

victor Unified Client

Commend Intercom Integration User Guide REVISION A0

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Overview

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Understanding Commend Intercom Systems

An intercommunication device (intercom) is an electronic communications system that provides dedicated voice communications, such as private dialog or announcements, throughout a facility. Such a facility could encompass a single building, a campus, or a collection of offices located across the globe.

Intercoms that are installed within a facility include a fixed microphone and speaker unit that are hard-wired to a central control panel. Larger systems might connect all of the rooms in a school or hospital to a central office. Intercoms in larger buildings often function as public address systems, capable of broadcasting announcements.

Within each facility, an intercom system comprises stations and substations connected by an intercom server. Intercom stations can be portable or installed at doors or wall locations in buildings, on desktops or in vehicles. Intercoms can also be connected with hard-wired and mobile telephones or handheld communications devices or to other intercom systems over voice or data lines. Stations are analogous to telephones with dial-keypads, also called control desks. Substations are often flat, single or dual button intercoms mounted on a wall.

Commend Intercom Systems and victor Unified Client

Commend manufactures a diverse range of intercom products. The integration between victor Unified Client and three Commend Intercom servers share a common protocol. These servers are: GE 100, GE 200, and GE 700.

Each Commend GE class server has a limit to the number of stations that it can administer, so the number of servers deployed throughout a facility is dependent on the number of station required. Commend servers can be connected to form an intercom network. victor Unified Client can be connected to a Commend GE class server with a terminal device server such as a Lantronix UDS-10. The intercom network or stand-alone server issues commands delineated by a dedicated protocol. victor Unified Client connects to this server and monitors and sends commands that identify calls placed among all the stations tied to this server's intercom network.

victor monitors those substations and groups of substations identified and configured with victor Commend Intercom editors by displaying their state, sending calls, receiving calls, etc. The state changes of intercom stations and substations are also monitored in the victor activity viewer and journal. In the maps, each station is represented by an icon that identifies a particular state.

A Commend Intercom system can remotely direct an event management framework to control electronic or electromechanical devices such as cameras, door latches, vehicle barriers, alarms, or signal lights.

victor Unified Client's interface can also be used to transmit intercom-only commands over the IP network for synergistic operation with existing Commend Intercom systems.

Example:

In many schools, tones signaling the change of classes are often sounded over an intercom, replacing electromechanical bells used in older schools. Additionally, many schools now use audio intercoms that interface with a video system to identify visitors attempting to gain access to a locked school building.

Intercom Over IP

Commend Intercom systems can interconnect with victor access control systems via a digital connection over the internet. Digital intercom stations are connected using Cat 5 cable and can use existing computer networks for remote communication.

Data networks allow transmission of diverse data. Voice over IP (VoIP) is the transmission of speech using Internet Protocol (IP), particularly in telephony. For professional security and communication solutions, Commend provides the Intercom over IP (IoIP®).

Benefits of IoIP

Historically, only telephones used the IP network to transmit speech as a VoIP solution. Today intercom systems can use the IP network not only to transmit speech, but also to take on increasingly complex control and reporting tasks. The principle of IoIP is that new IP enabled-servers can be connected together in a network so that complex solutions can be used both locally and remotely.

Integration of Commend Intercom systems with victor allows the processes to be triggered and controlled by creating and enabling victor events. These events can be reported on the victor Journal, while video cameras provide a visual record of the event.

Example:

An event can be configured so that when a wall-mounted substation is activated at a door, the Commend Intercom/victor interface reports a visitor requesting entry at a door, while simultaneously activating a camera that provides a live video feed. Once the visitor is recognized, the corresponding door latching mechanism can be activated, allowing entry.

Intercom Over Internet Protocol Technology

When networking via IP is required to monitor various site locations, the sites need to be linked together. Intercom terminals with digital 2-wire or analog 4-wire technology can be IP-enabled by connecting to an IP Intercom Server. Commend has developed networking solutions for IP, ISDN, E1, and HDSL platforms. Networking intercom servers allows the local intercom system to act as one large system across different sites. All specified functions are available across the entire Intercom network and programming is conducted centrally from a single victor location.

Commend Intercom Components

Connection of victor Unified Client to an existing Commend Intercom facility can be accomplished through a network router to a switch/hub and then via a terminal server connected to a Commend Intercom Server.

