



Symmetry Software User Guide

8.0.1

Symmetry™ Security Management

9600-0429

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**Symmetry Software User Guide
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Preface

This User's Guide introduces the key concepts of:

- Symmetry™ Security Management, including its purpose, scope, main components and architecture.
- The Symmetry software, which used to configure, monitor and control Symmetry Security Management Systems.

This guide is aimed at people who are responsible for day-to-day operation of the Symmetry software. After reading this guide, you should be reasonably familiar with the purpose and scope of Symmetry Security Management Systems, how to log in to the Symmetry software and the key features of the software. This guide does not attempt to describe the details of each and every option on every screen; the *Online Help* is provided for that purpose.

Underwriters Laboratories (UL) Compliance

This guide has not been evaluated by UL. Any site that requires UL compliance must use only documentation that has been evaluated by UL.

Other Publications

This guide covers some of the key features of the Symmetry software. Other publications provide additional information about optional modules or utilities:

- *SymmetryWEB™ Installation Guide*
- *Web Access Installation & User Guide*
- *813 Fingerprint Reader User's Guide*
- *Directory Sync Manager Installation & User Guide*
- *Guard Patrol Manager Installation & User Guide*
- *Intrusion Management Installation & User Guide*
- *M2150 Intrusion Guide*
- *Intercom Management Installation & User Guide*
- *NIC Module Configuration Guide*
- *XML Developer's Kit Installation & User Guide*
- *Threat Level Manager Installation & User Guide*
- *Data Connect Manual*
- *Disconnected Doors Installation and User Guide*

This manual should be read in conjunction with the product help, which is also available in printed form as the *Symmetry Software Reference Manual*.

Chapter 1: Introduction to Symmetry Security Management

About the Symmetry Software

The Symmetry software (Figure 1-1) allows operators to configure, monitor and control Symmetry Security Management Systems. The software runs within the Microsoft® Windows® operating system on PCs.

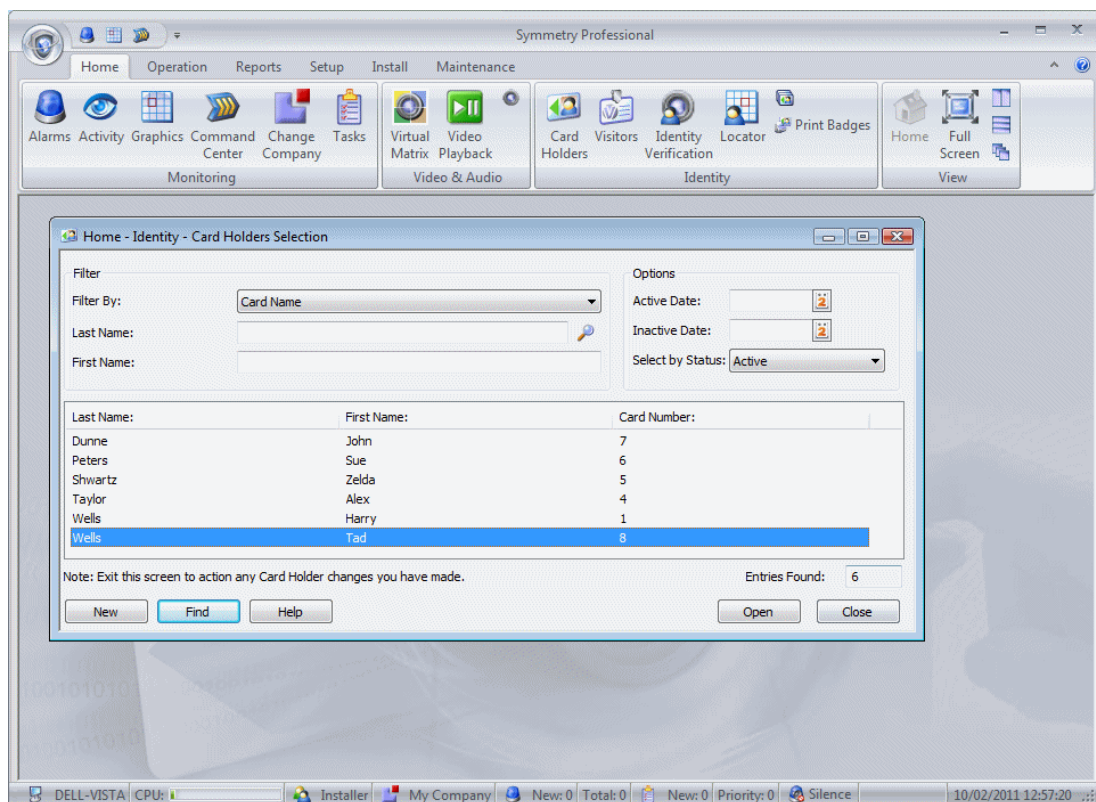


Figure 1-1: Symmetry Software

The Symmetry software includes an extensive range of standard features, complimented by a comprehensive range of optional modules that allow an operator to configure, monitor and control the building's security systems from a common user interface. The software enables you to perform tasks such as to configure and control access, set up intrusion panels, define guard tours, arm and disarm intrusion areas, design and print badges, manage visitors, monitor and manage alarms, produce reports, control video cameras, replay video recordings and operate intercoms. The Symmetry software provides a framework that allows all of these different areas of site security to come together as a single solution.

About Symmetry Security Management Systems

A Symmetry Security Management System is a powerful integrated solution for organizations requiring automated security. Symmetry Security Management consists of the core Symmetry software, together with a range of software modules and hardware devices that can be selected to match the security requirements of the site. Depending on the modules and hardware selected, the system can provide integrated control and monitoring of all key elements of site security, including:

- **Access Control**
- **Video Management**
- **Intrusion Management**
- **Guard Patrolling**
- **Visitor Management**
- **Intercom Management**



Figure 1-2: Symmetry Security Management

The following sections explain each of the key elements of Symmetry Security Management.

Access Control

The Symmetry software, supported by the Symmetry range of nodes and card readers, can control access through all forms of entrance, including standard doors, turnstiles and revolving doors. Access control for elevator floors is also available using the Symmetry range of elevator nodes.

The Symmetry nodes store the access control rules locally, which means that the system can function normally without a network connection to the Symmetry database.

Figure 1-3 shows an example of the architecture of a Symmetry access-control system.

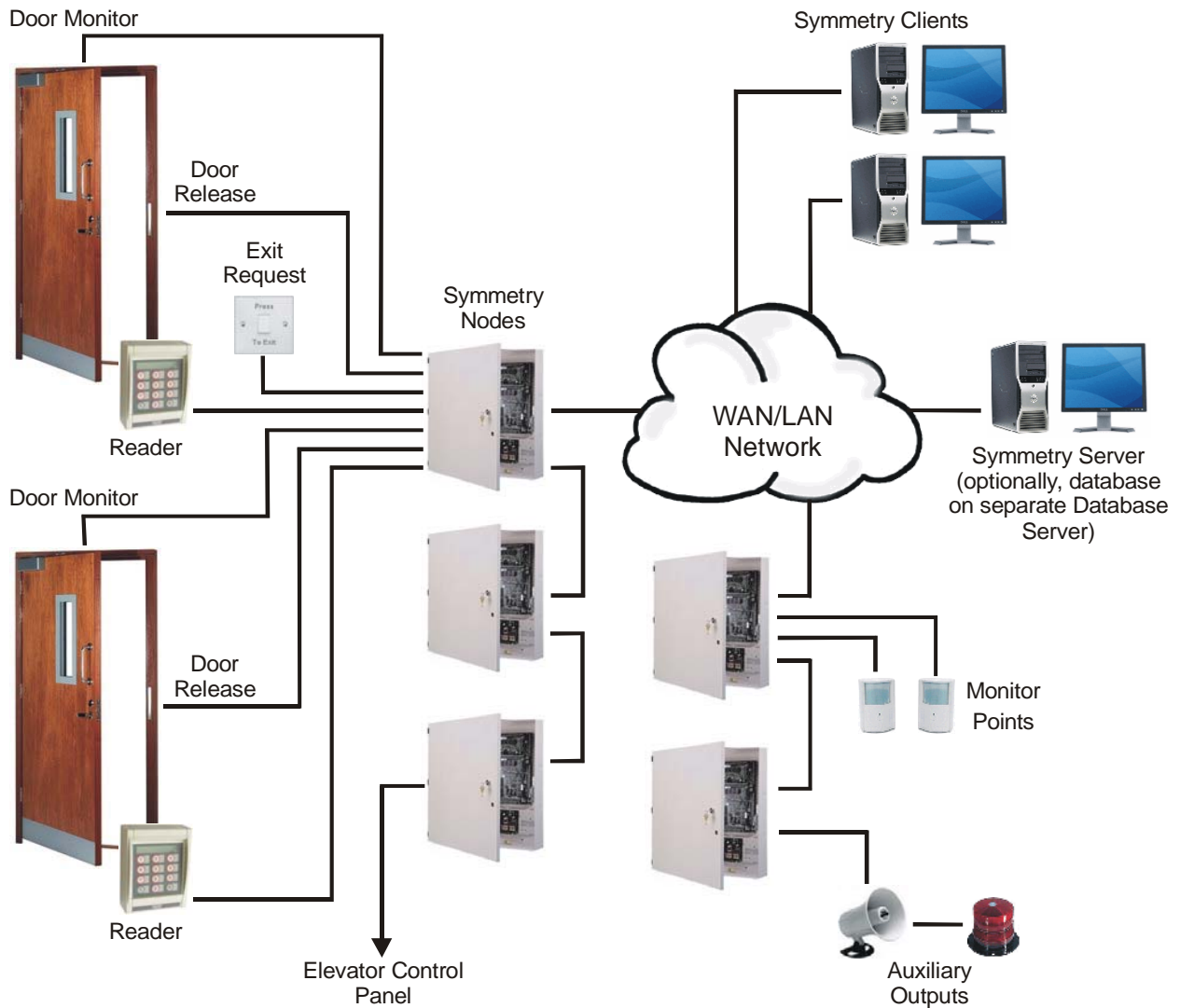


Figure 1-3: Symmetry Access Control

To gain access to an access-controlled area, a person normally presents a card or badge to a reader. The entry of a personal identification number (PIN) may also be necessary, or a fingerprint or hand for a biometric reader. The system then determines whether or not to grant access based on a predefined set of rules known as access rights. If access is granted, the door release is activated or the elevator floor button is enabled, and the card holder is able to gain access to the access-controlled area.

For a door, after a predefined length of time (normally a matter of seconds), the door relocks automatically. If required, the door can be permanently unlocked during busy periods of the day using scheduled commands. Each door has a dedicated reader, which is located close to the door.

Symmetry supports many different types and makes of card reader, including smart-card, proximity, magnetic stripe and biometric readers. In addition, a wide range of card formats is supported. Further

information about Symmetry readers and the card formats supported can be found in the Symmetry reader data sheets.

Each door also has a door-monitor contact. This detects when the door has been opened or closed, and enables the system to determine whether, for example, the door has been forced or kept open too long.

In some cases, a door also has an exit-request switch, which when pressed, activates the door release. The exit-request switch is normally located next to a final exit to allow people free access to leave the building.

An access-control card contains a unique number that identifies the card holder to the system, and therefore the access rights of the card holder. The access rights, which can be set up in the Symmetry software, specify which doors or floors the card holder is allowed to use and at what times. Not only can the access rights vary from day to day, but also for specified holidays, which maintains the security of your building during vacation periods, shutdown periods or any other nominated days.

About the Symmetry Server

The Symmetry server, which should never be switched off, is the PC that manages the Security Management System. For example, the Symmetry server starts trigger or scheduled commands across nodes and initiates scheduled reports.

All data about the Security Management System, including card holders, access rights and alarms is stored in the Symmetry database. For Symmetry Business and Professional editions (see page 8), the database must be located on the Symmetry server. Optionally, for Enterprise and Global editions (see page 8), a separate SQL database server can be used, which may manage databases belonging to other applications. Using a separate database server can, amongst other benefits, reduce database software costs, ease maintenance and improve security. A full description of the advantages can be found in the *Symmetry Software Installation Manual*.

About Symmetry Clients

The client PCs connect to the Symmetry server over a network. Clients provide the user interface to the Symmetry software. They enable you to carry out tasks such as to set up card holders, specify access rights, print badges, view alarms, produce reports, and monitor, record or play back video images. They also control communications to the security management hardware located around the building, such as the nodes that operate the doors and readers.

By default, the Symmetry client software is installed on the Symmetry server.

There can be many clients in use simultaneously, up to a limit determined by the license. The number of clients required depends on the number of nodes and other security management hardware in use, and the number of users who need to use the Symmetry software. In a large system, many clients may be required, each for a different purpose.

Each user of the Symmetry software has a set of login privileges, which determine the range of screens that are available and the functions that can be carried out.

Alarms can be sent to any of the clients according to the time of day, day of the week or even on holiday dates. This allows, for example, alarms to be displayed on an operator's PC during the day, then on the guard's PC during the night.

Each Symmetry client can support up to 1024 LAN chains and/or 16 dial-up/serial hardwired chains.

About Symmetry Nodes

The Symmetry nodes provide distributed intelligence for the Security Management System. Using a copy of the relevant rules that have been set up on the client PCs, nodes manage all their connected devices, including readers, door releases, monitor points and auxiliary outputs. A node can independently decide whether or not to grant access, and can respond in the desired manner to any attempted access violation. Alarm messages are immediately sent to a client PC for the attention of the guard or alarm reporting.

A Symmetry node consists of a database unit, and one or more door controllers. The database unit holds the access-control rules, while the door controllers provide the physical connections to the door furniture. Symmetry provides a range of integrated database units and controllers on the same PCB, and separate devices that can be mounted in different locations for ease of installation.

There are several ranges of Symmetry hardware available. For example:

- EN-2DBC – The EN-2DBC is a Power-over-Ethernet+ (PoE+) Edge Network device that contains an integrated database unit and two-door controller in the same unit.
- M2150 – This provides a wide range of hardware options. M2150 supports up to 16 readers controlled by a single node. The system can be easily expanded by connecting additional nodes, either directly to the network, or from a node that is already connected to the network. For further information about M2150 node types and hardware configurations, please refer to the *M2150 Design Guide*.
- SR-Series™ – Symmetry SR-Series nodes are replacements for existing microcontrollers (micros) manufactured by Casi-Rusco®, General Electric® or UTC Climate, Controls and Security.

About Monitor Points and Auxiliary Outputs

The Symmetry hardware allows connection of monitor points and auxiliary outputs. Monitor points are devices such as infra-red detectors, floor pads, door contacts or other sensors. They are constantly monitored, and if triggered, cause the node to generate a predetermined response, such as displaying an alarm at a client PC or recording video.

Auxiliary outputs are devices such as external lights, sirens and barriers that can be switched on or off (or switched on for a predefined period of time), either by a manual command from a client PC or automatically by a scheduled or trigger command. For example, a scheduled command may switch on an outside light at specific times of the day, and a trigger command may cause a device to operate automatically when an event or alarm occurs. Trigger commands are a very powerful feature, which provide extreme flexibility without the overhead of complexity.

The EN-2DBC supports four monitor points and two auxiliary outputs.

In the M2150 range, auxiliary outputs and monitor points can connect to an input/output module fitted to a node, to an alarms controller or to an output controller. The M2150 AC24/4 alarms controller supports up to 24 monitor points and four auxiliary outputs, and the M2150 OC4/24 output controller supports up to four monitor points and 24 auxiliary outputs.

About Alarms and Events

The system constantly monitors all activity at devices such as readers, doors, monitor points and video cameras, and logs all major actions that take place. The Symmetry software can log when access is granted, when doors are closed, when movement is detected and more serious conditions, such as when a door is forced or when a lost card has been used. Each of these conditions is classed as an alarm or event, depending on importance, with alarms being the most important.

Details of all alarms can be monitored in real time at a PC and are also logged for future reporting. Events are simply logged for reporting. If required, alarms can also be directed to maintenance or security personnel by email.

For further details of alarms monitoring, please refer to Chapter 7.

Video Management

The Symmetry Video Management module of the Symmetry software provides all the interfaces and tools necessary to monitor, record, play back and control cameras from computers located anywhere on the network. Symmetry supports a wide range of network cameras, Digital Video Recorders (DVRs) and Network Video Recorders (NVRs), including Symmetry's own brand of devices (Figure 1-4).

Symmetry also supports interfaces to legacy analog CCTV switchers, which facilitates an easy upgrade from an analog to digital solution. Cameras attached to legacy CCTV switchers can be viewed, controlled and switched to any monitor, and ancillary devices (such as lamps and wipers) can be switched on or off from the Symmetry software user interface.

The Symmetry software allows video systems to be deeply integrated with access control, intrusion and other parts of the Symmetry Security Management System.

Chapter 6 explains Video Management in more detail.

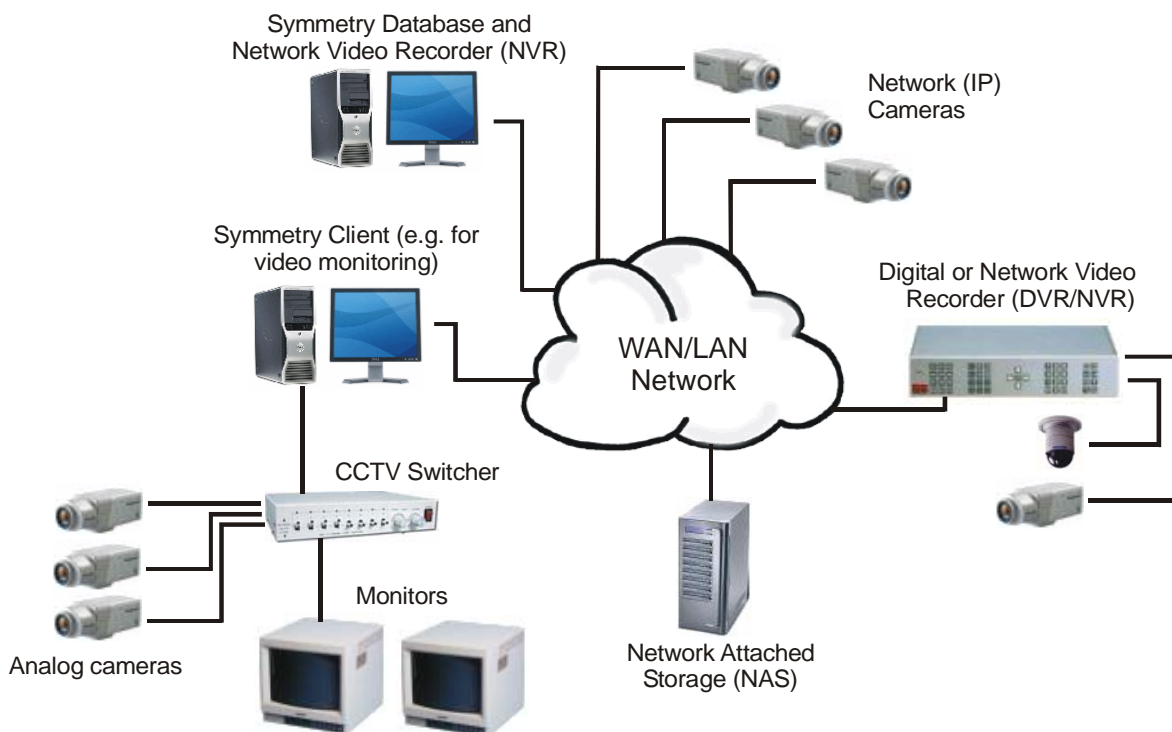


Figure 1-4: Symmetry Digital Video Management

Intrusion Management

The Symmetry Intrusion Management module allows Symmetry intrusion panels, third-party intrusion systems to be monitored, controlled and configured from the Symmetry software (Figure 1-5). The

Intrusion Management module provides complete alarms monitoring and reporting from the same user interface used by other parts of the Symmetry software. The module also supports alarm monitoring from Bosch D6600 Central Station communications receivers.

Operators can arm or disarm areas, enable or disable detectors and determine the status of all parts of the intrusion system using the Command Center in the Symmetry software.

The Intrusion Management module also allows intrusion systems to interact with other modules of the Security Management System. For example, an intrusion alarm can automatically start a video recording at a selected camera, and an access-control transaction can automatically disarm an intrusion area depending on access rights.

Intrusion Management is explained in further detail in two publications: the *M2150 Intrusion Guide* (for M2150 and EN-2DBC intrusion systems) and the *Intrusion Management Installation and User Guide* (for all other intrusion systems).

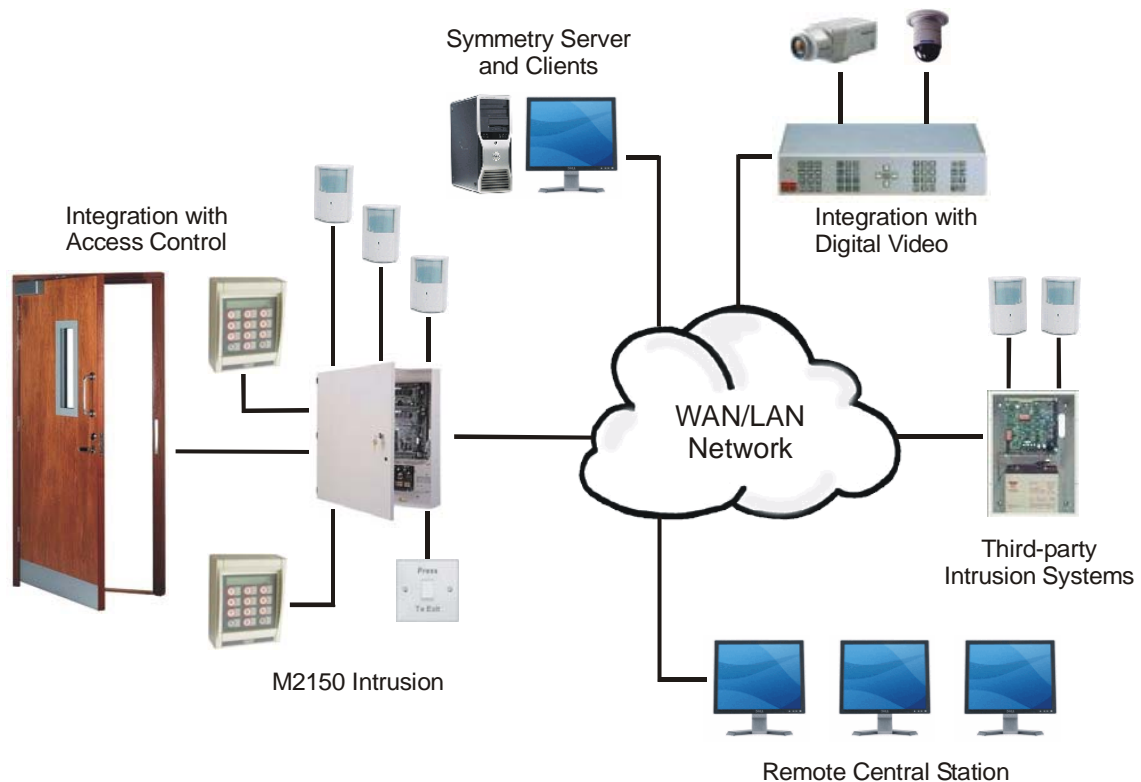


Figure 1-5: Symmetry Intrusion Management

Guard Patrolling

The Guard Patrol Manager is an optional module for configuring, recording and reviewing guard patrols. The module includes a complete set of tools for setting up and managing patrols entirely from the Symmetry software. It benefits from the ability to use access-control readers or monitor points as tour checkpoints, resulting in the need for no specialist hardware or data-collection devices, and making the introduction of patrol management both cost effective and easy to implement.

Patrols can be set up to specify the sequence of checkpoints to visit and the time allowed for the guard to travel between them. The progress of a patrol can be monitored, and previous patrols reviewed in reports. The Symmetry software can display any rule infringements, such as missed checkpoints or late arrival, immediately in the Alarms screen.

For further details of Guard patrolling, please see page 75 or refer to the *Guard Patrol Manager Installation and User Guide*.

Intercom Management

The Intercom Management module provides an easy-to-use graphical interface for managing, answering and responding to calls from intercoms connected to Stentofon Alphacom intercom systems. The module enables operators to respond to calls using the same user interface used to manage access control, monitor video, operate intrusion systems, etc.

Calls are answered and managed from the dedicated Intercom Control screen, which lists all outstanding calls. Operators can use the screen to manage calls, communicate with callers and open a barrier or door associated with a selected intercom.

The module is of particular benefit in busy environments, where many incoming call requests could be made at the same time.

For further information, please refer to the *Intercom Management Installation and User Guide*.

Visitor Management

Visitor Management is a built-in feature of the Symmetry software that allows you to manage visitor arrivals and departures efficiently. It provides all the tools you need to add visitor details, assign access rights, issue cards, nominate escorts and sign visitors in and out. Chapter 5 explains the key concepts in further detail.

Symmetry Software Product Types

There are four different types of Symmetry software: Business, Professional, Enterprise and Global Edition. Each of these is also available as a Homeland Security Edition.

Business Edition Systems

Business Edition is a true client/server system, with a maximum configuration of up to 64 readers and 3 clients. If required all software can be installed on a single PC. Each node can support up to 2000 cards.

Business Edition uses SQL Server databases managed by the SQL Server Express database engine. With its maximum database size of 10GB, SQL Express has been designed and optimized for use on smaller systems.

Professional Edition Systems

Professional Edition builds on the capabilities of Business Edition to provide a maximum configuration of up to 512 readers and 9 clients depending on the package purchased, with an unrestricted number of cards.

Enterprise Edition Systems

This provides all the features of the Professional Edition system, but utilizes the full Microsoft SQL Server relational database management system, which meets the needs of high performance and scalability. This configuration supports unrestricted expansion for large systems.

Enterprise Edition also supports:

- The use of a separate SQL Server Database Server (see page 4).
- "Clustering", where two independent servers are seen as a single server by the Symmetry software. If one server in the cluster should fail, the other automatically steps in to continue normal operation. Please refer to the *Cluster Installation Manual* for further information.

Although installed, the Symmetry client software should not normally be used on a Symmetry server in an Enterprise system.

Global Edition Systems

This builds on Enterprise Edition to provide enhanced capabilities for remote management of multiple systems spread over a number of geographically separate sites.

Global Edition supports "Global Clients" (see Figure 1-6). Each Global Client can connect to any regional system and log on as if it were a local client of that site. This gives true remote management of sites, allowing full access (dependent upon user permissions) for history reporting, card administration and control of readers, doors and monitor points.

Global Clients are also provided with alarms-handling capabilities. This allows the head office or regions to communicate alarms to the Global Client for centralized alarm notification and management. Alarms can be routed to Global Clients at specified periods of the day, such as during out-of-hours periods. Global Clients have no attached access-control hardware.

