

WIN-PAK 2.0

The Complete Access Control Software

User Guide

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Welcome

WIN-PAK 2.0 is state-of-the-art access control software that was specifically designed to run in the Windows 95/98 and Windows NT 4.0 operating systems.

WIN-PAK 2.0 allows the programming of card and card holder information, the design and creation of badges and easy monitoring of alarms and cameras.

WIN-PAK 2.0 software functions are separated into three applications: Database Server, Communications Server and Client Workstation. These applications can run on the same computer or on multiple computers, allowing great flexibility in configuring a networked system.

WIN-PAK 2.0 is a three-tier client server application based on Microsoft tools and standards. It is ODBC (Open Database Connectivity) compliant. This provides a reliable, flexible and robust system.

WIN-PAK 2.0 is designed to meet the needs and view-point of the installer as well as the end user. The Device Map displays the access control system from the view point of equipment and connections. The Access Map and Control Map, along with the Floor Plan view, allow the user to define and use the system from the view point of the facility.

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Many technical documents are available from our website at www.nciaccess.com.

About This Guide

The WIN-PAK 2.0 User Guide has been organized into seven major sections:

Introduction explains key software concepts and many of the features of WIN-PAK 2.0. It also gives contact information for Northern Computers, Inc. sales and technical support.

Installation contains system requirements, installation instructions, and registration information.

User Interface gives an overview of the user interface, including the database windows, tree structures, main menus and commands.

Programming is a basic guide to programming your access control system. It is designed to provide you with the necessary information to get your system up and running. Information is included on programming your hardware, creating custom floor plan views, adding cards and card holders, and creating badges.

Badging contains the information necessary to create your own badge designs, including card holder photos and signatures, magnetic stripe encoding, bar codes and a variety of artwork.

Operations provides information on the functioning of the access control system. This includes information on monitoring and controlling the system and generating and printing reports.

Reporting contains information on generating, previewing and printing reports.

Conventions

In WIN-PAK 2.0 there is often more than one way to perform a task. For example, you can open the Card Holder database by clicking the Card Holder toolbar button or by clicking the Card Holder command on the Card menu. Wherever available, this guide describes the menu method of performing tasks. Other conventions are listed in the following table.

Convention	Method
Bold	In procedures, indicates the name of a screen object (such as a button or menu command).
BOLD CAPS	In procedures, indicates a keyboard command (such as ENTER or SHIFT).
Double-click	Refers to quickly clicking the primary mouse button (usually the left) twice.

Right-click	Refers to clicking the secondary mouse button (usually the right) once.
-------------	---

On-Line Help

In addition to this manual, WIN-PAK 2.0 has an on-line help system. It is also organized into functional sections, which should make it easy to find the information you need. The on-line help system is designed to be viewed in Microsoft's HTML Help Window. If you do not have the HTML Help components installed on your computer, it will be viewed in the default browser.

Use the Table of Contents, Index or search functions to locate the information you need.

- In the left pane, click the tab for **Table of Contents**, **Index** or **Search** to find the information you need.
- Press F1 to get context-sensitive help at a dialog box or window. You can also click a dialog box **Help** button to access context-sensitive help.
- When viewing help, you can maximize or resize the help window to suit your requirements.
- Click the **Hide** or **Show** navigation icons to view or hide the TOC, Index, and Search tabs.
- Click **Back** to return to the previously viewed topic. Click **Forward** to go to the topic that was displayed prior to going back.
- Click **Print** to print the current topic.
- The **Options** menu provides additional browse and navigation controls.
- Many topics include a **Related Topics** control at the end of the text that displays a pop-up menu of related topics that you can click and go to.

Note: The installed versions of both Internet Explorer and Microsoft HTML Help Workshop determine the print functionality on your system.

Chapter I

Introduction

Access Control Overview

WIN-PAK 2.0 Overview

Software Concepts

Features

Access Control Overview

Access control is computerized control over entry into any area that can be secured with a lock and key. Entry is only allowed to authorized people at authorized times. Control of who is allowed to come and go is easily maintained.

The weakness of a lock and key security system is the physical key. The key is readily duplicated and gives access to anyone who holds it. There is no control of when a key is used and no record of its use. The risk of lost or stolen keys, with the expense of changing locks, is a costly problem.

Access control is an effective and affordable solution to this problem. With access control, each person receives a card or keycode which restricts access to authorized areas at authorized times. A small, programmable control panel allows or denies access. If a card is lost or stolen, the control panel can be reprogrammed quickly and easily.

Many additional functions are available when access control is combined with today's powerful computer networks. The system can control and monitor CCTV equipment. It can track and provide reports of all card and keycode activity, a history of system events and database reports.

In addition, the access control system can store and manage basic information on thousands of employees at multiple sites. Employee photo ID imaging and badging are now an important feature of access control systems.

WIN-PAK 2.0 Overview

Database Management

WIN-PAK 2.0 allows the user to define time zones, communication loops, panels, cards and card holders and other pertinent information. The database information is easily edited, searched, and sorted. A wide variety of reports, including Device, Card, Card Holder and History, can be viewed on-screen and printed.

Access Control Management

WIN-PAK 2.0 uses Floor Plan views to monitor and control many of the daily functions of access control. The floor plan provides a graphic representation of devices including doors, panels, inputs, outputs and CCTV equipment. Representations of system devices (abstract devices or ADVs) signal the state of system hardware and give the user control over these devices. For example, a door can be locked or unlocked from an ADV on the floor plan, a CCTV camera view can be switched from one monitor to another, and information can be sent to a control panel.

Control Areas are defined by adding devices to a Control Map, which provides another way to control the devices.

Separate Event and Alarm views display alarms and other system information in list form. Alarms can be acknowledged and cleared from either the Floor Plan or Alarm view.

Badging

WIN-PAK 2.0 gives you the tools to create high-quality photo IDs. Badge designs can be created incorporating photos, signatures, barcodes, magnetic-stripe encoding and logos or other art work. These can be printed on access control cards, incorporating two security measures into one.

Software Concepts

Multiple Server Design

WIN-PAK 2.0 is a true 32-bit application which can operate in either a Windows 95/98 or Windows NT 4.0 environment. The server modules load as services in Windows NT 4.0 and as pseudo services in Windows 95/98. Multi-threading design takes advantage of supported multiple processor machines in NT.

WIN-PAK 2.0 is a three-tier client/server application based on Microsoft tools and standards. This design provides a robust, reliable, and flexible program. Because it is ODBC (Open Database Connectivity) compliant, existing databases can be converted for use with WIN-PAK 2.0.

WIN-PAK 2.0 is comprised of three primary modules, the Database Server, Communications Server and Client Workstation. These modules can be installed on one computer or on different machines on a network. Communications are handled by the communication server, which can be on one computer. The databases are handled by the Database Server, which can be on another computer. The Client can be installed on one or more other computers which serve as workstations. This provides a distribution of system activities and processes across the defined computers, thereby significantly improving system performance.

Database Server

The *Database Server* stores, organizes and retrieves the information in the WIN-PAK 2.0 databases. It makes this information available to other system components and allows the retrieval of information for editing and report generation. The Database Server can be used at the same time by multiple client workstations and communication servers.

The Database Server can be installed on the same PC as the client workstation or it can reside on another machine on the network. To avoid nuisance error messages, the Database Server should be started before the communication server and client workstation are started.

Communication Server

The *Communication Server* controls communication to and from the control panels and the Database Server. It assigns priorities and resolves conflicts as information is routed from the various panel loops and devices to the Database Server, and the WIN-PAK 2.0 Client Workstation.

The Communication Server can be installed on the same PC as the client workstation or it can reside on another machine on the network. To avoid nuisance error messages, the Communication Server should be running before starting the client workstation.

Client Workstation

The *Client Workstation* provides the user interface for WIN-PAK 2.0. Operators log on to the client workstation and then connect with the *Database Server* which is already running. All of the interaction between the end users and the access control system takes place through the Client Workstation.

The Client Workstation can be installed on the same PC as the Database Server and the Communication Server or it can reside on another machine on the network. With the purchase of appropriate licenses, numerous copies of the Client Workstation can be running and logged into the Database Server at the same time.

Command File, Guard Tour, Muster and Schedule Servers

In addition to the three main program modules, WIN-PAK 2.0 has four other servers. The Command File

Server, Guard Tour Server, Muster Server and the Schedule Server. These servers are normally installed on the same machine as the Database Server. In Windows NT 4.0 they run as services and are transparent to the end user. In Windows 95/98 environments, they run as pseudo services. They are launched on start-up and their task bar buttons are not visible. Again, the operation of these servers is more or less transparent to the end user. The Command File, Guard Tour, Muster and Schedule functions are accessed through the WIN-PAK 2.0 user interface in the same manner as other databases.

Abstract Devices

An abstract device (ADV) is a logical representation of a physical device (e.g., a communication server, control panel, door or CCTV switcher). Similar in appearance to an icon, an ADV is associated with an actual device in your access control system.

ADV's provide an interface for monitoring the status and controlling the actions of a physical device. The ADV's are placed on a *Floor Plan Background* creating a *Floor Plan*, which is the main user interface for monitoring and controlling the access control system.

WIN-PAK 2.0 is designed to combine many hardware devices, with different functions and features, into a seamless access control system. The abstract device plays an important role in this design. The ADV provides a user interface for controlling different hardware, without concerning the end user with the details of the hardware configuration.

For example, when placed on a floor plan, the ADV door object allows the user to lock, unlock, shunt, un-shunt, return to time zone, pulse or send a programmable pulse to the door relay. From the user's point of view, it does not matter if the door device is from an N-1000 panel or another controller.

In operation on the floor plan, the ADV signals the state or status of its device by blinking and changing color; a

sound file can also be associated with the ADV to signal a change in state. Each ADV has a control menu that allows the user to execute functions available for that device. Right-clicking the ADV opens the control menu. Drag and drop functionality is available in some cases. For example, a camera object can be dragged and dropped onto a monitor object to initiate a switch.

The colors, blinking and other properties of the ADVs can be edited, re-sized and rotated in the *Floor Plan Definition* utility.

Floor Plan View

Floor Plans are the main user interface for controlling and monitoring the system. The Floor Plan Views can be tailored to the specific needs of your access control system. Multiple Floor Plans can be opened and viewed simultaneously. Floor plans can contain links to other floor plans for a different or more detailed view. In addition, the Floor Plan view can contain links to Alarm and Event views, as well as a special field for text information.

Floor plans are made up of a reusable, static background and ADVs associated with hardware devices. The background can be the floor plan of the building or area where the hardware is located. It can also be a loop wiring diagram, a simple grid, or a picture of the area where the hardware is located. Background files must be supplied as Windows metafiles (.wmf).

The ADVs can be associated with any hardware device, including communication interfaces, panels, alarm points, entrances, and CCTV equipment. The ADVs signal events by changing color and blinking. Right-clicking an ADV opens a control menu for the device.

Data Trees

WIN-PAK 2.0 uses a graphical *tree* to organize and display some of its database information. The tree allows infor-

mation to be organized into logical or geographical groups. Each tree is created as you program your access control system, therefore it is tailored to meet the needs of your access control system.

Except for the device tree, the tree defines the hierarchy of resources, not the resources themselves. For example, an Access Level is defined as a list of readers. But rather than being displayed in a standard list, the readers are mapped on a data tree. The highest level branch can be defined as an entire office complex. Branching off from the office complex is the President's suite, the Accounting Department, the Production Area, and the Distribution Center. The appropriate entrances are then added to each branch. The entrances that are included in a given access level are shown in green. A quick look at the tree gives a clear picture as to which entrances are included in this access level.

The Device Map is displayed on a tree, but unlike the other tree structures, devices are defined as they are added to the Device Map.

Features

General

WIN-PAK 2.0 is state-of-the-art access control software that was specifically designed to run in the Windows 95/98 and Windows NT 4.0 operating systems. This makes it possible for WIN-PAK 2.0 to take full advantage of the speed, flexibility and reliability of modern networked computers.

WIN-PAK 2.0 has many features designed to handle large and complex installations. The WIN-PAK 2.0 environment can be set up so that it is easy to use by the people who are monitoring alarms, issuing cards, and carrying out other day to day functions.

WIN-PAK 2.0 supports Tracking and Muster Reporting to indicate the location of people for security or safety reasons.

WIN-PAK 2.0 allows Guard Tours defined by reader and alarm points, that can be timed or random.

WIN-PAK 2.0 provides CCTV control with live monitor view, supporting interfaces with Burle, Dedicated Micros, Geutebruck, Javelin, JavQuest, NCI CCTV, Panasonic, Pelco and Vicon.

Database Features

WIN-PAK 2.0 uses Microsoft Access as its database engine.

WIN-PAK 2.0 supports partitioning of alarms by operator, making it possible to control which alarms a particular operator monitors. Highly detailed operator definitions (down to the level of individual points, readers, and note fields), allow the protection of confidential information, while making needed information available.

Flexible Views and Control Features

Floor plan views are user configured. They provide both monitoring and control capability for panels, doors, alarms, inputs and outputs, and other system devices. Multiple floor plans can be viewed simultaneously, while links can open other floor plans at the click of a mouse. The pan, tilt, zoom and switching of CCTV cameras can also be controlled from the floor plan view.

The Control Map provides another user-configured means of controlling devices. The user defines the Control Map by adding devices to a branching tree structure. Devices can be controlled from the Control Map view.

Other on-screen views include live CCTV monitoring and Auto Card Lookup, which automatically displays a picture and information about a card holder when their card is presented at a designated reader.

Badging

WIN-PAK 2.0 includes a full-featured badge layout utility for the design, creation and printing of badges. This includes two-sided printing and bulk printing of badges.

Magnetic stripe encoding (up to three tracks), barcoding, multiple images, and signatures can be placed on a badge.

Video images can be captured in real time or imported from another source. High resolution digital images, photo cropping and ghosting of images are all supported.

Card and Card Holder Features

WIN-PAK 2.0 allows the programming of card and card holder information. Forty user-defined note fields are available for entering information into the Card holder database. The note fields are arranged on user-defined tabs, so that the information can be organized to suit the user's particular needs. Multiple photos, signatures, and cards can be used for Human Resources, asset tracking, or other purposes.

Multiple cards can be assigned to a single card holder. For example, a long range RF tag may be issued for drive-in entry through a security gate, and a proximity card might be used for entry into and within the building. A spouse or child may need his or her own card for access to a building as well.

Communications

WIN-PAK 2.0 supports a wide variety of communication options to allow the greatest flexibility in setting up an access control system. It supports up to 64 serial communications ports in an NT environment or 32 in a Windows 95/98 environment. Remote locations can be supported by dial-in and dial-out configurations.

Chapter II

Installation

System Requirements

Installation Instructions

Licensing and Registration

System Requirements

Operating System

WIN-PAK 2.0 is a 32-bit application that runs in either a Windows 95/98 environment or Windows NT 4.0. The Windows NT 4.0 operating system is recommended for systems having more than eight communication ports or more than five workstations.

Hardware Basics

Minimum Requirement Configuration

This set up is sufficient for small systems with 1 to 10 readers, up to 250 cards and 2 communication ports. It is a good configuration for a work station, but is not sufficient for use as a server.

- Pentium II-233 CPU
- 128 megabytes of RAM
- 2.1 gigabyte hard disk
- 2 serial communication ports
- Tape backup drive
- 1 parallel port (2 for badging)
- 2 button mouse (PS2 mouse preferred)
- 15" SVGA color monitor (1024 x 768, 256 color)
- Microsoft Windows 95, 98 or NT 4.0

Recommended Configuration

This is the recommended hardware configuration for basic access control, including badging. For systems with 1 to 100 readers, up to 5,000 cards and up to 8 communication ports. It can be used for a stand-alone system, a work station or a server. However, additional RAM will improve performance.

- Pentium II-350 CPU
- 128 megabytes of RAM

6.4 gigabyte SCSI hard disk
2 serial communication ports
8 gigabyte SCSI tape backup
1 parallel port (2 for badging)
17" 1024 x 768 true color monitor
2 button mouse (PS2 mouse preferred)
Windows 95, 98 or NT 4.0.

Performance Configuration

This configuration is recommended for systems using more than 16 communication ports. It is suitable for systems using up to the system capacity for readers, up to 25,000 cards and 64 communication ports. It is suitable for a stand-alone system or a server.

Pentium III-500 CPU
256 megabytes of RAM
9 gigabyte SCSI hard disk
2 serial communication ports
8 gigabyte SCSI tape backup
1 parallel port (2 for badging)
19" 1280 x 1024 true color monitor
2 button mouse (PS2 mouse preferred)
Microsoft Windows NT 4.0

Video Capture Card

Video badging requires the **PB-VC-8** or **PB-VC-9** video capture card

Modems and Communication Ports

Modems and communication ports are those that are supported by the Windows operating systems, including both internal and dial-up modems.

Windows 95 or 98

Dial-up modems are supported on COM 1, COM 2, COM 3 or COM 4 as defined by Windows. Dial-up modems are not supported by any of the multi-port boards. You may mix the PC's COM 1, 2, 3, 4, with the multi-port boards. WIN-PAK 2.0's utilization of communication ports in this manner allows the use of an internal

modem as defined by Windows.

Windows NT 4.0

Supported communication ports and devices, including modems, are any devices supported by the NT operating system.

Badging Printers

Any badge printer that is supported by the Windows operating system can be used for most badge printing. However, for two-sided PVC encoding or magnetic stripe encoding, the Datacard IC III or one of Ultra's Turbo series printer is required. (Additional printers will be supported in the future.)

Report Printers

For page printing, any printer that is installed in the Windows operating system can be used. For single line printing, a dot-matrix printer, such as the P-1000 is required.

Panel Firmware

WIN-PAK 2.0 requires that the N-1000 control panels have at least version 8.02 level of firmware.

Windows 95/98 or Windows NT 4.0

WIN-PAK 2.0 runs in both the Windows 95/98 and Windows NT 4.0 environments. In larger systems, with greater communication requirements, NT is the preferred operating system.

Installation

WIN-PAK 2.0 software is distributed on an autorun CD, along with the CD release notes and other technical documents.

To install WIN-PAK 2.0, select the install software option from the browser.

There are several installation types to choose from. These allow you to either install all software components on one machine for stand-alone applications, or install selected components for network applications.

A 30-day initial license period is provided, beginning as soon as the software is installed. During this time you can use the software without registering it. See License and Registration for further information.

Before beginning installation, make a note of the CD Key inside the cover of the user guide. You will need this number during installation and when contacting Northern Computers regarding the software.

Before Installation

- 1 Read the text files on the WIN-PAK 2.0 CD and any release notes that are shipped with the software. These may contain additional installation information.
- 2 Note the CD Key inside the cover of the User Guide.
- 3 If this computer is part of a networked system, verify that your computer has a valid IP address. (For further information consult your Microsoft documentation.)
- 4 Check the machine name of the computer that is running the Database Server. If this computer is part of a networked system, the machine name must use the same format as a valid Internet name. The first character must be an alphabetic character, and

there should be no spaces or punctuation in the name.

Initial Installation

- 1 Exit any Windows programs that may be running. Insert the WIN-PAK 2.0 CD into the CD drive. The installation program is self-activating for Windows 95/98. Select Install WIN-PAK.
- 2 When prompted, enter your name, company name and CD-Key.
- 3 Select the type of installation you require. (The System Manager is installed along with any selected component.)

Communication Server Only for networked applications.

Complete Installation installs all components on one machine.

Custom Installation allows you to select the components to be installed. Select the check box for each component you want to install.

Database Server Only for networked applications.

User Interface Only to setup a workstation for networked applications.

- 4 When prompted, select the path and file name for your executable program files, or accept the default settings.

Depending on which Windows operating system you are using, a number of Windows components may be installed. The software may reboot your computer after each of these components is installed. This is normal. When installation is complete, you will be prompted to re-boot your computer again. Re-boot the computer at this time.

During installation, you may be asked if you want to overwrite existing .dll files. Keep your existing dlls. (When asked “Do you want to keep this file?” click **Yes**.)

- 5 You have the option to place program icons on your desktop. The desktop icons can be used to start WIN-PAK 2.0. If you do not install the icons, WIN-PAK 2.0 is started from the Windows Program menu, Northern Computers, Inc. group.
- 6 When installation is complete, restart your computer.

First Log In

- 1 WIN-PAK 2.0 services load on start-up.
- 2 Double-click the WIN-PAK 2.0 User Interface icon. The User Interface opens and the Connect to Server window appears.
- 3 In the **Connect to Server** dialog, enter the default operator **Admin** (use a capital A for the first log in).



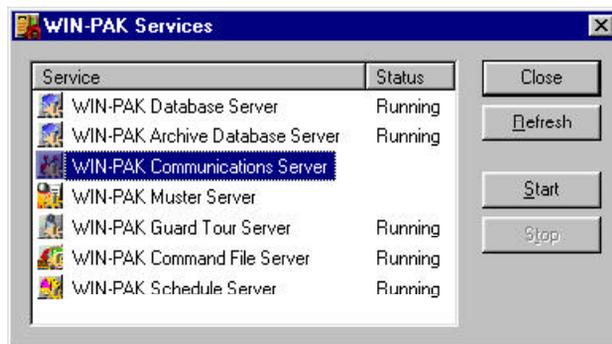
NOTE: No password is required for the initial log on, but you should add a password in order to insure the security of your system.

- 4 Leave **Server Name** blank if the Database Server, Communication Server and User Interface are installed on the same machine. If the Database Server is on a different machine, that machine name appears in the Server Name field.
- 5 Click **Connect**. The toolbars and menus are available.

A message in the title bar reads “TRIAL LICENSE *x* days remaining,” indicating that your software has not been registered. See the Licensing and Registration section to learn about licensing your application.
- 6 Follow the instructions in **Programming** to enter information into your WIN-PAK 2.0 access control system.

Service Manager

The WIN-PAK 2.0 Service Manager is a utility which allows the administrator or operator to easily start and stop the software services. Open the WIN-PAK Services window by double-clicking the desktop icon or selecting it from the Windows Program menu, Northern Computers, Inc. group. The installed program components are listed. The status column indicates if they are running or not. Double click any component to either start or stop the service.



System Manager

The System Manager is a utility used by WIN-PAK 2.0 to locate its various software components. The machine name and protocol endpoint for each program component is displayed in the System Manager. Generally, none of the settings on the System Manager should be changed.

The System Manager, Database Server tab provides access to the Copy Database and Compact Database. (See Database Maintenance for details.) Open the System Manager by clicking the **Start** button, pointing to Programs, Northern Computers, Inc., and then click **WIN-PAK 2 System Manager**.

The screenshot shows the 'WIN-PAK 2 System Manager' dialog box with the 'Database Server' tab selected. The dialog has a title bar with a close button (X) and a menu bar with the following options: Command File Server, Scheduler Server, Guard Tour Server, User Interface, Database Server, and Database Archive Server. The main area contains the following fields and controls:

- LPC Name:** Database_Server
- RPC Endpoint:** 5555
- DSN Name:** WIN-PAK Database
- User Name:** DBA
- Password:** ****
- Service Exit On Logout

Buttons on the right side: Install, Remove, Start, Stop. Buttons at the bottom: Copy Database..., Compact Database..., OK, Cancel, Apply, Help.

Licensing and Registration

WIN-PAK 2.0 has a 30 day initial license period. For evaluation purposes, the software can be installed and used for up to 30 days without registration. At the end of the 30 day period, the initial license expires and is invalidated. When the license is invalidated, you can only access the Help menu until the software is registered and a valid license restored.

WIN-PAK 2.0 software has a CD Key found inside the cover of the user guide. Make a note of this number, as you will need it to install WIN-PAK 2.0 and when contacting Northern Computers regarding the software.

To register your software, from the **Help** menu, click **License**. The License dialog appears. Note the Site Code. This is a unique number that identifies your computer. Call Northern Computers Customer Service at (800) 360-6067. Be prepared to give the Customer Service Representative both the CD Key and the Site Code. You will be given a Site Key. Enter this number in the **Site Key** field. This activates the license for your software.

The number of clients and number of servers licensed for your system is now displayed on the License dialog. A new Site Code appears in the Site Code field.

License Files

The encryption software writes files to your hard drive as part of the licensing. You must take care not to move or damage these files, or your license will be invalidated and you will not be able to access your system.

Caution: Using Norton Speed Disk can invalidate your license. Do not use Norton Speed Disk until you have made the following changes in its settings.

Norton Speed Disk Utility

Speed Disk is the defragmentation utility included in Symantec's Norton Utilities. Unfortunately this program moves system files by default, which will move the licensing files, causing the loss of the license.

- 1 To solve this problem, open Speed Disk and on the File menu, choose **Options/Customize** and then select **Unmovable Files**.
- 2 Specify that the .ent, .key, and .rst files cannot be moved.
- 3 Save the new profile by selecting **Files/Options/Optimization/Save**. **Speed Disk** can now be run without affecting your license files.

Chapter III

User Interface

Main Window

Main Database Window

Database Detail View

Right-Click Menus

Main Window

The WIN-PAK 2.0 user interface allows you to setup, monitor and maintain all aspects of your access control system.

Title Bar and Menu Bar

Once a user is logged on, the title bar at the top of the screen displays the name of the operator, and if the software has not been registered, the number of days remaining on the initial license is also displayed. The main menu bar and toolbar are available.

Title Bar

Menu Bar

Toolbar Buttons



Toolbar Buttons



Log In - Opens the Log In window, allowing operators to log in to the User Interface and connect to the Database Server.



Dynamic Alarm View and Acknowledge - Opens the Alarms view. Incoming alarms can be viewed, acknowledged, and cleared. Right-click menus provide access to control functions.



Event View - Opens the Events view, displaying current system activity in real-time.



Floor Plan View - Opens the Floor Plan database main window, allowing the operator to open selected floor plans.



Locate - Opens the Locate dialog box, allowing the operator to search, by card holder name or card number, for the last time and place a card was used.



Card Database - Opens the Card Database main window, allowing the operator to search and sort the card list, and add, edit or delete cards. Badge layouts can be added to cards and badges can be printed.



Card Holder Database - Opens the **Card Holder Database** main window, allowing the operator to search and sort the cardholder list, and add, edit or delete card holders. Card Holder photos and signatures can be imported, captured and viewed from this the Card Biometrics tab in the Card Holder database.



Reports - Opens the Reports database main window, allowing the operator to generate, view and print reports.



Help - opens the Help menu, providing access to on-line help files, and connections to Northern's website and e-mail.



Log Out - Logs the operator out of the User Interface.

Menus



File Menu

Log In
 Log Out
 Configure Badge Printer
 Reports
 Workstation Defaults
 System Defaults
 Database Maintenance
 Exit

View Menu

Select Language
 Toolbar
 Status Bar

Operations Menu

Locate
 System Events
 Events
 Alarms
 AutoCard Lookup
 Live Monitor
 Floor Plan
 Control Map
 Guard Tour
 Tracking and Mustering

Card Menu

Card
 Card Holder
 Access Level
 Bulk Card Add
 Bulk Card Delete

System Menu

Operator
 Operator Level
 Workstation Defaults
 System Defaults

Reports Menu

Reports

Configuration Menu

Define	Access Areas Tracking Areas Control Areas
Device	Device Map Abstract Device (ADV) Action Group
Time Management	Time Zone Schedule Holiday Group
Card Holder	Configure AutoCard Lookup Note Field Template Card Holder Tab Layout
Badge	Configure Badge Printer Badge Layout Utility Badge DLL's
Select Language	
Translate	Available Languages Dialogs Menus Other Text
Command File	
Guard Tour	
Floor Plan Definition	

Window Menu

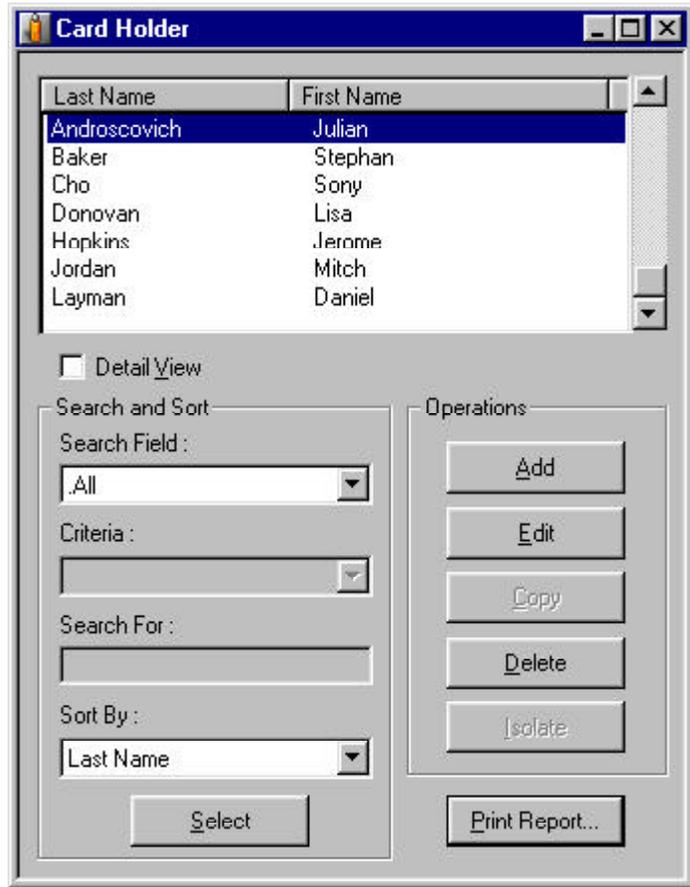
Arrange Icons

Help Menu

Help Topics	
Northern Computers, Inc.	On the Web E-mail Technical Support
License	
About WIN-PAK 2.0	

Database Window

Most of the WIN-PAK 2.0 databases are accessed through a main database window. The list of records displayed in the window can be searched and sorted. Records can be removed from the database by deleting them from this list.



A detail view can be opened from the main database window, displaying additional information about the selected record.

Title Bar

The database window is identified by a title bar.



Database Record List

Below the title bar is a list of database records. Use the scroll bars to scroll through the list and data fields. Typically all records in the database are displayed in the list, while the default sort order varies depending on the database. For example, Card Holders are displayed alphabetically by last name. The Search and Sort fields allow you to sort the list in a particular order or to search for records with a particular characteristic. The search results are displayed in the list.

You can select records from the database list by clicking them. A range of records can be selected by holding down **SHIFT** and clicking the first and last records in the range. Or select multiple records by holding down **CTRL** and clicking the desired records.

Detail View Check Box

Select this box to open the Detail View of a selected database record. When the main database window's **Edit** button is clicked, the Detail View is activated and can be used to edit the selected record. When the main database window's **Add** button is clicked, a blank detail view opens and a new record can be entered.

Search and Sort Fields

Use these fields to choose the search characteristics to be applied to the records list.

- **Search Field:** Select the name of the field you want to search.
- **Criteria:** Choose one of the operators from this list. The available options vary depending on the database, but include *greater than*, *equal to*, or *less than*.
- **Search For:** Type in a letter, word, phrase or numeric expression that you want to search for.
- **Sort By:** This selection designates the order in which the search results will be displayed, (e.g. cards can be displayed by card number or last name.)
- **Select:** This button initiates a search based on the information entered in the **Search and Sort** fields

Operations

- **Edit:** Opens the **Edit View** window to the selected record, allowing the record to be changed
- **Add:** Opens a blank **Record View** window for entry of a new record
- **Delete:** Removes the selected record from the database. (In the Card database, a confirmation dialog box appears if the Confirm Card Deletes option is selected in Workstation Defaults. Click **OK** to confirm.)

Copy

Some databases (for example Badge Layouts and Action Groups) have a Copy function. Select a record and click the Copy function to make a duplicate which can be re-named and edited.

Isolate

Some databases (for example Time Zones) have an Isolate function, which is very helpful when you want to delete an

item. WIN-PAK 2.0 will not delete an item that is in use. Isolate allows you to view the usage and reassign elements without having to search through all the possible areas where the element might be in use. For example, in order to delete a time zone you must first remove it from any panels, access levels, cards, operators, ADVs or action groups where it is used. Click Isolate, the Modify Usage (Isolate) window appears. Tabs indicate where the time zone is used and allow it to be removed from each instance. When this process is completed, click **OK** to return to the main database window. Now the time zone can be deleted by selecting it and clicking Delete.

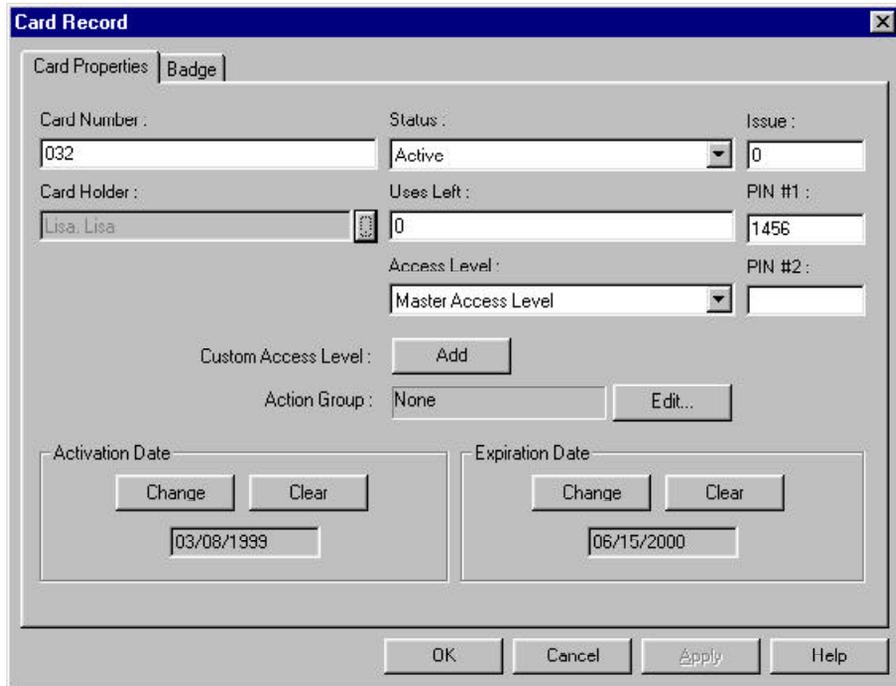
Print Report

Click the Print Report button to view and print a report on the current database. Generally, a filter dialog box opens first, allowing you to select settings for the report. Select Print Preview to review the report and Print to print it.

Database Detail Window

Many of the WIN-PAK 2.0 databases have both a main database window and a secondary Detail window. (This is sometimes called the Record view, because it shows information on a particular database record.) Select a database record from the list in the main window, and then select the **Detail View** check box. The Detail View appears. This new window shows information on the currently selected record.

Below is the Detail View from the Card database. It has two tabs for displaying different information.



The screenshot shows a window titled "Card Record" with a close button (X) in the top right corner. The window has two tabs: "Card Properties" and "Badge". The "Card Properties" tab is active. The form contains the following fields and controls:

- Card Number : 032
- Status : Active (dropdown menu)
- Issue : 0
- Card Holder : Lisa, Lisa
- Uses Left : 0
- PIN #1 : 1456
- Access Level : Master Access Level (dropdown menu)
- PIN #2 : (empty)
- Custom Access Level : Add (button)
- Action Group : None (text field) Edit.. (button)
- Activation Date : 03/08/1999 (text field) Change (button) Clear (button)
- Expiration Date : 06/15/2000 (text field) Change (button) Clear (button)

At the bottom of the window are four buttons: OK, Cancel, Apply, and Help.

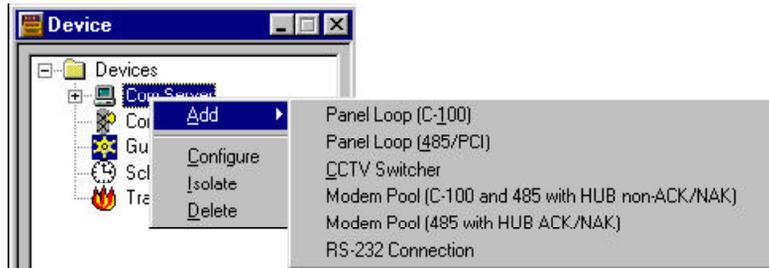
If you click the **Edit** button on the main window, the Detail View becomes active and the selected record can be edited.

If you click the **Add** button on the main window, a blank **Detail View** opens allowing a new database record to be entered.

Right-Click Menus

Right-Click items in the WIN-PAK 2.0 User Interface to display useful items.

For example, right-click the Devices folder in the Device Map. A menu appears with the Add command. Point to **Add** and a menu appears which allows you to add servers to the Device Map, as shown in this example.

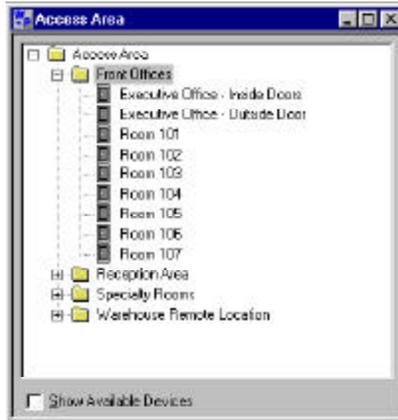


Right-click a communication server, and another menu appears, allowing you to add other devices or modify or remove the communication server.

WIN-PAK 2.0 makes extensive use of right-click menus. In the Floor Plan and Control Map views, right-click an ADV to open the control menu for that device.

Database Tree

Several WIN-PAK 2.0 databases use *trees* to display information. The trees allow information to be organized into logical or geographical groups. Except for the Device Map, the tree defines the hierarchy of resources, not the resources themselves. For example, Access Areas are defined by a lists of entrances. The Access Area tree (below) provides a way to view the data.



The tree can be collapsed so that only the top level information is displayed. By clicking the plus signs (+), the tree structure can be expanded, a level at a time, to show all branches and sub-branches. On some trees, whole branches can be copied or moved.

Chapter IV

Programming

Overview

Configuration

Device Map

Floor Plans

Cards and Card Holders

Badging

Schedule, Tracking, Guard Tour

Initialize Panels

Part 1

Overview

Programming an Access Control System

Programming Order

Passwords



Programming an Access Control System

Planning is necessary for any access control system, even one that is rather simple. Use the following outline to guide you in planning and gathering the necessary information before you begin programming your system.

The databases in WIN-PAK 2.0 store, organize and retrieve the information for your access control system. They are interrelated and, while programming sequences can vary, there are certain dependencies. Some data cannot be entered until other information is already in place.

The following is a brief description of the information that needs to be entered and the recommended order for entering it. For more detailed information, see the following sections. The order presented here can be adjusted to fit your particular needs.

Password Protect Your Admin Operator

The *Admin Operator* is used to set up the system. Protect the security of your system by giving the Admin Operator a password. Other operators may be defined to meet the needs of monitoring and maintaining the system. Log out and log in again using the new *Admin* password to verify that your new password has been entered properly. Then proceed with your set up.

WARNING: Failure to change the manufacturer's default password greatly compromises the security of your system! It is also recommended to delete/change the Admin Operator name.

Define Time Zones and Holiday Groups

Time Zones - These named time periods are used to determine when actions will happen. Actions can be allowed or restricted during a time zone. Set up a master time zone of 24 hours a day, 8 days per week. (Monday through Friday and holidays). Then designate additional

time zones to meet your facilities needs, for example day shift, second shift, and third shift. Holiday time blocks can be included in any time zone.

Holiday Groups - Holidays are often treated differently than other days. For example only certain employees may have access on these days or doors that are normally unlocked during business hours may be locked. A Holiday Group is a selection of days that are designated as holidays. They must be defined in the Holiday database. Then they can be selected in the time zone definition of the affected control panels.

Fill Out the Device Map

Devices must be defined and then added to the system. This is done through the Device Map. It is not necessary to have all of the devices operational before they are defined. Devices include communication hardware, panels, readers and CCTV equipment.



ADVs (abstract devices) should be created as each device is defined. The ADV can be assigned to an object placed on floor plans to create floor plan views that have both monitoring and control functions. ADVs change color and blink to indicate changes of state in the various devices. Right-click an ADV to display a menu that allows you to control the device (e.g., right-click an ADV door to lock or unlock the door, pulse or timed pulse, or restore to time zone).

Communication Servers (Comm Servers) are branches on the device map. Define your operating system, active communication ports, and any multi-port boards. You need to know the machine name, the operating system (Windows 95/98 or Windows NT 4.0), and the available communication ports. If you are running Windows 95/98, and have installed a multi-port board, you need to know the board type, its IRQ setting and the port addresses.

Communication Loops branch off the communication server. Once you have a Comm Server defined, you can add loops to it. Enter definitions for the type of communications the loop uses (e.g., C-100, or PCI), and the communication settings for your com ports. When a loop has been added, you can add panels.

Panels are added to the loops. The panel definition includes basic information on the type of panel (e.g., N-1000 or N-1000-IV-X), the card format it accepts, time zones, inputs, outputs, groups and readers. Interlocking of input points and output points, as well as shunt times and similar details, are entered in the panel definition. Time zones, and optionally holiday groups, are assigned to panels. Time zones must be set up before you can complete your panel definitions. (Additional time zones can be added after panels have been defined.) Panels can only be added to communication loops; therefore, loops and communication devices must be defined before adding panels.

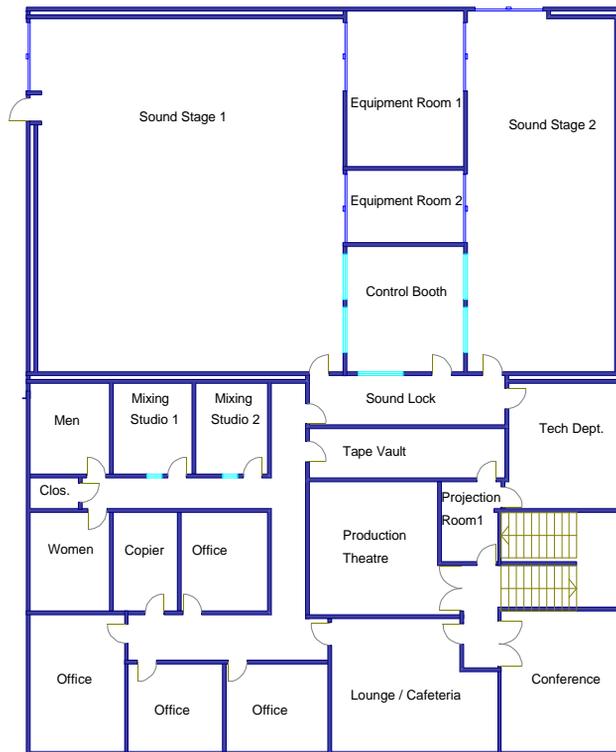
Define the Control Areas and Control Map

The **Control Map** is a map of access control system devices. It is created by defining **Control Areas**. Communication servers, loops, panels, input points, output points, groups and readers are added to Control Areas by placing them on a tree structure. Control Areas are used to partition devices for Operator Level definitions. The Control Map can be used to monitor and control system devices.

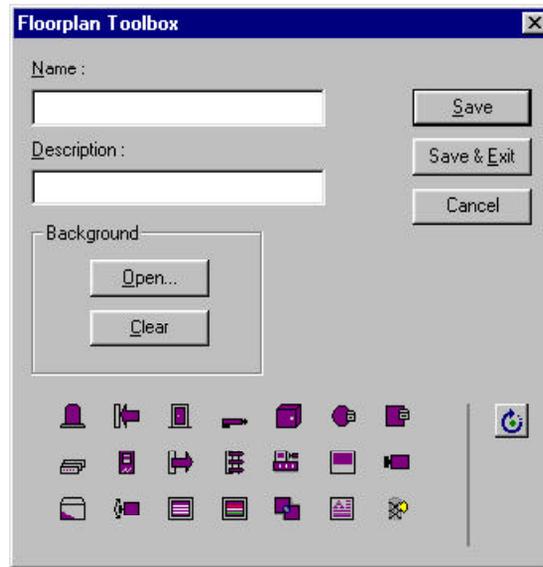
Create Floor Plan Views

Floor Plans are constructed by placing ADVs on a static background after your devices have been defined. Monitoring and control functions are accessed from the floor plan view.

Floor Plan Backgrounds are static graphics, imported as Windows Metafiles (.wmf). The graphic can be a map, a loop wiring diagram or even a simple grid. Links can be added to a other floor plans.

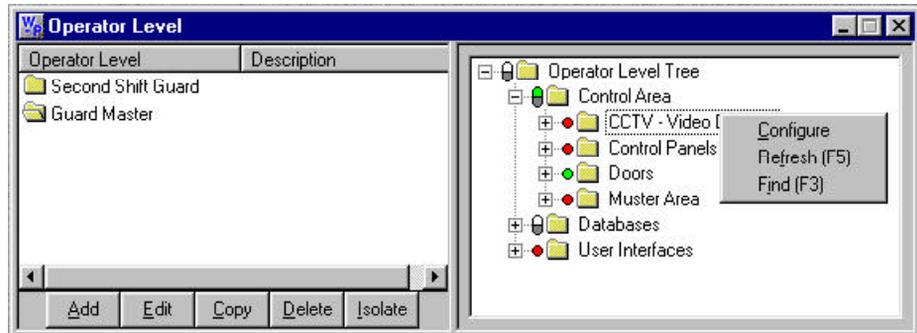


ADVs, which can be selected from a toolbox dialog, are placed on the floor plan background creating both a monitoring and control view. The ADVs signal alarms and other events by changing color, blinking and emitting audible signals. Right-clicking an ADV opens a menu allowing you to control the device from the Floor Plan view.



Create Operator Levels and Operators

Operator Levels define which parts of an access control system that an operator can view or change. In addition to devices, the Operator Level defines access to the databases and user interface.

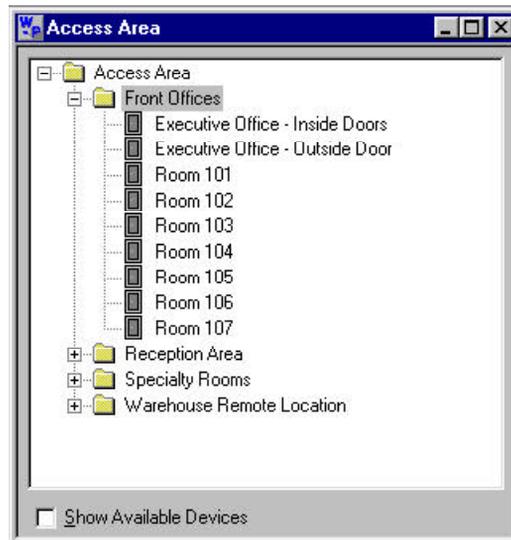


Operators are individuals with certain rights to view and/or alter the system. Operators are restricted by Operator Level and Time Zone. Operator Level defines which system components the Operator has access to, while the Time Zone defines when the operator can log on to the system. Operators are password protected.

Operator passwords should be used at all times and proper password security must be maintained.

Configure Access Areas and Create Access Levels

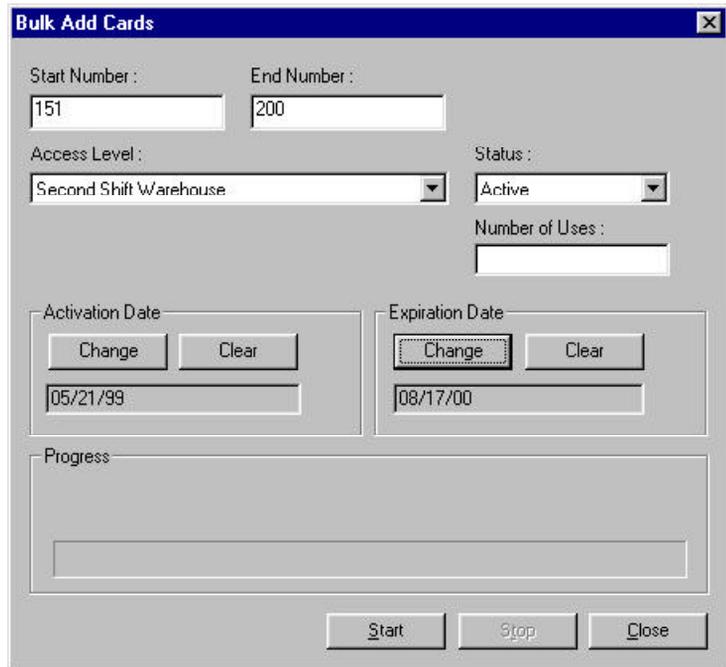
Access Areas are defined by adding entrances (doors and readers from the control panels) to a tree structure. An ADV must be defined before an entrance is available for selection. Access Areas list entrances and indicate where they are located. The Access Areas are then used to define Access Levels.



Access Levels are added to cards as they are entered into the Card database. A card must have an Access Level, which allows the card holder entry to selected areas during assigned times and restricts access to all other areas and/or outside the assigned times. An Access Level is defined by choosing selected entrances in an Access Area and a selected time zone during which access is allowed. For example, to define an Executive Access Level having access to all doors, 24 hours a day, you would select all entrances in the Access Areas, assign access rights and a 24-hour, 7-day time zone. For a Visitor Access Level, you might select the main door between 8:00 a.m. and 5 p.m. Monday through Friday.

Add Cards and Card Holders

Bulk Card Add can be used to get your system up and running quickly. A range of cards can be added at one time. All of the cards have the same access level and activation/expiration dates. (Since a card cannot be issued without an access level, it is necessary to have access levels defined before entering cards into the database.) Cards do not have to be assigned to individuals when they are added. They can be modified later and also issued to individual card holders.



The screenshot shows a dialog box titled "Bulk Add Cards" with the following fields and controls:

- Start Number :
- End Number :
- Access Level :
- Status :
- Number of Uses :
- Activation Date : (with Change and Clear buttons)
- Expiration Date : (with Change and Clear buttons)
- Progress :
- Start, Stop, and Close buttons at the bottom.

In setting up your system, you can enter cards in the basic categories you plan to use. These cards can be used immediately or they can be made available when you want to issue them to individual card holders.

Cards can also be entered into the database one at a time. The required information includes card number, status of the card (active, inactive, lost/stolen, or trace), and access level. Additional options include activation and expiration dates, an action group, a PIN # and custom access level. A badge layout can be assigned to the card and a card holder can be designated at this time or later.

The screenshot shows the 'Card Record' dialog box with the following data:

Field	Value
Card Number	032
Status	Active
Issue	0
Card Holder	Lisa, Lisa
Uses Left	0
PIN #1	1456
Access Level	Master Access Level
PIN #2	
Custom Access Level	Add
Action Group	None
Activation Date	03/08/1999
Expiration Date	06/15/2000

Card Holders are defined separately from the cards. One card holder can have more than one card. The Card Holder database has note fields organized into tabs for entry of card holder information. These note fields and tabs are user-defined and should be set up before entering information into the Card Holder database. However, they can be edited even after Card Holders have been added to the system.

Photos and signatures are also stored in the Card Holder database and are linked to the Card Holder files. These files can be searched and sorted.

Card Holders can be issued an existing card when they are first added. A new card can be added from the Card Holder database, or a Card can be attached to a Card Holder from the Card database.

When a Card Holder is assigned a card, he or she has the Access Level assigned to that card definition.

Capture Images and Create Badges

WIN-PAK 2.0 has an integrated badging utility which allows you to design and print badges from within the program. Video images and signatures can be imported or, with the necessary hardware, captured and saved for printing badges or for video images in the AutoCard Lookup when used at selected readers.

Badge Layouts are associated with card definitions, while photos and signatures are associated with Card Holders. When a Card Holder is issued a card with a badge layout, his or her individual information, including photo and signature if desired, is merged with the badge template. Badges can be printed on a variety of cards including magnetic stripe and proximity cards. The Badge Layout utility can also be applied in Human Resources applications providing photos and other Card Holder information.

Programming Order

Programming order will vary depending on the type and complexity of the system. All systems require planning before programming can begin. Review the Programming section of this manual carefully, and assemble all of the necessary information on your system before you begin.

To begin set up you must have information about the basic hardware and especially the communications servers, adapters, and modems. The following is a programming order for a simple access control system that has no remote sites.

Password Protect your Installation

Configure Optional Settings

Note Field Template

Card Holder Tab Layout

System Defaults

Workstation Defaults

AutoCard Look Up

Badge DLL's

Badge Printer

Design Badge Layout

Create Time Zones and Holiday Groups

Device Tree - Add Devices and Create ADVs

Comm Server and ADV

Comm Loop and ADV

Panel and ADV

**Input Points, Output Points, Groups, Readers,
and Doors (all with ADVs)**

Command Files

Control Areas

Floor Plan Definitions with ADVs

Operator Levels

Operators

Access Areas

Access Levels

Tracking Areas

Scheduler

Guard Tour

Bulk Add Cards

Cards

Card Holders

Passwords

Operator access is password protected. Once WIN-PAK 2.0 is installed, a password should be defined and used. This is critical to the security of your entire system.

CAUTION! Failure to change the manufacturer's default password greatly compromises the security of your system! Always replace the default password with your own secure password.

Passwords can be up to 20 characters. They are case sensitive. For the greatest security, use a combination of both letters and numbers in your password; do not use any familiar terms such as your company name, your name, initials, or birth date.

A simple strategy for choosing a password that is both easy to remember, but hard to decode is to pick a simple phrase preceded or followed by one or more numbers. Enter it without spaces and capitalize each word. Such a password cannot be easily decoded either by a random number generator or by dictionary decoder. Yet the person who knows the phrase can remember it without writing it down.

Part 2

Configuration

Note Field Template

Card Holder Tab Layout

Translate Text

Badge DLLs

System Defaults

Workstation Defaults



Note Field Template

The information in the **Card Holder** database is entered in a series of up to 40 note fields which can be organized on any number of tabs. Both the note fields and tabs are configured by the user. The **Note Field Template** allows you to label and define the note fields, while the **Card Holder Tab Layout** provides the tools for creating and configuring tabs.

A note field definition has two parts, the Name which is the label that appears next to the note field on the card holder tab, and a Template, which defines the type and number characters that can be entered into the note field. If the Template field is left blank, the note field acts as a regular text box. Entering special characters into the Template creates a mask which prompts the user to enter a certain type of data and/or a certain number of characters in the note field.

For example, a template for the *Zip Code* field can have five numeric place holders (#); the *Business Phone* field can be configured with a combination of numeric place holder spaces and alphabetic characters to accept the area code, phone number, and a four digit extension.

See **Mask Properties** for a complete list of mask characters and their values.

The software monitoring data entry can tell the difference between alphabetic and numeric characters, but it cannot verify the accuracy of the information.

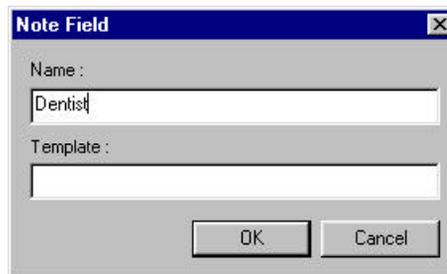
To Add Card Holder Note Fields

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Note Field Template**. The Note Field Template window appears.



The note fields are listed by name, template and tab (If one has been defined).

- 2 Click **Add**. The Note Field window appears.



- 3 In the **Name** box, enter a unique name for the note field.

- 4 In the **Template** field, enter a description of the note field.

The Template creates a mask for the note field, defining the type, number and syntax of the characters entered. (See Mask Properties for more information.) If the Template field is left blank, the note field acts as a regular text box, accepting up to 60 alphanumeric characters.

- 5 When finished, click **OK**.

To Edit a Card Holder Note Field

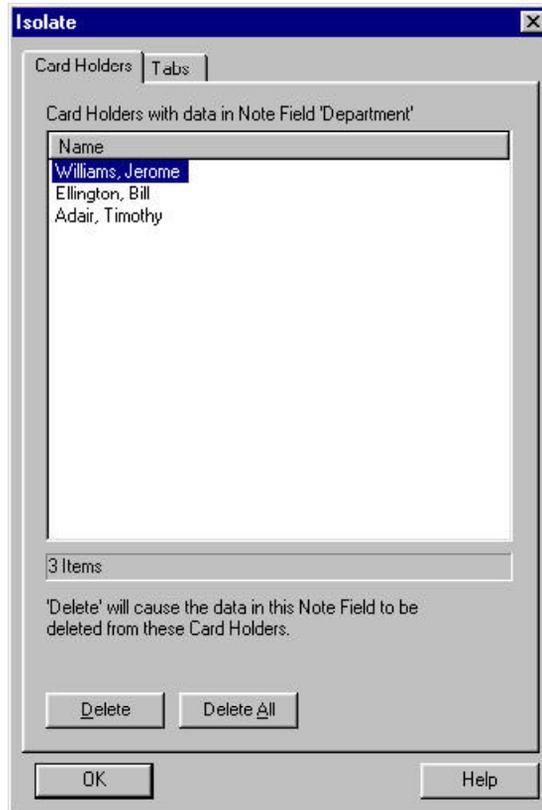
- 1 In the **Configuration** menu, point to **Card Holder**, then click **Note Field Template**. The Note Field Template window appears.
Select the note field you want to edit and click **Edit**. The Note Field window appears.
- 2 Edit the name and/or template.
- 3 When finished, click **OK** to save your changes.

To Isolate a Card Holder Note Field

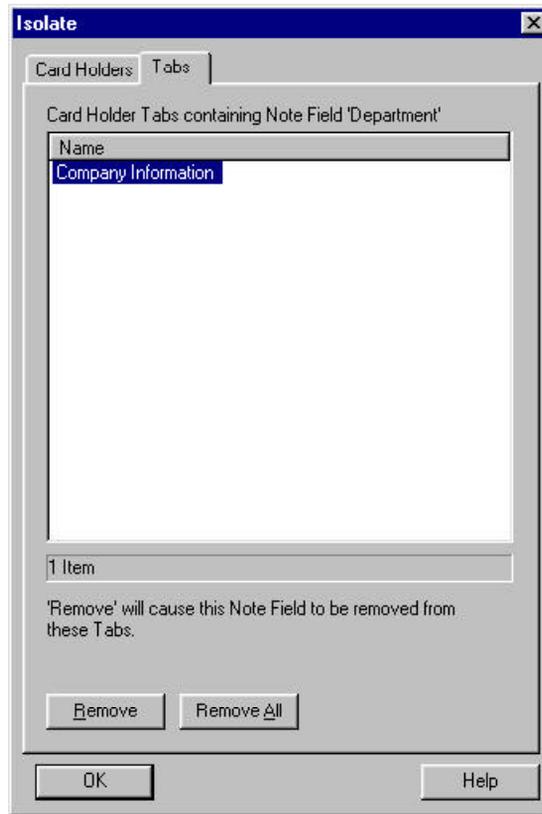
When you delete a note field that is in use, the data that is entered in that field is also deleted. The Isolate function displays a list of card holders who have data entered in the note field. It also displays the tabs where the note field appears. You can modify the usage of a note field and delete from the Isolate window.

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Note Field Template**. The Note Field Template window appears.

- 2 Select the note field you want to isolate. Click **Isolate**. The Isolate window, Card Holder tab appears.



- 3 If you wish to delete the data in this field, select a card holder and click **Delete**. Or select **Delete All** to remove the data from all card holders.
- 4 Once the data has been removed from the note field, it can be deleted from the card holder tabs. Click the **Tabs** tab. The tabs that use the note field are displayed.



- 5 Select the tab(s) from which you want the note field removed, and then click **Remove**. Or click **Remove All** to take the note field off of all card holder tabs.
- 6 When you are finished, click **OK**.

To Delete a Card Holder Note Field

A note field cannot be deleted from the system without removing it from the places where it is used. You can use the Isolate function before attempting to delete a note field. Or you can use the delete function. If the selected note field is in use, the Isolate window appears.

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Note Field Template**. The Note Field Template window appears.

- 2 Select the note field you want to delete. Click **Delete**.
- 3 If the note field is used in any card holder tabs, the Isolate window appears. Remove the note field from all card holders, and then remove the note field from all tabs.
- 4 Click **OK**. The note field is removed from the system.

Mask Properties

Mask properties determine the input mask for the **Note Fields Template**.

You can define input masks for the Note Fields. The following are examples of standard input masks that you may want to use.

Mask Descriptions

- **Null String (Default)** No mask. Acts like a standard text box.
- **##-???-##** Medium date (US). Example: 20-May-92
- **##-##-##** Short date (US). Example: 05-20-92
- **##:## ??** Medium time. Example: 05:36 AM
- **##:##** Short time. Example: 17:23

Mask Character Description

Digit placeholder

- **Decimal placeholder:** The actual character used is the one specified as the decimal placeholder in your international settings. This character is treated as a literal for masking purposes.
- **Thousands separator:** The actual character used is the one specified as the thousands separator in

- your international settings. This character is treated as a literal for masking purposes.
- : **Time separator:** The actual character used is the one specified as the time separator in your international settings. This character is treated as a literal for masking purposes.
 - / **Date separator:** The actual character used is the one specified as the date separator in your international settings. This character is treated as a literal for masking purposes.
 - \ **Literal character qualifier:** Treat the next character in the mask string as a literal. This allows you to include the #, &, A, and ? characters in the mask. This character is treated as a literal for masking purposes.
 - & **Character placeholder:** Valid values for this placeholder are ANSI characters in the following ranges: 32-126 and 128-255.
 - ~ **Drop-down list:** Gives multiple choices from a drop-down list. For example: ~brown ~blue ~green ~hazel.
 - C **Character or space placeholder:** (Entry optional.) This operates exactly like the & placeholder, and ensures compatibility with Microsoft Access.
 - ? **Letter placeholder:** For example: a – z or A – Z.
Literal: All other symbols are displayed as literals; that is, as themselves.

If no mask characters are entered in the Template field (i.e., the mask is an empty string) the note field behaves like a standard text box. When an input mask is defined, underscores appear beneath every placeholder in the note field. You can only replace a placeholder with a character of the type specified in the input mask. If you enter an invalid character, the masked edit control rejects the character and generates an error message. The user cannot proceed to the next field until the error is corrected.

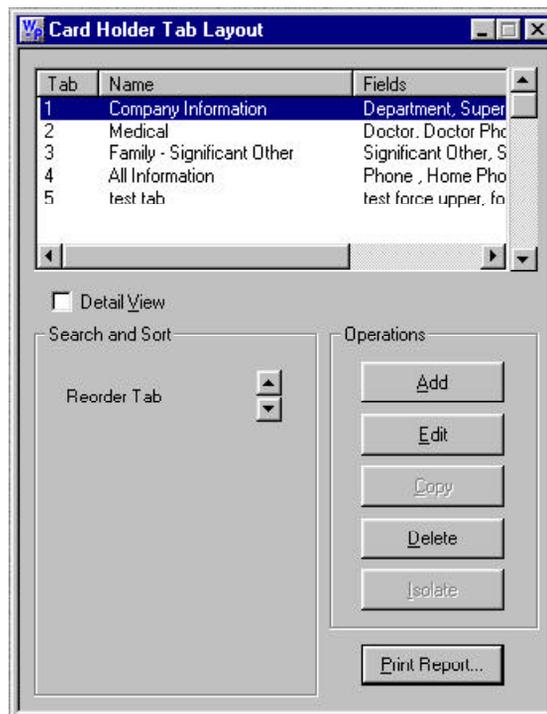
The control can distinguish between numeric and alphabetic characters for validation, but cannot check for valid content, such as the correct month or time of day.

Card Holder Tab Layout

The **Card Holder Tab Layout** allows you to use different tabs to organize the card holder note fields for the card holder database display. These tabs appear when a card holder record is opened. (There are three permanent tabs: **Name**, **Card Data**, and **Card Biometrics**.)

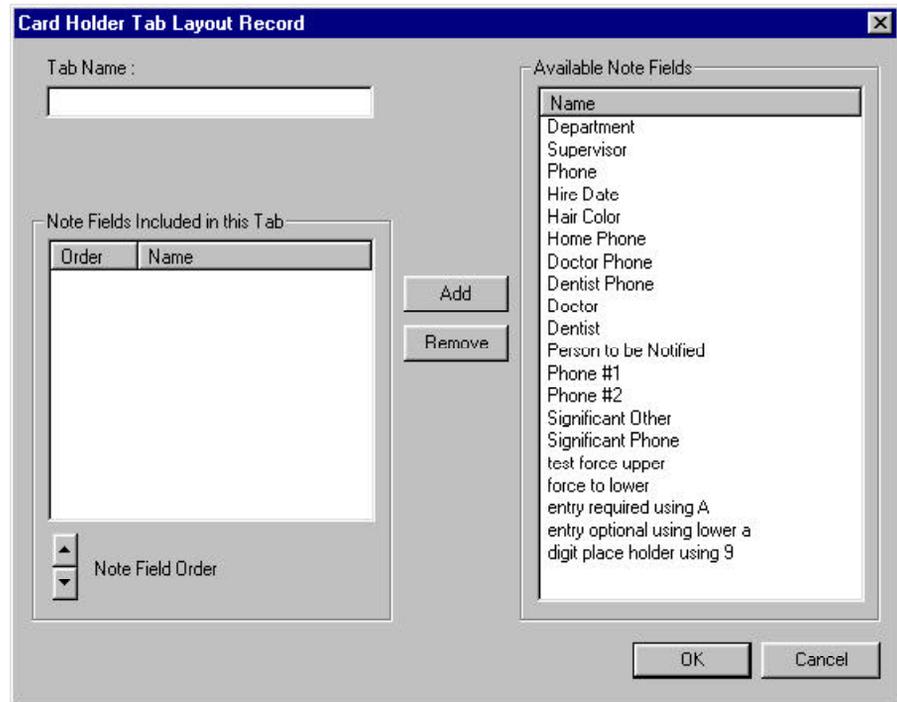
To Define a Card Holder Tab

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Card Holder Tab Layout** to open the Card Holder Tab Layout window.