Supported Terminal Server

A terminal server is a device that aggregates multiple communication channels. Because these channels are bidirectional, two models emerge:

- Multiple entities connecting to a single resource the victor Unified Client interface
- Single entity connecting to multiple resources the Commend IoIP facility

victor supports the Lantronix UDS-10 terminal server. The USD-10 is connected to the network hub with an RJ-45 CAT-5 cable from the 10BASE-T connector. To connect a terminal server to a WAN, ensure that gateways, routers, level 3 switches, and firewalls do not affect TCP/IP communications. The Port entry and the IP address that are configured in the Commend Central editor correspond directly to the terminal server. Only one terminal server is required per Commend network.

Commend Intercom Servers

victor Unified Client integrates with five Commend Intercom servers that share a common protocol:

- GE 100
- GE 200
- GE 300
- GE 700
- GE 800

GE 100 Server

The Commend GE 100 is a microprocessor-controlled intercom server for up to 32 subscribers at one location. The Commend GE 100 allows connection of analog 4-wire stations. It also provides slots for subscriber cards and various interface cards. The Commend GE 100 has a compact plastic housing designed for wall mounting.

The Commend GE 100 allows the following number of simultaneous conversations: 2 Duplex/6 Full Duplex/12 Simplex. The Commend GE 100 is designed to be used for intercom systems limited to one location. The Commend GE 100 also provides the means to forward calls to the public telephone network.

GE 200 Servers

The Commend GE 200 server is a microprocessor-controlled intercom server for up to 32 subscribers at one location. The Commend GE 200 allows connection of digital 2-wire stations and analog 4-wire stations and IP-terminals for IoIP, within one housing. The Commend GE 200 also provides slots for subscriber cards and various interface cards. The Commend GE 200's compact plastic housing is designed for wall mounting.

The number of simultaneous conversations that the Commend GE 200 allows depends on the link cards used. The Commend GE 200 is designed for small intercom systems that are designed as local units for large communication and security systems. The Commend GE 200 also provides the means to forward calls to the public telephone network.

GE 300 Servers

The Commend GE 300 server is a microprocessor controlled intercom server for up to 80 IP-subscribers per housing. This intercom server suits small or medium-sized intercom applications or operates as a network node in larger intercom networks. The GE 300 provides connection of digital 2-wire stations, analog 4-wire, SIP stations, and SIP/VoIP telephones. The Commend GE 300 is designed for wall mounting.

Providing security and communication systems with up to 14,280 networked Intercom Servers, the GE 300 has built-in functions for fuctions such as: door and gate control, alarms, CCTV integration, and control desks.

GE 700 Servers

Commend's GE 700 is a microprocessor controlled, System Intercom Server designed for rack-mounted 19 inch technology for up to 5,760 subscribers. The Commend GE 700 allows connection of digital 2-wire stations and analog 4-wire stations and IP-terminals for IoIP within one housing. The Commend GE 700 allows 14 free slots for subscriber cards and various interface cards. The Commend GE 700 has a plastic housing of 3 height units for 19 inch racks.

The number of simultaneous analog conversations that the Commend GE 700 provides depends on the link cards used. The Commend GE 700 is designed to be used for medium and large intercom and/or IoIP-

systems. The Commend GE 700 allows communication/security systems for up to 120 network-connected intercom servers— analogous to 5,760 stations. The Commend GE 700 also provides the means to forward calls to the public telephone network.

GE 800 Servers

The GE 800 IP-Intercom server allows connection of IP, 2-wire, 4-wire, and SIP-stations as well as additional SIP/VoIP telephones. Designed with 3 rack units for mounting, the integrated functions of the GE 800 servers include, but are not limited to: door and gate control, alarm, video integration, and control desk operations.

The GE 800 server allows security and communication systems with up to 14,280 networked Intercom Servers and 896 IP-Subscribers per housing. It is also possible to forward calls to the public telephone network via VoIP through this server.

IP Intercom Terminals

After networking intercom servers via IP, Commend introduced the IP intercom terminal, the ET 901. Using the ET 901 IP Intercom terminal, every intercom terminal can be directly connected to the IP network. Every analog or digital Commend intercom terminal is therefore IP enabled, allowing for an onsite solution for every type of application. By using victor's events, intercom servers can report and control functions with voice connections via an IP network. Commend's ET 901, among other IP intercom modules, provides a built-in IP connection, which can be readily connected directly to the IP network.

ET 901-D

The ET 901-D IP-Intercom terminal is connected between the Ethernet connection (LAN/WAN) and any desired digital 2-wire Intercom Terminal. This turns the station into an IP-station that is connected to the Intercom Server via the IP-network. The integrated switch with downlink function allows direct connection of further IP-products, such as an IP-camera. The ET 901-D IP-Intercom box contains the latest DSP-technology. Therefore the connected Intercom Terminal can utilize the standard functions as well as DSP-functionality.