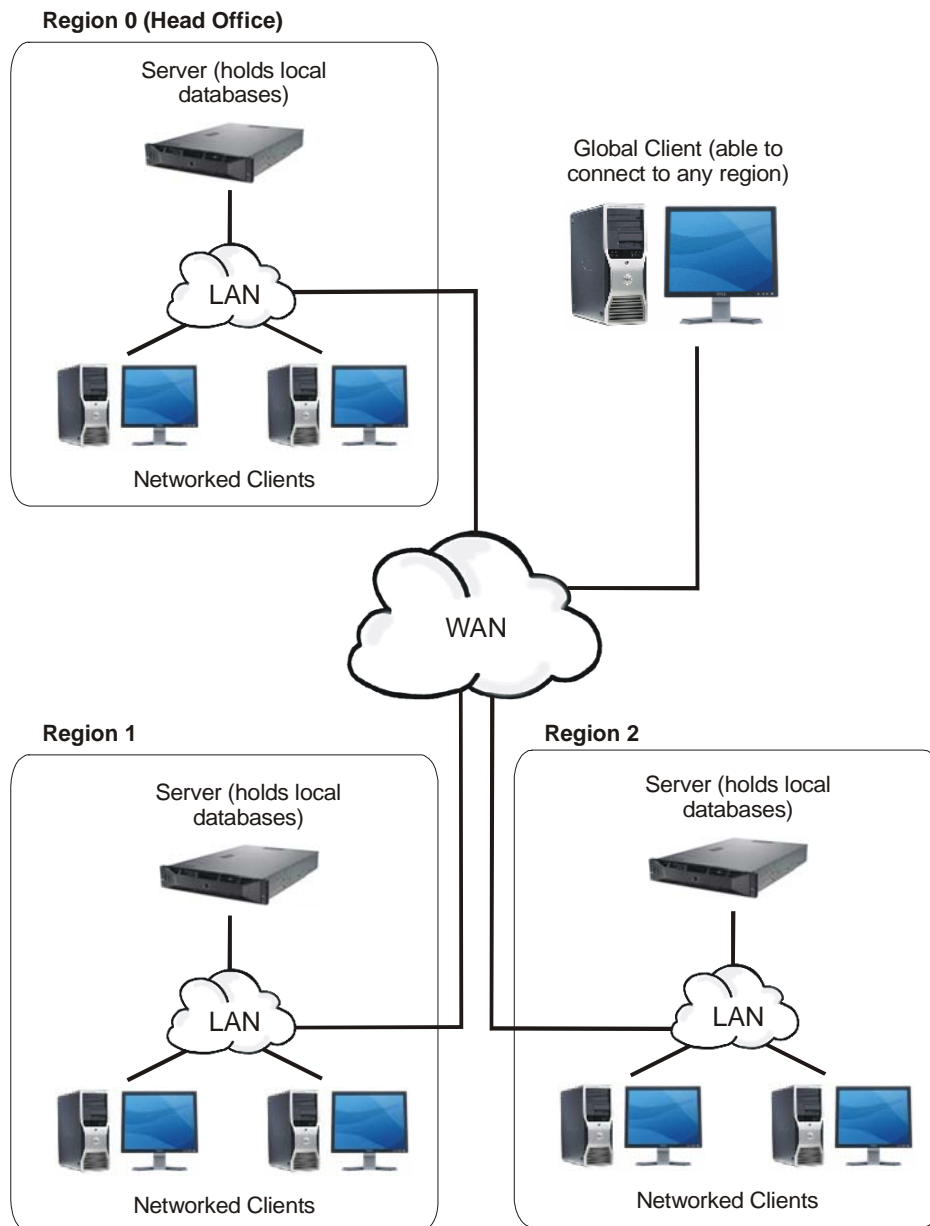


Figure 1-6: Global Edition System, with Global Clients

Each region must be set up in the Install/Regions screen at the head office. Access-control and other equipment can be connected to each regional system in exactly the same way as for an Enterprise system.

A further option of the Global Edition system provides central card handling (see Figure 1-7). This allows card holders to be defined centrally, assigned to one or more regional systems, then automatically imported to each site. The Central Card Handler database can be located on the head office server or on another machine.

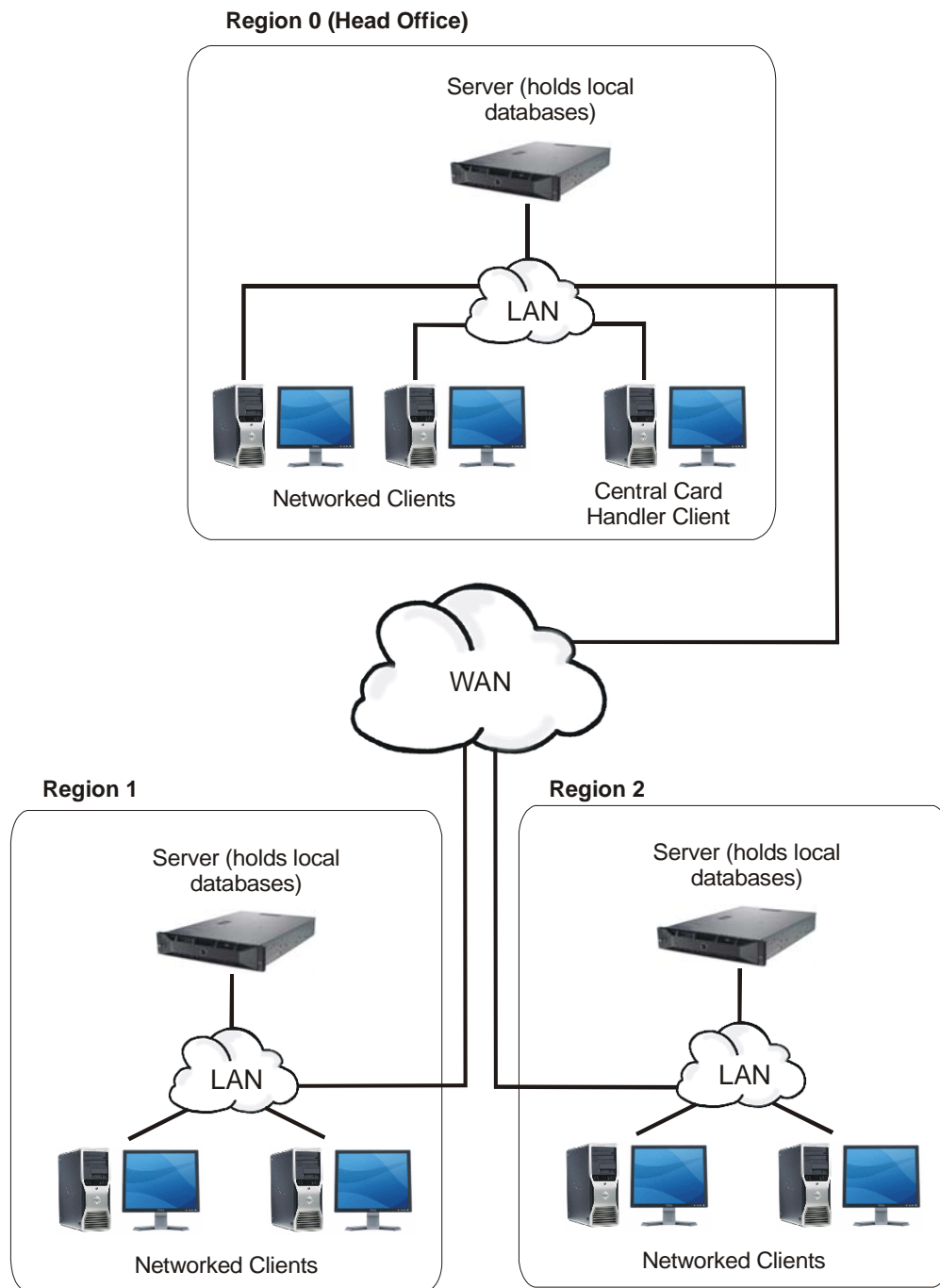


Figure 1-7: Example Global Edition System, with Central Card Handling

Central card handling not only provides a multi-site organization with the improved efficiency of central card management, but also provides the ideal solution when persons require access to more than one site, as one operation will add cards at all the required locations.

Global Edition architecture provides the ultimate resilience for multi-site applications, since any failure of the corporate network links still allows autonomous regional systems to continue operating fully at a local level.

Summary of Client Types for Global Systems

The following client types are available for Global Systems:

- **Central Card Handler Client** - Allows a central database of card holders to be maintained and imported by the individual regional systems. There can be more than one Central Card Handler client.
- **Global Client** - A client that can connect to any regional system and log on as if it were a local client of that site for true remote management of sites. A Global Client can display and manage alarms routed from regional systems for centralized alarm management.
- **Administration Client** - A standard client for monitoring and setting up the system (see page 4). Although installed, the Symmetry client software should not normally be used on a Symmetry server in a Global system.

Homeland Security Edition

A Homeland Security Edition (HSE) variant of the Symmetry software is available for US Government installations. Homeland Security Edition includes additional fields when defining card details. Otherwise, the user interface and features are the same as the standard software.

Summary of Features

Standard Features

Standard features of the Symmetry software include:

- Easy-to-use and up-to-date user interface
- Full integration with all Symmetry security products and many other third-party systems
- Complete control of access rights (to specify "who" is allowed to go "where" and "when")
- Easy card administration, including bulk amendments
- Dynamic alarms management
- Graphics interface (e.g. to display alarms on plans of the building)
- Badge designing and printing
- Database partitioning
- Login permissions control user access to screens and the menu options displayed
- Extensive reporting options
- Commands
- Visitor management
- Antipassback management
- Area occupancy management
- Straightforward control of hardware using manual and automated commands
- Comprehensive context-sensitive online help system

- Dial in and Dial-Out Alarms
- Email Alarms

Optional Features

Optional features of the Symmetry software include:

- Integration with digital video cameras, digital video recorders, network video recorders and CCTV systems
- Integration with intrusion systems, including the Symmetry M2150 and EN-2DBC intrusion systems
- Optional video-only product
- Integration with SALTO™ online/offline readers
- Magnetic Stripe and Smart Card Encoding
- Threat Level Management
- XML Developer's Kit
- SymmetryWEB web interface
- Intercom Control Integration
- Card Data Import and Card Data Export
- Guard Patrols
- Safety Roll Call Management (mustering)
- Web access

Chapter 2: Getting Started

Starting the Symmetry Software

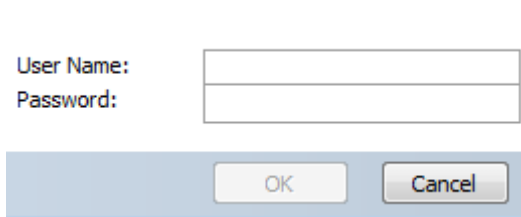
To start the Symmetry software:

1. Double-click the following icon on the Windows desktop:



Alternatively, select **Start/All Programs/Security Management System/Security Management System**.

2. You are now prompted to log in:

The image shows a login dialog box with a light blue background. It has two text input fields: "User Name:" and "Password:". Below the input fields are two buttons: "OK" and "Cancel". The dialog box is framed by a thin blue border.

3. Enter your allocated user name and password to gain access to the screens of the Symmetry software.

Your login user name determines the screens that are made available to you, and your user permissions within the screens. For example, you may have full permissions to change information in some screens, but view-only permissions in others. Details of how to set up users and their permissions are given on page 68.

Once you have logged in, you can change your password by using the "Maintenance/User & Preferences/Set Password" screen.

Quick Access Toolbar

If required, you can set up a Quick Access Toolbar, which can contain options to access your favorite screens. By default, the toolbar is located near the top-left corner of the window, as shown in Figure 2-3. You can add and remove icons from the toolbar using the **More Commands** option selected from the menu to the right of the toolbar.

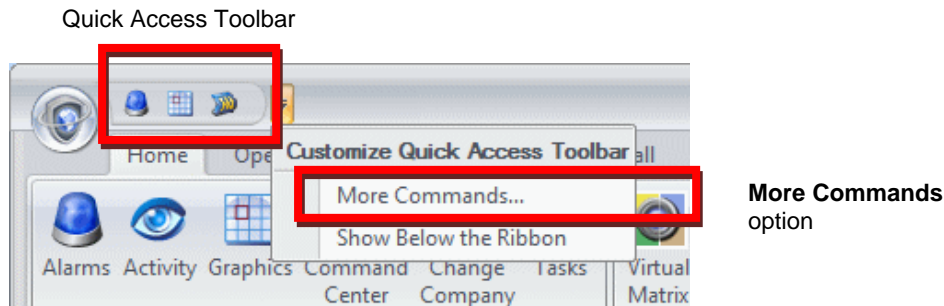


Figure 2-3: Quick Access Toolbar

Selection and Definition Screens

Many options in the Symmetry software lead to two screens: the "Selection" screen and the "Definition" screen, as explained next.

Selection Screen

The Selection screen (e.g. see Figure 2-4) is the screen that is displayed when you first select an option such as **Card Holders** from the ribbon bar.

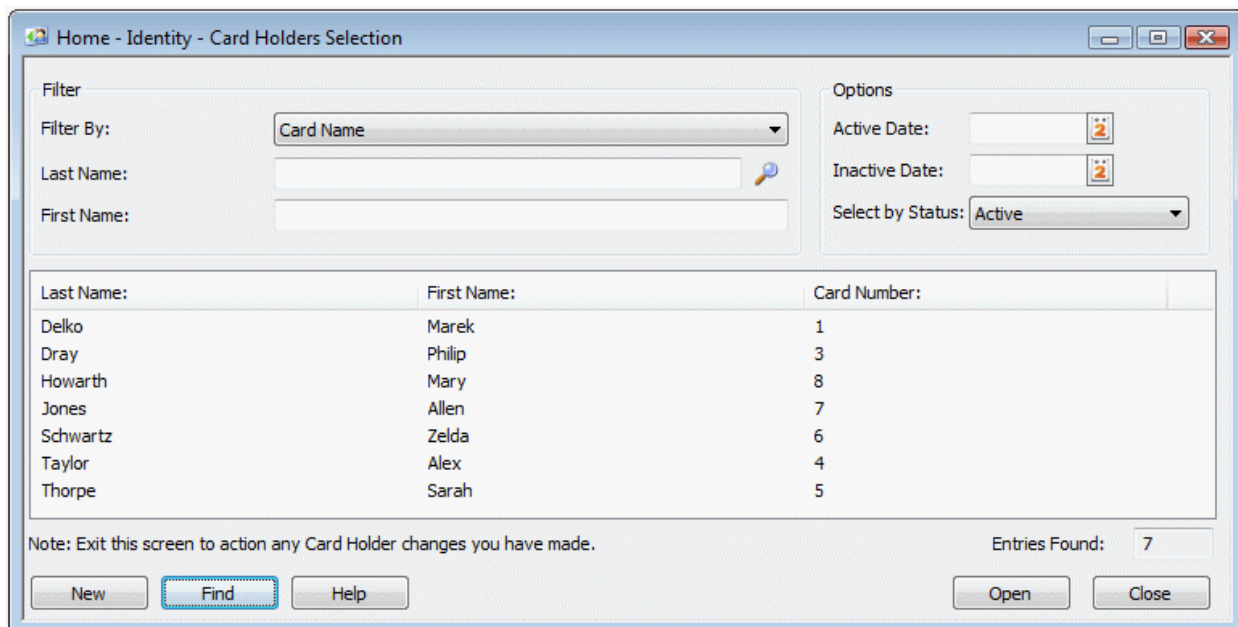


Figure 2-4: Selection Screen (Card Holders)

Selection screens contain a **Find** option, which enables you to find all existing items, such as card holders. The items found are listed on the screen, often with other related information.

If you want to be selective about the items to list, you can choose the filter options in the upper area of the screen. Selecting **Find** then displays only those items that match the filter settings.

Definition Screen

Selecting **New** in the Selection screen, or selecting one of the items listed in the Selection screen followed by **Open**, displays the Definition screen, such as the Card Holder Definition screen, as shown in Figure 2-5.

Figure 2-5: Definition Screen (Card Holders)

Using the Definition screen, you can perform tasks such as to:

- View or modify the details of the selected item. **Note:** you are given view-only access if another person on the network is already viewing or modifying the item.
- Define a new item, such as to set up a new card holder.
- Delete the item entirely from the system.
- Copy the item's details to create a new item.

Online Help

Every screen in the Symmetry software contains a **Help** button. Clicking the **Help** button provides comprehensive context-sensitive help for that screen.

Logging Off

You can log off from the Symmetry software by selecting the Symmetry button in the top-left corner of the screen, followed by **Logoff**, as shown in Figure 2-6.

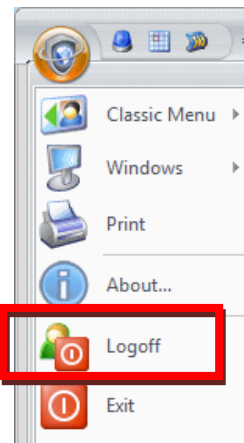


Figure 2-6: Logoff

Note that the system may automatically log you out if you have not used the computer for a predefined period of time (default 15 minutes). You can change this using the **Auto Logoff Time** option in the "Maintenance/User & Preferences/Client Preferences" screen.

What you need to do next

Before you start to use the Symmetry software, you need to make sure your system's hardware has been configured correctly using the Install screens. This User's Guide assumes that these tasks have been completed for you by an installer, and includes setting up:

- The Symmetry client PCs that are being used.
- The LAN chains that the Symmetry hardware connects to.
- The node chains.
- The nodes, readers, monitor points, CCTV cameras, video servers, etc. used in your system.

Once these tasks are complete, you can work through this User's Guide to learn more about the Symmetry software. You will find out how to:

- Set up card holders and access rights – Chapter 3.
- Design, print and encode ID badges (or cards for access control) – Chapter 4.
- Use the system for visitor management – Chapter 5.
- Use and control CCTV cameras and digital video systems – Chapter 6.
- Set up and use the alarms-monitoring features – Chapter 7.
- Set up and generate reports – Chapter 8.
- Use other important features – Chapter 9.

Other optional modules are described in separate manuals; see page iv.

Chapter 3: Card Administration

This chapter describes how to set up card holders and define access rights.

About the Card Holders Screen

The "Home/Identity/Card Holders" screen is where you set up the details of each person who requires an access-control card or identity badge (except visitors, who are set up in the "Home/Identity/Visitors" screen). Using the Card Holders screen, you can perform tasks such as to:

- Enter the details of the card holder, such as the card holder's name, card number and personal details.
- Specify the card holder's access rights. For example, the doors through which the card holder can gain access, and the times that access can be gained.
- Capture a photograph and signature to include on the printed badge.
- Print and encode cards.
- Capture biometric data, such as fingerprints, which can be encoded onto smart cards for access at high-security fingerprint readers.

Finding or Creating a Card Holder

After opening the "Home/Identity/Card Holders" screen, use the Selection screen to open an existing card holder, or click **New** to create a new card holder. This displays the Definition screen. In the following example, the existing card details for Alex Taylor have been opened.

The Card Holder Definition screen contains a series of tabs:

- **Card Details tab** – Allows you to capture the card holder's picture and to set up information such as the dates that the card is valid, the badge design and any special privileges that you want to assign to the card. See *Setting Up Card Details* on page 21.
- **Access Rights tab** – Specifies the doors through which the card holder is allowed to gain access. See *Creating and Assigning Access Rights* on page 24.
- **Personal tab** – Allows you to specify personal information about card holder. See *Specifying Personal Data* on page 29.
- **Locator tab** – For finding the card holder's current location. See *Locating a Card Holder* on page 29.
- **Biometrics tab** – Enables you to capture biometric data, such as the card holder's fingerprints and signature. See page 34.
- **Vacation tab** (by default, not displayed) – Enables you to specify hours when it is mandatory for the card holder to be on vacation. See page 31.

You may not have access to some tabs, depending on your user permissions.

Note: The following sections describe the key features of the Card Holders screen. If you need further information, please refer to the *Online Help*.

Last Name, First Name and Middle Name

Each card holder must have their name specified in **Last Name**, **First Name** and **Middle Name**.

If possible, you should make sure that these three fields make the card holder's name unique, otherwise you may find reports, etc. confusing if two people have the same name.

Setting Up Card Details

This section describes key features of the Card Details tab in the Card Holders screen:

The screenshot shows a software window titled "Home - Identity - Card Holders". At the top, there are input fields for "Last Name: Taylor", "First Name: Alex", and "Middle Name:". Below this is a tabbed interface with "Card Details" selected. The "Card Details" tab contains several sections:

- Card Information:** Card Number (4), PIN Code (3154), Active Date (01/12/2010), Inactive Date, Inactive Time, Employee Ref, Approving Official (None), Badge Design (None).
- Card Status:** Badge Expires, Usage Remaining (No Limit), and a green "ACTIVE" button. There are also checkboxes for "Force Cardholder Inactive", "Stop", "Set For Batch Printing", and "Card Lost".
- Additional Options:** A grid of checkboxes for "Area Occupancy Card", "Conditional Card", "Keycard Holder", "Card Watch", "Executive Card", "Command Card Holder", "Extended Door Times", and "Visitor Escort".
- Facility/Code:** Card Issue Level (0) and Facility/Customer Code (999999).
- Image:** A photo of a man in a suit, with "Live", "Import", "Clear", and "Export" buttons below it.

At the bottom of the window, there are buttons for "Copy", "Delete", "Move", "Badge", "Notes", "Permissions", "Help", "Save", and "Cancel".

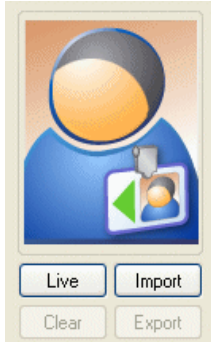
Card Number

The **Card Number** should normally be unique. If the card is used for access control, the card number must correspond to the number on the card issued to the card holder.

If you leave the **Card Number** field empty when defining the details of a new card holder, a card number is allocated automatically when you select **Save**, providing **Auto Card Number** is selected in the "Maintenance/User & Preferences/System Preferences" screen. If **Auto Card Number** is not selected, a card number of zero is used (you can enter the correct card number at a later date).

If you are using magnetic stripe cards and have an appropriate encoding unit, you can encode the card number onto the card using the "Maintenance/Access Control/Encode Cards" screen or when printing the badge. If you are using smart cards, you can use a **Smart Card** button in the Card Holders screen to encode the card.

Card Holder's Picture



If this large icon is displayed on the right of the Card Details tab, it indicates that the card holder's picture has not yet been captured. A picture may be required for the card holder's badge (see page 34). Once captured, the actual picture of the card holder replaces the icon.

The tab provides two alternative methods to capture the person's picture:

- **Live** – Click this to capture a live picture of the card holder's from a camera connected to your PC.
- **Import** – Click this to import a stored picture of the card holder (e.g. taken by a digital camera).

Active and Inactive Dates

Use the **Active Date** and **Inactive Date** to specify the period over which the card can be used to gain access (the doors and times that the card can be used are defined in the Access Rights tab). A card cannot be used as from midnight on its **Inactive Date**, irrespective of access rights.

Note: You can also set a card to expire when a date specified in the Personal tab is reached. This could, for example, be used to expire the card when a qualification expires. For further details, see page 30.

PIN Code

The **PIN Code** option enables you to specify a PIN (Personal Identification Number) for the card holder. This is essential for any card holder who will be using card-and-PIN readers, since access cannot be granted until the card holder presents the card and enters the correct PIN.

By using commands (see page 70), you can switch any reader between card-only and card-and-PIN modes at any time. When a reader is in card-only mode, a PIN does not have to be entered, which may be appropriate at busy times of the day.

A card holder can also use the PIN to create a "duress" alarm/event by preceding the PIN with a zero and not entering the last digit. The alarm/event signals that the card holder is gaining access under duress. Duress mode can be switched on or off for each reader.

Facility/Customer Code

Some cards include a customer code (otherwise known as a facility code), which identifies the card holder's company. You need to choose the code from the **Facility/Customer Code** menu. The codes in the menu are defined in the "Setup/Configuration/Facility/Customer Codes" screen.

Badge Design and Badge Expires

You can use the **Badge Design** menu to choose the badge design for the card holder (see page 35).

If the badge design has an expiry period, the expiry date is displayed in **Badge Expires**. If the badge is used as an access-control card, it will not be able to be used to gain access after this date.

Additional Card Options

You can use the checkboxes in the **Additional Options** area to specify additional privileges for the card holder. For example:

- **Executive Card** – An executive need not enter a PIN at readers in card-and-PIN mode.
- **Extended Door Times** – This is useful for card holders who are disabled, or for another reason require more time than is normally necessary to open and get through a door. If you select the option, the system uses the extended door times (as set up in the "Maintenance/Access Control/Door Timing" screen) each time the card holder gains access.
- **Command Card Holder** – This enables the card holder to generate card command messages at keypad readers. The messages can be made use of by trigger commands, for example to arm or disarm intruder alarm systems or to switch lights on or off. Card commands can also be used by users to change their PIN or the door open time.

Card Status

The **Card Status** area displays and enables you to change the current status of a card. For example, selecting **Card Lost**, as it implies, is useful if the card has been lost or stolen, since if the card is used, the "Lost Card" alarm/event is generated and access is not granted.

Active is the normal status for a card and enables the card to be used normally.


An **Expired** status can be set automatically if the card remains unused for a specified period of time (perhaps because the card holder no longer works for your company). The time period can be specified in the "Maintenance/User & Preferences/System Preferences" screen.

Multiple and Temporary Cards

If **Multiple Cards** is enabled in the "Maintenance/User & Preferences/System Preferences" screen, the following icons are displayed to the right of the **Card Number** field in the Card Details tab:

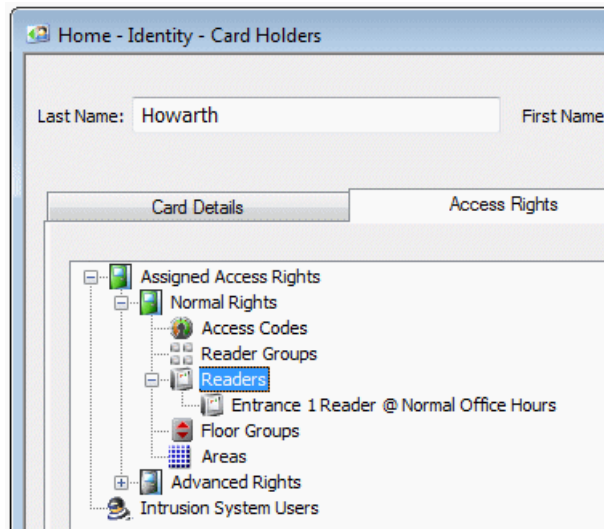


You can use these icons to create and manage up to ten cards per card holder. Multiple cards may be useful if, for example separate cards are needed for different sites. Each card can have a different card number, active/inactive date, facility/customer code and card issue level.

The  icon allows you to create a "temporary card", which could be used if, for example, the card holder has left his or her standard card at home. When a card holder has an active temporary card, only that card can be used to gain access; all other cards belonging to the card holder are set to "Inactive".

Creating and Assigning Access Rights

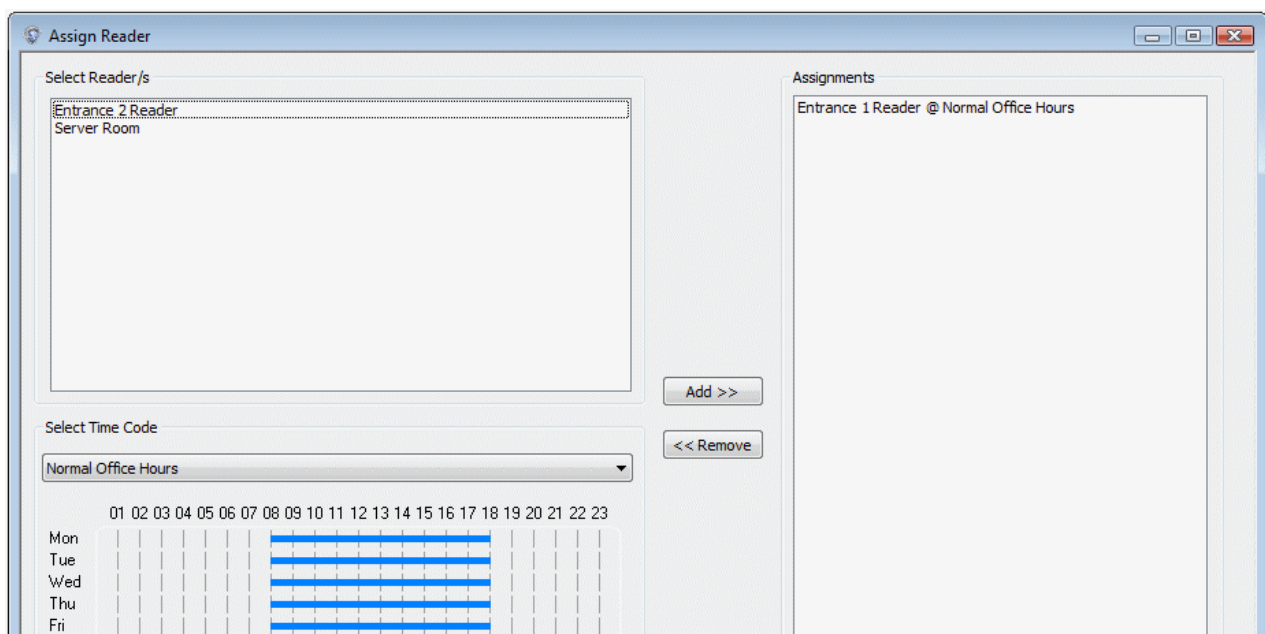
A card holder's access rights, which can be specified in the Access Rights tab of the Card Holders screen, determine which parts of the building he or she has access to and at what times. For example:



The card holder's Assigned Access Rights can comprise Normal Rights and Advanced Rights, displayed in a graphical tree view. You can expand the branches of the tree to view their contents in the normal way. Normal rights are the standard access rights assigned to the card holder. The top level of this branch is always displayed in the tree view.