The tabs are listed by number indicating the order in which they appear, followed by the tab name and then the note fields that appear on the tab.

- 2 Click **Add** to open the Card Holder Tab Layout Record window.



- 3 In the **Tab Name** box, enter a unique name for the tab.
- 4 From the **Available Note Fields** list, select the note fields for this tab. Multiple note fields can be selected by using the **CTRL** or **SHIFT** key.
- 5 Click **Add**. The selected items are added to the **Note Fields Included in this Tab** list.
- 6 Use the **Note Field Order** arrows to arrange the Note Fields in the desired order.
- 7 To remove a field from the tab, select it in the **Note Fields Included in this Tab** list and click **Remove**.
- 8 Click **OK** to save your changes and return to the main database window.

To Edit a Card Holder Tab

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Card Holder Tab Layout** to open the Card Holder Tab Layout window.
- 2 Select the tab to be edited, then click **Edit** to open the Card Holder Tab Layout Record window.
- 3 Make the desired changes. To edit the name, click the **Tab Name** field and type in the new information. To remove a note field from the tab, select it from the left hand list and click **Remove**. To add a note field, select it from the right hand list, then click **Add**. Use the **Note Field Order** arrows to rearrange the order of the note fields on the tab.
- 4 Click **OK** to save your changes and return to the main Card Holder Tab Layout window.

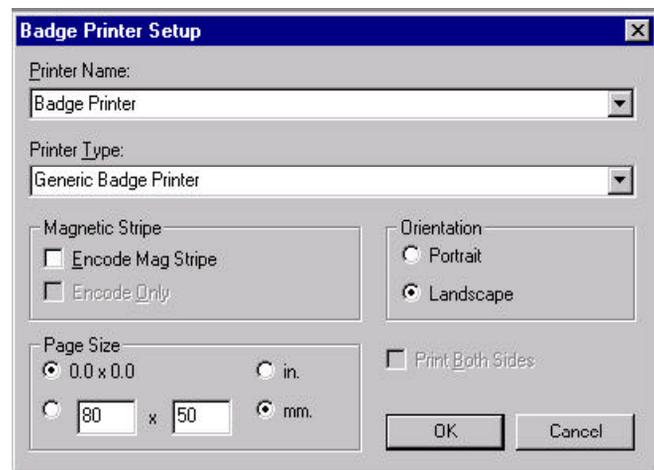
Configure Badge Printer

WIN-PAK 2.0 can print badges to a variety of printers. Any badge printer that is supported by the Windows operating system can be used for most badge printing. However, for two-sided PVC printing or magnetic stripe encoding, the Datacard IC III or a printer from the the Ultra Magicard Turbo series is required. (Additional badge printers will be supported in the future.) In addition, Windows-compatible laser printers can be used to print badges to plain paper.

Install your printer or printers using the Windows Control Panel. (Consult your Microsoft documentation for more information.)

To Configure a Badge Printer

- 1 In the **Configuration** menu, point to **Badge**, and then click **Configure Badge Printer** to open the Badge Printer Setup window.



- 2 In the **Printer** list, select the printer you want to use for badge printing. (All of the printers that are installed in your Windows system will appear in the list.)
- 3 If you will be encoding magnetic stripe informa-

tion, select **Encode Mag Stripe**. If you will only be encoding the magnetic stripe information, and not printing, select **Encode Only**.

- 4 Select the correct orientation for your badges. (The default badge has a landscape orientation.)
- 5 Some printer drivers will automatically set the correct page size, others do not. If the correct page size does not appear, select the manual **Page Size** option and enter the correct page size in either inches or millimeters. (The default badge size is 80 mm x 50 mm.)
- 6 When finished, click **OK** to save the settings and close the **Badge Printer Setup** window.

Translate Text

WIN-PAK 2.0 allows the translation of the User Interface into languages other than English. To translate the User Interface into another language, you must create or import a file containing the new language.

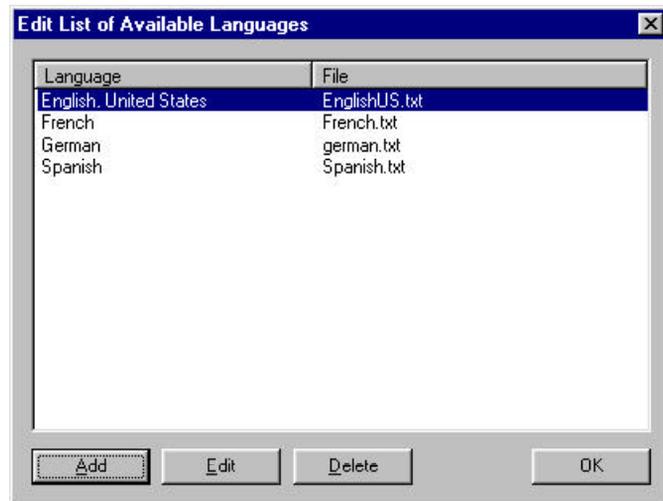
To use the WIN-PAK 2.0 translation utility requires three steps:

- 1 Create a language text file and add the new language to the list of available languages.
- 2 Select the language you are going to translate using the Select Language command.
- 3 Translate the menus, dialogs, and other text.

Once this process is completed, you can switch languages by using the Select Language command. You can also add a language selection to an Operator definition, so that when a particular operator logs in, the User Interface switches to the correct language for that operator.

To Create a Text File for Translation

- 1 On the **Configuration** menu, point to **Translate** and then click **Available Languages**. The Edit List of Available Languages dialog box appears.



- 2 Click **Add**. The Configure Language dialog box appears.

Configure Language

Language Name :

File :

Language uses gender specific articles and pronouns

Singular				Plural			
	Masc.	Fem.	Neut.		Masc.	Fem.	Neut.
A or An	<input type="text"/>	<input type="text"/>	<input type="text"/>	The	<input type="text"/>	<input type="text"/>	<input type="text"/>
The	<input type="text"/>	<input type="text"/>	<input type="text"/>	These	<input type="text"/>	<input type="text"/>	<input type="text"/>
This	<input type="text"/>	<input type="text"/>	<input type="text"/>	Those	<input type="text"/>	<input type="text"/>	<input type="text"/>
That	<input type="text"/>	<input type="text"/>	<input type="text"/>	Their	<input type="text"/>	<input type="text"/>	<input type="text"/>
Its	<input type="text"/>	<input type="text"/>	<input type="text"/>				

- 3 In the **Language Name** field, type the name you want to use to describe the language translation, such as Spanish, South American. In the **File** field, type a name for the new translation text file, for example *SpanishSA.txt* (this file name must have the .txt extension).
 - 4 If it applies, select the check box **Language uses gender specific articles and pronouns**, and then enter the articles and pronouns in the appropriate fields. (Special characters can be copied from the Windows Character Map and inserted into the text where required.)
 - 5 Click **OK** to return to the Edit List of Available Languages dialog box. The new language text file name is now listed.
 - 6 Click **OK**.
- Now select the language to be translated.

To Select a Language for Translation

- 1 In the **Configuration** menu, click **Select Language**. The Select Language dialog box appears.

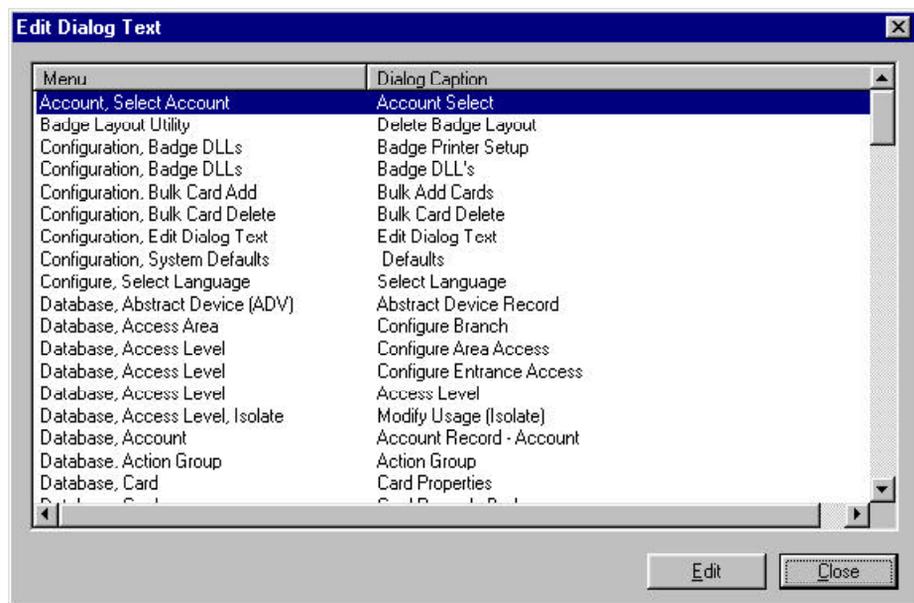


- 2 Click the pull-down arrow in the Language box, and then select the desired language.
- 3 Click **OK**.

Now you can begin translation of the software dialogs, menus and other text.

To Translate Dialogs, Menus and Other Text

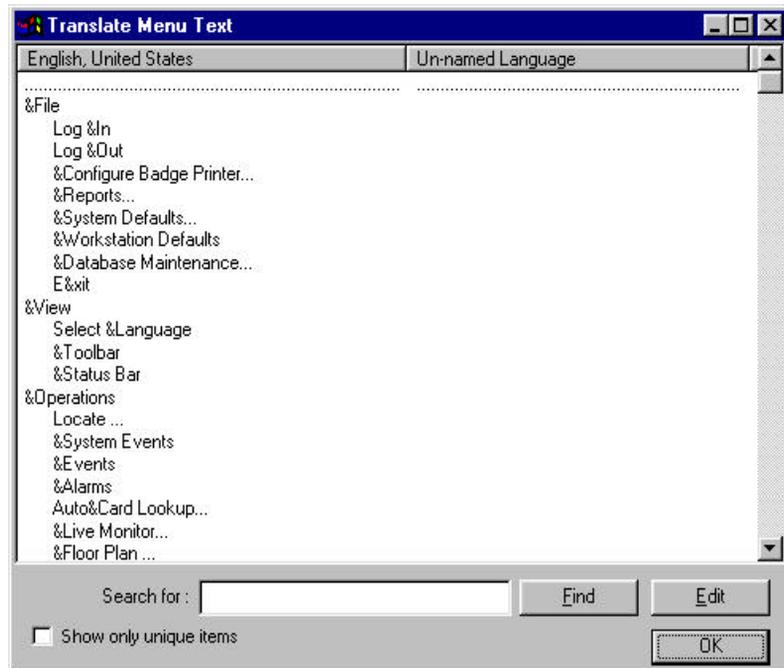
- 1 In the **Configuration** menu, point to **Translate**, then click **Dialogs**. The Edit Dialog Text window appears.



- 2 From the list, select a dialog. An editable version of the dialog opens.
- 3 Double-click the text you want to change, and then type in the new text. Hit **ENTER** to close and save the edited text.
- 4 When you have finished this particular dialog, click the close button (X). Then select the next dialog to translate.
- 5 Continue this procedure until all the desired dialogs have been translated.

Menu Text

- 1 In the **Configuration** menu, point to **Translate**, then click **Menus**. The Translate Menu Text window appears.



- 2 Click an English menu item, and then type in the translation text to replace it. In the lower left corner is a check box, which globally applies the translated phrase throughout the program.

Other Text

- 1 In the **Configuration** menu, point to **Translate**, then click **Other Text**. The Translate Other Text window appears.
- 2 These are screen messages in WIN-PAK 2.0. Proceed to translate them as with Menu items.

To test a translation, go to the **Configuration** menu, click **Select Language** and choose the desired language from the list. Click **OK**. The terms that you have entered should appear in the User Interface dialog boxes, menus and other messages.

If you have a translation file for a given language, copy the file to the WIN-PAK 2.0 Language Files folder. (The default path is C:\Program Files\WinPak2\Language Files. You can verify or change this path by going to **Configuration Menu**, click **Workstation Defaults**, then select the **Directories** tab and check the Path to Language Files.)

In addition to translating text from English into another language, you may want to customize selected dialog boxes. You can use the **Edit Dialog Text** utility for this purpose as well.

To Restore Dialog Text Defaults

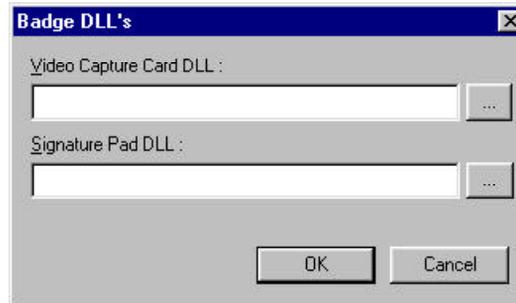
- 1 In the **Configuration** menu, click **Edit Dialog Text** to open the **Edit Dialog Text** window. All of the dialog boxes in WIN-PAK 2.0 are listed.
- 2 Either double click the dialog box you want to restore or select it from the list and click **Edit**. The dialog box appears.
- 3 Right-click the dialog box, and select **Restore All Defaults**. All of the original labels will be restored for the selected dialog box. If you have edited text on more than one dialog box, you must open each one you want restored and follow the procedure above.

Badge DLL's

A specific dynamic-link library (.dll) file is required for the video capture card, TWAIN device and signature pad. The DLLs for currently supported hardware are included in the WIN-PAK 2.0 directory and can be installed from within WIN-PAK 2.0.

To Install Badge DLLs

- 1 On the **Configuration** menu point to **Badge**, and then click **Badge DLL's**. The Badge DLL's window appears.

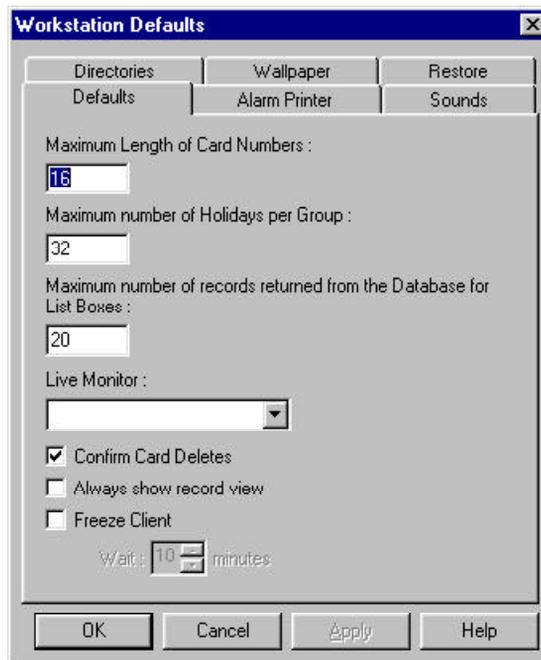


- 2 Click the button  next to the hardware device you have installed. A window opens to the WIN-PAK 2.0 directory.
- 3 Select the appropriate DLL file and click **Open**. The DLL name is entered in the box below the hardware device in the **Badge DLL** window.
- 4 Click **OK** to save your selections and close the **Badge DLL** window.

Workstation Defaults

Selecting the **Workstation Defaults** command from the **System** menu allows you to change workstation settings, including settings for the alarm printer. The available options are listed below.

Defaults Tab

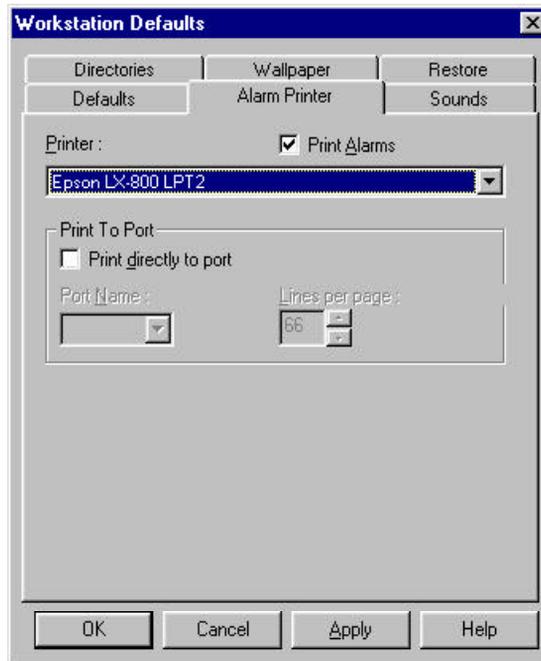


- **Maximum Card Number Length:** The default is 16. This setting determines the largest card number handled by the software. (It does not affect the control panel.)
- **Maximum Holidays Per Group:** The default is 32. This setting depends on the hardware being used. (32 is the maximum holidays per group that can be accepted by the N-1000 control panels.)
- **Maximum List Box Records from Database:** The default is 20. This is the number of records retrieved from a database at one time. This setting adjusts performance: If a small number of records are retrieved at one time, the wait time is quite

short. However, as you scroll through the list of records, you may have to wait again as the next group of records is retrieved. A small number of records means the result is returned quicker but the records must be retrieved more often for longer displays. Twenty (20) was selected as a general optimum value but that can change depending on the types of typical database searches and the speed of the computer being used.

- **Live Monitor:** From the list of defined CCTV monitors, select the monitor output to be connected to the video capture card, allowing the video signal to be displayed when live monitor view is selected.
- **Confirm Card Deletes:** If selected, you will be prompted to confirm a card delete before it is removed from the database.
- **Always Show Record View:** When a database window opens, the record view or detail view will open at the same time.
- **Freeze Client Wait ___ Minutes:** Freezes access to the Client Workstation after a set period of operator inactivity (from 1 to 60 minutes). An operator will have to log back in to use the program.

Alarm Printer Tab



- **Print Alarms:** To print alarms, select this option and designate an alarm printer. Any printer installed in Windows can be selected. Alarms will print one page at a time.
- **Printer:** Select the alarm printer from the list of printers installed in Windows.

Print to Port

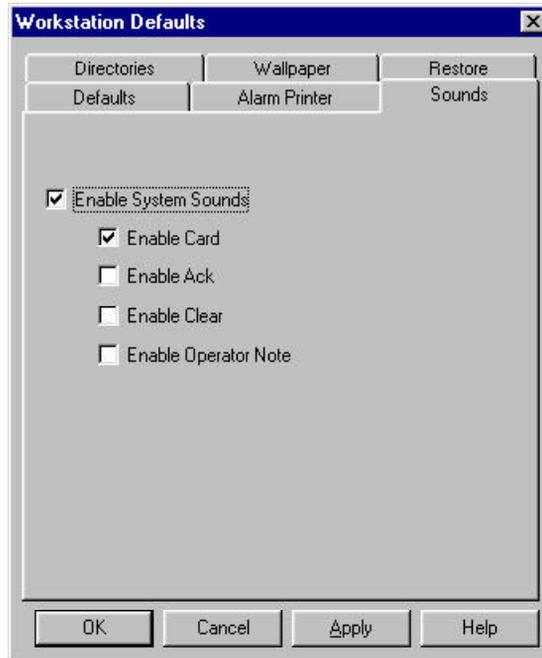
Print directly to port: Print events in real time, one event at a time. You must use a dot matrix type printer to view the printed event immediately. If you choose to use a laser printer, the alarms will print one page at a time (a page being defined by the number of lines in the **Lines Per Page** box).

If you are printing to a port, do not use the same printer for alarms and reports. Otherwise, since alarm messages bypass the spooling queues, alarm messages may appear in the middle of a report.

Port Name: Select the port to which your printer is connected.

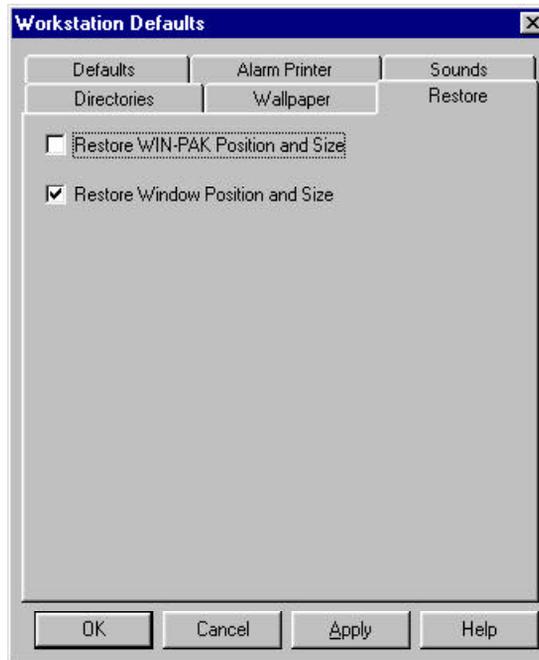
Lines per page: Indicate the number of lines per page, 66 is the default.

Sounds Tab



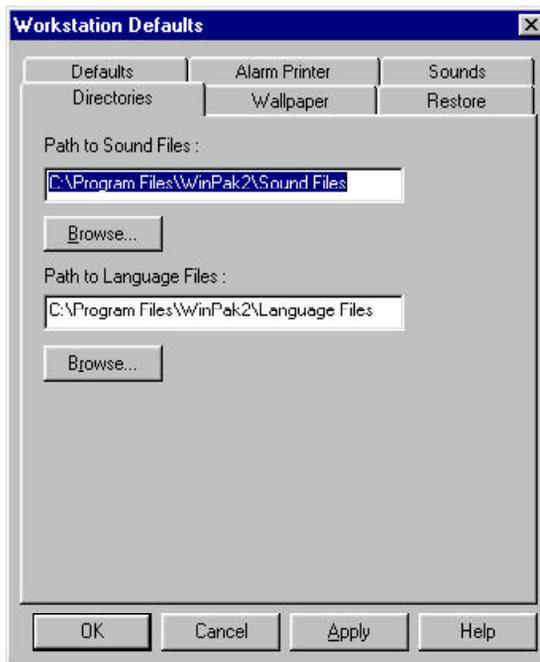
- **Enable System Sounds:** Use sound files triggered by system events. Select each of the options where you want sound files to be activated.
Enable Card, Enable Ack, Enable Clear, Enable Operator Note.

Restore Tab



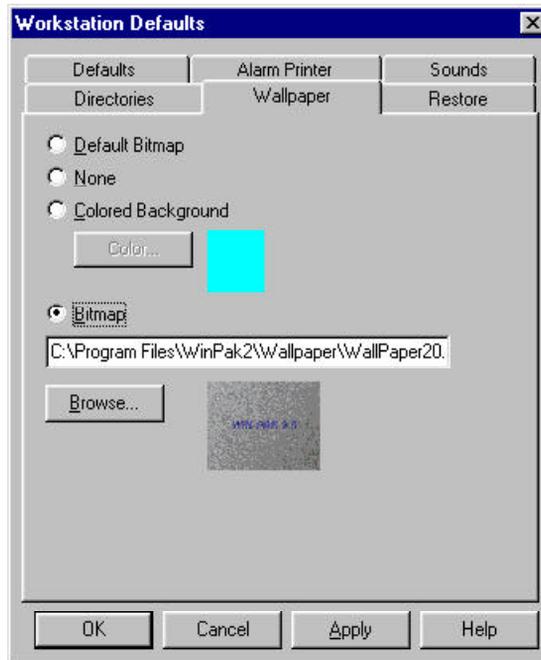
- **Restore WIN-PAK Position and Size:** Save settings for the size and position of the WIN-PAK 2.0 main window.
- **Restore Window Position and Size:** Save each operator's settings for the secondary windows (for example, main database windows, floor plan views, and control maps.) At log-in, secondary windows return to the size and position set when a given operator logged-out.

Directories Tab



- **Path to Sound Files:** The current path for sound files is displayed. Additional sound files can be copied into this folder. To select a new location for the sound files, type in the new path or click the **Browse** button and locate the desired directory. When the correct path is entered, click **Apply** to save the new directory setting.
- **Path to Language Files:** The current path for language files is displayed. Additional language files can be copied into this folder. To select a new location for the language files, type in the new path or click the **Browse** button and locate the desired directory. When the correct path is entered, click **Apply** to save the new directory setting.

Wallpaper Tab

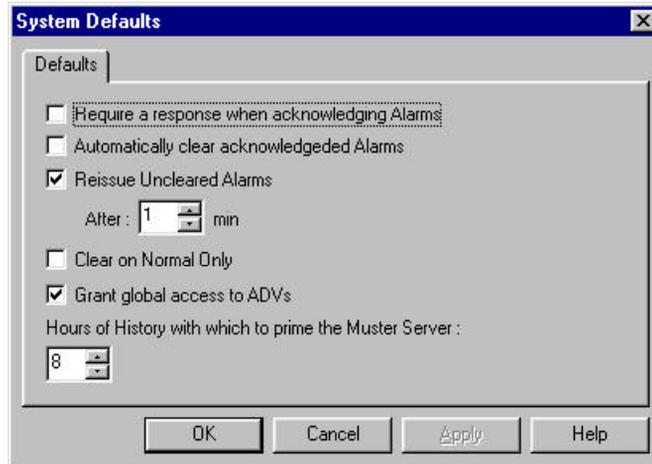


Customize the wallpaper in the main WIN-PAK 2.0 window. Select any of the following options:

- **Default Bitmap:** Keep the default bitmap as the wallpaper.
- **None:** Applies a gray background.
- **Colored Background:** Select a **Colored Background**, click the **Color** button and choose from a selection of standard colors, or create a custom color of your choice. Click **OK** to return to the Wallpaper tab.
- **Bitmap:** Use a bitmap of your choice. Type in the path and file name of the bitmap or click the **Browse** button and then select the desired bitmap. Click **Open** to return to the Wallpaper tab.
- Click **Apply** to see the new wallpaper.

System Defaults

Selecting the **System Defaults** command from the **System** menu allows you to change the system settings:



- **Require a response when acknowledging Alarms:** Requires the operator to add a note before acknowledging an alarm.
- **Automatically clear acknowledged Alarms:** Automatically clears alarms when they are acknowledged.
- **Reissue Uncleared Alarms:** Reissues alarms that are not cleared within the designated amount of time. Select the amount of time from 1 to 60 minutes.
- **Clear on Normal Only:** Alarms can only be cleared when the source of the alarm has returned to a normal state.
- **Global ADV Access:** All ADVs that are not added to Control Areas are available to all operators. Normally, only ADVs that are added to Control Areas and configured for an operator's operator level are available. This could cause a problem if an operator created an ADV. An administrator would be required to add the ADV to the Control Areas, and provide access to the new ADV in the operator level. If this option is

selected, an operator could create an ADV and then use it in the system. Once an ADV has been added to the Control Areas, those settings override the global access.

- **Hours of History with which to Prime the Muster Server:** This option allows you to select how many hours of tracking history is displayed when the Muster View is opened; select from 0 to 99 hours. The default setting is 8 hours. (This option is only available if a Muster Server is defined.)

Configure AutoCard Lookup

The **AutoCard Lookup** feature responds to a card read by providing an on-screen view identifying the Card Holder. If there is a photo in the database, it is also displayed. By selecting the **Notes Field** option, you can include additional information in this view. Use the **Configure AutoCard Lookup** utility to select which note fields are displayed.

To Configure AutoCard Lookup

- 1 In the **Configuration** menu, point to **Card Holder**, then click **Configure AutoCard Lookup**. The AutoCard Lookup Configuration window appears.



- 2 From the **Show Note Fields** list, select the note fields you want included in the AutoCard Lookup report. The note field names are selected by clicking the note field name and deselected by clicking that name again.
- 3 When you have finished, click **OK** to save your changes or click **Cancel** to close the window without making any changes.

Time Zones Overview

A Time Zone is a range of hours and days which is given a name. These named time periods are used to define when actions are allowed in the access control system. When a panel is configured, you choose which time zones are available at the panel.

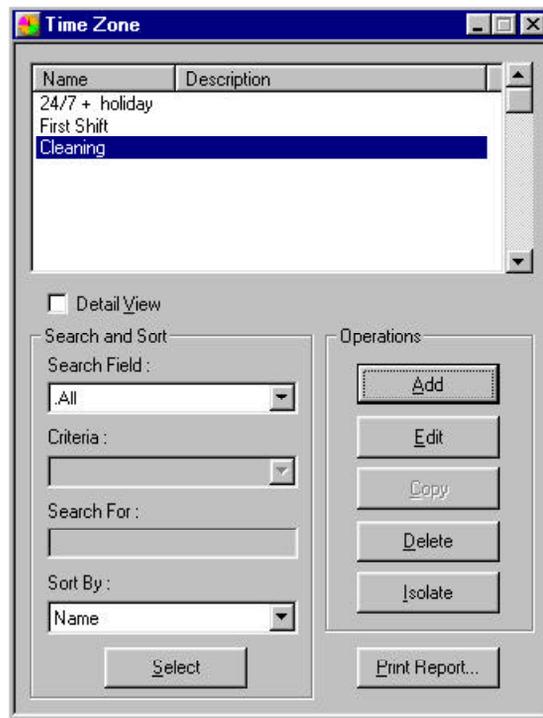
Time Zones are made up of blocks of time: a start time, end time and days on which it is valid. Since a given Time Zone may contain more than one block of time, the number of blocks is indicated when the Time Zone is created. There is no limit on the number that can be created, but a maximum of 63 blocks of time can be downloaded to an N-1000 series panel. WIN-PAK 2.0 keeps track of the number of blocks applied to a given panel and signals if you exceed the limit.

Time Zones are combined with definitions of physical devices to create access levels. An access level then determines when and where access is allowed.

A list of defined Time Zones can be viewed in the Time Zone Database. You can search the list of Time Zones and view details. Or you can add, edit or delete the Time Zones in the database.

Time Zone Database

Open the Time Zone Database from the **Configuration** menu. Point to **Time Management**, then click **Time Zone**. The main Time Zone Database window appears. The existing Time Zones are displayed in the database list. This list can be searched and sorted by name and description. Time Zones can be added, edited or deleted. To close the **Time Zone Database** click the close button in the upper right corner.



Time Zones are used in many places in the access control system. Deleting a Time Zone without first cleaning up all the places where it is used leaves the system with undefined states of operation. Fortunately WIN-PAK 2.0 provides a tool to make this clean-up easy. Clicking the **Isolate** button (with the appropriate Time Zone selected in the **Time Zone** window) results in a dialog box that displays where the selected Time Zone is used.

This dialog box also allows the operator to make adjustments in other databases to remove the need for this Time Zone. The **Isolate** dialog box allows changes to Operators, Panels, Access Levels, Cards, Action Groups and ADVs.

After the Time Zone has been isolated it may be deleted by selecting the Time Zone and clicking **Delete**.

Search and Sort

Search and Sort fields allow the user to choose search characteristics.

- **Search Field:** Enter the name of the field you want to search (Name or Description).
- **Criteria:** Choose one of the operators from this list: *begins with*, *greater than*, or *less than*.
- **Search For:** Type in the name you are searching for or the beginning words or letters. The more complete your entry, the faster the search.
- **Sort By:** This selection designates the order in which the search results will be displayed, (e.g. alphabetically by name).
- **Select:** This button initiates a search based on the information entered in the **Search and Sort** fields
- **Detail View:** Select this box to display the detail view of the selected Time Zone.

Operations

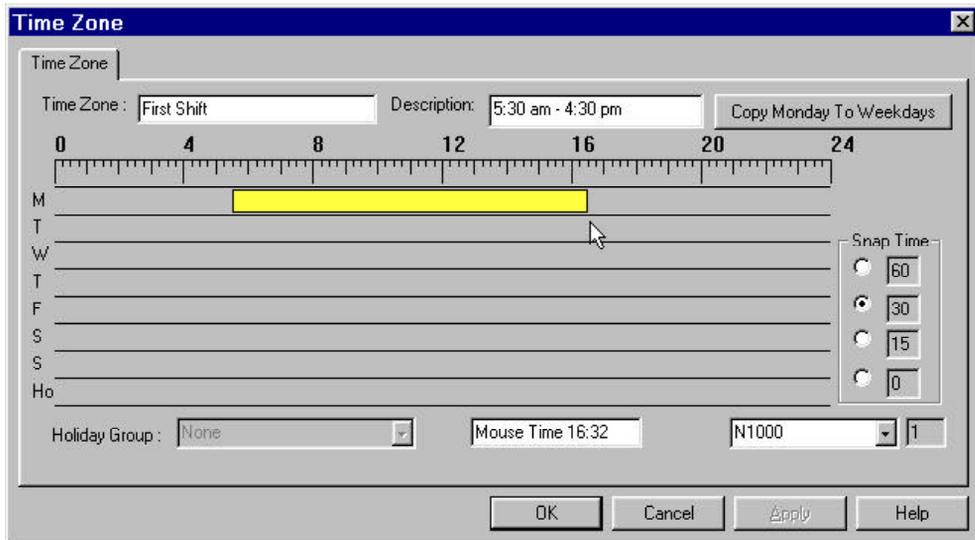
- **Add:** Opens a blank **Detail View** window for entry of a new record.
- **Edit:** Activates the **Detail View** window to the selected record, allowing the record to be changed.
- **Delete:** Removes the selected record from the database.
- **Isolate:** Displays where in the system this Time Zone is used and allows the operator to clean-up the other databases before deleting this Time Zone.
- **Print Report:** Opens the report filter dialog box.

A Time Zone Report can be generated, viewed and printed.

Add, Edit or Delete a Time Zone

To Add a Time Zone

- 1 From the Time Zone Database window click **Add**. The detail window will become active, allowing you to define a new Time Zone.



- 2 Enter a name and brief description of the Time Zone. Then use your mouse to drag the time line to the desired hours.
- 3 The **Snap Time** option allows you to set the time to snap to increments of 60, 30, 15, or 0 minutes. Selecting 0 minutes allows the time to be set to the minute.
- 4 Once you have entered a range of time for Monday, you can copy it to the other weekdays by clicking **Copy Monday to Weekdays**. Or you can create the time line for each day separately.

- 5 Create a time range for Saturday, Sunday and Holiday (if desired). Whenever a holiday time range is defined, a holiday group must be referenced. This specifies which holidays use this start and end time.
- 6 Finally, choose the panel type. N-1000 is the default.
- 7 Click **OK** to save your Time Zone. Clicking **Cancel** returns to the main database window without saving your entries.

To Edit a Time Zone

- 1 In the **Time Zone** database window, highlight the Time Zone you want to edit, then click **Edit**.
- 2 The detail window changes to an Edit view. Make the desired changes, and then click **OK**.

To Delete a Time Zone

A Time Zone cannot be deleted if it is used in the system because this might create undefined states of operation. The **Isolate** function displays the where the selected time zone is used. It also allows the operator to make adjustments in the other databases to remove the need for this time zone. The **Isolate** dialog allows changes to Operators, Panels, Access Levels, Cards, Action Groups and ADVs.

After the Time Zone has been isolated it may be deleted by selecting the time zone and clicking **Delete**.

- 1 In the **Time Zone** database window, highlight the Time Zone you want to delete, then click **Isolate**. The Modify Usage (Isolate) window appears.



- 2 Check each tab for time zone usage and assign a new Time Zone where necessary.
- 3 Click **OK** to return to the Time Zone database window.
- 4 Click **Delete** to remove the selected Time Zone.

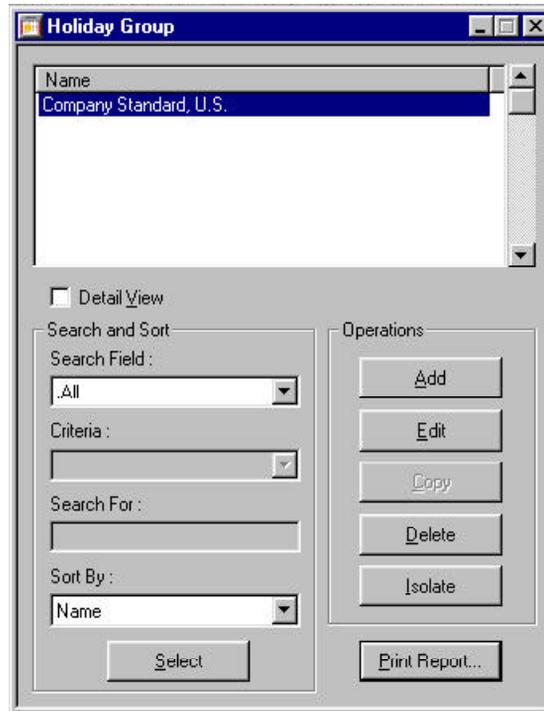
Holiday Groups

A Holiday Group is a collection of holiday definitions. Some holidays, like New Year's Day, happen on the same date every year. Others have dates that change each year. When you define a holiday, you can choose if it applies to every year, or select a specific year. If you want a panel to treat holidays differently than other days, you must associate a Holiday Group with that panel.

Once a holiday group has been defined, it is associated with a panel to allow for a change in access on holidays. (If you have Time Zones in a panel that have holidays defined, you must have a Holiday Group assigned to that panel). For example, doors that are normally open between 8 a.m. and 5 p.m. Monday through Friday, could be locked during those same hours on January 1, July 4 and December 25. If a holiday time block is included in a Time Zone assigned to a card, a person using that card is allowed access on a holiday. If there is no holiday time block in the assigned Time Zone, the person cannot gain access.

More than one Holiday Group can be defined, with different groups being associated with different panels. For example, in a retail business, some departments may close on holidays while others remain open. In such a case, define different Holiday Groups for each department and associate them with the appropriate panels.

To open the **Holiday Group Database**, go to the **Configuration Menu**, point to **Time Management**, and then click **Holiday Group**.



If any Holiday Groups have been defined, they are listed in the database window. Select the **Detail View** box to display the **Holiday Group** detail window. This view lists the name and date of each holiday in the group. If the entire list is not visible, click **Edit** to activate the detail view. Now you can scroll through the holiday list.

To Add a Holiday Group

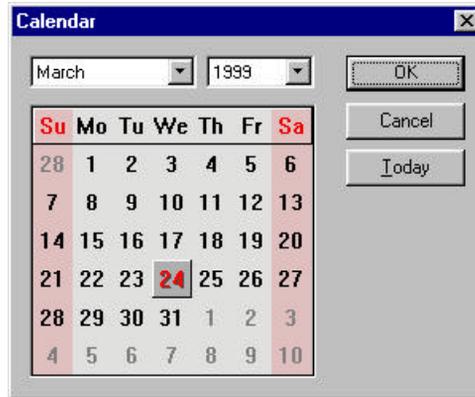
- 1 On the main **Holiday Group Database** window, click **Add**. The **Holiday Group Record** dialog appears.



- 2 In the **Holiday Group** dialog, enter the name of the group you are adding, and then click **Add**. The **Holidays** dialog appears.



- 3 Type the name of the holiday you are adding.
- 4 Next to the **Date** field, click the  button. The Calendar window appears.



- 5 Select the date for the holiday you are adding, then click **OK** to return to the **Holiday Group** dialog.
- 4 Select the **Apply to All Years** option if this is a recurring holiday, then click **OK**. The new holiday is added to the new group you are creating.
- 5 Continue to add all the holidays you want, then click **OK** on the Holiday Group dialog, to add the new group to the Holiday Group database.

To Edit a Holiday Group

- 1 From the **Holiday Group** database window, select the **Holiday Group** you want to change, and then click **Edit**. The **Holiday Group** window appears, listing defined holidays in the group.



- 2 Click **Add** if you want to include additional holidays in the group. The Holiday dialog appears. Type in the holiday name and select a date. Select the **Apply to All Years** option if this holiday recurs on the same date every year. Click **OK**.
- 3 Select any holiday to be changed, then click **Edit**. The Holiday dialog appears. Make the required changes, then click **OK**.
- 4 Select any holiday to be removed from the group and then click **Delete**.
- 5 When all the necessary changes have been made, click **OK** on the **Holiday Group** dialog to save the changes you have made.

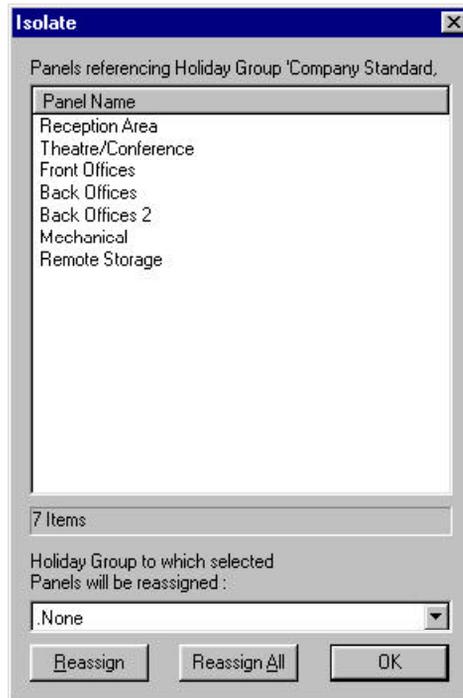
To Delete a Holiday Group

Holiday Groups are attached to panels in the access control system. As with Time Zones, deleting a Holiday Group, without first cleaning up the places it is used, may leave the system with undefined states of operation. The Holiday Group database has an Isolate function to make this clean-up easy. Clicking the **Isolate** button (with the appropriate Holiday Group selected in the **Holiday Group** window) results in a dialog that displays which panels reference this Holiday Group. This dialog also allows the operator to make adjustments in the panel

definitions to remove the need for this Holiday Group. After the Holiday Group has been isolated it may be deleted by selecting the Holiday Group.

To Delete a Holiday Group

- 1 In the **Holiday Group** database window, select the Holiday Group you want to delete, then click **Isolate**. The Modify Usage (Isolate) window appears.



- 2 Click the drop-down arrow and select another Holiday Group to assign to each affected panel.
- 3 Click **OK** to return to the Holiday Group database window.
- 4 Click **Delete** to remove the selected Holiday Group.

Part 3

Device Map

Overview

Abstract Devices

Action Group

Servers

Panel Configuration



Device Map Overview

The Device Map is created and designed for the installer. This view of the system lists the physical devices that make up the access control system and shows how they are connected.

Access control system devices are identified by adding them to the device tree. As each physical device is defined, a logical representation known as an ADV (abstract device) should be created for it. These ADVs are then used on the floor plan views for monitoring and controlling the devices. Each ADV is associated with an Action Group, which determines system actions such as activating a command file or playing a sound file in reaction to transactions from the device. An Action Group can be edited from the Action Group database to make global changes in all ADVs associated with a particular action group.

The Device Map is set up in a graphical tree structure representing the physical connections of the devices. The highest level is the Devices folder. The servers, including the Communications Server, are added at this level. CCTV switchers and various types of panel loops are added to the Communications Server. Panels are then added to the panel loops and CCTV cameras are added to the CCTV switchers. Card readers and keypads, input points and output points are defined in the panel configuration.



Once these devices have been added to the Device Map, and corresponding ADVs defined, they can be used in the definition of Access Areas, Control Areas, and Tracking and Muster Areas.

The device configurations and ADV definitions can be edited from the Device Map. (Right-click any device, and then click **Configure**.)

Devices can also be deleted from the system by deleting them from the Device Map. (Right-click a device, and then click **Delete**.) However, you cannot delete ADVs that are in use. The Isolate option lets you identify where an ADV is used (for example, operator level, floor plan, control map) and change its usage so that it can be deleted.

Abstract Devices

An ADV (abstract device) is a logical representation of a physical device. ADVs represent all the system hardware and services available for operator viewing and /or control. Similar in appearance to an icon, an ADV is associated with an actual device in your access control system, such as a panel or alarm. ADVs provide a logical interface for monitoring the status and controlling the actions of a physical device. The ADVs are placed on a *Floor Plan* which is the main user interface for monitoring and controlling system resources.

In operation, the ADV signals the state or status of the object by blinking and/or changing color; a sound file can also be associated with the ADV to signal a change in state. Each ADV has a control user interface that allows the user to execute functions available for that object. Right-clicking the ADV opens the control menu. Drag and drop functionality is available in some cases. For example a camera object can be dragged and dropped onto a monitor object to initiate a switch.

The colors, blinking and other properties of the ADVs can be edited and the ADV can be resized and rotated in the Floor Plan Definition utility.

Each ADV is associated with an action group, which defines the priority of a given event related to the device and any actions that should take place in response to an event. When an Action Group is edited, it globally changes all ADVs which are associated with it.

Abstract Device Definition

Abstract Devices (ADV) are created through the **Device Map**. Each device configuration window has an ADV section in the upper right corner. Click **Add** (to create) or **Edit** (to modify) in the ADV area and the **Abstract Device** configuration window opens. The general format for all ADVs is the same. However, the available Actions vary, depending on the type of device the ADV is associated with.

The ADV configuration window contains the following:

Name: Enter a descriptive name (up to 30 characters). Alphabetic, numeric, special characters and spaces can be used.

Description: Enter a description as desired (optional).

Default Floor Plan: Select a floor plan to be associated with this device (optional). (The floor plan specified here can be opened from an Alarms view by right-clicking a message from this device and clicking **Floor Plan**.)

Action Group: The default setting is Custom; no priorities or actions are selected. If this is the first ADV of its

type, click **Add**. Enter a name for the Action Group. Hit **ENTER**. Then define the priorities, command files and other properties. These become part of the named Action Group and are available for other ADVs of this type. Any changes that are made to this Action Group will be applied to all ADVs associated with it.

If other ADVs of this type have been defined, select an existing Action Group from the drop down list. All of the properties of the selected Action Group will be applied to this ADV. Hit **ENTER**.

Any changes you make in the properties of this ADV will be applied to all ADVs with the same Action Group. If you want to use most of the settings but make changes in the properties of this ADV without changing all the rest, follow these steps:

- 1 Select a name from the **Action Group** drop-down list. Hit **ENTER**.
- 2 Click **Add**, and then type in a new name.
- 3 Make any desired changes in the **Priority, Command Files**, and other settings, then click **OK**. (You have actually created a new Action Group with one ADV associated with it. This Action Group is available for other ADVs.)

Action: Select from the list of possible actions (e.g., *Loop OK*, or *Loop Trouble*). This list varies depending on the type of device.

Priority: Set the priority you want assigned to the selected action. If the priority is 0, no actions can be entered. (1 is the highest priority, 99 is the lowest.)

Time Zone: Select the time during which you want the action group activated. The default setting is *Always*, which means the defined actions would take effect regardless of the time.

Command Files: Enter any command files that you want activated in response to the selected action. You can choose files on **Receive, Acknowledge**, and/or **Clear**.

Sound File: Choose a sound file to be activated in response to the action.

Camera: Select a CCTV camera to be activated in response to the action.

Monitor: Select a monitor to be activated in response to the action.

Write to History: Select this option if you want the action written to the history file.

Print: Select this option if you want the action printed on the alarm printer

Message: Insert a message that you want sent to the **Alarm Detail View** in response to the action.

Abstract Device Database

The Abstract Device database contains information on all Abstract Devices (ADVs) that have been defined. Open the Abstract Device Database (in the Configuration menu, point to **Device**, click **Abstract Device**). The main database window lists existing ADVs.



This list can be searched and sorted by Name, HW Device (Hardware Device), Point, and Type. ADVs can be edited by selecting them from the database list and clicking **Edit**. However, they can only be created and deleted from the Device Map.

Action Group

An Action Group is a set of actions assigned to a device when its ADV is defined. The Action Group defines what will happen in response to a given event. For example, a Loop Action Group definition would define what happens when the state of a communication loop changes from *OK* to *trouble* or from *trouble* back to *OK*. Responses can include the sending of a command file on receipt, acknowledge and clear; the activation of a sound file, a camera and a monitor. Also a message can be attached which will appear in Alarm Details when the initiating action occurs.

The list of trigger events depends on the type of device. For example, a supervised input point Action Group will include three sets of actions, triggered when the state of the point is *active*, *normal* and *trouble*. Each state is assigned a priority (if it is assigned a priority of zero, no actions are available) and a Time Zone during which the actions would apply. Command files, sound files, camera and monitor control files can be associated with it. The event can be written to a file and also printed. If a message is associated with the event, the message will appear in the alarm view.

An Action Group can be edited from the Action Group database to make global changes in all the ADVs associated with a particular Action Group. If you wish to change an Action Group feature for a single ADV, you must open the device from the Device Map, rename the Action Group Template and then edit the new template.

Once an Action Group has been created, it can be used as a template for other devices of the same type.

Servers

Communication Server

In order to communicate with system devices, including panel loops, panels and CCTV switchers, you must configure the Communication Server. It can be installed on the same machine as the Database Server or on another computer in a networked system. The Communication Server is defined by adding it to the Device Map.

When any server is added to the Device Map, you must log off and then log on again before the changes take effect.

To Configure the Communication Server

- 1 In the **Configuration** menu, point to **Device**, and then click **Device Map**. The Device Map window appears.



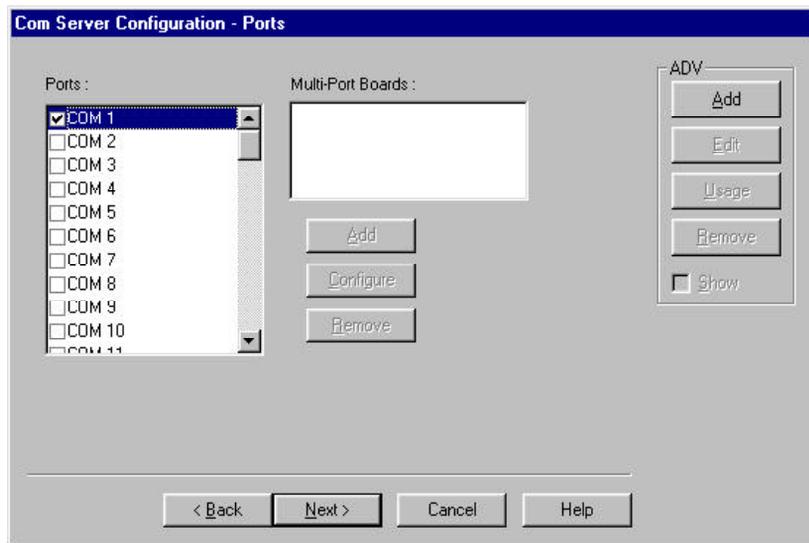
- 2 Right-click the **Devices** folder, point to **Add**, and then click **Communication Server**. The Com Server Configuration - Basic Information window appears.

Com Server Configuration - Basic Information

- 1 In the **Name** box, enter a unique name for the Communication Server (up to 30 alphabetic or numeric characters).
- 2 In the **Description** box, enter a description of the Communication Server (up to 60 alphabetic or numeric characters).
- 3 Enter the **Machine Name**. It can be found in the Windows Control Panel by activating the Network application and looking at the Identification tab.
- 4 Do not change the **Protocol End point**: This number uniquely identifies this communication server to any client processes that need its services.
- 5 In the **Operating System** area, select the correct operating system for the server.
- 6 Select the various optional features as desired:
 - **Alarm Priority for Notification:** An alarm with a higher priority (lower number) than this setting appears in the Event view.
 - **Alarm Priority for required acknowledgment:** An alarm with a higher priority (lower number) than this setting appears in the Alarm view and must be acknowledged before it can be cleared.

- **Write Transactions to file?** Check this box if you want a record of the server transactions written to a file.
- 6 Create an ADV for the Communications Server. Click the **Add** button in the ADV area (upper right corner).
 - 7 Click the **Next** button. The Com Server Configuration - Ports window appears.

Com Server Configuration - Ports



- 1 Check the boxes for the COM Ports that are used on this server for the access control system.
- 2 If the server has a multi-port board, click **Add** under the Multi-Port Board field. A list of compatible multi-port boards opens, select and configure the correct definition.

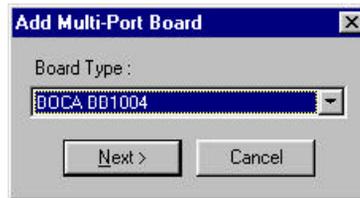
In the **Com Serve Configuration - Ports** dialog there is a multi-port option. This is used to implement a multi-port support driver and only applies if you are running WIN-PAK 2.0 in a Windows 95 or Windows 98 environment.

When running under Windows NT, WIN-PAK 2.0 makes use of

the standard NT drivers and, therefore, does not need this extra definition step.

You must enter the address and IRQ setting for each port.
(Consult the board manufacturer's documentation for further information.)

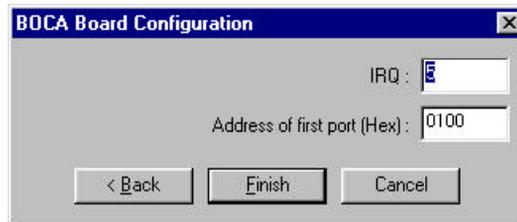
Multi-Port Boards



- 1 Click the drop-down arrow in the **Board Type** field, then select the correct multi-port board.

Supported multi-port boards for Windows 95/98 include:
Boca BB1004, Boca BB 1008, Boca BB2016, Digiboard PC/4, Digiboard PC/8, Digiboard PC/16

- 2 Click **Next**. The Board Configuration window appears. Enter the required information in the appropriate fields.



- 3 Click **Next**.
- 4 Click **Finish**.

Command File Server

In order to use the Command File functions, a Command File Server must be configured. Normally the Command File Server is located on the same machine as the Database Server.

The Command File server is configured on the **Device Map**.

To Configure the Command File Server

- 1 In the **Configuration** menu, point to **Device**, and then click **Device Map**. The Device window appears.



- 2 Right-click the **Devices** folder, point to **Add**, then select **Command File Server**. The Command File Server Configuration window appears.

- 3 In the **Name** box, enter a unique name for Command File Server.
- 4 In the **Description** box, enter a description of the Command File Server.
- 5 In the **Machine Name** box, enter the machine name where the server is located. Usually it will be on the same machine as the Database Server.
- 6 Create an ADV for the Command File Server. Click the **Add** button in the ADV area (upper right corner).
- 7 When you have completed the ADV, click **OK** to return to the Command File Server Configuration window.
- 8 Click **Next**.
- 9 Click **Finish** to add the server to your Device Map.

When any server is added to the Device Map, you must log off and then log on again before the changes take effect.

Guard Tour Server

In order to use the Guard Tour functions, a Guard Tour Server must be configured. Normally the Guard Tour Server is located on the same machine as the Database Server.

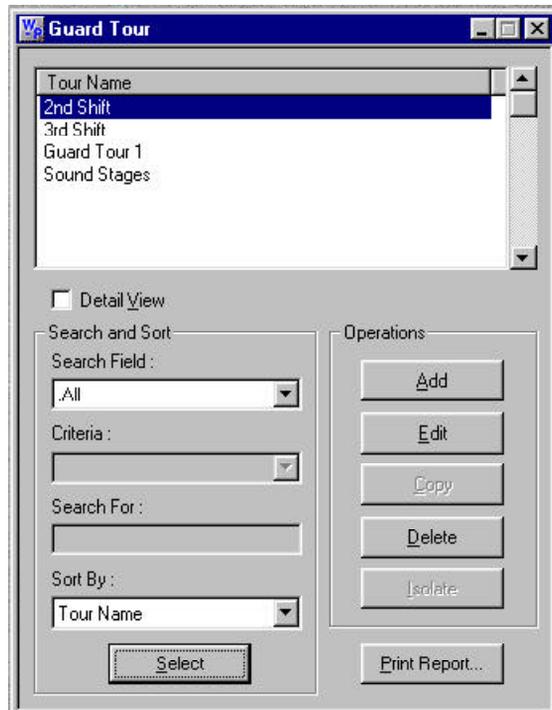
The Guard Tour Server is configured on the **Device Map**.

To Configure the Guard Tour Server

- 1 In the **Configuration** menu, point to **Device**, and then click **Device Map**. The Device window appears.



- 2 Right-click the **Devices** folder, point to **Add**, then click **Guard Tour Server**. The Guard Tour Server Configuration window appears.



- 3 In the **Name** box, enter a unique name for the Guard Tour server.
- 4 In the **Description** box, enter a description of the Guard Tour Server.
- 5 In the **Machine Name** box, enter the machine name where the server is located. Usually it will be on the same machine as the Database Server.
- 6 Create an ADV for the Guard Tour Server. Click the **Add** button in the ADV area (upper right corner).
- 7 When you have completed the ADV, click **OK** to return to the Guard Tour Server Configuration window.
- 8 Click **Next**.
- 9 Click **Finish** to add the server to your Device Map.

When any server is added to the Device Map, you must log off and then log on again before the changes take effect.

Schedule Server Configuration

In order to use the Schedule functions, a Schedule Server must be configured. Normally the Schedule Server is located on the same machine as the Database Server.

To Configure a Schedule Server

- 1 In the **Configuration** menu, point to **Device**, and then click **Device Map**. The Device window appears.



- 2 Right-click on the **Devices** folder, point to **Add**, and then click on **Schedule Server**. The Schedule Server Configuration window appears.

Schedule Server Configuration

Name :
Schedule Server

Description :

Machine name :
FRENCH

Protocol end point :
5588

ADV

Add
Edit
Isolate
Delete
 Show

< Back Next > Cancel Help

- 3 In the **Name** box, enter a unique name for the Schedule Server (required). Use up to 30 alphabetic and numeric characters.
- 4 In the **Description** box, enter a description of the Schedule Server (optional). Use up to 60 alphabetic and numeric characters.
- 5 In the **Machine Name** box, enter the machine name for the Schedule Server (this is usually the same machine as the Database Server).
- 6 Create an ADV for the server. Click the **Add** button in the ADV area (upper right corner).
- 7 When you have completed the ADV, click **OK** to return to the Schedule Server Configuration window.
- 8 Click **Next**.
- 9 Click **Finish**.

When any server is added to the Device Map, you must log off and then log on again before the changes take effect.

Tracking and Muster Server Configuration

In order to use the Tracking and Muster functions, a Tracking and Muster Server must be configured. Normally it is located on the same machine as the Database Server.

To Configure a Tracking and Muster Server

- 1 In the **Configuration** menu, point to **Device**, and then click **Device Map**. The Device window appears.



- 2 Right-click on the **Devices** folder, point to **Add**, and then click on **Tracking and Muster Server**. The Tracking and Mustering Server Configuration window appears.

The screenshot shows a dialog box titled "Tracking and Mustering Server Configuration". It contains several input fields and a set of buttons. The fields are: "Name:" with the text "Tracking and Muster Server"; "Description:" which is empty; "Machine name:" with the text "FRENCH"; "Protocol end point:" with the text "5500"; and "Hours of History to Prime on startup:" with a spinner box showing "8". On the right side, there is a section labeled "ADV" containing buttons for "Add", "Edit", "Isolate", "Delete", and a "Show" checkbox. At the bottom of the dialog, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 3 In the **Tracking and Muster Server** window, enter the name of the server, a description (optional), and the machine name for the Server (this is usually the same machine as the Database Server).
- 4 Create an ADV for the server. Click the **Add** button in the ADV area (upper right corner).
- 5 When you have completed the ADV, click **OK** to return to the Tracking and Muster Server Configuration window.
- 6 Click **Finish** to add the server to your Device Map.

When any server is added to the Device Map, you must log off and then log on again before the changes take effect.

Communication Loops

Communication interfaces are programmed by adding them to an existing communication server on the **Device Map**. You must have an available communication port for each communication interface.

To add an interface, open the **Device Map** (go to the **Configuration** menu, point to **Device**, click **Device Map**). Right-click the communication server that you are connecting to, point to **Add**, and then select the interface of your choice.

WIN-PAK 2.0 opens a series of dialog boxes so that you can enter the basic information and the port settings. At the bottom of each dialog box are **Back**, **Next** and **Cancel** buttons. Select or enter information. When you are finished entering information, click **Next** to move to the next dialog box. If you want to review or edit the information you have entered, just click the **Back** button. When you have finished all of the dialog boxes, click **Finish** to save your entries, or **Cancel** to exit without saving.

Create an ADV for your communication interface when you program it, so that the ADV will be available when you set up your floor plan definition.

To Add a C-100 Communication Loop

- 1 In the **Configuration** menu, point to **Device** and then click **Device Map**. The Device window appears.



- 2 Right-click the communication server that your loop is connected to, point to **Add**, and then select **Panel Loop (C-100)**. The C-100 Loop Configuration - Basic Information window appears.

C-100 Loop Configuration - Basic Information

- 3 In the **Name** box, enter a unique name for the panel loop (required). Use up to 30 alphabetic and numeric characters.

- 4 In the **Description** box, enter a description of the panel loop (optional). Use up to 60 alphabetic and numeric characters.
- 5 Check the boxes for **Buffer all panels on exit** and/or the **Unbuffer all panels on startup** options, to select either option (These options apply to the Communication Server.)
- 6 Click the pull-down arrow in the **Time Zone** box, and select the Time Zone in which the loop is located.
- 7 Select a **Loop Verification Interval** (in seconds). Decreasing the interval shortens the time until a lost loop is detected. Increasing the interval improves the band width. The default of 60 seconds is an optimum based on experience.
- 8 Make any desired adjustments in the Panel Default Settings.

Panel Defaults

- **I/O Poll Interval:** 60 seconds (default); set the frequency for the signal that is sent to the panel to verify communication and check the panel's input and output states.
 - **Panel CMD Retry Count:** 3 seconds (default); set the number of times a command file will be resent, if the panel does not respond to the command.
 - **Panel CMD Time Out:** 5 seconds (default); set the amount of time allowed for sending a command file before timing out.
- 9 Click **Next**. The C-100 Loop Configuration - Port Settings window appears.

C-100 Loop Configuration - Port Settings

C-100 Loop Configuration - Port Settings

Port :
No Port - Device Inactive

Bits per Second : 1200

Data Bits : 8

Parity : None

Stop Bits : 1

ADV

Add
Edit
Isolate
Delete
 Show

< Back Next > Cancel Help

- 1 Click the pull-down arrow in the **Port** box, and select the port that the loop is connected to.
- 2 Click the pull-down arrow in the **Bits per Second** box, and select the communication rate for the loop (1200 default).
- 3 Create an ADV for your communication loop. (Click **Add** in the ADV section, located in the upper right of the configuration window.)
- 4 When finished creating the ADV, click **Next**.
- 5 Click **Finish**.

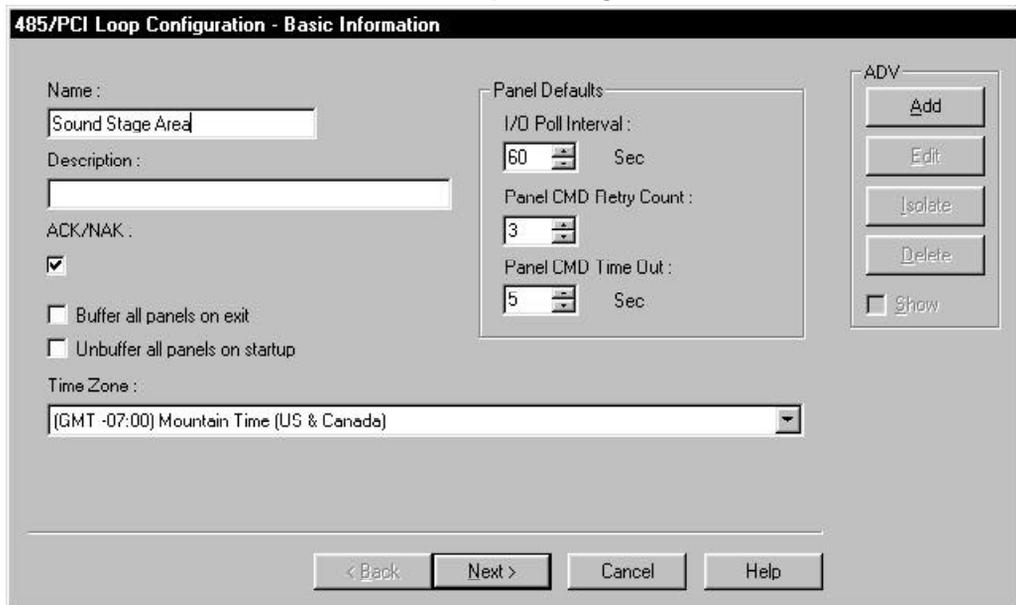
To Add a 485 PCI Multiple Dropline

- 1 In the **Configuration** menu, point to **Device** and then click **Device Map**. The Device window appears.



- 2 Right-click the communication server that your PCI is connected to, point to **Add**, and then select **Panel Loop (485/PCI)**. The 485/PCI Loop Configuration - Basic Information window appears.