ET 901-A

The Commend ET 90-A IP-Intercom terminal is connected between the Ethernet connection (LAN/WAN) and any desired analog 4-wire Intercom Terminal. This turns the station into an IP-station that is connected to the Commend GE class Intercom Server via the IP-network. The integrated switch with

downlink function allows direct connection of further IP-products, such as an IP-camera. The ET 901-A IP-Intercom terminal contains the latest DSP-technology. Therefore the connected Intercom Terminal can utilize the standard functions as well as DSP functions, such as Audio Monitoring or OpenDuplex.

IP-Intercom modules are Intercom build-in kits for integration in existing housings and panels or building of customer specific stations. The modules are connected directly to the Ethernet (LAN/WAN) and in this manner are connected to the Intercom Server via the IP-network. The built-in switch with downlink function allows direct connection of an additional IP-device, such as an IP-camera. ET 90-A supports DSP-functions such as OpenDuplex, Audio-Monitoring, and loudspeaker/microphone surveillance.

Intercom terminals are connected to the Intercom Server via the IP network. A single CAT 5 cable is used from the Intercom to a switch. This is made possible by the cascade arrangement of the subscriber cards on the Intercom Server. In this way, up to 48 Intercom terminals can be controlled using just one cable from the Intercom Server to the switch. Transmission to the Intercom terminals is carried out via the data network.

IP Intercom Stations

Commend manufactures a variety of intercom stations that are suitable for use with the Commend GE class servers. Typically, wall-mounted stations would be found near doors, pedestrian entries, parking entrances, in elevators, and at emergency call points. One or two button substations can also be used for simple call requests to a central station. Desk-mounted stations are often used for manned security posts such as the Commend Central post, where the victor interfaces with a facility's Commend GE class server. Handheld intercom devices and cellular telephones can also be tied into the Commend Intercom system with call forwarding to standard mobile and hard-wired telephone systems. For more information concerning the correct implementation of stations with existing or proposed Commend GE class servers, contact your Commend integrator.

Installation

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Overview

victor Unified Client must be installed before you install the Intercom Integration. For information on how to install victor, see the victor Installation and Configuration Guide.

The Commend Intercom Integration must be installed on every victor server and client system.

The Commend Intercom Integration has the same hardware, software, and disk space requirements as victor Unified Client. If the target computer can install victor, then it satisfies the Commend Intercom Integration requirements.

You need to perform the basic installation process described in the following pages on each computer in your victor system.

NOTE

Please be advised that the Commend Intercom integration installation will temporarily shut down and restart the CrossFire Services. Therefore, the Commend Intercom installation should be planned accordingly.

Before You Begin

Prior to installing the Commend Intercom Integration, you should ensure the following:

- If you are installing Commend Intercom Integration on a corporate network, be sure to coordinate with your corporate network administrator.
- You must have the appropriate Windows permissions.
- You must be in the local Administrators group or have equivalent privileges.

NOTE

See the Microsoft Operating System documentation or your system administrator for more information.

Installation



The Commend Intercom integration installation temporarily shuts down and restarts the CrossFire services. Therefore, the Commend Intercom integration should be planned accordingly.

Running the Installation Program

- 1. Double-click on **setup.exe**. A Tyco CrossFire Service Alert appears indicating that Tyco CrossFire services will be shutdown.
- 2. Click **OK** to continue the install. The Welcome dialog box opens.
- 3. Click Next. The License Agreement dialog box opens.
- 4. Click on the I accept the terms of the license agreement radio button, and then click Next. You can also click Print to print a hard copy of the license agreement for your records. A copy of the license agreement is sent to the default printer configured in your printer settings.
 - The Database Server dialog box opens if you are installing the Commend Intercom integration on a victor server computer. The dialog box automatically selects the victor database server/instance and catalog. This dialog box allows you to choose the authentication method.
- 5. Click **Next**. The Ready to Install the Program dialog box opens.
- 6. Click **Install**. The Installing victor Commend Intercom Integration dialog box opens.
- 7. When the installation is complete, the InstallShield Wizard Completed dialog box opens. To automatically start the CrossFire Services after the installation, click in the **Start the Tyco CrossFire services** check box.
- 8. Click Finish.

