have privilege to use the application?
	The Windows user permissions may be incorrect.	Have permissions been set up so this user can run the application?
	The user name may be incorrect.	Has the user been set up as a valid user for the Administration application?
	The user password is incorrect.	Try changing the password in the Administration application and then have user log in again.

Monitoring Station

Table 10-9: Troubleshooting Monitoring Station Errors

This problem...	May be caused by...	Check or do this...
Active events do not appear on the Monitor.	The event may have been configured to not be annunciated.	Check the **Event Configuration** dialog box to see whether the **Send to Monitoring Station** option is enabled.
	The event may not be active.	Check the event in question.
	The event was configured to clear when acknowledged and has been acknowledged.	Check the **Event Configuration** dialog box to see whether the event was configured to clear when acknowledged.
	The user logged into the Monitoring Station does not have privileges to view the event.	Check the monitoring privileges of the user logged into the Monitoring Station.
The Monitoring Station is not receiving new messages.	The drivers are not running, or Server not online.	▪ Restart the Monitoring Station. ▪ Run the Server Configuration Application and check on the **Services** tab that the appropriate services and drivers are running. ▪ Check for a network problem. ▪ Restart the appropriate services and drivers on the Server Configuration Application **Services** tab.

Reports and Maps

Table 10-10: Troubleshooting Reports, Maps, and Records Errors

This problem...	May be caused by...	Check or do this...
Reports do not print.	The printer is incorrectly configured.	Try printing from Notepad as a test.
	No connection to a network printer.	Refer to the Windows documentation for guidance.
	Printer not plugged in.	Make sure the printer is plugged in and turned on and is online.
	Incompatible printer	Refer to the compatible printers section in the Windows documentation for specific models.
	Incompatible printer driver	Uninstall and then reinstall the printer, obtaining latest driver compatible with the application.

Miscellaneous Problems

Table 10-11: Troubleshooting Miscellaneous Problems

This problem...	May be caused by...	Check or do this...
Manual actions do not work as expected.	The priority of the action may be lower than the current cause of the object.	Use the **Event Configuration** dialog box to adjust the action's priority.
	The object may be offline.	You may want to put the security object online. Use the **Event Configuration** dialog box to do this.
	The object may be in communications failure.	Ensure that the physical device is properly connected.
Security objects are not in the state expected.		Look at the **Active Cause** dialog boxes in the right-click context menu to determine what is putting the object into the current state.

MAS and SAS

Table 10-12: Troubleshooting MAS and SAS Errors

This problem...	May be caused by...	Check or do this...
Installation failed. Error Messages: Error reading DVD. Error decompressing files.	MAS unavailable when installing SAS. Hard disk errors.	Make sure that SAS can communicate with the MAS. Make sure that MAS is online when installing SAS. Try reading the DVD on another system.
	A software problem.	Check the final summary message from the installation (success, warning, or error). ▪ A **warning message** indicates there is a problem, but you can still continue. ▪ A **severe error message** tells you what the problem is and then aborts the installation. ▪ All warning and error messages appear in the %TEMP% directory in the installation error logs with a description. See "Install Logs" on page 10-2. Does the user name that you used to log into Windows have Administrator permissions? Are you running the correct version of Windows? (Check the Windows version and Service Pack number. The Service Pack is available on http://[redacted]) Did you close all other applications before starting the installation, such as anti-virus? If this is a remote SQL Server installation, contact the Software House Customer Support Center. For information, see Chapter 11, "Software House Customer Support".

11

Software House Customer Support

This chapter provides customer support information for C•CURE 9000 certified dealers/ integrators.

Software House accepts service calls **only** from employees of the Systems Integrator of Record. C•CURE 9000 **product users** with post-sale technical questions should contact their dealer.

In this chapter

Contacting the Software House Customer Support Center

Telephone Technical Support

During the period of the Agreement, the following guidelines apply:

- Software House accepts service calls **only** from employees of the Systems Integrator of Record for the installation associated with the support inquiry.

Before Calling

Ensure that you:

- Are the Dealer of record for this account.
- Are certified by Software House for this product.
- Have a valid license and current Software Support Agreement (SSA) for the system.
- Have your system serial number available.
- Have your certification number available.

Table 11-1: Customer Support Hours and Phone Numbers

Hours	Normal Support Hours	Monday through Friday, 8:00 [redacted]. to 8:00 [redacted]., EST. Except holidays.
	Emergency Support Hours	24 hours/day, seven days a week, 365 days/year. **Requires Enhanced SSA "7 x 24" Standby Telephone Support (emergency) provided to Certified Technicians.** For **all other customers**, billable on time and materials basis. Minimum charges apply – See MSRP.
Phone	For telephone support contact numbers for all regions, see [redacted]	

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