Advanced rights are used to replace the normal access rights between specified dates. For example, if the card holder has temporary duties in a different office or building, advanced rights can be used to assign the new access rights for the relevant dates. If the Advanced Rights branch is not displayed, click **Show All** to display it.

You can assign access rights by, for example, clicking **Readers**, followed by **Assign**. In this case, the Assign Reader dialog is displayed:



In the Assign Reader dialog, you choose one or more readers that the card holder is allowed to access from the list in the top-left corner. You also need to choose a **time code** (described in the next section), which restricts access to the reader to specified times of the day. In the previous example, the area on the right shows that "Entrance 1 Reader" has been selected with the "Normal Office Hours" time code. The graphic in the bottom-left corner shows that the time code has been specified as 08:00 to 18:00 Monday to Friday, which restricts the use of "Entrance 1 Reader" to those times.

In addition to readers, the Access Rights tab allows other types of access rights to be set up. For example:

- **Reader groups** – A reader group is a group of one or more card readers, as set up in the "Setup/Device Groups/Readers" screen. Reader groups allow access to a group of readers to be assigned quickly and easily. Normally, employees who work in the same office require the use of the same readers, so defining reader groups reduces the amount of work involved in setting up employee access rights.
- **Floor groups** – A floor group is a group of one or more elevator floors, as set up in the "Setup/Device Groups/Floor/Output" screen. You will need to use them if you want to restrict the floors that can be selected on an elevator's control panel. For example, some employees may require access to floors 1 to 10, but others may require access to floors 1 and 2 only.
- **Access codes** – An access code is a predefined set of access rights set up in the "Operation/Times/Access Codes" screen. An access code can define a collection of access rights to readers, reader groups and floor groups. By using access codes, you can assign a card holder access to all these items in one simple operation.

Access codes are particularly useful if you need to assign the same access rights to more than one person. For example, you could set up an access code called "Admin Staff" containing all the access rights needed by the card holders working in the Administration department.

- **Areas** – This determines the intrusion areas that the card holder is allowed to arm or disarm.

Defining Time Codes and Hours

You can define time codes by using the "Operation/Times/Time Codes" screen:

Operation - Times - Time Codes

Time Code Description: Normal Office Hours Category: Access Right

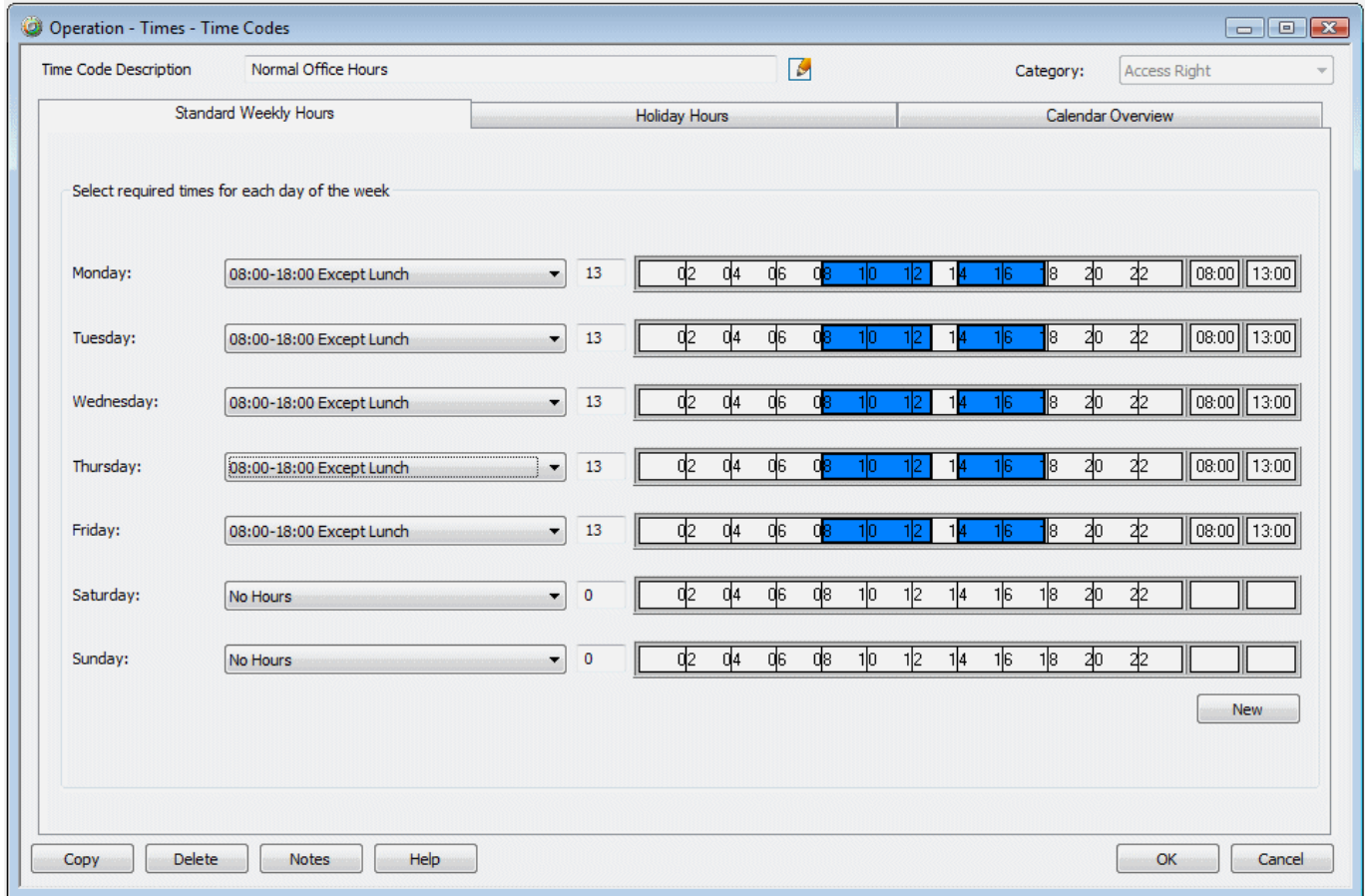
Standard Weekly Hours Holiday Hours Calendar Overview

Select required times for each day of the week

Day	Time Range	Hours	02	04	06	08	10	12	14	16	18	20	22	08:00	18:00
Monday:	08:00-18:00 Access Right	9				X	X	X	X	X	X			X	X
Tuesday:	08:00-18:00 Access Right	9				X	X	X	X	X	X			X	X
Wednesday:	08:00-18:00 Access Right	9				X	X	X	X	X	X			X	X
Thursday:	08:00-18:00 Access Right	9				X	X	X	X	X	X			X	X
Friday:	08:00-18:00 Access Right	9				X	X	X	X	X	X			X	X
Saturday:	No Hours	0													
Sunday:	No Hours	0													

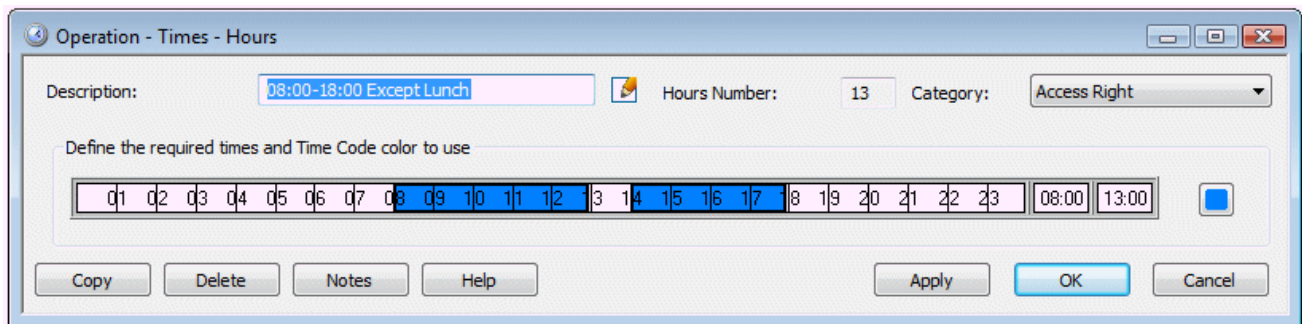
Using the pull-down lists in the Standard Weekly Hours tab, you choose the "hours definition" to use for each day of the week. In the previous example, "08:00-18:00 Access Right" has been selected for each week day, which indicates that access is allowed from 08:00 to 18:00.

By default, a number of hours definitions are automatically installed during software installation, including "08:00-18:00 Access Right ". An hours definition contains one or more time intervals, which determine when people will be able to gain access. In the following example, the hours definition "08:00-18:00 Except Lunch" has been selected, which consists of two intervals:



There can be a maximum of ten different time intervals per time code.

You can add or modify hours definitions using the "Operation/Times/Hours" screen. For example:



Note: Time codes (and therefore hours definitions) are used when setting up access rights, scheduled commands and trigger commands. You can use the **Category** pull-down menu shown in the top-right

corner of the Hours Definition and Time Code Definition screen to restrict the item's use. For example, selecting **Access Right** enables the time code or hours definition to be used only when setting up access rights. The default setting is **General**, which allows unrestricted use.

Defining Holidays

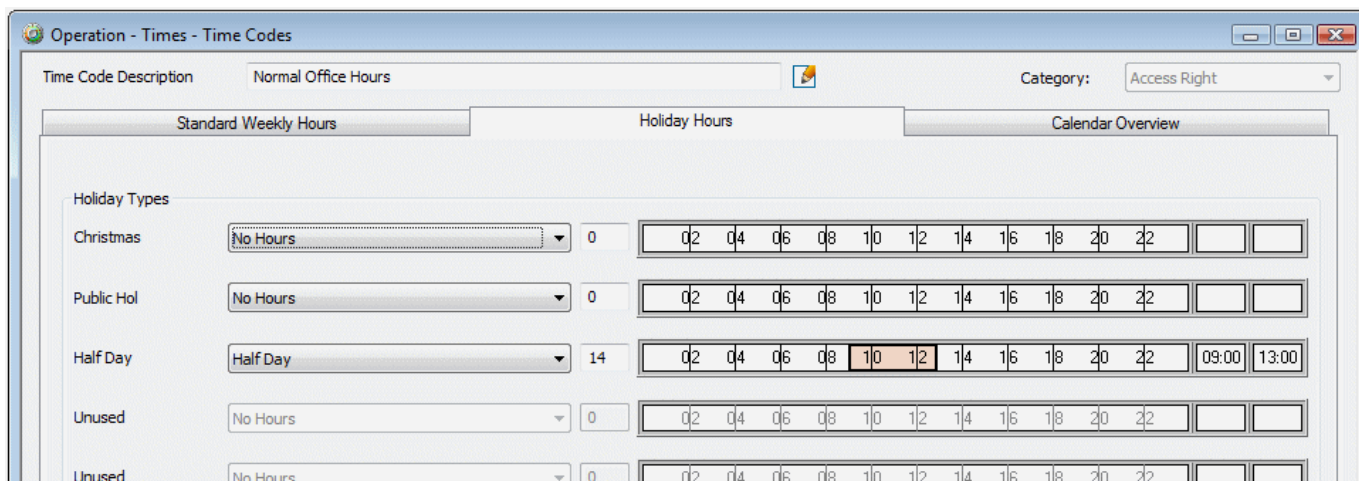
By using the "Operation/Times/Holiday" screen, you can set up holiday dates, which gives you the capability of having different access times for holiday periods.

The screenshot shows the "Operation - Times - Holiday" window. The main area is a calendar for 2011 with days of the week (Mo, Tu, We, Th, Fr, Sa, Su) and dates (1-31) for each month. Several dates are highlighted in blue, indicating they are selected as holiday dates. Below the calendar, there is a section for "Holiday Types" with nine numbered boxes (1-9) and a "Multiple Holiday Types Assigned" option. At the bottom, there are buttons for "Clear", "Notes", "Help", "Assign", "Remove", "OK", and "Cancel". A checkbox for "Holiday Check 7 Days Prior" and a note "Note: Dates may require amendment for each year." are also present.

In the Holiday screen, you first name the holiday types in the boxes near the bottom of the screen (e.g. "Public Holiday" and "Christmas Shutdown"). You then select one or more dates, click **Assign** and choose the holiday types to assign to the selected dates:

The screenshot shows the "Assign Holiday Type" dialog box. It has a section for "Holiday Types" with three numbered boxes (1-3). Box 1 is assigned "Christmas Shutdown" with a checked checkbox. Box 2 is assigned "Public Holiday" with an unchecked checkbox. Box 3 is empty with an unchecked checkbox.

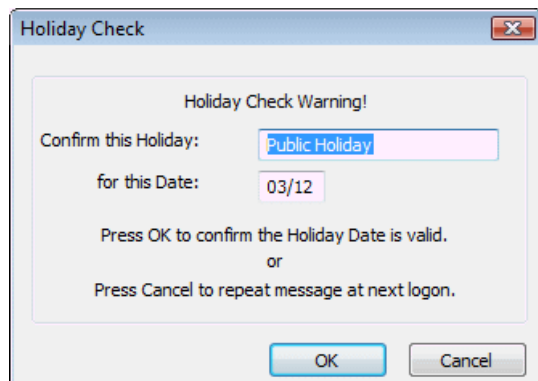
Once you have used the Holiday screen to define the holiday dates, you can use the Holiday Hours tab in the "Operation/Times/Time Codes" screen to specify the hours to use for each holiday type. In the following example for the "Normal Office Hours" time code, "No Hours" is selected for the "Christmas Shutdown" holiday type and "Half Day" for the "Half Day" holiday type (e.g. Christmas Eve).



Defining holidays makes it easy to adjust access rights for holiday dates.

Displaying the Holiday Check Dialog

The Holiday screen includes an option named **Holiday Check 7 days Prior**. It is a good idea to set this option, since it causes a Holiday Check dialog to be displayed when you log in at any time during the 7-day period prior to the holiday date (so that you can check that the holiday date is correct before it occurs):



The dialog is displayed only when logging in at the machine specified by **Route Holiday/Advance/Retard Checks to** in the "Maintenance/User & Preferences/System Preferences" screen (a similar dialog is displayed to warn of a daylight-savings time change).

Specifying Personal Data

You can use the Personal tab of the "Home/Identity/Card Holders" screen, as shown below, to specify personal data about the card holder.

Home - Identity - Card Holders

Last Name: Taylor First Name: Alex Middle Name:

Card Details Access Rights Personal Locator Biometrics

Title	Data
Job Title	Head of Security
Hair Color	Gray
Eye Color	Blue
Gender	Male
Department	Security
Site	Main Site
Date of Birth	01/05/1963
Citizenship	US
Employment Category	Level 3
Vehicle Pass Number	P104

Visitor Management Login

Allow Visitor Management Login for this Cardholder

Login Username: Password:

Copy Delete Move Badge Notes Permissions Help Save Cancel

The personal data titles displayed in this tab (such as "Job Title", "Hair Color" and "Gender") are set up in the "Setup/Identity/Personal Data/Card Holder Titles" screen.

A pull-down list may be displayed for some personal data titles. These are for common information such as "Hair Color", "Gender", etc. For these titles, you can choose predefined data from the pull-down lists. Depending on how the titles are set up in the "Setup/Identity/Personal Data/Card Holder Titles" screen, you may be able to type text directly into the empty first box of the pull-down list. In this case, the information you type is automatically added to the list the next time you use the screen.

The personal data titles that do not have pull-down lists are for information that is likely to be different for each person, such as "Date of Birth". For these, you simply type the text directly into the box. If a "Mask" is set up in the "Setup/Identity/Personal Data/Card Holder Titles" screen, you may be required to enter the information in a particular format, such as mm/dd/yyyy for a date value.

Specifying personal data provides useful additional information about the card holder that may be required from time to time. In addition, it also enables you to use the **Card Data Title** and **Visitor Data Title** filters in the Card Holder/Visitor Selection screen. These filters can be used to find a person's name from specified personal data, such as a vehicle license number.

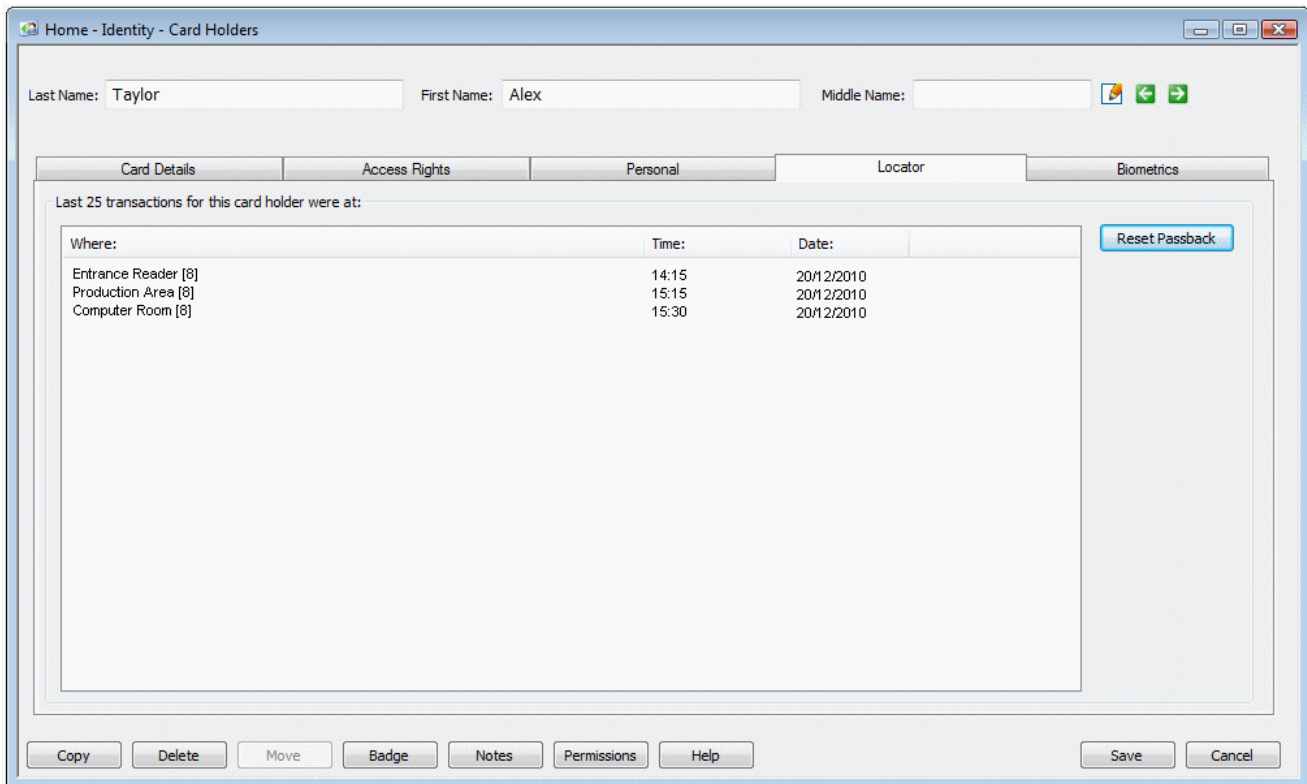
Depending on how the titles are set up in the "Setup/Identity/Personal Data/Card Holder Titles" screen, it may be mandatory to specify data for some or all of the titles. These have a red marker on the right-hand side. If there are mandatory fields, you will not be able to save the card holder's details until you have specified personal data in them.

Secondary Card Expiry

One or more personal data titles may have **Field Type** set to **Expiry Date** in the "Setup/Identity/Personal Data/Card Holder Titles" screen. If you enter a date for such a title, the status of the card is automatically set to "Inactive" at the beginning of the specified day. This feature is useful if you want the card to be made inactive when, for example, an insurance policy or qualification expires.

Locating a Card Holder

On occasions, you may want to determine a card holder's current location in a building. You can use the Locator tab of the Card Holders screen for this purpose, which lists the card holder's last 25 reader transactions. For example:



Home - Identity - Card Holders

Last Name: Taylor First Name: Alex Middle Name:

Card Details Access Rights Personal **Locator** Biometrics

Last 25 transactions for this card holder were at:

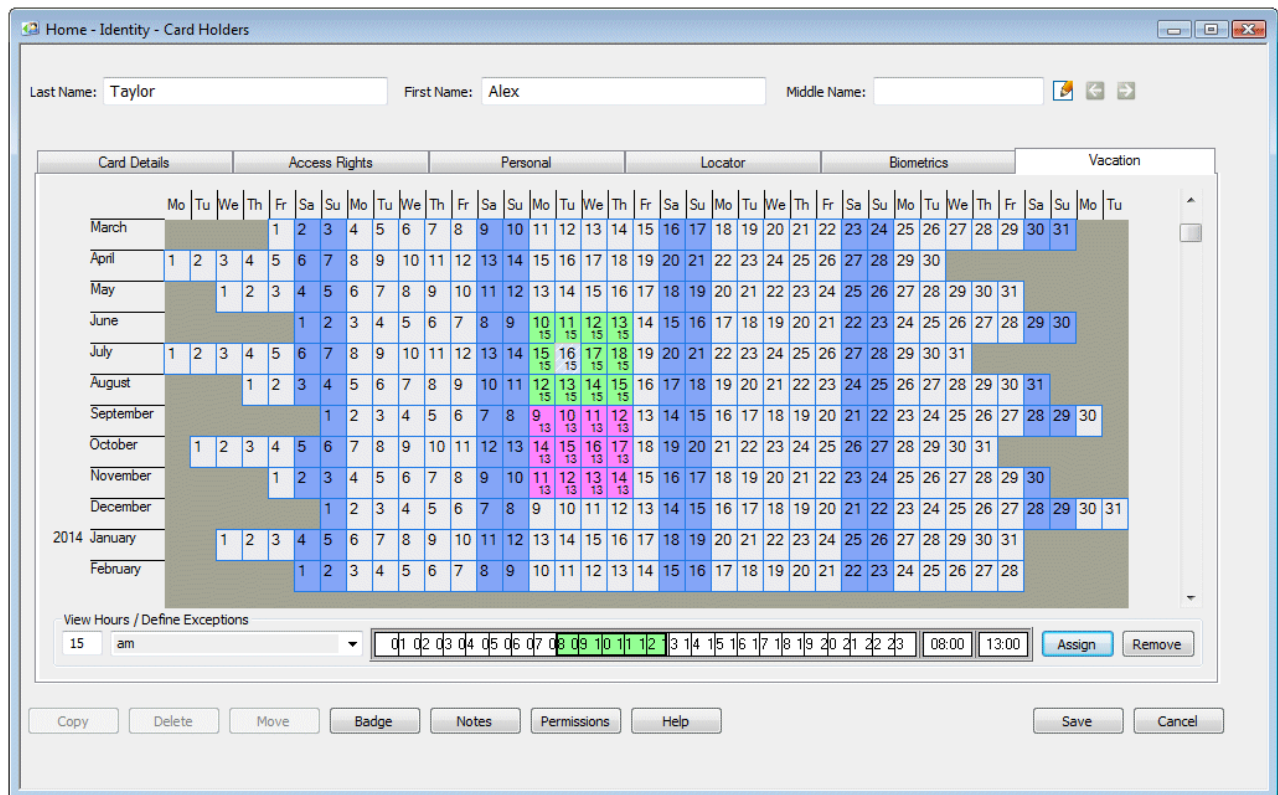
Where:	Time:	Date:
Entrance Reader [8]	14:15	20/12/2010
Production Area [8]	15:15	20/12/2010
Computer Room [8]	15:30	20/12/2010

Reset Passback

Copy Delete Move Badge Notes Permissions Help Save Cancel

Specifying Vacation Times

The Card Holders screen includes a Vacation tab if your user role (as defined in the "Maintenance/User & Preferences/Roles" screen) allows you to access it. The tab allows you to specify the card holder's vacation times in a calendar:



Vacations are used to specify times when individual card holders are taking a period of leave or rest from work. During a vacation, the card holder is not able to gain access - this is to comply with employment law in countries that require people to be offsite during vacations. Card holders who are on vacation have a status of "Vacation" in the Card Details tab.

If a card holder attempts to gain access during a vacation, a "Card Holder on Vacation" alarm/event message is generated and the card holder is not granted access.

Before specifying vacations, set up standard times for vacations (such as 00:00 to 12:00, and 00:00 to 24:00) in the "Operation/Times/Hours" screen. You can specify non-standard times directly into the Vacation tab by selecting the **<Variable>** option from the menu near the bottom-left corner of the tab.

Vacation times have a resolution of one hour.

What is the Difference between Holidays and Vacations?

Holidays are defined in the "Operation/Times/Holiday" screen and are used to specify public holidays, site shutdown periods and other dates. Holidays can be used to affect the access rights of many people within the organization.

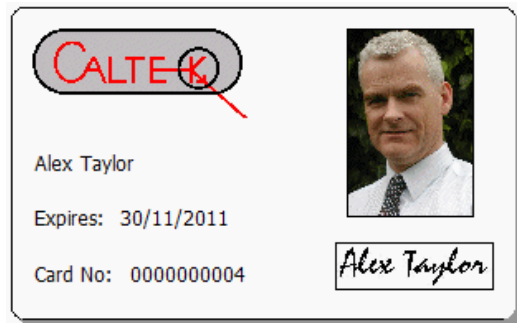
Vacations are specific to individual card holders. They are used to specify leave or rest periods that require the card holder to be offsite to comply with employment laws.

Chapter 4: Producing ID Badges

Introduction

The Symmetry software provides a comprehensive set of tools that allow you to design and print ID badges quickly and easily. A badge may be used for identification purposes only, or for access control, or both.

Producing ID badges is easy. First, you use the "Setup/Identity/Badge Designer" screen to create a library of badge designs, then the "Home/Identity/Card Holders" screen to select, print and encode a badge for each person.



Using the "Home/Identity/Card Holders" screen, you can quickly enter any information that is required for the badge, such as the card holder's name and card number. You can also capture the person's picture, signature and any biometric data, then print and encode the card. The user interface has been designed to optimize operator efficiency, while allowing full control to include all the graphics and information required.

Designing Badges

You can design badges using the "Setup/Identity/Badge Designer" screen. A badge design specifies the appearance of the badge, including the position and type of information to include. For example, a badge design could include the card holder's name, expiry date, company logo and card holder's picture. The system gives you all the tools you need to create customized badge designs in minutes, with text and graphics applied to both sides of the badge.

Using the Badge Designer, you can create a library of badge designs. You may, for example, decide to create different designs for administration staff, cleaners, contractors and security staff.

A key feature of the Badge Designer is the ability to associate default access rights with each badge design for access control purposes. Any card holder allocated a badge design is automatically given the badge access rights, which eliminates the need to set up access rights for each person.

The overall simplicity of the software, supported by context-sensitive help, ensures that anyone with basic mouse/keyboard skills can begin to use the Badge Designer quickly and efficiently.

Figure 4.1 gives an overview of the key features provided by the Badge Designer.

Card Data allows you to define the position of text that varies for each card holder, such as the card holder's name or card expiry date.

You can specify an expiry period. A badge cannot be used to gain access once expired.

You can use the options in the **Tools** group to draw or place down objects, such as shapes, text and a company logo.

You can use this option to toggle between designing side 1 and side 2 of the badge.

You can associate default access rights with the badge.

You can right-click in white space and specify the position of a chip or magnetic stripe on the current side.

You can define the position and size of the card holder's signature and picture, then use the "Home/Identity/Card Holders" screen to capture this data.

Figure 4-1: The Badge Designer Definition Screen

Note:

- When you open the Badge Designer screen, a new tab in the ribbon bar provides the options necessary for designing badges.
- Right-clicking an item and selecting **Rule** enables you to set up a rule that determines whether or not the item is displayed for a card holder, depending on personal data. For example, you may want a logo to be displayed only for card holders who belong to a specific department.

Producing a Card Holder's Badge

Once you have produced the badge designs, you can select each card holder's badge from the "Home/Identity/Card Holders" screen, as described next.

Entering Card Details and Capturing the Card Holder's Picture

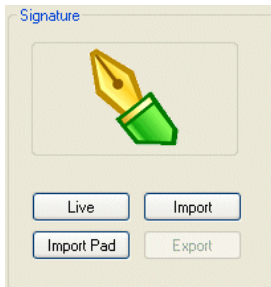
First, you need to make sure that the card holder's details are correct, and to ensure that the card holder's picture has been captured (assuming that a picture is to be printed on the badge). Use the Card Details tab to do this, as described on page 21.