Starting the Server Application Services

Before you can configure a Commend Intercom integration object, the **CrossFire Framework Service**, **CrossFire Server Component Framework Service**, and **Commend Driver Service** must be running.

If you did not select the **Start the Tyco CrossFire services** check box during the installation, you must manually start the services.

Manually starting the Server Services

- 1. From the Start Menu, select **Start>All Programs>Tyco>Server Configuration**. The Server Configuration Application opens.
- 2. Click the Services tab.
- 3. If the Status is displayed as Stopped for the CrossFire Framework Service under Framework Services, click Start.
- 4. If the Status is displayed as **Stopped** for the **Crossfire Server Component Framework Service** under Framework Services, click **Start**. Proceed to Step 5 after the **CrossFire Framework Services** each display a status of **Running**.

5.	If the Commend Driver Service is not displaying Running, click in the Enabled checkbox, and click Start. When the Crossfire Framework Service, CrossFire Server Component Framework Service, and the Commend Driver Service each display a status of Running, you can configure Commend Intercom objects in victor.

Uninstall the Integration

This section describes how to uninstall the Commend Intercom integration from the Server computer and Client computers in your security system.

The uninstall removes all software components that were installed on the computer by the Commend Intercom integration installation Once the uninstall process completes, the computer will be in a clean state.



Uninstalling this integration does not automatically remove objects that were configured in the victor Unified Client. Before you proceed with this uninstall, you must manually remove the objects from victor to avoid potential issues with functions, such as partition deletion.

Unless you intend to reinstall the integration and continue using it, ensure that the objects are deleted before removing the integration.

The Commend Intercom Integration uninstall procedure shuts down and restarts the CrossFire services. Therefore, the Commend Intercom Integration uninstall should be planned accordingly.

Uninstalling the Integration

NOTE

The uninstall procedure described is on a Windows 7, 32-bit computer. For other supported operating systems, please refer to your operating system guide for information about removing programs from your computer.

- 1. Close all open applications.
- 2. From the Windows Start menu, select Control Panel>Programs and Features.
- 3. In the list, right-click on the **Commend Intercom Integration**.
- 4. Click the **Change**. A Tyco CrossFire Service Alert appears indicating that Tyco CrossFire services will be shutdown. The Welcome dialog box opens.
- 5. Click **Next**. The Synchronize or remove installation dialog box opens.
- 6. Click **Remove** and click **Next**. The Ready Remove dialog box opens.
- 7. Select from the following:
 - Leave **the Drop database tables** check box unchecked and the databases used in the Commend Intercom integration configurations will be kept. Select this option to keep the existing configurations if you plan to reinstall the Commend Intercom integration at a later date.
 - Click in the **Drop database tables** check box to select it, and the databases used in the Commend Intercom integration configurations will be deleted.
- 8. Click **Remove**. The Removing dialog box opens.

NOTE

If there are files in use that need to be updated by the unistall, the Files in Use dialog box opens. You will need to close the applications listed, and then go back and click **Retry** to continue with the uninstall.

9.	The InstallShield Wizard Completed dialog box opens when the uninstall is complete. Click in the Start the Tyco
	CrossFire services check box to automatically start the services. Selecting this check box means you do not have to
	manually start the Tyco CrossFire services.

10. Click Finish.

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Commend victor Interface Overview

Two objects are found on the victor **Setup** tab that are designed to manage the intercom call states within the Commend Intercom system.

- Commend Central
- Commend Station



Figure 1: Commend Intercom icons on the victor Setup tab

The **Commend Central** object is analogous to a Commend Intercom server. There are three servers currently offered by Commend: GE 100, GE 200, and the GE 700. These process the Commend Intercom Protocols within the victor interface. Each Commend Intercom server has linked to it **Commend Station** objects that are analogous to intercoms and sub-categorized as a Substation of intercoms. As you configure them in victor, **Commend Stations** are identified by unique ID Numbers. Every **Commend Central** that you configure is also given a unique server Name saved in the victor database. Each **Commend Central** sends commands to the **Commend Stations**, either within a single facility over a LAN, or across the globe as an Intercom over IP WAN transmission. To process these commands, an Intercom Protocol object is linked to the **Commend Central** server and to a designated victor server.

Commend Server Component Communication

The Commend Intercom Interface driver communicates with the Commend GE100, GE200, and GE700 class intercom servers. The Commend driver is responsible for establishing a connection with Commend Central server through a Lantronix, or equivalent, terminal server. Two-way communication is supported; that is, the driver sends commands to the **Commend Central** server and receive commands from the server. The commands sent and received depend upon the protocol commands configured in the Intercom Protocol object. By default there are nine receive commands and three send commands.