485/PCI Loop Configuration - Basic Information

A screenshot of a dialog box titled "485/PCI Loop Configuration - Basic Information". The dialog box has a light gray background and contains several fields and controls. On the left side, there are four text input fields: "Name:" (containing "Sound Stage Area"), "Description:" (empty), "ACK/NAK:" (with a checked checkbox), and "Time Zone:" (containing "[GMT -07:00] Mountain Time (US & Canada)"). Below these are two unchecked checkboxes: "Buffer all panels on exit" and "Unbuffer all panels on startup". In the center, there is a "Panel Defaults" section with three spinners: "I/O Poll Interval:" (set to 60, labeled "Sec"), "Panel CMD Retry Count:" (set to 3), and "Panel CMD Time Out:" (set to 5, labeled "Sec"). On the right side, there is an "ADV" section with five buttons: "Add", "Edit", "Isolate", "Delete", and "Show" (with a small square icon to its left). At the bottom of the dialog box, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 3 In the **Name** box, enter a unique name for the panel loop (required). Use up to 30 alphabetic and numeric characters.
- 4 In the **Description** box, enter a description of the panel loop (optional). Use up to 60 alphabetic and numeric characters.
- 5 If you are using ACK/NAK communications ensure there is a check in the **ACK/NAK** box.
- 6 Check the boxes for **Buffer all panels on exit:** and/or the **Unbuffer all panels on startup** options, to select either option.
- 7 Click the pull-down arrow in the **Time Zone** box, and select the Time Zone in which the loop is located.
- 8 Make any desired adjustments in the Panel Default Settings.

Panel Defaults

- **I/O Poll Interval:** 60 seconds (default); set the frequency for the signal that is sent to the panel to verify communication and check the panel's input and output states.
 - **Panel CMD Retry Count:** 3 seconds (default); set the number of times a command file will be resent, if the panel does not respond to the command.
 - **Panel CMD Time Out:** 5 seconds (default); set the amount of time allowed for sending a command file before timing out.
- 9 Click **Next**. The 485/PCI - Ports Settings window appears.

485/PCI Loop Configuration - Ports Settings

485/PCI Loop Configuration - Port Settings

Port :
No Port - Device Inactive

Bits per Second : 9600

Data Bits : 8

Parity : None

Stop Bits : 1

ADV

Add

Edit

Isolate

Delete

Show

< Back Next > Cancel Help

- 1 Click the pull-down arrow in the **Port** box, and select the port the loop is connected to.
- 2 Click the pull-down arrow in the **Bits per Second** box, and select the communication rate for the loop (9600 default).
- 3 Create an ADV for your communication loop. (Click **Add** in the ADV section, located in the upper right of the configuration window.)
- 4 When finished creating the ADV, click **Next**.
- 5 Click **Finish**.

CCTV Switcher Configuration

WIN-PAK 2.0 supports a variety of CCTV switchers. They are added to a communication server on the Device Map in the same way as other communication interfaces. You must have an available communication port for each switcher.

To Add a CCTV Switcher

- 1 In the **Configuration** menu, point to **Device** and then click **Device Map**. The Device window appears.



- 2 Right-click the communication server that your switcher is connected to, point to **Add**, and then select **CCTV Switcher**. The CCTV Switcher Configuration - Basic Information window appears.

CCTV Switcher Configuration - Basic Information

CCTV Switcher Configuration - Basic Information

Name :

Description :

Type :

Port Settings

Port :

Bits per Second :

Data Bits :

Parity :

Stop Bits :

ADV

Show

< Back Next > Cancel Help

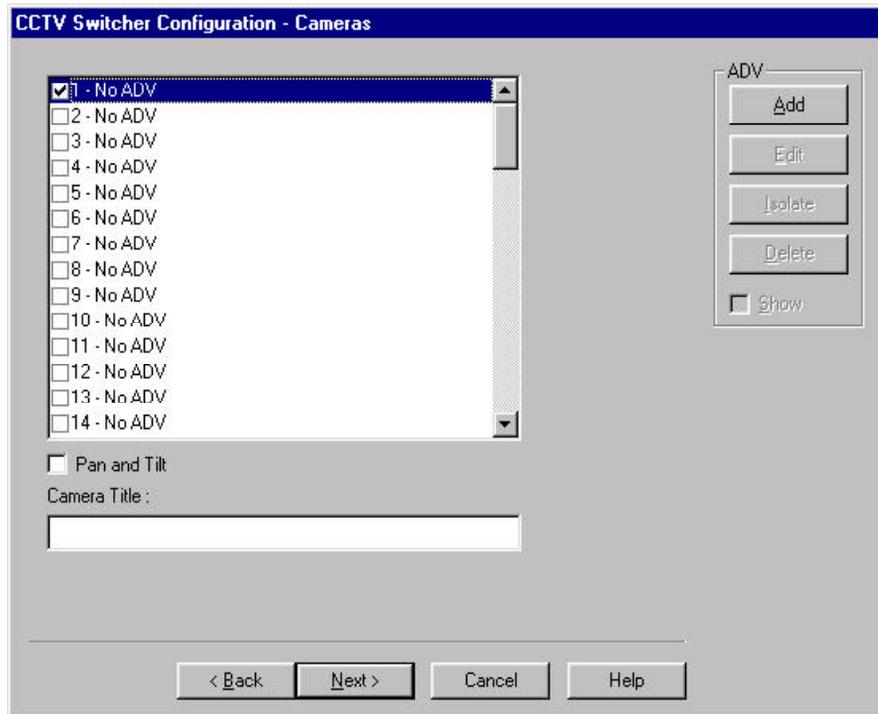
- 3 In the **Name** box, enter a unique name for the CCTV switcher (required). Use up to 30 alphabetic and numeric characters .
- 4 In the **Description** box, enter a description of the CCTV switcher (optional). Use up to 60 alphabetic and numeric characters.
- 5 Click the pull-down arrow in the **Type** box, and select the type of CCTV switcher.
- 6 Click the pull-down arrow in the **Port** box, and select the port that the CCTV switcher is connected to.
- 7 Click the pull-down arrow in the **Bits per Second** box, and select the communication rate for the loop (9600 default).

Default Settings

- **Bits per second:** 9600.
- **Data Bits:** 8.
- **Parity:** None.
- **Stop Bits:** 1.

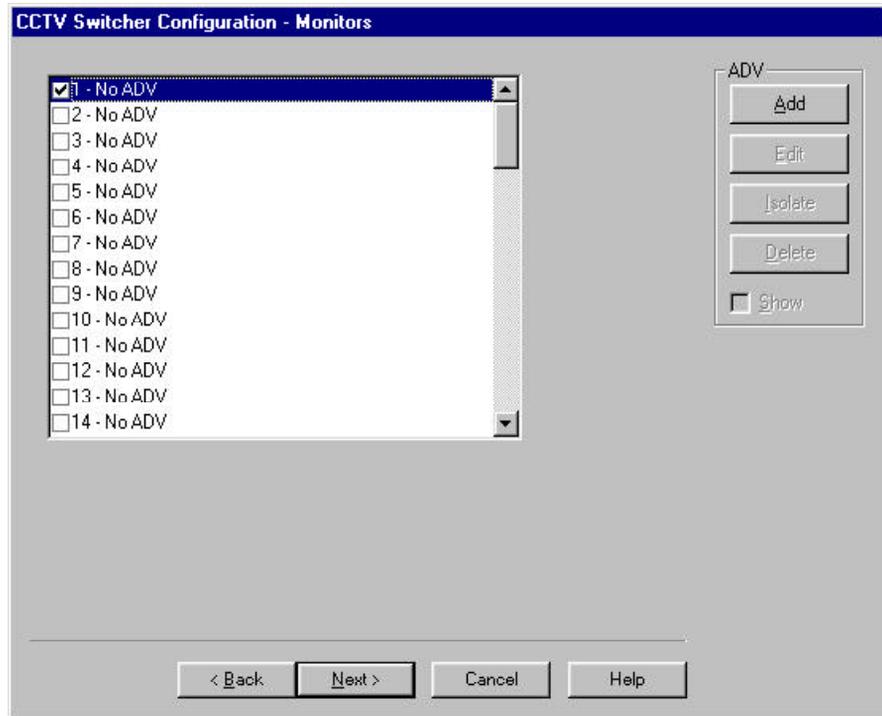
- 8 Click **Next**. The CCTV Switcher Configuration - Cameras window appears.

CCTV Switcher Configuration - Cameras



- 1 Place checks in the boxes next to the cameras to be controlled by the CCTV switcher. As you check each box next to a camera, an **ADV Configuration Record** opens. Fill it out for the camera, and click **OK**.
- 2 When you have selected all the cameras you want, click **Next**. The CCTV Switcher Configuration - Monitors window appears.

CCTV Switcher Configuration - Monitors



- 11 Place checks in the boxes next to the monitors to be controlled by the CCTV switcher. As you check the box next to a monitor, an **ADV Configuration Record** opens. Fill it out for the monitor, then click **OK**.
- 12 Create an ADV for your CCTV Switcher. (Click **Add** in the ADV section, located in the upper right of the configuration window).
- 13 Click **Finish** to save the new switcher and the ADVs for the switcher, cameras and monitors.

RS-232 Connection Configuration

An RS-232 connection is defined by adding it to the Device Map. You must have a communication server with an available com port for each communication interface in your system.

To Add an RS-232 Connection

- 1 In the **Configuration** menu, point to **Device** and then click **Device Map**. The Device window appears.



- 2 Right-click the communication server that you are connecting to, point to **Add**, and then select **RS-232 Connection**. The RS-232 Connection Configuration - Basic Information window appears.

- 3 In the **Name** box, enter a unique name for the RS-232 Connection. Use up to 30 alphabetic and numeric characters (required).
- 4 In the **Description** box, enter a description of the RS-232 Connection (optional). Use up to 60 alphabetic and numeric characters.
- 5 Click the pull-down arrow in the **Port** box, and select the port for the RS-232 Connection .
- 6 Make any desired changes in the default settings.

Default Settings

- **Bits per second:** 9600.
- **Data Bits:** 8.
- **Parity:** None.
- **Stop Bits:** 1.

- 7 Create an ADV for your RS-232 Connection. (Click **Add** in the ADV section, located in the upper right of the configuration window).
- 8 Click **Next**.
- 9 Click **Finish**.

Modem Loop Configuration

Modem connections can be used to communicate with panel loops at remote sites. First you define the modem pool (which can have one or more modems) and then you define the communication loop. The modems can be used to communicate with C-100; 485 with a HUB (non-ACK-NAK) and 485 with a HUB (ACK-NAK). For each type of panel configuration, the options available are the same as for local panel loops. For an explanation of the options refer to the preceding sections.

Modem pools, like other communication connections, are defined by adding them to the Device Map. You must have a communication server with an available com port for each modem you are adding. Once the pool is defined, the panel loops are added to the modem pool, rather than directly to the communication server, as is the case with local loops.

To Add a Modem Pool

- 1 In the **Configuration** menu, point to **Device** and then click **Device Map**. The Device window appears.



- 2 Right-click the communication server to which you are connecting, point to **Add**, and then select the modem pool with the type of panel loop you are using. The Modem Pool Configuration - Basic Information window appears.

C-100 Modem Pool Configuration - Basic Information

- 1 In the **Name** box, enter a unique name for the Modem Pool. Use up to 30 alphabetic and numeric characters (required).
- 2 In the **Description** box, enter a description of the Modem Pool (optional). Use up to 60 alphabetic and numeric characters.
- 3 Click **Add** in the **Modems in Pool** area. The Modem Configuration window appears.

- 4 In the **Name** box, enter the name of the modem to be added to the Modem pool.

- 5 In the **Local Phone Number** box, enter the modem's phone number. Include the area code and dialing prefix if they are required to call from the remote site.
- 6 Click on the pull-down arrow in the **Port on Server** box, and select the port that the modem is connected to.
- 7 Click **OK**.
- 8 Repeat this procedure for each modem in the pool.
- 8 Create an ADV for the Modem Pool. (Click **Add** in the ADV section, located in the upper right of the configuration window.)
- 9 Click **Next**, and then **Finish**.

C-100 or 485/PCI (without ACK-NAK) Remote Configuration

- 1 Once the Modem Pool has been defined, right-click it. Click **Add New C-100 Loop** or **Add New 485 Loop**.
- 2 The C-100 or 485/PCI Loop Configuration - Basic Information window appears.

- 3 In the **Name** box, enter a unique name for the communication loop. Use up to 30 alphabetic and numeric characters (required).
- 4 In the **Description** box, enter a description of the communication loop (optional). Use up to 60 alphabetic and numeric characters.
- 5 Select any options and make any desired changes in the panel defaults.
- 6 In the **Remote Phone Number** box, enter the phone for the remote site. Enter the number just as it is dialed, including any required prefixes and area codes.
- 7 From the **Modem** drop-down list, select a modem.
- 8 Click **Next** and then **Finish**.

485/PCI (with ACK-NAK) Remote Configuration

- 1 Once the Modem Pool has been defined, right-click it. Click **Add New 485 Loop**.
- 2 The 485/PCI Loop - Basic Information window appears.

485/PCI Loop Configuration - Basic Information

- 3 In the **Name** box, enter a unique name for the communication loop. Use up to 30 alphabetic and numeric characters (required).
- 4 In the **Description** box, enter a description of the communication loop (optional). Use up to 60 alphabetic and numeric characters.
- 5 Select any options and make any desired changes in the panel defaults.
- 6 In the **Remote Phone Number** box, enter the phone for the remote site. Enter the number just as it is dialed, including any required prefixes and area codes.
- 7 Click **Next**. The 485/PCI Loop Configuration - HUB Settings appears.

N485/PCI Loop Configuration - HUB Settings

- 1 (These settings are available only if 485/ACK-NAK is selected.) Leave the default settings, or make any desired changes. The options are explained below.
 - **Delay for Connection:** Enter a value in seconds, if a pause is required between the dialing prefix and dialing the phone number.
 - **Number of Redial Attempts:** The number of redial attempts can be any number between 0 - 50. The default is 3.
 - **Wait Time for Disconnect:** The amount of time allowed before disconnect can be any number between 1 - 999 seconds. The default is 5 seconds.
 - **Delay before Next Attempt:** The amount of time allowed between dial attempts can be any number between 1 and 999 seconds. The default is 60 sec.
 - **Modem Initialization String:** Enter the remote initialization string as:

ATE0Q0V1&K0&C1&D0S0+1&W

(Refer to the modem documentation for further information.)

- **Dial Prefix:** Enter the dial command prefix. In most cases it is **ATDT**, which is set as the default.
 - **Call In Option:** Select either **On Invalid Transaction** or **Never**.
- 2 When 485 ACK-NAK is selected, you have the option of setting a Site ID and Password. Click **Set New Site ID and Password**.



The screenshot shows a 'Password' dialog box with the following fields and values:

- New Password:** XXXXXXXXXX
- Confirm Password:** XXXXXXXXXX
- Site ID:** @A0000,S0000

Buttons: OK, Cancel

- 3 Enter the site ID using the following format:
@A [unique 4-digit number], S [unique 4-digit number]
For example @A0002, S0003 is area 2 site 3.
- 4 Enter a password, using up to 20 alphabetic and/or numeric characters.
- 5 Click **OK** to return to the HUB Settings window.
- 6 Click **Next** and then **Finish**.

Panels

The panel configuration contains a great deal of information about the setup of your access control system. This includes card formats, the type of readers and keypads, and numerous options for input and output points. A series of dialogs guides you through the panel definition process. Select or enter the information which applies to your system. When you have finished entering information, click **Next** to move to the next tab. If you want to review or edit the information you have entered, just click the **Back** button. When you have finished all of the dialog boxes, you can click **Finish** to save your entries, or **Cancel** to exit without saving.

Because of the amount of information and the number of options, adding panels to a large system can be very time consuming. There are a few short cuts that can speed up the process. First of all, note that once a panel has been defined, it can be copied and then edited, if necessary. Second, action groups act as templates: once an action group is defined, it can be used in defining all ADVs of the same type. In addition, action groups can be copied and then edited, allowing you to quickly create a variety of action groups to choose from.

Panel definitions are added to the **Device Map**. They can be copied by right-clicking, and then dragging and dropping them onto a communication interface on the Device Map. Similarly, whole branches on the Device Map can be copied. For example, if you define a C-100 loop with four panels, you can right-click and drag the C-100 to a com server, click copy, and a new loop plus panels is added to your system.

Panel Configuration

The panel configuration includes information on a number of system features. The card format, anti-passback, groups and readers use groups that are all configured at the panel.

To Add a Panel

Panel definitions are added to the **Device Map**.

- 1 In the **Configuration** menu point to **Device**, and then click **Device Map**. The Device window appears.



- 2 Click the plus sign (+) next to **Devices** to open the first level of branches.
- 3 Click the plus sign (+) next to the communication server of your choice to display the communication loops attached to it. Right-click the loop that you are adding the panel to.
- 4 Point to **Add**, and then click **Add New N-1000 panel**. The Panel Configuration - Basic window appears.

Panel Configuration - Basic

Panel Configuration - Basic

Name :
Front Offices

Description :

Type :
N-1000

Firmware Version :
8.03

Status :
Active

Address :
2

ADV
Add
Edit
Isolate
Delete
 Show

< Back Next > Cancel Help

- 1 In the **Name** box, enter a unique name for the panel. Use up to 30 alphabetic and numeric characters (required).
- 2 In the **Description** box, enter a description of the panel (optional). Use up to 60 alphabetic and numeric characters.
- 3 Click the pull-down arrow in the **Type** box, and select the type of panel you are adding.
- 4 Click the pull-down arrow in the **Firmware Version** box, and select the version of the firmware in the panel you are adding.
- 5 Click the pull-down arrow in the **Status** box, and select the desired status for the panel. Choose from *Active*, *Inactive* or *Not Present*.

Inactive is intended for a panel that is present but temporarily disconnected for maintenance. Not present allows a system to be defined before the physical installation is complete. Card additions or deletions sent to an inactive panel are saved until the panel is made active. If the panel is marked not present, no transactions are saved.

- 6 In the **Address** box, enter the panel's hardware address.
-

The address is set by DIP switches on the panel; each panel on a loop must have a unique address. Consult your N-1000 installation manual for further information.

- 7 Create an ADV for your panel. (Click **Add** in the ADV section, located in the upper right of the configuration window.)
- 8 Click **Next**. The Panel Configuration - Card Format window appears.

The Panel Configuration - Card Format

- 1 Select either ABA or Wiegand type cards. If ABA type cards are selected, 12-digit, 16-digit or a user defined card format can be selected.

If Wiegand cards are selected, the panel address is followed by a format slot number (*fsn*). Default formats for slots 1, 2, and 3 respectively are CR-1 Wiegand Card Swipe Reader, NR-1 Magstripe Swipe Reader, PR-2 Hughes/IDI Proximity Reader. These defaults can be edited and other Wiegand card formats can be entered in the remaining slots.

Wiegand Card Formats

CR-1 Wiegand Card Swipe

`_F=pn_fsn_26_S_1_D_1_B1_B2_B3_B4`

NR-1 Magstripe Swipe

`_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4`

PR-2 Hughes/IDI Proximity

_F=pn_fsn_34_S_1_D_1_B1_B2_B3_B4

CI-1 Wiegand Card Insert

_F=pn_fsn_26_I_1_D_1_B1_B2_B3_B4

PR-1-280 Cotag Proximity

_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4

HG-1 Hand Geometry

_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4

5 Conductor Keypad

_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4

Dorado Magstripe Cards

_F=pn_fsn_34_S_1_D_Ø_B1_B2_B3_B4

Sielox Wiegand Cards

_F=pn_fsn_34_S_1_D_1_B1_B2_B3_B4

Sielox Proximity Cards

_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4

NCS 25-Bit Cards

_F=pn_fsn_25_S_1_D_1_B1_B4_B2_B3

NCS 29-Bit Cards

_F=pn_fsn_29_S_1_D_1_B1_B4_B2_B3

Kidde Cards *_F=pn_fsn_31_S_1_BØ_B2_B3_B4*

Continental 36-Bit Cards

_F=pn_fsn_36_S_3_D_2_B1_B2_B3_B4

Continental 37-Bit Cards

_F=pn_fsn_37_S_3_D_2_B1_B2_B3_B4

- 2 Click **Next**. The Panel Configuration - Time Zones window appears.

Panel Configuration - Time Zones

Panel Configuration - Time Zones

Available Time Zone	Description	No. Slots
1st Shift	7:30 - 17:3...	0

Slot	Selected Time Zone	Description	No. Slots
1	2nd Shift	17:00 to 2:30	0
2	24 Hours by 7 Days	24 Hours a Day 7 Da...	0

Holiday Group :

ADV

Add
Edit
Isolate
Delete
 Show

< Back Next > Cancel Help

- 1 Time Zones which apply to a given panel must be added to the panel's definition. Generally, it is best to add all Time Zones to every panel. Select a Time Zone from the list of Available Time Zones and double click on it. The name will appear in the list of Selected Time Zones.
- 2 If you are using holiday overrides, select the Holiday Group that applies to this panel.
- 3 Click **Next**. The Panel Configuration -Input Points window appears.

The N-1000 panel has 64 time zone slots, so it is possible that, in a very large system, the number of time zones could exceed the number of available slots. In that case, it would be necessary to select only the time zones that apply to a given panel.

To help the user determine the number of slots available, the number of slots used is displayed for each time zone.

The Panel Configuration - Options

Panel Configuration - Options

Anti-Passback Forgiveness

Groups All readers use the same group

Keypads PIN
Time Zone for PIN :
[Dropdown]

Continuous Card Reads
 Reverse Read LEDs
 Split Time Zone

Command File :
[Dropdown]

Initialization Command :
B M A I F Z O

Site Codes :

Slot	Site Code
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0

Hardware Options :

AEP-5 (Supervised Inputs)
 ERB (Additional Outputs)

Advanced...

ADV
[Add] [Edit] [Isolate] [Delete] [Show]

< Back Next > Cancel Help

- 1 Enable or disable options as desired. Refer to the descriptions of the options below.
 - **Anti-passback:** Anti-passback discourages users from entering with others without using their own cards. Cards must be used at a designated *In* reader, then at a designated *Out* reader before the card can be read *in* again. If the in/out/in pattern is broken, an anti-passback violation occurs and access is denied. A reader is required on each side of the door for this option.

If anti-passback is selected for any panel in a given area, the result is global anti-passback where the

card must be presented at any out reader before it can be read in again without a violation.

On the N-1000-IV (X) which supports four readers, readers 1 and 3 are considered the *In* readers, while readers 2 and 4 are considered the *Out* readers.

- **Forgiveness:** Anti-passback can be used with or without *forgiveness*. With *forgiveness* all cards are reset at midnight so that if card users leave the building in the evening without using anti-passback out readers, they are allowed normal entry the next morning. Without forgiveness, an anti-passback violation occurs in this instance also. Forgiveness is not available unless anti-passback is selected.

If the Anti-passback option is not selected, WIN-PAK 2.0 defaults to a free egress configuration. A card is not required to exit. Instead, the door can be activated by a button, motion detector, or other device. For example, with an N-1000-II panel, card reader 1 activates one door, and card reader 2 activates a different door. Inputs 3 and 4 are reserved for the exit devices for these two doors which releases locks just like a valid card read.

- **Groups:** Select this option if you want to create output relay groups. Output relay groups allow a card read to activate more than one output relay for applications such as elevator control. When the Groups option is used, a valid card read on Reader 1 pulses the group, while a valid card read on Reader 2 pulses Relay 2. If you want a valid card read on any reader to pulse the group, select the **All readers use the same group** option. Groups must be selected to access the AEP-3 in Hardware Options
- **Keypads:** Select this option if matrix style (11-wire) keypads are used with the panel. If using Wiegand style (5-wire) keypads, the keypad is treated as a reader and this option should **not** be selected.

- **PIN and PIN Timezone:** These options are available only if the Keypad option is selected. Select **PIN** (personal identification number) if a keycode must be entered **before** presenting a card to gain access. Do not select this option if the panel is using keypads without readers. From the **PIN Timezone** list, select the Time Zone during which a PIN is required.
- **Continuous Card Reads:** Select this option to allow card readers to read cards continuously, independent of output pulse time. If the option is not selected, card readers do not recognize valid cards while the corresponding output is energized. For example, **without** the Continuous Card Reads option and output 1 assigned a 10 second pulse time, a valid card read at reader 1 causes output 1 to energize for 10 seconds, during which time the card reader does not recognize any other valid cards.
- **Reverse Read LEDs:** Select this option to reverse the standard LED operation of the reader. If this option is selected, a reader that normally changes from green to red on a valid card read, will change from red to green.
- **Command File:** Provides the name of the defined command files that contain special programming for the control panel. A command file must be defined before you can select it.
- **Site Codes:** Enter up to 8 Site Codes in this section. Site Codes are encoded with a card number on cards to ensure that cards belong to the facility where access is attempted. Click any space in the table to enter a Site Code. If no site codes are defined, then site code checking is not performed.

When the system is set up for 12 digit card numbers, Site Codes cannot be entered.

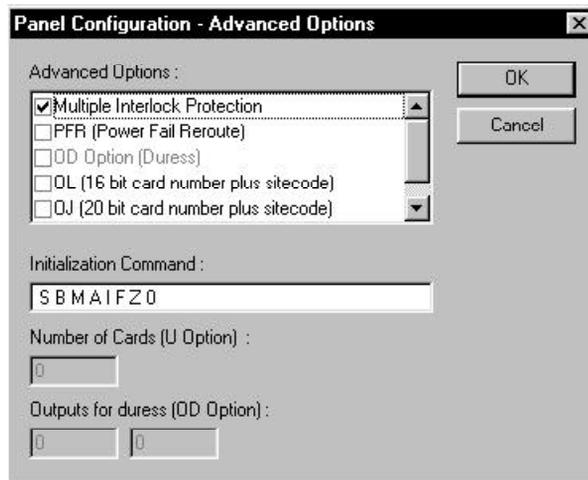
Hardware Options

The available hardware options vary depending on the type of panel selected. The AEP-5 (supervised input board) and ERB (Expanded Relay Board) are only used with N-1000-II panels.

If the **Groups** option is selected, you can select one or two **AEP-3 Output Expansion Boards**. Each board adds eight output relays to a panel.

To configure the Advanced options, click the **Advanced** button. The Panel Configuration - Advanced Options window appears.

Panel Configuration - Advanced Options



- 1 Enable or disable advanced options as desired. Refer to the descriptions of the advanced options below.
 - **Multiple Interlock Protection (MIP):** (Available with all N-1000 series panels.) Requires that all input points tied to a single output return to a normal state before the output is de-energized. Without MIP, just one input returning to the normal state de-energizes the output.
 - **PFR (Power Fail Reroute)** (Available only with the N-1000-II using AEP-5). Allows Input 8

(Primary Power) to be rerouted to input 9 (Primary Power - System Alarm). Freeing up input 8 on the AEP-5 to be used as a standard/supervised input point.

- **OL (16 bit card number plus site code):** (Available with all N-1000 series panels.) Creates Wiegand card numbers by concatenating site code with card numbers. The result is transmitted as a 12-digit number. **Do Not** add site codes to the panel with this option.

Use either OJ or OL options. They cannot be used at the same time.

- **OJ (20 bit card number plus site code):** (Only available with 8.03 firmware or higher.) Sets the format for 20 bit card numbers. The first 12 bits are interpreted as the site code and the last 8 as the card number. The card number is sent to the head end software as a 12-digit number.
- **U option:** (Available with all N-1000 series panels.) Allows the user to change the number of cards the panel supports. Selecting more cards reduces the number of buffers available to store events when the panel is not on-line with the computer (or heavy traffic prevents immediate transmission of all events).
- **OD (Duress Option):** (Only available with the N-1000 with 8.03 firmware) when configured for PIN operation and a PIN is used that is a value of 1 different from the valid PIN, then the output defined in **Outputs for Duress** will pulse. When configured with firmware later than 8.03, then 2 outputs can be selected.
- **OH (25 bit card number plus site code):** (Available for use with firmware later than 8.03) Allows special card format applications.
- **Initialization Command:** Displays the command string that is sent to the panel at initialization.
- **Number of cards for U option:** Allows you to enter the number of cards for the panel, if the **U option** is selected.

- 2 When you have selected all the desired options, click **OK**.
- 3 Click **Next**. The Panel Configuration - Inputs window appears.

Panel Configuration - Inputs

The screenshot shows the 'Panel Configuration - Inputs' dialog box. It has a title bar with the text 'Panel Configuration - Inputs'. Inside, there is a 'Name:' section with a list box containing five items: '1 - Rm 103', '2 - No ADV', '3 - No ADV', '4 - No ADV', and '5 - No ADV'. Each item has a checkbox to its left. '1 - Rm 103', '3 - No ADV', and '5 - No ADV' are checked. '3 - No ADV' is highlighted in blue. Below the list box is a 'Time Zone:' dropdown menu set to 'None'. To the right of the list box are four buttons: 'Add', 'Edit', 'Isolate', and 'Delete', and a 'Show' checkbox. Below the 'Time Zone' dropdown are three radio buttons for 'Sec', 'Min', and 'Hr', with 'Sec' selected. There are two numeric input fields: 'Shunt Time:' with the value '15' and 'Debounce Time:' with the value '0'. To the right of these fields are two checkboxes: 'Supervised' (unchecked) and 'Normally Closed' (checked). Below these are two more checkboxes: 'Interlocking' (unchecked) and 'Report Alarms:' (checked). The 'Report Alarms:' section has three radio buttons: 'Never', 'Trouble', and 'Always', with 'Always' selected. At the bottom of the dialog are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

The panel input points are configured in this dialog box. All the input points available on the current panel are listed.

- 1 Select the check box for each input point you want active. Once an input point is selected, other settings are available. WIN-PAK 2.0 sets some input points as active and may assign them an interlock value. These default settings vary depending on the type of panel and whether or not you have chosen the anti-passback option. All of these settings can be edited.

- 2 Make the desired selection from the following options:
 - **Time Zone:** To shunt (deactivate) an input point during a particular time zone, select that time zone from the list.
 - **Shunt Time:** Enter a value here to set the amount of time that the input point is deactivated (shunted) when triggered. This can be set in seconds, minutes or hours by using the selection buttons directly above the option .
 - **Debounce Time:** This option sets the amount of time, in seconds, that an input must be in a changed state before that change is reported. For example, an input point with a debounce time of 5 must be in active condition for five seconds before it is reported as an alarm. The same is true when returning to normal condition. The point would not report as normal until it was in the normal state for five seconds. If the value is set to zero, the debounce time is a minimum of .33 seconds on events returning to normal and 0 seconds going into alarm.
 - **Interlocking:** In the case of input points, interlocking is linking the changing state of the input to either another input, an output, or a group of outputs.
- 3 Create an ADV for each input point. Set up priorities for each state you want to monitor.

To Enable Interlocking for Inputs

- 1 Select an input and then select the **Interlocking** check box.
- 2 Above the **Point:** option, select **I**, **O** or **G** to indicate Input point, Output point, or Group, respectively.
- 3 Select the interlocking point from the **Point:** list.

Only input points, output points or groups that have already been activated appear on this list. If the point you need is not

listed, go to the correct dialog and activate the point, then return to this screen.

- 4 Select the **Alarm Action:** for the interlocked point. This is the action that the second point will take when the initial input becomes active.
- 5 Select the **Normal Action** for the interlocked point. This is the action the second point will take when the initial point returns to normal status.
- 6 The choices for both Normal and Active actions are **No Action, Energize, De-energize, Pulse, Pulse Off, Follow, Invert Follow.**

Supervised: All N-1000 alarm input points default to normally closed, non-supervised circuits used to monitor changes of state. The inputs on an N-1000 with an AEP-5 default to normally closed, supervised circuit to monitor changes of state. N-1000-III/IV inputs can also be configured for normally open circuits and 3-state supervised circuits. Select this check box to configure the selected input point as supervised, and then select your choice of **Normally Open**, or **Normally Closed**.

Report Alarms: If the selected input point is unsupervised, you can choose from **Never** or **Always**. If the input point is supervised, the **Trouble** option is also available, which would report only Trouble conditions.

Default Panel Input Definitions

Input	N-1000-II	N-1000-III	N-1000-IV
1	Door 1 State	Door 1 State	Door 1 State
2	Door 2 State	Door 2 State	Door 2 State
3	Egress 1	General Alarm	Door 3 State
4	Egress 2	General Alarm	Door 4 State
5	General Alarm	Egress 1	Egress 1
6	General Alarm	Egress 2	Egress 2
7	General Alarm	General Alarm	Egress 3
8	Primary Power	General Alarm	Egress 4
9-11	General Alarm*	General Alarm	General Alarm
12	Tamper	General Alarm	General Alarm
13-16	General Alarm*	General Alarm	General Alarm
* may be used as matrix keypad inputs when the keypad option is enabled.			

- 7 Create ADVs as needed for system control.
- 8 Click **Next**. The Panel Configuration - Outputs window appears.

Panel Configuration - Outputs

Panel Configuration - Outputs

Name :

- 1 - Front Offices 2 - Out 1
- 2 - No ADV
- 3 - No ADV
- 4 - No ADV
- 5 - No ADV
- 6 - No ADV

Time Zone :

None

Sec Min Hr

Pulse Time : 10

Interlocking I O G

Point : 3 - No ADV

On Action : Follow

Off Action : No Action

< Back Next > Cancel Help

ADV

Add

Edit

Isolate

Delete

Show

- 1 Select the check box for each output point you want active. Once an output point is selected, other settings are available. WIN-PAK 2.0 sets some output points as active and may assign them an interlock value. These default settings vary depending on the type of panel and whether or not you have chosen the anti-passback option. All of these settings can be edited.
- 2 Make the desired selection from the following options:
 - **Time Zone:** To turn an output point on during a particular Time Zone, select that Time Zone from this list.
 - **Pulse Time:** Enter a value here (in seconds, minutes or hours) to set the amount of time that the output point is energized when triggered. This

can be any time interval from 0 to 63 hours.

- **Interlocking:** In the case of output points, interlocking is linking the changing state of the output to either an input, another output, or a group of outputs.

To Enable Interlocking for Outputs

- 1 Enable Interlocking for the selected output by selecting the **Interlocking** check box.
- 2 Above the **Point** option, select **I**, **O** or **G** to indicate Input point, Output point, or Group, respectively.
- 3 Select the interlocking point from the **Point:** list.

Only input points, output points or groups that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this screen.

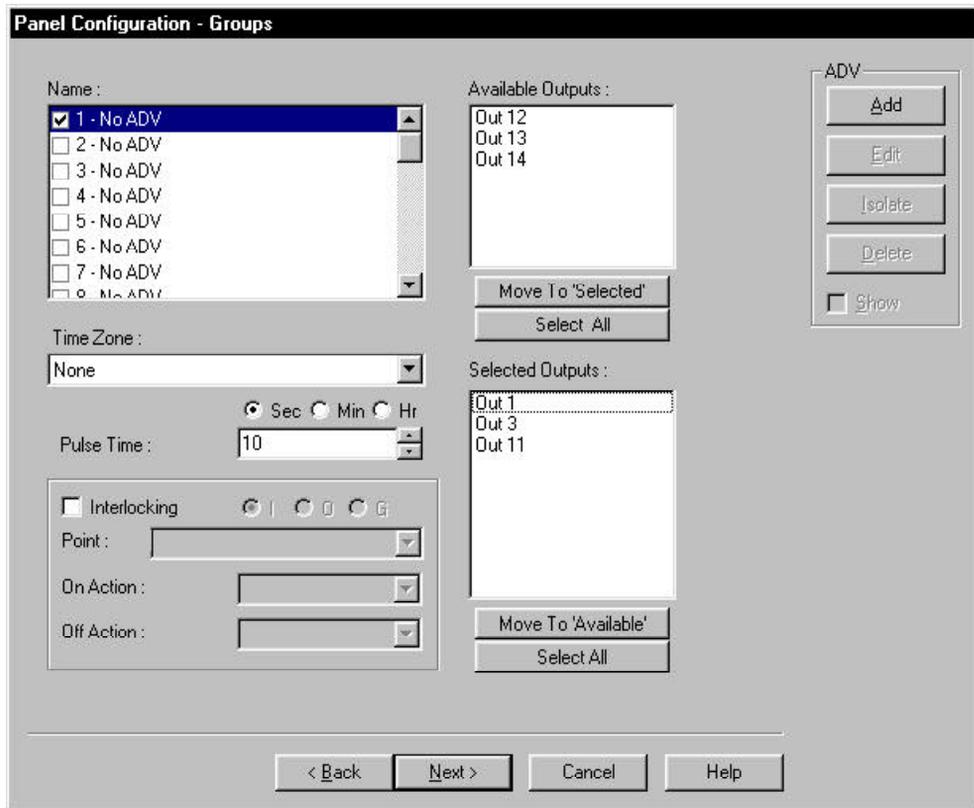
- 4 Select the **On Action** for the interlocked point. This is the action that the second point will take when the initial output goes on.
- 5 Select the **Off Action** for the interlocked point. This is the action the second point will take when the initial point goes off.

The choices for both On and Off actions are **No Action, Energize, De-energize, Pulse, Pulse Off, Follow, Invert Follow.**
- 6 Create ADVs as needed for system control. For example, the output ADV is used on the floor plan to monitor the state of the output. (Energized, De-energized, Trouble (not responding to poll)).
- 7 Click **Next**. The Panel Configuration Groups window appears.

Default Panel Output Definitions

Output	N-1000-II	N-1000-III	N-1000-IV
1	Door 1	Door 1	Door 1
2	Door 2	Door 2	Door 2
3	Aux	Aux	Door 3
4	Aux	Aux	Door 4
5-8 (X ver.)	Aux	Aux	Aux
9	ERB option relay 9-not available with AEP-3	Aux TTL output	N/A
10	ERB option relay 9-not available with AEP-3	Aux TTL output	N/A
11	ERB option relay 9-not available with AEP-3	Rdv 1 Led	Rdr 1 Led
12	ERB option relay 9-not available with AEP-3	Rdv 2 Led	Rdr 2 Led
13	Rdr 1 Led	N/A	Rdr 3 Led
14	Rdr 2 Led	N/A	Rdr 4 Led
15 16	TTL-output used for AEP Oprsy	N/A	N/A
17-24	AEP-3 Brd 1	AEP-3 Brd 1	AEP-3 Brd 1
25-32	AEP-3 Brd 2	AEP-3 Brd 2	AEP-3 Brd 2

Panel Configuration - Groups



A *Group* is one or more active output points that are *grouped* together. As many as 32 groups can be defined per panel. Groups are created in the **Panel** definition, **Groups** dialogue box. Groups can also be created or edited by opening the panel on the **Device Tree**. And clicking the **Groups** tab.

The **Groups** option must be selected in the **Options** dialog box.

- 1 In the **Name:** list, check the box for the Group you are defining. A list of available outputs appears in the **Available Outputs** list.
- 2 Click the outputs for the Group, and then click **Move to 'Selected'**. Or click **Select All**, and then click **Move to 'Selected'** to add all of the available outputs to the Group. The selected outputs appear in the **Selected Outputs** list.

- 3 Select a *Time Zone*, *Pulse Time*, and *Interlocking* for the Group, as outlined for Outputs.
- 4 Add an ADV as needed for system control.
- 5 Click **Next**. The Panel Configuration - Readers window appears

Panel Configuration - Readers

The screenshot displays the 'Panel Configuration - Readers' window. At the top left, there is a 'Reader:' section with a list box containing four items: '1 - Front Offices - Read 1', '2 - Front Offices - Read 2', '3 - No ADV', and '4 - No ADV'. All items are checked, and '3 - No ADV' is selected. To the right of this list is an 'Enable PIN' checkbox, which is unchecked. On the right side of the window, there is an 'ADV' section with buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox, which is also unchecked. The main area contains a diagram with three input boxes: 'Read 3', 'Free Egress Input : In 7', and 'Status Input : In 3 Shunt Time 15 sec'. A 'Direct Point : Out 3 Pulse Time 10 sec' box is connected to 'Read 3' and 'Free Egress Input : In 7' with a line labeled 'Pulse - No Action'. Another line labeled 'Follow - No Action' connects 'Direct Point : Out 3 Pulse Time 10 sec' to 'Status Input : In 3 Shunt Time 15 sec'. At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

Individual readers for the current panel are defined in the **Readers** dialog box. The number of readers available depends on the type of panel that is being defined. By default all available readers are active. Also by default, the Door option is selected. This provides the basic free egress interlocking, if anti-passback is not selected. If the Anti-passback option is selected (Options tab), the readers default to anti-passback settings.

- 1 Create ADVs for each reader. If the Door option is selected, there are additional actions available (for example, door normal, door ajar, etc.).
- 2 When the PIN option (on the Options tab) is selected, you can set the selected reader not to require a PIN.
- 3 Make any desired adjustments in the settings for interlock, pulse/shunt time, debounce or restore factory defaults from this screen. Click the **Input** or **Direct Point** buttons. A Configure window appears allowing you to change these settings. Changes made here are reflected in the Input, Output or Group tabs.
- 4 When you have made all adjustments, click **Next**.
- 5 Click **Finish**.

Interlocking Input and Output Points

The interlocking feature allows an input point or output point to take a specified action based on the change of state of another input point or output point. In an interlock sequence, an action on one point causes a reaction from a second point.

Interlocks initiated by an input point change of state are defined in the **Input** dialog box of the **Panel** definition. (To edit input interlocking, expand the **Device Map**, and then right-click the panel you want to edit. Select **Configure** and click the **Inputs** tab.)

Interlocks initiated by an output point change of state are defined in the **Output** dialog box of the **Panel** definition. (To edit output interlocking, expand the **Device Map**, and then right-click the panel you want to edit. Select **Configure** and click the **Outputs** tab.)

Component A: From the list at the left select the check box of the input or output point that will initiate the interlock sequence. A change of state on Component A causes a reaction from Component B.

Select the **Interlocking** check box to make the **Interlocking** section available.

Component B: Select **I**, **O** or **G** for an input point, output point or group, respectively, then select the point to react to a change of state of Component A.

Action 1: Specify the action Component B takes when Component A goes into an active state (input) or on (output).

Action 2: Specify the action for Component B to take when Component A returns to a normal state (input) or off (output).

The actions available are as follows:

- **Energize** Turn the point on.
- **De-Energize** Turn the point off.
- **Pulse** Energize the point for a set amount of

time.

- **Pulse Off** Turn off a point currently being pulsed. When relay is energized, it will Pulse Off and then return to Energized state. (This is rarely used and must be used in addition to a command file.)
- **No Action** No change of state.
- **Follow** Take the state of Component A.
- **Invert Follow** Take the opposite state of Component A.

When a Follow action is specified for Alarm Action, No Action must be specified for Action 2. A Follow/No Action specification causes Component B to follow any change of state of Component A.

Interlocking Examples

Example 1

- **Component A:** Input 5, motion detector
- **Component B:** Output 3, siren
- **Action 1:** Energize
- **Action 2:** De-energize

When the motion detector is triggered, input 5 goes into active state, output 3 energizes, sounding the alarm. When input 5 returns to normal state, output 3 de-energizes, turning off the siren.

Example 2

- **Component A:** Input 6, door status switch
- **Component B:** Output 4, bell
- **Action 1:** Pulse
- **Action 2:** No Action

When the door status switch is opened illegally, input 6 goes into active state, output 4 pulses for its set pulse time. The pulse time is set in the Output Point dialog box.

Example 3

- **Component A:** Output 1, door strike relay
- **Component B:** Input 1, door status switch
- **Action 1:** Follow
- **Action 2:** No action

When a valid card read or egress causes output 1 to energize, input 1 is shunted for the defined shunt time. Input 1 follows the state of output 1.

Example 4

- **Component A:** Input 7, push button
- **Component B:** Input 8, motion detector
- **Action 1:** Pulse
- **Action 2:** No Action

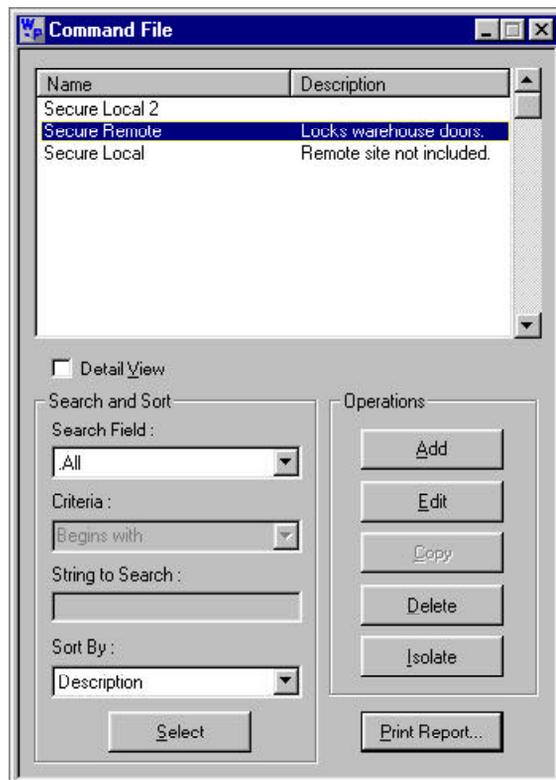
When the push button is activated, input 7 goes into active state, input 8 pulses (shunts) for its set shunt time, deactivating the motion detector.

Command File Database

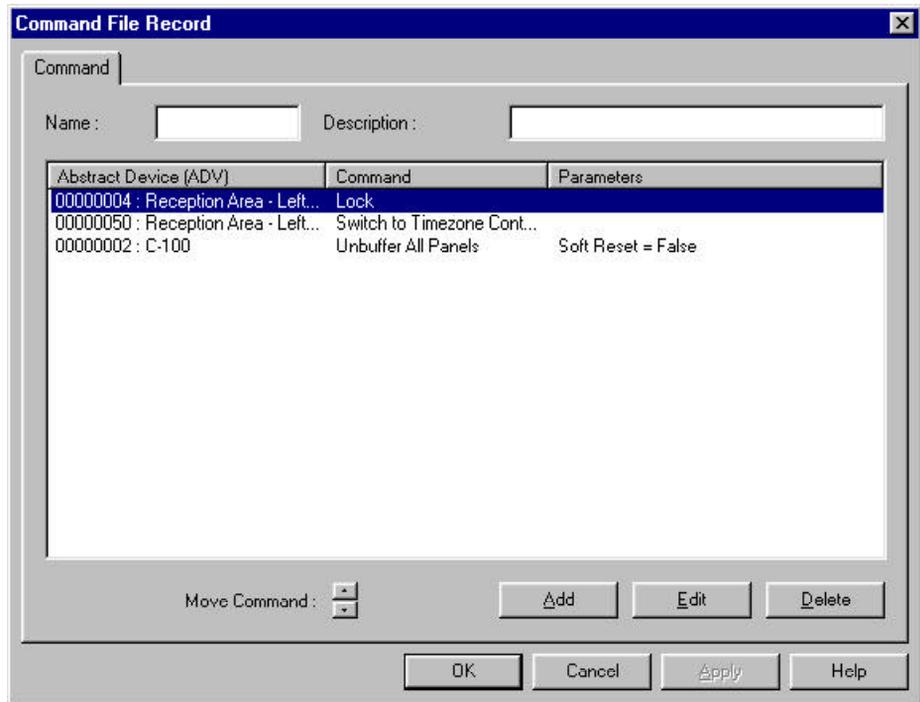
Text files containing device instructions are stored in the **Command File** database. A name and description are assigned to one or more commands. This file is then saved as a command file. In setting up an ADV Action Group, command files can be used to set up dependencies. When a particular event takes place, a designated command file is activated. For example, a command file can be activated automatically on receiving, acknowledging, or clearing an alarm, as defined in the Action Group.

To Add a Command File

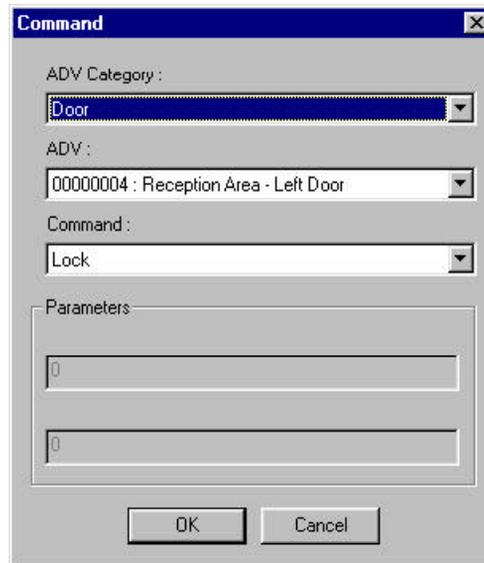
- 1 In the **Configuration** menu, click **Command File**. The Command File window appears.



- 2 Click **Add**. The **Command File Record** window appears.



- 3 In the **Name** box, enter a descriptive name for the command file (up to 20 alpha/numeric characters).
- 4 In the **Description** box, enter a description, if desired.
- 5 Click **Add** in the Command File Record window to open the Command window.



- 6 Click the pull-down arrow in the **ADV Category** box, and select the correct ADV Category.
- 7 Click the pull-down arrow in the **ADV** box, and select the correct ADV.

The ADV selected determines which commands are available.

- 8 Click the pull-down arrow in the **Command** box and select the desired command. (Commands that are not listed can be sent to a panel as Custom Commands. See the following procedure.)

If parameters are required for the command you have selected, choose them from the available choices or enter the required variables in the **Parameters** box.

- 9 Click **OK** to close the Command window, and the new command is added to the list in the Command File Record window.
- 10 Click **OK** to close the Command File Record window and save the changes to the Command file.

Add as many commands as you wish to this file. If necessary, use the **Move Command** arrows to adjust the order of the commands you have entered.

To Add a Custom Command

- 1 In **ADV category**, select **Panel**.
- 2 From the **ADV** list, select the panel name.
- 3 From the **Command** list, select **Custom Command**.
- 4 Type the command in the **Parameters/Custom Command** field.
- 5 Click **OK**.

To Edit a Command File

- 1 Select the Command File you want to edit from the Command File window.
- 2 Click **Edit**. The Command File Record window appears.
- 3 To change the name or description, select the existing text and enter the new information in the name and description fields.
- 4 To delete a command, select it from the list in the Command File Record window. Click the **Delete** button.
- 5 Use the **Move Command** arrows below the list to rearrange the order in which the commands are sent. The commands at the top of the list are sent first.
- 6 When you have completed editing this Command File, click **OK**.

To Delete a Command File

- 1 Select the Command File you want to delete from the Command File window.
- 2 Click the **Delete** button.

If the Command File is not in use it is removed from the database. If the Command File is referenced by an ADV Action Group or a panel, you receive a message indicating that it is in use. Remove Command File from all Action Groups and panels using the Isolate function.

Available Commands

ADV	Commands	Parameters
CCTV Camera	Go Home	
	Go to Preset	
	Iris Open	
	Iris close	
	Pan Left	
	Pan Right	
	Refresh	
	Set Home	
	Set Limit	
	Set Preset	
	Stop	
	Tilt Down	
	Zoom In	
	Zoom Out	
CCTV Camera	Refresh	
Switcher	Switch Camera to Monitor	
	(Camera ID)	0 - 65335
	(Monitor ID)	0 - 65335
CCTV Monitor	Refresh	
	Switch Camera (Camera ID)	0 - 65335
Door	Lock	
	Pulse	
	Timed Pulse	0 - 65335 sec.
	Unlock	

Input:	Shunt	
	Switch To Time Zone Control	
	Unshunt	
Loop:	Buffer All Panels	
	Unbuffer All Panels	0 = Hard , 1=Soft
Output & Group	De-energize	
	Energize	
	Pulse	
	Switch to Time Zone Control	
	Timed Pulse	0 - 65335 sec.
Panel:	Buffer	
	Unbuffer	
	Custom Command	
Server (Comm):	Refresh	

Part 4

Floor Plans

Floor Plan Database

Floor Plan Definition

Floor Plan Control Properties

Floor Plan Links



Floor Plan Database

The **Floor Plan** database contains information on all the Floor Plans that have been entered into the system. Floor Plans can be added, changed or deleted from the Floor Plan database.

To open the Floor Plan database, select **Floor Plan Definition** on the **Configuration** menu. The Floor Plan database list displays existing floor plans by name and description.

The information in the Floor Plan database can be searched and sorted by name and description. (See Main Database Window.)

The **Add**, **Edit** and **Delete** buttons allow you to create new floor plans, edit existing ones or remove Floor Plan definitions from the system.

Floor Plan Definition

The Floor Plan begins with the Floor Plan background of your choice. This background is a static graphic image that can be an actual Floor Plan drawing, a photo or just a simple graph. Floor Plan backgrounds are imported as .wmf (Windows Metafile) graphics which are scalable so that the Floor Plan view can be easily enlarged or reduced without distortion. Or, if you prefer, a Floor Plan can be created without a background graphic.

The next step is to add an ADV for each device you want to monitor or control from this Floor Plan. You can choose from any of the ADVs that have been defined. Different objects (e.g., doors, panels, C-100 loops) are available in the toolbox for the different types of ADVs you may want to use.

Add any links to other Floor Plans or to an Alarm or Event view. In addition, you can add a text block to your Floor Plan. If, for example, you may want to create a legend explaining the color codes of the ADVs

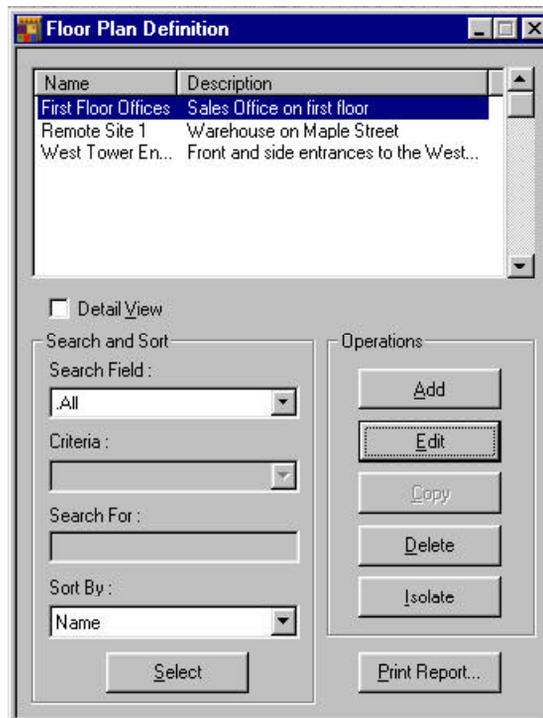
or special instructions for the operator viewing a particular Floor Plan. Just select the text object from the toolbox, drag it onto the background and type in the text.

Once an object has been dragged from the toolbox onto the floor plan, it has a right-click menu that allows you to set its properties, copy or delete it.

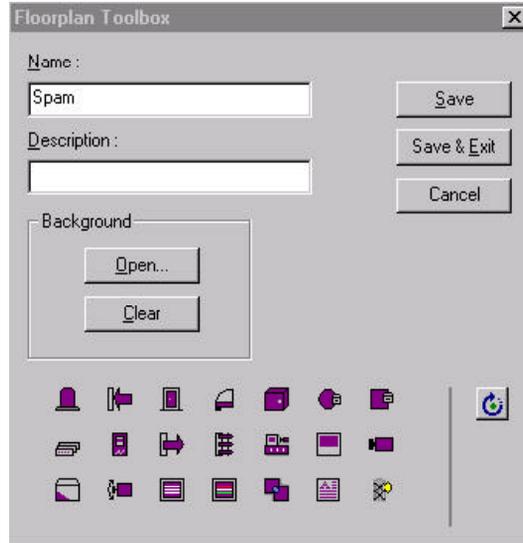
A Floor Plan object must be selected (left-click) before its properties can be changed. Be sure that you have selected the correct object (there is a visible box around the selected object) before setting its properties.

To Add a Floor Plan

- 1 In the **Configuration** menu, click **Floor Plan Definition**. The Floor Plan Definition window appears.



- 2 Click **Add**. The Floor Plan window appears along with the Floor Plan toolbox window.



- 3 In the **Name** box, enter a name for the floor plan (required). Use up to 30 alpha/numeric characters.
- 4 In the **Description** box, enter a description of the Floor Plan (optional). Use up to 30 alpha/numeric characters.
- 5 Complete the instructions in sections A (optional), B and C.

A. Open a Background

- 1 In the **Background** area, click **Open**. The Open window appears.



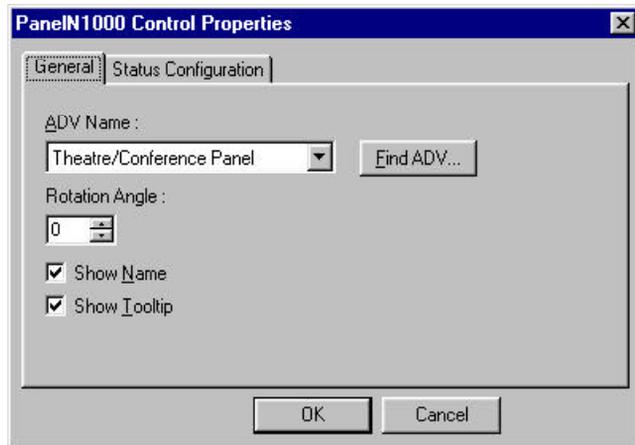
- 2 Navigate to the **FloorPlanImage** directory, and select a Floor Plan background.
- 3 Click **Open**. The selected graphic file opens in the window behind the **Floor Plan Toolbox**.
- 4 Add ADVs, links and text objects to the background.

Any graphic can be used for a Floor Plan background, as long as it is saved as a Windows metafile (.wmf). Copy the graphic files to the **FloorPlanImage** folder in the WIN-PAK 2.0 Database directory.

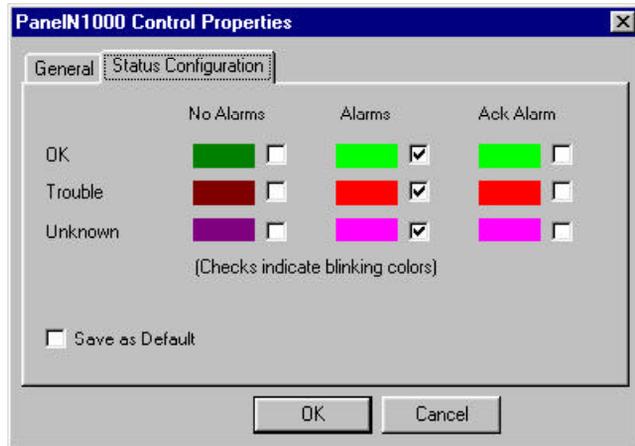
B. Add ADVs, Links, and Text Objects

Select an object from the **Floor Plan Toolbox** and drag it onto the Floor Plan background.

- 1 Right-click the object you have selected and click **Control Properties**. The *Device Control Properties* window, General tab, appears (where *Device* is the type of object you select; for example, *Panel N1000 Control Properties* or *Comm Server Control Properties*).



- 2 If this is an ADV control object, click **Find ADV** and select the ADV you want associated with the object.
- 3 Click the **Status Configuration** tab, and make any desired changes in the color or blink settings.



To change a color, click the color swatch. The Color window appears. Select a basic color or create a custom color and then click **OK**. (For more information refer to Chapter 5 Badging, Custom Colors).

By default, devices in alarm state blink. This is indicated by a checked box. To change this setting, select or deselect the appropriate boxes.

The new status configuration can be saved and applied as the default for other ADVs of this type. Simply select the **Save as Default** box.

- 4 Click **OK**.
- 5 If the object is a link to another floor plan, select the name of the target from the pull-down list.
- 6 If the object is a text block, type the desired text in the text block.
- 7 Click **Save** or **Save & Exit**.

C. Arrange Objects on the Floor Plan

- 1 Click and drag the ADVs and other objects to the desired position on the Floor Plan background.
- 2 To enlarge or reduce an object, click it, and then drag a corner sizing handle until the object is the desired size.
- 3 To rotate an object, select it (left-click) and then right-click and click **Control Properties**. Select the angle of rotation, and then click **OK**.
- 4 Click **Save**.
- 5 When you have added and arranged all objects, click **Save and Exit** to close the Floor Plan window.

To Edit a Floor Plan

- 1 In the **Configuration** menu, click **Floor Plan Definition**. The Floor Plan Definition window appears.



- 2 Select the Floor Plan you want to edit from the list and then click **Edit**. You can change the name or description of the Floor Plan, add or delete objects or change properties of existing objects.
- 3 To add ADVs or other objects, select the type of object you want from the **Floor Plan Toolbox** and drag it onto the Floor Plan.
- 4 Select and right-click the object, and then click **Control Properties**. Set the object's properties as desired.
- 5 To delete an object, select it, then right-click, and click **Delete Control**.
- 6 When you have finished editing the Floor Plan, click **Save and Exit**.

Adding an ADV

You can add an ADV that is already defined to a Floor Plan view.

To Add an ADV to a Floor Plan

- 1 In the **Configuration** menu, click **Floor Plan Definition**. The Floor Plan Definition window appears.
- 2 Select the Floor Plan you want to edit from the list and then click **Edit**. From the **Floor Plan Tool Box**, select the type of ADV you want to add to the Floor Plan and drag it onto the floor plan.
- 3 Be sure that the new object is selected (a box is visible around it), then right-click the new ADV and click **Control Properties**. Click the **Find Now** button, and then select the ADV you want from the list.
- 4 Click the **Status Configuration** tab, and make any desired changes to the color or blink settings.

To change a color, click the color swatch. The Color window appears. Select a basic color or create a custom color and then click **OK**. (For more information refer to Chapter 5 Badging, Custom Colors).

By default, devices in alarm state blink. This is indicated by a checked box. To change this setting, select or deselect the appropriate boxes.

The new status configuration can be saved and applied as the default for other ADVs of this type. Simply select the **Save as Default** box.

- 5 Click **OK** to save your changes. Drag the ADV to the desired position on the Floor Plan.
- 6 Click **Save** or **Save and Exit**.

Floor Plan Control Properties

Alarms can be acknowledged and cleared from the Floor Plan and system devices can be controlled. Right-click an ADV on the Floor Plan view to open its control menu, and then select the desired action. The available control functions depends on what type of object you select. Below is a list of typical ADVs and their control functions.

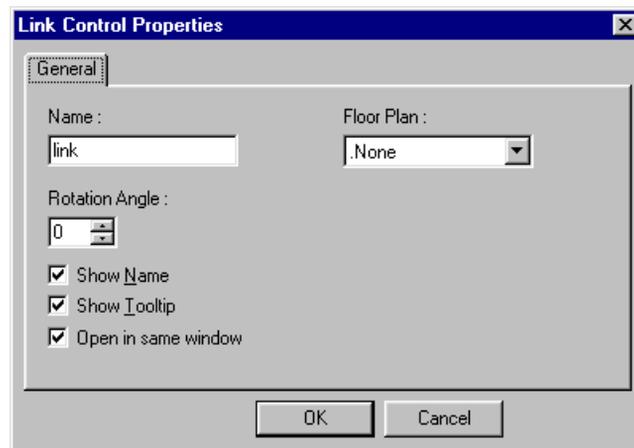
CCTV	Switch (click camera ADV and drop on monitor ADV) Pan, Tilt, Zoom, Focus
Comm Server	Acknowledge All Alarms, Clear All Alarms
Doors	Lock, Unlock, Pulse, Timed Pulse, Restore to Time Zone, Acknowledge All Alarms, Clear All Alarms
Input Points	Acknowledge All Alarms, Clear All Alarms, Shunt, Un-shunt, Restore to Timezone
Outputs/Groups	Energize, De-Energize, Pulse, Timed Pulse, Restore to Time Zone
Panel	Initialize, Cancel Initialization, Buffer (Hard or Soft), Un-Buffer (Hard or Soft), Acknowledge All Alarms, Clear All Alarms
Command File Server	Run Command File
Loop C-100 & 485 Dropline	Ack All Alarms, Clear All Alarms, Buffer All Panels (Hard or Soft), Un-Buffer All Panels (Hard or Soft) Set Retry Count, Set Command Timeout, Connect Remote, Disconnect Remote
Modem Pool	Ack All Alarms, Clear All Alarms, Hangup Modem, Reset Modem
Switcher	Ack All Alarms, Clear All Alarms, Send Camera Titles, Camera to Monitor Switch

Floor Plan Links

A floor plan can contain links to other floor plans. Right-clicking a Floor Plan link will open the linked Floor Plan on the screen.

To Add a Floor Plan Link to a Floor Plan

- 1 On the **Configuration** menu, click **Floor Plan Definition**.
- 2 Select the Floor Plan you want to edit from the list and then click **Edit**. From the **Floor Plan Tool Box**, select the link object and drag it onto the Floor Plan.
- 3 Select and right-click the link, and then click **Control Properties**.



- 4 Enter a name for the link (optional).
- 5 From the **Floor Plan** list, select the target floor plan. Select any of the following options:
 - **Show Name:** The link name appears under the ADV on the floor plan.
 - **Show Tool Tip:** The link name appears when the cursor is moved over the ADV on the floor plan.
 - **Open in same window:** When the link is

selected, the originating floor plan closes and the linked floor plan replaces it in the open floor plan window.