Approving Official

The Card Details tab includes an **Approving Official** option. You can use this to choose the name of the person who has authorized the badge to be issued. You can set up approving officials in the "Setup/Identity/Approving Official" screen.

Capturing the Card Holder's Signature

If the card holder's signature is to be printed on the card, capture it using the **Signature** area of the Biometrics tab in the Card Holders screen:



There are three ways of capturing a signature:

- **Live** – Click this to capture a live picture of the signature from a camera connected to your PC.
- **Import** – Click this to import a stored picture of the signature (e.g. taken by a digital camera).
- **Import Pad** – Click this to capture the signature online from a signature pad attached to your computer. The card holder writes the signature on the pad and the system captures it automatically.

Once you have captured the signature, the icon shown above is replaced by the person's signature.

Capturing Fingerprint and Hand Geometry Data

Biometric recognition is taking an increasingly prominent position as a solution for today's ever-increasing requirement for total security. The Symmetry software uses the latest technologies to enable fingerprint and hand geometry to be used as part of access-control transactions.

Fingerprint and hand geometry biometric data can be captured using the Biometrics tab, making it easy to set up a card holder's details, capture the biometric data and produce a badge from a single location in the user interface.

After capturing the biometric data, you can use the optional Smart Card Management Module to encode the biometric data onto a smart card, which the card holder presents to a biometric reader to gain access. The reader checks the hand or fingerprint data on the card with the actual hand or fingerprint to confirm the person's identity.

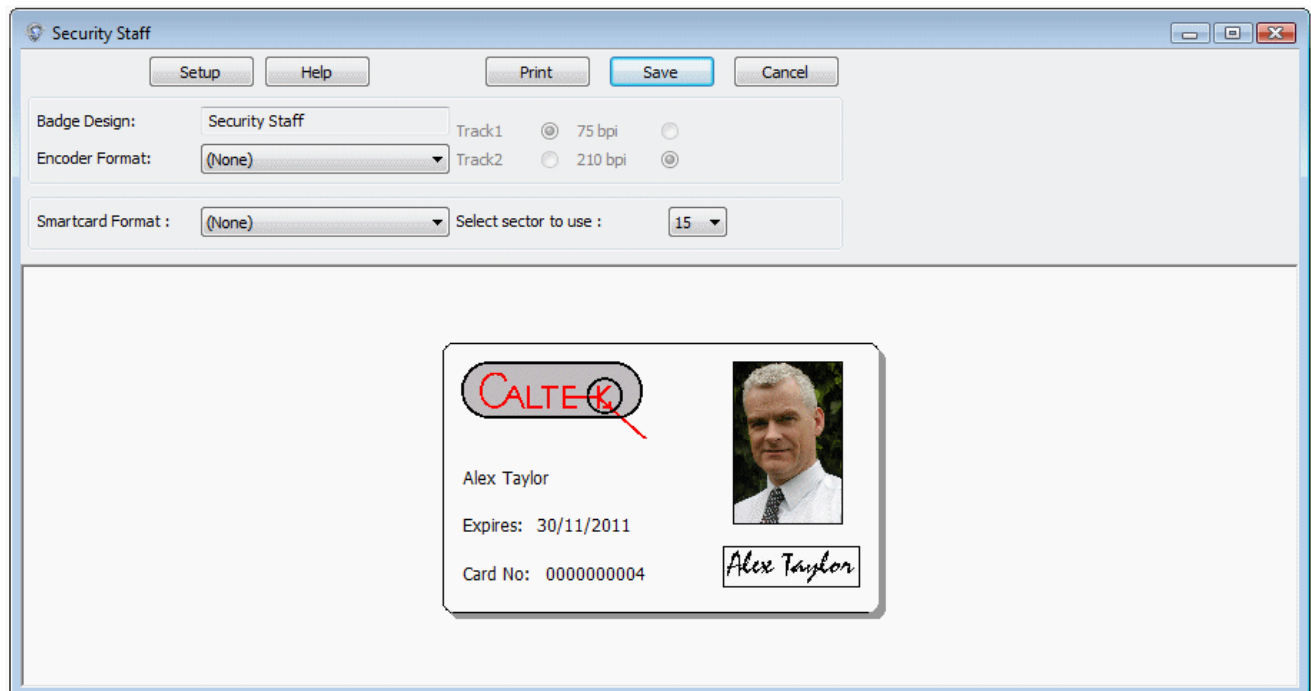
Smart-card technology provides the possibility of using a single card for multiple purposes.

For detailed information, please refer to the online help in the Symmetry software. Alternatively, if you are using 813 fingerprint readers, you can obtain details of how to enroll fingerprints and use 813 readers from the *813 Fingerprint Reader User's Guide*.

Selecting and Previewing the Badge Design

Before printing a badge, you must choose a badge design for the card holder using the **Badge Design** pull-down menu in the Card Details tab.

Once you have selected the badge design, you can use the **Badge** button at the bottom of the Card Holders screen to see a preview of the badge. The card holder's name, picture, etc. are automatically inserted into the appropriate locations. The following shows an example, which uses the badge design shown on page 33.



The preview screen contains **Encoder Format** and **Smartcard Format** options. You can use these to define the format to be used when encoding the badge.

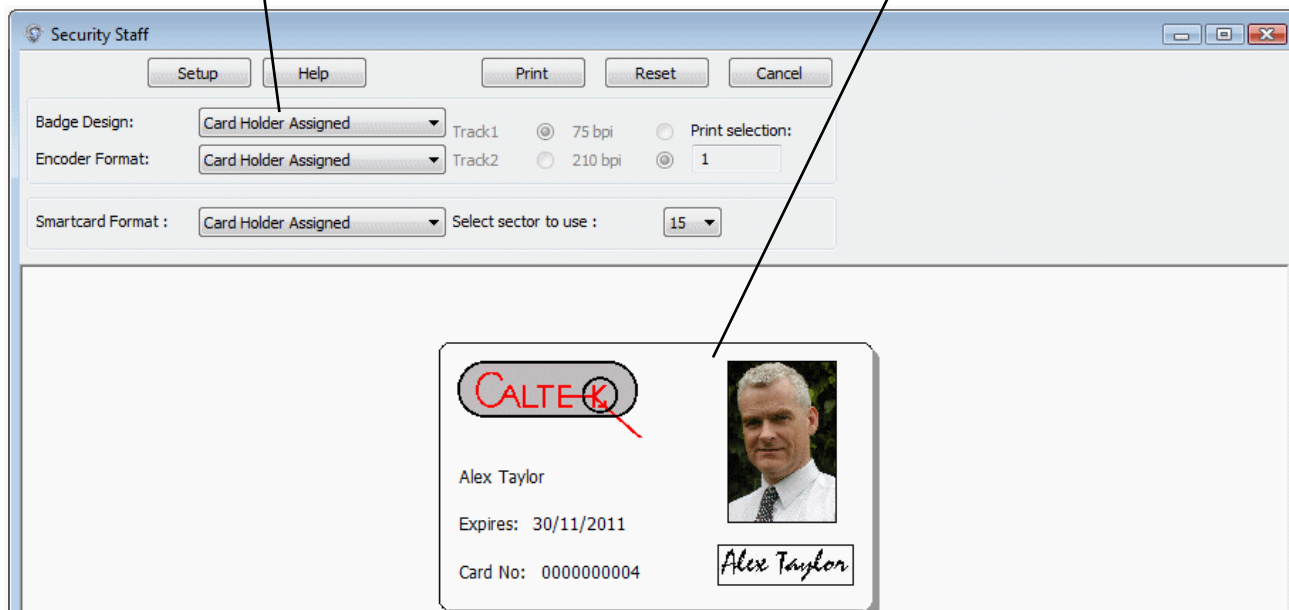
Printing and Encoding the Badge

If you wish to print an individual badge, you can simply click **Print** when viewing the preview of the badge, as shown in the previous picture. A suitable combined printer and encoder will print and encode the card in one operation.

Alternatively, you can save the card holder's details and use the "Home/Identity/Print Badges" screen to print several badges in the same print run. The Print Badges screen displays a Selection screen, in which you select the badges to print. Having done this, the screen shown in the following picture is displayed. Selecting **Print** starts the printing/encoding process.

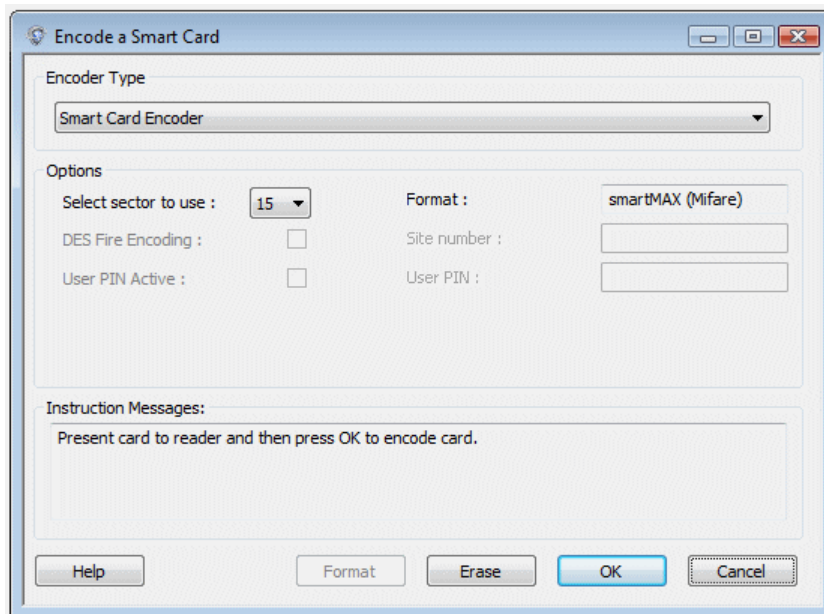
For each card, the default badge design and default encoder format are taken from the "Home/Identity/Card Holders" screen. You can override the defaults here.

Each person's badge is displayed as it is being printed.



Smart Card Button

If the "Smart Card Encoding" license is installed, a **Smart Card** button is available in the Card Holder's screen. Clicking **Smart Card** displays the following screen, which enables you to encode the card number and optional biometric data onto the badge if it is a smart card used for access control:



This screen supports various smart card types, including MIFARE®, MIFARE DESfire, HID®, HID iCLASS™, and Texas Instruments™ (ISO 15693). Several different encoders are also supported.

Chapter 5: Visitor Management

Setting Up Visitors

The Visitor Management features of the Symmetry software enable you to improve the efficiency of the visitor check-in process, enhance site security and manage visitor details more effectively. The system allows easy entry of visitor details through a dedicated "Home/Identity/Visitors" screen, which can be accessed from any client PC or Web browser (with a SymmetryWEB or Web Access license):

The screen can be used by any authorized employee to enter personal information about their visitors before they arrive on site. This approach can significantly reduce check-in delays, improve efficiency and enable security staff to verify a person's identity more carefully on arrival.

The "Home/Identity/Visitors" screen has been designed to enable people who are not normally users of the Symmetry software to enter the personal details of their visitors. The Visitors screen is similar to the "Home/Identity/Card Holders" screen.

Note: It is possible to give different users different levels of access to the "Home/Identity/Visitors" screen. Some tabs in the screen may not be available, depending on your user privileges (defined in the "Maintenance/User & Preferences/Roles" screen).

Visitor Details

The Visitor Details tab enables you to specify general details of the visitor, such as when the visitor is expected to arrive and depart, who he/she is visiting, and the name of the escort (if required). In a similar manner to the "Home/Identity/Card Holders" screen, you can also capture the visitor's picture, choose a badge design, then print the visitor's badge on a badge printer.

A major benefit of the Visitor Management module is the ability to sign visitors in and out from the Visitor Details tab, using the **Sign In** and **Sign Out** buttons. Full details of when the visitor signed in and out are maintained in the History box located near the bottom of the screen.

The current status of the visitor (Pending, Active or Closed) is displayed in a color-coded box near the bottom-left corner of the screen, which can instantly show you whether the visitor is still on site.

If **Email Notification of Visitor Signing In** is selected in the "Maintenance/User & Preferences/System Preferences" screen, an email is automatically sent to the card holder when the visitor is signed in. The email address is defined using a personal data title in the card holder's details. The personal data title must have a **Category** of type **Email**, as defined in the "Setup/Identity/Personal Data/Card Holder Titles" screen.

The Visitor Details tab is also able to display a scanned or imported image of the visitor's business card. This time-saving feature ensures speedy and accurate acquisition of basic information about a visitor, such as address and contact information, and is of particular benefit in cases when the visitor details are not entered before the visitor arrives.

Personal Details

The "Home/Identity/Visitors" screen includes a Personal tab, in which you can enter personal details of the visitor in a similar manner to the Personal tab of the "Home/Identity/Card Holders" screen (see page 29).

The personal data titles can be different from those used for card holders and are set up in the "Setup/Identity/Personal Data/Visitor Titles" screen.

Pre-defined data items for each of these personal data titles can be defined in the "Setup/Identity/Personal Data/Visitor Data" screen. For example, if there is a data title named "Hair Color", you may want to define data items such as "Black", "Brown" and "Blonde". You can select pre-defined data items from menus in the screen.

Visitor Card Details, Access Rights and Biometrics

If the visitor requires an access-control card, you need to specify a card number and other details in the Card Details tab. You also need to use the Access Rights tab to specify which areas the card holder can access, and at what times. Setting up card details and access rights for a visitor is similar to setting up the same details for a standard card holder, as described on page 21 and 24.

If biometric card readers are being used, it may be necessary to capture the visitor's fingerprints or hand geometry before encoding the visitor's access-control card. You can do this using the Biometrics tab, in the same way as for a standard card holder (see page 34). If magnetic stripe cards are being used, you can encode the card at the same time it is being printed (assuming you are using a combined badge printer and encoder).

Once a visitor has left the site, it is possible to delete the card number from the visitor's details, then save the details. This allows the card number to be assigned to another visitor, without deleting the previous visitor's details, which may be reused if the visitor revisits the site.

Deactivating a Visitor Automatically on Leaving the Site

Visitors can be automatically deactivated following a successful transaction at a specified reader. To configure this feature, set **Deactivate Visitor Cards** in the "Install/Access Control/Reader" screen and ensure the visitor has access rights to this reader. When the visitor is granted access at the reader:

- The **Force Cardholder Inactive** checkbox is automatically set in the "Home/Identity/Visitors" screen.
- The "Visitor Card Holder Deactivated" alarm or event is generated.

This feature is typically used at readers that allow visitors to exit the site.

Note: If mustering is used on the site, make sure the deactivation reader is outside the **Area Reader Group**, as set in the "Home/Identity/Muster" screen. The **Area Reader Group** defines the area covered by the muster, and if the deactivation reader is in this area, the visitor will be removed from muster reports before leaving the area.

Visitor Reports

The system provides extensive visitor reporting capabilities:

- **"Reports/Identity Reports/Visitors"** – You can list details of visitor cards.
- **"Reports/Identity Reports/Access"** – You can list details of the access rights of visitor cards.
- **"Reports/History/Activity"** – You can view previous alarms and events generated by visitors.
- **"Reports/History/Cardholders Onsite"** – You can find out which visitors used an entrance reader.
- **"Home/Identity/Locator"** – You can find out the current location of selected visitors.
- **"Home/Identity/Muster"** – Muster (roll call) reports include visitors.

All visitor transactions at access-controlled doors are recorded, and any infringements of site security are immediately reported.

Chapter 6: Digital Video Management

Introduction

The optional Digital Video Management module provides integration with CCTV and Digital Video systems. The module enables video images to be viewed, recorded and replayed from easy-to-use screens within the Symmetry software.

The Digital Video Management module provides an open platform that supports IP cameras connected directly to the network, Symmetry Network Video Recorders (NVRs) and a wide range of Digital Video Recorders (DVRs). If required, images can be recorded continuously or at scheduled times of the day or night.

This chapter gives an overview of the screens and options available in the Digital Video Management Module.

Summary of Key Features

The following is a summary of key features.

Virtual Matrix Screen:

- Simultaneously displays multiple live images from digital video cameras.
- Up to 72 simultaneous live images per PC, depending on PC specifications.
- Includes controls for camera pan, tilt, zoom and focus.
- Instant record feature.
- Save, print and export images.
- Camera sequencing.
- Camera tours.
- Supports display of web pages.
- Instant replay feature.
- Alarm and activity display.

Video Playback screen:

- Allows easy replay of video recordings.

- Filter options enable recordings to be located quickly from the database.
- Simultaneous replay of up to four recordings.
- JPEG picture export.

Tagging:

- Tagged recordings produced by, for example, a Record Video trigger command or user recording, are prevented from being overwritten and enable easy playback.
- Also supports tagging by a user-applied "bookmark".

Camera Support:

- A wide range of camera types is supported, including Symmetry and Axis IP cameras.
- Maximum number of cameras is license dependent.

CCTV switcher integration:

- Cameras attached to legacy CCTV switchers can be viewed, controlled and switched to any monitor.
- Ancillary devices (such as lamps and wipers) can be switched on or off.

Commands:

- Commands can, for example, run scheduled recordings and record incidents automatically (e.g. from any intrusion or access event).
- Supports commands to switch live video to the virtual matrix.

Playback from alarms or reports:

- Incidents recorded automatically by an alarm or event can be easily replayed from history reports or the "Home/Monitoring/Alarms" screen.

Graphics integration:

- Live video can be played from a graphic, such as a plan or map of the building.

Identity Verification:

- Operators can compare the live image of a card holder who is using a reader, against the stored image.

Using the Virtual Matrix Screen

The "Home/Video & Audio/Virtual Matrix" screen enables you to simultaneously view live pictures from digital video cameras or web pages. Each image is displayed in a "cell" located on the right-hand side of the screen. Two Virtual Matrix screens can be open at the same time.

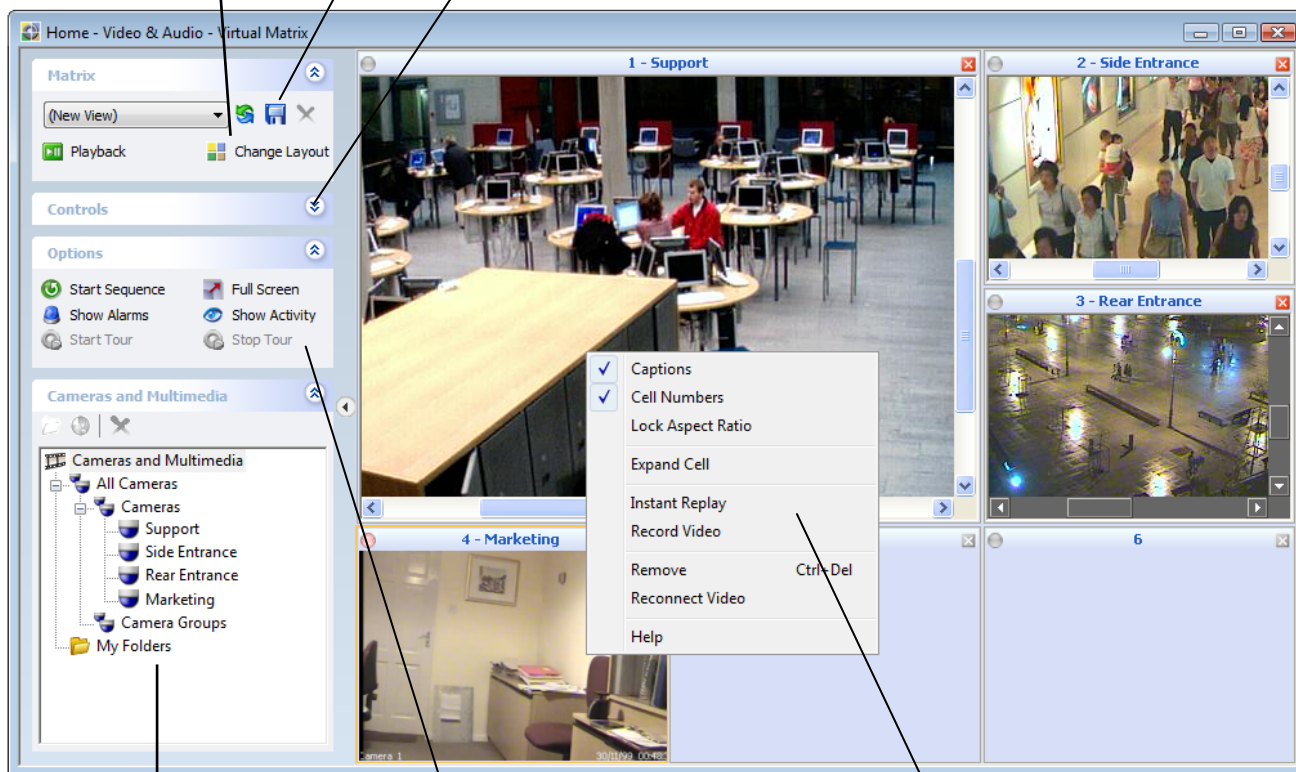
To display live images, find the camera or web page in the tree view, then drag and drop it into a cell. You can also drag and drop images from one cell to another. Double-clicking an image displays the image in the largest cell.

Note: Black or gray areas in a picture indicate "privacy zones" configured by the installer.

You can change the number of cells displayed and their positions using the **Change Layout** option.

Once you have decided which cameras and/or Web pages to view, and have moved each into a cell, you can save the configuration as a "view" using the **Save** button. The next time you open the screen, you can select the view from the pull-down menu, which automatically displays the Web pages and camera images in that view.

Clicking here can display a control to zoom in/out, focus, pan, tilt and focus the camera, or to move the camera to a preset position. The control makes available only those functions the camera supports.



The tree view contains the digital video cameras set up in the Install screens, and all Web pages added using the **Create URL** button, which is located above the tree view.

This panel enables you to start camera sequencing, display an image full screen, show alarms, show current activity and start/stop camera tours.

The right-click menu provides context-sensitive options; for example, to record or replay video.

Using the Video Playback Screen

The "Home/Video & Audio/Video Playback" screen enables you to replay video recordings. Up to four recordings can be simultaneously replayed in "cells" located on the right-hand side of the screen. You can swap between displaying one and four cells by right-clicking on a cell and selecting/deselecting **Expand Cell**.

You can change playback speed, or pause and play the recording.

Camera	What	Where/Who	When	Start	End	Duration
Symmetry NVR Storage						
Side Entrance	Installer	Installer	02/12/2010 16:28	02/12/2010 16:28	02/12/2010 16:29	00:01:00

This lists the recordings available for the selected cameras.

The time line shows periods during which recordings exist for the currently selected cell, and your current position in the recording. You can drag and drop the marker to replay from a different time. The different colors in the time line indicate different types of recording, e.g. bookmarked recordings, or recordings started by an alarm condition.

You can use these options to perform actions such as to save the recording as an MPEG-4 file, zoom in or out of the time line and bookmark periods of interest.

To play a recording:

1. In the tree view located near the top-left corner of the screen, select the camera(s) that made the recording(s).
2. Use the **Include** pull-down menu to specify the types of video recordings to find from the database. Select **All Video** if you want to find all recordings.
3. Specify the date and time range of the recordings to find.

4. Click the **Search** (🔍) button. The panel near the bottom of the screen lists all recordings that are of the correct type and include any part of the time period specified by the **From** and **To** fields.
5. Drag and drop any listed recording into a cell, or double-click. Playback starts from the **Start** time shown in the panel.

Using Identity Verification

The "Home/Identity/Identity Verification" screen enables you to monitor the identity of people at "entry points" to the site and control access at those entry points. An entry point is a reader at a door, barrier, turnstile or other device that controls access. Up to nine entry points can be monitored simultaneously. Entry points are set up in the "Setup/Identity Verification/Entry Point" screen.

Normally, the screen is configured to display live video at each entry point.

When a card holder or visitor performs an access-control transaction, the screen automatically displays the stored image of the card holder or visitor, providing that person is known to Symmetry. This allows you to check the person's stored image against the live video image.

The screen displays a cell for each entry point in the current view.

This is the live image at the entry point (there can be up to three).

This is the person's stored image.

The buttons allow you to grant or deny access, pause/resume live video, send commands, etc. The following section provides further information.

Clicking this button displays the entry point you should service first (that is, has been outstanding the longest).

Click to change the View

Entry Point	Status	Card Number	Active Date	First Name	Last Name	Hair Color
Door 1	Access Requested	1	17/03/2014	Alex	Taylor	Grey
Door 2	Access Denied	7	17/03/2014	Sarah	Green	Brown
Side Entrance 1	User Locked					

This area displays information about the last transaction, including details of the card holder or visitor (if known). The card and personal information to display is specified the "Setup/Identity Verification/Data Titles" screen.

The side bar contains a button for each entry point. Clicking a button brings the entry point into view.

Optionally, the screen can be used in manual verification mode (otherwise known as PC Door Control mode). In this mode, you are required to choose whether to grant or deny access for each valid access-control transaction. The alternative is automatic verification mode, where the system automatically grants or denies access in the normal way. If you have the necessary permissions, you can change the mode using the **Enable Automatic Verification/Enable Manual Verification** button in the screen.

Optionally, an entry point can also be set up to use an intercom system. This allows you to speak to any person at the entry point.

The entry points displayed at any one time are defined in a "view", as set up in the "Setup/Identity Verification/View" screen. You can choose the view to display from the menu near the top-right corner of the screen. The name of the view you are currently displaying is shown at the top of the screen.

Note: If the Video Verification screen is used to monitor just one entry point, previous transactions can be displayed, including associated images. To do this, **Rotate View** must be set in the "Setup/Identity Verification/View" screen.

Video Verification Buttons

The following buttons are provided in the Video Verification screen (some are available only if enabled in the "Setup/Identity Verification/Entry Point" screen).

Note: The following provides an overview of each button. Please refer to the *Online Help* if you require further information.



Grant Access (icon set in the "Setup/Identity Verification/Entry Point" screen) – Click to grant access. This is available if one of the following is true:

- You have used **Lookup Card Holder** (see below).
- The entry point is in manual verification mode and there has been a valid access-control transaction.
- The entry point is in automatic verification mode (you can grant access at any time).



Deny Access (icon set in the "Setup/Identity Verification/Entry Point" screen) – Click to deny access.



Unlock/Lock – Click to lock/unlock the entry point. The icon indicates the current state.



Connect Intercom/Disconnect Intercom – Click to speak to the person at the entry point, or hang up.



Lookup Card Holder – Click to find a card holder in the database. You can then use **Grant Access** or **Deny Access**. This option may be useful in cases where, for example, a card holder has forgotten his/her card.



Pause/Resume – Click to pause/resume live video. You can configure the entry point to pause video automatically when there is an access control transaction in manual verification mode.



Print – Prints the details shown for the entry point.



Command – Click to run one of up to three predefined commands specifically configured for the entry point.



Enable Automatic Verification/Enable Manual Verification – Click switch between automatic and manual verification modes.

Configuring Identity Verification

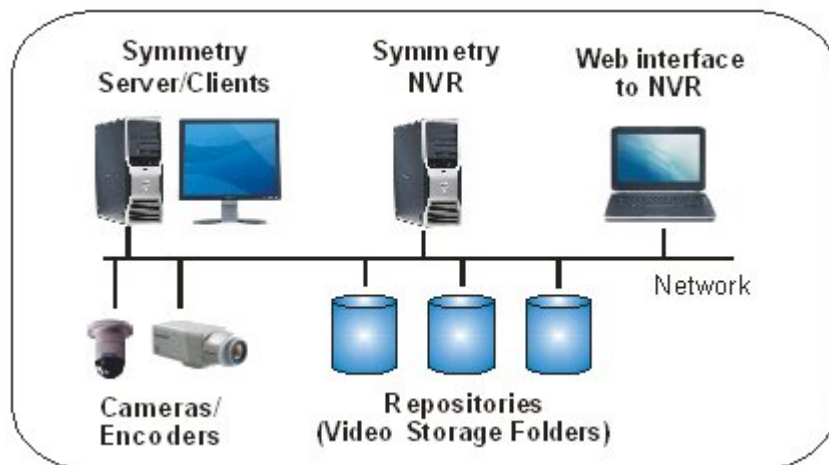
You can configure identity verification using three screens:

- "Setup/Identity Verification/Entry Point" screen – Specifies the information to display for each entry point.
- "Setup/Identity Verification/View" screen – Specifies the entry points to include in each view.
- "Setup/Identity Verification/Data Titles" screen – Specifies the card and personal information to display when there is a transaction from a known card holder or visitor.