Receive Commands:

■ Call Request 1 [Normal call]

- Call Request 1 [Emergency call]
- Loud speaking [Dialed call]
- Terminate call
- Park [Hold]
- Poll response
- Line fault occurred [Station failure]
- Line fault removed [Station restored]
- Call request deleted [Call end]

Send Commands:

- Poll
- Button sequence [Dial]
- Check station



In the **Server Configuration Application Database** tab, the **Connection String** for the Commend Objects should read:

Server=localhost\SQLEXPRESS;Initial Catalog=ACVSCORE;Integrated Security=True

Configuring Commend Central

Commend calls their GE class intercom servers: Centrals. The three servers that process the Intercom Protocols with the victor interface are the GE 100, GE 200, and GE 700.

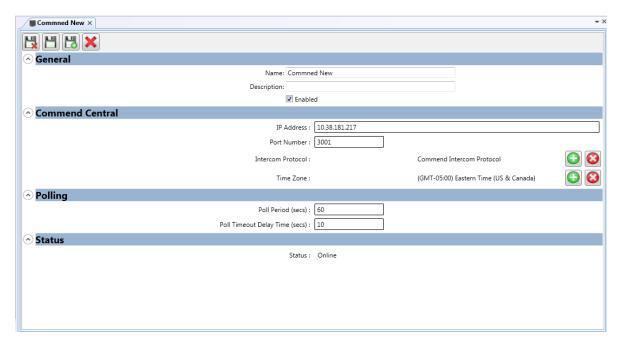


Figure 2: The Commend Central editor

Creating a Commend Central

- On the Setup tab, select Commend Central and click New. The Commend Central editor opens.
 For more information regarding the fields of the Commend Central editor, refer to "Fields of the
 Commend Central editor" on page 20.
- 2. Enter a Name.
- 3. Enter a **Description**.
- 4. Click the **Enabled** check box to put the server online once you are finished configuring the Commend Central server.

- 5. Enter an **IP Address** of the terminal device server, such as Lantronix UDS-10, that the intercom server uses to communicate with victor.
- 6. Select a **Port Number** which is the address of the terminal server from which the intercom server will communicate with victor. The values range from 0 through 65535. The default value is 3001.
- 7. Click to select an **Intercom Protocol**. The **Object Selector** opens. Select the protocol and click **OK**.
- 8. Click to select a **Time Zone** to synchronize the system.
- 9. Enter an amount in **Poll Period (secs)**. This is the frequency, in seconds, of polling to the Commend Central server. The default entry is 60 seconds and the range is from 30 to 600 seconds.
- 10. Enter an amount in **Poll Timeout Delay Time (secs)**. This is the amount of time, in seconds, allocated for the Commend Central server to respond to the Poll command. The default entry is 10 seconds and the range is from 1 to 60 seconds.
- 11. Click to save and close.

Editing a Commend Central

- 1. On the **Setup** tab, select **Commend Central** and click **Show All**. A list of all configured Commend Centrals opens.
- Right-click on the Commend Central that you want to edit. Click Edit. The Commend Central editor
 opens. For more information regarding the fields of the Commend Central editor, refer to "Fields of the
 Commend Central editor" on the next page.
- 3. Make the edits you require and then click to save and close the Commend Central editor.

Deleting a Commend Central

- 1. On the **Setup** tab, select **Commend Central** and click **Show All**. A list of all configured Commend Centrals opens.
- 2. Right-click on the Commend Central that you want to delete. Click **Delete**. A dialog box appears stating that **This will permanently remove the Object(s) from victor**. **Do you wish to continue?**

3. Click Yes.

Fields of the Commend Central editor

The following tables explain the fields of the Commend Central editor and descriptions of their values.

General section

Field	Description	
Name	Enter a unique Name for the Commend Central . If you enter the name of an existing object, the system returns an error message indicating there is a conflict.	
Description	Enter a characterization of the Commend Central . This text is optional and for information only.	
Enabled	Select this box to put the Commend Central server online.	

Commend Central section

Field	Description	
IP Address	This is the IP Address of the terminal server, such as a Lantronix UDS-10, that the intercom server uses to communicate with victor. Enter the unique IP address for the Commend Central server as up to 4 integers between 0 and 255, separated by periods, such as 100.10.1. A unique IP address is required for all servers on TCP/IP networks.	
Port Number	Select a Port Number for the terminal server, such as a Lantronix UDS-10, that the intercom server uses to communicate with victor. The values range from 0 through 65535. The default entry is 3001.	
Intercom Protocol	Click to select an Intercom Protocol for the intercom server.	
Time Zone	If you are managing Commend Central severs in different time zones, specify a time zone for the controller. Click to display the Object Selector and select a time zone.	