- 6 Click **OK** to save your changes. Drag the link to the desired position on the floor plan.
- 7 Click **Save** or **Save and Exit**.

Part 5

Access Areas & Levels

Access Areas

Access Levels

Access Level Database

Custom Access Levels

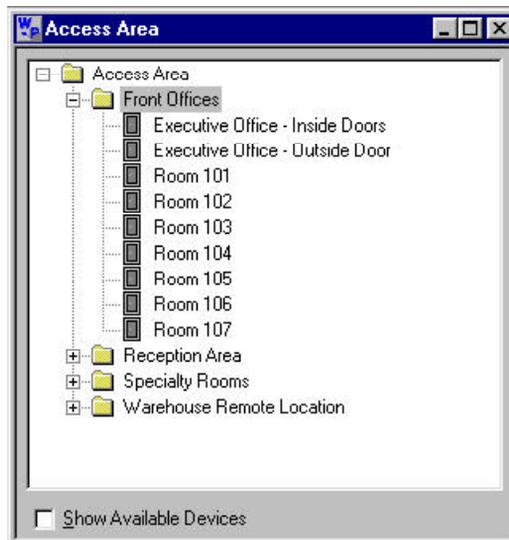


Access Areas

The Access Areas provide a logical map of your access control system. They show the entrances and their relative location within the system. Access Areas are used to define Access Levels. Once panels and readers have been defined and added to the Device Map, you can define the Access Areas by creating branches on a tree structure and then adding entrances to the branches. The example below has branches for *Front Offices*, *Reception Area*, *Specialty Rooms* and *Warehouse Remote Location*. The tree is expanded to show the entrances attached to the *Front Offices*. Branches can also have subbranches.

To Define Access Areas

- 1 In the **Configuration** menu, point to **Define**, then click **Access Areas**. The Access Areas window appears.



- 2 Right-click the **Access Area** folder, and select **Add Branch**. The Configure Branch window appears.



- 3 In the Branch Name field, enter a unique name for the Access Area.
- 4 Click **OK**. The new branch appears in the Access Area window.

To Add Entrances to an Access Area

- 1 Right-click the new branch, and click **Add Entrances**. The Add Devices window appears.



- 2 Click on the pull-down arrow in the **Device Type** box and select the entrances you want to add from the list of available entrances.
- 3 Click **Add**.

Entrances can be moved from one branch to another. Right-click an entrance and drag it to the desired branch.

To Remove an Entrance or a Branch

Right-click the entrance or branch to be removed and click **Remove**. An entrance cannot be removed if it is assigned to an access level.

To Rename a Branch

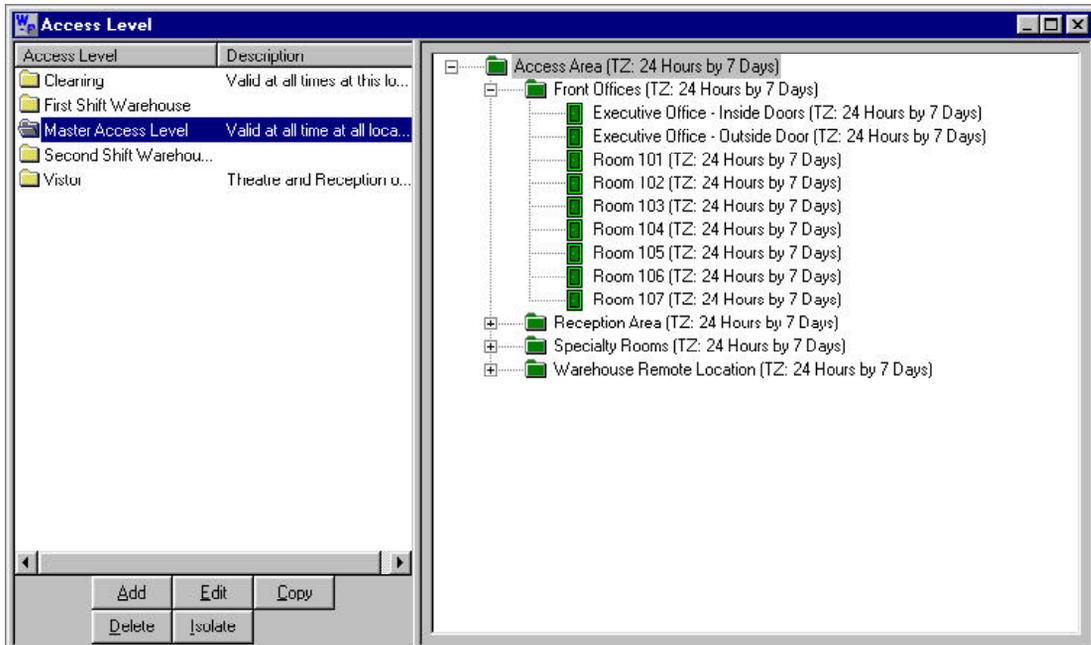
- 1 Right-click the branch you want to rename, and then click **Rename**.
- 2 Type the new name in the **Configure Branch, Branch Name** field.
- 3 Click **OK**.

Access Levels

Access levels determine where and when a user's card is valid in the system. An access level is made up of a list of readers with time zones. Together these elements define time periods during which the listed readers will grant access to the various doors. The ability to assign cards to a group of doors eliminates the need to program the card for every reader. When a card is activated it is assigned an access level. Changing the access level assigned to a card automatically changes when and where the card holder has access.

Access Level Database

The **Access Level** database contains information on existing access levels. These levels define which entrances a card holder can use and during what times. Open the Access Levels database from the **Card** menu by clicking **Access Levels**. The two pane Access Level database window appears.



On the left is a list of existing Access Levels. On the right is the **Access Area** tree. Below the left pane of the **Access Level** database are five buttons:

Add: Define new access levels.

Edit: Make changes in existing access levels.

Copy: Duplicate an access level, then make any desired changes.

Delete: Remove the selected access level.

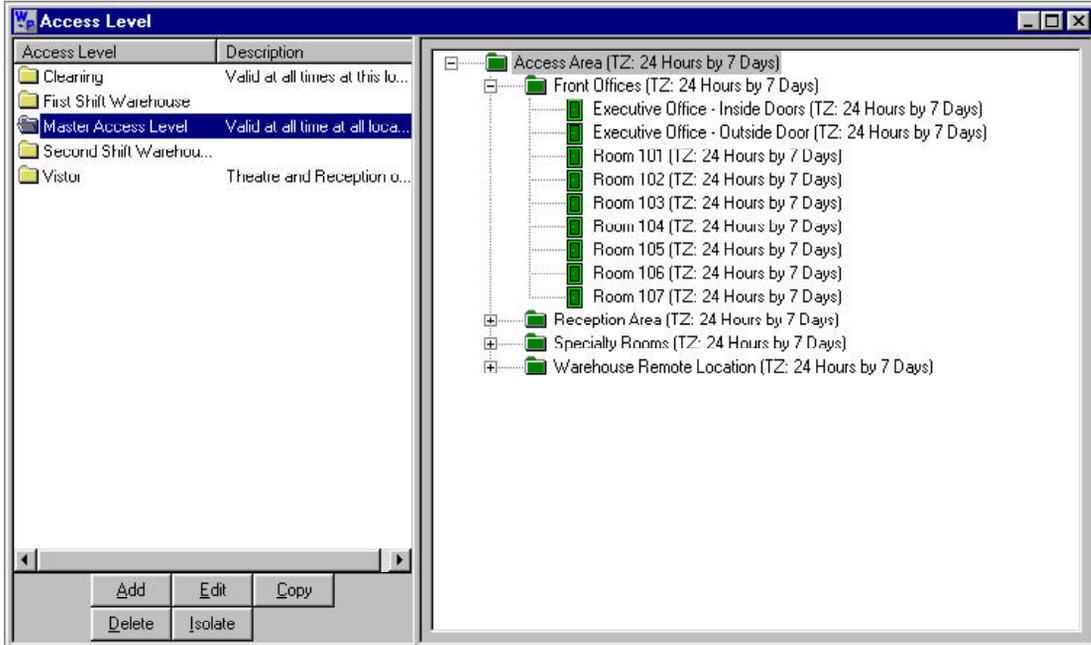
Isolate: Display the card holders assigned to the selected access level and/or reassign any such card holders to a different access level.

It is easy to tell at a glance what areas are included in a given access level. Select a level from the list in the left pane. The branches of the Access Areas are color-coded for the selected level: red means no access to any doors in the area. Yellow means access to some entrances in this area. Green means access to all entrances in this area during the assigned time zone. Click on a branch to view the entrances which are also color coded and have a time zone notation.

Access levels are defined by selecting entrances and assigning time zones to them. When a new access level is added, it has no access rights. All the folders and entrances in the Access Areas are red and no time zones are shown. To configure the new access level, right-click on an Access Area branch, then click **Configure**. Set Access for all entrances in this area and select a time zone. If you do this at the top most branch, the settings will be applied to all subbranches. To further refine your settings, you can repeat this procedure for individual readers.

To Add an Access Level

- 1 In the **Card** menu, click **Access Levels**. The **Access Level** window appears.



- 2 Click **Add**. The Define Access Level window appears.

The screenshot shows the 'Define Access Level' dialog box. It has a title bar 'Access Level' and a close button. Inside, there are two text input fields: 'Name :' and 'Description :'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

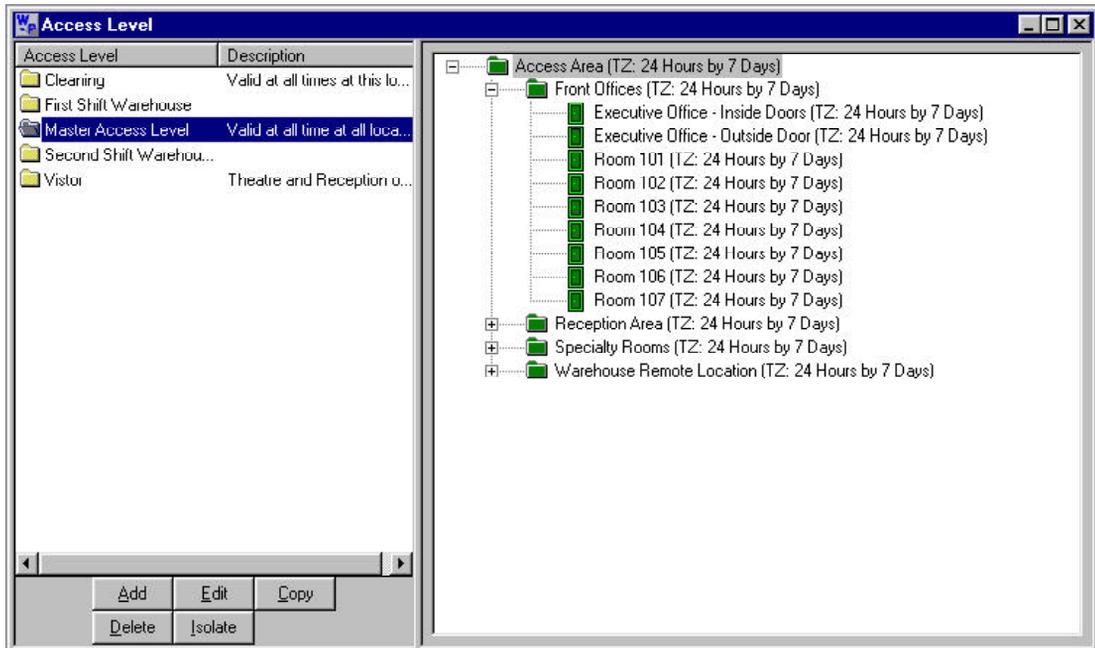
- 3 In the **Name** box, enter a name for the Access Level (required). Use up to 30 characters.
- 4 In the Description box, enter a description of the Access Level (optional). Use up to 30 characters.
- 5 Click **OK**. The new access level is added to the

list, but it has no access rights to any entrances. You must now configure the access level.

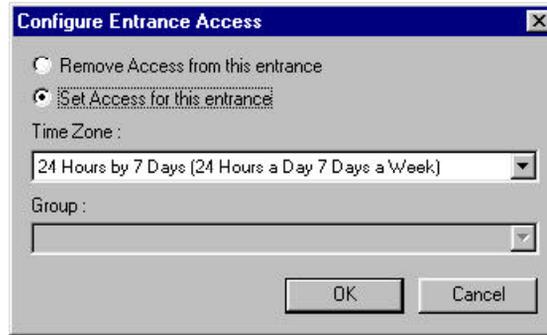
To Configure an Access Level

It usually saves time to configure whole branches in the access areas and then adjust individual readers. For example, the Cleaning access level shown below has access to all offices except the Executive Offices - Inside Doors. To configure this, first grant access to the entire Front Offices branch, then go back and restrict the one exception.

- 1 In the **Card** menu, click **Access Levels**. The **Access Level** window appears.



- 2 Right-click on an Access Area branch, then click **Configure**. The Configure Area Access window appears.



- 3 To allow access to all doors in the area, select **Set Access for all entrances in this area.**
- 4 Click on the pull-down arrow in the **Time Zone** box, and select a time zone from the list.

Time zones that are common to all readers in the branch are shown. A time zone that is unique to a specific reader can only be defined by the individual reader - not as the whole group.

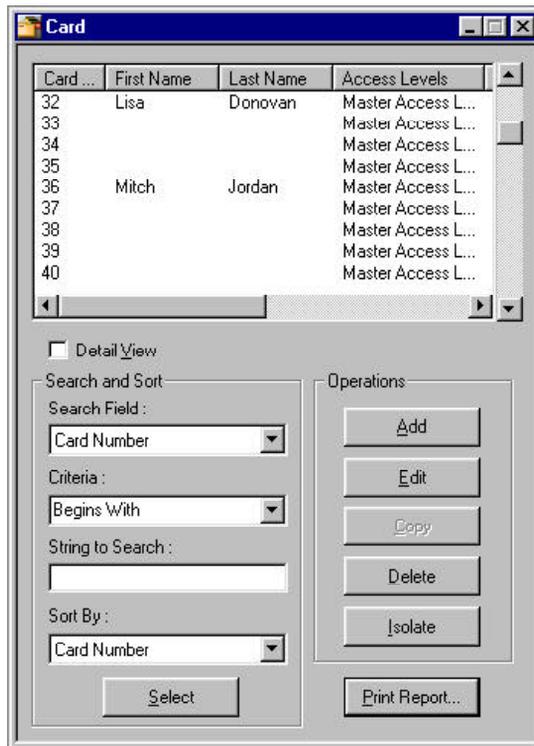
- 5 Click **OK.**
- 6 In the Access Level window, right-click individual entrances on the branch to customize the settings as necessary.
- 7 Continue with branches and entrances until the access level has the required configuration.

Custom Access Level

In certain cases, a general access level will not meet a card holder's specific needs. Therefore, a customized access level can be created for a card.

To Create a Custom Access Level

- 1 In the **Card** menu click **Card**. The Card window appears.



- 2 Select the card to which you are adding a custom access level.
- 3 Click **Edit**. The Card Record window appears.

Card Record

Card Properties | Badge

Card Number : 032 Status : Active Issue : 0

Card Holder : Lisa, Lisa Uses Left : 0 PIN #1 : 1456

Access Level : Master Access Level PIN #2 :

Custom Access Level : Add

Action Group : None Edit...

Activation Date : 03/08/1999 Expiration Date : 06/15/2000

Change Clear Change Clear

OK Cancel Apply Help

- 4 In the Custom Access Level area, click **Add**. The Custom Access Level window appears with the Access Level tree, which is a combination of entrances with assigned time zones.

Custom Access Level - 1

- Access Area
 - Front Offices (TZ: 2nd Shift)
 - Muster Area (TZ: 24 Hours by 7 Days)
 - Muster Reader (TZ: 24 Hours by 7 Day)
 - New Warehouse Remote Location
 - Entrance Gate Reader
 - Storage Warehouse
 - Reception Area (TZ: 2nd Shift)
 - Conference Door (TZ: 2nd Shift)
 - Reception Area - Left Door (TZ: 2nd Shift)
 - Reception Area - Right Door (TZ: 2nd Shift)
 - Specialty Rooms
 - File Room (TZ: 1st Shift)
 - Mechanical

Show Original Access Only

First Valid Date : None

Last Valid Date : None

OK Cancel

A custom access level is named after the card number that it is attached to. For example, Custom Access Level 55 is attached to Card 55.

- 5a To customize one entrance, right-click it, and click **Configure Access**. The Configure Entrance Access window appears. Check the Customize Access box for this entrance.

Select either:

Remove access from this entrance.

or

Set access for this entrance.

And select a time zone from the pull-down menu.

- 5b To customize a group of entrances, right-click the branch which contains the group, click **Configure Access**. The Configure Entrance Access window appears. Check the Customize Access box for this entrance.

Select either:

Remove access from all entrances in this area.

or

Set access for all entrances in this area.

And select a time zone from the pull-down menu.

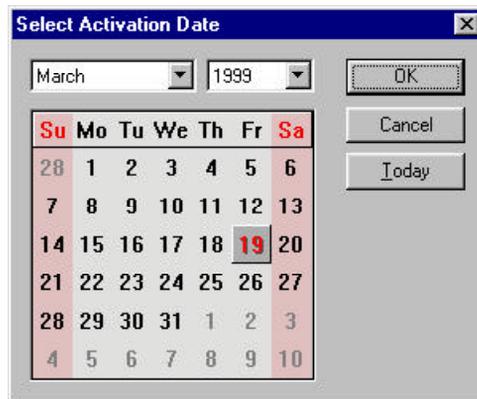
A blue dot denotes an entrance that has been customized for this access level.

- 6 Click **OK** to save the Custom Access Level.
- 7 Click **Cancel** to return to the Custom Access Level window.

The new customized access level can be compared with the previous, original access level by checking the box labeled Show Original Access Only. Changes cannot be made when the window is in this view state. To make changes (or to return to the custom access level), uncheck the box.

To Assign an Activation or Expiration Date to a Custom Access Level

- 1 In the **Card** menu click **Card**. The Card window appears.
- 2 Select the card to which you wish to add a custom access level.
- 3 Click **Edit**. The Card Record window appears.
- 4 In the Custom Access Level area, click **Add** or **Edit**. The Custom Access Level window appears.
- 5a To assign an activation date, click the button next to the label First Valid Date.
- 5b To assign an expiration date, click the button next to the label Last Valid Date.
- 6 Use the calendar to choose the desired date.



The Today button will program either the activation or expiration date to today's date.

Part 6

Control Areas & Operators

Control Areas

Operator Overview

Operator Levels Database

Operator Database

Operator Record View



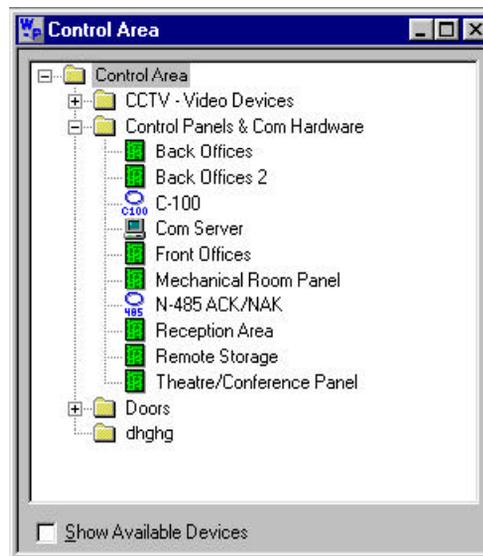
Control Areas

Control Areas are used to define the Operator Levels, and to filter alarms and other information being sent to the various views.

The Control Areas are defined by creating a Control Map of the system devices and adding them to a tree structure. This map shows the relationships of communication servers, loops, panels, input and output points and groups. In addition, the Control Map provides another way of controlling system devices. It can be opened from the **Operations** menu, by clicking **Control Map**. Right-clicking any device opens a control menu.

To Define Control Areas

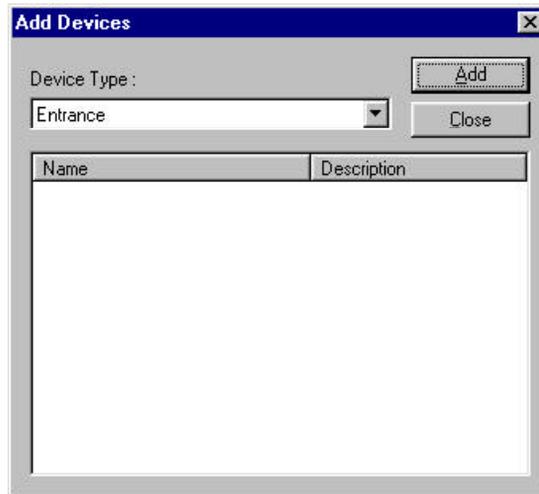
- 1 In the **Configuration** menu, point to **Define**, then click **Control Areas**. The Control Area window appears.



- 2 Right-click the **Control Area** folder, then select **Add Branch**. The Configure Branch window appears.



- 3 In the **Branch Name** box, enter the name of the branch you want to add (e.g., *Control Panels*).
- 4 Click **OK**.
- 5 Right-click the new branch, then click **Add Devices**. The Add Devices window appears.



- 6 Click on the pull-down arrow in the Device Type box, and select the type of device you want to add from the drop down list.
- 7 Click **Add**.
- 8 Continue this procedure until you have added all the devices you want displayed on your Control Map. Click the close button (X) to close the **Control Areas** window.

Operator Overview

Operators have defined rights and privileges to view and/or change the system. Operator privileges can be greatly restricted—a workstation can be set up to view alarms from just one door—or they can be very broad. An administrator can view and edit all devices, databases and all parts of the User Interface.

Operators are defined by Operator Level and Time Zone. Operator Level defines the system components the Operator has access to and the Time Zone defines when the operator can log on to the system. When a user logs on to a workstation, he or she selects whether that workstation uses access rights specified by the user's rights or the workstation.

Operator access is password protected. Once WIN-PAK 2.0 is installed, a password should be defined and used. This is critical to the security of your entire system.

Passwords can be up to 20 characters. They are case sensitive. For the greatest security, use a combination of both letters and numbers; do not use any familiar terms such as your company name, initials, birth dates, etc.

A simple strategy for choosing a password that is both easy to remember, but hard to decode is to pick a simple phrase preceded or followed by one or more numbers. Enter it without spaces and capitalize each word. Such a password cannot be easily decoded either by a random number generator or by a dictionary decoder.

Operator Level Database

The **Operator Level** database contains information on existing Operator Levels. These levels define what a given operator can see and do within the system. The Operator Level database opens as a two-pane window. On the left is a list of existing Operator Levels, on the right is the Operator Level tree. The Operator Level tree consists of Control Area devices, along with databases and user interfaces. Individual operator levels are defined by assigning rights to branches or individual items on the tree. To close the Operator Level database, click the close button (X).

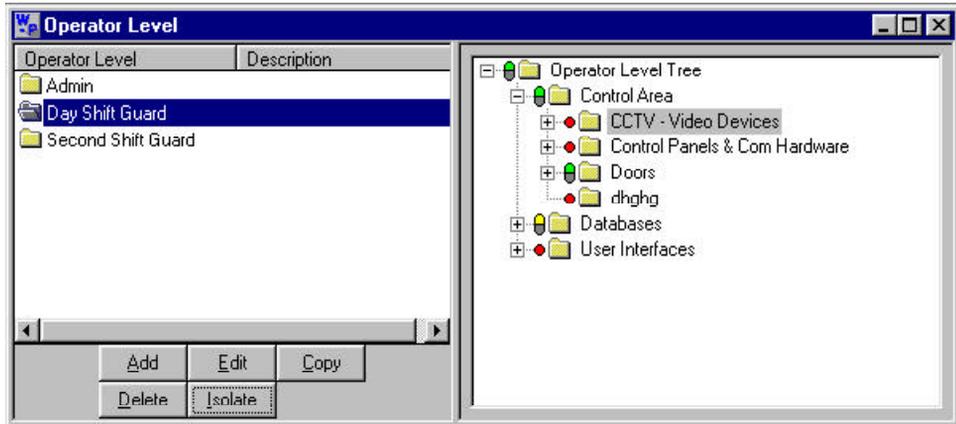
Below the left pane of the Operator Level database are five buttons:

- **Add:** Define a new operator level.
- **Edit:** Make changes in an existing operator level.
- **Copy:** Duplicate an operator level, then make any desired changes.
- **Delete:** Remove the selected operator level.
- **Isolate:** View all the operators assigned to the selected operator level and/or reassign such operators to a different operator level.

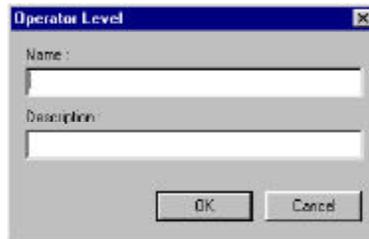
An operator level cannot be deleted if it is assigned to an operator. If you try to delete a level that is in use, you receive an error message. Use the Isolate feature to reassign operators before deleting an operator level.

To Add an Operator Level

- 1 In the System menu, click **Operator Level**. The Operator Level window appears.



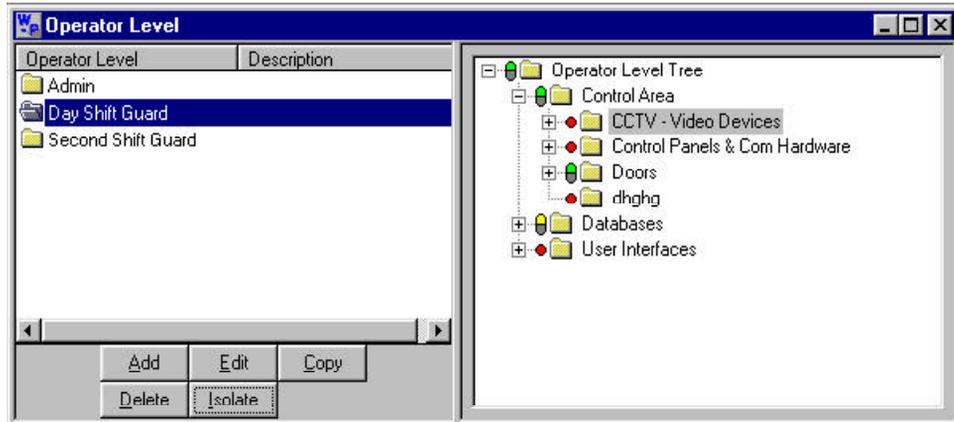
- 2 Click **Add**. The Add Operator Level window appears.



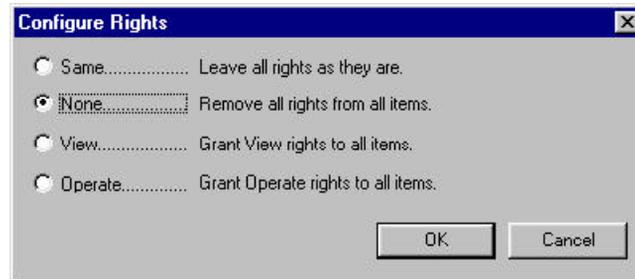
- 3 In the **Name** box, enter a name of up to 30 characters for the Operator Level (required).
- 4 In the **Description** box, enter a description of up to 60 characters for the Operator Level (optional).
- 5 Click **OK**.

To Configure an Operator Level

- 1 In the **System** menu, click **Operator Level**. The Operator Level window appears.



- 2 Select an **Operator Level**.
- 3 Configure rights for Control Area devices, Databases, and the User Interface. All the sub-branches of one branch can be configured at one time. To do so, right-click a branch a Configure Rights window appears.



- 4 Choose one of the following:
 - **Same** Leave all rights as they are.
 - **None** Remove all rights from all items.
 - **View** Grant rights to all items.
 - **Operate** Grant Operate rights to all items.

For databases only:

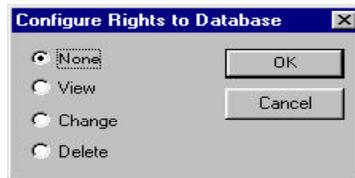
- **Change** Grant Change rights to all fields.
- **Delete** Grant Delete rights for the Database as a whole, grant Change rights for all fields.

- 5 If you right-click an individual device, a different Configure Rights window appears.



- 6 Choose one of the following options for each device:
- **None:** Remove all rights.
 - **View:** Grant view rights.
 - **Operate:** Grant Operate rights.

- 7 If you right-click an individual database, a different Configure Rights window appears.



- 8 Choose one of the following options:
- **None:** Remove all rights from all fields.
 - **View:** Grant view rights to all fields.
 - **Change:** Grant Change rights to all fields (for databases only).
 - **Delete:** Grant Delete rights for the Database as a whole, grant Change rights for all fields.

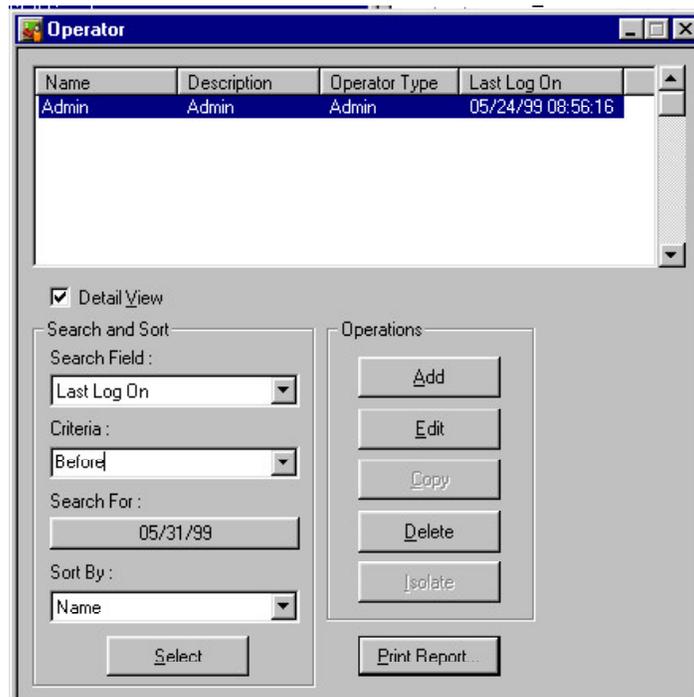
Each device, database, and user interface in the control tree is color-coded per the right assigned to it: Red: No rights. Yellow: View rights. Green: Operate rights (view and edit). White: Delete rights.

- 9 Click **OK**.

Operator Database

The Operator Database contains information on all WIN-PAK 2.0 operators. Operators can view and/or change various parts of the WIN-PAK 2.0 system, based on their operator level and the rights assigned to that level. The Operator Level is defined in the Operator Level database (**System** menu, click **Operator Levels**).

Existing Operators are displayed in the Operator database list. This list can be sorted by Operator Name, Description or Operator Type using the Search and Sort buttons. If the Detail View check box is selected, the Operator Record dialog is also displayed. If you click either **Edit** or **Add**, the Operator Detail View is activated and information can be added or edited.



Search Field

Using the drop-down list, select one of the following to define your search:

- **All:** Shows every operator within the system.
- **Description:** As written in the description field within each operator.
- **Last Logon:** The last recorded time the operator logged-in to the system.
- **Operator Name:** The operator name, not necessarily the card holder name. The operator name does not necessarily equal a card holder name.
- **Type:** Either operator or admin.

Criteria

If you are using any field, except **All**, select one of the following by which to define criteria:

- **Begins With:** Select this if you know the first letter(s) or number(s) of the field with which you are searching.
- **Greater Than:** Select this if you are searching for some sort of range or group and need to narrow the search in ascending order. (See example below.)
- **Less Than:** Select this if you are searching for some sort of range or group and need to narrow the search in descending order. (See example below.)
- **Equals:** Select this if you are searching for an exact match.

Search For

If you are using **Begins With**, enter the first letter(s) or number(s) of the item for which you are looking.

If you are using **Greater Than**, enter the first letter(s) or number(s) of the range. For example, if you are searching for every operator whose name begins with any letter from M-Z, you would enter *M* in the Greater Than field. The search will return every operator who name begins

with any letter from M-Z. Greater Than is an ascending order search.

If you are using **Less Than**, enter the first letter(s) or number(s) of the range. For example, if you are searching for every operator whose name begins with any letter from A-L, you would enter *L* in the Lesser Than field. The search will return every operator whose name begins with any letter from A-L. Less Than is a descending order search.

Sort By

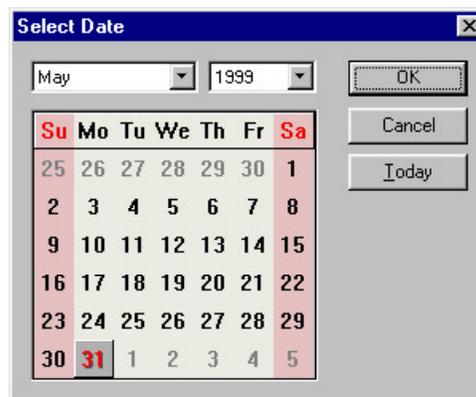
Select one of the following to determine how the list of operators will be organized:

- **None**
- **Description**
- **Last Log On**
- **Operator Name**
- **Operator Type**

In addition you can search for an operator by the last log on date.

To Search by Last Log On

- 1 Select **Last Log On** as the Search field.
- 2 Select **Before**, **After**, or **On** as the Criteria.
- 3 Click the **Search for Date**. The Select Date window appears.



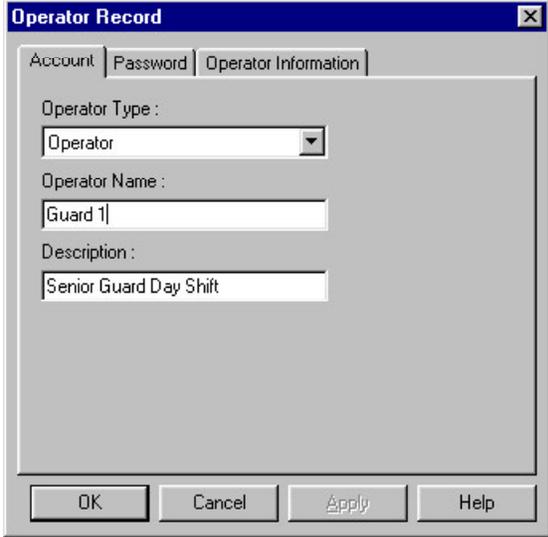
- 4 Select the date you want to use for this search, and then click **OK**.
- 5 Click **Select**. The Operators that match the criteria are displayed.

To Add an Operator

- 1 In the System menu, click **Operator**. The Operator window appears.
- 2 Click **Add**. The Operator Record window appears.
- 3 Follow the instructions below for each tab of the Operator Record window.

Clicking the OK button will save the data and deactivate the Operator Record window. The **Apply** button will save the data but keep the window active.

Account Tab



The screenshot shows a dialog box titled "Operator Record" with a close button (X) in the top right corner. The dialog has three tabs: "Account", "Password", and "Operator Information". The "Account" tab is selected. Inside the dialog, there are three input fields: "Operator Type" is a pull-down menu with "Operator" selected; "Operator Name" is a text box containing "Guard 1"; and "Description" is a text box containing "Senior Guard Day Shift". At the bottom of the dialog, there are four buttons: "OK", "Cancel", "Apply", and "Help".

- 1 Click the pull-down arrow in the **Operator Type** box, and select one of the following:

Operator: Needs to be assigned an operator level.

Admin: Has global rights—may view and edit any and every part of the system. Does not need to be assigned an operator level.

- 2 In the **Operator Name** box, enter a name for the Operator (required). Use up to 30 characters.
- 3 In the **Description** box, enter a description of the operator (optional). Use up to 60 characters.

Password Tab

Passwords can be up to 20 characters. For the greatest security, use a combination of both letters and numbers. Do not use any familiar terms such as your company name, initials, and birth dates.

Warning: Passwords are case sensitive. When choosing a password, remember whether the letters are capitalized or not.

- 1 In the **New Password** box, enter the operator's password.
- 2 In the **Confirm New Password** box, re-enter the operator's password.

Operator Information Tab

The screenshot shows a dialog box titled "Operator Record" with three tabs: "Account", "Password", and "Operator Information". The "Operator Information" tab is active. It contains four fields, each with a pull-down arrow:

- Operator Level :** A pull-down menu showing "Guard Master".
- Card Holder :** A pull-down menu showing ".None" and a small "..." button to its right.
- Time Zone :** A pull-down menu showing "1st Shift".
- Language :** A pull-down menu showing "English, United States".

At the bottom of the dialog box are four buttons: "OK", "Cancel", "Apply", and "Help".

- 1 Click the pull-down arrow in the **Operator Level** box, and select the level for this operator.
- 2 Click the pull-down arrow in the **Card Holder** box, and select the card holder, if any.

Operators do not necessarily have to be card holders. For example, an operator can simply be Guard.

- 3 Click the pull-down arrow in the **Time Zones** box, and assign the operator a time zone during which they will be able to log on to the system.

If an operator is not assigned a time zone, the operator has no time restrictions on his/her log-on rights.

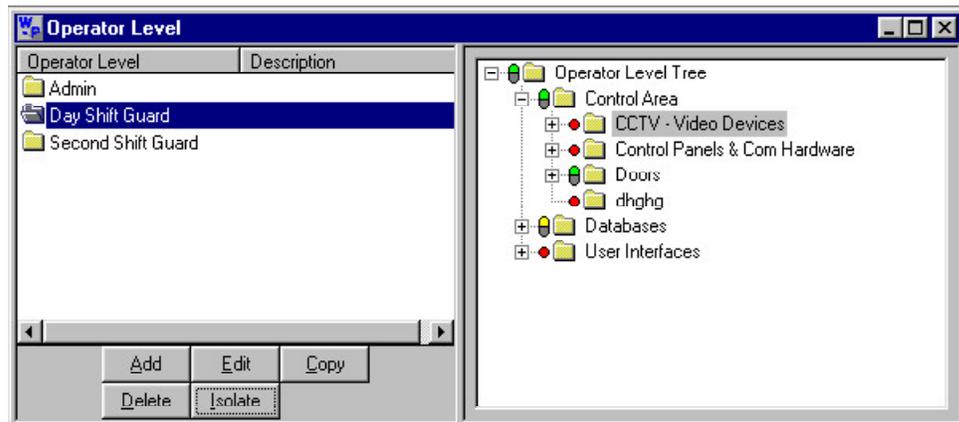
- 4 Click the pull-down arrow in the **Language** box, and select the operators language.

Clicking the OK button will save the data and deactivate the Operator Record window. The Apply button will save the data but keep the window active.

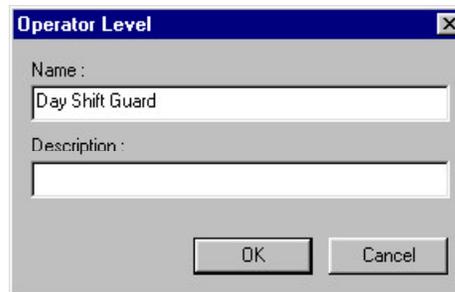
To Copy an Operator Level

Sometimes, it is necessary to create operator levels that are similar to each other with only minor differences. To save time, copy an operator level, then make any desired changes.

- 1 In the **System** menu, click **Operator Level**. The **Operator Level** window appears.



- 2 In the **Operator Level** list, select the operator level you wish to copy.
- 3 Click **Copy**. The Configure Operator Level window appears.



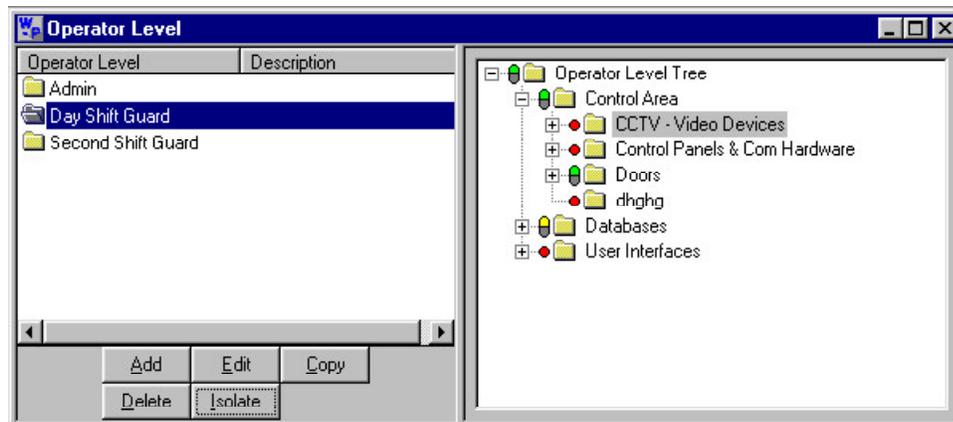
- 4 In the Name box, enter a new name (required). Use up to 30 characters.
- 5 In the Description box, enter a new description (optional). Use up to 60 characters.

The default name of the copy is the same as the original with the prefix Copy of... The default description is the same as the original.

- 6 When finished click **OK**.

To Edit an Operator Level

- 1 In the **System** menu, click **Operator Level**. The Operator Level window appears.

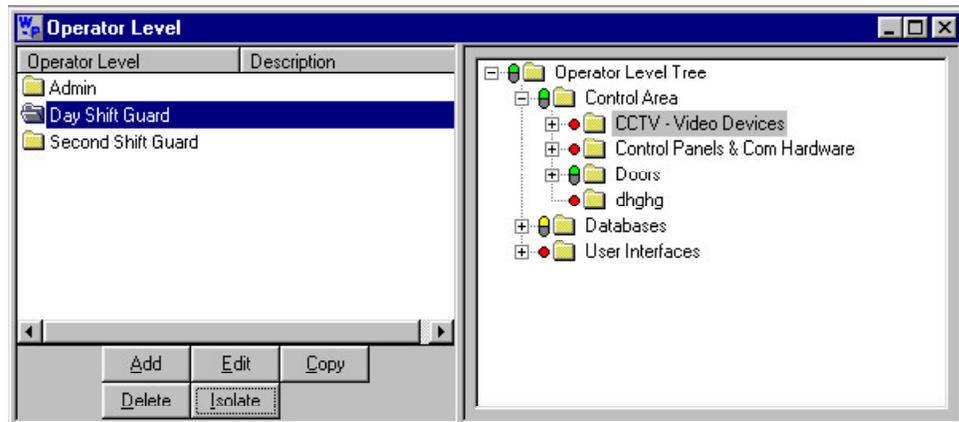


- 2 In the **Operator Level** list, select the operator level you wish to edit.
- 3 Make the desired changes to either a sub-branch or a main branch. (See *To Add an Operator Level* for specifics on operator rights.)
- 4 To edit the name or description of the operator level, click the operator level, then click **Edit**. The **Configure Operator Level** window appears. Type a new name and/or a new description. When finished, click **OK**.

To Delete an Operator Level

An Operator Level cannot be deleted if it is used in one or more Operator definitions. Use the **Isolate** function to display where the selected operator level is used. The **Isolate** dialog allows you to re-assign other operator levels.

- 1 In the **System** menu, click **Operator Level**. The Operator Level window appears.



- 2 In the **Operator Level** list, select the operator level you wish to delete.
- 3 Click **Delete**.

Isolate Function

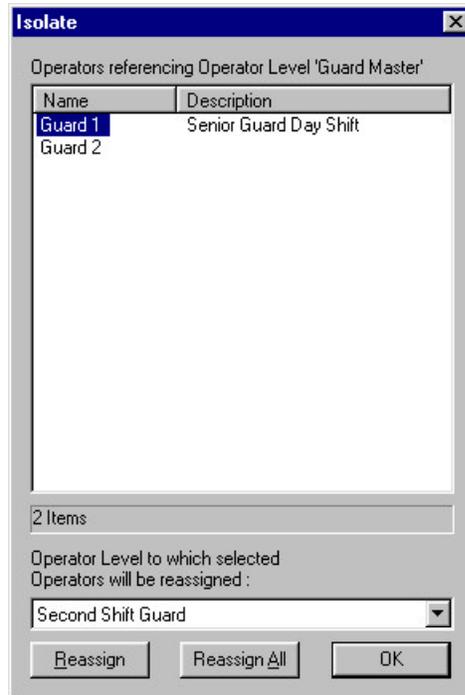
The isolate function in the operator level database serves two purposes:

- To view all the operators assigned to an operator level.
- To reassign any such operators to a different operator level.

To View All the Operators Assigned to an Operator Level.

- 1 In the **System** menu, click **Operator Level**. The Operator Level window appears.

- 2 In the **Operator Level** list, select the operator level you wish to isolate.
- 3 Click **Isolate**. The Isolate window appears with all of the operators assigned to the selected operator level.



- 4 When finished viewing the operators assigned to the selected Operator Level, click **OK** to close the Modify Usage (Isolate) window.

To Reassign an Operator Levels

- 1 In the **System** menu, click **Operator Level**. The Operator Level window appears.
- 2 In the **Operator Level** list, select the operator level with the operator(s) you wish to reassign.
- 3 Click **Isolate**. The Isolate window appears with all of the operators assigned to the selected operator level.

- 4 Click the operator(s) you wish to reassign.

Use the **SHIFT** key to select a range of operators. Hold down the **Shift** key and click the first and last operator in the range.

Use the **CTRL** key to select multiple operators one-by-one. Hold down the **Ctrl** key and click each desired operator.

- 5 Click the pull-down arrow in the drop-down list at the bottom of the window, and select the operator level to which you wish to reassign the selected operator(s).
- 6 Click **Reassign**. The operator(s) is now reassigned to the new operator level.

To Reassign all the operators in an Operator Level, click **Reassign All** instead of **Reassign**.

- 7 When finished, click **OK** to close the Isolate window.

Part 7

Cards & Card Holders

Overview

Card Database

Card Limiting

Card Add, Edit, Delete

Bulk Card Add & Delete

Badges

Card Holder Database

Card Holders



Overview

The Card and Card Holder Databases work together in the WIN-PAK 2.0 system. The separation of cards and card holders into two databases adds flexibility. A card holder can be issued multiple cards, as replacements for a card that is lost, stolen, or cards of different technologies for different applications. A large number of cards can be added to the system and then issued to card holders as the need arises.

Cards

Cards are defined by the following properties: card number, access level and status (active, inactive, lost/stolen, or trace). In addition they can be assigned activation and expiration dates. Card records can be searched and sorted by any of the properties. For example, cards can be organized numerically (by card number), or an operator can search for cards most recently expired (by expiration date). In addition, PINs (Personal Identification Numbers) can be defined, badge layouts can be assigned and the card can be set for a limited number of uses. (The default setting is for unlimited use.)

A card must have a valid access level in order to have an active status. Cards can be added individually or in bulk. Once added, card properties can be edited, both individually or in batches. Cards do not have to be associated with card holders. (For example, you might want to have a number of limited use cards available for visitors, vendors or temporary employees. You do not have to assign them to an individual card holder.)

You can add a card when you are adding card holders, but you cannot add new card holders from the Card database.

Card Holders

Card holders are the people to whom cards are issued. All card holder information is contained in the Card Holder database. The minimum card holder information is first and last name. It can also include a variety of optional information entered into user-defined note fields (up to 40). If a card holder has been assigned cards, that information is included in the card holder record.

Card holder information can be searched and sorted by first or last name and/or card number or any of the 40 user-configured note fields.

When card holders are entered into the database, they can be issued an existing card or entered without a card (and issued one later), or the Card Database can be accessed and a new card can be issued.

Card holder photos and signatures are also stored in the Card Holder database and can be viewed from the Card Holder record view. Card holder photos and signatures can be viewed, captured or imported from the Card Biometrics tab of the Card Holder database.

Card Database

The **Card** database contains information on all the cards that have been entered into the system.

To open the **Card** database, click **Card** in the **Card** menu. The **Card** database list displays existing cards with their number, access level and status; and, if this information has been assigned, activation date, and expiration date. It also shows the first and last name of the card holder, for those cards that have been assigned a card holder.

Action groups can be used to set specific actions to occur when a card is read in different states, for example when its status is *Lost/Stolen* or *Trace* rather than *Active* (see the *Action Group* section for more information).

The **Card** database detail view has two tabs, **Card Properties** and **Badge**. When activated, card information can be edited in the detail view.

The **Badge** tab allows a badge layout to be selected for the front and back of the card. When card holders are associated with the cards, their information appears in the badge layout on the **Badge** tab. The badge layout can be printed from the **Card** database.

Search and Sort Fields

The information in the **Card** database can be searched and sorted by any of the fields in the card record.

The **Search and Sort** fields allow you to search the database and choose the order in which the cards are listed. The options are explained below:

Search Field:

Search for cards by card number, card holder's first or last name, access level, activation date, deactivation date, badge print status, action group, or status; or display all of the cards by selecting **.ALL**.

Criteria:

Choose to search for cards that begin with, are greater

than, or are less than or (in some cases) equal to the value entered in the **Search for** field.

Search for:

Search for words, letters and/or numbers. For example, when searching for a card by status, there is a list to select from; if you are searching by name, type the first letter(s) or the entire name. More letters refine the search results.

Sort By:

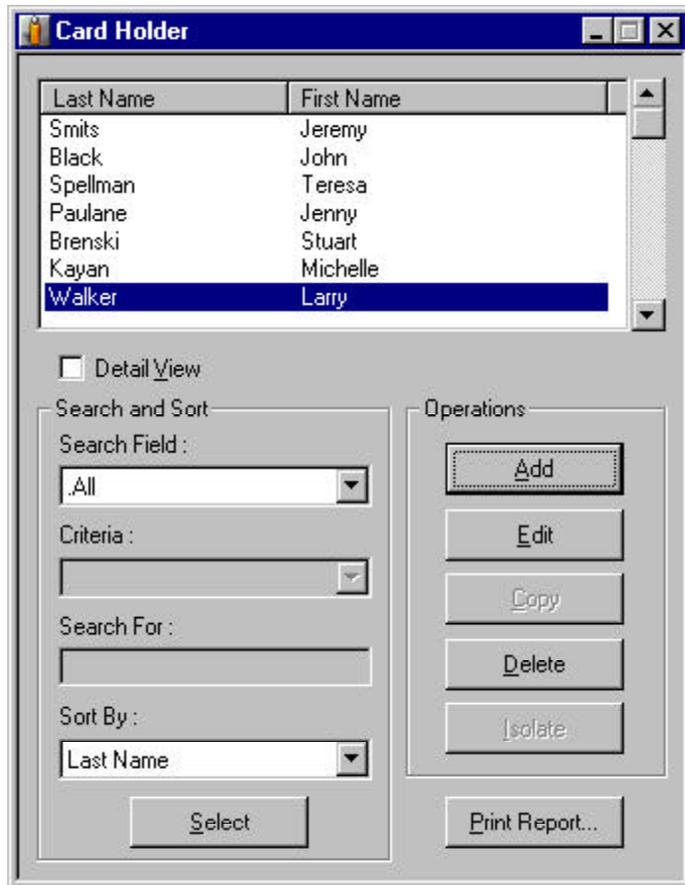
Sort the cards in the **Card** database list by card number, card holder's first name, last name, access level, activation date, deactivation date, badge print status, action group, or status.

Select:

Click to begin the search or sort.

To Search for a Card

- 1 On the Card menu, click **Cards**. The Card window appears.



- 2 Click the pull-down arrow in the **Search Field** box, and select the field you want to search. Choose from card number, card holder's first name, last name, access level, activation date, deactivation date, badge print status, action group, or status.
- 3 Click the pull-down arrow in the **Criteria** box, and select the criteria you want to use: **Begins with, Greater than, Less than**.
- 4 In the **Search For** box, enter the letter(s) or number(s) for which you are searching. (For example, if you selected access level, enter the name of the access level you are looking for. The search returns a list of all cards with that access level.)

- 5 Click **Select**. A list of cards meeting those criteria is displayed.

For example, to find all of the cards that have the status *Trace*: Select **Status** in the **Search Field**; select **Equals** in the **Criteria** field; select **Trace** in the **Search for** field. Click **Select**. The search returns a list of all cards with the status **Trace**.

To Sort the Card Database List

- 1 Click the pull-down arrow in the **Sort By** box, and select one of the available fields: card number, first name, last name, access level, activation date, deactivation date, badge print status, action group, or status.
- 2 Click **Select**. The **Card Database** list is now displayed in the order you selected.

Card Limiting

When cards are added to the **Card** database, they can be configured for an unlimited number of uses over an indefinite period of time. However, you do have the option of limiting card usage in two ways:

Activation and Expiration by Scheduler

When an active card is entered into the **Card** database, the information is automatically sent to the panels. However, if you choose an activation date the card information must be sent to the panels. The Scheduler should be set to periodically send card information to the panels, at least once a day. When a card Activation/Deactivation scheduled event is preformed, cards with an activation date prior to the event are sent to the panel; cards with a deactivation date prior to the event will be deleted from the panel and changed to an inactive status.

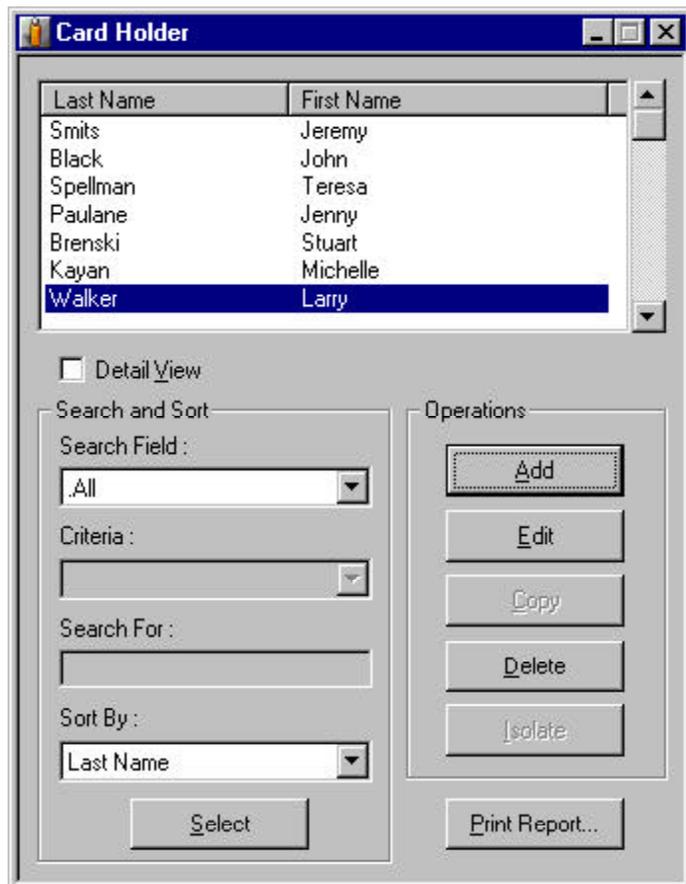
The activation and expiration dates can also be changed by editing a card.

Card Add, Edit or Delete

Cards can be added and deleted singly, or in batches. For information on adding or deleting cards in batches or in bulk see Bulk Card Add.

To Add a Card

- 1 On the **Card** menu, click **Card**. The Card window appears.



- 2 Click **Add**. The **Card Record** window appears displaying the **Card Properties** tab.

The screenshot shows a 'Card Record' dialog box with the following fields and values:

- Card Number: 032
- Status: Active
- Issue: 0
- Card Holder: Lisa, Lisa
- Uses Left: 0
- PIN #1: 1456
- Access Level: Master Access Level
- PIN #2: (empty)
- Custom Access Level: Add
- Action Group: None, Edit...
- Activation Date: 03/08/1999, Change, Clear
- Expiration Date: 06/15/2000, Change, Clear

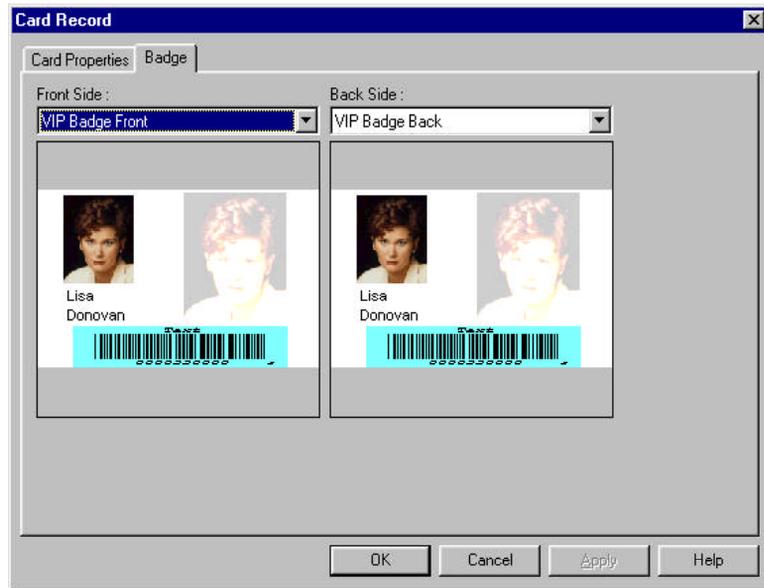
Buttons at the bottom: OK, Cancel, Apply, Help.

- 3 In the **Card Number** box, enter the Card Number.
- 4 Click the pull-down arrow in the **Access Level** box, and select an Access Level for the card. Custom Access Levels can be created. See *Custom Access Levels* for further information.
- 5 If your system requires a PIN (personal identification number) enter it in the **PIN #1** field. (A PIN can be added to the card later.)

The **PIN #2** field is for future use as a duress PIN.

- 6 By default, a card with an *Active* status becomes active as soon as it is entered into the system. If you want to select an activation date, click **Change** from the Activation Date area and select the day, month and year from calendar.
- 7 If you want the card to be valid for a limited time, click **Change** from the **Expiration Date** area, and then select the desired expiration date from the calendar.

- 8 If you want to limit the number of times a card can be used, enter the desired value in **Uses Left** box (maximum 4095). For an unlimited use card, leave the default setting of 0.
- 9 To associate a badge layout with the card, click the **Badge** tab. If you are not using custom badges skip to step 12.



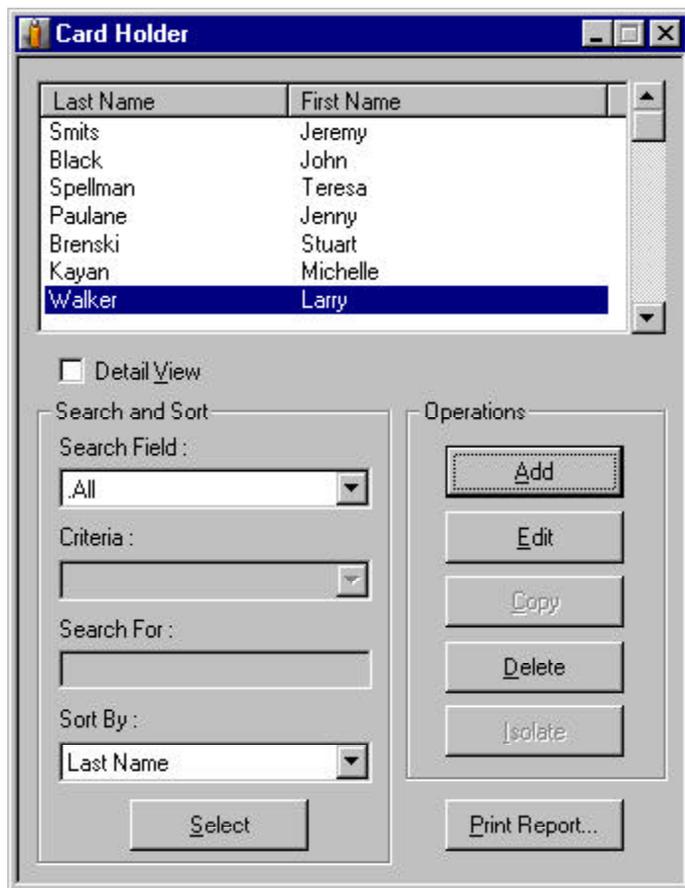
- 10 Click the pull-down arrow in the **Badge Front** box and select a front layout for the Badge.

Requires a supported printer. See Configure Badge Printer.

- 11 Click the pull-down arrow in the **Badge Back** box and select a badge back layout for the badge.
- 12 When you have finished defining the card, click **OK** to save it. Or, click **Cancel** to return to the **Card** window without saving the new card.

To Edit an Existing Card

- 1 In the Card menu, click **Card**. The Card window appears.



- 2 Select the card you want to edit from the card database list.
- 3 Click **Edit**. The Card Record window appears displaying the Card Properties tab.

The screenshot shows the 'Card Record' dialog box with the 'Badge' tab selected. The fields are as follows:

- Card Number: 032
- Status: Active
- Issue: 0
- Card Holder: Lisa, Lisa
- Uses Left: 0
- PIN #1: 1456
- Access Level: Master Access Level
- PIN #2: (empty)
- Custom Access Level: Add
- Action Group: None
- Edit... (button)
- Activation Date: 03/08/1999
- Expiration Date: 06/15/2000

Buttons at the bottom: OK, Cancel, Apply, Help.

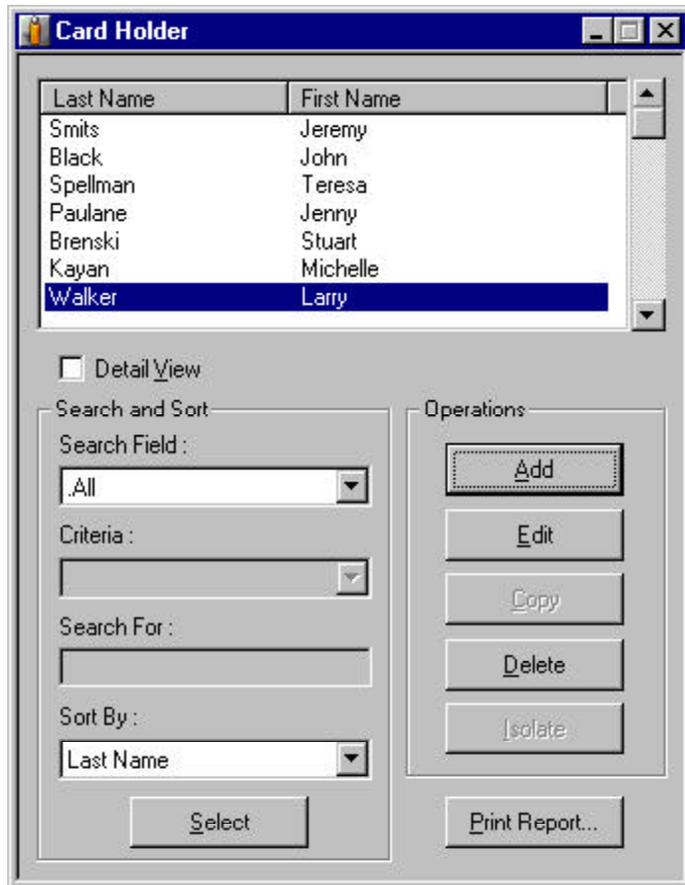
- 4 Make the desired changes.

To edit the badge properties of the Card, click the Badge tab of the Card Record window and then make desired changes.

- 5 When finished, click **OK** to save the changes, or, click **Cancel** to return to the **Card** window without saving any changes.

To Delete a Card

- 1 In the Card menu, click **Card**. The Card window appears.



- 2 Select the card you want to delete from the card database list.
- 3 Click **Delete**.

By default, you will be asked to confirm card deletes. However, this setting can be changed in workstation defaults so that cards can be deleted without confirmation. To change this setting, go to the **System** menu, click **Workstation Defaults**, and then select the **Defaults** tab. Select the **Confirm Card Deletes** check box to turn this feature on; deselect it to turn it off.

- 4 If asked to confirm the delete, click **Yes** to delete the card or click **No** to cancel the delete.

Bulk Card Add

To add a large number of cards to your system quickly, use the **Bulk Card Add** feature. You can add and activate hundreds of cards at one time. All the cards added in a batch have the same properties but they can be edited later to suit the needs of individual card holders.

You cannot have duplicate cards in the system. An error message appears if the card numbers you are adding are already in the system.

To Bulk Add Cards

- 1 In the Card menu, click **Bulk Card Add**. The Bulk Add Cards window appears.

The screenshot shows the 'Bulk Add Cards' dialog box. It features a title bar with the text 'Bulk Add Cards' and a close button. The main area contains several input fields and dropdown menus: 'Start Number' (101), 'End Number' (200), 'Access Level' (Master), 'Status' (Active), and 'Number of Uses' (empty). Below these are two date selection boxes for 'Activation Date' (6/4/99) and 'Expiration Date' (7/26/01), each with 'Change' and 'Clear' buttons. At the bottom is a 'Progress' area with a horizontal bar and three buttons: 'Start', 'Stop', and 'Close'.

- 2 In the **Start Number** box, enter the first card number in the range you are adding.