Using Symmetry NVRs

The Symmetry Network Video Recorder (NVR) is PC-based software that is able to record and store video in any accessible folder (repository) on the network. The NVR records video from all digital video cameras that are assigned to it. Typically, the repositories use separate network-attached storage, but it is allowable to use any local or network-accessible disk.

The following illustration shows one possible example of a Symmetry architecture that includes an NVR.



There can be multiple NVRs in the same system. Each requires a separate PC, which can be a Symmetry server, client or any other suitable PC on the network. An NVR can be shared by more than one Symmetry company.

Video stored by an NVR can be replayed using the "Home/Video & Audio/Video Playback" screen.

Each NVR stores the details of the cameras that are assigned to it. Any changes in the Symmetry software are automatically downloaded to the NVR.

The NVR is able to mark recordings as tagged, bookmarked, user and standard.

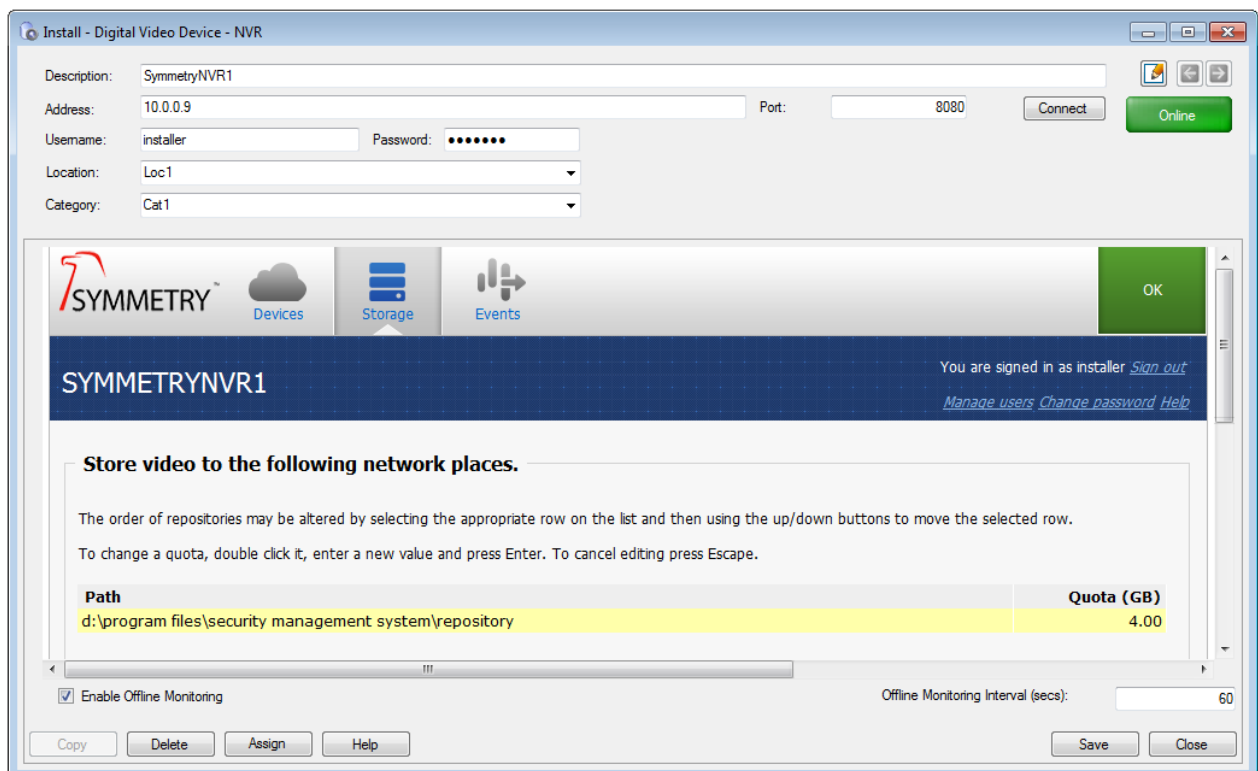
Tasks Carried Out by an NVR

Each NVR:

- Manages the storage of recordings for all cameras that are assigned to it.
- Determines the recording mode. An NVR can be set up to record on demand (as a result of user actions in the Symmetry software or according to a specified schedule), continuously or never. The default mode is "on demand".
- Retrieves video for playback. For example, for the "Home/Video & Audio/Video Playback" screen.
- Provides a web interface that allows you to configure and monitor the NVR (see below for further details).
- Purges old video automatically, based on purging rules defined in the web interface.
- Communicates alarms and events to the Symmetry software.

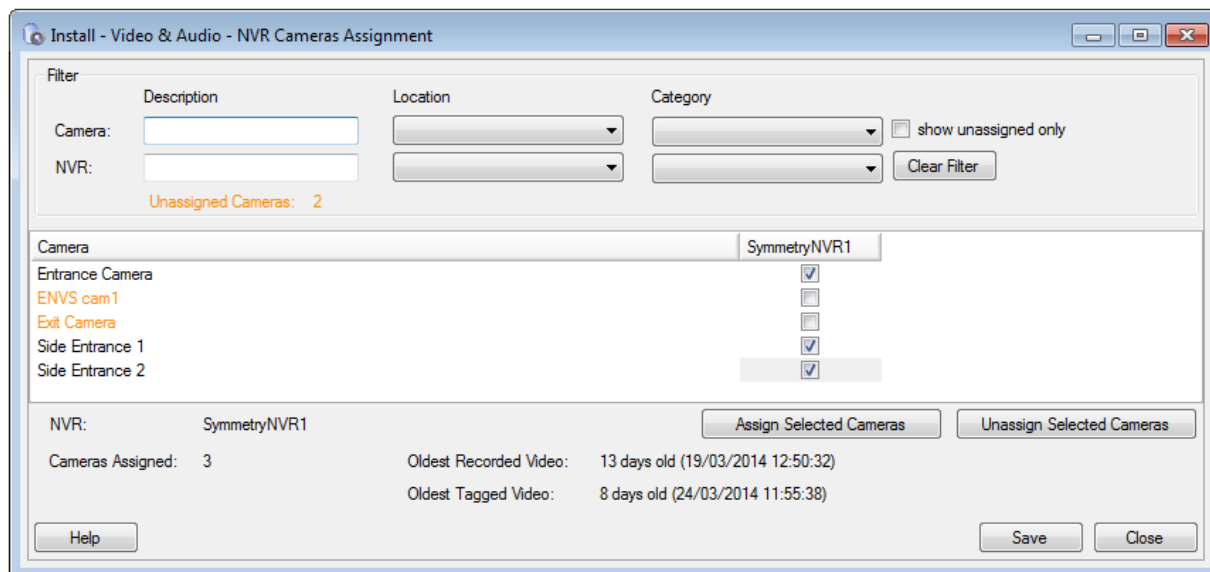
Defining NVRs in the Symmetry Software

You can define NVRs in the Symmetry software using the "Install/Video & Audio/Digital Video-NVR" screen. The screen also provides access to the NVR web interface.



Assigning Cameras in the Symmetry Software

You can assign cameras to NVRs using the "Install/Video & Audio/NVR Cameras Assignment" screen. The screen allows the same camera to be assigned to more than one NVR, which enables a recording to be saved to different locations.



By default, up to 128 cameras can be assigned to a single NVR, but this can be changed using the NVRCameraLimit setting in multimax.ini.

Using the camera definition screen in the Symmetry software, it is possible to create the same camera more than once. You can do this by creating two separate camera definitions, each using the same camera IP address, which allows different streams from the same camera to be recorded simultaneously. You may want to do this to record the same image at, for example, different resolutions.

About the Web Interface

You can use the web interface to perform various management tasks, including to:

- Specify the recording mode (never, on demand or always).
- View the current recording status.
- Add repositories (storage folders).
- View or specify recording schedules (such as every night).
- Specify video purge rules.
- Specify the NVR events to send to the Symmetry software.
- Manage NVR user accounts.

For further details of how to use the web interface, please open the separate help system from the web interface.

Backing up Video Data

Make sure that there are automated procedures in place for backing up the NVR configuration folders and, if required, video repositories. Please refer to page 84 for further details.

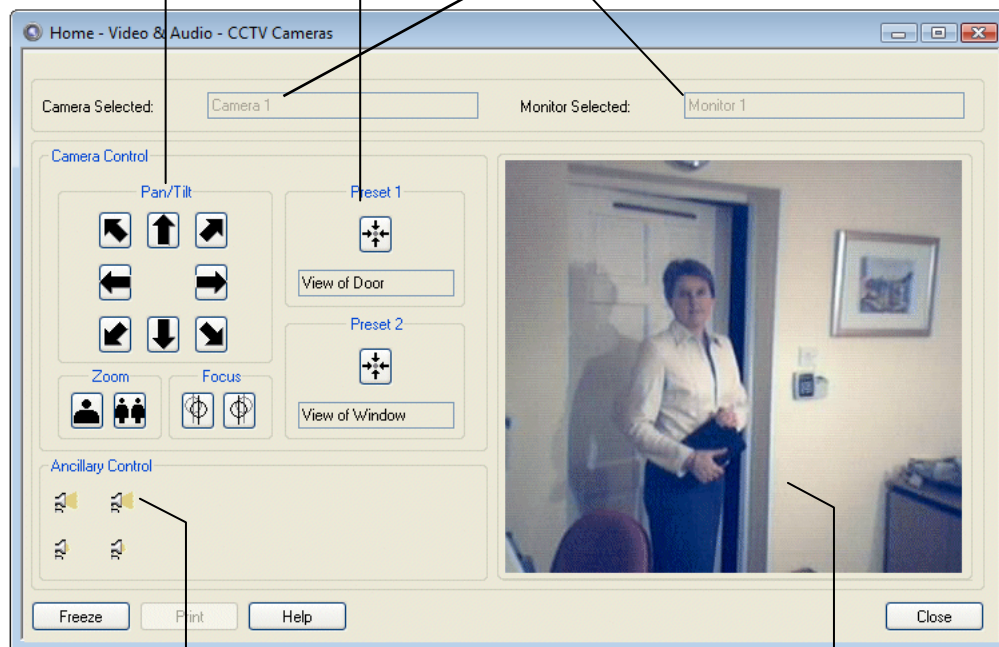
Using CCTV Switchers and Cameras

A CCTV switcher is a device that can be connected to a serial port of a Symmetry client PC. The switcher unit has connections for cameras and monitors, and is able to switch live video from any connected camera to any connected monitor. A CCTV switcher is also able to switch ancillary devices, such as camera lamps and wipers, on or off.

You can switch video to a selected monitor, control camera position and switch ancillary devices on or off using the "Home/Video & Audio/CCTV Cameras" screen, as shown below. Alternatively, commands can be set up to perform the actions automatically at scheduled times or in response to alarms or events.

You can use the buttons to control the camera's pan/tilt, zoom and focus, and to move it to a preset position (camera type permitting).

These shows the name of the camera and monitor selected in the Selection screen. Pictures from the camera are automatically switched to the monitor.



These buttons switch the camera's ancillary devices on or off.

If a switcher has a separate hardwired video connection to the PC, the pictures displayed at the CCTV monitor are also displayed here.

Viewing a CCTV Image During Alarm Acknowledgement

A **Command** button is available when acknowledging an alarm from the "Home/Monitoring/ Alarms" screen, which could be used to switch the CCTV camera at the alarm location to a pre-defined monitor. This enables the operator to view the images at the alarm location quickly and easily. You can set up the command activated by the **Command** button using the "Operation/Alarms/Commands" screen.

Digital Video and CCTV Switcher Commands

Commands from the Symmetry software include the following.

Digital Video Camera Commands

- Live Video – Displays live video from the selected digital video camera.
- Modify Video Settings – Changes the video settings of the selected camera.
- PTZ Preset – Moves the selected camera to a preset position.
- Record Video – Records video from the selected digital video camera.
- Start/Stop Recording – Starts/stops recording for the selected digital video camera.
- Switch Live Video – Switches live video from a digital video camera to a cell in the "Home/Video & Audio/Virtual Matrix" screen.
- Video Instant Replay – Automatically displays a window showing recorded video from a selected camera.
- Enable/Disable Motion Detection – Enables/disables motion detection for a selected camera.

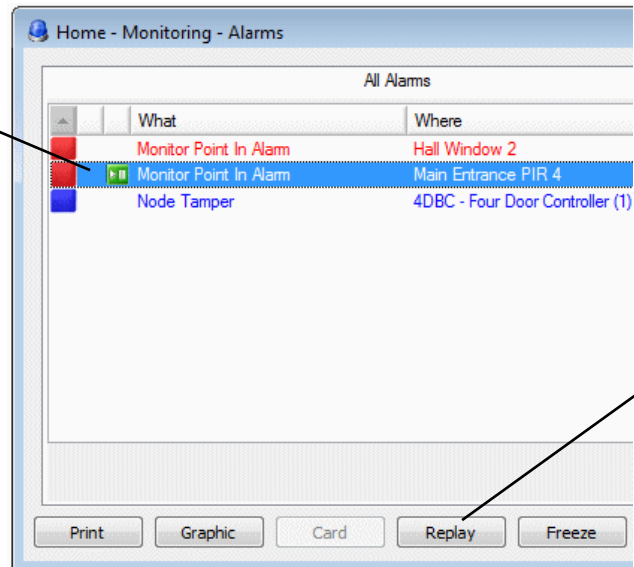
CCTV Switcher Commands

- Activate Alarm – Causes a pre-programmed action to occur at the CCTV switcher (trigger command only).
- Reset Alarm – Cancels the Activate Alarm command (trigger command only).
- Ancillary On/Off – Switches the CCTV switcher ancillary device on/off.
- Switch to Monitor or the name of the camera – Switches video from the selected camera to a selected CCTV monitor.

Playback from Alarms and Reports

Video recordings created by a Record Video command can be easily replayed from the "Home/Monitoring/Alarms", "Home/Monitoring/Activity" or "Reports/History/Activity" screens. For example:

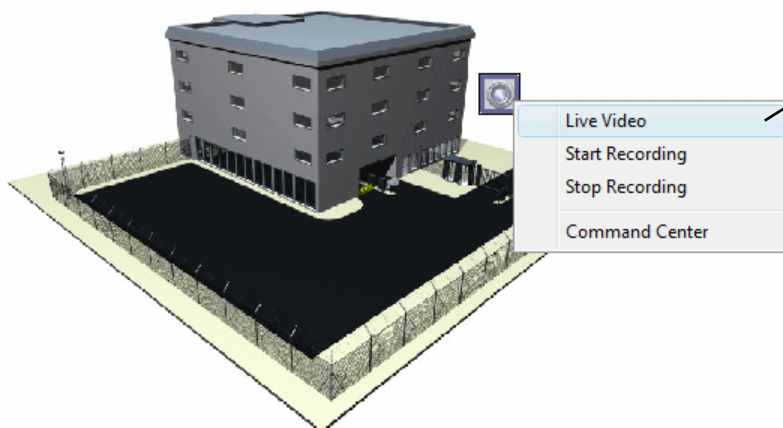
Any alarm that has an associated video clip displays this icon in the "Home/Monitoring/Alarms" screen.



You can replay the video clip by clicking **Replay**.

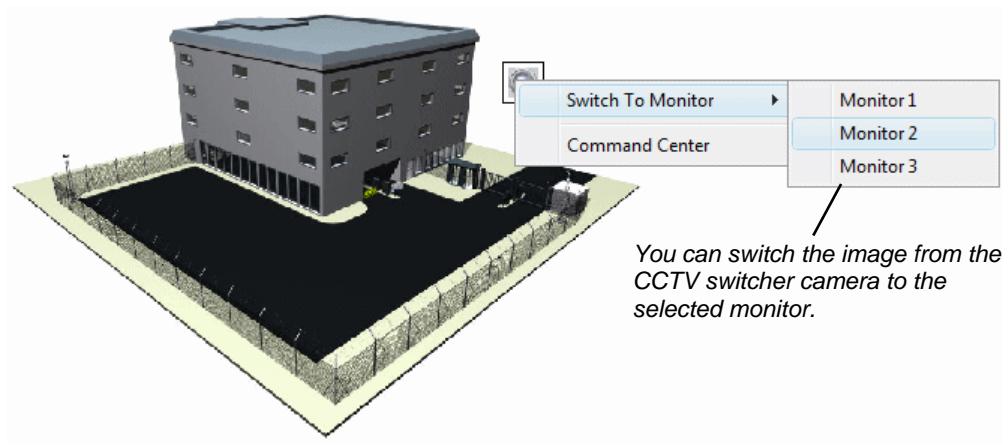
Graphics Integration

Digital video and CCTV switcher cameras can be added to graphics using the "Setup/Graphics/Setup" screen. Adding cameras to a graphic makes it easy for you to locate a camera on the "Home/Monitoring/Graphics" screen and to view live video from that camera. Right-clicking the icon for an IP camera displays the following:



You can view live video from the camera or start/stop recording.

Right-clicking a CCTV switcher camera displays the following.



Chapter 7: Alarms Monitoring

Understanding Alarms Monitoring

Each major action that takes place at devices such as readers and monitor points is classed as either an event or alarm. Events are non-serious conditions and are simply logged for future reporting. Alarms, however, (such as "Door Forced") are potentially serious violations of security and are always displayed in the "Home/Monitoring/Alarms" screen, which forms the central part of the system's alarms monitoring capabilities.

Note: It essential that the user who is tasked with alarms monitoring is either logged into the Symmetry software or has the Login screen displayed.

How New Alarms are Signaled

When a new alarm occurs, the PC that is receiving the alarms makes a sound, which can be set up to vary depending on the alarm type and location of the alarm. If the Login screen is displayed and there is at least one uncleared alarm, alarm details are shown in a box in the bottom-left corner of the screen:

New Alarms	5
Total Alarms	5
Highest Priority	80

The box shows:

- The number of new alarms, i.e. the number of alarms that you have not yet acknowledged. You will find out how to acknowledge an alarm later in this section.
- The total number of uncleared alarms.
- The highest priority of any alarm (1 is the highest priority, 999 is the lowest).

If you are logged in, this information is shown at the bottom of the display area, together with a **Silence** button to stop the sound:



When there is a new alarm, you will see a flashing blue/red light in the Windows System Tray. This changes to the standard Symmetry software icon (🔔) after all alarms have been acknowledged. In addition, you may see "Alarm!" in the background of the main window (depending on client preferences).

If your system has been set up for real-time printing, details of the alarm are automatically printed. It is normal to use an impact printer that has continuous stationery for this purpose.

Your system can also be set up to display a graphic of the alarm location or to send an email to a nominated person.

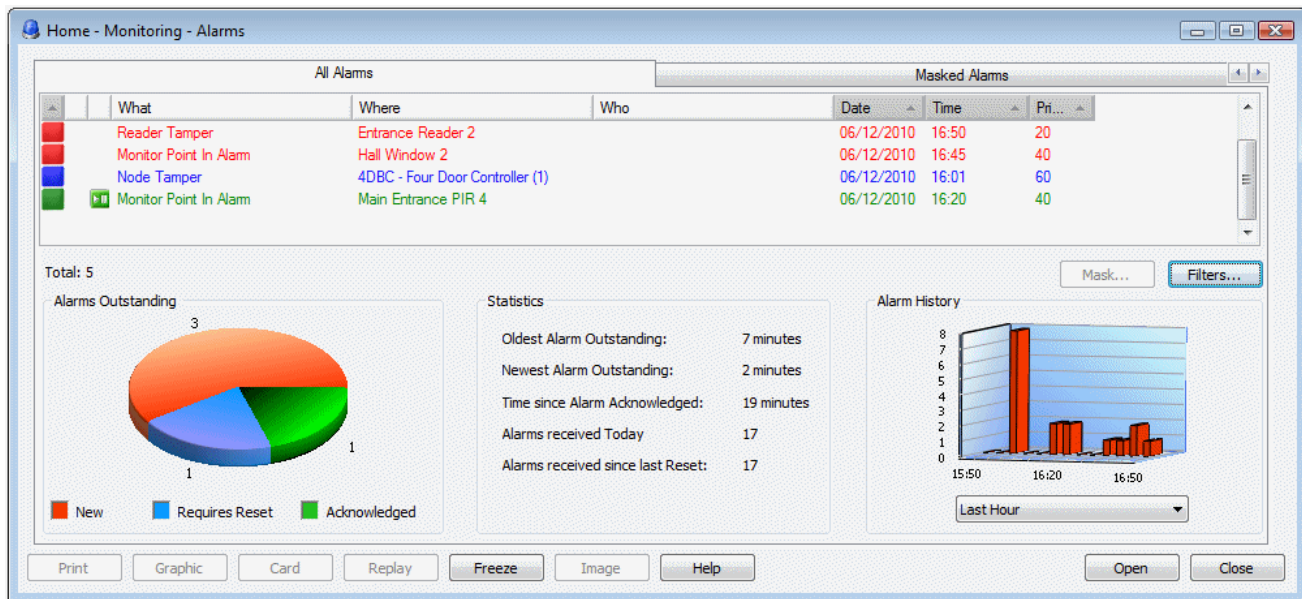
About the Alarms Screen

You can use the "Home/Monitoring/Alarms" screen to view, acknowledge and clear alarms. The Alarms screen provides full details of all alarms that have not yet been cleared.

Ideally, you should keep the Alarms screen displayed at all times, since it allows you to read the details of new alarms as soon as they occur.

There are two different appearances for the Alarms screen: the default appearance and the combined alarm/acknowledgement appearance, as described next. The appearance can be changed using the **Show Combined Alarm / Acknowledgement Screen** option in the "Maintenance/User & Preferences/Client Preferences" screen.

Default Appearance of the Alarms Screen



The default appearance, which is shown above, has the following features:

Alarm List

Alarms are listed in the upper area of the screen. Details of each alarm are given, including the alarm message, location and the name of the person who caused the alarm (if known). The alarms are color-coded as follows:

- Red alarms are new alarms that have not been acknowledged.
- Blue alarms have been acknowledged, but require a device to be reset (such as sensor returning to its normal state). The alarm cannot be cleared until the device is reset.
- Green alarms have been acknowledged and, if necessary reset, but have not yet been cleared. Clearing an alarm removes it from the Alarms screen.

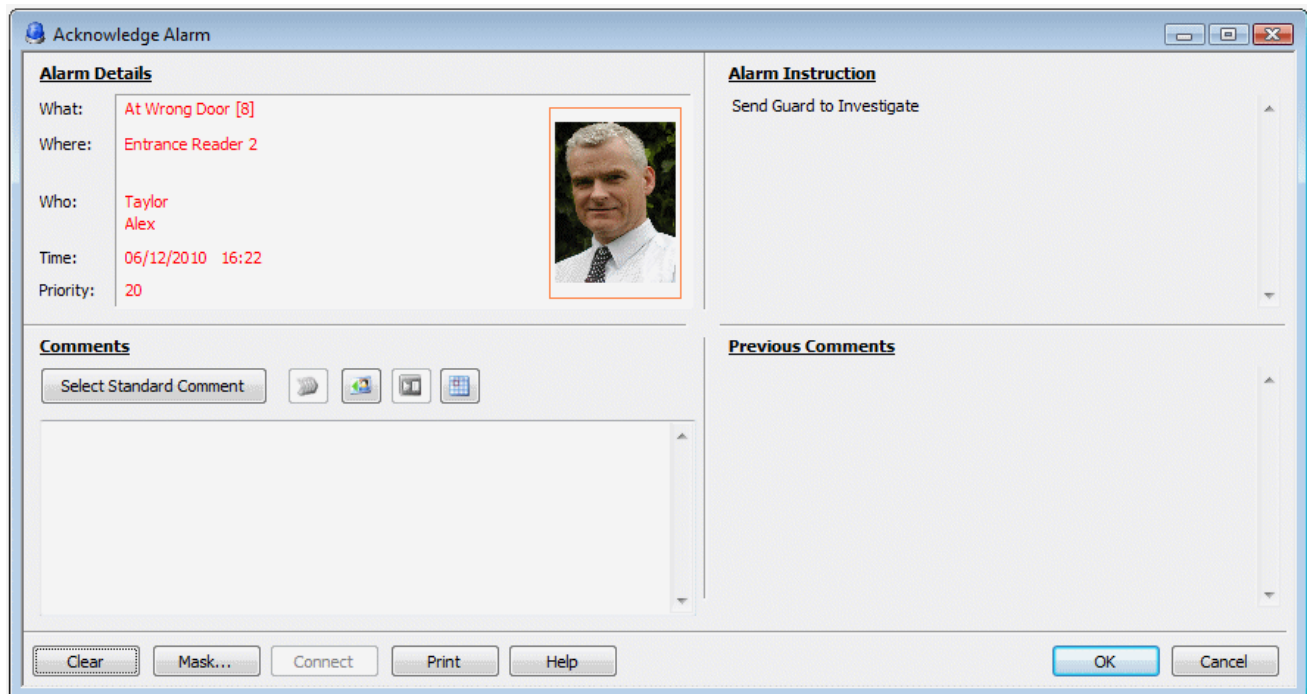
Red alarms are listed first, followed by blue then green. For each color, the alarms are also listed in order of priority.

Alarm Statistics

The default appearance of the alarms screen is able to display a pie chart and alarm statistics. These are shown in the lower area of the screen. You can change the viewing angle of a chart by clicking on the picture and moving the mouse.

Acknowledging an Alarm, Viewing Instructions and Adding Comments

You can acknowledge an alarm, view alarm instructions, enter new comments and review previous comments by double-clicking the alarm. A separate Acknowledge Alarm screen is displayed; for example:

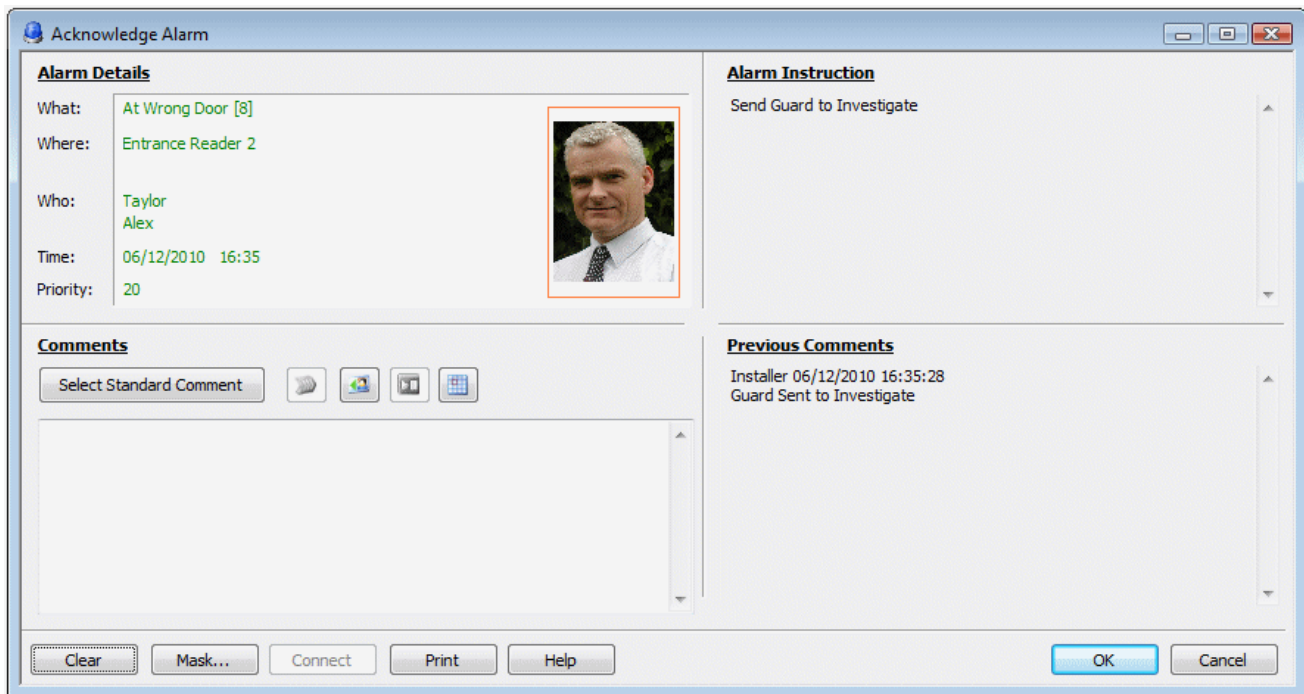


The Acknowledge Alarm screen displays the instructions that you should follow (in this case, "Send Guard to Investigate", as shown near the top-right corner). The instructions are specific to the type of alarm and are set up using the "Operation/Alarms/Instructions" and "Operation/Alarms/Definitions" screens.