Polling section

Field	Description
Poll Period	The Poll Period is the frequency, in seconds, of polling to the Commend Central server. The default entry is 60 seconds and the range is from 30-600 seconds.
Poll Timeout Delay	The Poll Timeout Delay is the number of seconds allocated for the Commend Central server to respond to the Poll command. The default entry is 10 seconds and the range is from 1-60 seconds.

Configuring Commend Stations

The Commend Stations represent the actual Commend system intercommunication devices.

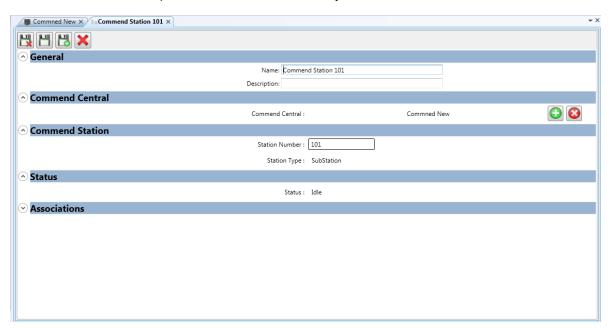


Figure 3: The Commend Station editor

Creating a Commend Station

- 1. On the **Setup** tab, select **Commend Station** and then click **New**. The Commend Station editor opens.
- 2. Enter a Name.
- 3. Enter a **Description**.
- 4. Select to add a Commend Central to this Commend Station. Select a Commend Central from the Object Selector and click OK.
- 5. Enter a **Station Number** which is the actual station number as it has been assigned within the Commend Intercom network

- 6. Under the **Associations** section, select to add associated hardware.
- 7. Click to save and close.

Editing a Commend Station

- 1. On the **Setup** tab, select **Commend Station** and click **Show All**. A list of all configured Commend Stations opens.
- 2. Right-click on the Commend Station that you want to edit. Click **Edit**. The Commend Station editor opens. For more information regarding the fields of the Commend Central editor, refer to "Fields of the Commend Station editor" below.
- 3. Make the edits you require and then click to save and close.

Deleting a Commend Station

- 1. On the **Setup** tab, select **Commend Station** and click **Show All**. A list of all configured Commend Station opens.
- 2. Right-click on the Commend Station that you want to edit. Click **Delete**. A dialog box appears stating that **This will permanently remove the Object(s) from victor. Do you wish to continue?**
- 3. Click Yes.

Fields of the Commend Station editor

The following tables describe the fields of the Commend Station editor relevant when creating or editing a Commend Station.

General section

Field	Description
Name	Enter a unique name for the Commend Station . If you enter the name of an existing object, the system returns an error message indicating there is a conflict.
Description	Enter a characterization of the Commend Station . This text is optional and for information only.

Commend Central section

Field	Description
Commend Central	Select to connect the Commend Station to a Commend Central.

Commend Station section

Field	Description
Station Number	The actual station number as it has been assigned on the Commend Intercom network.
Station Type	Substation which signifies an individual station.

Status section

Field	Description
Status	This field indicates the status of the Commend Station .

Associations section

Use the **Object Selector** in this section to associate other hardware devices with the Commend Intercom.

Scheduling an Event for Commend Intercom

Events can be created and configured from within the client. The **Event Setup** editor can be used to configure alerts for Commend Intercoms. For more information regarding configuration of events, alerts, and actions refer to *victor Unified Client Administrations and Configuration Guide*.



Figure 4: Commend Central configured for an event

Creating an Event

- 1. On the **Build** tab, select **Events** and then click **New**.
- 2. Enter a Name.
- 3. Enter a **Description**.
- 4. The **Enabled** check box is checked by default, uncheck to disable the event.
- 5. Select the **Priority** from the drop-down list.

NOTE

Each priority level is associated with a color which is made prominent in the Event viewer when the event is triggered.

- Select Event Breakthrough if required. The default setting is disabled. Enabling Event
 Breakthrough assigns priority to the event viewer when the event is triggered which overrides
 anything else the user is viewing.
- 7. Enter the **Activate Text**. This text will display in the event viewer. If you have the activity list open, this text displays as the event triggers.
- 8. Enter Instructions for the user. These will be conveyed to the user with the event triggers.
- 9. Select **Play Sound When Active** check box if an audible alarm is required when the event triggers.