- 3 In the **End Number** box, enter the last number in the range you are adding.
- 4 Click the pull-down arrow in the **Access Level** box and select a valid access level for the cards.
- 5 Select an activation date (optional) by clicking **Change** in the Activation Date area and selecting an activation date from the calendar.
- 6 Select an expiration date (optional) by clicking **Change** in the Expiration Date area and selecting an expiration date from the calendar.
- 7 Set the **Status** to **Active** or **Trace**.
- 8 For unlimited use, leave the **Number of Uses** field blank; to limit the card use enter a value up to 4095.
- 9 When you have entered the required information, click **OK** to add the cards to the system or click **Cancel** to exit without adding the cards.

If you click **OK**, you will see a bar graph indicating the progress of the cards being added. It may take a few minutes to add a large number of cards. Do not log out of WIN-PAK while the bulk card add is still in progress.

Bulk Card Delete

To remove a large number of cards to your system quickly, use the **Bulk Card Delete** feature. You can remove any group of consecutive card numbers at one time.

To Bulk Delete Cards

- 1 On the Card menu, click **Bulk Card Delete**. The Bulk Card Delete window appears.



- 2 In the **Start Number** box, enter the first card number in the range you are deleting.
- 3 In the **End Number** box, enter the last number in the range you are deleting.
- 4 Click **OK** to delete the cards or click **Cancel** to exit without adding any cards.

By default, you will be asked to confirm card deletes. However, this setting can be changed in work station defaults so that cards can be deleted without confirmation. To check or change this setting, go to the **System** menu, click **Workstation Defaults**, and then select the Defaults tab. Select the **Confirm Card Deletes** check box to turn this feature on; deselect it to turn it off.

- 5 If asked to confirm the delete, click **Yes** to delete the card or click **No** to cancel the delete.

Badges

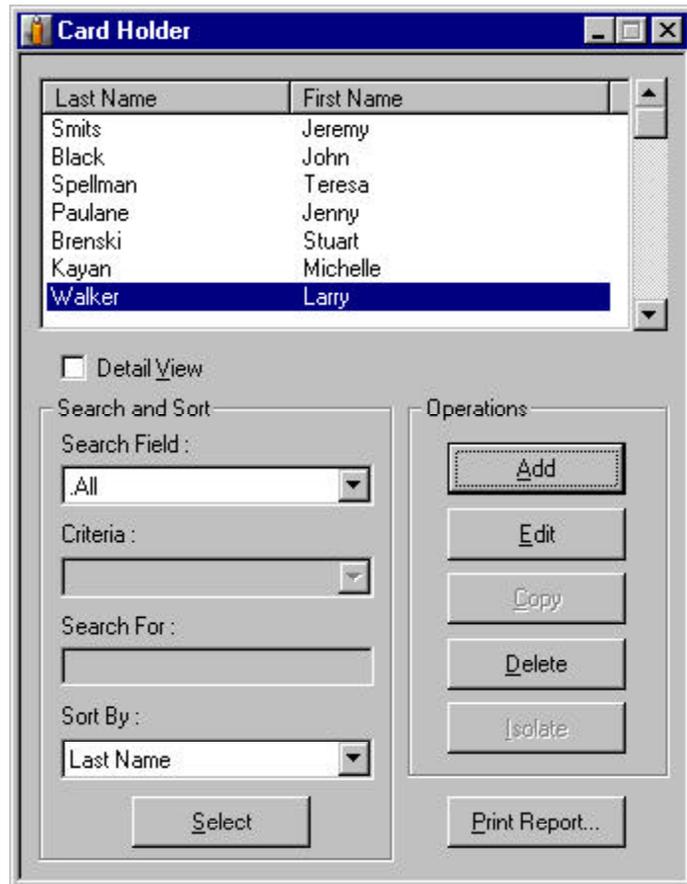
Adding a Badge to a Card

Badge designs or layouts are created using the **Badge Layout Utility**. Once a badge design has been created, it can be associated with a card. When the card is issued to a card holder, the card holder's information is merged with the badge design, resulting in an individual badge. Using a badge printer, these badges can be printed to plain cards to create a photo ID. They can also be printed on proximity cards and/or have magnetic stripes encoded, resulting

in an ID card that is also an access card.

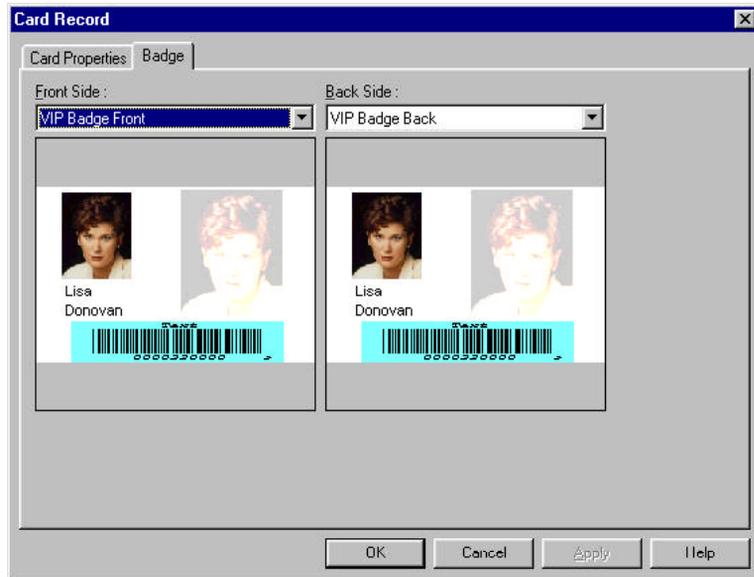
To Assign a Badge to a Card

- 1 On the Card menu, click **Card**. The Card window appears.



- 2 Select the desired card from the list.
- 3 Click **Edit**. The **Card Record** window appears displaying the **Card Properties** tab.
- 4 Click the **Badge** tab of the Card Record window.
- 5 Click the pull-down arrow in the **Front Side:** box, and select the name of the badge design that you want to assign to the front side of this card.

- 6 Click the pull-down arrow in the **Back Side:** box, and select the name of the badge design that you want to assign for the back of this card (if desired).



- 7 When finished, click **OK** to save your changes, or click **Cancel** to return to the Card window without saving the changes.

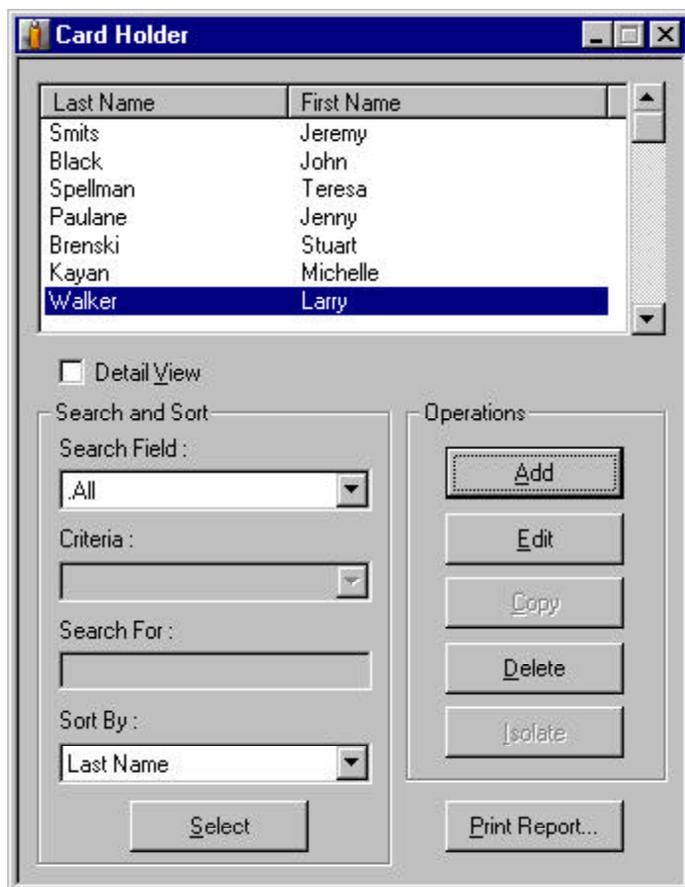
No card holder biometrics will be displayed until card is issued to a card holder who has photos and/or signatures in the Card Holder database.

Printing a Badge

Once a badge has been associated with a card, it can be printed either to a PVC card or to paper. In order to print a card, your printer must be installed in Windows (for further information on printer see your Windows documentation).

To Print a Badge

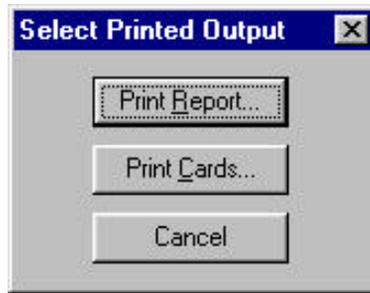
- 1 On the Card menu, click **Card**. The Card window appears.



- 2 Select the badge to be printed from the list of cards.

To select a continuous range of cards, hold down the **SHIFT** key, click the first card in the range and then the last card in the range. To select a noncontinuous group, hold down the **CTRL** (control) key, and click individual cards on the list.

- 3 Click **Print Report**. The **Select Printed Output** window appears.



4 Click **Print Cards**.

The Print Badge Preview allows you to view the badges before printing. If you are printing a batch of cards, use the **Next** and **Previous** buttons to scroll through the preview.

5 Click **Print**.

Card Holder Database

The Card Holder Database contains information on all the card holders that have been entered into the system.

To open the Card Holder Database, click the card holder button or select **Card Holder** on the **Card** menu. The **Card Holder** list displays existing card holders by first and last name.

The information in the Card Holder Database can be searched and sorted by first or last name. The **Search and Sort** fields allow you to search the database and choose the order in which the card holders are listed. The options are explained below:

Search Field:

Search for card holders by first or last name, any notefield, or display all of the card holders by selecting **.ALL**.

Criteria:

Choose to search for card holders whose names begin with, are greater than, or are less than the letters entered in the **Search For** field.

Search For:

Search by letters.

Sort By:

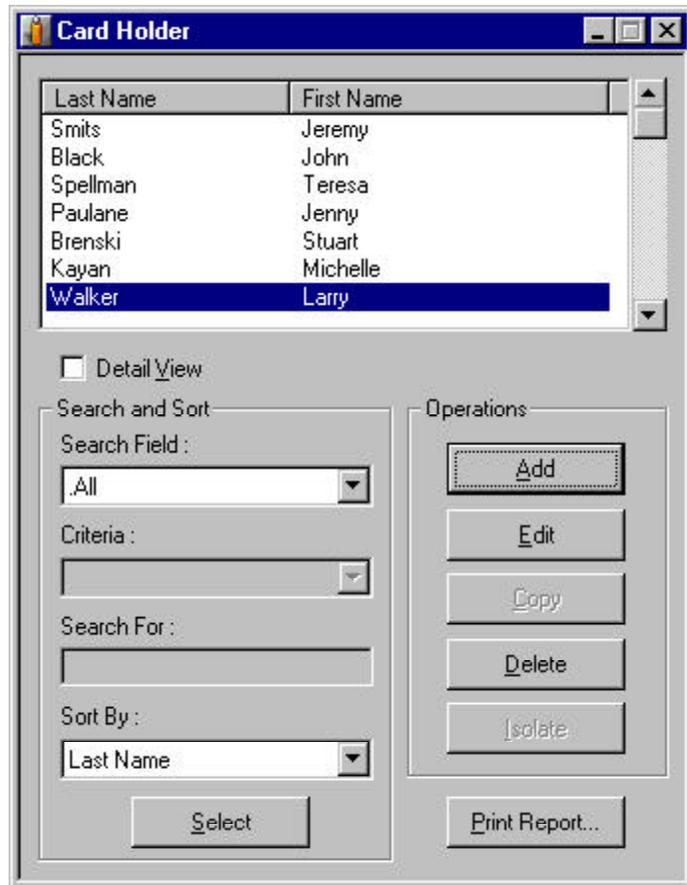
Sort the card holders in the list by either first name, last name, or any notefield.

Select:

Click to begin the search or sort.

To Search for a Card Holder

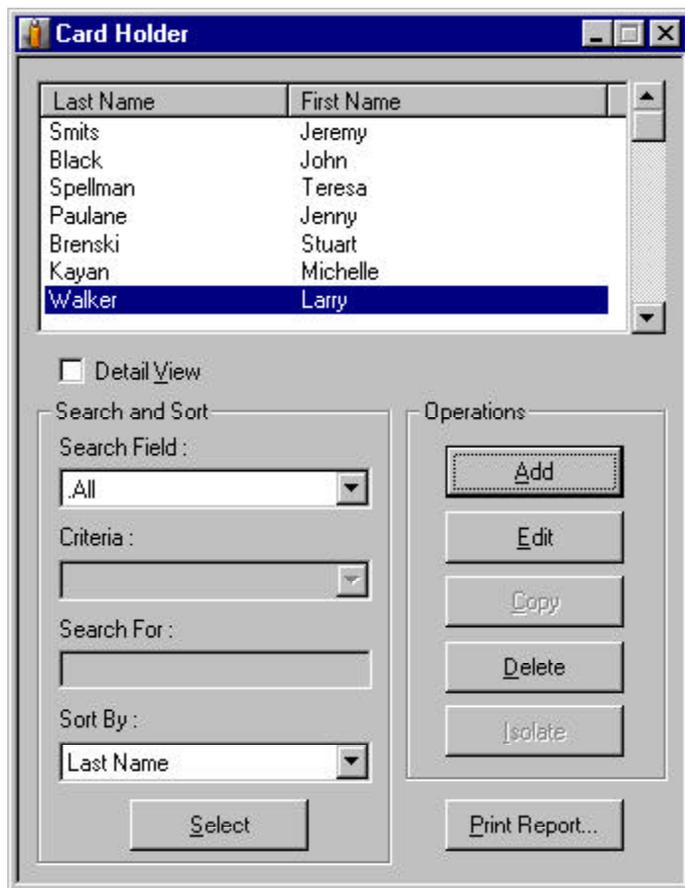
- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.



- 2 Click the pull-down arrow in the **Search Field** box, and select either first name, last name, or any notefield.
- 3 Click the pull-down arrow in the Criteria box and select either **Begins with**, **Greater than**, or **Less than**.
- 4 In the **Search For** box, enter the beginning letters for the names you are seeking.
- 5 Click **Select**. A list of cards meeting the criteria is displayed.

To Sort the Card Holder Database List

- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.



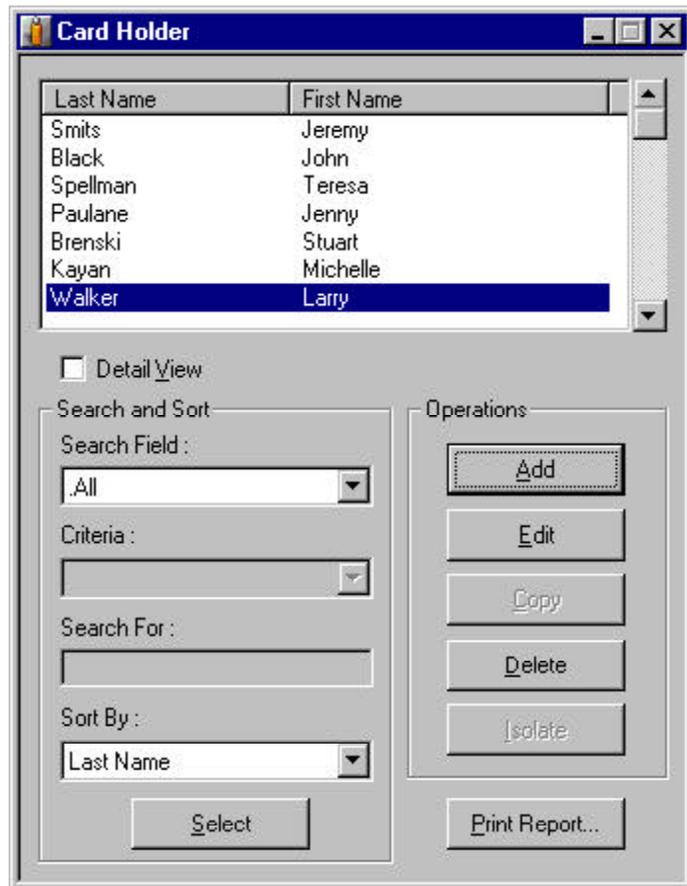
- 2 Click the pull-down arrow in the **Sort By** box, and select one of the available fields: First name or last name.
- 3 Click **Select**. The **Card Database** list is now displayed in the order you selected.

Card Holders

You can add, edit or delete card holders and card holder information from the Card Holder database.

To Add a Card Holder

- 1 On the Card menu, click **Card Holder**. The card Holder window appears.



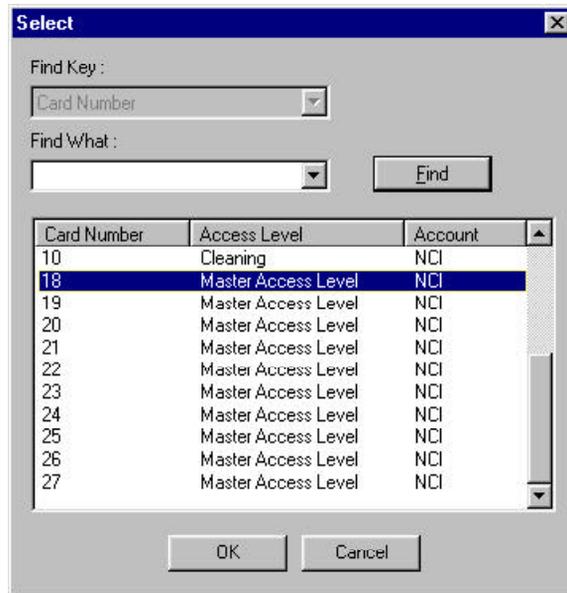
- 2 Click **Add**. The **Card Holder Record** window appears, displaying the **Name Information** tab.

The screenshot shows a software window titled "Card Holder". It features a tabbed interface with the following tabs: "Significant Other", "All Information", "Card Data", "Card Biometrics", "Name and Account Information", "Company Information", and "Medical". The "Name and Account Information" tab is active and contains three text input fields: "First Name" with the value "Lisa", "Last Name" with the value "Donovan", and "Account" with the value "NCI".

- 3 Enter the Card Holder's first and last names in the In the **First Name** and **Last Name** boxes, respectively.

This is the minimum information required to add a name to the database. If you click **OK** at this point, the new card holder is added to the database without any cards being attached.

- 4 To attach a card, click the **Card Data** tab.
- 5 Click **Attach**. The **Select** window appears.
- 6 Click **Find** to display a list of available card numbers.



- 7 Select a card number with an appropriate access level, and then click **OK** to return to the **Card Data** tab.

If no cards are available, open the **Card** database by clicking the **Add** button on the **Card Data** tab. See the To Add Cards section for more information.

- 8 Click **OK** to return to the **Card Data** tab. The card number and access level are now listed. You can add multiple cards by repeating this procedure.

- 9 Click any of the user-defined tabs and enter the desired information. In the following example, **Company Information** is one of the user-defined tabs.

Note Field	Card Holder Data
Department	
Supervisor	
Phone () ___ Ext. ___	
Hire Date	/ /
Home Phone () ___ __	

- 10 Continue selecting tabs and entering information, until you have finished. Click **OK** to save the Card Holder information or click **Cancel** to return to the Card Holder window without saving the new Card Holder information.

To Delete a Card Holder

- 1 In the Card menu, click **Card Holder**. The Card Holder window appears.
- 2 Select the desired card holder.
- 3 Click **Delete**.
- 4 You will be prompted to confirm the card delete. If the Card Holder is assigned cards, photos and/or signatures you will also be informed of a **Card Holder Dependency Conflict**. From the dialog box you can choose to either delete the cards and images or detach them from the card holder.
- 5 When asked to confirm the deletion, click **OK** to delete the card holder or click **Cancel** to retain the card holder.

To Assign an Existing Card to a Card Holder

- 1 While adding or editing a card holder, click the **Card Data** tab, then click **Attach** to issue a card which is already entered in the Card database. The Select window appears.
- 2 Select the desired card and click **OK**.

To Add a Card from the Card Holder Database

- 1 While adding or editing a card holder, click the **Card Data** tab, then click **Add** to open card the Card Record window .

The screenshot shows a 'Card Record' dialog box with the following fields and controls:

- Card Properties** tab: **Badge**
- Card Number**: 032
- Status**: Active
- Issue**: 0
- Card Holder**: Lisa, Lisa
- Uses Left**: 0
- PIN #1**: 1456
- Access Level**: Master Access Level
- PIN #2**: (empty)
- Custom Access Level**: Add
- Action Group**: None, Edit...
- Activation Date**: 03/08/1999, Change, Clear
- Expiration Date**: 06/15/2000, Change, Clear
- Buttons: OK, Cancel, Apply, Help

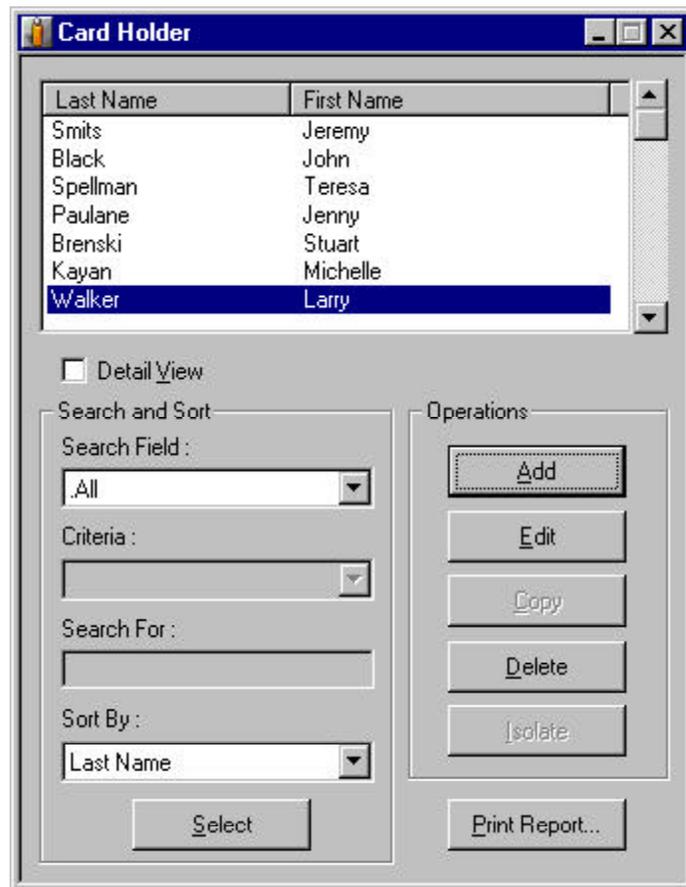
- 2 In the **Card Number** box, enter the Card Number.
- 3 Click the pull-down arrow in the **Access Level** box, and select an Access Level for the card. This is the minimum information necessary to add a card. Select any other options you want. (For information on other options, see *Cards*.)
- 4 When you have finished defining the card, click **OK** to save it. Or, click **Cancel** to return to the **Card Data** tab without saving the new card.
- 5 On the Card menu, click **Card Holder**. The Card Holder window appears.
- 6 Select the desired card holder.
- 7 Click **Delete**.
- 8 You will be prompted to confirm the card delete. If the Card Holder is assigned cards, photos and/or signatures you will also be informed of a **Card Holder Dependency Conflict**. From the dialog box you can choose to either delete the cards and images or detach them from the card holder.

- 9 When asked to confirm the deletion, click **OK** to delete the card holder or click **Cancel** to retain the card holder.

To Remove a Card from a Card Holder

Card holders can have multiple cards assigned to them. Therefore, cards can be added to or removed from card holders, as needed.

- 1 On the **Card** menu, click **Card Holder**. The **Card Holder** window appears.



- 2 Select the desired card holder., and then click **Edit**. The **Card Holder Record** window appears.
- 3 Click the **Card Data** tab, and then select the Card Number of the card you wish to remove.

The screenshot shows a window titled "Card Holder" with a blue header. Below the header are several tabs: "Name and Account Information", "Company Information", "Medical", "Family - Significant Other", "All Information", "Card Data" (which is selected and highlighted with a dotted border), and "Card Biometrics". The "Card Data" tab contains a table with two columns: "Card Number :" and "Access Level :". The "Card Number" cell contains the value "32", and the "Access Level" cell contains the value "Master Access Level".

Name and Account Information	Company Information	Medical
Family - Significant Other	All Information	Card Data
Card Number :	Access Level :	
32	Master Access Level	

- 4 Click **Detach**. The card is now removed.
- 5 Click **OK** to exit the Card Holder Record window.

Card Holder Photos

Card holder photos can be included in the card holder database information. Up to 99 photos can be recorded for each card holder. These can include different views of the same person, for example front and side views. You can also include photos of the person's car or of equipment issued to them, such as a lap top computer.

If a photo is included in a card holder's record, it will appear in the card holder database record view on the **Card Biometrics** tab. Each photo has a Photo Index number. By default, photo 1 is displayed. To view other photos, change the Photo Index number on the **Card Biometrics** tab.

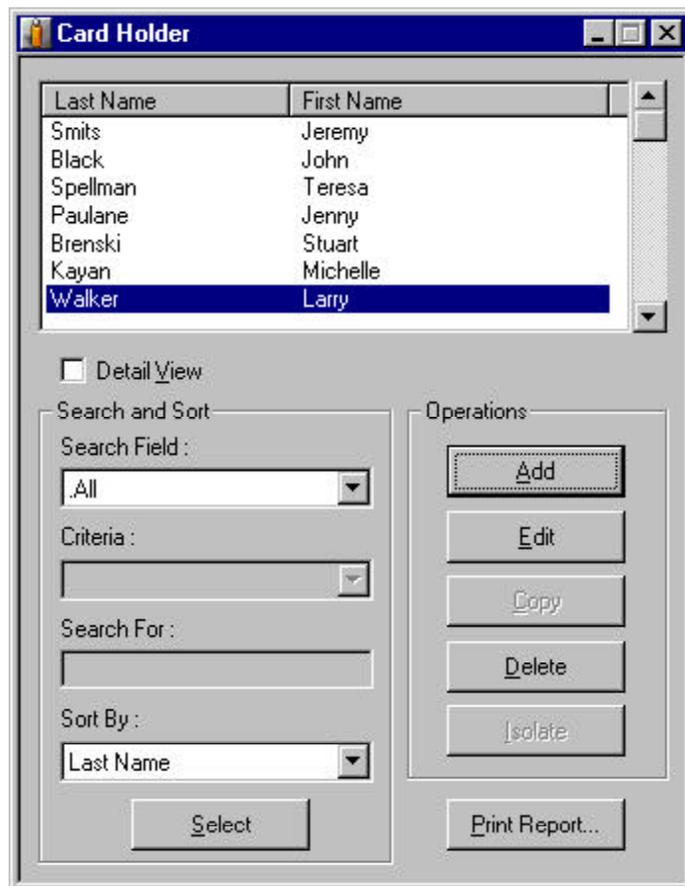
Photos can be added to the card holder information either by capturing video images or importing digital files created in other programs, for example scanned images or photos taken with a digital camera. The **Photo Index**

setting determines whether a captured or imported image overwrites an existing image or is added to the card holder record as an additional image.

When a photo is included in a card holder's information, it will be inserted in the badge layout that is associated with any cards assigned to the card holder. Again, the Photo Index number on the badge layout determines which photo is displayed on the badge.

To Import a Card Holder Photo

- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.

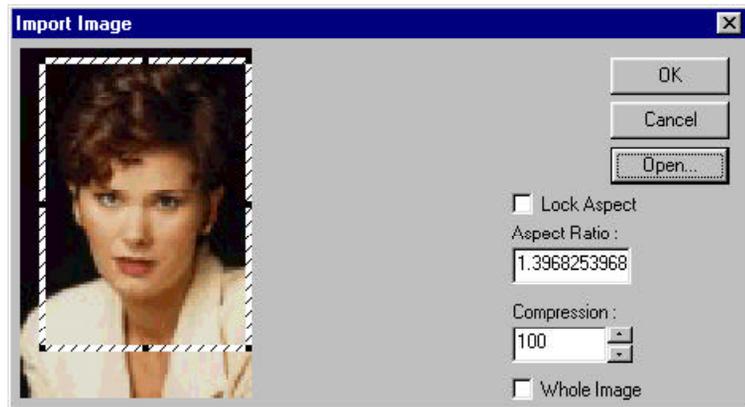


- 2 Select the desired card holder., and then click **Edit**. The Card Holder Record window appears.

- 3 Click the **Card Biometrics** tab of the Card Holder Record window.

If you are adding a new card holder, you must first enter the card holder's name.

- 4 Click **Import**. The **Import Image** window appears.
- 5 Click **Open**.
- 6 Navigate to the folder containing your photo files, select the correct file and click **Open**. The image appears in the **Import Image** dialog box.
- 7 Select **Whole Image** to import the photo without changes.
- 8 To crop the image, deselect **Whole Image**. A cropping guide appears on the photo.



- 9 Move and stretch the guide to the proper position. To maintain a consistent ratio of height to width, enter the ratio in the Aspect Ratio box. When **Lock Aspect Ratio** is selected, the cropping tool will maintain the same relation of height to width, no matter how much of the image is selected. Adjust the compression setting at this point, if desired. (100 is the least compression and the best quality, 30 is the most compression and the lowest quality.)

- 10 Click **OK**. The **Import Image** dialog closes and the photo appears on the **Card Biometrics** tab.



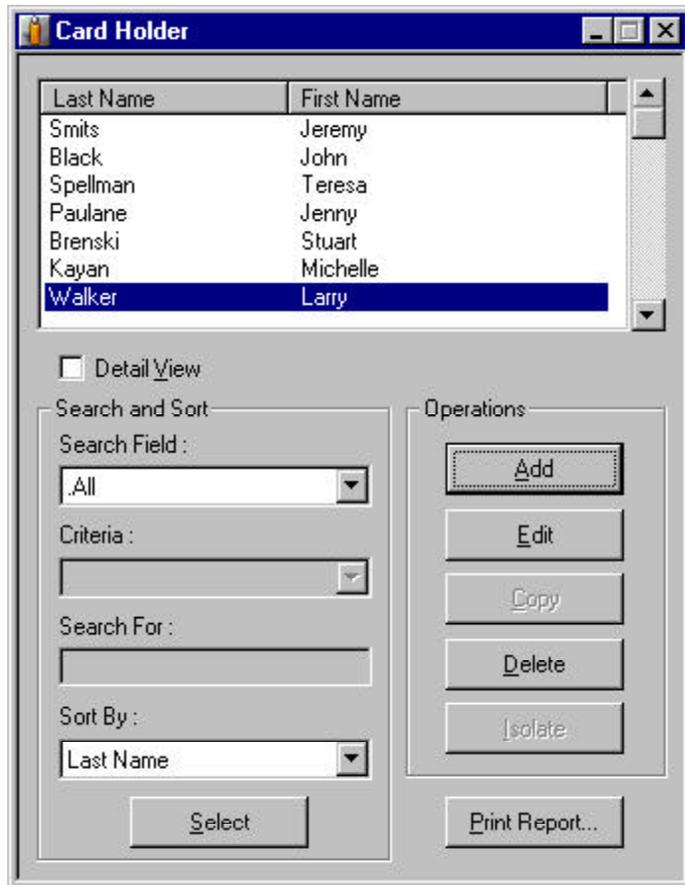
- 11 Click **OK** to save the photo.

To Import Additional Card Holder Photos

To add additional photos to a card holder file, follow the procedure above except change the **Photo Index** on the **Card Biometrics** tab to a new number. If you do not change the **Photo Index**, the photo you import replaces the existing photo.

To Delete a Card Holder Photo

- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.

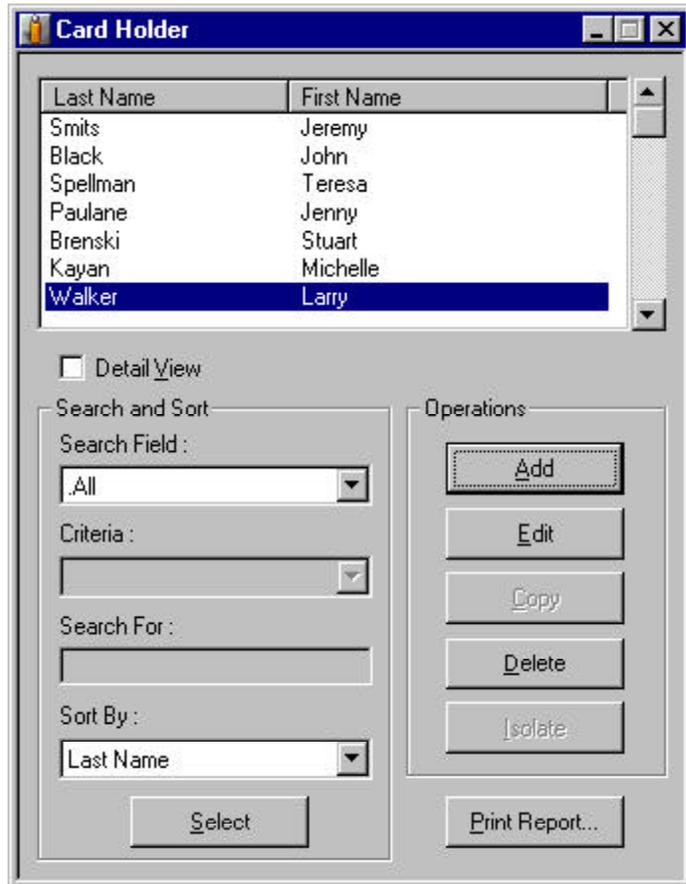


- 2 Select the desired card holder.
- 3 Click **Edit**. The Card Holder Record window appears.
- 4 Click the **Card Biometrics** tab of the Card Holder Record window.
- 5 In the **Photo** area of the **Card Biometrics** tab, select the photo to be deleted by setting the Photo Index to the photo's index number.
- 6 Click **Delete** to remove the photo.
- 7 You are prompted to confirm the delete. Click **OK** to remove the photo or **Cancel** to keep it.

To Capture a Card Holder Photo

Photos can be added to a card holder's information when the card holder is first added to the database. Or, photos can be added for existing card holders.

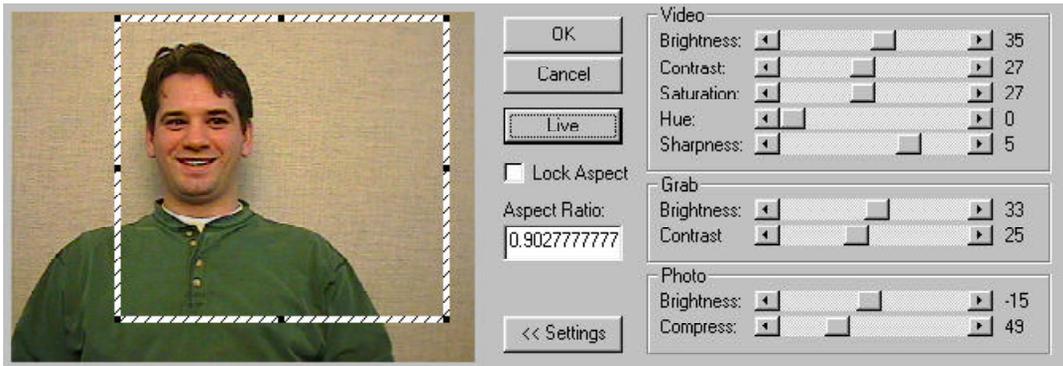
- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.



- 2 Select the desired card holder.
- 3 Click **Edit**. The Card Holder Record window appears.
- 4 Click the **Card Biometrics** tab of the Card Holder Record window.

If you are adding a new card holder, you must first enter the card holder's name.

- 5 Click **Capture**. The Capture Image window appears showing the live view from your video camera.
- 6 Click **Settings** to expand the window and access the video settings.



- 7 Adjust the **Video** settings (explained below) until the picture is satisfactory.
- 8 If you are not using a flash, set the **Grab** settings to the same values as the **Video** settings. If you are using a flash, reduce the **Grab Brightness** and **Contrast**. (The exact settings will vary depending on the type of flash and other lighting. The exact settings can only be determined through trial.)
- 9 Click **Freeze**, to capture the image. Once the picture is frozen or captured, you can make a number of adjustments.
- 10 Use the cropping frame to crop the image and adjust its proportions. If you want a particular proportion, enter it in the **Aspect Ratio:** field and select **Lock Aspect Ratio**.
- 11 If the image is too dark or too light, adjust the **Photo Brightness**.

- 12 Finally, set the degree of **Compression**, then click **OK** to save the image.

To Capture Additional Card Holder Photos

To add additional photos to a card holder file, follow the procedure above except change the **Photo Index** on the **Card Biometrics** tab to a new number. If you do not change the **Photo Index**, the new photo you capture replaces the existing photo with that photo index number.

Video Capture Settings

Freeze/Live: Switches between static and live-view image.

When the desired image is on screen, click Freeze to keep it on screen. Click Live to switch back to the live camera view. Adjust the slides at the right of the background image to enhance the quality.

Video

The settings in this section apply to the live on-screen video image.

Brightness: Lightens or darkens the entire tonal range of the image.

Contrast: Expands or contracts the entire tonal range of the image. The difference in highlights and shadows can be greatly increased or decreased.

Saturation: Adjusts the vibrancy (the amount of color) in the image.

Hue: Adjusts the value of color in the image. Adjusting this can correct images that seem to have incorrect color.

Sharpen: Sharpens blurry images by increasing the contrast of adjacent pixels. The highest value is 7.

Grab

These settings are applied to the camera when an image is captured. If you are not using a flash, set the Grab Brightness and Contrast the same as the Video settings. If a flash is used, reduce both the Brightness and Contrast

settings lower than the Video settings. This prevents the camera from over-exposing the picture. The exact settings must be determined by experimentation, as they vary depending on the type of flash, distance from the subject, and other lighting.

Brightness: Lightens or darkens the entire tonal range of the image to be captured.

Contrast: Expands or contracts the entire tonal range of the image to be captured.

Photo

These settings are applied to the video image after it is captured.

Brightness: Lightens or darkens the entire tonal range of the captured image.

Compression: The captured image is saved as a JPEG file which uses a compression technology to decrease the size of the file. If desired, use the slider to adjust the compression of the saved image. The lower the number, the greater the compression. However, images lose quality as they are compressed, so avoid over-compressing. A setting of 100 applies the least amount of compression and provides the best image quality. A setting of 30 applies the most compression, but provides lower image quality.

Card Holder Signatures

Card holder signatures can be included in the card holder database information. Up to 99 signatures can be recorded for each card holder.

If a signature is included in a card holder's record, it will appear in the card holder database detail view on the **Card Biometrics** tab. Each signature has a Signature Index number. By default, signature 1 is displayed. To view other signatures, change the **Signature Index** number on the **Card Biometrics** tab.

Signatures can be added to the card holder information

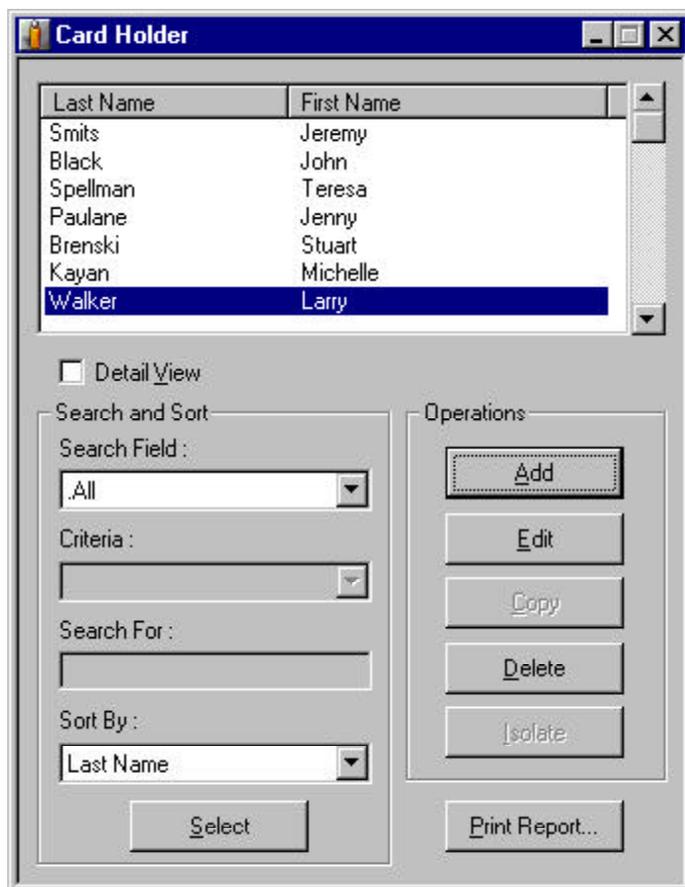
either by capturing them with an electronic writing pad, or importing digital files created in other programs, for example by scanning the card holder's signature and storing it as an Enhanced Metafile (.emf).

When a signature is included in a card holder's information, it is displayed on the **Card Biometrics** tab in the **Card Holder** database. It is also inserted in the badge (if the badge has a signature place holder) that is associated with any cards assigned to the card holder.

To Capture a Card Holder Signature

Signatures can be added to a card holder's information when the card holder is first added to the database or signatures can be added for existing card holders.

- 1 On the **Card** menu, click **Card Holder**. The Card Holder window appears.



- 2 Select the desired card holder.
- 3 Click **Edit**. The Card Holder Record window appears.
- 4 Click the **Card Biometrics** tab of the Card Holder Record window.

If you are adding a new card holder, you must first enter the card holder's name.

- 5 In the Signature area, click **Capture**. The Capture Image window appears, showing the input from your digital writing pad.
- 6 Have the card holder sign their name on the writing pad.

- 7 Click **OK** to close the capture window and display the signature on the **Card Biometrics** tab.
- 8 Click **OK** to save the signature.

To Import a Card Holder Signature

- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.



- 2 Select the desired cardholder.
- 3 Click **Edit**. The Card Holder Record window appears.
- 4 Click the **Card Biometrics** tab of the Card Holder Record window.

If you are adding a new card holder, you must first enter the card holder's name.

- 5 In the **Signature** area of the **Card Biometrics** tab, click **Import**. The **Enter Signature** window appears

- 6 Click **Open**.
- 7 Navigate to the folder containing your signature files (.sig or .emf), select the correct file and click **Open**. The signature appears in the **Enter Signature** window.
- 8 Click **OK**. The **Enter Signature** window closes and the signature appears on the **Card Biometrics** tab.
- 9 Click **OK** to save the signature.

To Import Additional Card Holder Signatures

To add additional signatures to a card holder file, follow the procedures above except change the **Signature Index** on the **Card Biometrics** tab to a new number. If you do not change the **Signature Index**, the signature you import replaces the existing signature.

To Delete a Card Holder Signature

- 1 On the Card menu, click **Card Holder**. The Card Holder window appears.
- 2 Select the desired card holder.
- 3 Click **Edit**. The Card Holder Record window appears.
- 4 Click the **Card Biometrics** tab of the Card Holder Record window.
- 5 In the **Signature** area of the **Card Biometrics** tab, click **Delete** to remove the signature.
- 6 You are prompted to confirm the delete. Click **OK** to remove the signature or **Cancel** to keep the signature.

Part 8

Scheduler

Scheduler



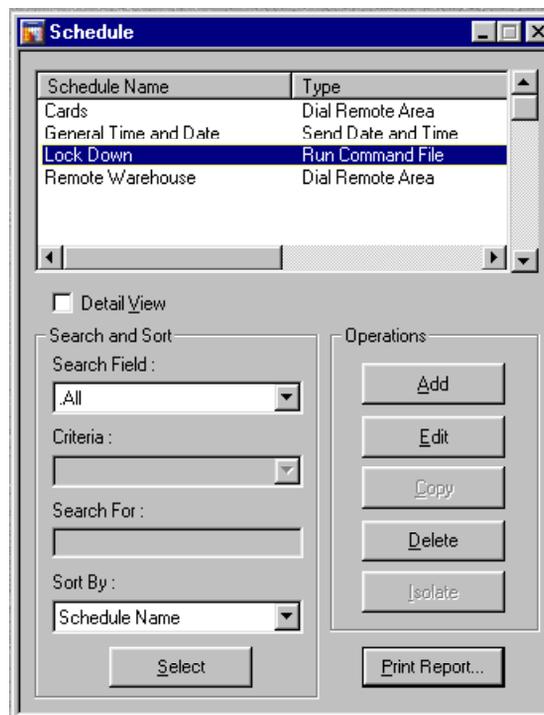
Scheduler

The Schedule Server sends out command files on a predetermined time table. These can be one-time events, hourly, daily, weekly, once every two weeks, or monthly. There is also a Never option, so you can define a scheduled event that you don't know yet when it will be sent.

The Schedule window lists schedules which have already been defined. Possible events include *Send Date and Time*, *Activate and Deactivate Cards*, *Dial Remote Area* and *Run Command File*. If Dial Remote Area is selected, a number of other options become available. The *Run Command File* option allows you to run any of the command files that you defined. (See Command File Database.)

To Schedule an event

- 1 In the Configuration menu, point to **Time Management**, and click **Schedule**. The Schedule window appears.



- 2 Click **Add**. The Schedule Record window appears.

- 3 In the **Schedule Name** box, enter a name for the scheduled event.
- 4 Click the pull-down arrow in the **Type** box, and select an event.
- 5 Click the pull-down arrow in the **Frequency** box, and select how often the file should be sent.
- 6 If you have selected *Run Command*, click the pull-down arrow in the **Command File** box, and select the command file you wish to run.
- 7 If you have selected *Dial Remote Area*, click on the pull-down arrow in the **Remote Area** box, and select the desired area name. Then select other options from the **Dial Remote Area** section and/or the **Initialize Remote Area**.

- 8 Go to the **Next Scheduled Date & Time** and select either now, or a time and date for the file to be sent.
- 9 Click **OK** to save your changes and return to the **Schedule** database window.

Part 9

Tracking & Muster

Overview

Muster System Precautions

Define Tracking and Muster Areas

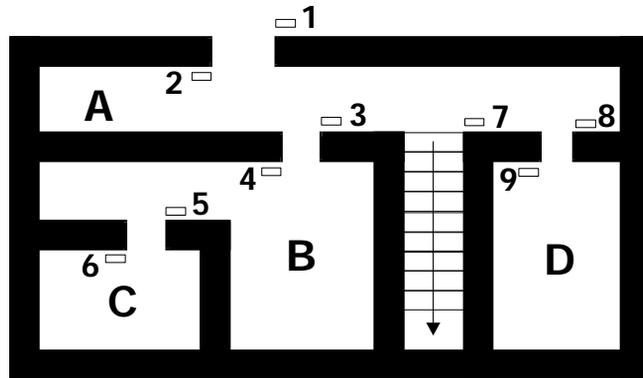


Overview

Tracking and Muster reporting allows card holders to be located in the event of an emergency. Tracking and muster areas are defined by mapping Tracking Areas and Muster Readers on a tree structure. People are required to swipe readers when entering or leaving tracking areas. In an emergency, a muster is declared, and people go to the muster readers and present their cards.

Tracking Areas

Tracking Areas are sections of a facility defined by selecting designated readers. Card reads within this area are recorded and can be viewed in the Muster view. In case of an emergency, card holders are instructed to go to a muster area and present their cards to a muster reader. The operator can then tell if everyone has exited the tracking areas, and if not, where they last presented their cards.



In this diagram, A, B, C, and D are Tracking Areas. If each area is distinct and not *nested*, then the area is defined by the readers that allow access to the area. Readers 1, 4, and 9 allow access to Tracking Area A. Readers 3 and 6 allow access to Tracking Area B. Reader 5 allows access to Tracking Area C and Reader 8 allows access to Tracking Area D.

The first time a person presents a card at one of these readers, the read event is recorded and may be viewed in the **Muster** view. Each time that card is presented at one of the readers in that same area, the previous record for that card is replaced by the new record. When a person moves to a different area, his card reads are removed from the former area and now appear in the new area. The screen displays the most recent records of card reads from individual areas or from all areas at one time.

The operator can select which areas to view by selecting the appropriate branch on the Tracking Area tree. If the top level is selected, card reads from all areas are displayed. Reports can also be generated. When a card is presented at a muster reader, it is removed from the tracking area and is listed in the muster area. A report of card reads can be printed.

Muster Area

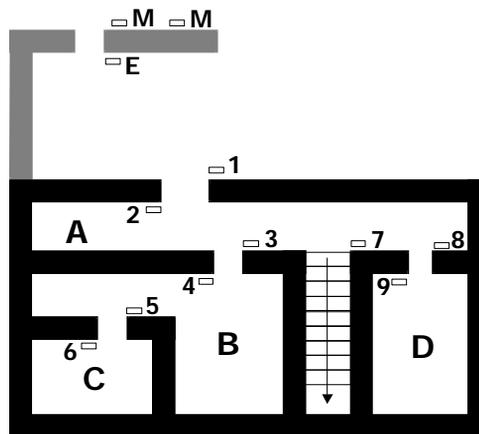
Like tracking areas, *muster areas* are also logical areas, not defined by the hardwiring of the system. They contain readers that will **only** be used by card holders if there is a call for muster (in the event of a disaster, for example). Several different muster areas can be created. The **Muster** view displays card read events. A report can be run on cards presented in an individual muster area or at all muster areas. In normal conditions there will be no transactions recorded at the muster readers. They will only be used if there is a muster call (usually in an emergency).

Nesting Areas

The concept of *nesting* is not unique to the tracking system, but does take on considerable significance when planning areas for disaster management, and can change the way tracking reports are generated. When an area is *nested* in another area, its readers are also part of that other area. The general principle of nesting is that readers used to enter an area or move about within the area should be listed under the tracking area in the Tracking Areas Database.

For example, if a hospital building is designated as tracking area H, the laboratory within the hospital can be another tracking area L, which is nested in area H. The lab's two readers would define tracking area L, but would also be part of the H tracking area. Therefore, an employee who has entered the lab is shown as being present in the hospital as well as being present in the lab. If the laboratory area was not nested, an employee entering the lab would be shown as present in the lab, but not present in the hospital.

To take another example, note the diagram below.



1-9 Tracking Reader

A, B, C, D Tracking Area, **M** Muster Reader, **E** Exit Reader

If we focus on the **B** and **C** areas shown above, we can consider those areas in two ways.

Not Nested

If they are not nested, then Readers 3 and 6 define Area B because they allow access to Area B. Reader 5 defines Area C.

Nested

If we consider these same areas to be nested, then anyone in Area C is ALSO in Area B. In that case, Readers 3, 5, and 6 define Area B and Reader 5 is also in Area C. There can be many levels of nesting. There could be another

room inside Area C, which would be nested under both B and C.

The diagram has the following Tracking Area definitions when nested:

Tracking Area A Readers 1, 3, 4, 5, 6, 8, 9

(Presenting at any of these readers shows the person in Tracking Area A. Readers 2 and 7 both leave Tracking Area A.)

Tracking Area B Readers 3, 5, 6

(Reader 4 leaves Tracking Area B)

Tracking Area C Reader 5

(Reader 6 leaves Tracking Area C)

Tracking Area D Reader 8

(Reader 9 leaves Tracking Area D)

Reader E (Exit Reader)

An Exit tracking area can be defined, if desired. Designate an exit reader, which card holders are required to use on leaving the facility. When mapping the tracking areas, this reader (or readers) define the exit area. Reader E causes the card holder information to be entered into the Exit tracking area.

Reader M (Muster Reader)

If readers M are defined as muster readers, a card read removes the card holder from the tracking area and moves them to the muster area.

Muster System Precautions

When designing a muster system for use with WIN-PAK 2.0 it is important to keep the following precautions in mind:

- **Use a separate dropline** (communication port) to isolate muster readers from tracking units.
- **Run a special line for the muster units** providing a unique data path, even if the wiring from the main facility is damaged. (Ideally, the tracking units should also have a unique data path.)
- **Use 485 communications with ACK-NAK enabled.** A battery backup power supply is required for the 485-API-2 on any N-1000-II.
- **Provide a UPS** or other backup power source for the WIN-PAK 2.0 computer, N-485-PCI-2 and other associated communication devices.
- **Provide a safe location** for the computer and communication.
- **Keep the muster system on-line** (not buffered) to ensure timely and complete information.
- **Perform regular checks** to insure that the muster system is functioning properly.
- **Check that all panels are maintaining the correct time and date.** It is critical that the time and date be correct on card reads at the muster readers. If the time and/or date are earlier than that of other reads in the system they will be ignored.
- **Program the Scheduler to update panel time and date** at least once a day.
- **Create a check list** for muster procedures.
- **Hold regular drills** to practice muster procedures.

At the time of muster:

Verify that muster reads from the panel have the correct time and date.

If the date and time are wrong, stop the presentation of

cards, and send the time and date to the panel.

Test the correction.

Repeat all card presentations. Multiple presentations of the same card at the Muster reader does not adversely affect the result of the Muster as the most recent time/date stamp is the one that is displayed.

Caution: A cold restart of the access control panel sometimes occurs if there is a serious power surge on the power or communication lines. This can cause corruption of the panel's database and time functions. The N-1000 panels address the time problem by generating a system alarm 99 (Panel Database, System Alarms, Panel Reset Alarm) when the panel experiences a cold restart. WIN-PAK 2.0 then sends the current Time and Date to the panel within 60 seconds of receiving this alarm. The default time and date after a cold restart is January 1st, Monday at 12:00 a.m. This time stamp appears on activities in the Event view and History report. Panel Time is critical to the proper operation of the muster function as the most recent event is used to determine the tracking/muster status of a card holder. If a card is presented to the Muster reader and the time and date stamp is earlier than the stamp from another reader location, there will be no change of status to the Muster (safe) location.

In the event that the card database is lost or corrupted at the muster reader, WIN-PAK 2.0 recognizes all read-types (*Not Found, Time Zone, Normal, Trace, Pin Violation, and Expired*) as *valid* muster reads (provided that the time is later than the previous card read as described above). This function eliminates the need to reload cards to a muster panel during a muster event. Only Valid and Trace card reads count at a Tracking reader.

Define Tracking and Muster Areas

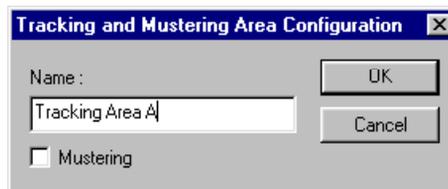
Tracking and muster areas are defined using a mapping tool. Branches are added to the tree representing either tracking or muster areas. Then the appropriate doors and readers are added to the branches.

To Define Tracking and Muster Areas

- 1 In the Configuration menu point to **Define**, and click **Tracking Areas**. The Tracking Area window appears.

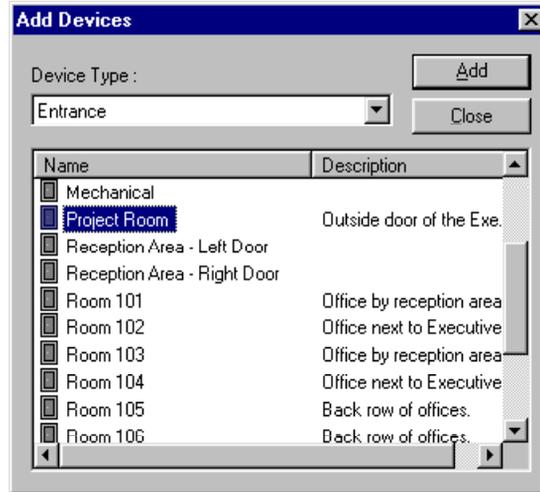


- 2 Right-click **Tracking and Mustering Area**, and then select **Add a Branch**. The Tracking and Mustering Area Configuration window appears.



- 3 Enter the name of the first area you want to define. By default, the area is a tracking area. To define it as a muster area, select the **Muster** check box.

- 4 Click **OK**. The new branch appears in the Tracking Area window.
- 5 Right-click the new branch and then select **Add Entrances**. The Add Devices window appears.



- 6 Select from the list of available entrances. Continue until you have added all of the branches and entrances required.

Entrances selected for a tracking area will be available for other tracking areas, but will NOT be available for a muster area. Entrances selected for a muster area will not be available for any other muster area or a tracking area.

Part 10

Guard Tour

Overview

Guard Tour Database

Check Point Alarms



Overview

A Guard Tour is a defined series of check points a guard must activate within a given amount of time. Usually the check points are readers where the guard presents a card, but they can also be input points attached to other devices, such as an egress button. The check points can be sequenced (that is, they must be activated in the specified order) or they can be unsequenced (they can be activated in any order).

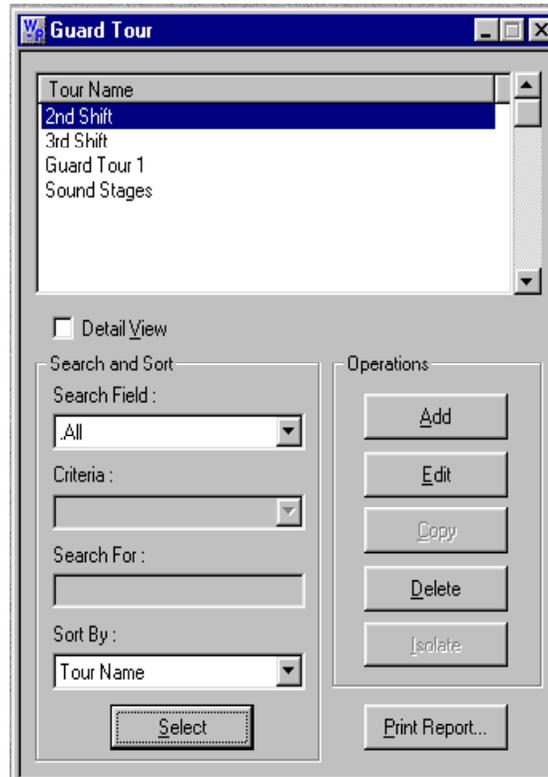
The tour definition sets the amount of time the guard has to get from one check point to the next. Alarms can be defined and priorities set for early arrival, unsequenced or missed check points.

Guard Tour Database

The guard tour definitions are stored in the **Guard Tour** database. The list of tours can be searched and sorted and reports can be generated. The details of a selected tour can be viewed by selecting the **Detail View** check box. Tours are added and edited in the **Guard Tour** database by activating the detail view.

To Add A Guard Tour

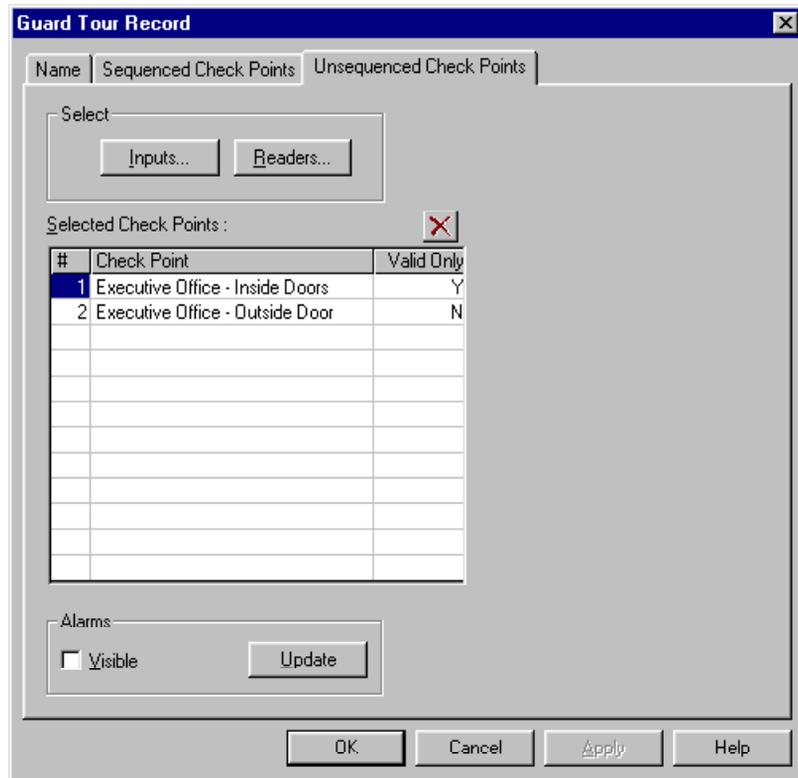
- 1 In the **Configuration** menu, click on **Guard Tour**. The Guard Tour window appears.



- 2 Click **Add**. The Guard Tour Record window appears.



- 3 In the **Name** box, enter a descriptive name for the tour (up to 40 characters).
- 4 Click either the **Sequenced Check Points** or **UnSequenced Check Points** tab. (One guard tour can have both types of check points.)



- 5 In the **Select** area, click **Inputs** button to select inputs or click the **Readers** button to select readers. The **Select** dialog box appears.
- 6 In the **Find What** field enter the first letters of the device you want to select. Click **Find** to list the readers or inputs that fit the criteria. (If the field is left blank, the list returns all inputs or readers on the device map.)
- 7 Select the input or reader to be added to the guard tour, and then click **OK**.
- 8 To remove a check point from the list, select it and then click the **Delete** button.
- 9 Repeat this procedure until all of the required check points have been added to the tour.
- 10 If the check point is a reader rather than an input, you have the choice of using a valid card read only

or allowing either valid or invalid cards to activate a check point. In this case an invalid card can activate a check point without unlocking the door. In the **Valid Only** column select the type of card read required for the check point.

- Y = valid cards only
- N = any card (valid or invalid) will work.

Sequenced Check Points

Sequenced check points should be assigned a time allowed for the guard to get from one point to the next. Tolerances for early and late arrival can also be assigned.

- 1 Click the **Sequenced Check Points** tab.

Guard Tour Record

Name Sequenced Check Points Unsequenced Check Points

Select

Inputs... Readers...

Selected Check Points :

#	Check Point	Valid Only	Time (hh:mm)	(+) (hh:mm)	(-) (hh:mm)
1	Conference Door	N	00:01	00:01	00:01
2	Theatre Doors	N	00:01	00:01	00:01
3	Executive Office - Inside Doors	N	00:01	00:01	00:01
4	Muster Reader	Y	00:30	00:05	00:05
5	Reception Area - Right Door	N	00:30	00:05	00:05

Alarms

Visible Update

OK Cancel Apply Help

- 2 Click the **Time** column and enter the time as *hours : minutes*.
- 3 Click the (+) column and enter the tolerance for early arrival in *hours : minutes*.

- 4 Click the (-) column and enter the tolerance for late arrival in *hours : minutes*.
- 5 To change the order of the check points, use the up arrow or down arrow buttons to move the selected point up or down the list.

Check Point Alarms

Sequenced check points on a guard tour generate alarms for three states: *Early Arrival*, *Missed*, and *Unsequenced*. Unsequenced check points generate an alarm for only one state: *Checked*. The priorities and dependent actions for these alarms are set in an action group which can be supplied to multiple check points. If the action group is changed it changes the setting for all Guard Tour Check Points associated with it. This action group can be edited from the Guard Tour database. Select a guard tour, click **Edit** and then click **Update**. It can also be accessed through the Action Group database. (See the Action Group section for further information.)

To Set Check Point Alarms

- 1 In the **Configuration** menu, click on **Guard Tour**. The Guard Tour window appears.



- 2 Select a guard tour from the list, and then click **Edit**. The Guard Tour Record window appears.
- 3 Click either the **Sequenced Check Points** tab or the **Unsequenced Check Points** tab.

Guard Tour Record

Name Sequenced Check Points Unsequenced Check Points

Select

Inputs... Readers...

Selected Check Points :

#	Check Point	Valid Only	Time (hh:mm) (+)	Time (hh:mm) (-)	Time (hh:mm) (-)
1	Reception Area - Left Door Status	N/A	00:00	00:00	00:00
2	Reception Area - Right Door Status	N/A	00:05	00:00	00:00
3	Warehouse Door Status	N/A	00:15	00:00	00:00

Alarms

Visible Update

OK Cancel Apply Help

- 4 In the **Alarms** area, select the **Visible** box, to view the current settings.
- 5 Click the **Update** button to edit these settings. The Check Point Alarms window appears.
- 6 Select an **Action Group**: The default setting is *Custom*; no priorities or actions are selected. If an action group for reader check points has been defined, select an existing action group from the drop down list. All of the properties of the selected action group will be applied to this check point. Hit **ENTER**, and then click **OK** to return to the **Check Point Record** window.

- 7 If no action group has been defined, click **Add**. Enter a name for the Action Group. Hit **ENTER**.
- 8 Click the pull-down arrow in the **Action** box, and select an alarm state.
- 9 Click the pull-down arrow in the **Priority** box, and assign a priority.

1 is the highest, 99 the lowest. If no priority is assigned, no further information can be entered.

- 10 Click the pull-down arrow in the **Time Zone** box, and select the time during which the action group is activated.

If None is selected, the defined actions take effect regardless of the time.