The Acknowledge Alarm screen also provides a **Comments** area, where you can record the actions taken. You add a comment either by typing text in the box or by clicking **Select Standard Comment** and choosing one of the predefined comments. Predefined alarm comments are set up using the "Operation/Alarms/Comments" screen.

Clicking **OK** acknowledges the alarm and displays the Alarms screen, which now shows the alarm in blue (alarm acknowledged, but device not reset) or green (alarm ready to be cleared).

If required, you can return to the Acknowledge Alarm screen to add more comments by reselecting the alarm in the Alarms screen. Your previous comments are shown in the **Previous Comments** box, as shown in the following picture.



Each comment in the **Previous Comments** box is prefixed with the name of the user who added the comment and the time that the comment was added.

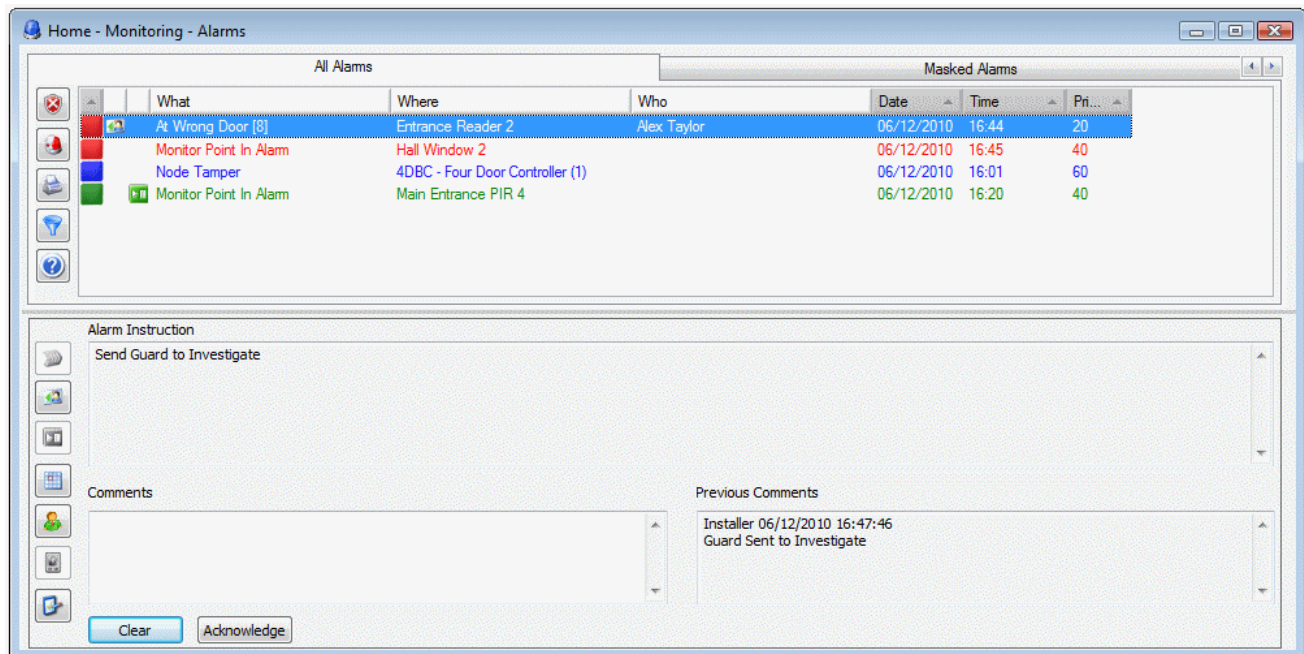
The  button (to the right of **Select Standard Comment**) is ungrayed if a command has been set up for the alarm in the "Operation/Alarms/Commands" screen. Selecting the button sends the command. The command may, for example, record video at a selected camera.

Clearing an Alarm

An alarm can be cleared (i.e. removed from the Alarms screen) by clicking **Clear** in the Alarm Acknowledgement screen. You may also want to add a comment before selecting **Clear**, such as "Supervisor Notified".

Combined Alarm/Acknowledgement Appearance


An example of the combined alarm/acknowledgement appearance for the Alarms screen is shown next. This is displayed if the **Show Combined Alarm / Acknowledgement Screen** option is selected in the "Maintenance/User & Preferences/Client Preferences" screen.

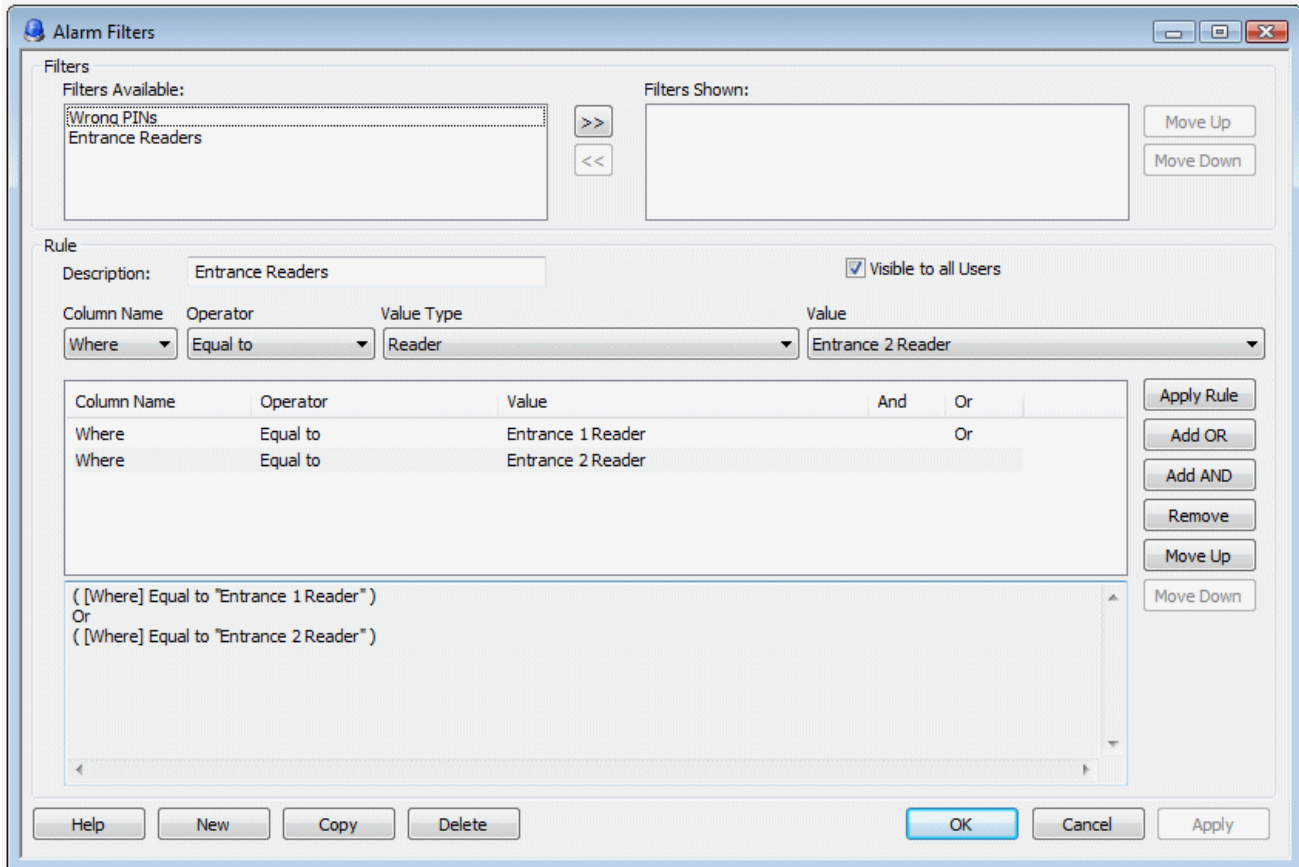


The combined appearance contains the same list of alarms as the default appearance, but a selected alarm can be acknowledged by clicking the **Acknowledge** button, or cleared by clicking the **Clear** button. Selecting an alarm also displays any alarm comments and instructions associated with that alarm.

The toolbar along the left side allows you to perform functions such as to print an alarm, select a standard comment, send an alarm command and view the image of the card holder who is associated with an alarm.

Setting Up Alarm Filters

Clicking the **Filters** () button in the Alarms screen displays the following screen, which enables you to define one or more alarm filters:




Each filter you define creates an extra tab in the Alarms screen. The tab displays only those alarms that the filter is set up to display. Each Symmetry client can display different alarm filters.

Alarm filters provide a method of partitioning the viewing of alarms in the Alarms screen. You can, for example, create an alarm filters to display only alarms of a specified type or from a specified location, or combinations of different alarm types.

The panel near the bottom of the screen shows how the currently selected alarms filter is set up. In this example, the "Entrance Readers" filter will display alarms from "Entrance 1 Reader" or "Entrance 2 Reader".

Viewing a Graphic of the Alarm's Location

If graphics have been defined for your installation, clicking on an alarm, then selecting the **Graphic** () button displays a graphic of the alarm's location.

Graphics can also be viewed at any time in the "Home/Monitoring/Graphics" screen, or they can be set up in the "Maintenance/User & Preferences/Client Preferences" screen to be displayed automatically.

Chapter 8: Producing Reports

Introduction

The reporting features within the Symmetry software enable comprehensive listings of alarms, events, user actions, access rights, configuration settings and other information to be produced, giving full traceability of all essential information.

It's easy to produce a wide range of different types of report. You can, for example, produce reports of the card holders who have been granted access through specified doors, the people who have attempted to gain entry into unauthorized areas, and the actions taken to acknowledge alarms.

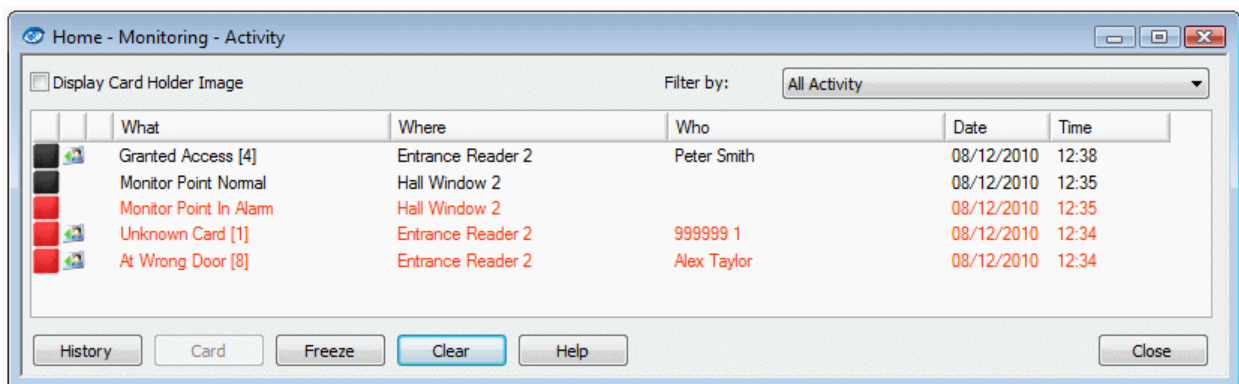
Using the reports provided, you can quickly find the information you need. The extensive filtering options ensure that the reports display only the information you require, leading to improved clarity and ease of use.

For added flexibility, the system enables a library of customized reports to be defined, which can be printed automatically at scheduled intervals. For ultimate customization of report format and content, integration with the popular Crystal Reports[®] software is provided.

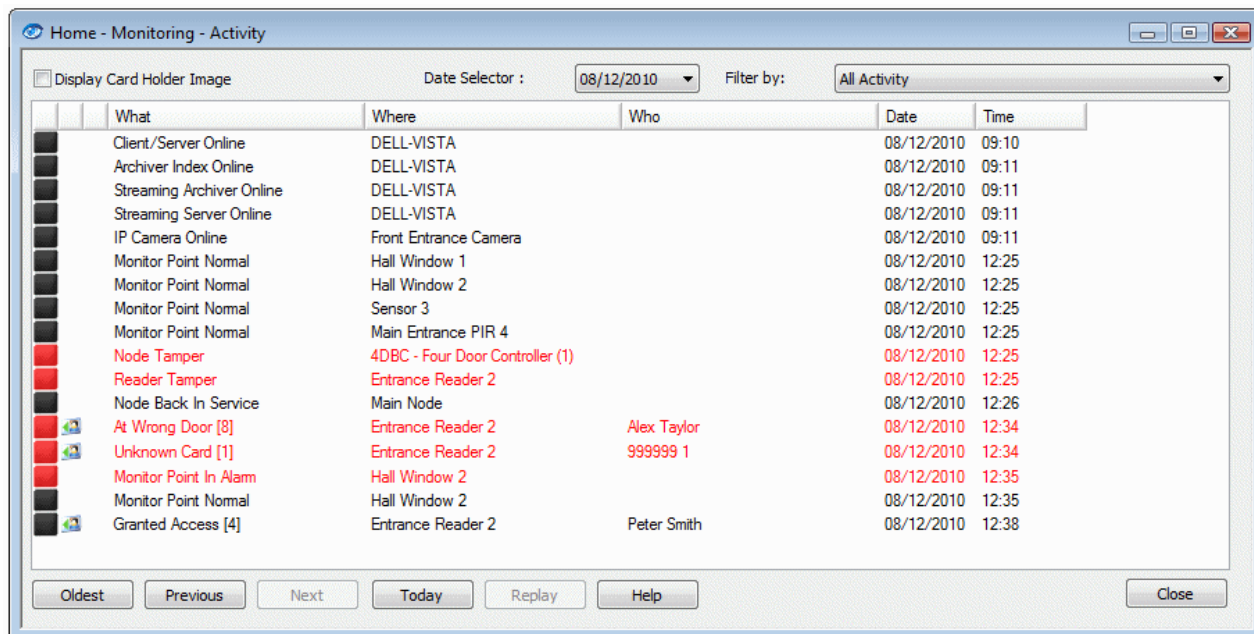
The reporting system is essential for any manager who needs to be assured that attempted breaches of security or other incidents can be investigated properly and quickly, or who requires comprehensive paper records of how the system has been configured.

Activity Report

You can generate an activity report from the "Home/Monitoring/Activity" screen at nominated client machines, as set up in the "Install/System/Clients" screen. The report displays all alarms and events as they occur.

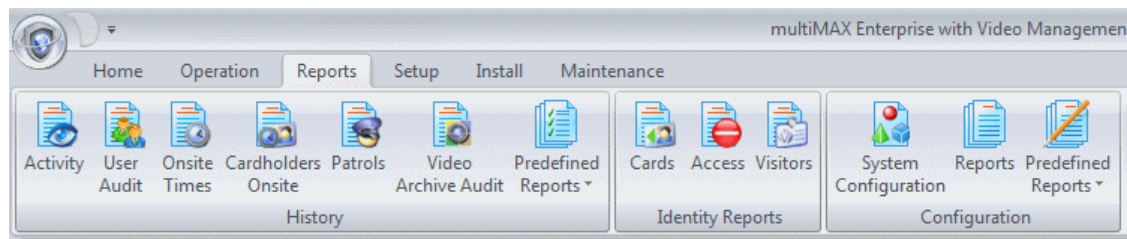


The report includes a **History** button that displays on a day-by-day basis any alarms and events that have been recorded in the system's log. For example:



Reports Available from the Reports Tab

You can run several different types of report (depending on the modules installed) from the Reports tab of the Symmetry software:



The meaning of each report shown above is as follows.

"Reports/History":

- **Activity** – Produces full details of previous alarms and events. See the example in the next section.
- **User Audit** – Lists previous user actions within the screens of the Symmetry software.
- **Onsite Times** – Lists the amount of time card holders have spent on site. The report can, for example, be used to verify contractor invoices.
- **Cardholders Onsite** – Lists the cards that are currently on site. The report could be used by emergency services.

- **Patrols** – Produces information about previous patrol tours (see the *Guard Patrol Manager Installation & User Guide*). The report provides details of when patrol tours were started and completed and any rule infringements.
- **Video Archive Audit** – Examines the date and time of each recording stored in a video storage folder of a Symmetry NVR, and shows the date and time of the most recent recording for the selected camera(s).
- **Predefined Reports** – Enables you to run a report that has been previously set up and customized from the "Reports/Configuration/Predefined Reports" menu. You can run the report manually, or automatically at scheduled intervals. Predefined reports enable you to set up a library of your favorite reports, which saves time if you need to run the same report frequently.

"Reports/Identity Reports":

- **Cards** – Lists the details of how cards have been set up in the "Home/Identity/Cards" or "Home/Identity/Visitors" screen. See the example in the next section.
- **Access** – Enables you to produce different types of access-rights listings:
 - Card holders who can use a specified door.
 - Cards that are to expire between specified badge or inactive dates.
 - Cards unused for a specified number of days.
 - Cards using a specified access code or time code.
 - Card holders who can use a specified floor/output group or reader group.
 - Doors that can be accessed by a specified card.

See the example in the next section.

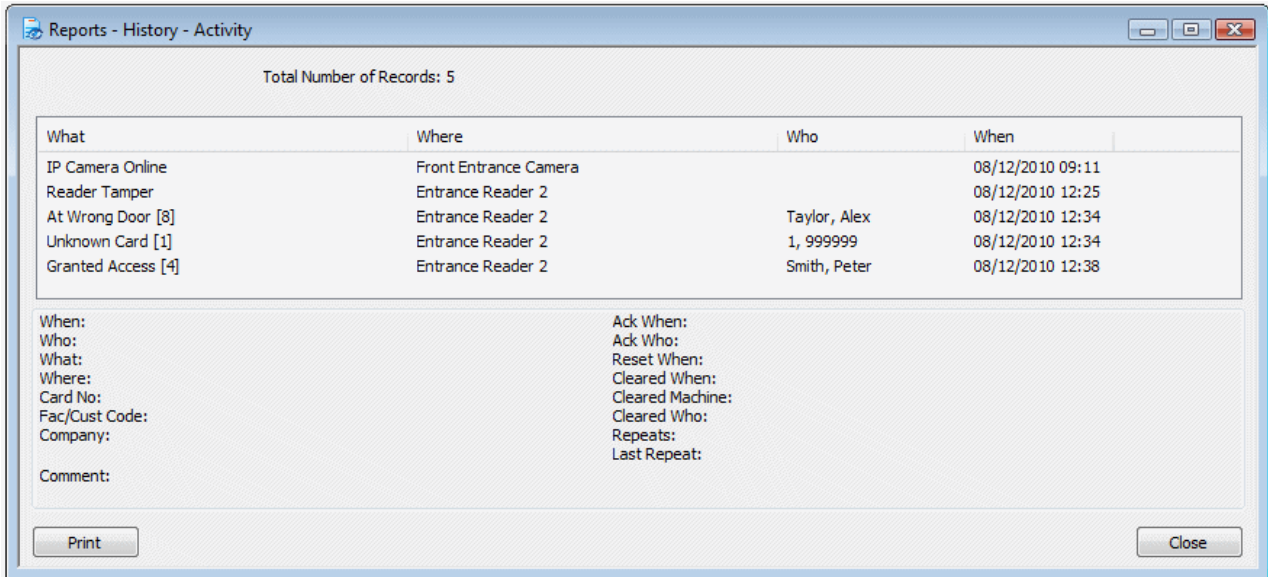
- **Visitors** – Produces a report of current, previous or future visitors. You may, for example, want to run a report that shows all the visitors expected on a specified date. See the example in the next section.

"Reports/Configuration":

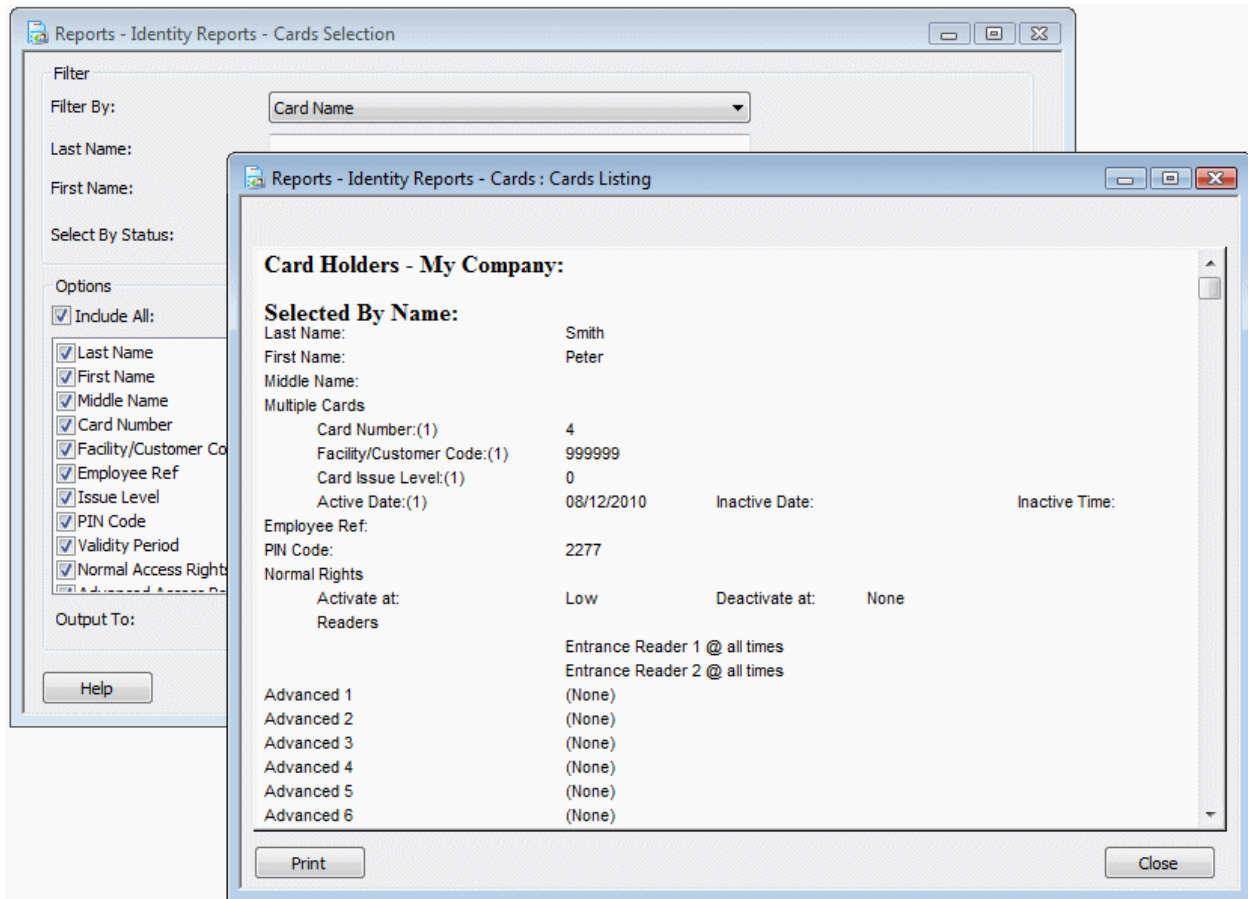
- **System Configuration** – Displays a tree view of how the Symmetry software is set up. See the example in the next section.
- **Reports** – Enables you to produce a large number of different reports to view how readers, holidays, time codes, users, commands, etc. have been set up.
- **Predefined Reports** – Allows you to define customized reports to run from "Reports/History/Predefined Reports".

Examples

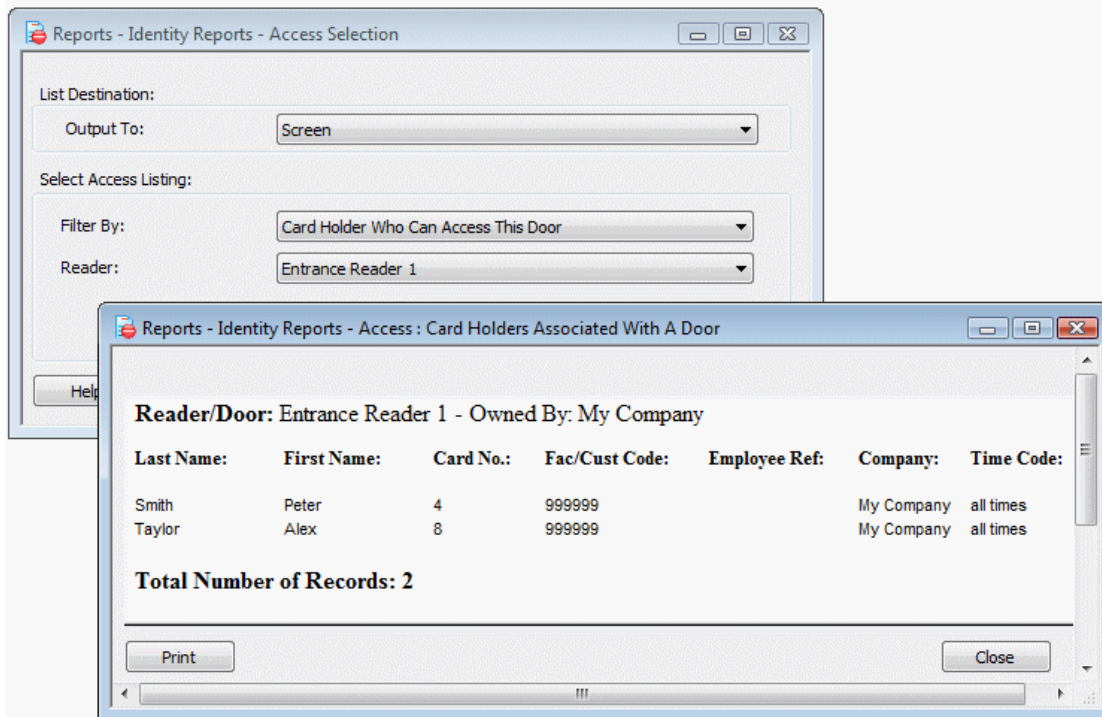
Example – "Reports/History/Activity"



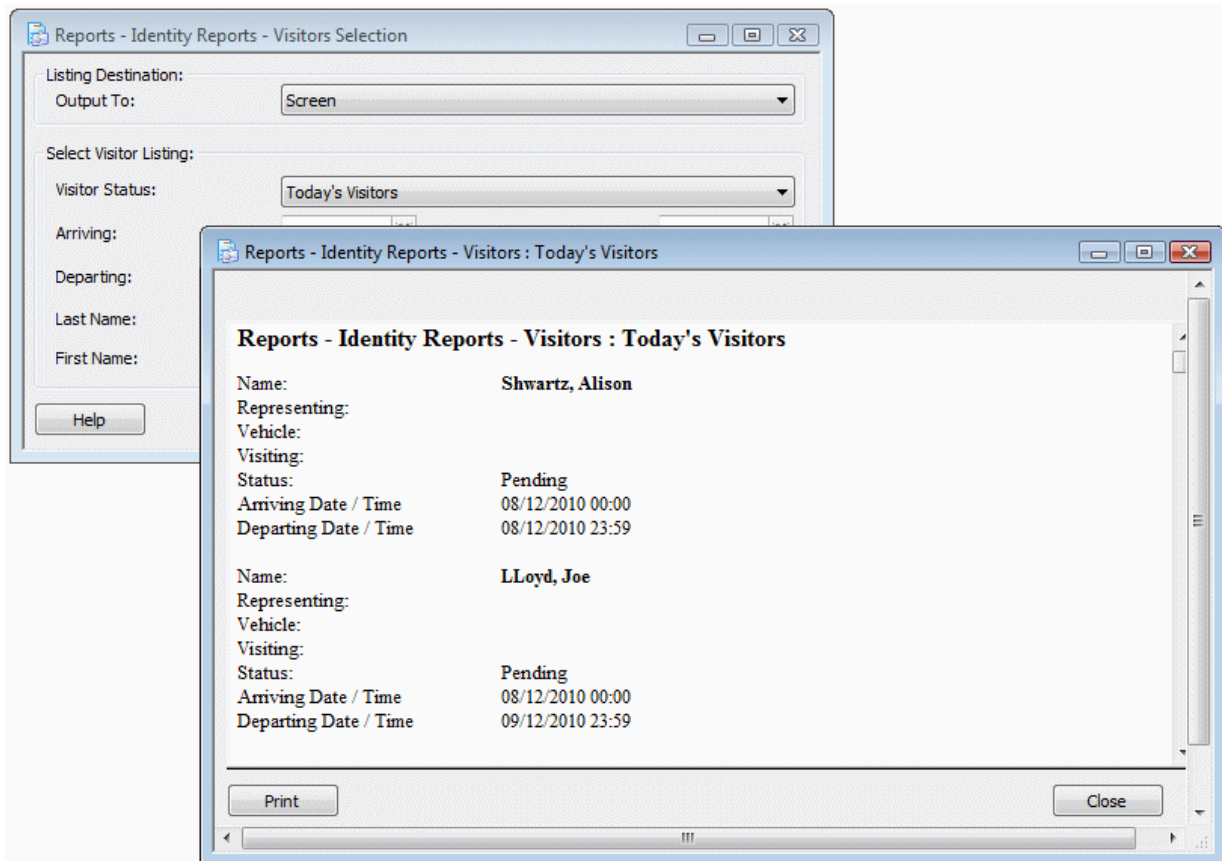
Example – "Reports/Identity Reports/Cards"