10. Select to open the **Select Sound** dialog box. Navigate to the sound you want and select the file. Select **Open** and then select **OK**.

NOTE

Only .wav sound files are supported.

The files must be located in the ...\\WINDOWS\Media folder. If a custom .wav file is required, copy to this location.

- 11. Select or deselect check boxes for the **Acknowledge and Clear Options** depending on how you require the event to be acknowledged and cleared.
- 12. Click to save and close.

Event Configuration

Using the **Event/Action Pairing** editor and the **Event Setup** editor, you can build multiple even configurations quicker and easier than building single event configurations one at a time.

Event/Action Pairing Editor

The Event/Action Pairing editor is used to tie together system events with actions you wish to trigger.

NOTE

Event/Action association can only be made in this editor.

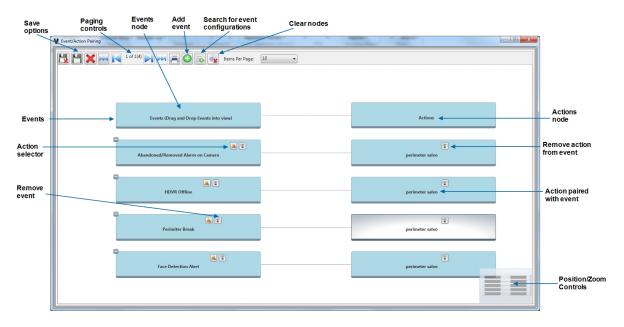


Figure 5: The Event/Action Pairing editor

Pairing Events and Actions

- 1. On the **Build** tab, select **Event/Schedule Setup** and then click **Event/Action Pairing**. The Event/Action Pairing editor opens.
- 2. Click the **Events** node and use the **Obeject Selector** to select events as required.
- 3. Select in the **Event** node and use the **Object Selector** to assign even Actions. Repeat as required.
- 4. Select to save and close.

Event Setup

The **Events/Schedule Setup** editor provides a dynamic, visual method of bath linking **Devices**, **Alerts**, and **Actions** as well as setting up event scheduling.

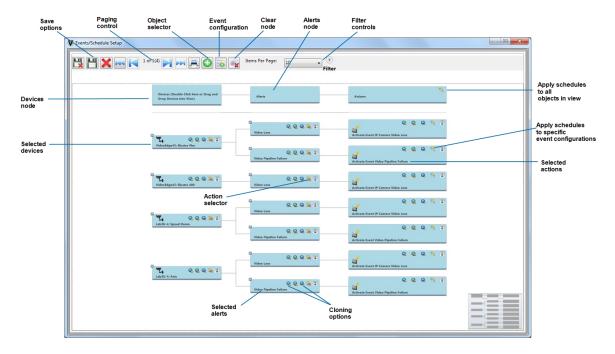


Figure 6: The Event/Schedule Setup editor

- 1. On the **Build** tab, select **Event/Schedule Setup** and then click **Events/Schedule Setup**. The Events Setup editor displays.
- 2. Double-click the **Devices** node and use the **Object Selector** to select the device, or drag and drop from the **Device List**.
- 3. Select in the **Devices** node and use the check boxes in the drop-down list to assign alerts as required. Click **Add Alerts**. These alerts are displayed under the **Alerts** node.
- 4. Select in the Alerts node and use the Object Selector to assign Actions. Repeat as required.
- 5. Use merge and clone options as required to copy configurations:
 - Select to merge and clone target configuration.
 - Select to duplicate source configuration to all targets.

- Select to remove configuration on source and target.
- 6. Select to add or remove schedules as you require. Refer to the *victor Unified Client Administrations and Configuration Guide* for more information on schedules.
- 7. Following event setup, select 🛂 to save and close.

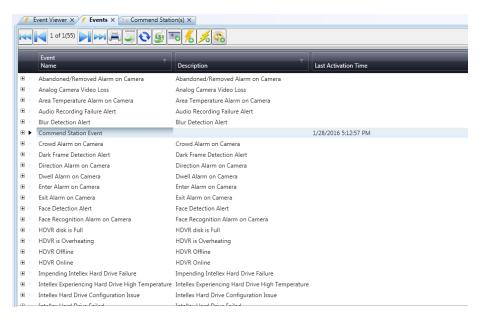


Figure 7: Event triggered on Commend Station

Activity Journal

Activity Journal	32
Commend Activity Viewer Log Messages	
Commend Intercom Activity Example	

Activity Journal

victor tracks state changes in either **Commend Central** Servers or **Commend Stations** with an entry in the **Activity** list and **Event Viewer**. Each intercom server or station state change triggers entries. These can both be accessed from the **Home** tab. For more information regarding the **Activity** list and **Event Viewer**, see the *victor Unified Client Administration and Configuration Guide*.