- 11 In the Command Files area, enter any command files that you want activated in response to the alarm state. You can choose to activate command files on **Receive**, **Acknowledge**, and/or **Clear**.
- 12 If desired, choose a sound file, a CCTV camera and monitor to be activated in the response to receiving the alarm.
- 13 To print or write the file to the history, select the respective check boxes.
- 14 In the **Message** area, enter a message to be sent to the Alarm Detail View in response to the action.
- 15 Repeat this procedure for each alarm state for which you want a response.
- 16 Click **OK** to save the changes and return to the **Guard Tour Record** window.

Part 11

Panel Initialization

Initializing Panels

Initialization Options



Initializing Panels

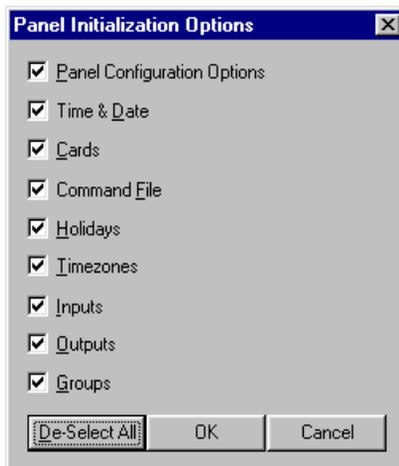
Programming information that is entered into WIN-PAK 2.0 must be sent to the panels before it can take effect. When panels are first added to the system, they must be initialized so that the information entered in the panel configuration is sent to the panels. Likewise, whenever there is a change in the panel configuration, the new information must be sent to the panels. The only exceptions are changes to individual card and card holders, which are automatically sent to the panels.

Panels are initialized from the floor plan view or from the Control Map.

Panel Configuration Options reset all of your panel's programming. It is recommended that you select all options (check the **Select All** box) when sending the **Panel Configuration Options**.

To Initialize a Panel from the Floor Plan

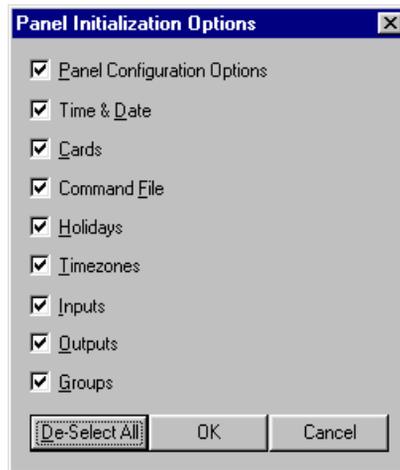
- 1 Open the floor plan containing the panels you wish to initialize. Right-click the first panel, and then select **Initialize**. The Panel Initialization Options window appears.



- 2 If you want to send all information to the panel, click **Select All**. This will replace all panel programming with the new information being sent.
- 3 Otherwise, if you want to update selected information do not select **Panel Configuration Options**. Select the boxes for each type of information you want to send and then click OK.

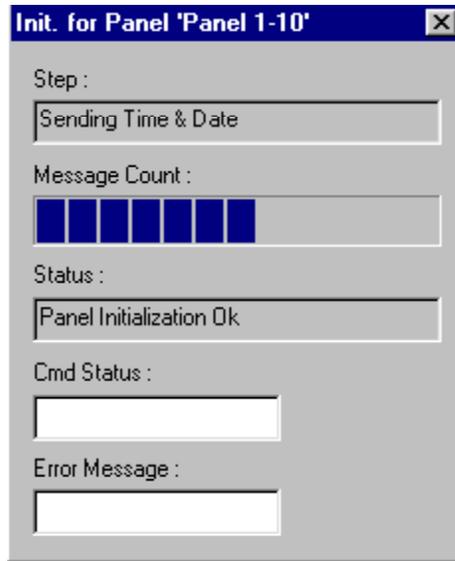
To Initialize a Panel from the Control Map

- 1 In the **Operations** menu, select **Control Areas**.
- 2 Right-click the desired panel from the **Control Map**, and then click **Initialize**. The Panel Initialization Options window appears.



- 3 Select the appropriate options and click **OK**.

As the panel is initializing, a status box indicates what information is being sent. If there is an error, the status box indicates which command caused the error.



Step Indicates which information is being sent.

Message Count Indicates progress of messages being sent.

Status Indicates if the initialization is proceeding, is successful or has failed.

Cmd Status Indicates if a command has timed out.

Error Message Indicates if there were any errors in transmitting information to the panel.

Panel Initialization Options

- **Panel Configuration Options:** Sends all panel configuration options information. This resets your panel programming and it is recommended that you select all options when the Panel Configuration Options are sent to the panel.
- **Time & Date:** Updates panel time and date with the network time and date. You may notice a pause for up to 50 seconds when the time and date are sent because the time is sent at the top of the computer minute up to + 10 seconds.
- **Cards:** Sends card information to the panel. When sending cards it is recommended that you

re-initialize the panel by choosing Select All. That will insure that old card information is removed when the new card information is added. (When cards with an Active or Trace status are added, edited or deleted from the card or card holder database, this information is automatically sent to the panels. All other card information changes must be sent using this command.)

- **Command File:** Sends a selected command file to the panel configuration.
- **Holidays:** Sends the selected holiday group to the panel.
- **Time Zones:** Sends the selected time zones to the panel.
- **Inputs:** Sends input point information to the panel.
- **Outputs:** Sends output point information to the panel.
- **Groups:** Sends group information to the panel.

Chapter V

Badging

Badge Layouts Database

Creating Badges

Badge Definition Window

Badge Object Property Tabs

Badge Objects

Badge Layouts Overview

Badge layouts or designs are templates that define the size, placement and other properties of a badge. These templates can be associated with cards. When a card is issued to a card holder, his or her information is automatically entered in the badge template, creating an individual badge. This badge can be printed on a card, creating a photo ID. If desired, badges can be printed on proximity cards, so that they are also access cards. Badges can be printed using any Windows-compatible printer - ink jet, laser, or PVC card printer. Special PVC card printers allow two-sided and magnetic stripe encoding.

The Badge database contains information on the various badge layouts or designs in the system. It also gives access to the Badge Layout Utility which is used to create and edit badges.

To open the **Badge Database** window, go to the **Configuration** menu, point to **Badge**, and then click **Badge Layout Utility**. The main database window contains a list of badges which can be searched and sorted either by name or description. Use the scroll bars to scroll through the list.

To view a badge, select it from the list and then select the **Show Badge** check box. Deleting a badge from the list removes it from the system. Click **Edit** to make changes in the selected badge. Click **Add** to create a new badge. A selected badge can be copied by clicking the **Copy Badge Button**. Close the **Badge Database** by clicking the close

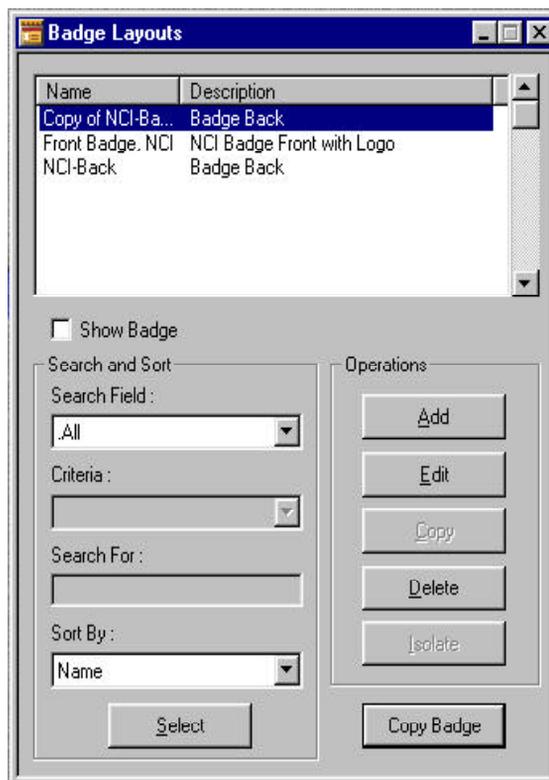
 button.

Badge Layouts Database

Copying a badge design allows you to more easily create several badges with the same basic layout and perhaps one distinguishing feature (such as the backdrop color). Create your basic design, then copy it and edit the copy to suit your needs.

To Add a Badge Layout

- 1 In the **Configuration** menu, point to **Badge**, and then click **Badge Layout Utility**. The Badge Layouts window appears.



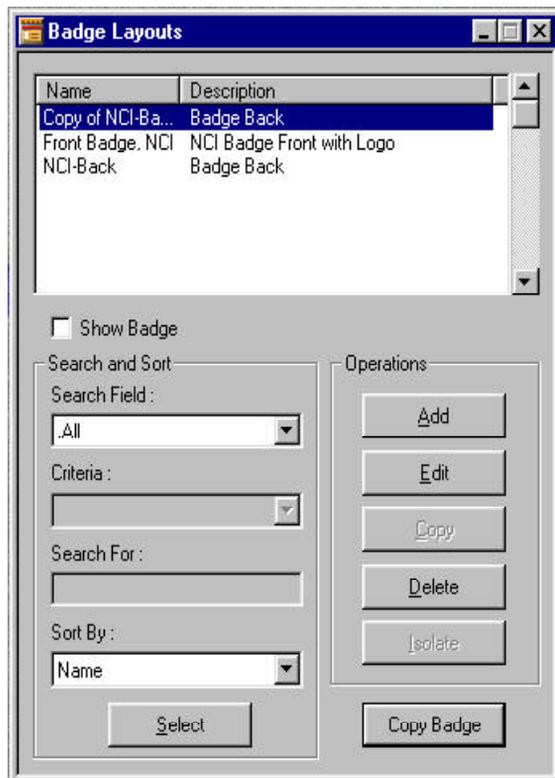
- 2 Click **Add** and the Badge Definition window appears.
- 3 Enter a name for the badge layout and a description (optional) in the Name and Description fields respectively. You can use up to 30 characters for

the name and 60 for the description, including spaces and special characters.

- 4 Set the printable size of the badge. (The default badge size is landscape 50 mm high by 80 mm wide. These dimensions will work with most PVC printers.) To change this size, right-click anywhere in the Badge Definition window, select Properties, then click the Positioning tab. In the Height: field, enter the height of the card in millimeters. In the Width: field, enter the width in millimeters. The badge outline will resize to these dimensions. Click **Apply** to apply the change to your badge.
- 5 To change the badge orientation from landscape (horizontal) to portrait (vertical) enter the larger dimension in the height box.
- 6 Add any design elements to the layout. For more information, consult the Create Badges section.
- 7 Click **Apply** to view the changes or click **OK** to apply the change and return to the Badge Definition window. Or click Cancel to close the dialog box without creating a badge. (Clicking Cancel after applying the change will not bring back the previous settings.)

To Copy a Badge Layout

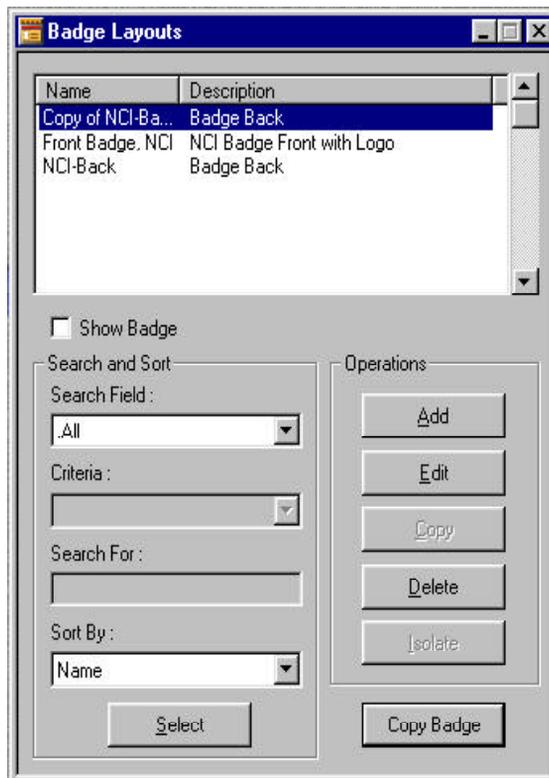
- 1 In the Configuration menu, point to **Badge** and click **Badge Layout Utility**. The **Badge Layouts** window appears.



- 2 In the Badge list, select the badge design you want to copy.
- 3 Click **Copy Badge**.
- 4 Click **OK** to copy the badge.
- 5 Click **Select**, to refresh the list of badge design names and the copy appears in the list. (If, for example, your original badge design is named *Badge Front*, the copy will be named *Copy of Badge Front*.)
- 6 To rename the copy, see the Edit a Badge Section below.

To Edit a Badge Layout

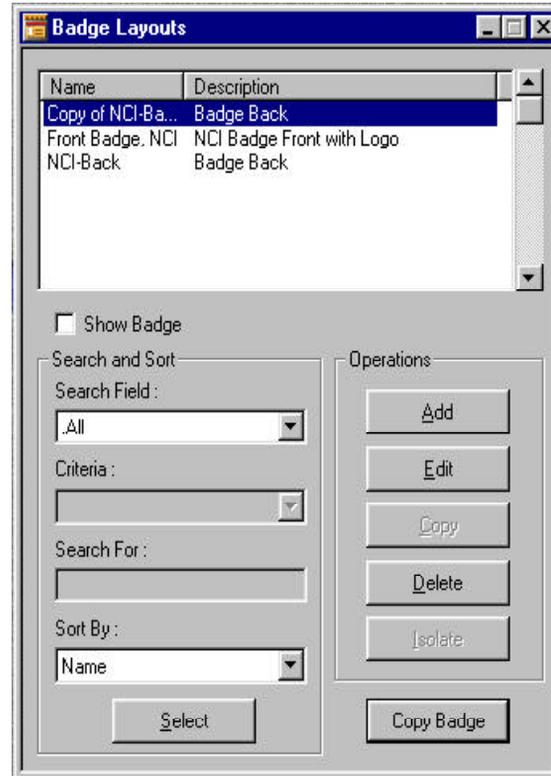
- 1 In the Configuration menu, point to **Badge**, and click **Badge Layout Utility**. The **Badge Layouts** window appears.



- 2 Select a badge design from the list.
- 3 Click **Edit**. The Badge Definition window appears.
- 4 Make desired changes to the Badge.
- 5 Click the save  button on the Badge Layout toolbar to save all changes made to the badge design.
- 6 Click the close  button to close the Badge Definition window. On exiting the Badge Definition window, you will be prompted to save any unsaved changes.

To Delete a Badge Layout

- 1 In the Configuration menu, point to **Badge** and click **Badge Layout Utility**. The Badge Layouts window appears



- 2 Select a badge design from the list.
- 3 Click **Delete** to permanently delete the selected badge layout from the database. If the badge layout you are attempting to delete is assigned to one or more cards, an information dialog box appears, listing the cards. Deleting the badge layout at that point clears the link to all cards. Clicking on **Cancel** aborts the deleting process.

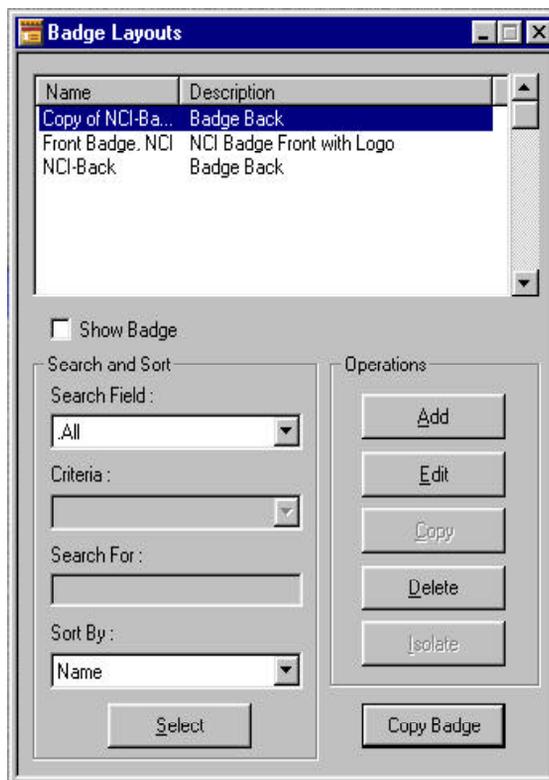
Creating Badges

WIN-PAK 2.0 has a full-featured badge layout utility. You can create badge designs, with colored or graphic backgrounds, logos, text, bar codes, and place holders for card holder photos and signatures.

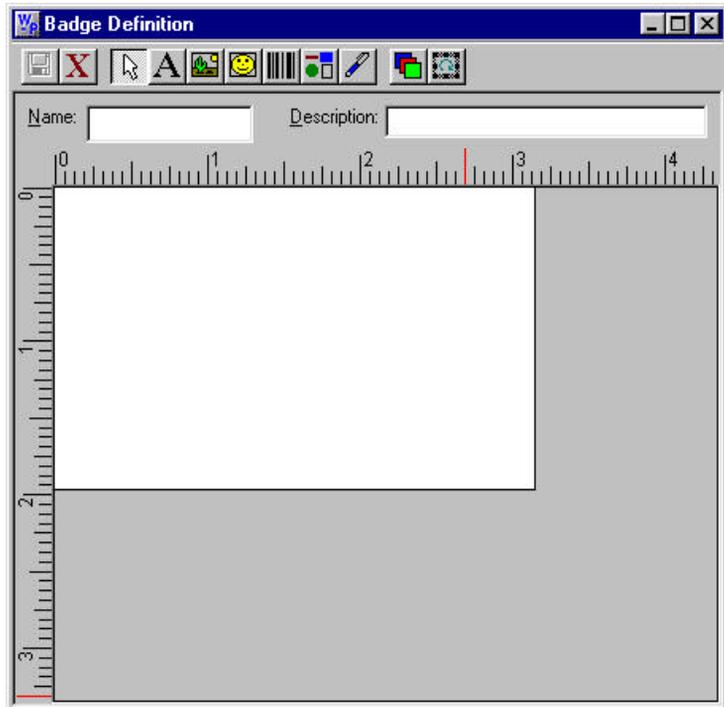
Begin by defining the size and orientation of your badge or use the default settings. Once the basic badge has been defined, items are added as desired. Once placed, badge items can be moved, resized and modified in a number of ways.

To Create a Badge Layout

- 1 In the **Configuration** menu, point to **Badge** and click **Badge Layout Utility**.



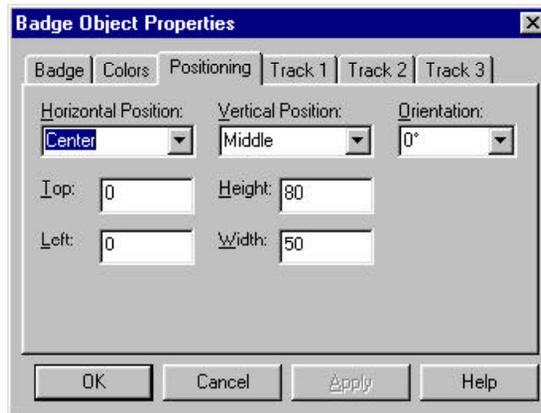
- 2 Click **Add**. The Badge Definition window appears.



- 3 Enter a name (required) for the badge design and a description (optional) in the fields to the right of the tool bar. You can use up to 30 characters, including spaces and special characters.
- 4 Set the printable size of the badge. Right-click anywhere in the Badge Definition window, and select **Properties**. The Badge Object Properties window appears.

The default badge size is landscape 50 mm high by 80 mm wide. These dimensions will work with most PVC printers.

- 5 Click the **Positioning** tab of the Badge Object Properties window.



- 6 In the **Height** box, enter the height of the card in millimeters.
- 7 In the **Width** box, enter the width in millimeters. The badge outline will resize to these dimensions.

To change the badge orientation from landscape (horizontal) to portrait (vertical) enter the larger dimension in the **height** box.

- 8 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window. Click **Cancel** to close the window without creating a badge.

Badge Elements

Six types of elements can be placed on a badge: text, bitmap, photo, barcode, shape, and signature. Badge items are layered as they are placed. This is only noticeable when one element overlaps another. The layering order is changed by using the **Select Next Item**  button from the toolbar. As each item is selected, it is brought to the front.

To Add a Badge Item

- 1 In the the toolbar of Badge Definition window, click the button for the item that you want to add.



text bitmap photo barcode shape signature

- 2 Then, click within the badge in the Badge Definition window and drag the box to the desired size.

To Resize an Item

- 1 In the Badge Definition window, click on the item to select it for modification.

If it is difficult to select an item, use the **Change Layering**

button  or the **Select Next Item**  button to locate the item you want to select.

- 2 Move the cursor over a sizing handle on the edge of the selected object. When the cursor changes to a double-headed arrow . Click and drag the sizing handle until the object is the desired size and shape.

To Move an Item

- 1 Move the cursor over the object until the cursor becomes a four-headed arrow. 
- 2 Click the item and drag it to the desired location.

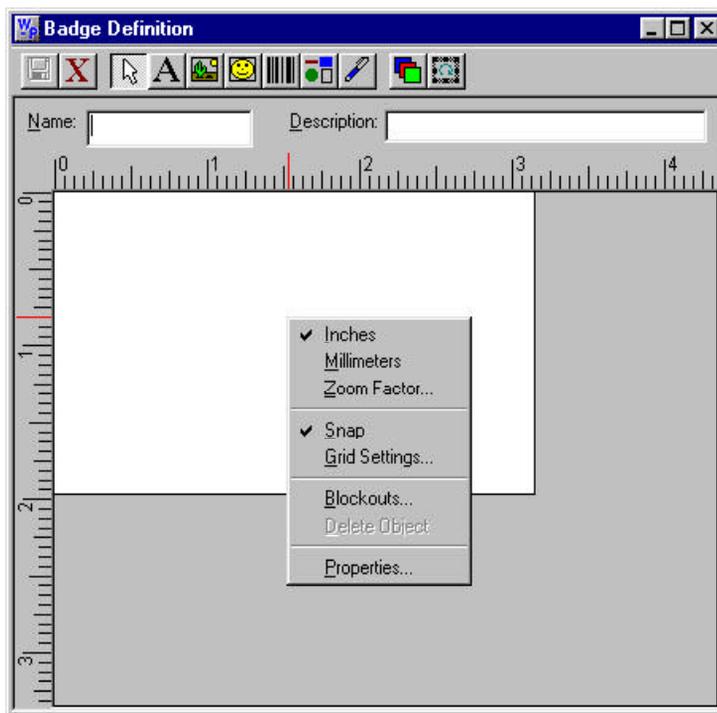
If it is difficult to select an item, use the **Change Layering**

button  or the **Select Next Item**  button to locate the item you want to select.

Badge Definition Window

To open the **Badge Definition** window go to the **Configuration** menu, point to **Badge**, then click **Badge Layout Utility**. From the main **Badge Layouts Database** window, click either **Add** or **Edit**. This opens the Badge Definition window.

The Badge Definition window has its own tool bar. The outline inside the window shows the current badge size (the default badge is landscape 50 mm x 80 mm).



Right-click inside the window to open a menu with ruler settings and other commands listed below.

Commands

Inches: Sets the ruler to inches.

Millimeters: Sets the ruler to millimeters.

Zoom Factor...: Enlarges or reduces the **Badge Layout** view.

Snap: Snaps items to the grid.

Grid Settings...: Changes the grid size. Also hides or displays the grid.

Delete Object: Deletes the selected object.

Properties...: Opens the **Object Properties** dialog box.

To Open the Badge Definition Window

- 1 In the Configuration menu, point to **Badge**, then click **Badge Layout Utility**. The Badge Layouts window appears.
- 2a Either select an existing badge and click **Edit**.
-OR-
- 2b Click **Add**.

To Exit the Badge Definition Window

- 1 Click the close  button. You will be prompted to save any unsaved changes.

Grids

Grids are evenly spaced points on the badge layout area that assist in sizing and aligning items. The grid can be used as a visual aid in placing items, or you can have items snap to the grid for more precise alignments of objects.

To Set-up a Grid

- 1 Right-click in the **Badge Definition** window, then select **Grid Settings**.
- 2 Select the desired spacing of the grid from this list. Click **OK** to save the setting and return to the previous menu.
- 3 Select **Snap to Grid** if you want items to snap to the grid when they are moved. For example, when an item is moved close to a grid mark, it will be pulled to it like a magnet.

- 4 Select **Show Grid** if you want the grid marks visible.

Blockouts

Blockouts provide a non-printing area for badges. The blockout keeps a defined area of the badge free of printing which is useful, for example, to prevent printing over a magnetic stripe or hole punch area in the card. Unlike other badge objects, the blockout has no properties. In the item layering, the blockout always remains on top. (The blockout is generally effective in preventing overprinting of the magstripe area, some card printers will print resin black over the blockout. Therefore, avoid placing any black type over the magstripe area.

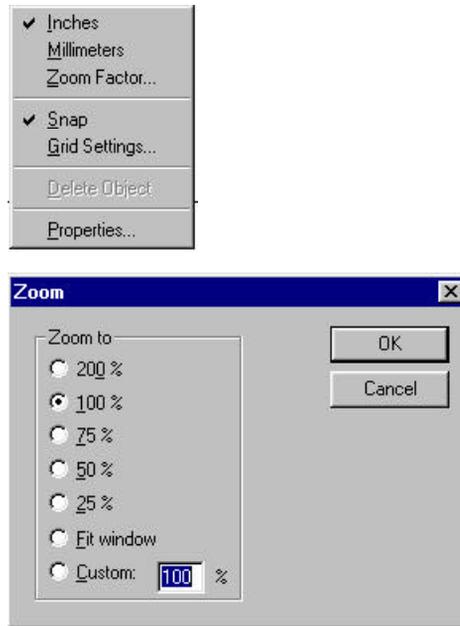
To Set a Blockout

- 1 Right-click within the badge outline, and then click **Blockout**. The Blockout dialog appears.
- 2 Click **Add**, enter name and positions setting from left edge, top edge, width, and height of the blockout area. Enter the distance from the top of the badge's printable area and the width of the blockout in millimeters. You may have to measure an actual card and print a test to determine the exact position for the block out.
- 3 Click **OK**.
- 4 To apply the blockout selected define blockout name and click **Place**.

Zoom Factor

To Enlarge the Badge Definition View

- 1 Right-click in the **Badge Definition** window, and then click **Zoom Factor**. The Zoom window appears.



- 2 Select a percentage enlargement or reduction, **Fit window** or type in a value in the **Custom** box (this can range from 10% to 999%).
- 3 Click **OK**.

Badge Backgrounds

The Badge Layout Utility can set a colored or graphic background for the entire printable area of the badge. Other items are then placed on this background. The outline in the Badge Definition window shows the printable area.

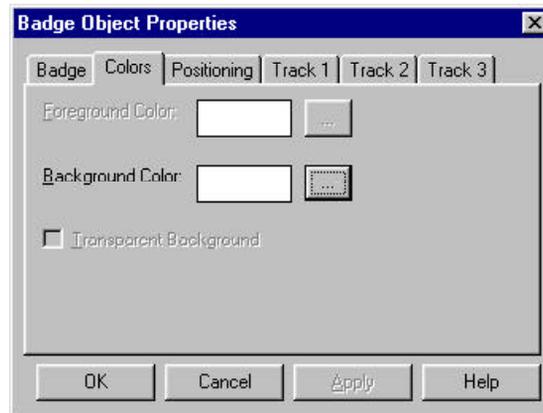
There are three ways to provide a background for a badge: select a single color, capture or import a graphic that can be added to the **Background Image** list.

To Apply a Background Color

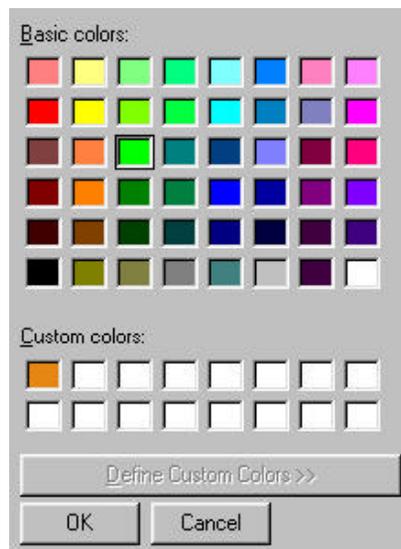
The simplest background is a single color. Badge colors can be used to represent different clearance levels as they are easy to distinguish from a distance.

- 1 Right-click the badge, and click **Properties**. The Badge Object Properties window appears.

- 2 Click the **Colors** tab in the **Badge Object Properties** window.



- 3 Click the button next to the **Background Color** box. The Color window appears.



- 4 In the color palette, click the color swatch you want to use for a background.

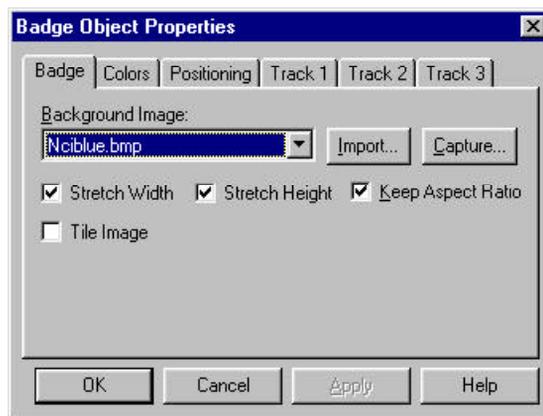
You can also create a custom color for your badge. See Custom Colors.

- 5 Click **OK**.

- 6 The selected color appears in the **Background Color** field. Click **Apply** or **OK** to apply the color to your badge. Some printers produce a more even color if a light colored or white backdrop is used. Solid dark colors may not print evenly.

To Apply a Bitmap Background Image

- 1 Right-click on the badge in the Badge Definition window, and select **Properties**. The Badge Object Properties window appears.
- 2 Click the **Badge** tab of the Badge object Properties window.



- 3 Click the pull-down arrow in the **Background Image** box, and select an image from the list.

Images can be added to the **Background Image** list by importing existing graphic files or by capturing live images using your computer, equipped with a video camera and capture board.

- 4a To have the image cover the entire badge, select **Stretch Width** and **Stretch Height**.
- 4b To fill the badge as much as possible, without distorting the image, select **Keep Aspect Ratio**.
- 5 Click **Apply** to view the changes or click **OK** to apply the image to your badge and exit.

Badge Object Property Tabs

To open the **Badge Object Properties** dialog box, right-click anywhere in the **Badge Definition** window, but not on an existing item and click properties.

Six tabs with object settings are included in your badge layout: **Badge, Colors, Positioning, and Track 1, Track 2, Track 3.**

The **Badge** tab allows you to import or capture background images. It also can determine how the program will fit the image to the available space.

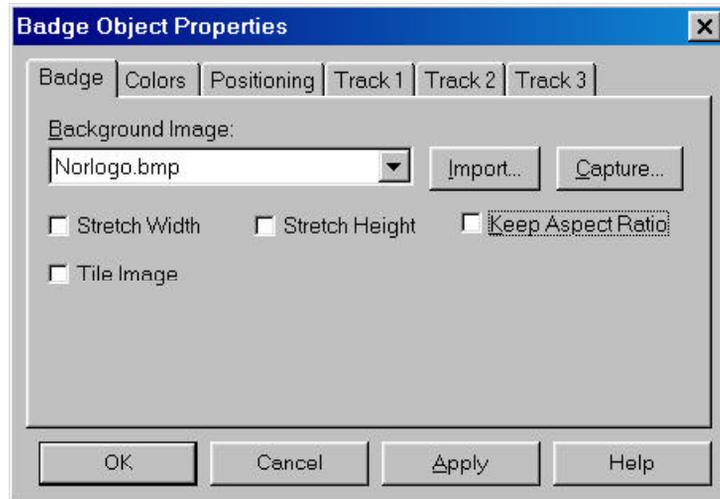
The **Colors** tab allows you to select a background color for a given badge element.

The **Positioning** tab allows you to change the size of the badge, change from landscape to portrait, determine the alignment of objects within a photo or graphic placeholder and also rotate an object on the badge layout.

Track 1, Track 2, and Track 3 are for magnetic stripe encoding.

Badge Tab

The badge tab allows you to import background images. It also can determine how the program will fit the image to the available space. If no badge element is selected when the dialog box is opened, the settings apply to the entire badge. If a shape, bitmap, or other object is selected, a different Object Properties dialog appears, and the settings apply to the selected object.



Background Images can be imported into the WIN-PAK 2.0 database from any directory. (Once added to the WIN-PAK 2.0 database, background image files are available to any workstation.) Scanned images, photos taken with a digital camera, and artwork created in a drawing or paint program can all be incorporated into your badge design. However, they do need to be saved in one of the following supported file-types: BMP, JPG, PCX, and TGA. The **Stretch Width**, **Stretch Height** and **Keep Aspect Ratio** options allow graphics to fill place holders that are not exactly the same size as the graphic. The stretch options make the graphic fill the space as you have defined it. If the image is a different shape than the space, it will be distorted. If you also select **Keep Aspect Ratio**, the graphic will be as large as possible, without distortion.

For example, if you place a square photo box in the badge design, then place a tall rectangular photo in the box, with the **Keep Aspect Ratio** option selected, the photo will be as tall as the place holder, but leave a margin on the sides where the placeholder background color will show. If you do not want this margin to show, select the placeholder, then go to the **Colors** tab and select **Transparent Background**.

Options

Background Image: Select a graphic file from this list to use as a background.

Stretch Width: Stretches the graphic to fill the defined horizontal space.

Stretch Height: Stretches the graphic to fill the defined vertical space.

Keep Aspect Ratio: Maintains the image proportions.

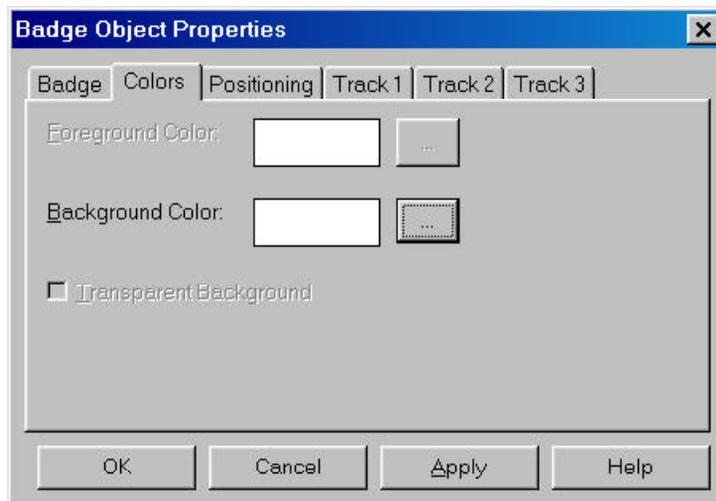
Tile Image: Repeats the image to fill the defined space.

Import Button: Select graphic images to be imported into the WIN-PAK 2.0 database and added to the list for background images.

Capture Button: Opens the **Capture Graphic** window for capturing video images.

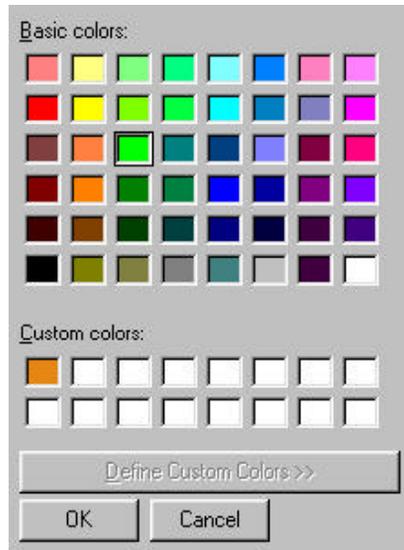
Colors Tab

The **Colors** tab allows you to select a badge background color. If no items are selected when **Properties** is selected, the color is applied to the whole badge background. The foreground color is not available unless an element is selected.



To Select a Basic Background Color

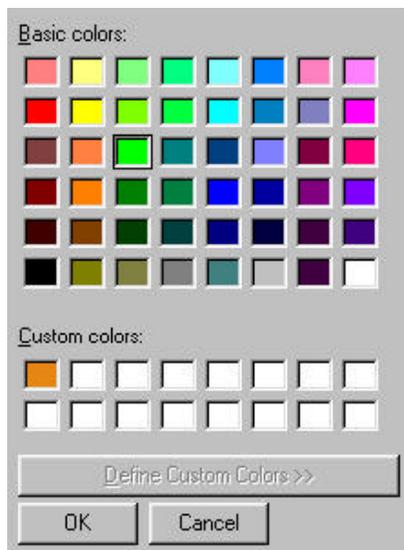
- 1 Click the button next to **Background Color** box. The Color window appears.



- 2 Choose a color from the **Basic colors** palette by clicking the color swatch.
- 3 Click **OK** to return to the Colors tab. The selected color appears in the Background Color box.
- 4 Click **Apply** or **OK** to apply the background color to your badge.

To Select a Custom Background Color

- 1 Click the button next to **Background Color** box. The Color window appears.



- 2 Click **Define Custom Colors**. The Color window expands.
- 3a If you know the Red, Green, Blue equivalents for a specific color, enter those values in the Red, Green, Blue boxes.

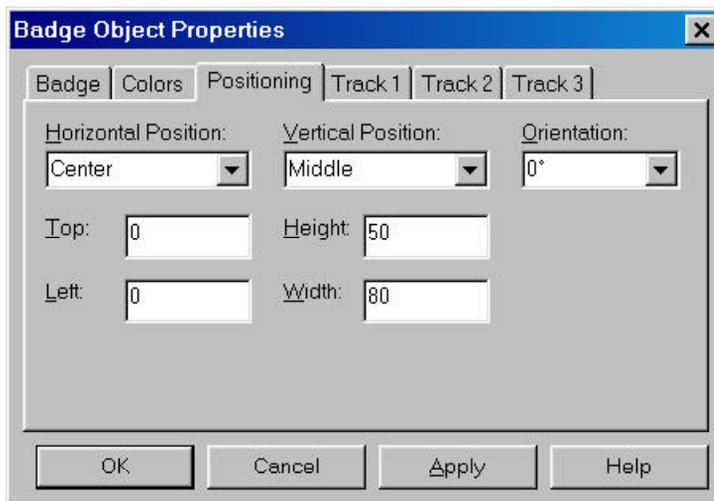
-OR-
- 3b If you know the Hue, Saturation, Luminosity equivalents for a specific color, enter those values in the Hue, Sat., and Lum. boxes.

-OR-
- 3c Use the color selector to choose the color you want. For more information, see Custom Colors.
- 4 When the desired color appears in the **Color/Solid** window, click the **Add to Custom Color** button. The new color is added to your custom color palette. Select the new color.
- 5 Click **OK** to return to the Colors tab. The selected color appears in the Background Color box.
- 6 Click **Apply** or **OK** to apply the background color to your badge.

Because of differences in monitors, printers and print media, the printed badge color may be a different shade than the color displayed on your monitor.

Positioning Tab

The **Positioning** tab allows you to change the size of the badge (change from landscape to portrait), determine the alignment of objects within a photo or graphic place holder and also rotate an object on the badge layout.



Position

Horizontal: Places the graphic object in the top, center or bottom of the defined area.

Vertical: Places the graphic object in the right, middle or left of the defined area.

Orientation: Rotates the selected object by 90 degree increments.

Top: The position from the top of the badge in millimeters (normally 0 for PVC printers).

Left: The position from the left of the badge (in millimeters (normally 0 for PVC printers).

Height: Height of the badge in millimeters.

Width: Width of the badge in millimeters.

Magnetic Stripe Encoding

Magnetic stripe data can be defined for all three tracks. (Some encoders and some cards do not support Track 3. Check your printer and card supplier before using this feature.)

For each track, specify the magnetic stripe format: IATA, ABA, or TTS. The industry standard for track/format assignment is Track 1 - IATA, Track 2 - ABA, Track 3 - TTS. (The NR-1-WR, NR-3-WR, NR-5-WR and the NR-5-KP read ABA on Track 2. The NR-2-WR and NR-6-WR read ABA on Track 1.)

Each track can have a number of data items. (The number of items is limited by the amount of data that will fit on a given track. See your printer documentation for the number of characters that can be encoded using each format.) Only certain ASCII characters can be used, depending on the format selected for that track.

IATA accepts the alpha/numeric characters 0–9, and A–Z, plus various punctuation characters (ASCII 32-95). Lower case letters will be forced to upper case as IATA doesn't understand lowercase. If a field separator is required, it is designated by the “^” character.

ABA accepts only numeric characters 0-9 and various punctuation characters (ASCII 48-63).

TTS accepts the alpha/numeric characters 0–9, and A–Z, plus various punctuation characters (ASCII 32-95). Lower case letters will be forced to upper case as IATA doesn't understand lowercase. If a field separator is required, it is designated by the ^ character.

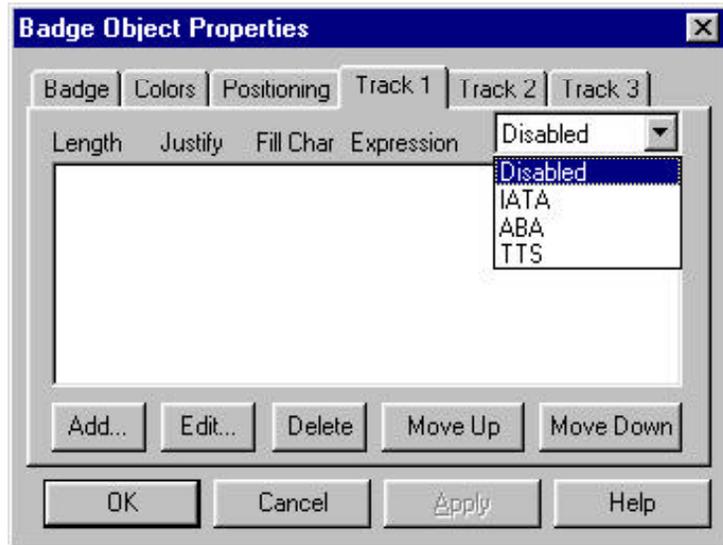
The maximum number of characters that can be printed using the Datacard IC III printer are listed in the following table:

Track	Type of Character	Max. Char.	bits per inch
Track 1:	alphanumeric	76 characters	210 bits/in.
Track 2:	numeric only	37 characters	75 bits/in.
Track 3:	numeric only	104 characters	210 bits/in.

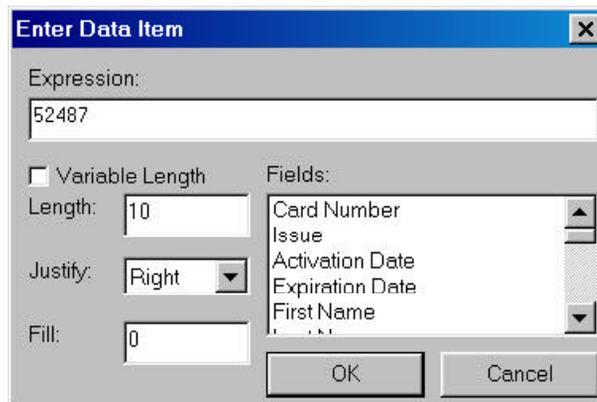
These specifications differ from the ISO 7811/2 Standard because of printer limitations.

To Add or Edit Magnetic Stripe Data

- 1 Select the tab for Track 1, Track 2 or Track 3, then choose the format from the drop-down list in the upper right corner.



- 2 Select **Add** or **Edit** to define items to be added to the track. The Enter Data Item window appears.



- 3 Type in or select fields for the Expression. (See the following explanation for variables.)
- 4 Click **OK** to save any changes and return to the **Track** tab.
- 5 When several data items have been entered on the **Track** tab, they can be reordered using the **Move Up** and **Move Down** buttons.
- 6 To remove a data item from the list, select it and click the **Delete** button.
- 7 When you have completed the data item list, click **OK** to save your changes.
- 8 Click **OK** to exit and save any changes or **Cancel** to exit without saving any changes.

Magnetic Stripe Encoding Options

The options available for a given track depend on which format has been selected.

Expression: Any combination of text or database fields can be entered. Either type the desired text or double-click the note field from the **Fields:** list, to enter it in the **Expression** field.

Variable Length: If the **Variable Length** box is selected, the field length is adjusted to match the number of characters in the data item.

Length: If a value is entered for **Length**, the data item will be truncated or padded so that it is precisely that number of characters.

Justify: This only applies to fixed-length data items. If a data item is shorter than the number of characters allotted for it, it can be justified left, center, or right, within those characters. All other characters are set to the **Fill** character.

Fill: Enter the character to be used to pad the data to fit a fixed length field.

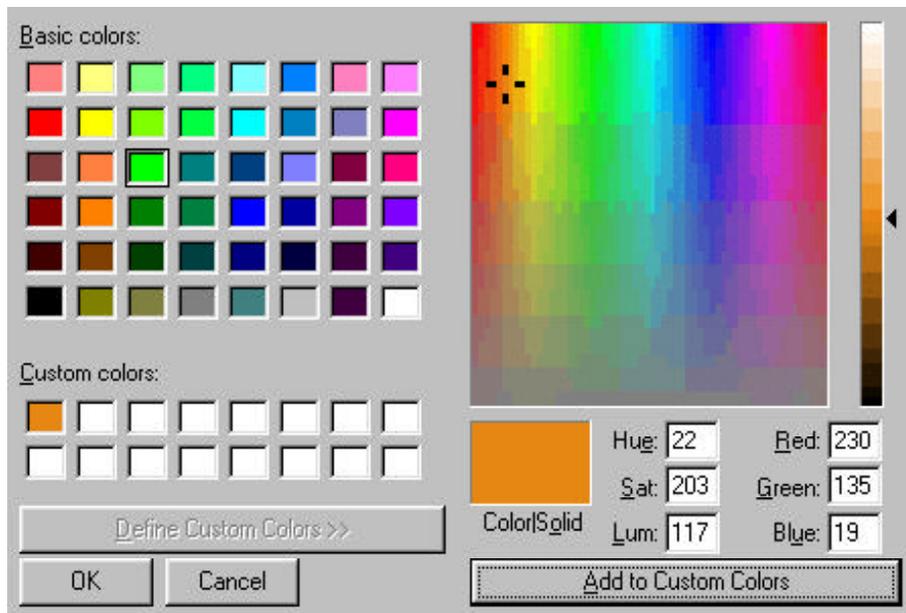
Fields: Select a field and double-click it to add it to the expression. All of the Card and Card Holder note fields for the currently selected account are displayed in this list.

Custom Colors

If the pre-set colors on the color palette don't meet your specifications for a background or text color, you can create a custom color. Click **Define Custom Colors...** to display the custom color selector.

The color selector describes colors in two common color models: hue, saturation, luminosity (HSL); and red, green, blue (RGB).

A third common color model is cyan, magenta, yellow and black (CMYK). It is based on the use of four colors of ink to approximate a full spectrum of colors. Many badge printers use the CMYK color model and, therefore, will give only an approximate match for the colors displayed on the screen.



Hue/Saturation/Luminosity

The HSL color model is based on how colors are viewed by the human eye. Colors are described by three basic characteristics:

Hue is the wave length of light reflected by or transmitted through an object. It is the characteristic commonly called color, and identified by color names such as yellow, green, or orange. Hue values range from 0 (red) through 239 (running through the spectrum and returning to red).

Saturation is the strength of the color; it indicates the amount of gray in the color. Saturation values range from 0 (gray with no trace of color) through 240 (fully saturated color with no gray).

Luminosity is the relative brightness or darkness of the color. Luminosity values range from 0 (black) through 240 (white) with the untinted color at about 120.

Red/Green/Blue

The RGB model is based on the representation of the visible spectrum by mixing red, green and blue light. Computer monitors are based on this model, creating colors by emitting light through red, green and blue phosphors.

The RGB model assigns a value for each pixel ranging from 0 (black) to 255 (white) for each color component. For example, the red on the Basic color palette has a Red value of 255, a Green value of 0 and a Blue value of 0.

Color | Solid

The color swatch shows the color as it appears on the monitor and gives an approximation of how the color appears when printed. Because monitors can only show a certain number of colors at a time, the colors may be dithered. This dithering appears on the monitor only - the color prints as a solid.

The Solid swatch shows the closest solid color your monitor can display with its current settings. If your

monitor is set to display 256 colors, the closest match is displayed. If your monitor can display more colors, the Solid swatch will probably match the Color swatch exactly.

To Define a Custom Color

A color can be defined in one of three ways:

- 1 Use the color field and slider to pick a color. Click an area in the color field. The color field measures hue horizontally and saturation vertically. Adjust the luminosity of the color by moving the slider along the bar at the right of the color field.
- 2 Enter values for hue, saturation, and luminosity in the text fields provided.
- 3 Enter values for the red, green and blue components in the text fields provided.
- 4 When the color you want appears in the Color | Solid swatch, click **Add to Custom Colors**. The new color appears in your **Custom Colors** palette.
- 5 To apply the new color to your badge, select the swatch and click **OK**. The color appears in the **Background Color** field. Then either click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the **Badge Definition** window.

Badge Objects

Text and Text Boxes

To add text to a badge, you first draw a text box, then type in the text and/or add card holder note fields. When you assign a badge to an individual, it will automatically fill in the appropriate data for that person. The appearance of the text can be changed by changing its font, color, size and orientation. Text can be justified horizontally and vertically within the text box and it can be rotated within the box at set intervals.

To Add a Text Box

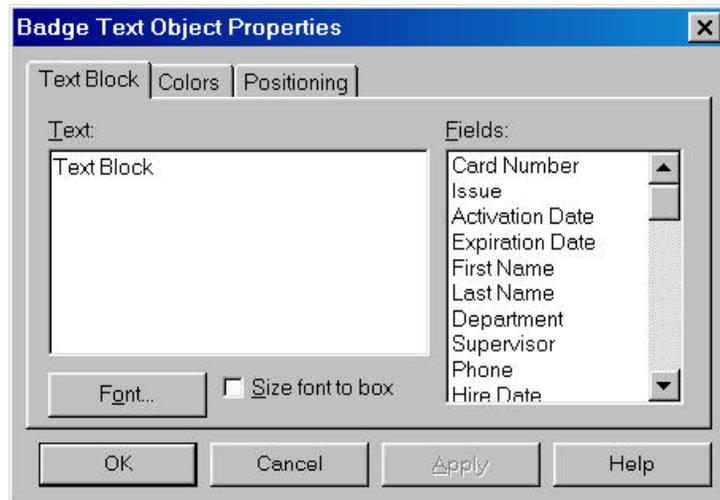
- 1 Click the text button  on the toolbar of the Badge Definition window.
- 2 After the cursor changes to the text tool, click the badge layout and drag the box to the desired size and shape.
- 3 To move the box, select it and use the four-headed arrow to drag it to the desired position.
- 4 To resize the text box, select it and use the two-headed-arrow to drag one of the sizing handles to the desired position.

If you use one of the corner sizing handles, you can change the height and width of the box at the same time.

To Add or Edit Text

Once a text box has been created you can add (or edit) text.

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties window appears.



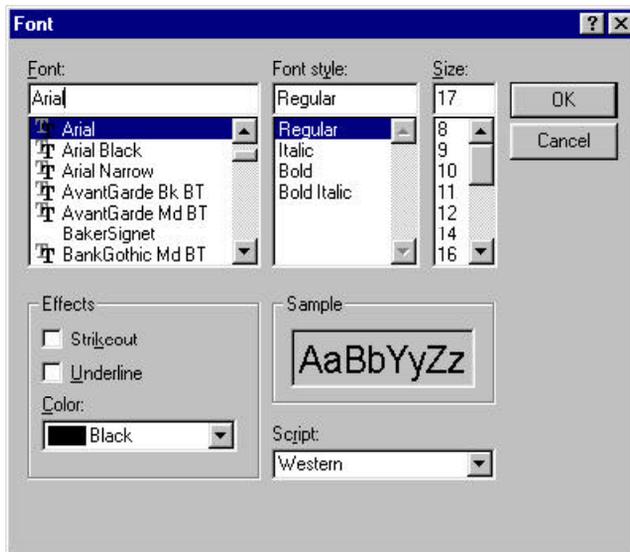
- 2 On the **Text Block** tab, type the desired text in the **Text:** field.
- 3 To have card holder's specific text appear in the text box, select a note field from the **Fields:** list and double click to add it to the text field.
- 4 To set the size of the font automatically, select the **Size Font to Box** option.

Enabling this option changes the text size to fit the text box when resized. The text will grow or shrink proportionally when the box is resized. This may not be desirable in fields where the data is a variable such as a name, as the size of the font will change.

- 5 Click **Apply** to preview the text on the badge.
- 6 Click **OK** when finished.

To Change the Type Font and Size

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties window appears.
- 2 Click **Font**. The Font window appears.



- 3 In the **Font:** list, select a font.

The fonts listed are those installed in Windows. See your Windows manual for more information.

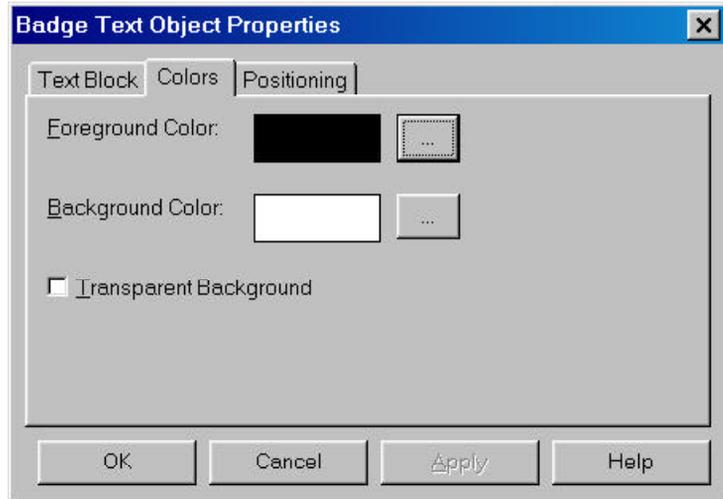
- 4 In the **Font Style:** list, select Regular, *Italic*, **Bold** or ***Bold Italic***.
- 5 In the **Size:** list, select a size (in points) for the font. Use the following as a guideline:
 - 72 point** = 1.0 inch
 - 36 point** = 0.5 inch
 - 18 point** = 0.25 inch
 - 9 point** = 0.125 inch

If the **Size Font to Box** option is selected, the font size will adjust automatically to fill the text box.

- 6 Click **OK**.
- 7 Click **Apply** to preview the text on the badge.
- 8 Click **OK** when finished.

To Change the Type Color

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties window appears.
- 2 Select the **Colors** tab.



- 3 Click the **Foreground Color** button. The Color window appears.
- 4 Select a color swatch.

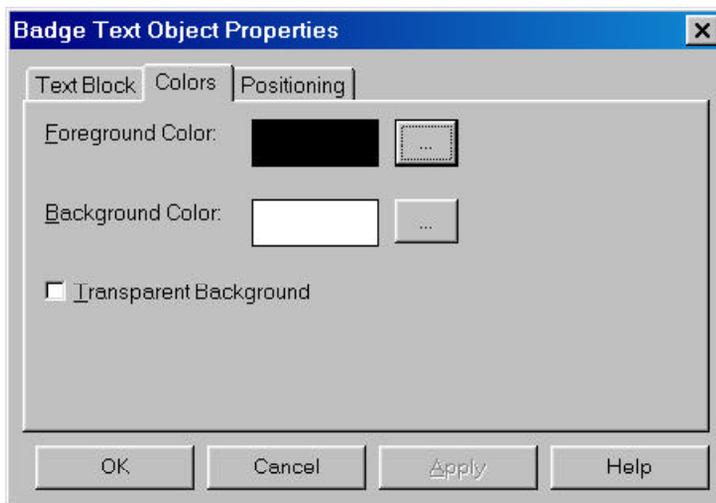
For additional color choices click the **Define Custom Colors** button. See Custom Colors for more information.

- 5 Click **OK**. The new type color is displayed in the **Foreground Color** box.
- 6 Click **Apply** to preview the new color on the badge.
- 7 Click **OK** when finished.

To Change the Text Background Color

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties window appears.

- 2 Select the **Colors** tab.



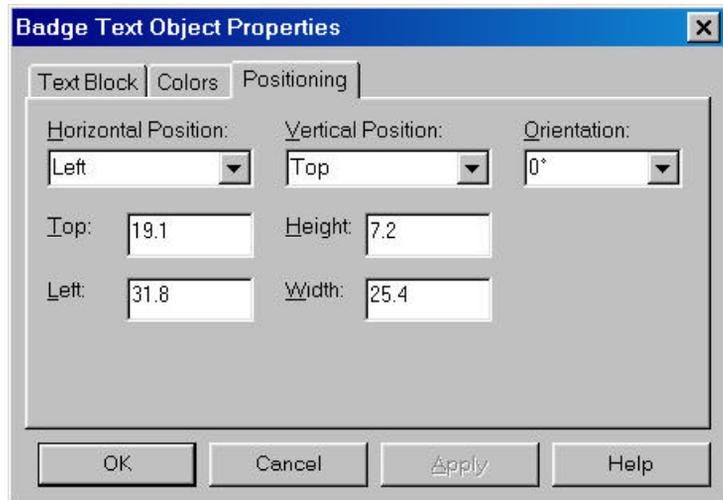
- 3 Click the **Background Color** button. The Color window appears.
- 4 Select a color swatch.

For additional color choices click the **Define Custom Colors** button. See Custom Colors for more information.

- 5 Click **OK**. The new background color is displayed in the **Background Color** box.
- 6 If you want a transparent background for the text block (the items behind it show through) select the **Transparent Background** option.
- 7 Click **Apply** to preview the background color on the badge.
- 8 Click **OK** when finished.

To Edit the Text Justification and Orientation

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties window appears.
- 2 Select the **Positioning** tab.



- 3 Click the pull-down arrow in the **Horizontal Position** box, and select Left, Center or Right.
- 4 Click the pull-down arrow in the **Vertical Position** box, and select Top, Middle, or Bottom.
- 5 Click the pull-down arrow in the **Orientation** box and select the angle for the text to appear on the badge. Your options are:
 - 0°** Text is upright.
 - 90°** Text is rotated 90° clockwise.
 - 180°** Text is upside-down.
 - 270°** Text is rotated 90° counterclockwise.
- 6 To change the location or size of box enter the information in the top, left, height and width.
- 7 Click **Apply** to view the changes or **OK** to apply the changes and exit.

To Delete a Text Block

Right-click the text box and then click **Delete Object**. The text box is removed from the badge.

Photo Placeholders

A photo placeholder is used in a badge design where you want the card holder's photo to appear. When the badge is assigned to a card and card holder the appropriate photo from the card holder database is applied to the badge.

WIN-PAK 2.0 allows up to 99 photos for each card holder. These can be different pictures of the employee, or pictures of the employee's automobile, or equipment assigned to the card holder, such as a lap top computer. A *photo index* number is used to indicate which card holder photo should appear on the badge.

Photo placeholders can be formatted in a number of ways. The photo can be aligned horizontally and vertically within the box and stretched or shrunk to fill the space; it can also be rotated at set intervals. The **Keep Aspect Ratio** feature allows the photo to fill the photo placeholder, without distorting its proportions. Photos can be *ghosted*, that is faded or lightened, so they look like a watermark. A ghosted photo is harder to photocopy and may provide added security against unauthorized reproduction of ID badges.

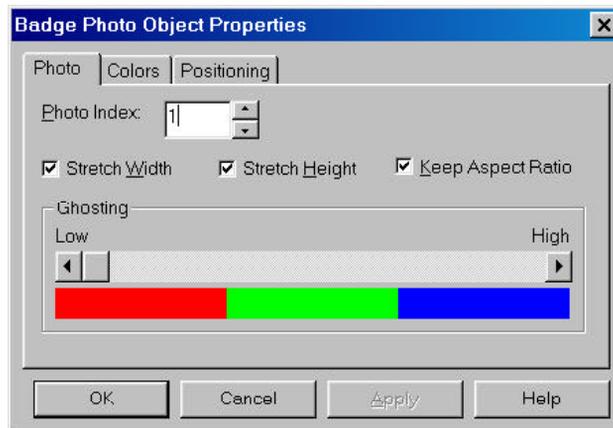
To Add a Photo Placeholder

- 1 Click the photo button  on the toolbar of the Badge Definition window.
- 2 Click the badge layout and drag the box to the desired size and shape.
- 3 To move the box, select it and drag it to the desired position.
- 4 To resize the text box, select it and then drag one of the sizing handles to the desired position.

To Format the Photo Placeholder

- 1 Right-click inside the photo box and select **Properties**. The Badge Photo Object Properties window appears.

- 2 Select the **Photo** tab.



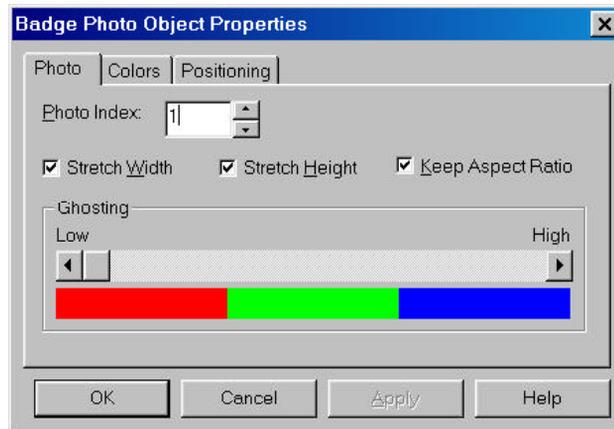
- 3 Set the **Photo Index** if necessary.

The Photo Index indicates which card holder picture will appear on the badge. The default is Photo 1.

- 4 Select the **Stretch Width**, **Stretch Height** and **Keep Aspect Ratio** options to automatically size the photo to fill the placeholder, without distorting the photo's proportions.
- 5 To rotate the photo within the placeholder, select **Rotation:**, and then choose the desired angle. Your options are:
 - 0°** Photo is upright.
 - 90°** Photo is rotated 90° clockwise.
 - 180°** Photo is upside-down.
 - 270°** Photo is rotated 90° counterclockwise.
- 6 Click **OK** when finished.

To Create a Ghosted Photo

- 1 Right-click inside the photo box and select **Properties**. The Badge Photo Object Properties window appears.
- 2 Select the **Photo** tab.



- 3 Use the slider to set the degree of transparency for the photo.
- 4 Click **OK** when finished.

To Delete a Photo Placeholder

Right-click the photo placeholder, then click **Delete Object**. The photo box is removed from the badge.

Barcode Boxes

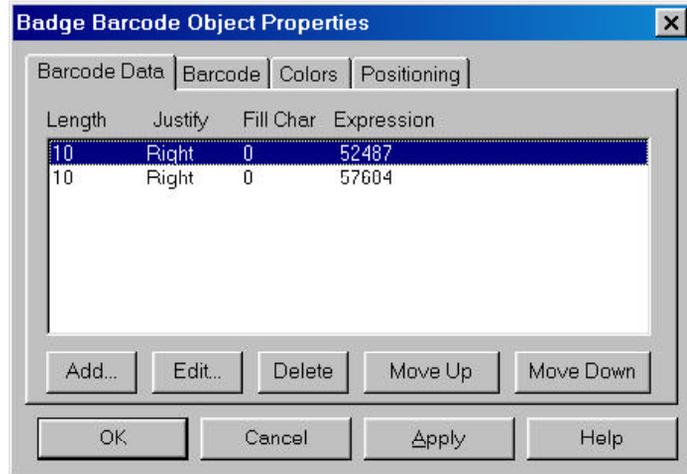
Barcodes can be added to a badge in a number of formats, and can be used for a wide variety of reasons. Barcodes can contain information specific to the badge design or to the card holder. For example, the barcode can contain the card number or the user's social security number.

To Add a Barcode Box

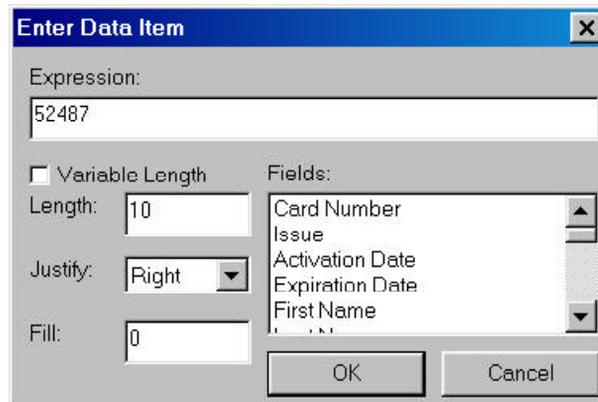
- 1 Click the barcode  button in the toolbar of the Badge Definition window.
- 2 Click the badge layout and drag the barcode box to the desired size.
- 3 To move the box, select it and drag it to the desired position.
- 4 To resize the text box, select it and then drag one of the sizing handles to the desired position.

To Add or Edit Barcode Data

- 1 Right-click the barcode box, then select **Properties**. The Badge Barcode Object Properties window appears.