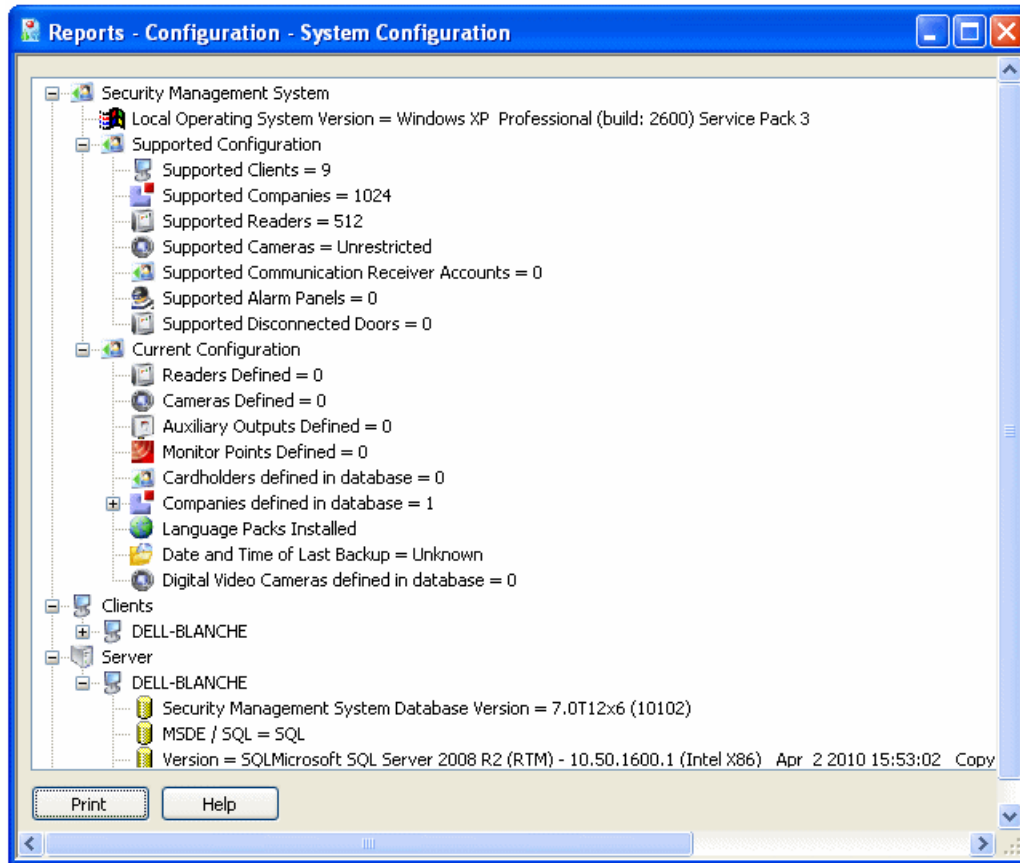
Example – "Reports/Identity Reports/Access"



Example – "Reports/Identity Reports/Visitors"



Example – "Reports/Configuration/System Configuration"



Muster (Roll Call) Reports

A muster report (available only with the "Safety Roll Call Management Module") shows a list of people who are recorded by the Symmetry software as being in a specified area, together with details of the last reader they used. It is intended to be used during fire or other emergencies to assist the rescue services. The following is an example of a muster report:

Card Holders in Area					
Muster Report Area 1 (Sorted by Card Number)					
Total Card Holders : 3					
Card Holder Name	Card Number	Last Reader Used	Time	Gender	
Taylor, Alex	1	Reader1	16/03/2012 18:14:19	Male	
Talbot, Mary	2	Reader1	16/03/2012 18:14:28	Female	
Smith, Pam	3	Reader1	16/03/2012 18:15:18	Female	
				Total Card Holders	3
				Total Card Holders	3

Musters can start automatically when a monitor point triggers, such as an output of a fire alarm. You can also start them manually.

You can create multiple musters for different areas of your site. An area can overlap other areas, be entirely contained within another or be completely separate.

You can create, list, open, start, stop, reset and monitor musters using the "Home/Identity/Muster" screen, an example of which is shown next:

The screen lists all musters that have already been set up. This column shows which Symmetry client has been set up to run the

You can see the current status of each muster.

This shows the number of people who were in the area at the start of the muster, and the number of people currently in the area.

You can use the buttons to create, find and open muster definitions. You can also start musters, reset musters and produce muster reports manually.

Creating a Muster

You can create a new muster by clicking **New** in the "Home/Identity/Muster" screen. The following screen is displayed:

The name should reflect the area that is being reported by the muster.

A person is included in the report only if the last reader used is in the **Area Reader Group**.

People are "clocked" out of an area by using a reader that is not in the **Area Reader Group**. You can use dedicated muster readers for this purpose.

The report can be started automatically when a monitor point such as a fire alarm triggers, (or manually from the "Home/Identity/Muster" screen).

You can choose "Group by" and sorting options, and specify additional information to be included in the report.

You can send the report to more than one location (primary and secondary).

You can delay the first report to give most people enough time to exit the area.

The report repeats at the specified interval until there is no-one left in the area or until you reset the muster.

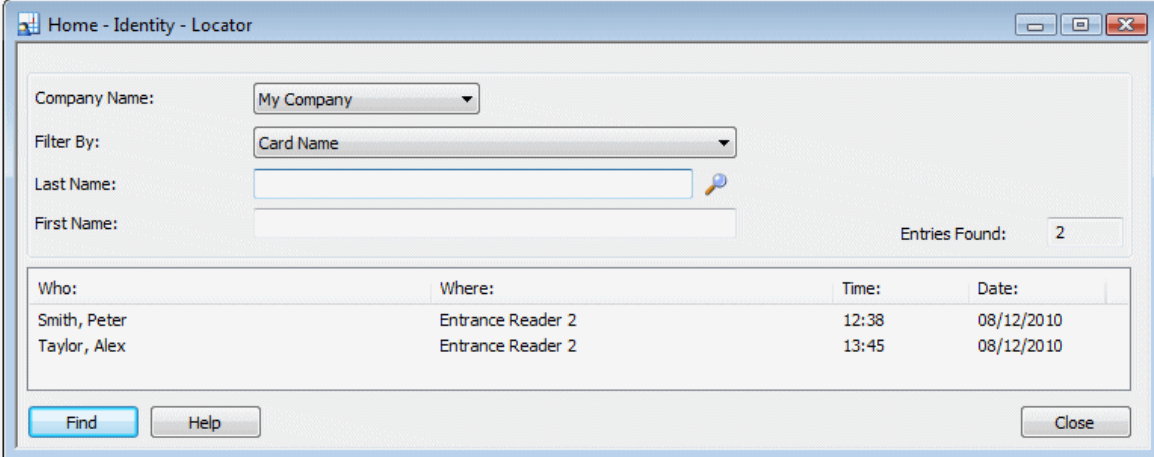
This prevents the first report from being produced until there are fewer than a specified number of people in the area.

When the muster is over, you need to reset the muster from the "Home/Identity/Muster" screen. These are the reset options. A muster can be reset manually, automatically or in response to a monitor point. You can also choose to move people to a named location or set their antipassback zone to neutral after a reset.

Locator Reports

There are two types of locator report. The first is actually a tab of the Card Holders or Visitors screen, rather than a true report. It lists the card holder's last 25 transactions (see page 29).

The second is accessible from the "Home/Identity" menu and shows, for each selected card holder, the name of the reader that last granted access. This can help you to determine the current location of one or more card holders. For example:



The screenshot shows a software window titled "Home - Identity - Locator". It contains several input fields and a table of results. The "Company Name" is set to "My Company" and "Filter By" is set to "Card Name". The "Last Name" and "First Name" fields are empty. The "Entries Found" count is 2. The table below shows two entries:

Who:	Where:	Time:	Date:
Smith, Peter	Entrance Reader 2	12:38	08/12/2010
Taylor, Alex	Entrance Reader 2	13:45	08/12/2010

At the bottom of the window are buttons for "Find", "Help", and "Close".

Chapter 9: Other Features

This chapter describes other key miscellaneous features of the Symmetry software.

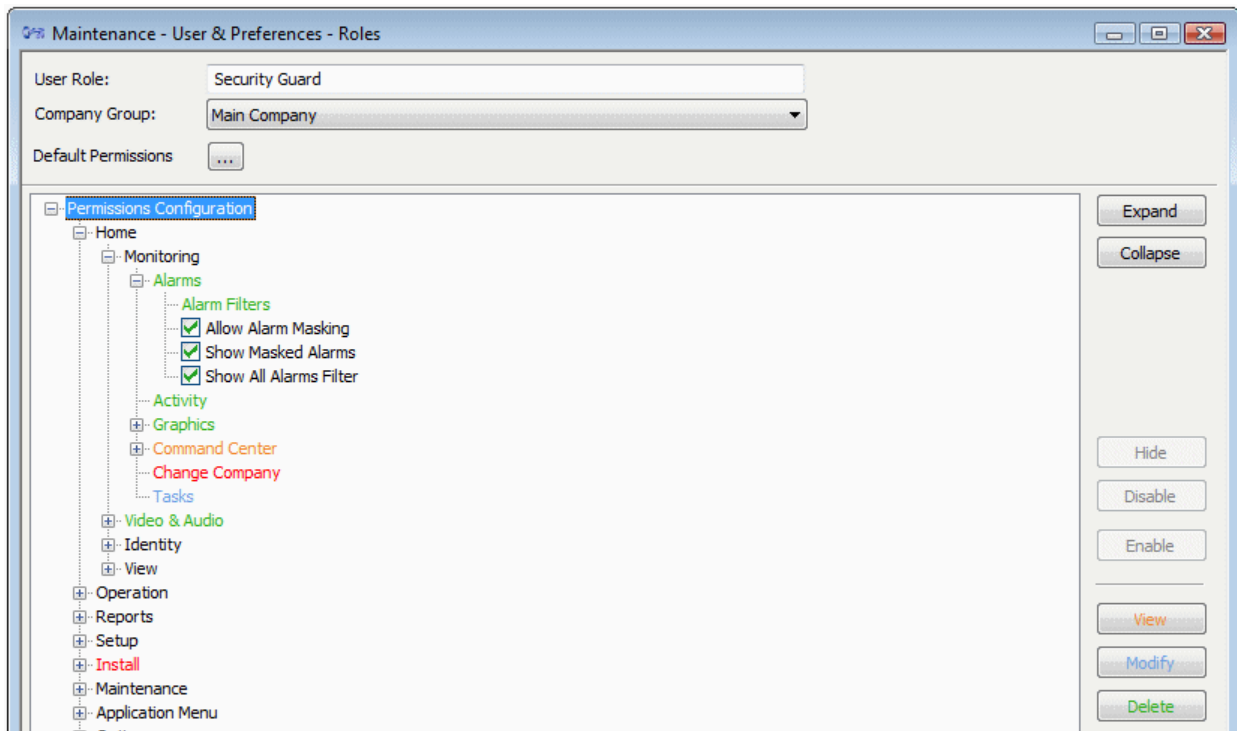
Setting Up User Roles and Accounts

A user is a person who uses the Symmetry software on a Symmetry client PC. There are two stages to setting up users:

1. Use the "Maintenance/User & Preferences/Roles" screen to define one or more user roles. Each role (e.g. System Manager) specifies a set of permissions to the screens of the Symmetry Software.
2. Use the "Maintenance/User & Preferences/Accounts" screen to create the user's account, which specifies the user's login name, password and role.

Setting Up Roles

Roles are set up in the "Maintenance/User & Preferences/Roles" screen:



A role defines a set of access privileges to the screens of the Symmetry software. A series of roles can be set up for different categories of user. In the example shown above, the role has been named "Security Guard", which could be assigned to any user who needs to perform guard tasks in the Symmetry software.

Each role provides four levels of access to each screen: View (orange), Modify (blue), Delete (green) and None (red). If, for example, you set the access to a screen to be view only, users who belong to the role will be able to view the contents of the screen, but nothing else. Modify access allows users to alter the information in the screen, and Delete access enables users to delete complete records, such as a card holder.

Roles enable the range of tasks to be carried out by each type of user to be restricted, which not only enhances system security, but also simplifies the user interface, since the system displays menu options for only those screens that a user has access to. Roles make it easy to set up the privileges of new users or modify the privileges of existing users.

As with most computer systems that offer these types of security arrangements, only one user should have full access to all options (and, if applicable, to every company's information).

Creating User Accounts

You can create a user's login name and password, and assign the user to a role using the "Maintenance/User & Preferences/Accounts" screen:

The screenshot shows a dialog box titled "Maintenance - User & Preferences - Accounts". It is divided into several sections:

- Setup:**
 - User Name:
 - User Role:
 - Password:
 - Retype Password:
 - Enable Password Expiry
 - Duration (Days):
 - Enabled:
- Options:**
 - Language:
 - Home Screen:
 - Task List Assignment:
 - Ignore/Bypass Permission Filters
 - Enable Permissions
 - Enable Clear All Alarms
 - Instant Replay:
 - Only Show Badge From Alarm
 - Status Tool Bar: Show Toolbar
 - Force Status Toolbar Visible
- Secure Logon:**
 - Enable Secure Logon
 - Smartcard
 - Biometric
 - Status:
 -
- Cardholder Fingerprint Enrollment Options:**
 - Minimum Quality:
 - Minimum Content:
 - Minimum Threshold:

At the bottom, there are buttons for "Copy", "Delete", "Help", "OK", and "Cancel".

If different Symmetry language packs are installed, you can choose the language to use for the user. When the user logs in, menus and options will be displayed in the specified language.

A simple selection of the role (in the **User Role** menu) instantly sets up the user's required privileges.

The **Secure Logon** options enable logons to be accepted only after a user has presented a smart card or fingerprint at an appropriate reader. The **Cardholder Fingerprint Enrollment Options** are used when enrolling fingerprints in the "Home/Identity/Card Holders" or "Home/Identity/Visitors" screen.

Sending Commands

The ability to send commands is an extremely powerful feature of the Symmetry software, which enables you to change the status and mode of operation of devices such as readers, monitor points, auxiliary outputs and cameras.

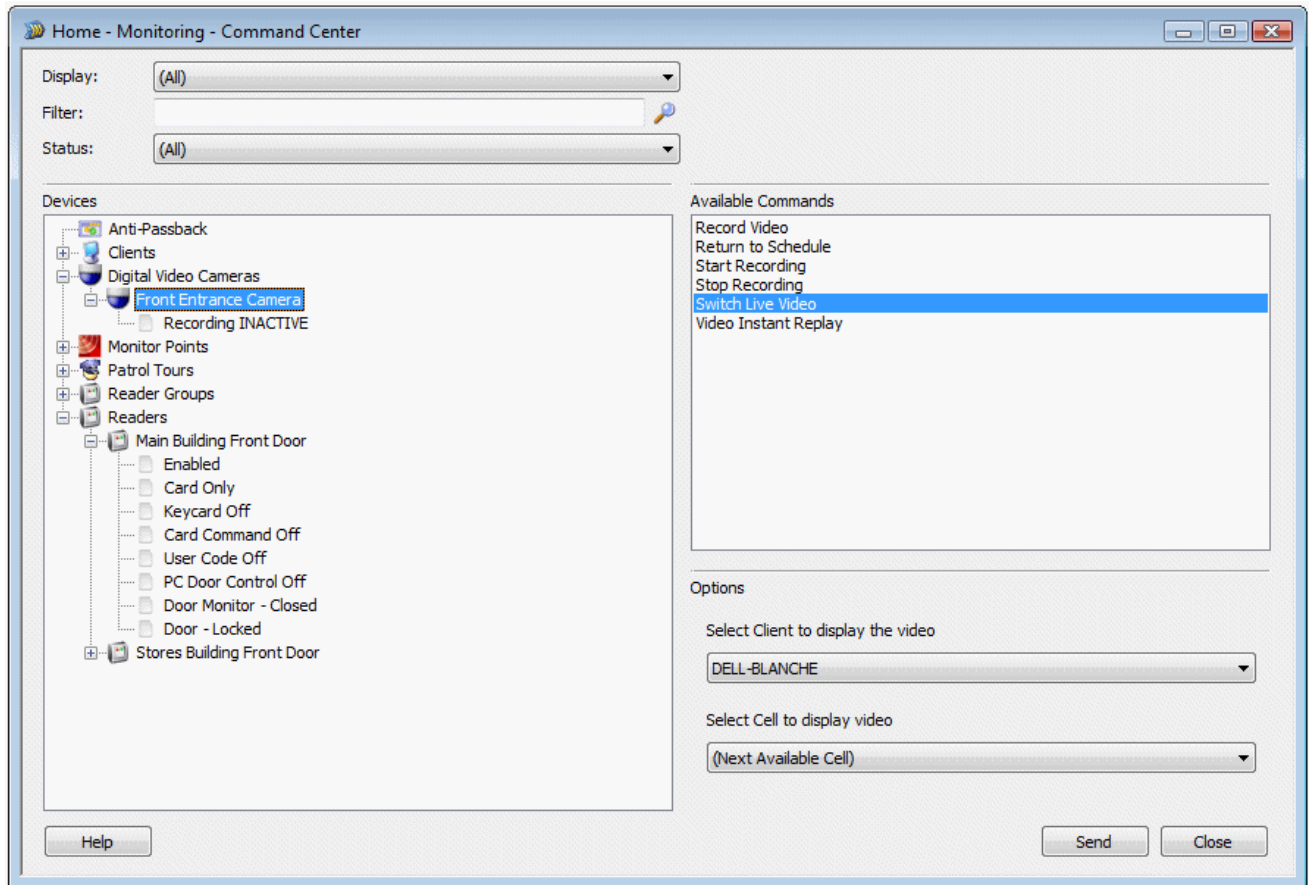
There are three types of commands:

- **Manual Commands** – These enable you to change the status or mode of operation of a device immediately. For example, you can send a manual command to release a door's lock, or to switch a reader from card-only mode to card-and-PIN mode.
- **Scheduled Commands** – These cause commands to be executed at pre-defined times each day. For example, you could set up a scheduled command to start a video recording at the same time each day.
- **Trigger Commands** – A trigger command is executed only when a defined action takes place. For example, a CCTV camera could be switched to a specified Symmetry client when an alarm sensor is triggered, or doors can be unlocked on a fire alarm. Trigger commands are also known as conditional or "If, Then, When" commands.

The following sections explain the different types of command in more detail.

Note: A time-saving feature is the ability to send a single command to a group of monitor points, readers or auxiliary outputs (created using the options in the "Setup/Device Groups" menu). The command is then executed at all devices in the group.

Manual Commands (Command Center)



You can send manual commands using the "Home/Monitoring/Command Center" screen. The commands available depend on the selected device. In the above example, the Front Entrance camera is selected in the tree, and any of the commands shown in the panel on the right-hand side of the screen can be sent to that camera. Selecting a different device type displays a different set of commands in the panel.

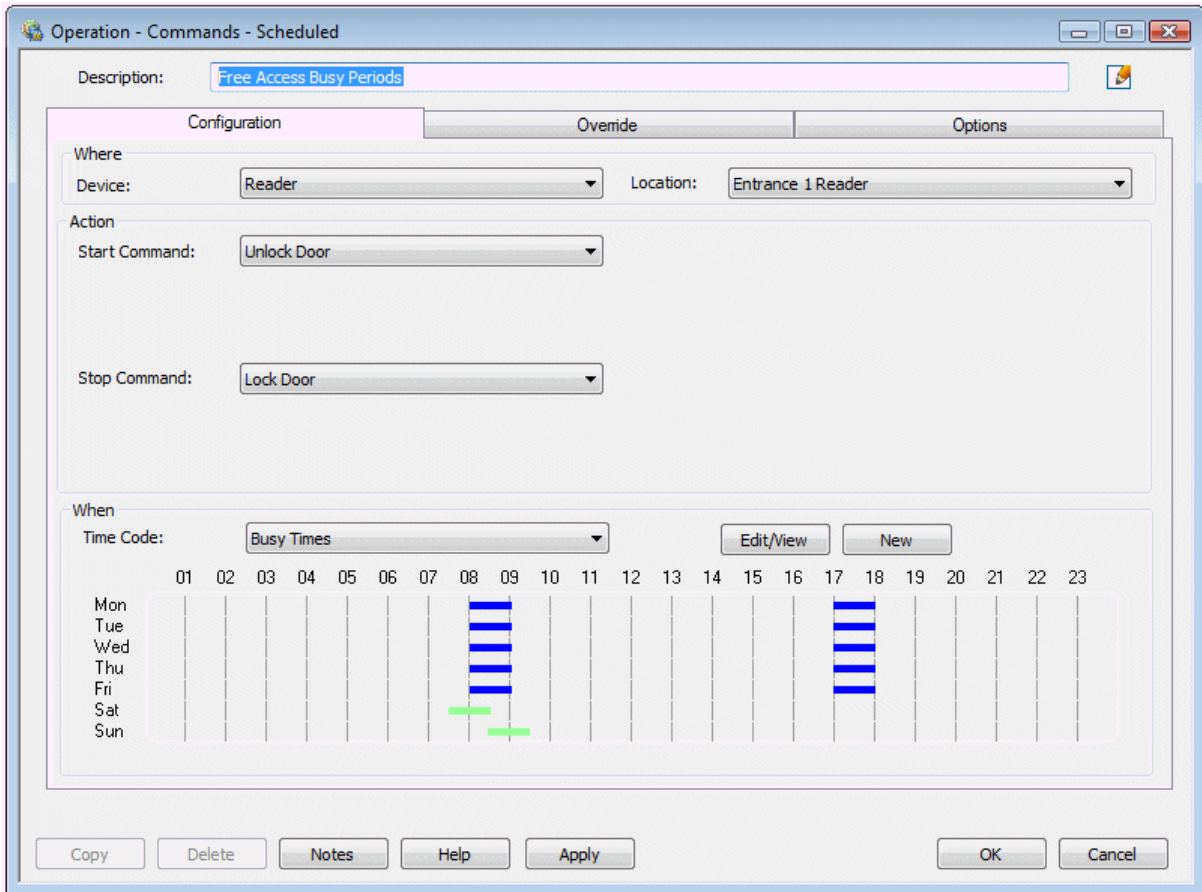
The "Home/Monitoring/Command Center" screen also displays the current status and mode of operation of a device in a tree view. In the example, the tree view shows that the "Main Building Front Door" reader is enabled and in card-only mode, keycard mode is switched off, etc.

The "Home/Monitoring/Command Center" screen provides real-time status monitoring, which means that any changes in the information that you are viewing are displayed immediately; you do not have to exit and re-enter the screen.

If required, you can also send commands from other screens in the Symmetry software, such as from the "Home/Monitoring/Graphics" screen.

Scheduled Commands

Scheduled commands can be set up using the Scheduled Commands screen ("Operation/Commands/Scheduled"). For example:



Scheduled commands consist of a start command, stop command and time code. The start command is executed at each start time in the time code, and the stop command is executed at each stop time.

Consider the following example, which reflects the scheduled command set up in the previous picture:

Time code ("Busy Times"):

08:00 to 09:00 Monday to Friday

17:00 to 18:00 Monday to Friday

07:30 to 08:30 Saturday only

08:30 to 09:30 Sunday only

Start command: Unlock Door

Stop command: Lock Door

This example shows a scheduled command that could be used to unlock and re-lock the main door to the Assembly Area at busy times of the day. The start command is Unlock Door, which enables people to gain access without having to use their cards. The command is executed at 08:00 Monday to Friday, 17:00 Monday to Friday, 07:30 on Saturdays and 08:30 on Sundays.

The stop command is Lock Door, which means that after the command, people gain access in the normal way; that is, by presenting a card to the reader. The command is executed at 09:00 and 18:00 Monday to Friday, 08:30 on Saturdays and 09:30 on Sundays.

It is normal, although not compulsory, for the start and stop commands to have opposite effects.

Scheduled commands can also be useful to switch readers into different modes. For example, as an added security measure, you may want to switch readers into card-and-PIN mode during the night.

You can also enable and disable a monitor point or a group of monitor points, which may be useful if people want to open, for example, monitored fire exits during the day.

An auxiliary output or a group of auxiliary outputs can also be switched on or off according to time of day, which may be appropriate for external lights or other devices.

Trigger Commands

Scheduled commands bring a great deal of flexibility to the security management system, but even more flexibility is achieved through the use of trigger commands (otherwise known as conditional commands), as set up in the "Operation/Commands/Trigger" screen. The following picture shows an example of a trigger command, which is generated when the "Side Entrance Reader" generates a "Door Forced" alarm.

Operation - Commands - Trigger

Description: Record Video on Side Door Forced

Configuration Options

If

Device: Reader Location: Side Entrance Reader

Message: Door Forced

Then

Device: Digital Video Camera Location: Side Entrance

Command: Record Video Command No. 1 of 1

Pre-Period: 0 Seconds Post-Period: 1 Seconds

When

Time Code: All times Edit/View New

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon																							
Tue																							
Wed																							
Thu																							
Fri																							
Sat																							
Sun																							

Copy Delete Notes Help Apply OK Cancel

A trigger command is executed if a specified alarm/event message is generated from a specified device/card between a start and stop time of a specified time code. Consider the trigger command set up in the example:

Device name:	Side Entrance Reader
Alarm/event message:	Door Forced
Command to:	Side Entrance (a camera)
Command:	Record Video
Time code:	All times

In this example, if the Side Entrance Reader generates the "Door Forced" alarm at any time, then the Side Entrance camera records video.

In this case, the command is triggered as a result of an alarm/event from a reader, but you can also trigger commands from, for example, a monitor point or card alarm/event. If you choose a group, such as a monitor group or reader group, the command is triggered if any device in the group generates the selected alarm/event.

Threat Level Management

The optional Threat Level Manager features of the Symmetry software enable you to change a building's security at the click of a button. You may want to enhance security when there is a greater threat of criminal or terrorist activities, or during times of limited occupancy such as holiday or site shutdown periods, and lower it at other times. Five threat levels are available, each of which you can customize using the "Setup/Configuration/Threat Levels" screen to provide a different level of security:

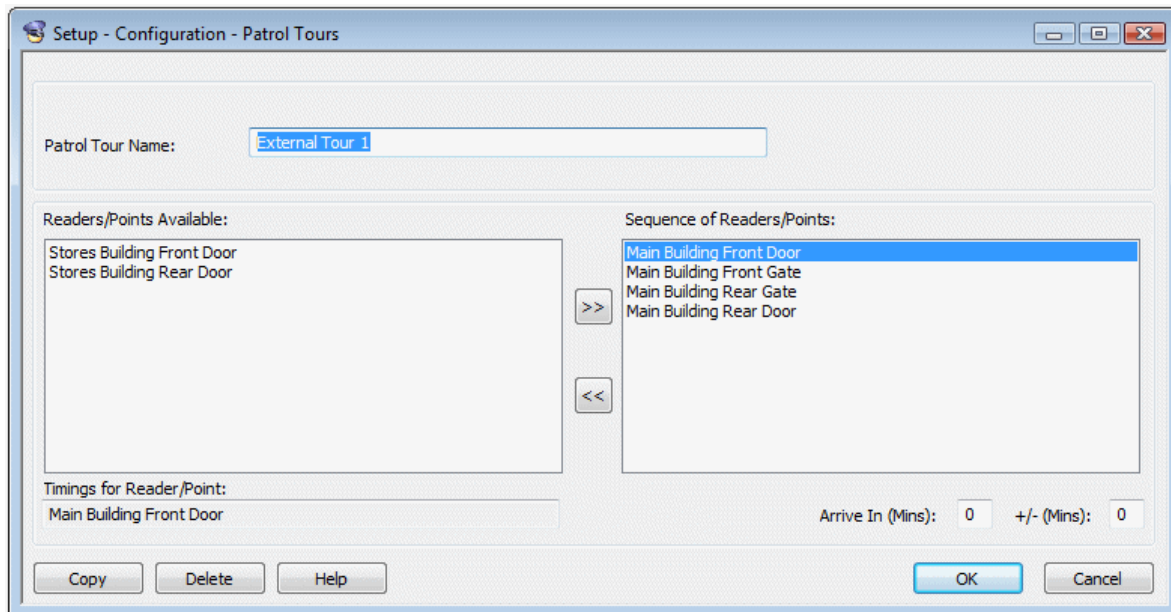


Changing the threat level (in the "Home/Monitoring/Change Threat Level" screen) can determine which cards have access, which areas they can access and the scheduled and trigger commands that can operate. For further information, please read the *Threat Level Manager Installation and User Guide*.