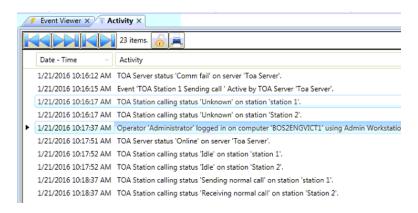


Figure 8: The Activity viewer

Commend Activity Viewer Log Messages

There are three Commend log messages: two for **Commend Central** and one for **Commend Station**. These are described and listed below:

Server Retry Limit Message

Commend Central exceeded command retry limit. The **Commend Central** Server attempts to send a command to a commend server, but is unable to receive an acknowledgment from the server. Consequently, the command is issued again. If the command is issued three times without success, it has exceeded the allowed number of retries, hard coded to three. Therefore, the following message displays in the journal:

```
"Intercom server exceeded the number of command retries '{0}' on server '{1}'."
```

NOTE

The $\{0\}$ is replaced with '3' and the $\{1\}$ is replaced with the **Commend Central** name.

Server Status Change Message

Commend Central status change message displays any time the Commend Central changes status:

```
"Intercom server status '{0}' on server '{1}'."
```

NOTE

The {0} is replaced with the new status and the {1} is replaced with the **Commend Central** name.

Call Status Change Message

Commend Station call status change message displays any time the Commend Station changes call status:

```
"Intercom station calling status '{0}' on station '{1}'."
```

NOTE

The {0} is replace with the new call status and the {1} is replaced with the **Commend Station** name.

Commend Intercom Activity Example

The following section describes activities created by a typical Commend Intercom **Receiving call** command with an Commend Intercom system integrated with victor. Each step also includes troubleshooting suggestions.

Preconditions

This intercom activity example assumes four preconditions:

- The victor system includes the Commend Intercom interface installation.
- The Commend Central unit and Commend Stations have been configured.
- Both the control desk master and the intercom substation are in an Idle, Ready, or Normal state.
- An event has been configured that should trigger when the substation initiates a call.

Call Situation

A call is placed from a substation to the control desk master by pressing the single push-button located on the front of the intercom substation. An operator answers the call on the control desk master, then after a brief conversation, terminates the call.

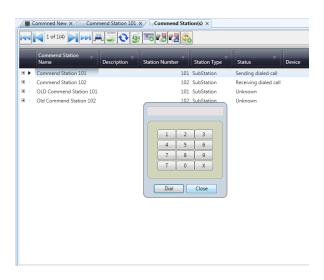


Figure 9: Commend Station Sending call

Results

victor displays the call state changes of each station and a pop-up video window displays the intercom substation area.

- The call is logged in the **Activity** list.
- The video pop-up window reveals the visitor's identity with live video feed.
- The Activity list lists the call states.

Step	Description	Troubleshooting
1	A visitor presses the intercom substation button. The Commend Intercom system routes the call to a specific control desk master.	- If the control desk master does not answer, the call is routed to another control desk master.
		- If the protocol command for a Call Request 1 , Normal call, was not configured, the command is ignored.
		-If the command was corrupt on entry and failed the check sum, victor will return Not Acknowledged .
2	victor recognizes the protocol command and changes the call state of the intercom substation to Sending normal call. The control desk master station receiving the call changes call state to Receiving call .	Activity list required to view call state change.
	Call states are enunciated through the Activity list.	
	The state change of the intercom substation triggers an event to display live video of the floor space outside the intercom substation.	
3	The operator stationed at the control desk master accepts the call by pressing the Enter button on the control desk.	If there is no operator available to accept the call, it could be routed to another control desk master.
4	The system recognizes the protocol command and changes the call state of the control desk master station to Sending call . The intercom substation receiving the call changes the call state to Receiving call .	Activity list required to view call state change.
	Call states are enunciated through the Activity list.	
5	After a conversation with the caller concludes, the operator terminates the call by hanging up.	Activity list required to view call state change.
	Call states are enunciated through the Activity list.	
6	Call status of both the control desk master and the intercom substation are returned to Idle .	
	Call states are enunciated through the Activity list.	