- 2 On the Barcode Data tab select **Add** or **Edit**. The Enter Data Item window appears.



- 3 In the **Expression** box, enter the data or select a note field from the **Fields** list and double click to add it to the expression.
- 4 Select the desired **Length** and **Fill Character**, which are explained below.
- 5 Click **OK** to save any changes and return to the **Barcode Data** tab.

Barcode Properties Definition

Expression: Any combination of text or database fields can be entered. Either type the desired text or select the note field that you want and double-click it to enter it in the Expression field.

Variable Length: If the **Variable Length** box is selected, the field length is adjusted to match the number of characters in the data item.

Length: If a value is entered for **Length**, the data item will be truncated or padded so that it is precisely that number of characters.

Justify: Only applies to fixed-length data items. If a data item is shorter than the number of characters allotted for it, it can be justified left, center, or right, within those characters. All other characters are set to the **Fill** character.

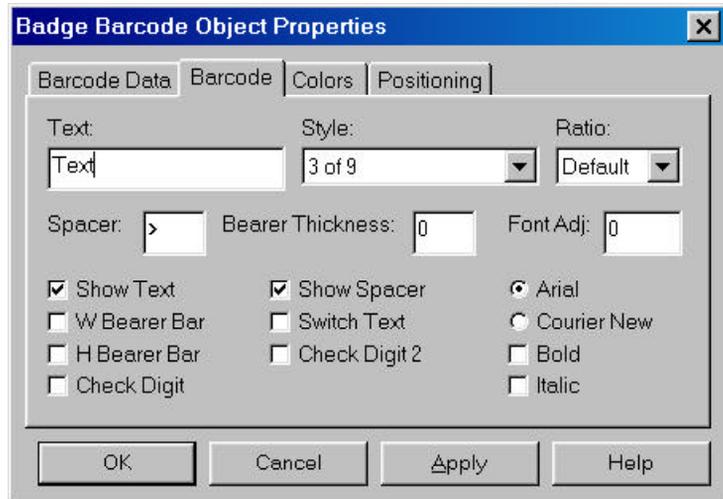
Fill: The character used to pad the data in order to fit a fixed length field.

Fields: Select a field and double click it to add it to the expression. All of the Card and Card Holder note fields for the currently selected account are displayed in this list.

When several data items have been entered, they can be reordered using the **Move Up** and **Move Down** buttons. To remove a data item from the list, select it and click the **Delete** button. When you have completed the data item list, click **OK** to save your changes.

To Format a Barcode

- 1 Right-click the barcode box, then select **Properties**. The Badge Barcode Object Properties window appears.
- 2 Select the **Barcode** tab.



- 3 Select the desired options (see Barcode Options below).
- 4 Click **Apply** to view changes or click **OK** to save any changes and return to the Badge Definition window.

Barcode Options

Text: Text to be displayed above the barcode.

Style: Style setting for the barcode characters. Choices include:

2 of 5, 2 of 5 interleaved, 3 of 9, Codabar, Code 11, Code 39, Code 93, Code 128, Code 128 A, Code 128 B, Code 128 C, Code B, EAN 8, EAN 13, EAN 128, ITF, MSI, Telepen, UPC A, UPC E

Ratios: Determines the width ratio of thick bars to thin bars. For example, a ratio of 2.00 means that thick bars are twice the width of thin bars.

Spacer: Adds space before and after the barcode when show data is enabled.

Bearer Thickness: Thickness, in points, of the bearer bars.

Font Adj.: Adjusts the font size in relation to the bar code.

Show Text: Displays the barcode data as text underneath the encoded information.

W Bearer: Displays the width bearer bars (top and bottom borders).

H Bearer: Displays the height bearer bars (left and right borders).

Check Digit: Error detection.

Show Spacer: Displays the space before and after the barcode data.

Switch Text: Switches top and bottom text. The barcode data displayed as text is placed above the barcode; the text entered into the **Text:** field is displayed below the barcode.

Check Digit 2: Error detection.

Arial: Arial is the text font.

Courier New: Courier New is the text font.

Bold: Applies the bold format to the text.

Italic: Applies the italic format to the text.

To Edit the Barcode Background Color

Before selecting a background color, note that visible light barcode readers require some contrast between the barcode and the background. If the background color is too dark, the reader will not be able to read the code.

- 1 Right-click the barcode box, then select **Properties**. The Badge Barcode Object Properties window appears.
- 2 Select the **Colors** tab.
- 3 Click the **Background Color** button. The Color window appears.
- 4 Select a color swatch.

Do not select black for the background color as the barcode will be printed in black, making it unreadable.

Custom colors can also be created. For more information see Custom Colors.

- 5 Click **OK** to return to the **Colors** tab. The new background color is displayed in the **Background Color** field
- 6 Click **Apply** to view the color on the badge.
- 7 Click **OK** to save the changes and return to the Badge Definition window.

To Edit the Barcode Color

Before changing the barcode color, note that most barcode readers are infrared and require that the barcode be black (resin black).

- 1 Right-click the barcode box, then select **Properties**. The Badge Barcode Object Properties window appears.
- 2 Select the **Colors** tab.
- 3 Click the **Foreground Color** button. The Color window appears.
- 4 Select a color swatch.

Custom colors can also be created. For more information see Custom Colors

- 5 Click **OK** to return to the Colors tab. The new barcode color is displayed in the **Foreground Color** box.

To Position a Barcode

Barcodes are automatically positioned within the barcode box. Select the **Positioning** tab on the Badge Barcode Object Properties window to adjust the position of the box relative to the top and left side of the badge by entering a value in millimeters in the **Top** and **Left** fields, respectively.

To Delete a Barcode

Right-click the barcode placeholder, and then select **Delete Object**. The barcode is removed from the badge.

Shapes

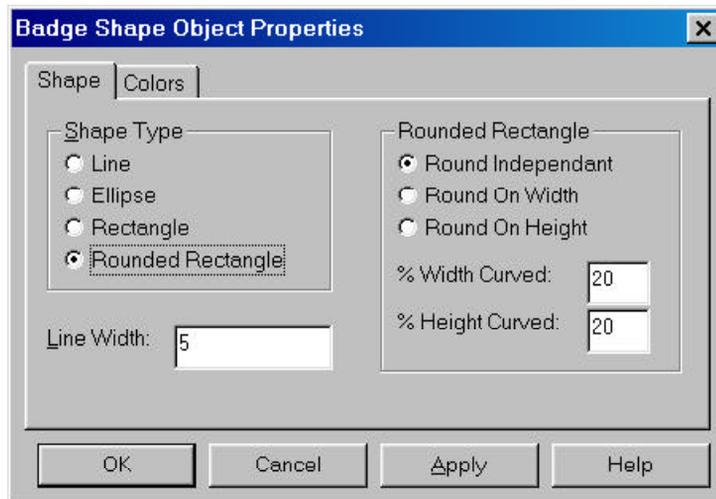
The Badge Layout Utility allows you to place shapes (rectangles, rounded rectangles, ellipses, and lines) on your badge. You can change the border or line width, the border and background color, or make them transparent to frame photos or text blocks.

To Add a Shape

- 1 Click the shape  button on the toolbar of the Badge Definition window.
- 2 Click the badge and drag the shape box to the desired size.

The default shape is a rectangle. Once the shape box has been placed and sized the type of shape can be changed.

- 3 Right-click the shape and select **Properties**. The **Badge Shape Object Properties** window appears.



- 4 In the **Shape** tab, select the Shape Type you want. Your choices are **Line**, **Ellipse**, **Rectangle**, and **Rounded Rectangle**.
- 5 In the **Line Width** box, enter the desired line width (in points).
- 6 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Format a Rounded Rectangle

- 1 Right-click the shape and select **Properties**. The Badge Shape Object Properties window appears.
- 2 In the **Shape** tab, select **Rounded Rectangle**.
- 3 If you choose **Rounded Independent**, you can set the percentage of curvature for both the height and width.
- 4 Or you can choose **Rounded on Width** or **Rounded on Height**, then set the percentage of the height or width to be curved.
- 5 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Change a Shape's Border Color

- 1 Right-click the shape and select **Properties**. The Badge Shape Object Properties window appears.
- 2 In the Colors tab, click the **Foreground Color** button. The Color window appears.
- 3 Select the desired color swatch.

Custom colors can also be created. For more information see Custom Colors

- 4 Click **OK** to return to the **Colors** tab. The new

color selection appears in the **Foreground Color** field.

- 5 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Change a Shape's Background Color

- 1 Right-click the shape and select **Properties**. The Badge Shape Object Properties window appears.
- 2 To make the shape transparent, from the **Colors** tab, select **Transparent Background**.
- 3 To give the shape a colored background, uncheck **Transparent Background**, then select **Background Color**. The Color window appears.
- 4 Select the desired color swatch.

Custom colors can also be created. For more information see Custom Colors

- 5 Click **OK** to return to the **Colors** tab. The new color selection appears in the **Background Color** field.
- 6 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Delete a Shape

Right-click the shape and select **Delete Object**. This removes the shape from your badge layout.

Signature Placeholders

A Signature placeholder is used in a badge design where you want the card holder's signature to appear. When the badge is assigned to a card and card holder the appropriate signature from the card holder database is applied to the badge.

A signature pad (Northern Computers' **PB-SIG-CAP**) can be connected to the computer to capture signatures. The signatures are saved in vector format. They can be placed on the badges and are proportionally stretched to fill the area allotted for them. The signature background can also be made transparent to be placed on top of any other object on the badge.

WIN-PAK 2.0 allows up to 99 signatures for each card holder. These can be different authorized signatures assigned to the card holder. A *signature index* number is used to indicate which card holder signature should appear on the badge.

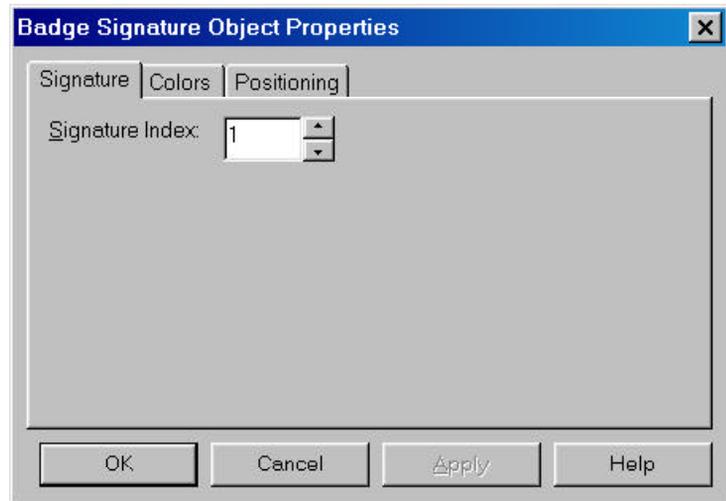
Signature place holders can be formatted in a number of ways. The signature can be aligned horizontally and vertically within the box and stretched or shrunk to fill the space; it can also be rotated at set intervals. The **Keep Aspect Ratio** feature allows the signature to fill the signature placeholder, without distorting its proportions.

To Add a Signature Placeholder

- 1 Click the signature button  on the **Badge Layout** toolbar.
- 2 Click the badge layout and drag the signature box to the desired size and shape.
- 3 To move the signature box, select it and drag it to the desired position.
- 4 To resize the signature box, select it and then drag one of the sizing handles to the desired position.

To Format the Signature Place Holder

- 1 Right-click inside the signature box and select **Properties**. The Badge Signature Object Properties window appears.



- 2 Select the **Signature** tab and set the **Signature Index** if necessary.

The Signature Index indicates which card holder signature appears on the badge. The default is Signature 1.

- 3 Select the **Stretch Width**, **Stretch Height** and **Keep Aspect Ratio** to automatically size the Signature to fill the placeholder, without distorting the Signature's proportions.
- 4 Click **Apply** to apply the changes to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Change the Background Color of a Signature Placeholder

- 1 Right-click inside the signature box and select **Properties**. The Badge Signature Object Properties window appears.
- 2 Select the **Colors** tab.
- 3 Click the **Background Color** button. The Color window appears.
- 4 Select the desired color swatch.

Custom colors can also be created. For more information see Custom Colors

- 5 Click **OK** to return to the Badge Signature Object Properties window.
- 6 Click **Apply** to apply the changes to your badge or click **OK** to apply the change and return to the Badge Definition window.

To Delete a Signature Placeholder

Right-click the Signature placeholder, then click Delete Object. The text box is removed from the badge.

Bitmap Graphics

Graphic images such as a logo or symbol can be placed on the badge. Simply create or scan in your image and save it as a bitmap graphic file. WIN-PAK 2.0 accepts Windows Bitmap (*.BMP), JPG (*.JPG), Targa (*.TGA), or TIFF (*.TIF) files.

All graphics used in designing a badge are saved to the BadgeImage folder in the WIN-PAK 2.0 directory. Once they have been added to the WIN-PAK 2.0 database, they appear in the **Bitmap Image** list in the Badge Layouts window and are available to all workstations.

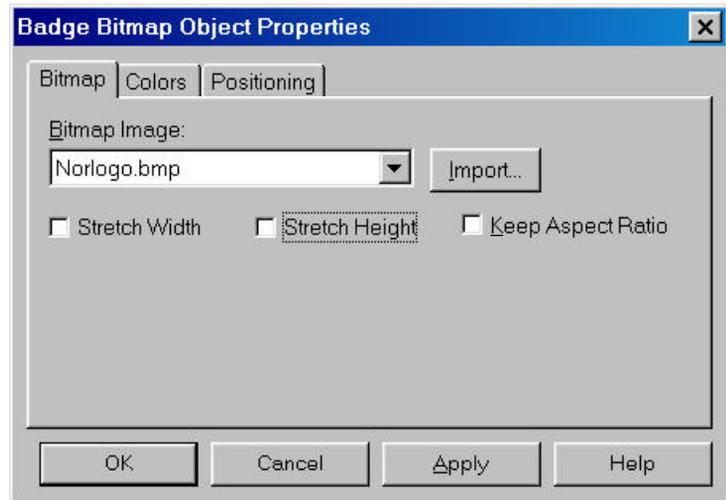
To Add a Graphic Image to a Badge Design

- 1 Click the bitmap button  in the toolbar of the Badge Definition window.
- 2 Click the badge layout and drag the box to the desired size and shape.
- 3 To move the graphic box, select it and use the four-headed arrow to drag it to the desired position.
- 4 To resize the graphic box, select it and then use

the two headed-arrow to drag one of the sizing handles to the desired position.

If you use one of the corner sizing handles, you can change the height and width of the box at the same time.

- 5 Right-click in the box, then select **Properties**. The Badge Bitmap Object Properties window appears.



- 6 In the **Badge** tab, click on the pull down arrow in the **Bitmap Image** box and select the desired graphic. (See *To Import a Graphic* for information on how to add graphics to the list.)
- 7 Select **Stretch Width** to maximize the graphic's width; select **Stretch Height** to maximize the graphic's height; select **Keep Aspect Ratio** to make the graphic as large as possible without distorting its proportions.
- 8 Click **Apply** to view the graphic on the badge.
- 9 Click **OK** to save your changes.

To Import a Graphic

- 1 Right-click inside the graphics box and select **Properties**. The Badge Bitmap Object Properties window appears.
- 2 Select the **Bitmap** tab.
- 3 Click the **Import** button. The Open window appears.
- 4 Click the pull-down arrow in the **Files of Type** box, and select the type of graphic file you want to import. Choose from: .BMP, .JPG, .TGA, PCX, or All Graphic files.
- 5 Navigate to the folder containing your graphic files, then select the file to be imported and click **Open**. The file name is added to the **Bitmap Image** list and is now available for use with any badge design, either to be placed in a bitmap box or as a badge background image.

To Add a Colored Background to a Graphic

The background color will only show if the bitmap is smaller than the graphic place holder. If you have selected both **Stretch Width** and **Stretch Height**, but not **Keep Aspect Ratio**, the graphic automatically fills the entire box and no background color is visible.

- 1 Right-click inside the graphics box and select **Properties**. The Badge Bitmap Object Properties window appears.
- 2 Select the **Colors** tab.
- 3 Click the **Background Color** button. The Color window appears.
- 4 Select the desired color swatch.

Custom colors can also be created. For more information see Custom Colors

- 5 Click **OK**. The new background color is displayed in the **Foreground Color** field.
- 6 If you want a transparent background for the graphic, select the **Transparent Background** option.
- 7 Click **Apply** to preview the background color with the graphic.
- 8 Click **OK** when finished.

To Position a Graphic Image

- 1 Right-click inside the graphic box and select **Properties**. The Badge Bitmap Object Properties window appears.
- 2 Select the **Positioning** tab.
- 3 Click the pull-down arrow in the **Horizontal Position** box, and select Left, Center or Right.
- 4 Click the pull-down arrow in the **Vertical Position** box, and select Top, Middle, or Bottom.
- 5 Click the pull-down arrow in the **Orientation** box, and select the angle for the graphic to appear on the badge. Your options are:
 - 0°** Text is upright.
 - 90°** Text is rotated 90° clockwise.
 - 180°** Text is upside-down.
 - 270°** Text is rotated 90° counterclockwise.

To Delete a Graphic Image

Right-click the graphic and then click Delete Object. The graphic and the graphic box are removed from the badge.

Capturing a Background Graphic

Another way to create a background graphic is capturing a video image of the desired background. (Your video equipment, including a PB-VC-8 or PB-VC-9 video card, must be installed or a compatible TWAIN device.)

To Capture a Video Background

- 1 Right-click the badge and select **Properties**. The Badge Object Properties window appears.
- 2 Select the **Badge** tab.
- 3 Click **Capture**. The **Capture Image** window appears showing the live view from your video camera. If TWAIN is selected as your video DLL then you will see a different view and will need to select source and get image.



- 4 Click **Settings** to expand the window and access the video settings.
- 5 Adjust the **Video** settings (explained below) until the picture is satisfactory.
- 6 If you are not using a flash, set the **Grab** settings to the same values as the **Video** settings. If you are using a flash, reduce the **Grab Brightness** and **Contrast**.

The exact settings will vary depending on the type of flash and other lighting. The exact settings can only be determined by experimenting.

- 7 Click **Freeze**, to capture the image. Once the picture is frozen or captured, you can make a number of adjustments.
- 8 Use the cropping frame to crop the image and adjust its proportions. If you want a particular proportion, enter it in the **Aspect Ratio:** field and select **Lock Aspect Ratio**.

If you are using the default badge size, set the aspect ratio to .625, to fill the entire area.

- 9 If the image is too dark or too light, adjust the **Photo Brightness**.
- 10 Set the degree of **Compression**, then click **OK** to save the image.

Video Caption Settings

Freeze/Live: Toggles between static and live-view image. When the desired image is on screen, click Freeze to keep it . Click Live to switch back to the live camera view. Adjust the slides at the right of the background image to enhance the quality.

Video

These settings apply to the live on-screen video image.

Brightness: Lightens or darkens the entire tonal range of the image.

Contrast: Expands or contracts the entire tonal range of the image. The difference in highlights and shadows can be greatly increased or decreased.

Saturation: Adjusts the vibrancy (the amount of color) in the image.

Hue: Adjusts the value of color in the image. Adjusting this can correct images that seem to have incorrect color.

Sharpen: Sharpens blurry images by increasing the contrast of adjacent pixels. The highest value is 7.

Grab

These settings are applied to the camera when an image is captured. If you are not using a flash, set the Grab Brightness and Contrast the same as the Video settings. If a flash is used, reduce both the Brightness and Contrast settings lower than the Video settings. This prevents the camera from over-exposing the picture. The exact settings must be determined by experimentation, as they vary depending on the type of flash, distance from the subject, and other lighting.

Brightness: Lightens or darkens the entire tonal range of the image to be captured.

Contrast: Expands or contracts the entire tonal range of the image to be captured.

Photo

These settings are applied to the video image after it is captured.

Brightness: Lightens or darkens the entire tonal range of the captured image.

Compression: The captured image is saved as a JPG file which uses a compression technology to decrease the size of the file. If desired, use the slider to adjust the compression of the saved image. The lower the number, the greater the compression. However, images lose quality as they are compressed, so avoid over-compressing. A setting of 100 applies the least amount of compression and provides the best image quality. A setting of 30 applies the most compression, but provides lower image quality.

Applying the Background Image

Once the graphic has been imported, it appears in the **Background Image** list. To apply the graphic to your badge design, select it from the list, then click **OK**.

Positioning the Background Image

After you have selected a background image, you can adjust its position on the badge; stretch it, tile it and/or rotate it.

- 1 Right-click the badge background image and select **Properties**. The Badge Object Properties window appears.
- 2 Click the **Positioning** tab.
- 3 Click the pull-down arrow in the **Horizontal Position** box, and select Left, Center or Right.
- 4 Click the pull-down arrow in the **Vertical Position** box, and select Top, Middle or Bottom.
- 5 Click the pull-down arrow in the **Orientation** box and select the desired degree of rotation. Your options are:
 - 0°** Places your image upright.
 - 90°** Rotates your image 90° clockwise.
 - 180°** Places your image upside-down.
 - 270°** Rotates your image 90° counterclockwise.

To Remove a Background Image

- 1 Right-click the badge background, and select **Properties**. The Badge Object Properties window appears.
- 2 Click the **Badge** tab.
- 3 Click the pull-down arrow in the **Background Image** box, and select None.
- 4 Click **OK**.

Importing Bitmap Graphic Background

Importing existing bitmap graphics allows an infinite number of possibilities. For example, you can scan a logo or photograph, take photos with a digital camera or use a paint-type software program to create artwork.

When creating your background file, remember, the file must be saved as a Windows Bitmap (.BMP), JPG (.JPG), Targa (.TGA) or PCX (.PCX) file. For best results, the file should be at least to 300ppi (pixels per inch).

Keep in mind the orientation and size of the badge, as well as the placement of photos, barcodes, and text so important parts of your background are not obscured.

Create your background image as close as possible to the printable area of your badge to avoid distortion or loss of image quality caused by resizing or stretching the image to fill the badge.

To Import a Background Graphic

- 1 Right-click the badge background image and select **Properties**. The Badge Object Properties window appears.
- 2 Click the **Badge** tab.
- 3 Click **Import**.
- 4 Navigate to the folder containing the graphic file to be imported, and select the file.
- 5 Either double-click the file name or click **Open**. The graphic file is added to the **Background Image** list and the **Badge Image** folder in the WIN-PAK 2.0 database.

Badge Item Layering

Badge items are layered as they are placed. This is only noticeable if one item overlaps another item. When an item is selected, it is brought to the top of the layering order.

Layering can also be controlled using the **Change Layering** button on the **Badge Layout** tool bar. In addition, items on the badge can be selected from the **Badge Item Layering** dialog box, allowing the item properties to be edited (without changing their layering order).

To Change the Layering Order of Badge Items

- 1 Click the **Badge Item Layering** button  in the toolbar of the Badge Definition window. The Badge Item Layering window appears.



- 2 Select the object to be moved.
- 3 Click the **Move Up** button to move the object up or click the **Move Down** button to move the object down.
- 4 Click the **Top** button to bring the selected object to the top layer of the badge.
- 5 Click the **Properties** button to edit an object's properties without changing its order (except for blackout).

Select Next Item

Badge items are layered as they are placed. Occasionally, it may be difficult to select a badge item, either because it is overlapped by another item or because its color makes it difficult to see. In such cases, click the **Select Next Item**  button. It will select the next item in the layering order. Each time you click the button, it moves to the next item. Continue selecting items until you have the one you want. Then proceed with your editing.

Chapter VI

Operations

Log In

Locate

System Events

Events

Alarms

AutoCard Look Up

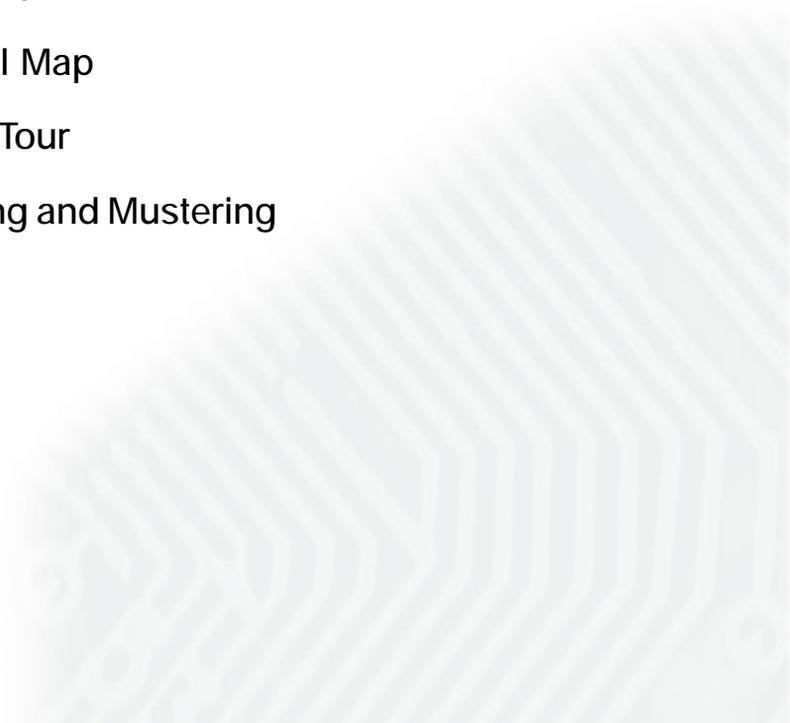
Live Monitor

Floor Plan

Control Map

Guard Tour

Tracking and Mustering



Log In



To Log In to WIN-PAK 2.0

- 1 Log in to WIN-PAK 2.0 by clicking the **Log In** button  on the WIN-PAK toolbar. The Connect to Server window appears.

A screenshot of the 'Connect To Server' dialog box. The title bar reads 'Connect To Server'. The main area features the 'NORTHERN COMPUTERS, INC.' logo and 'WIN-PAK 2' text. Below this, there are two sections: 'User' and 'Server'. The 'User' section has a 'Name:' label and a text input field, and a 'Password:' label and a text input field. The 'Server' section has a 'Name:' label and a dropdown menu. At the bottom, there are 'Connect' and 'Cancel' buttons.

Connect To Server

NORTHERN
COMPUTERS, INC.

WIN-PAK 2

User

Name :

Password :

Server

Name :

Connect Cancel

- 2 Enter your user name and password.

If the Database Server is on the same machine as the Client Workstation, leave the **Server Name** box blank. If the Database Server is on another machine, enter the machine name in the **Server Name** box.

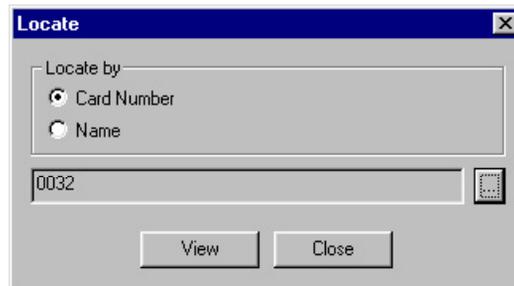
- 3 Click **OK**.

Locate

The Locate function reports when and where a card was last used in the system.

To Locate a Card's Last Use

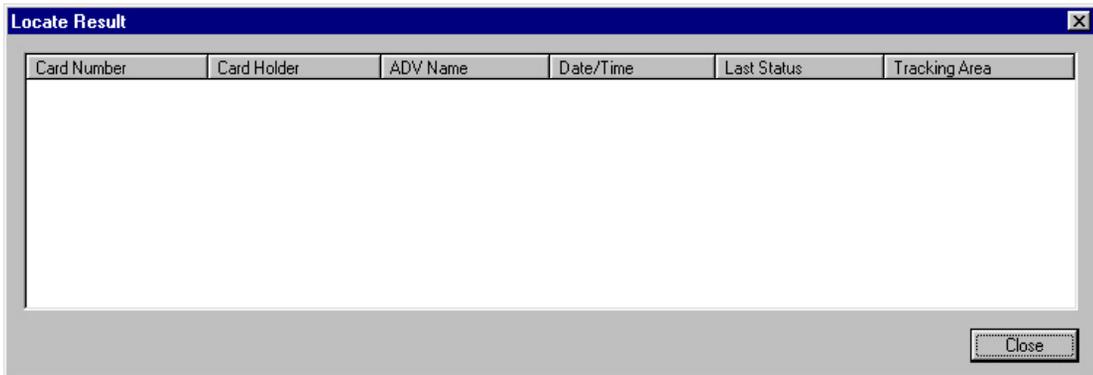
- 1 In the Operations menu, select **Locate**. The Locate window appears.



- 2 In the Locate by box, select either **Card** or **Name**.
- 3 Click the  button. The Select window appears.



- 4 If searching by number, the **Find Key** field will display **Card Number**. In the **Find What** field, enter the card number (if known), or one or more of the beginning digits of the number you are checking, then click the **Find Now** button. A list of all cards that match the criteria is displayed.
- 5 If searching by name, select either Last Name or First Name in the **Find Key** field. Enter the name (if known) or enter one or more of the initial letters in the **Find What** field, then click the **Find Now** button. A list of all card holders that match the criteria is displayed in the Locate Result window.

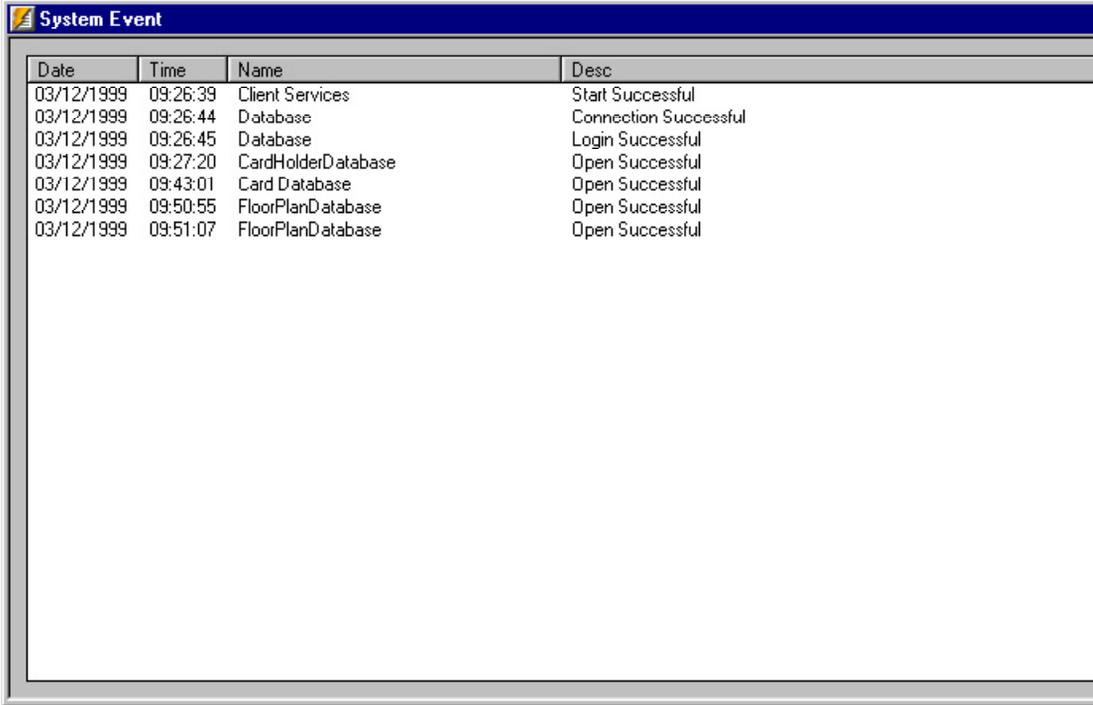


System Events

The **System Events** window displays the name, time and date of WIN-PAK 2.0 system (software) activity. This includes a record of successful and unsuccessful server connections, log-ins, and server disconnections. If there is a problem communicating with a server, this information can help locate the source of the problem.

To open the System Events window

In the Operations menu, click **System Events**. The System Events window appears. If desired, the System Events window can remain open and minimized during normal operations.



The screenshot shows a window titled "System Event" with a table of system activities. The table has four columns: Date, Time, Name, and Desc. The data rows show successful events for Client Services, Database, CardHolderDatabase, Card Database, and FloorPlanDatabase on 03/12/1999.

Date	Time	Name	Desc
03/12/1999	09:26:39	Client Services	Start Successful
03/12/1999	09:26:44	Database	Connection Successful
03/12/1999	09:26:45	Database	Login Successful
03/12/1999	09:27:20	CardHolderDatabase	Open Successful
03/12/1999	09:43:01	Card Database	Open Successful
03/12/1999	09:50:55	FloorPlanDatabase	Open Successful
03/12/1999	09:51:07	FloorPlanDatabase	Open Successful

System Events should not be confused with the **Events** view (also accessed from the **Operations** menu) which displays activity of the access control system, including card reads, alarms, and operator activity such as acknowledging and clearing alarms.

Events

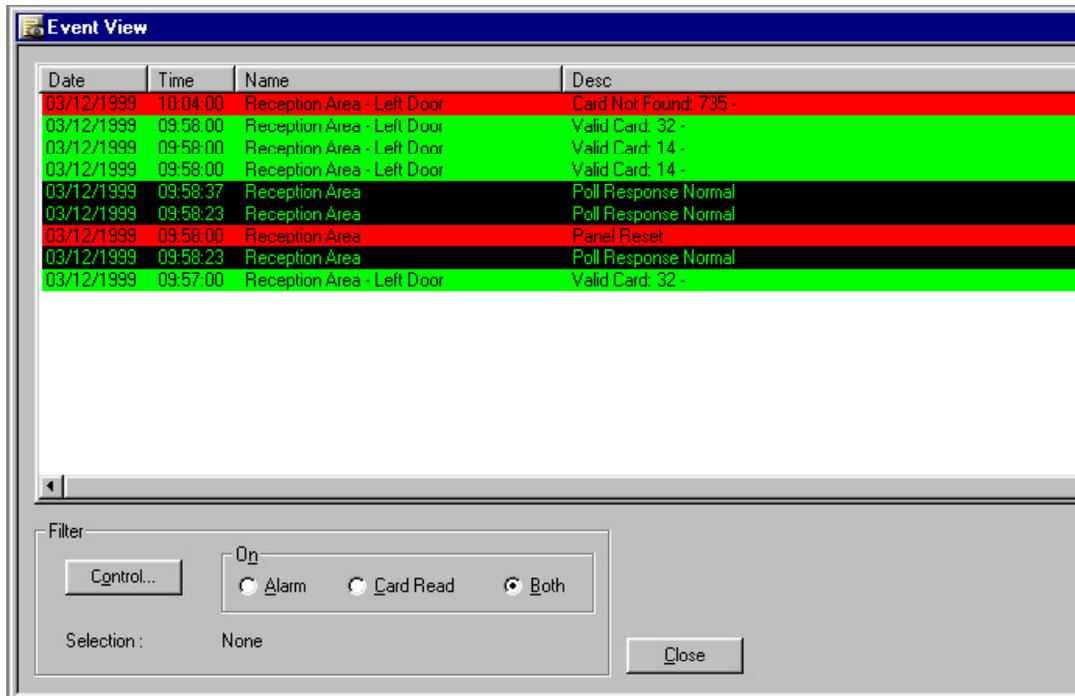
The **Event View** window displays a real-time record of access system events. These include, among others, card reads, alarms, log-ins, and log-outs. The Events View window has a 1,000 event capacity. Once it reaches 1,000 events, the oldest entries are replaced by the newer ones.

The Events View window only displays events that occur while it is open (it can be opened and minimized). The window can remain open along with other views.

The Events View window can be filtered to show only events from selected areas or devices.

To Open the Event View

In the Operations menu, click **Events**. The Events View window appears. If desired, the Events View window can remain open and minimized during normal operations.



Event View Filters

If you want to view only selected events, you can filter the messages appearing in the Events View window.

Once these views are closed, the filter selections are cleared. When a new Events View window is opened, it has the default settings (both alarms and card reads from all devices). You can, however, save Event filter selections. In the floor plan definition, create an Event View link with the filter selections you want. When you open an Event View window from this link, the filter properties you selected are applied. These filter settings cannot be changed from the Event View window, only from the floor plan definition.

(For further information, see Floor Plan Definition in the Programming section.)

To Filter the Event View

- 1 In the **Filters** area of the Event View window, select **Alarm**, **Card Read**, or **Both**, depending on which messages you want displayed.
- 2 To further narrow the information coming in, click the **Control** button. The **Filter Devices** window appears.



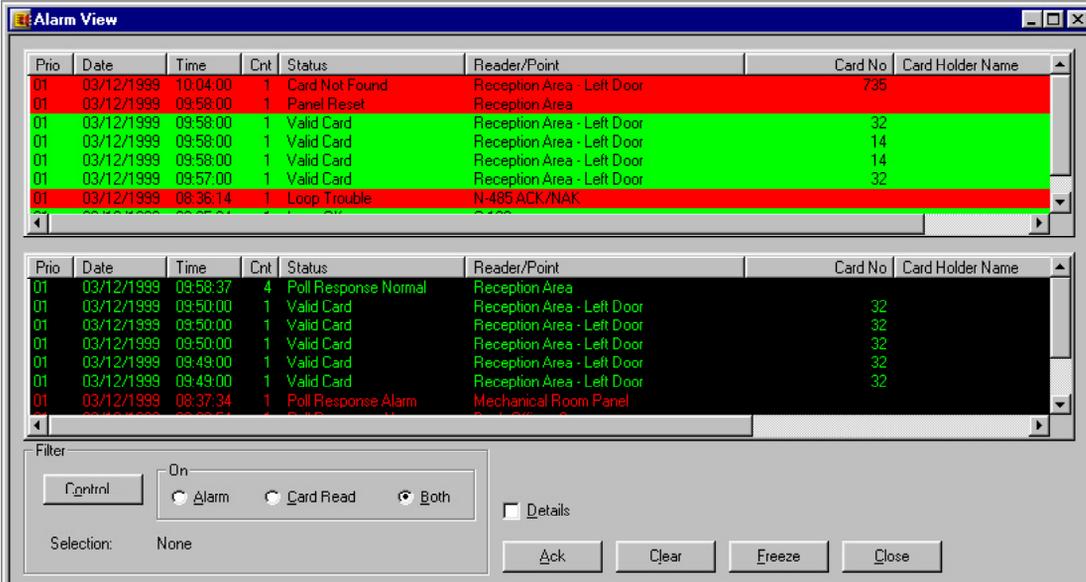
- 3 Expand the tree by clicking the plus signs.
- 4 Select the individual devices you want to monitor. To view alarms from a particular device, right-click it and click **Select**.

Now only messages from the selected devices are sent to the Alarm view. You can choose as many or as few devices as you wish.

Alarm View

The **Alarms View** provides a monitoring tool in addition to the Floor Plan View. The Alarm View displays alarm and reader activity as it happens. The Alarm View window is divided into two horizontal panes. Incoming alarms are displayed in the upper pane according to priority and time. The highest priority transactions are at the top of the list, and transactions with the same priority are shown with the most recent being first.

Colors of incoming messages indicate the type of event. Red indicates an *alarm*, green indicates *normal* and *yellow* is a trouble condition.



The screenshot shows the Alarm View window with two panes of data and a filter section at the bottom.

Upper Pane Data:

Prio	Date	Time	Cnt	Status	Reader/Point	Card No	Card Holder Name
01	03/12/1999	10:04:00	1	Card Not Found	Reception Area - Left Door	735	
01	03/12/1999	09:58:00	1	Panel Reset	Reception Area		
01	03/12/1999	09:58:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	09:58:00	1	Valid Card	Reception Area - Left Door	14	
01	03/12/1999	09:58:00	1	Valid Card	Reception Area - Left Door	14	
01	03/12/1999	09:57:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	08:36:14	1	Loop Trouble	N-485 ACK/NAK		

Lower Pane Data:

Prio	Date	Time	Cnt	Status	Reader/Point	Card No	Card Holder Name
01	03/12/1999	09:58:37	4	Poll Response Normal	Reception Area		
01	03/12/1999	09:50:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	09:50:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	09:50:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	09:49:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	09:49:00	1	Valid Card	Reception Area - Left Door	32	
01	03/12/1999	08:37:34	1	Poll Response Alarm	Mechanical Room Panel		

Filter Section:

Filter: On

Control

Alarm Card Read Both

Details

Selection: None

Buttons: Ack, Clear, Freeze, Close

An N-1000-II panel can only detect a trouble condition when an AEP-5 board is used.

Once a point goes into alarm or trouble, the color will not return to green. For example, if the first message from a point or card is *normal*, subsequent *alarm* or *trouble* conditions change the alarm to red or yellow. After that, even if the point returns to normal state, the message stays red (or changes between yellow and red) but does not return

to green on a normal state. The *Count* column shows the number of times a point changes state. (Once this message is acknowledged, a new *normal* message would be green.)

Selecting the **Details** check box opens the *Alarm Details* screen showing details of the state changes indicated by the counter and allowing a note to be written for that alarm.

The order of transactions in both lists is determined by priority and time. The highest priority transactions are first, and transactions with the same priority are shown with the most recent first.

Command Buttons

- **Ack Button:** To acknowledge an alarm, select it from the list of incoming alarms and click the **Ack** button. When the alarm is acknowledged, it moves to the lower list. The background color of the transaction is now black and the color of the type changes: green for normal, yellow for trouble, and red for alarm. This color changes with each new condition. Transactions remain in the *Acknowledged Alarm* section until they are cleared.
- **Clear Button:** To clear one or more transactions, select them from the list and click the **Clear** button.
- **Freeze Button:** To temporarily stop the display of incoming messages, click the **Freeze** button (it changes to **Release**). This stops the screen from scrolling as new information appears. To release the screen, click the **Release** button.
- **Close Button:** To exit the **Alarms** view, click the **Close** button.

When acknowledging or clearing alarms, you can select multiple alarms by holding down the **SHIFT** key and click the first and last alarm in a range. Or hold down the **CTRL** (control) key and click selected alarms.

Alarms View Right-Click Menus

Right-click a message in the **Alarms** view and a control menu appears. The list of available commands depends on the type of alarm selected.

The **Add Note** command on the right-click menu is unavailable once an alarm has been acknowledged. An alarm must be acknowledged before it can be cleared. On the right-click menu, either the **Acknowledge** or **Clear** command is available at one time, depending on whether or not the alarm has been acknowledged.

Control Functions

- **Inputs:** Acknowledge, Clear, Open Default Floor Plan, Add Note, Shunt, Unshunt, Restore to Time Zone.
- **Doors:** Acknowledge, Clear, Open Default Floor Plan, Add Note, Unlock, Lock, Pulse, Timed Pulse, Restore to Time Zone.
- **Readers:** Acknowledge, Clear, Open Default Floor Plan, Add Note.
- **Panel System Alarms:** Acknowledge, Clear, Open Default Floor Plan, Add Note.

Alarm View Filters

It is often impossible to monitor all card reads or alarms from one view, therefore, WIN-PAK 2.0 has several ways to filter messages that appear in the **Alarms** view. You can select either card reads, alarms or both. In addition, using the Control Map, you can select which devices are monitored in a given instance of the Alarms view. Multiple Alarm windows can be open at one time, each with its own filter selections.

Once these views are closed, the filter selections are cleared. When a new Alarms window is opened, it has the default settings (both alarms and card reads from all devices). You can, however, save Alarms filter selections.

In the floor plan definition, create an Alarms view link with the filter selections you want. When you open an Alarms view from this link, the filter properties you selected are applied. These filter settings cannot be changed from the Alarms view, only from the floor plan definition.

(For further information, see Floor Plan Definition in the Programming section.)

To Filter an Alarm View

- 1 In the **Filters** area of the Alarm View window select **Alarm**, **Card Read**, or **Both**, depending on which messages you want displayed.
- 2 To further narrow the information coming to this Alarm view, click the **Control** button. The Filter Devices window appears.



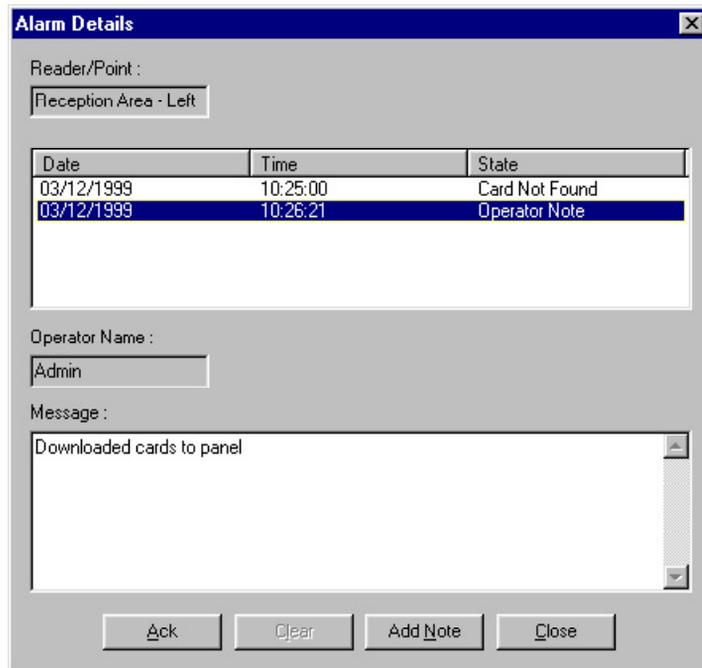
- 3 Expand the tree by clicking on the plus signs.
- 4 Select the individual devices that are to be monitored in this Alarm view. Right-click the desired device, and then click **Select**.

Now only messages from the selected devices are sent to the Alarm view. You can choose as many or as few devices as you wish. This could be very useful for example, if a particular guard station was to monitor the loading dock. An Alarm view can be defined to only receive messages from the loading dock doors.

More than one Alarm view can be defined and open at the same time. Thus, the same guard station could have an Alarm view that is monitoring the loading dock doors and another showing card reads and alarms from the computer room.

Alarm View Details

Select the **Details** check box in the **Alarm View** window to open the **Alarm Details** window. This shows details of any alarm selected in the Alarm View window. This includes the name of the reader, input or output point, the date and time of the alarm, and the state of the reader or point. Details also indicates if the alarm has been acknowledged or cleared, and the name of the operator.



The screenshot shows the 'Alarm Details' window with the following fields and controls:

- Reader/Point: Reception Area - Left
- Table of alarm events:

Date	Time	State
03/12/1999	10:25:00	Card Not Found
03/12/1999	10:26:21	Operator Note

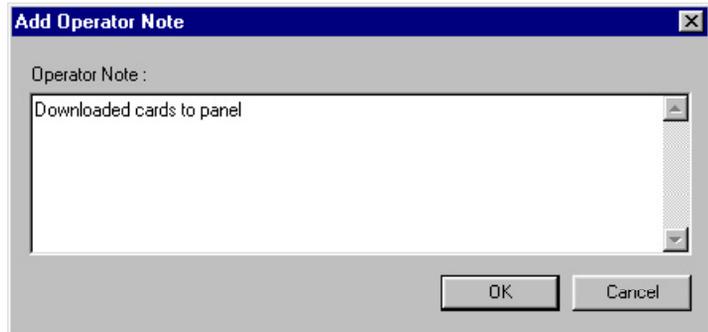
- Operator Name: Admin
- Message: Downloaded cards to panel
- Buttons: Ack, Clear, Add Note, Close

The operator can acknowledge the selected alarm from the **Detail** window by clicking the **Ack** button and clear the alarm by selecting the alarm and then clicking the **Clear**

button. A note can be added to an alarm before it is acknowledged.

To Add a Note

- 1 In the Alarm View window, select the desired alarm, and then click the **Add Note** button. The **Add Operator Note** window appears.



- 2 In the **Operator Note** box, type the message.
- 3 Click **OK**. These notes are included in history and can be printed with the History report.

Auto Card Lookup

WIN-PAK 2.0 can automatically look up cards from designated readers or card reads that have a status priority higher than a designated threshold. When activated, the **AutoCard Lookup** opens a small lookup screen that can be left open while monitoring other views. If the lookup screen is minimized and a card read is received, the screen will automatically pop up.

The lookup screen displays the card holder picture (if there is one on file) the card holder name, card number, time, date, reader name and the status of the card read. If the Note Fields box is selected, selected note field information is also displayed. (Note fields are selected in the Configure AutoCard Lookup utility.)

The lookup feature is filtered both by priority of card read event and by selecting readers on the control map. Using the Control Area filter, you can choose to monitor as many or as few devices as you wish. This could be very useful for example, if a particular guard station is monitoring the computer room. An **AutoCard Lookup** view can be defined which receives messages only from the computer room readers.

A **Buffer** check box freezes the current card on the lookup screen, while saving any subsequent card reads in memory.

To Activate AutoCard Lookup

- 1 From the Operations menu, click **AutoCard Lookup**. The AutoCard Lookup window opens.



- 2 In the **Priority** box, set the priority threshold. All reads that have a higher priority (lower number) than this threshold, will pop-up card information on the lookup screen. (The read status of a given card read event is set in the reader's **Action Group**.)
- 3 To further narrow the number of card reads which produce a card lookup, click the **Control** button. The Filter Devices window appears.



- 4 Expand the tree by clicking on the plus signs.
- 5 Right-click the readers you want to monitor and then click **Select**.
- 6 Select the **Buffer** check box to freeze the current card on the lookup screen, while saving any subsequent card reads in memory.
- 7 Click the **Next** button to display the next card read results, while remaining in the buffer mode. Deselecting Buffer removes all stored information and continues with the next card presented.

Multiple lookup windows can be opened at the same time, and each can have its own filter selections.

Live Monitor View

The **Live Monitor** view displays information from a selected CCTV camera in real time. Controls to adjust the Iris, Zoom and Focus are located to the right of the viewing screen, along with controls to pan and tilt the camera. Individual frames from the video can be captured and saved for later viewing.

For Live Monitor view, your PC must be equipped with a video capture card. Connect the CCTV switcher to the video capture card. Cameras and monitors must be properly defined on the Device Map. Select the CCTV switcher monitor for Live Monitor view in Workstation Defaults. From the **System** menu, click **Workstation Defaults**, select the **Defaults** tab, and then select the desired monitor from the **Live Monitor** list.

To Open the Live Monitor View

- 1 In the Operations menu, click **Live Monitor**. The Monitor window appears.



- 2 Drag the **Monitor** window to the desired location and enlarge or reduce it, as desired, by dragging a corner of the window.
- 3 Click the pull-down arrow in the box, and select the camera that you want to view.

To Capture a Frame from the Live Monitor View

- 1 Right-click anywhere in the Monitor window, and then click **Live**. This freezes the view.
- 2 Right-click again and click **Save**, select a path, enter a file name and click **Save**. The image is saved as a JPEG (.jpg) file.

Controlling the Camera

If the switcher and cameras support focus, aperture adjustment, zoom, pan and tilt, homing presets, and tilting then these features can be controlled remotely from a WIN-PAK 2.0 workstation.

To view the title of the camera view on the appropriate monitor, right-click the **Live Monitor** window, and then click **Send Titles**. This will display titles on the camera view being monitored. (See your CCTV equipment manual to see if the title or the time and date features are supported.) The Time and Date can also be viewed on screen. Right-click in the live view area and then click **Send Time and Date**.

To Adjust Focus



Click and hold the upper segment of this button

to slowly focus on closer objects. Click and hold the lower segment of this button to slowly focus on distant objects.

To Adjust Aperture



Click and hold the top button to slowly increase the aperture (opening) of the camera iris, letting in more light. Click and hold the bottom button to slowly decrease the aperture of the camera iris, letting in less light.

To Adjust Zoom



Click and hold down the top button to slowly zoom the camera in. Click and hold down the bottom button to slowly zoom the camera out.

Camera Pan and Tilt Control

The control arrows pan the camera left and right and also tilt it up and down. Click and hold down the camera control arrows to move the camera. The Left Arrow pans to the left, the Right Arrow pans to the right. The Up Arrow tilts the camera up, while the Down Arrow tilts the camera down. If the cursor is moved over the live viewing area, arrows appear. Clicking these cursor arrows has the same effect as the control arrows mentioned above.

Setting Pan and Tilt Limits

Limits should be set on each camera's panning and tilting actions. Limits keep a camera from tilting and panning to a point that is stressful on the hardware and to limit a camera's view to that which is useful. The following steps demonstrate how to set the upward tilt limit for a camera. Repeat these steps for downward tilt, left pan, and right pan on each camera.

- 1 Use the up and down arrows to tilt the camera to the highest point needed, and then right-click the up arrow.
- 2 Click **Set Limit**.

To Clear a Limit that has Been Set

- 1 Right-click the arrow with the limit you want to clear.
- 2 Click **Clear Limit**.

Setting Home Position

A *Home Position* is the most utilized view of a camera. It can be set for each camera so that it will return to its home position with the correct focus, aperture, and zoom settings when the **Home** button is pushed. The following steps outline setting a home position:

- 1 Adjust the pan, tilt, and adjustment settings for the view that you want to make your home position.
- 2 Right-click the **Home** button and click **Set Home**.

Now your camera will return to this view when you click the **Home** button.

Floor Plan View

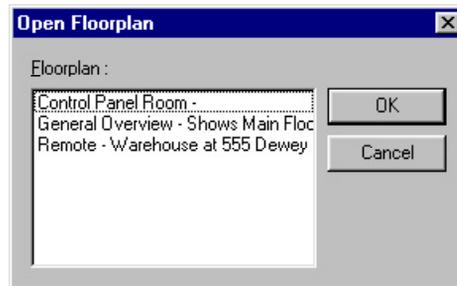
Floor plan views can be used both to monitor and control devices in the access control system. The design of your access control system dictates the size and layout of the floor plan views. Any given workstation can monitor one or more floor plans.

Floor Plan Control Functions

Devices can be controlled from the floor plan view. Right-click on an ADV to open the control menu, and then click the command. The commands available depend on the type of object you select.

To Open a Floor Plan

- 1 In the Operations menu, click **Floor Plan**. The Open Floor Plan window appears.



- 2 Select a floor plan and click the **OK** button. The selected floor plan opens in a separate window, identified by a title bar.
- 3 The window can be resized to meet your needs. Resize the window by positioning the cursor near an edge, when the cursor becomes a two-headed arrow, click and drag the window to the desired size.
- 4 To reposition the window, click in the title bar and drag the window to the desired position.

To Enlarge or Reduce the Floor Plan View

- 1 Right-click in an area of the floor plan (not an ADV), and then click **Zoom**. Select a preset percentage of enlargement or reduction or Fit in window.
- 2 If you prefer, select custom, and then enter a percentage value. The floor plan is automatically enlarged or reduced within the viewing window.
- 3 Once the floor plan has been enlarged above 100%, you can right-click the floor plan, and then click Show View. A smaller window opens inside the floor plan viewing window, showing the location of the enlarged detail on the total floor plan.

ADV Control Functions

Alarms can be acknowledged and cleared from the Floor Plan and Control Map and system devices can be controlled. Right-click an ADV to open its control menu, and then click the desired action. The control functions that are available depend on what type of object you select. Below is a list of typical ADVs and their control functions.

CCTV Camera	Control, Switch, Pan, Tilt
CCTV Switcher	Send Time & Date, Send Camera Titles, Camera to Monitor Switch, Ack All Alarms, Clear All Alarms
Comm Server	Ack All Alarms, Clear All Alarms
Command File Server	Run Command File
Doors, Outputs, Groups	Unlock, Lock, Pulse, Timed Pulse, Restore to Time Zone, Ack All Alarms, Clear All Alarms

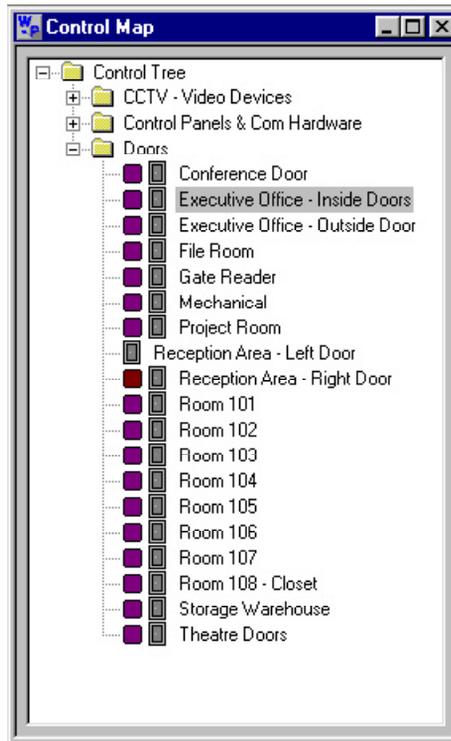
Input Points	Acknowledge, Clear, Shunt, Unshunt, Restore to Time Zone
Modem Pool	Hang-Up Modem, Reset Modem, Ack All Alarms, Clear All Alarms
Panel	Initialize, Cancel Initialization, Buffer, Un-Buffer, Ack All Alarms, Clear All Alarms,
C-100 & N-485	Buffer All Panels, Un-buffer All Panels, Set Retry Count, Set Command Timeout, Connect Remote, Disconnect Remote, Ack All Alarms, Clear All Alarms

Control Map

The **Control Map** provides another means of acknowledging and clearing alarms and controlling devices.

To Control Devices from the Control Map

- 1 In the Operations menu, click **Control Map**. The Control Map window appears.



- 2 Expand the tree by clicking the plus signs to display the devices that you want to control.
- 3 Right-click any device to open its control menu, and then click on the desired command.

ADV Control Functions

Alarms can be acknowledged and cleared from the Floor Plan and Control Map and system devices can be controlled. Right-click an ADV to open its control menu, and then click the desired action. The control functions that are available depend on what type of object you select. Below is a list of typical ADVs and their control functions.

CCTV Camera	Control, Switch, Pan, Tilt
CCTV Switcher	Send Time & Date, Send Camera Titles, Camera to Monitor Switch, Ack All Alarms, Clear All Alarms
Comm Server	Ack All Alarms, Clear All Alarms
Command File Server	Run Command File
Doors, Outputs,	
Groups	Unlock, Lock, Pulse, Timed Pulse, Restore to Time Zone, Ack All Alarms, Clear All Alarms
Input Points	Acknowledge, Clear, Shunt, Unshunt, Restore to Time Zone
Modem Pool	Hang-Up Modem, Reset Modem, Ack All Alarms, Clear All Alarms
Panel	Initialize, Cancel Initialization, Buffer, Un-Buffer, Ack All Alarms, Clear All Alarms,
C-100 & N-485	Buffer All Panels, Un-buffer All Panels, Set Retry Count, Set Command Timeout, Connect Remote, Disconnect Remote, Ack All Alarms, Clear All Alarms

Guard Tour

A Guard Tour is a defined series of check points a guard must activate within a given amount of time. Usually the check points are readers where the guard presents a card, but they can also be input points attached to other devices, such as an egress button. The check points can be sequenced (that is, they must be activated in the specified order) or they can be unsequenced (they can be activated in any order).

The guard tours are defined in the Guard Tour database. The tour definition sets the amount of time the guard has to get from one check point to the next. Alarms can be defined and priorities set for early arrival, late arrival or missed check points (these alarms are defined in the Guard Tour database and can be edited there or in the Action Group database). A Guard Tour Server must be defined on the Device Map.

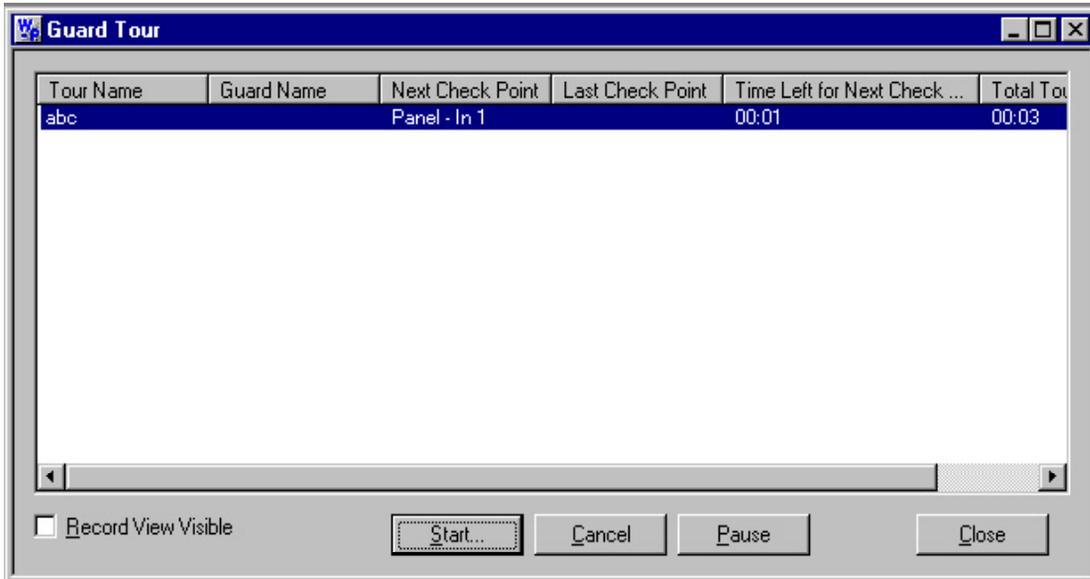
To Start the Guard Tour

To start a guard tour, the Guard Tour Server must be running.

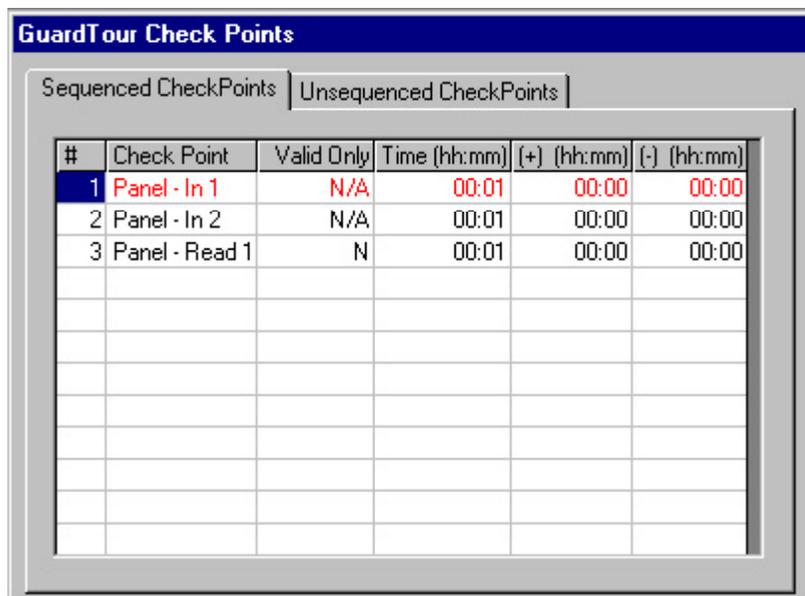
- 1 In the **Operations** menu, click **Guard Tour**. The Available Guard Tour window appears, with a list of available guard tours. (Tours that are already in progress do not appear on the list, because you cannot run more than one instance of a given tour.)



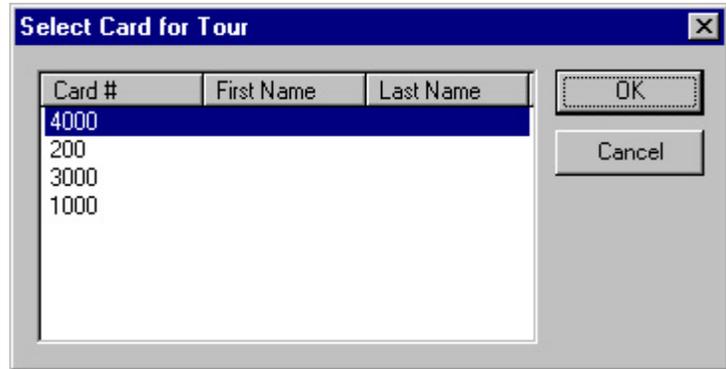
- 2 Select the Guard Tour to be started, and it appears in the Guard Tour window.



- 3 Select the View Check Points check box to see the required check points for the tour you have chosen. The sequenced and unsequenced check points are listed on separate tabs.



- 4 In the Guard Tour window, click the **Start** button, and the Select Card for Tour window appears.



- 5 From the list of cards, select the card that is being used to validate the reader check points. Or, if the first check point is a reader, you can begin the tour by presenting the card at the first check point.
- 6 To pause the tour, click the **Pause** button. The late or missed check point alarms will not be generated while the tour is paused. To restart the tour, click **Pause** again.

As the tour progresses, the Guard Tour screen reports the tour progress, indicating each check point as it is validated, along with the time between check points, and the total time elapsed. If a point is missed, it changes to red in the View Check Points list.