Guard Patrol Management

The Guard Patrol Manager is an optional module for configuring, recording and reviewing guard patrols. The module includes a complete set of tools for setting up and managing patrols entirely from the Symmetry software. It benefits from the ability to use access-control readers as tour checkpoints, resulting in the need for no specialist hardware or data-collection devices, and making the introduction of patrol management both cost-effective and easy to implement.

Patrols can be set up to specify the sequence of checkpoints to visit and the time allowed for the guard to travel between them.



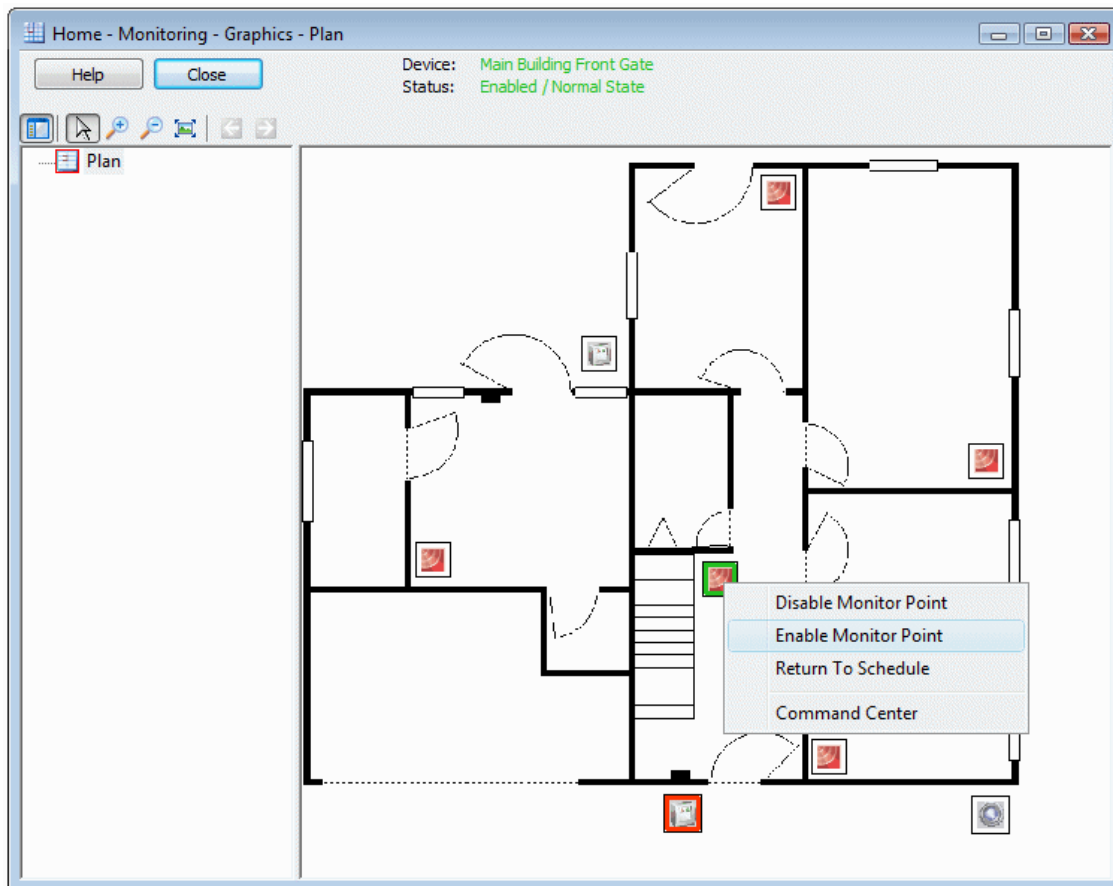
The progress of a patrol can be monitored, and previous patrols reviewed in reports. Of particular benefit in high-security applications is the ability for the system to notify Symmetry operators immediately of any rule infringements, such as missed checkpoints or late arrival.

For further information, please read the *Guard Patrol Manager Installation and User Guide*.

Graphics Screen

A graphic is typically a map or plan of the building, which can contain icons representing devices such as readers, doors, video cameras and alarm sensors. Graphics allow operators to monitor the status of devices, locate them in the building and control their mode of operation, such as to grant access through a selected door, connect to an intercom or start a recording at a selected video camera. Graphics make it easy to determine the location of an alarm and to send personnel quickly to an incident, leading to improved site security and efficiency.

Graphics are configured using the "Setup/Graphics/Add" and "Setup/Graphics/Setup" screens, and can be monitored using the "Home/Monitoring/Graphics" screen. An example of the "Home/Monitoring/Graphics" screen is shown next.



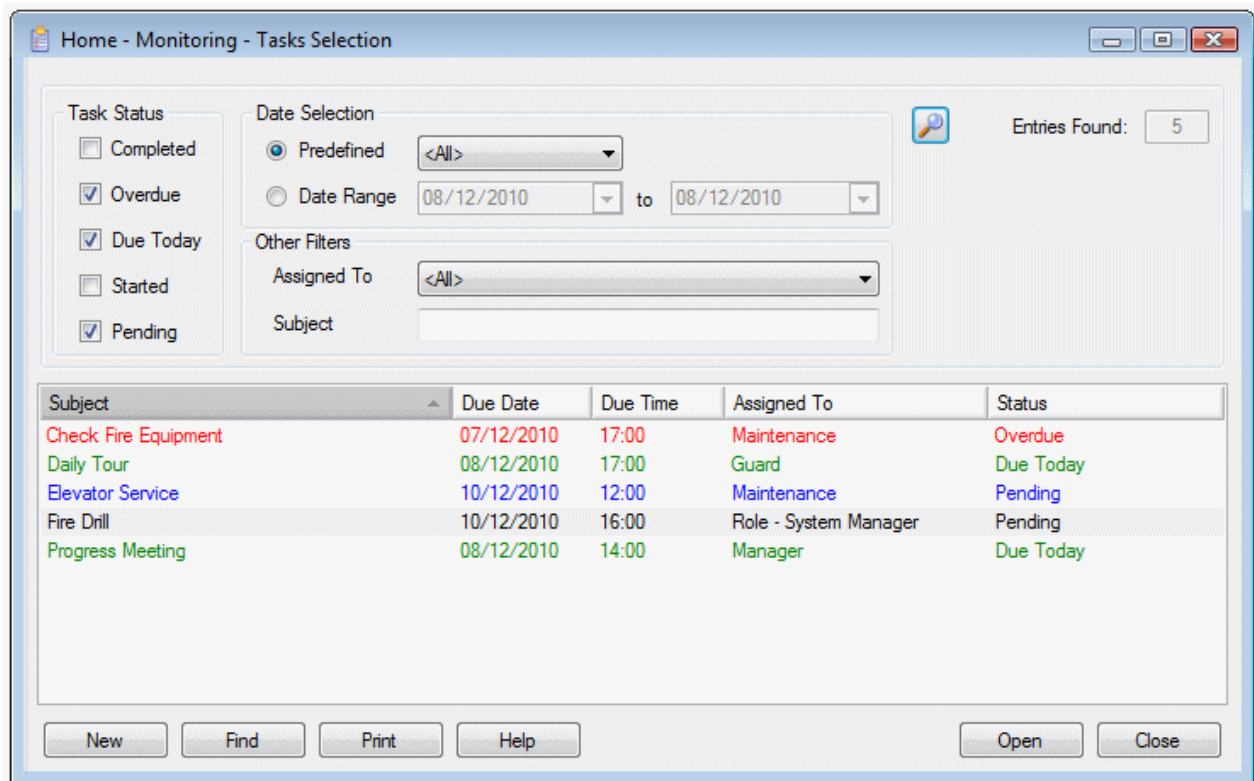
Selecting a device shows its status near the top of the screen. This example shows the status of the selected monitor point as **Enabled / Normal State**. The border of a device icon also indicates its status; red indicates an alarm state. The example also shows the right-click menu for a monitor point, which gives access to options such as **Disable Monitor Point** and **Enable Monitor Point**.

Graphics can contain links to other graphics, enabling an operator to locate an alarm or device with increasing accuracy. To make response times even quicker, a graphic can be set up to be displayed automatically when an alarm occurs.

Creating and Managing Tasks

The "Home/Monitoring/Tasks" screen allows you to create and manage tasks. A task defines an action that must be completed by a specified user, or by any user that has a specified user role. Each task has a due date and time; if the task is not completed on time, its status automatically changes to "overdue".

The Tasks screen lists all completed and uncompleted tasks. For each task, the screen shows the task subject, the due date and time, the name of the user or user role the task is assigned to, and the current status of the task. The following shows an example.



You can use the options in the upper area of the Selection screen to apply filters, which cause only tasks that match selected criteria to be displayed. You can open a task (e.g. to add comments or mark the task as completed) by selecting the task and clicking **Open**.

Creating a New Task

You can create a new task by clicking **New** in the Selection screen. This displays the screen shown next.

The screenshot shows a window titled "Home - Monitoring - Tasks". It contains several input fields and buttons:

- Created On:** 08/12/2010 13:03
- Created By:** Installer
- Due On:** 08/12/2010 14:03
- Alarm:** Create alarm when overdue
- Assigned To:** Installer
- Subject:** (empty text box)
- Due Today:** (green button)
- Status:** Not Started
- Navigation:** Details, Comments, Recurrence, Attachments (tabs)
- Actions:** Copy, Delete, Started, Complete, Help, Save, Close (buttons)

When you create a task, you specify:

- **Due on** – The due date and time of the task. If the task is not completed on time, its status automatically changes to "overdue".
- **Assigned To** – The name of the user or user role that is assigned the task. If the task is assigned to a user role, any user who has that role can complete it.
- **Subject** – The task subject, which should be a brief description of the task.
- **Alarm** – Whether to generate an alarm if the task becomes overdue or immediately on creation of the task.
- **Details tab** – Any instructions to complete the task.
- **Comments tab** – Any additional comments about the task. Additional comments can be added when managing or completing the task.
- **Recurrence tab** – The recurrence period, such as every day or every Friday. When the task is completed, a new instance of the task is automatically generated, with a due date that reflects the recurrence period.
- **Attachments tab** – File attachments for the task, such as diagrams or plans.

Completing a Task

You can mark a task as complete by opening the task and clicking the **Complete** button. Alternatively, if the task has caused an alarm, you can open the alarm in the "Home/Monitoring/Alarms" screen and click **Complete**.

Completing a task removes it from the "Home/Monitoring/Alarms" screen and generates a new task, depending on the settings in the Recurrence tab.

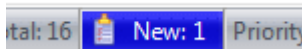
Completed tasks are deleted automatically after the period specified by **Purge Daily Logs After** in the "Maintenance/User & Preferences/System Preferences" screen.

Handling Task Alarms

A task appears in the "Home/Monitoring/Alarms" screen if it generates an alarm, which can occur immediately on creation of the task, or when the task is overdue (depending on the setup of the task). Double-clicking a task in the Alarms screen allows you to view the details of the task, in the same way as opening the task from the Tasks screen.

Completing a task removes it from the "Home/Monitoring/Alarms" screen.

The number of unacknowledged task alarms is displayed in the bar along the bottom edge of the main window. For example:



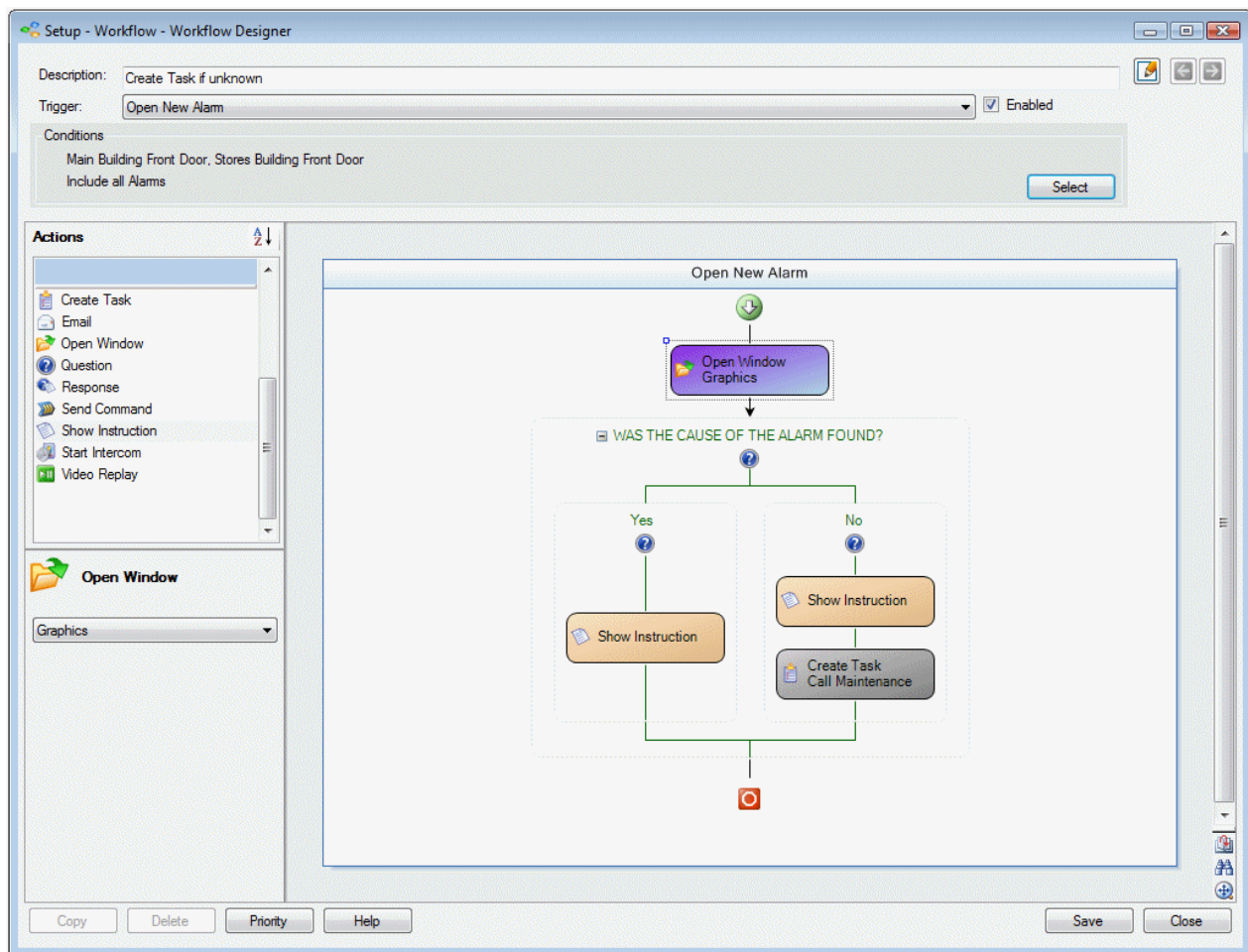
Workflow Designer

You can use the "Setup/Workflow/Workflow Designer" screen to create, find, view, modify, copy or delete workflows. A workflow is a set of actions that are started automatically when you perform a selected operation, such as opening a new alarm, acknowledging an alarm or opening a task. You can choose the type of trigger that starts a workflow and the actions that the workflow carries out. You can, for example, create a workflow that:

- Automatically opens the Graphics screen when you open a new alarm.
- Opens the Virtual Matrix screen when there is a Granted Access transaction at a door.
- Prompts the user to record whether a fire alarm (detected by a monitor point) was a drill or unscheduled.
- Automatically clears or acknowledges an alarm of a specific type when you open it.

A workflow can contain more than one action. For example, a workflow can open a screen, display an instruction and create a task when you open a new alarm. In addition, a workflow can contain different paths depending on your responses to questions.

The following shows an example of a workflow created in the "Setup/Workflow/Workflow Designer" screen.



If you choose an alarm-based trigger, you can specify that any alarm from any device can trigger the workflow, or only selected alarms from certain devices. The **Conditions** area in the Workflow Designer allows you choose the devices and alarms. By default, workflows are triggered by any alarm from any device.

Triggers and Actions

When you create a workflow, you specify the trigger that starts the workflow. Triggers are either alarm based, such as "Open New Alarm" and "Open Existing Alarm", or task based, such as "Create Task" and "Complete Task". The trigger in the above example is "Open New Alarm" (shown near the top of the screen).

The selected trigger determines the actions you can drag and drop from the menu on the left into the Workflow Designer. Actions include "Create Task", "Email", "Open Window", etc. The order you place the actions in the workflow determines the order in which they are executed.

Some actions have associated options. For example, the "Open Window" action has an option that allows you to choose the screen to open (selected from the panel in the bottom-left corner of the screen). The "Create Task" action has a greater set of options, which can be displayed in a separate window.

The first action in the above example is "Open Window", which opens the Graphics screen. This is followed by "Question" action, which has a branch for a Yes response and another for a No response. The Yes branch has a "Show Instruction" action. The No branch has "Show Instruction" and "Create Task" actions.

Multiple Workflows

More than one workflow can be set up with the same trigger. The **Priority** button allows you to specify the order in which the workflows are executed.

Web Access

Symmetry provides two optional methods of using the Symmetry software over the Internet or through a company intranet:

- **Using the Web Access Module.** This uses Microsoft Remote Desktop Services or the Citrix XenApp/Program Neighborhood software. Using Microsoft Internet Explorer, users have the ability to perform a wide range of tasks, such as setting up card holders, producing badges, generating reports, viewing digital video, monitoring alarms and registering visitor details. The user interface at a Web Client is the same as is displayed at a standard client of the Symmetry software. For further information, please refer to the *Web Access Installation and User Guide*.
- **Using the SymmetryWEB software.** This uses standard Internet Information Services, web server technology. Using SymmetryWEB, users can manage card holders, visitors and alarms from any standard web browser. SymmetryWEB allows users to enter card holder and visitor details, print badges, sign visitors in and out, view card status, view the last 25 valid transactions and manage alarms. For further information, please refer to the *SymmetryWEB Installation Guide*.

A key benefit of using the Web Access module or SymmetryWEB is that browser machines require no special software to be installed, making it the ideal choice for users who require casual access from any location.

Reader Modes

Readers are, of course, a key element of your Security Management System and their behavior must be matched to your site's specific requirements. Readers can be switched into several different modes, including the following, either through commands or through the "Install/Access Control/Reader" screen.

Card-and-PIN Mode

By using commands, you can switch any reader that has a keypad between card-only and card-and-PIN mode. When a reader is in card-only mode, there is no need to enter a PIN to gain access. With card-and-PIN mode, a PIN has to be entered, unless the card holder has executive card privileges, as set up in the Card Holders screen.

It may be a good idea to switch to card-only mode at busy times of the day by using a scheduled command.

User-Code Mode

User-code mode can be used by keypad readers. When a reader has been enabled for user-code mode, card holders are able to gain entry without their card by:

1. Pressing the # key.
2. Entering the card number (no need to enter leading zeroes).

3. Pressing the * key.

There is no need to present the card to the reader (although the use of a card will be accepted in the normal way).

You can enable user-code mode by sending the User Code Only or User Code + PIN command to the reader. User Code + PIN forces card holders to enter a PIN as well as the card number while the reader is enabled for user-code mode.

You can disable user-code mode by sending the User Code Disable command to the reader.

Card-Command Mode

Card-command mode enables a card holder who has the **Command Card Holder** option set in the "Home/Identity/Card Holders" screen to generate card command messages at keypad readers. The messages can be made use of by trigger commands, for example to arm or disarm intrusion systems, switch lights on or off, or to change the card PIN or door open time.

In order to allow the card holder to generate a card-command, the reader must have been enabled for the mode by sending the Card Command Mode On command to the reader. You can disable card-command mode by sending the Card Command Mode Off command.

Keycard Mode

A keycard holder can switch a reader between keycard-in and keycard-out states (access rights permitting) by presenting his or her card, followed by a four-digit PIN in a special sequence; this being 3412 for a PIN of 1234. When a reader is in keycard-out state, all cards except keycards are denied access, irrespective of access rights. When a card reader is in keycard-in state, normal operation is resumed. Keycard mode can be useful in cases where, for example, an intruder alarm needs to be armed and disarmed manually only by authorized personnel.

The reader must be keycard enabled in the "Install/Access Control/Reader" screen and any person who needs to be a keycard holder must have the privilege selected in the "Home/Identity/Card Holders" screen.

You can enable or disable keycard mode by sending the Keycard Mode On or Keycard Mode Off command to the reader. You can set the keycard-in or keycard-out modes by using the Keycard In or Keycard Out command.

Customer Code Only Mode

This mode allows access to any card encoded with a valid customer code, as configured in the "Setup/Configuration/Facility/Customer Codes" screen. When in this mode, a card's access rights are overruled. Refer to the "Home/Monitoring/Command Center" *Online Help* for further details.

Customer Code Only No Store Mode

This mode operates in the same manner as Customer Code Only mode, except that a record of each transaction will not be stored.

Enabled/Disabled Mode

The Disable Reader and Enable Reader commands enable you to disable and enable a reader respectively. Disabling a reader stops people from being able to use it.

Fingerprint Mode

Fingerprint readers can be set up to require just one fingerprint or two fingerprints using the Single Fingerprint Mode and Two Fingerprint Mode commands. You can disable the requirement to present a fingerprint using the Disable Fingerprint Mode command.

Duress Mode

A card holder can also use the PIN to create a "duress" alarm/event by preceding the PIN with a zero and not entering the last digit. A duress alarm/event signals that the card holder is gaining access under duress. Duress mode can only be used at readers that have been duress enabled in the "Install/Access Control/Reader" screen.

Delete-on-PIN-Error Mode

If a card holder enters an incorrect PIN, the "Wrong PIN" alarm/event is generated. The system can be set up to prevent the card from being used if the PIN is entered incorrectly a specified number of times. The system or node (depending on the **Delete PIN Errors Globally** preference) will no longer accept the card and the "Deleted for PIN" alarm/event is generated.

Toggle Mode

If a reader is enabled for toggle mode in the "Install/Access Control/Reader" screen, each valid access-control transaction or each valid exit request (from an exit-request switch) causes the door to toggle between being permanently locked and permanently unlocked.

As an example, the mode could be used for an entrance that is constantly manned by a guard throughout the day. In the morning, the guard could use his or her card to unlock the door permanently, then monitor everyone entering the building. To lock the door permanently, the guard could simply perform a normal access-control transaction on the way out.

Two-Card Mode

If a reader has been enabled for two-card mode in the "Install/Access Control/Reader" screen, two valid access transactions from two different cards must be made at the reader before access is granted. The transactions must be made within a specified period of time.

This mode is used in areas of a building where it is important that more than one person is present.

Reader-Inhibit Mode

This mode is typically used for readers that control turnstiles. If a reader is enabled for reader-inhibit mode in the "Install/Access Control/Reader" screen, when a card holder is granted access, the reader is effectively disabled until the card holder has passed through the turnstile and it has re-locked.

Antipassback Modes

A reader can be switched into various antipassback modes. Please refer to the *Online Help* for further information.

Visitor Deactivation

A reader can be set up in the "Install/Access Control/Reader" screen to deactivate a visitor card when the card is granted access at the reader (to exit the site). For further details, please refer to page 39.

Backing Up and Archiving

A backup, which can be produced using the "Operation/Data/Backup" screen, is a copy of the data in the Symmetry database. A backup enables your data to be recovered in the event of, for example, a computer fault.

It is absolutely essential that backups are taken regularly; ideally every day. The recommendation is that the timed backup feature is selected, with the backup time set to 04:00. This will give enough time for processes that occur at midnight to be completed, and for any remote sites to dial-in with the previous day's data. It is best to avoid a backup time of 02:00, otherwise confusion may arise on the daylight-saving dates.

Note: If you are using a Symmetry NVR (page 46), you must back up the NVR configuration folder separately and, if required, the video repositories. There is a separate configuration folder for each NVR, the location of which was specified during the installation of the NVR software. By default, the folder is located in "ProgramData\Symmetry\NVR", but you can find out the path by opening the properties of one of the "Symmetry NVR" services – the path to the configuration folder is shown as a parameter in the command line.

An archive is a copy of the historical transaction data from the Symmetry database; that is, card transactions, alarms, events and user activity. Producing archives may be necessary for reporting purposes, since data that is older than a specified number of days is deleted automatically, as specified by the **Purge Daily Logs After** option in the "Maintenance/User & Preferences/System Preferences" screen.

Normally, the interval between archives should be slightly less than **Purge Daily Logs After**. For example, if **Purge Daily Logs After** is set to 90 days, archives should be taken every 89 days.

Depending on your requirements, archiving may not be required at all; data older than a specified amount may not be of any interest. It is also important to realize that if an archive is used to produce a report, the whole archive is re-inserted into the transaction database.

Multi-Company Installations

One of the major features of a Symmetry Security Management System is its ability to be shared by two or more companies, which makes this product an excellent choice to install in buildings that will, or may, be occupied by more than one occupant.

The Benefits of a Single System

Using a single Security Management System, rather than a separate system for each company, can bring many advantages. Not only are the initial procurement costs likely to be lower, but thereafter the on-going security costs should be reduced.

One of the major cost savings for large sites may come from the more efficient use of security manpower, since, if required, a single guard can monitor alarms for the complete site. This can be carried out on a permanent basis or, if required, the system can be set up so that alarms are routed to a central guard only at night and during holidays/weekends, etc.

In addition to cost savings, a single system brings major benefits in terms of flexibility. If, for example, a tenant has negotiated the use of more of the building, no rewiring or other major works are required; only a few settings need to be changed in the Symmetry software. This degree of flexibility is obviously an essential consideration for new buildings, where the tenancy agreements may not have been completed.

Company Groups - Keeping Information Private

In a multi-company installation, each company's information can be kept private from other companies, with perhaps only one user having system management privileges for the complete system.

To keep information private, your user permissions (as set up in the "Maintenance/User & Preferences/Roles" screen) specifies the companies that you are allowed to access. In certain screens, such as "Home/Identity/Card Holders", you can set up, view and edit information for only those companies that you have permission to access. You choose the specific company to work on by using the "Home/Monitoring/Change Company" screen.

When you are working on one company's information, you normally have no visibility to the information set up for other companies. There is one exception to this rule, and that is when the **Card Holders by Company** option in the "Maintenance/User & Preferences/System Preferences" screen is deselected. When deselected, you are given view-only access to the Card Details, Personal and Biometrics tabs in the Card Holders screen for any card holder from any company. You are also able to add and remove normal access rights using readers, groups and time codes belonging to the currently-selected company. This can be a useful feature when readers need to be used by employees from different companies.

Various screens also operate only on the currently selected company if **Filter by Company** is selected in the "Maintenance/User & Preferences/System Preferences" screen. When deselected (the default), the options operate on all companies you have access to.

Device Sharing for Access Rights

Each device such as a reader, monitor point and auxiliary output is allocated to a specific company, which enables that company to maintain exclusive control over the use of its devices.

However, in situations where a reader needs to be shared by more than one company (such as at main entrances to the building), the 'owning' company can add the reader to a shared reader group, which enables another company to use the reader in their access rights.

The same applies to floors: elevator floors that need to be shared can be added to a shared floor group.

An alternative method is to use the **Card Holders by Company** option, as explained in the previous section.

Routing Alarms

You have complete freedom to route each company's alarms to one or more client PCs. This is in addition to the ability to route alarms to different PCs on the network according to time of day, day of the week or even holiday dates.

A modem can be used to route alarms automatically to a totally independent installation of the Symmetry software. This enables alarms generated at, for example, a site that is unmanned during the night to be automatically routed to a central manned site.

Alarms can also be routed to an email message or pager using the Email Alarms feature.

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