Tracking and Muster

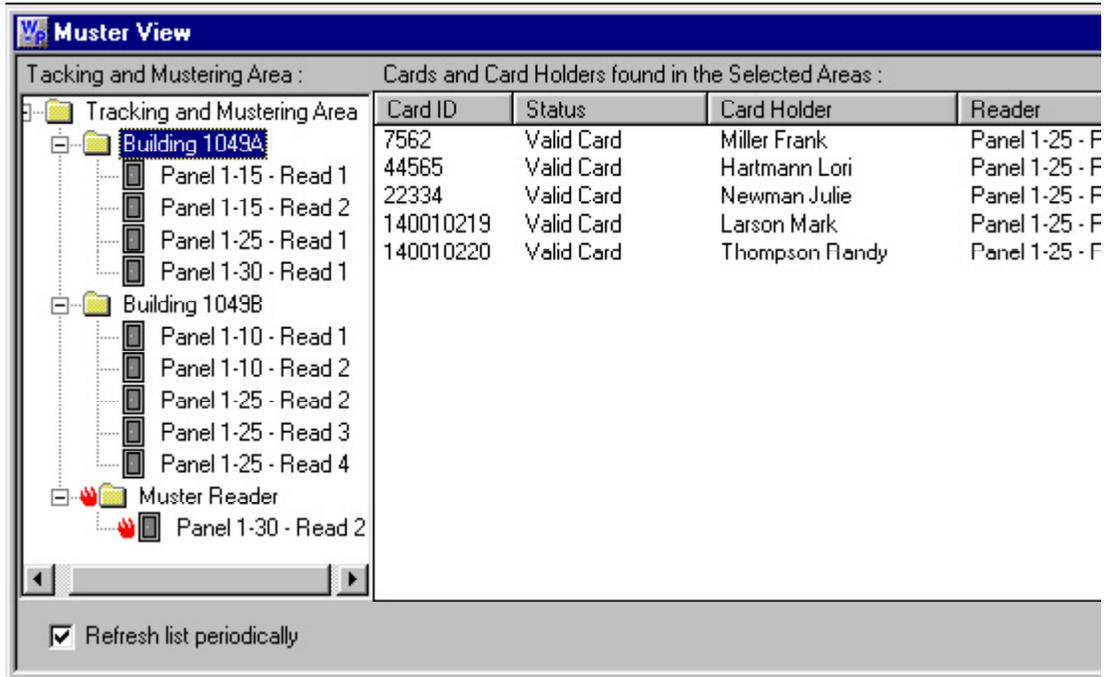
Tracking and Muster reporting allows card holders to be located in the event of an emergency. Tracking and muster areas are defined by Tracking Areas. A muster server must be added to the **Device Map**.

People are required to swipe tracking readers when entering or leaving tracking areas. In an emergency, a muster is declared, and people go to the muster readers and present their cards. The Muster view opens two panes. The left pane displays the Tracking and Muster areas with their readers. The right pane reports information on the cards and card holders in the tracking areas. The information includes: Card ID, Status, Card Holder (if any), Reader, Time and Date.

When you open the Muster view, it will load information from history, showing card reads for the past eight hours (or as defined in System Defaults). Make sure the **Refresh List Periodically** check box is selected, so that the list displayed is current. The list refreshes approximately every three seconds.

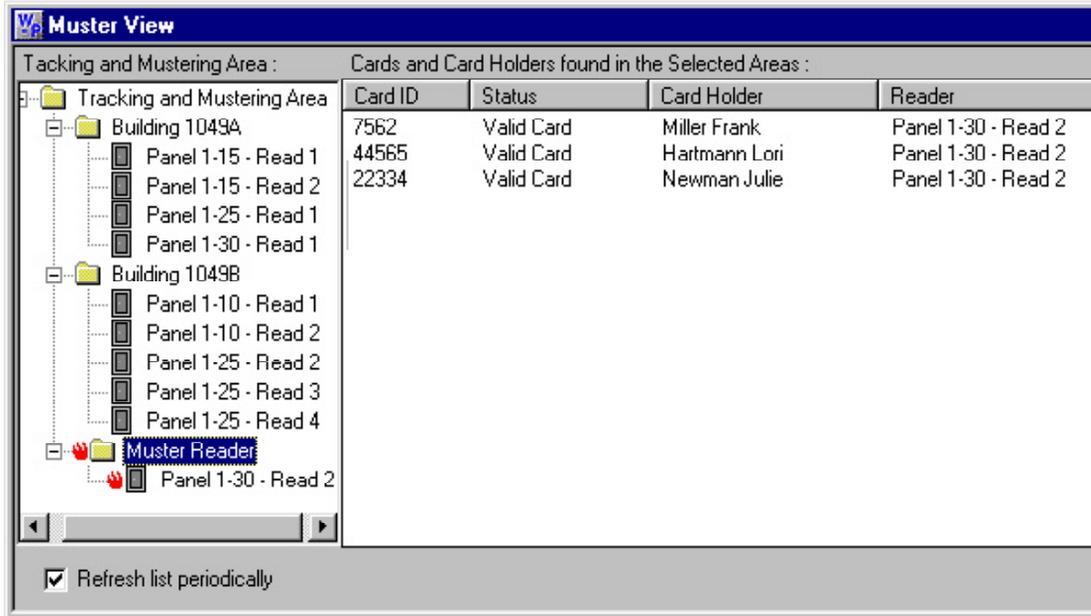
To Monitor the Tracking and Muster View

- 1 In the **Operations** menu, click **Tracking and Muster**. The Tracking and Muster view window appears.



- 2 Expand the tree to show the tracking and muster areas, and then click the top-level branch to display all tracking and muster areas. The right pane displays all of the cards and card holders that have been presented at a tracking or muster reader, along with the reader name, the time and date of the card read. The most recent card reads are at the top of the list.
- 3 To display a specific area, click the branch of your choice. Only card reads from the readers in the selected area are displayed. If one of these cards is presented at a tracking reader in another area, it is removed from the first area and added to the most recent area.

- 4 Select the muster area to show all of the cards which have been presented at the muster readers. As cards are presented at muster readers, they are removed from the tracking areas.



- 5 Select the Refresh List Periodically check box to update the list every few seconds. If you wish to freeze the list temporarily, deselect this box.
- 6 Messages can be deleted from the list. Select a message and click the Delete button. To delete a range of messages, while holding down the SHIFT key, click the first message in the range, click the last message in the range, and then hit Delete.

To Print a Muster Report

- 1 In the Operations menu, click **Tracking and Muster**. The Tracking and Muster view window appears.
- 2 Expand the tree and select the branches that you want included in the report. Select the top level branch if you want all tracking and muster areas included in the report.
- 3 Click the **Print** button.

Database Maintenance

Database maintenance provides tools for removing unused information from the databases. When records are deleted from a database, they are no longer available, but they have not actually been removed from the hard disk. Use the Remove Deleted Records utility to remove them, thus reducing the size of your database.

To Remove Deleted Database Records

- 1 In the File menu, click **Database Maintenance**. The Database Maintenance window appears.
- 2 Select **Remove Deleted Records**.
- 3 Click **Start**. A dialog box appears reminding you to make a back-up copy of your databases before deleting records. Click **No** to stop the deletion process or click **Yes** to proceed.
- 4 A status bar displays the progress of the deletion process, including the name of each database as it is being processed.

Unwanted history files can also be removed from the databases. This is generally done after you make a backup copy of your database files. Use the Delete History utility to delete history records before a selected date.

To Delete History from the Databases

- 1 In the File menu, click **Database Maintenance**. The Database Maintenance window appears.
- 2 Select **Delete History**.
- 3 Click the **Change** button, and select a date for the Until Date field. Either click **Today**, to select the current date or select a date from the calendar, and then click **OK**. All history entered prior to the selected date will be removed from the databases.
- 4 Click **Start**. A dialog box appears reminding you

to make a back-up copy of your databases before deleting records. Click **No** to stop the deletion process or click **Yes** to proceed.

- 5 A status bar displays the progress of the deletion process, including the name of the history database as it is being processed.

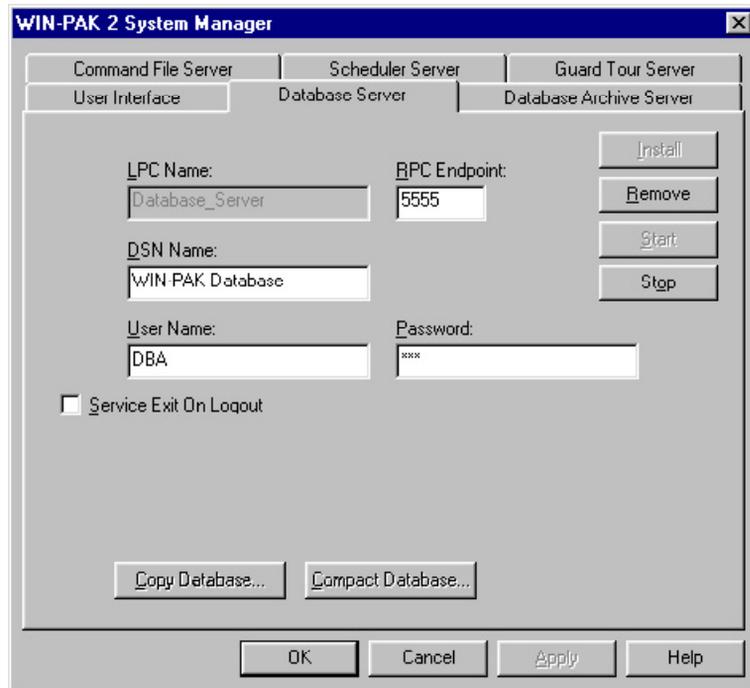
Removal of the deleted database records and removal of unwanted history can be done separately or at the same time. The date selection only applies to history records.

Back-up and Restore the Database File

In order to protect the information in your WIN-PAK 2.0 databases, it is important to make back-up copies on a regular basis. Use the WIN-PAK 2.0 back-up utility to copy the database file, while the Database Server is running. Once a backup has been made, use the software utility of your choice to copy it to a network drive, a tape backup, or other media. It can be stored either on the network or off line. These backup copies can be used to generate reports from older history, which has been deleted from the active database. If your database becomes corrupted, you can restore it (up to the date of the most recent backup) from your back-up copy.

To Back-up the WIN-PAK 2.0 Database File

- 1 Click the Windows **Start** menu. Point to the Northern Computers program group and then click **System Manager**. The System Manager appears.
- 2 Click the **Database Server** tab.



- 3 Click the **Copy Database** button. A **Save As** window appears pointing to the default Backup Database directory. If you want to use a different directory, enter its path and name.
- 4 Click **Save**.

The card holder photos and signatures, badge graphics, and floor plan backgrounds are stored in separate directories. You should also make back-up copies of these files. However, you can use any Windows-compatible utility to create copies of these files. If you have added foreign language files, sound files or wallpaper graphics, be sure and make copies of these as well. The default directory names are listed below.

BadgeImage - bitmap graphics used on badges

FloorPlanImage - floor plan background graphics

Language Files- text files for interface languages

Sound Files - sound files for use with action groups

UserImage - card holder photos and signature files

Wallpaper - wallpaper bitmaps

Chapter VII

Reports

Overview

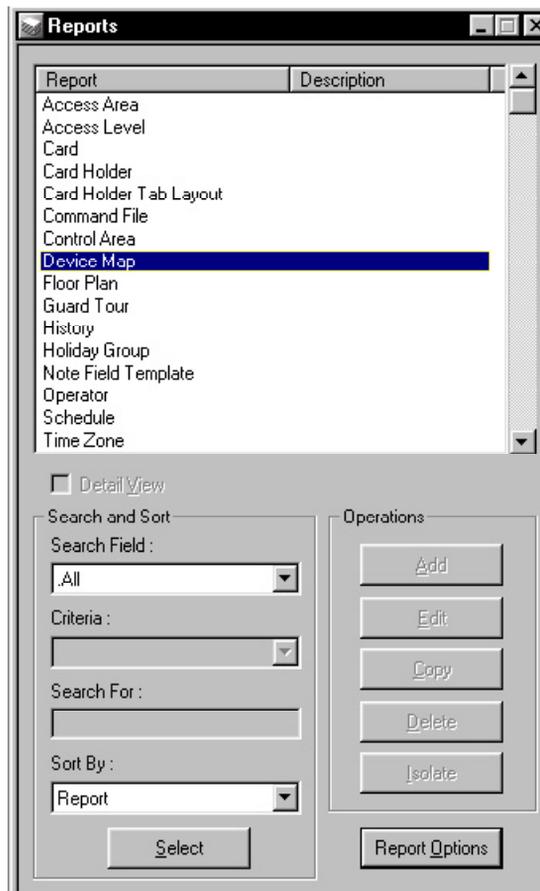
Generating and Printing Reports



Overview

WIN-PAK 2.0 allows you to generate a variety of reports that can be viewed on screen or printed.

To generate a report, go to the **Reports** menu, and then click **Reports**. From the database record list, double-click the report you want to generate. This will open a detail view window. Some reports have a variety of filters and sort options. After selecting the options you want, click **Print Preview** to view the report before printing.



Available Reports

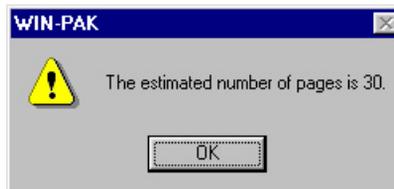
Access Areas
Access Levels
Card
Card Holders
Card Holder Tab Layout
Command File
Control Area
Device Map
Floor Plan
Guard Tour
History
Holiday Groups
Note Field Template
Operator
Schedule
Time Zone

Report Print Preview

To view a report before printing, click the **Print Preview** button. Use the **Zoom** tool to enlarge the page view. The **Next Page** and **Previous Page** buttons allow you to scroll through a multiple page report.

Report Size Estimation

The size of a report depends on the type of report and the amount of filtering done to it. The number of pages required for printing also depends on the printer. Before printing a report it may be helpful to know how many pages it will require. To learn the estimated page count of a report click the **Estimate Pages** button. A message, similar to the one below, appears.



Reporting from Archived Databases

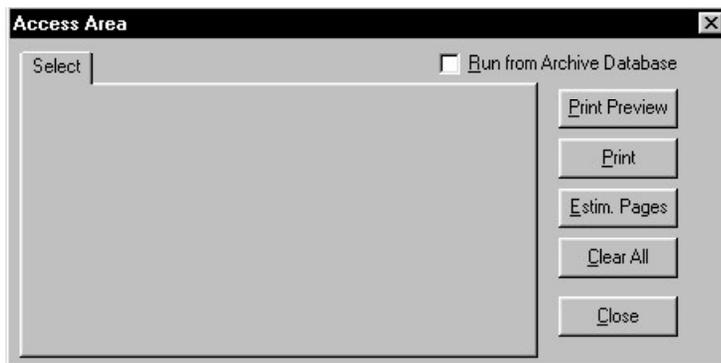
WIN-PAK 2.0 can generate reports from its archived databases as well as its active database. To run a report from an archived database put a check in the box **Run from Archived Database**. For more information refer to the Database Maintenance and Release Notes.

Generating and Printing Reports

Access Areas Report

To Generate an Access Areas Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Access Areas**. The Access Area window appears.

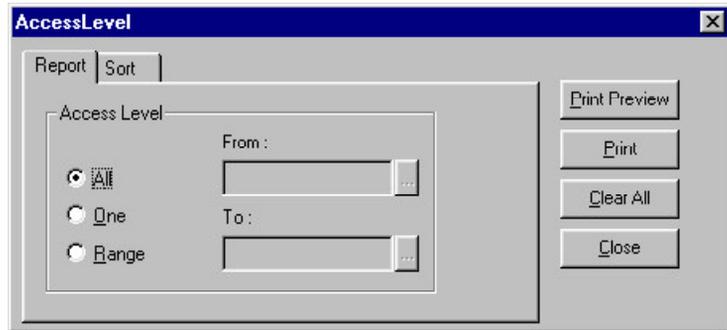


- 3 Click the **Print Preview** button to view the Access Areas Report prior to printing it.
- 4 Click **Print** when ready to print the report.
- 5 When finished, click **Close**.

There may be access levels listed in the report that do not show up in the access level database and are identified by number only. These numbered access levels are the custom levels for cards that are modified from their base access level Access Level Report

To Generate an Access Level Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Access Levels**. The Access Level window appears.



- 3 On the **Report** tab, select one of the following to define the report:
 - **All**: Reports every access level.
 - **One**: Reports a designated, individual access level, using the **From** field.
 - **Range**: Reports a designated range of access levels, using the **From** and **To** fields.
- 4 On the Sort tab, click on the pull-down arrow in the Sort Order box and select a category that determines how to sort the access levels (*Names*, for example). Then choose whether the category should appear in **Ascending** or **Descending** order. Ascending order will sort them in order alphabetically or numerically, and Descending order will sort them in reverse alphabetical or numerical order.
- 5 Click the **Print Preview** button to show the Access Level Report prior to printing it.
- 6 Click **Print** when ready to print the report.
- 7 When finished, click **Close**.

Card Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Card**. The **Card** window appears.

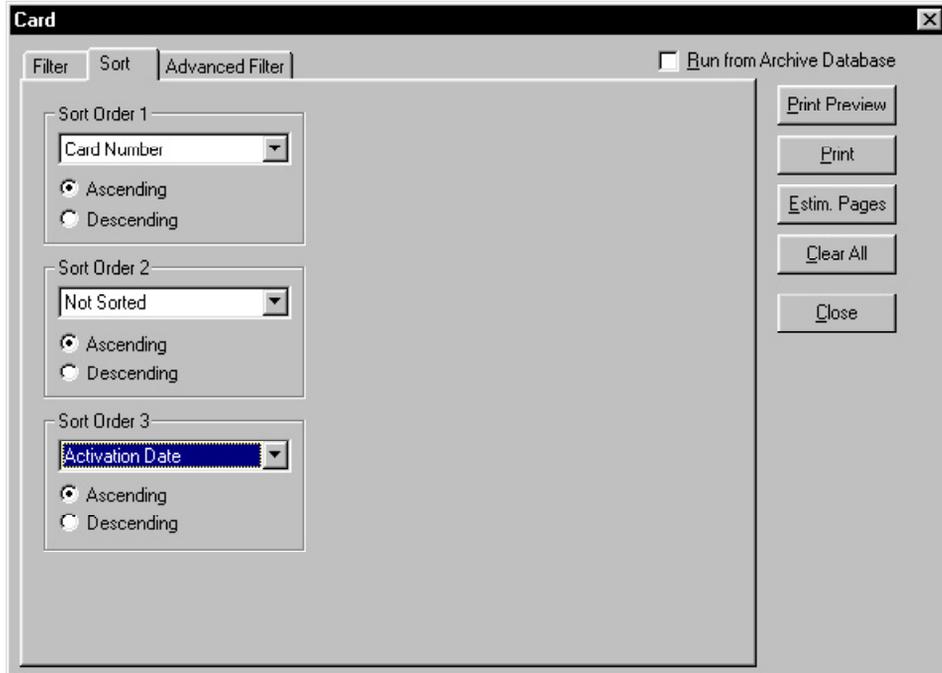
The screenshot shows the 'Card' window with the following elements:

- Buttons: Filter, Sort, Advanced Filter
- Checkbox: Run from Archive Database
- Card Number section:
 - Radio buttons: All, One, Range
 - From: [] []
 - To: [] []
- Card Holder: [] []
- Card Status: [All]
- Access Level: [] []
- Activation Date: [] []
- Door: [] []
- Expiration Date: [] []
- No. of columns to print:
 - Print fewer columns
 - Print all columns
- Buttons on the right: Print Preview, Print, Estim. Pages, Clear All, Close

- 3 To filter the report by card number, select one of the following
 - **All:** Reports all cards.
 - **One:** Locates a particular card number.
 - **Range:** Reports all cards in a given numerical range.
- 4 To filter the report even further, select one of the following options:
 - **Card Holder:**
 - **Access Level:**
 - **Door:**
 - **Card Status:** All, Active, Inactive, Lost/Stolen, Trace.

- **Activation Date:** The day the card became valid.
- **Expiration Date:** The day the card became invalid.

5 Click the **Sort** tab.



6 Click the pull-down arrow in each of the Sort Order boxes and select the category that determines how to sort the card holders. Then choose whether the category should appear in **Ascending** or **Descending** order. Ascending order will sort them in order alphabetically or numerically, and Descending order will sort them in reverse alphabetical or numerical order.

The Card Holder Report can be sorted, in order, by the following 3 categories:

- **Sort Order 1**
- **Sort Order 2**
- **Sort Order 3**

7 Click the **Advanced Filter** tab.

The screenshot shows a 'Card' report filter dialog box. It has three tabs: 'Filter', 'Sort', and 'Advanced Filter'. The 'Filter' tab is active. At the top right, there is a checkbox labeled 'Run from Archive Database'. Below this, there are six filter sections, each with three radio button options: 'Both' (selected), 'Assigned', and 'Unassigned'. The sections are: 'Card Holder', 'Badge Print Status', 'Pin #1', 'Pin #2', 'Badge Front', and 'Badge Back'. At the bottom left, there is a checkbox labeled 'Custom Access Level'. On the right side of the dialog, there are five buttons: 'Print Preview', 'Print', 'Estim. Pages', 'Clear All', and 'Close'.

8 The **Card Report** can be also be filtered by whether a Card Holder is one of the following:

- **Attached**
- **Unattached**
- **Both**

Other filter options include the following:

- **Badge Print Status**
- **PIN #1**
- **PIN #2**
- **Badge Front**
- **Badge Back**

The above filter options can be defined by whether or not each is **Assigned**, **Unassigned**, or **Both**.

Check the **Custom Access Level** to include all cards which have custom access level assigned to them.

- 9 Click the **Print Preview** button to show the Card Report prior to printing it.
- 10 Click **Print** when ready to print the report.
- 11 When finished, click **Close**.

Card Holder Report

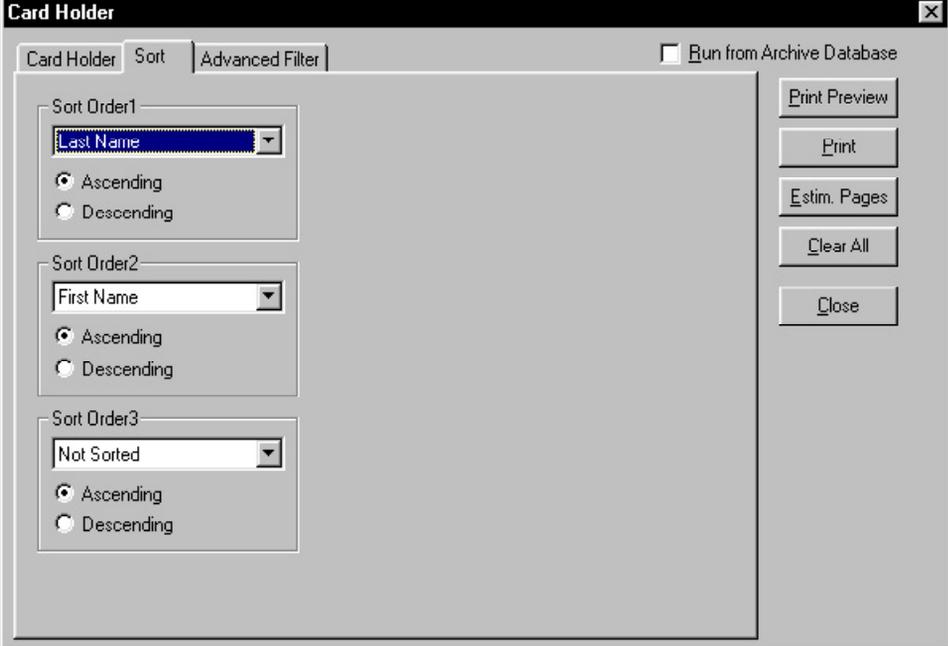
To generate a Card Holder Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Card Holder**. The Card Holder window appears.

- 3 On the Card Holder tab, select a filter for the card holders' last names. Select one of the following:
 - **All:** Reports all card holders.
 - **One:** Reports a designated, individual card holder.
 - **Range:** Reports a designated range of card holders.

The Access Level field narrows the report to card holders with a particular access level. Note Fields can refine the report by any of the user defined note fields.

4 Click the **Sort** tab.



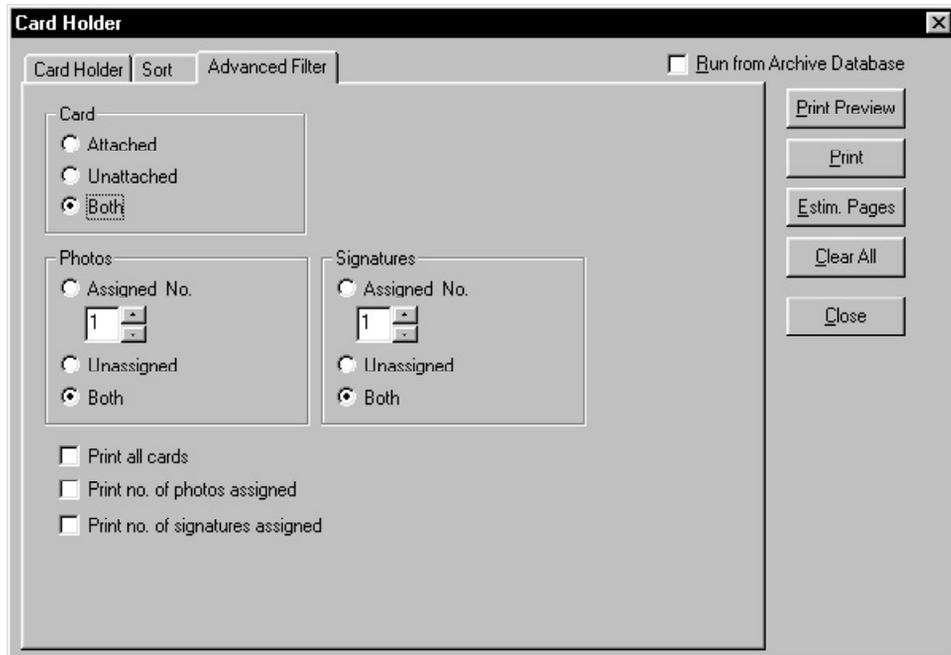
The screenshot shows the 'Card Holder' report window with the 'Sort' tab selected. The window has three tabs: 'Card Holder', 'Sort', and 'Advanced Filter'. A checkbox labeled 'Run from Archive Database' is checked. On the right side, there are five buttons: 'Print Preview', 'Print', 'Estim. Pages', 'Clear All', and 'Close'. The main area contains three 'Sort Order' sections. 'Sort Order1' has a dropdown menu set to 'Last Name' and radio buttons for 'Ascending' (selected) and 'Descending'. 'Sort Order2' has a dropdown menu set to 'First Name' and radio buttons for 'Ascending' (selected) and 'Descending'. 'Sort Order3' has a dropdown menu set to 'Not Sorted' and radio buttons for 'Ascending' (selected) and 'Descending'.

- 5 Click the pull-down arrow in each of the Sort Order boxes and select the category that determines how to sort the card holders. Then choose whether the category should appear in **Ascending** or **Descending** order. Ascending order will sort them in order alphabetically or numerically, and Descending order will sort them in reverse alphabetical or numerical order.

The Card Holder Report can be sorted, in order, by the following 3 categories:

- **Sort Order 1**
- **Sort Order 2**
- **Sort Order 3**

6 Click the **Advanced Filter** tab.



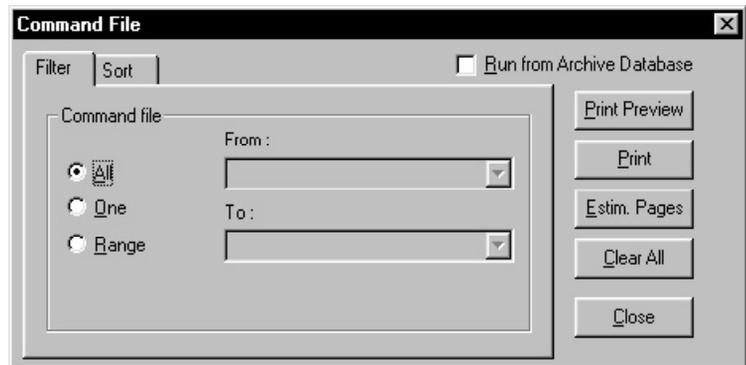
- 7 The Card Holder Report can be filtered by whether the cards are one of the following:
 - **Attached**
 - **Unattached**
 - **Both**
- 8 The report can also be filtered by the number of photos and signatures, and whether the photos and signatures are one of the following:
 - **Assigned**
 - **Unassigned**
 - **Both**
- 9 Click the **Print Preview** button to show the Card Holder Report prior to printing it.
- 10 Click **Print** when ready to print the report.
- 11 When finished, click **Close**.

Card Holder Tab Layout Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Card Holder Tab Layout**. The Card Holder Tab Layout window appears.
- 3 Click the **Print Preview** button to show the Card Holder Tab Layout Report prior to printing it.
- 4 Click **Print** when ready to print the report.
- 5 When finished, click **Close**.

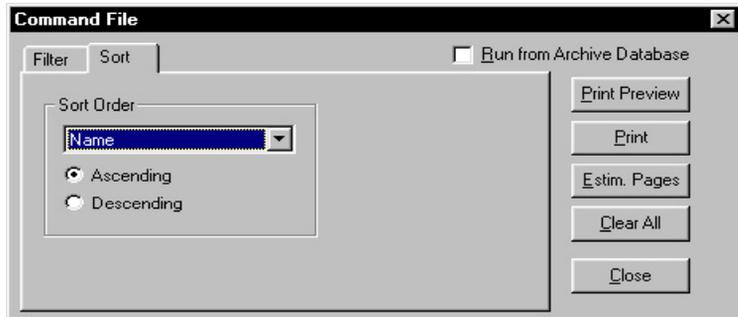
Command File Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Command File**. The Command File window appears.



- 3 Click the **Filter** tab.
- 4 Select one of the following to define the Command report to the degree necessary:
 - All:** Reports every Command File.
 - One:** Reports a designated, individual Command File using the **From** field.
 - Range:** Reports a designated range of Command Files, using the **From** and **To** fields.

- 5 Click the **Sort** tab.



- 6 Select a category that determines how to sort the commands (*Names*, for example). Then, choose whether the category should appear in Ascending or Descending order. The Ascending order will sort them in order alphabetically or numerically, and the Descending order will sort them in reverse alphabetical or numerical order.
- 7 Click the **Print Preview** button to view the Command File Report prior to printing it.
- 8 Click **Print** when ready to print the report.
- 9 When finished, click **Close**.

The **Clear All** button returns all filters to their default settings.

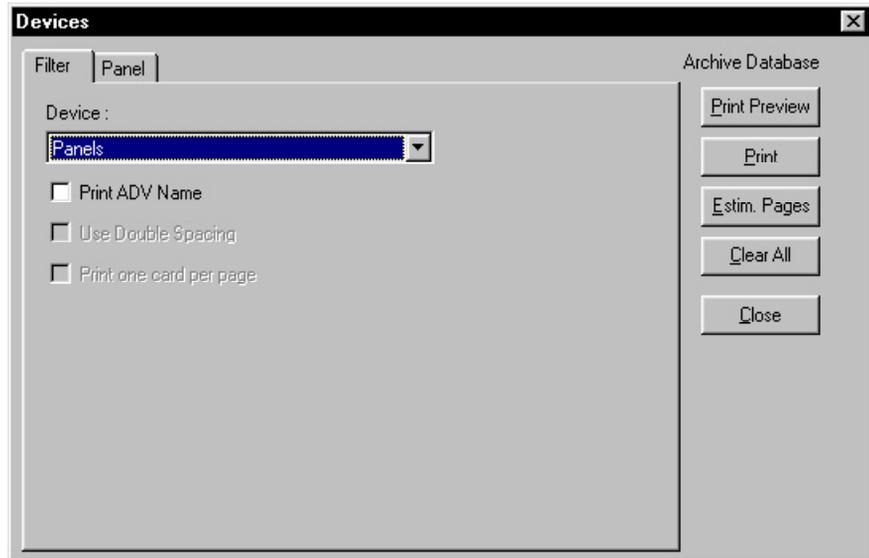
Control Area Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Control Areas**. The Control Areas window appears.
- 3 Click the **Print Preview** button to show the Control Areas Report prior to printing it.
- 4 Click **Print** when ready to print the report.
- 5 When finished, click **Close**.

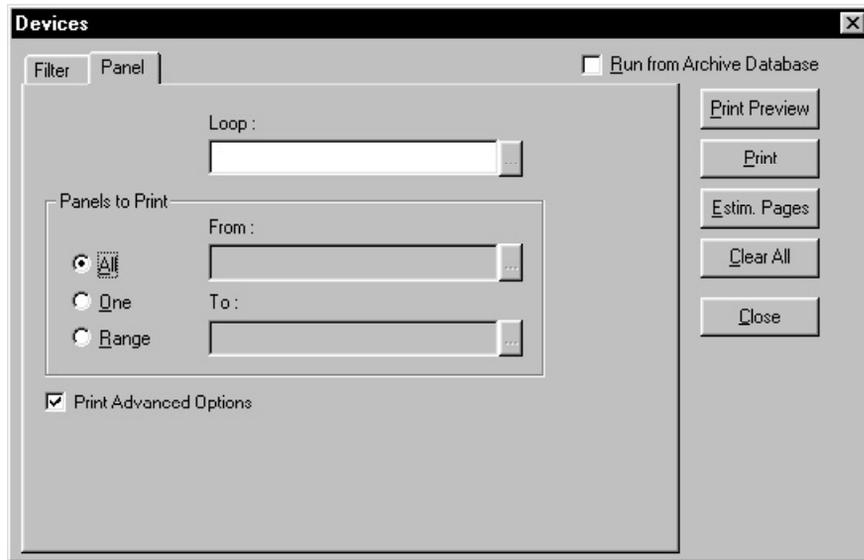
Device Report

To Generate a Device Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Device Map**. The Devices window appears.



- 3 Click the pull-down arrow in the **Device** box, and, select a device to filter. A corresponding tab with additional filter options will appear by the Filter tab.



- 4 For **Server** devices, the report can display all or just a range of servers. The report can also show either Comm servers or all other servers.

For **Loop** devices, the report can distinguish between C-100 and 485/PCI loops, and type of Communication servers.

For **Panel** devices, the report can display all or just a range of panels and show a specific type of Loop.

For **CCTV Switcher** devices, the report can display all or just a range of CCTV Switchers and show a specific type of Comm Server.

For **Modem Pool** devices, the report can display all or just a range of Modem Pools, distinguish between C-100 and 485/PCI loops and show a specific type of Comm Server.

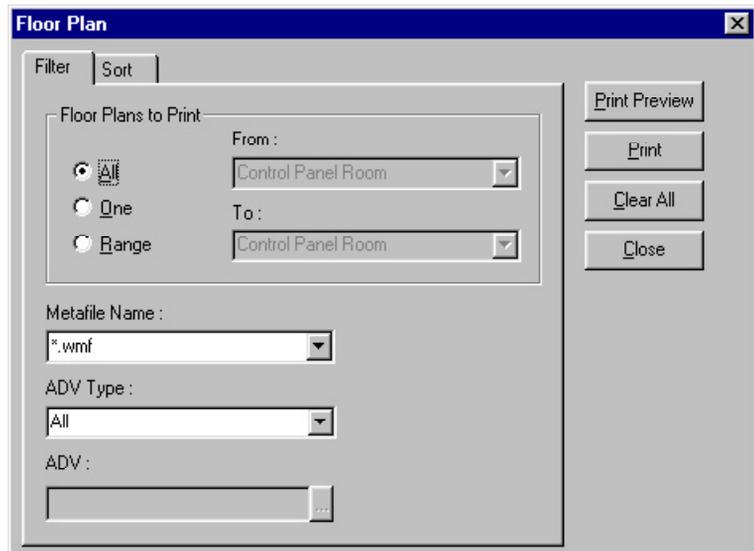
For the **RS-232 Connection** device, the report can display all or just a range of switchers and show a specific type of Comm Server.

- 5 Click the **Print Preview** button to show the Devices Report prior to printing it.

- 6 Click **Print** when ready to print the report.
- 7 When finished, click **Close**.

Floor Plan Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Floor Plan**. The **Floor Plan** window opens.

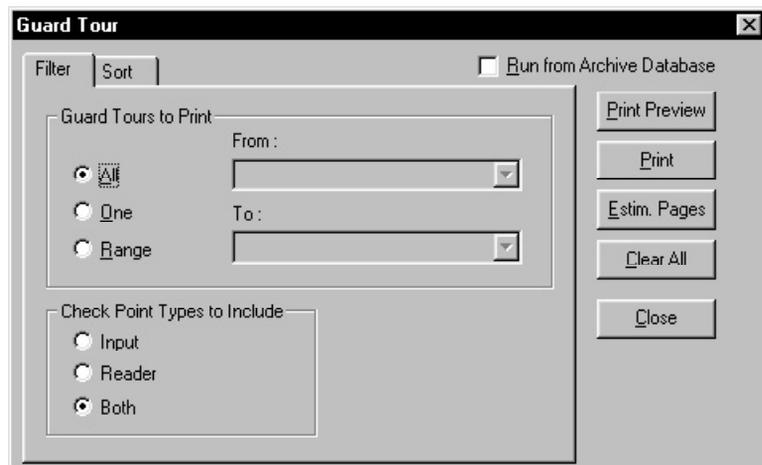


- 3 Click the **Filter** tab.
- 4 This report can be filtered by one of the following:
 - **Metafile Name** (The file used for the background)
 - **ADV Type**
- 5 The report also can be refined by using one of the following options:
 - **All**: Lists all floor plans.
 - **One**: Lists only the floor plan specified in the From field.
 - **Range**: Lists floor plans within the specified range, using the From and To fields.

- 6 Click the **Sort** tab. The **Floor Plan Report** can be sorted by Name in **Ascending** or **Descending** alphabetical order.
- 7 Click the **Print Preview** button to show the Floor Plan Report prior to printing it.
- 8 Click **Print** when ready to print the report.
- 9 When finished, click **Close**.

Guard Tour Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Guard Tour**. The Guard Tour window appears.



- 3 Click the **Filter** tab.
- 4 Select one of the following to define the Guard Tour report to the degree necessary:
 - **All:** Reports every Guard Tour.
 - **One:** Reports a designated, individual Guard Tour using the **From** field.
 - **Range:** Reports a designated range of Guard Tours, using the **From** and **To** fields.

- 5 The report can be further refined by selecting one of the following under **Check Point Types to Include**:
 - **Input**: Reports inputs exclusively.
 - **Reader**: Reports readers exclusively.
 - **Both**: Reports inputs and readers mutually.
- 6 Click the **Sort** tab.
- 7 Click the pull-down arrow in the **Sort Order** box and select a category that determines how to sort the guard tours (*Names* for example). Then, choose whether the category should appear in **Ascending** or **Descending** order. The **Ascending** order will sort them in order alphabetically or numerically, and the **Descending** order will sort them in reverse alphabetical or numerical order.
- 8 Click the **Print Preview** button to show the Guard Tour Report prior to printing it.
- 9 Click **Print** when ready to print the report.
- 10 When finished, click **Close**.

The **Clear All** button returns all filters to their default settings.

History Report

The History is a log of transactions that occur during a defined period of time. A History report can include:

Card
Input Point
Operator
Guard
System Transactions

An operator with report generating privileges can generate reports for any time period, for any or all loops and panels. The report includes:

Transaction Date and Time
Type of Transaction

Sequence ID Type and Status of the Event

In addition, the history report includes the following information (if applicable):

Name of the reader
Point or database that generated the event
Card number and name of the card holder
Operator and message

Report options allow the operator to narrow the report so that it includes only certain types of information.

To Generate a History Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **History**. The History window appears.

History [X]

Filter | Cards | Alarm Point Run from Archive Database

Date Range

From : May 26, 1999 ... 0 : 0

To : May 26, 1999 ... 23 : 59

Daily Time Range

Only list events between these hours each day

From : 0 : 0 To : 23 : 59

Transaction Types

Alarm Operator Card

System Alarm System Guard

Database

Alarm & Card

Clears Operator Messages

Acknowledgements

Sort on Sequence ID

Print Preview

Print

Estim. Pages

Clear All

Close

- 3 The **History Report** can be filtered by:
- **Date Range**
 - **Daily Time Range**
 - **Transaction Types**
 - **Alarm & Card Factors**

The screenshot shows a window titled "History" with a close button (X) in the top right corner. The window has three tabs: "Filter", "Cards", and "Alarm Point". The "Filter" tab is currently selected. In the top right corner of the window, there is a checkbox labeled "Run from Archive Database". Below the tabs, there are several input fields and checkboxes:

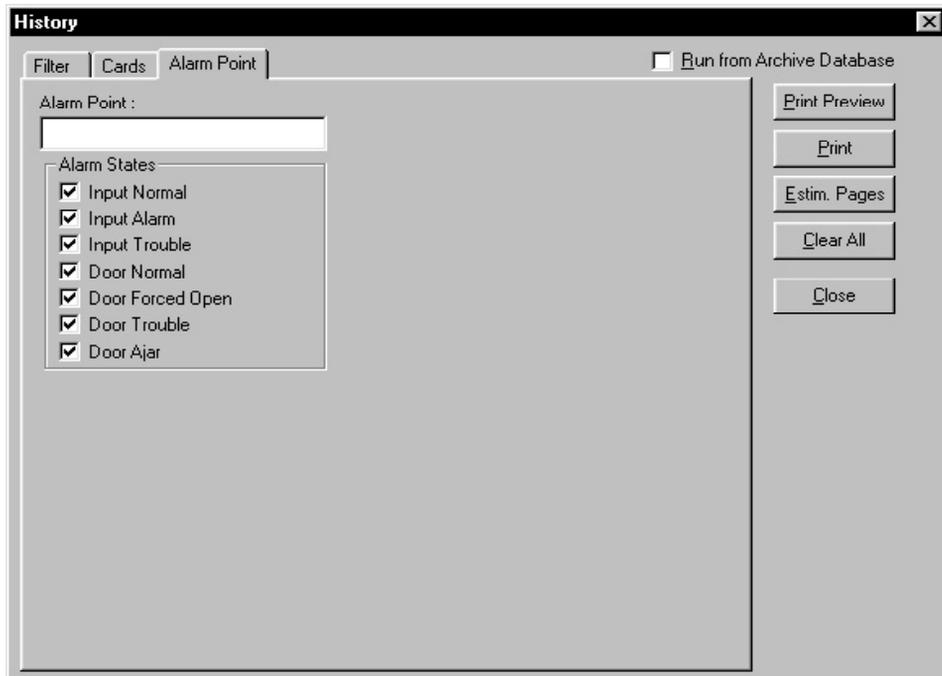
- Two text input fields for "First Name" and "Last Name".
- Two text input fields for "Card Number" and "Reader", with a dropdown arrow on the "Reader" field.
- A dropdown menu for "Tracking Area".
- A section titled "Card Codes" containing six checkboxes: "Normal", "Trace", "Timezone", "Not Found", "Pin", "Site Code", "Expired", and "Anti-passback". All checkboxes are checked.
- A section titled "Note Fields" containing three rows. Each row has a dropdown menu for "Field:", a text input field for "From:", and a text input field for "To:".

On the right side of the window, there are five buttons: "Print Preview", "Print", "Estim. Pages", "Clear All", and "Close".

- 4 The Card history can be further filtered by clicking the **Card** tab. Select any of the following restrictions:

First Name, Last Name, Card Number, Reader, Tracking Area, Card Codes (select the check boxes for all that apply), and any of the user-defined Note Fields.

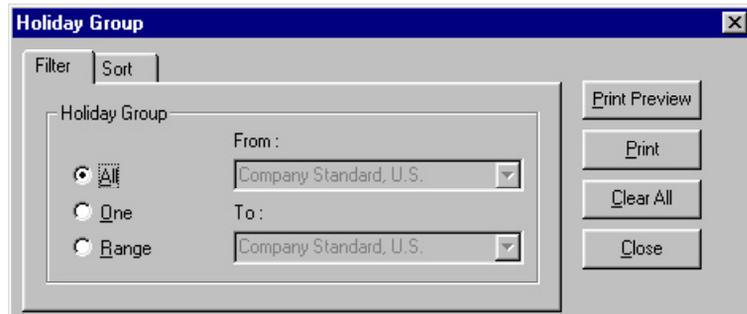
- 5 The Alarm Points history can be filtered by alarm state. Click the Alarm Point tab and select all the check boxes that apply.



- 6 Click the **Print Preview** button to show the History Report prior to printing it.
- 7 Click **Print** when ready to print the report.
- 8 When finished, click **Close**.

Holiday Group Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Holiday Group**. The Holiday Group window appears.



- 3 Click the **Filter** tab.
- 4 The **Holiday Group Report** can be refined by using one of the following options:
 - **All:** Reports all holiday groups.
 - **One:** Reports a specific holiday group as indicated in the **From** field.
 - **Range:** Reports a range of holiday groups as specified in the To and From fields.
- 5 Click the **Sort** tab.
- 6 The report can be sorted by name, in **Ascending** or **Descending** alphabetical order.
- 7 Click the **Print Preview** button to show the Holiday Group Report prior to printing it.
- 8 Click **Print** when ready to print the report.
- 9 When finished, click **Close**.

Note Field Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Note Field Template**. The Note Field Template window appears.
- 3 Click the **Print Preview** button to show the Note Field Report prior to printing it.
- 4 Click **Print** when ready to print the report.
- 5 When finished, click **Close**.

Note Field Tab Layout Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Card Holder Tab Layout**. The Card Holder Tab Layout window appears.

- 3 Click the **Print Preview** button to show the Card Holder Tab Layout Report prior to printing it.
- 4 Click **Print** when ready to print the report.
- 5 When finished, click **Close**.

Operator Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Operator**.
- 3 Click the **Filter** tab.
- 4 Select one of the following to define the Operator report to the degree necessary:
 - **All**: Reports every Operator.
 - **One**: Reports a designated, individual Operator, using the **From** field.
 - **Range**: Reports a designated range of Operators, using the **From** and **To** fields.
- 5 Click the **Sort** tab.
- 6 Select one of the following to determine how to sort the report:

Operator Name

Operator Type

Operator Level

Last Log-On

After selecting a sort category, choose whether the category should appear in **Ascending** or **Descending** order. The **Ascending** order will sort them in order alphabetically or numerically, and the **Descending** order will sort them in reverse alphabetical or numerical order.

- 7 Click the **Print Preview** button to show the Operator Report prior to printing it.
- 8 Click **Print** when ready to print the report.

- 9 When finished, click **Close**.

The **Clear All** button returns all filters to their default settings.

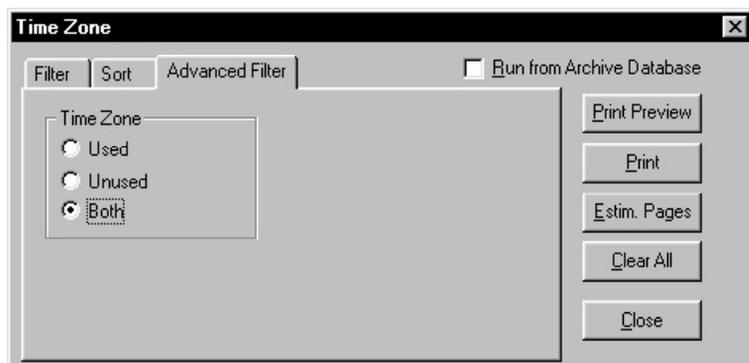
Schedule Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Schedule**. The Schedule window appears.
- 3 Click the **Filter** tab.
- 4 Select one of the following to define the Schedule report to the degree necessary:
All: Reports every Schedule.
One: Reports a designated, individual Schedule, using the **From** field.
Range: Reports a designated range of Schedules, using the **From** and **To** fields.
- 5 Click the **Sort** tab.
- 6 Select a category that determines how to sort the schedules (*Names* for example). Then, choose whether the category should appear in Ascending or Descending order. The Ascending order will sort them in order alphabetically or numerically, and the Descending order will sort them in reverse alphabetical or numerical order.
- 7 Click the **Print Preview** button to show the Schedule Report prior to printing it.
- 8 Click **Print** when ready to print the report.
- 9 When finished, click **Close**.

The **Clear All** button returns all filters to their default settings.

Time Zone Report

- 1 In the Reports menu, click **Reports**. The Reports window appears.
- 2 In the list of reports, double-click **Time Zone**. The Time Zone window appears.
- 3 Click the **Filter** tab.
- 4 Select one of the following to define the Time Zone report to the degree necessary:
 - **All**: Reports every Time Zone.
 - **One**: Reports a designated, individual Time Zone, using the **From** field.
 - **Range**: Reports a designated range of Time Zones, using the **From** and **To** fields.
- 5 Click the **Sort** tab.
- 6 Select a category that determines how to sort the time zones (*Names* for example). Then, choose whether the category should appear in Ascending or Descending order. The Ascending order will sort them in order alphabetically or numerically, and the Descending order will sort them in reverse alphabetical or numerical order.
- 7 Click the **Advance Filter** tab.



- 8 Select one of the following to refine the report even further:

- **Used:** Reports time zones that are currently being used within the system.
 - **Unused:** Reports time zones that are not in use within the system.
 - **Both:** Report all time zones, regardless of use.
- 9 Click the **Print Preview** button to show the Time Zone Report prior to printing it.
 - 10 Click **Print** when ready to print the report.
 - 11 When finished, click **Close**.

The Clear All button returns all filters to their default settings.

Glossary

Symbols

12 Digit Cards: Cards that use a combination of a 9 digit card number with a 3 digit issue number. This term is also refers to applications that require a card number greater than 65,535. It is usually implemented for barcode and magnetic stripe applications. WIN-PAK supports up to 16 digits but these are still referred to as 12 digit applications.

485 ACK-NAK: A communications verification system of the 485 converter which double-checks that information packets have been sent and **received** from one device to another.

A

Access Control: Controlling access to a port of entry in a physical area or into a computer. See *Electronic Access Control*.

Access Level: A level of authorization defined by a reader (or readers) and the times those readers can be accessed.

Access Point: A physical point of entry or exit, such as a door or gate, which is controlled by the system.

ACK: Abbreviation for *Acknowledge*.

ACK-NAK: See 485 *ACK-NAK*.

Activate: Enable. Make functional. See *Energize*.

Activation State: Indicates the behavior of an activated output point.

Address: An identification number of a specific control panel.

Alarm: A signal that indicates a problem.

Alarm Input: A physical input terminal on a control panel. A point at which an input device is connected to a control panel.

Alarms View: A display window that shows alarm activation and allows an operator to respond to situations reported on the system.

Alarm Priority: Priority rankings of 1 to 99 are assigned to alarms. Priority 1 is the highest and 99 is the lowest.

Alarm State: On an input, refers to the state that is opposite of a normal state. Software can recognize an input when that input goes into alarm, unless some other condition (such as a shunt) applies.

Alarm Type: An alarm determined by its unique priority, global shunt status, forced note, auto clear and RTN separate alarm characteristics, and the message displayed when an alarm is reported.

Alphanumeric: A combination of numeric, alphabetical and, in some cases, symbols found on a keyboard or display.

Annunciation: A device that indicates a condition. This condition can be announced by a message on a computer monitor, a flashing sign, a bell, or similar device, and by a combination of these things.

Antipassback: An access control feature that reduces the likelihood that two or more people can use the same access credential to gain admission to a controlled area.

This is done by requiring that the credential be presented upon entrance to an area and again when leaving the area. If the same credential is used for two entrances without an exit in between, an alarm is triggered and access is denied.

Arm Points: Enable specific input points to report alarms when they occur.

Arm: To enable.

Audit: The act of checking something to make sure it is correct. *Example:* Checking wiring connections.

AUX Port Alarm: An alarm triggered when the panel senses a communication failure from the auxiliary port.

B

Badge: A card that provides information about the person who is using it; usually a photo ID.

Badging: The act of creating an ID card. Photo badging includes a picture on the card.

Bar Codes: A series of black lines of various thickness that represents a code which is read through an optical reader and is interpreted by a computer or EAC system.

Battery Backup: A battery that supplies power to a device when standard primary AC power has been abruptly cut off.

Battery Low Alarm: A soft alarm that announces that the battery on a control panel is low.

Biometrics: The ability to use a person's physical characteristics such as an eye, to uniquely identify a person.

Buffer: Store transactions in the panel's RAM memory. Once stored, the information can be retrieved at a later time (called *unbuffering the panel*).

Buffer All: The act of buffering all panels.

C

Capture: Acquire a graphic image by scanning or video.

Card: Any type of credential used to carry electronic information in an electronic access control system.

Card Event: A card read. WIN-PAK can be programmed to initiate a variety of actions in response to a card event, depending on the status of the card.

Card Holder: A person who has been enrolled into the access control system.

CCTV: Closed circuit television.

Central Station: A remotely located control and monitoring center that supplies a client with monitoring services.

Chain of Events: A process that starts at one device and triggers numerous other devices and/or actions before it is done.

Cold Restart: Restarting a panel after the power has been completely removed, then restored. This might happen after a storm knocks out power to the area. After a cold restart a panel's programming is missing and the panel needs to be initialized.

Communications Loop: See *Loop*.

Configuration: The way in which computers, software and related equipment are interconnected to operate as a system.

Contact: An electrical switch that can be open or closed state. That state may be electrically, magnetically or physically controlled.

Continuous Reads: A software setting that enables a panel to continuously monitor a card reader and/or keypad. If this is not enabled, all cards and keypunches are ignored until the panel completes the actions dictated by the previous card read or keypunch.

Control Panel: A specialized computer that manages

access for specific doors and related devices (e.g., N-1000).

CPU: *Central processing unit.* It is the main chip (microprocessor) in a computer and control panel.

D

Data: Information. At the lowest level, data is represented as an electrical signal and is interpreted as a code. At the highest level, data represents information that people can read and understand.

DC: Direct Current.

De-energize: To remove energy from an output point. On a system, the normal state of an output point is “de-energized.”

Default: A standard condition or setting. Default settings are those provided by software prior to customization by the user.

Default Time Zone: A standard time zone that is always in effect unless overridden by another process or feature.

Dial-Up: (Also dial-in, dial-out) A system of control panels connected to a communications line (loop or multi-drop) that is not directly connected to a computer. To communicate with the panels, the computer must use a modem at its end to connect with a modem on the communications line. The act of establishing a connection is called *dialing*, as in “dialing a telephone number.”

Disable: To render a function or feature unavailable.

Distributed Processing: The ability of control panels connected to a single communications loop or multi-drop line to function independently from one another, yet communicate to and receive information from a central computer.

Distributed System: A computer network wherein each device (a PC or control panel) can work independently of one another, yet at the same time, communicate with one another.

Documentation: Any written record of activities and

processes.

Door Contact: This is a position locator that senses when a door is fully closed or open.

Duplex Printing: Printing on two sides of a single material, such as two sides of an access card.

Duress Alarm: A special alarm from a keypad reader which indicates that the card holder is being forced to provide entry to a secured area.

Duress: An event in which a card holder is being forced to provide entry into a secured area by an unauthorized person or people. A keypad can be configured in a way to produce a duress alarm when the user types in the PIN number.

E

EAC: Electronic Access Control.

Egress Button: A button by a controlled door that, when pushed, sends a signal to the controller indicating that someone wants to leave the area. this device may also mechanically allow the door to unlock, overriding the control.

Egress: To exit. See also free egress.

Electronic Access Control: Controlling entry into a physical area by means of a controller and electronic components including locks, readers, sensors, buttons and more.

Enable: To make a feature or function on the system usable.

Enclosure: An electrical utility box. It can hold control panels, splices, power outlets, etc.

Energize: Activate. Often refers to the state of an output point. Output points are in a normal state when they are "de-energized." An energized state means that the output is active.

EPROM: Erasable Programmable Read-only Memory.

Exit Button or Switch: When pressed or tripped, this device allows a person to exit from a controlled area. See also free egress.

Exit Reader: A reader that controls egress from a controlled area; used in anti-passback applications.

F

Facility Codes: The first part of the ID number on some cards, providing a higher degree of security against a duplicate card number being used in a system.

Fail Safe Lock: A lock that is in the unlatched or unlocked state when the unit is not energized.

Fail Secure Lock: (Also known as *Non-Fail Safe*.) A lock that is in the latched or locked state when the unit is not energized.

Firmware: The computer chip (PROM or EPROM) that runs a control panel. Firmware chips are identified by a version number.

Floor Plan: A view made up of ADVs placed on a floor plan background, showing the layout of an access control system; used to monitor and control devices in the system.

Floor Plan Background: A floor plan, graph or other digital graphic saved as a Windows Metafile (.wmf) that can be used to create a floor plan view.

Follow: In an interlock, a second point (component B) takes on the same state as the triggering point (component A). See *Invert Follow*.

Forgiveness: This feature adjusts the use of anti-passback to accommodate people who did not properly exit the anti-passback area. When forgiveness is enabled, a person who did not use the proper exit reader will be allowed to use the enter reader the following day without an anti-passback violation occurring. *Example:* A card holder who enters a controlled area, but does not leave until the next day, would cause the system to go into alarm the next day because the card was not used to check-in before checking-out.

Format J: Enables the J card format on a panel. This accommodates the 35 bit card number where the first 20 bits are read as the card number and the balance as the site code.

Format L: Enables the L card format option on a panel. This allows the card number to be linked with the site code, creating a linked card number.

Free Egress: Allows exit without requiring the presentation of a credential. This is usually accomplished by using an egress button, motion sensor that trips a momentary shunt of the door alarm input, thus allowing exit without an alarm.

G

Global Shunt: A period of time when all the points assigned to an event type are shunted, regardless of time zones entered on individual points records.

Ground Connection: A point where a cable is bonded to the grounding system.

Ground Fault: A grounding problem that needs to be corrected for proper system operation.

Grounding System: A unified (bonded) system designed to drain excess electrical energy from a circuit in order to protect life and property, and reduce the potential of signal interference.

Group: A group of output points that are activated by an input point or reader. This usually refers to a configuration used to program elevator cab door access control.

H

Hardware: The physical equipment that makes up an access control system.

Hardware Components: The individual physical components in an access control system. These include the communications loop, panels, locks, readers, sensors, CCTV cameras and monitors, printers and workstations.

Hardwired: A system of control panels connected to a

communication line (loop or multi-drop) that is connected directly to a computer.

Holidays: Exceptions to the normal way of operating an EAC system. A holiday on a weekday, for example, can cause normally opened doors to remain locked.

Host Computer: The main computer in an EAC network that is directly connected to a controller or controller network. Holds EAC software and databases, and manages the system.

I

Icons: A picture or graphic that represents a concept.

Infrared Barcode Cards: A bar code card where the bar code information is opaque to visible light, but transparent to Infrared light. The bar-coded information on the card may be read by the reader, but not copied by a photocopy machine.

Input: A point which receives information. An input device, such as an egress button, sends information to a control panel. Software monitors the state of an input. When that input state changes, such as when a related input device sends information to the panel, software regards that input as being in a state of alarm.

Insertion Card or Token: A card or token that is inserted into a reader, rather than swiped through or passed near a reader.

Integration: The art of controlling electronic devices through activities known as “chains of events.” Especially, in EAC, controlling CCTV and other systems in a unified way.

Interlock: Refers to creating a chain-of-events between input and output points.

Invert Follow: In an interlock, a second point (component B) takes on the opposite state as the triggering point (component A). See *Follow*.

J

Job Specifications: All the written documentation that must be followed in order for a job to be correctly completed.

K

Key Control: In an EAC system, key assignment and control is managed by the controller.

Keypads: A keyboard device, often, but not always, limited to numbered keys between 0 to 9.

L

Latching: The manual use of electronic access control credential in which one credential read causes a lock to unlock and a second read locks the lock. The lock changes state only after a credential is read.

LED: Light Emitting Diode (a small lamp).

Linear Power Supply: A power supply using a series regulator to control voltage by dissipating excess voltage as heat. Provides a very high quality output at the expense of power efficiency.

Local Relay: The communication occurring between an input device and an output on a control panel.

Log On: Signing on to the system. When system operators change shift, the new operator logs in.

Loop: A communications network wherein the communications cable begins and ends at the same point, with control panels linked at increments along the *loop*.

Low Voltage: When a battery is too low the N-1000-III and IV panels can be configured to report a low voltage alarm. This has a default priority of 1 (very high).

M

Memory: In a control panel, this refers to the amount of information that can be handled or stored provided by RAM (Random Access Memory) chips.

Message: Information displayed on the Alarm Detail screen in response to the activity (state changes) of an input.

MIP: See *Multiple Interlock Protection*.

Modem: A device that translates digital signals to analog signals and the reverse, allowing a computer to send information over a standard phone line.

Multi-drop Line: A cabling configuration used for 485 communication networks wherein control panels are connected to a length of cable by t-taps.

Multiple Interlock Protection (MIP): An option requiring that all input points tied to a single output be returned to a normal state to de-energize the point. Without this option, only one input needs to return to the normal state to de-energize the output.

Multi-technology Cards: A single card that uses several information technologies, such as magnetic stripe and bar codes.

Muster Area: A designated area where people go to be acknowledged as being safe during an emergency.

N

NEC: The National Electrical Code.

No Action: In an interlock, a second point (component B) does nothing in response to the state change of the triggering point (component A).

Node: A connection point on network cable. It indicates that a computer is linked to the network.

Non-Distributed System: A computer or EAC network that requires a single “host computer” that supplies the programming and decision making resources to other computers and EAC controllers in the system.

Normally Closed (NC): Refers to contact points that always touch when a device is in its normal position.

Normally Open (NO): Refers to contact points that do

not touch when a device is in its normal position.

Numb Mode: Disables readers for a set period of time following a card read.

O

Off Line: Disconnecting one computer device from another that stops the flow of information between them.

On Line: Connecting one computerized device with another in a way that can send information between them.

Operating Humidity: The relative humidity range in which a device can operate.

Operating Temperature: The temperature range in which a device can operate.

Operator: A person who operates the system directly through the software; a user. Operator privileges are determined by operator level or individually.

Operator Level: The granting or denying of a privilege to control, view, or edit an aspect of the access system to a system user or operator.

Output Control Group: A configuration of output points that are grouped in such a way that all can be activated when the status of a single input point changes. This is commonly used in elevator applications.

Output: This can refer to a location on a controller at which an output device (such as a lock) is connected, or a point on the controller which software controls to produce a transaction.

Override: Reverses a condition. When a locked door is overridden, it is unlocked and the reader shows a valid access.

P

Panel: An access control panel. Typically an N-1000-II or N-1000-III/IV.

Panel Primary Power Alarm: An alarm reported when a control panel loses primary power.

Panel Reset Alarm: An alarm triggered when a control panel is reset.

Parallel Port: A plug on a computer that is normally hooked up to a printer.

Parameter: Specific information (often a number) that controls the behavior of the system.

Passive Infrared Sensor (PIR): A small motion sensor commonly used above doors in an EAC installation. A dual technology PIR combines passive infrared and microwave or passive infrared and ultrasound.

PC: *personal computer.*

Piggybacking: *See Tailgating.*

PIR: A passive infrared sensor, which is usually installed above a door and senses motion in an EAC installation. A dual technology PIR combines passive infrared and microwave or passive infrared and ultrasound.

Poll Response Alarm: Refers to an alarm that occurs when panels do not respond when polled by the software. Three polling attempts are made. If there is no panel response during these attempts, the alarm is reported. This has a default priority of 1 (very high).

Poll: Asking for information. In a computerized system, one computer asks another for information.

Port Expander: A special device that allows you to have more than two serial ports on a personal computer.

Port: A place where you can connect a communications cable or device into a computer.

Power Drop: The change in the available electrical voltage or current supplied to a device. This is a function of the size and length of the supply wires.

Power Fail Reroute: An option that reroutes the Power Fail alarm from Input 8 to Input 19 on N-1000-II panels only.

Power Supply: The source of power that changes AC to

filtered DC.

Priority: See *Alarm Priority*.

PROM: Programmable Read-only Memory.

Pulse: A command to energize an output point or shunt an input point for a specific amount of time.

Push Bar: A door-unlatching device. When pushed, it releases a lock. If the push bar is connected electronically to the controller, it signals the controller that an egress event has taken place.

R

RAM: Refers to random access memory used in a computer or control panel.

Reader: Any device that reads encoded information from a card or token and transmits the information to a control panel.

Real Time: Processing events as they happen.

Redundant: Having two or more ways of doing things. Redundant hardware indicates that two or more items exist for every single function. The duplicate hardware can replace failing hardware at a moment's notice.

Re-enable: Return the system to normal operation.

Relay: An electronically operated switch that, when activated by a change in conditions on an electronic circuit, activates other devices on the same or another electronic circuit.

REX: Request-to-exit device. Refers to a button, pushbar or similar device that allows free egress without setting off an alarm.

RFI: Radio frequency interference.

S

Secure: To arm or enable.

Serial Port: A plug on a computer that is normally used for communications functions. These functions include

attaching a computer to a modem, or a computer to communications loops that are connected to control panels.

Server: The host computer. This is the computer which maintains the system or system functions.

Shunt: The automated or manual means through software, to ignore an input or an input alarm.

Shunt Points: The act of suppressing the ability of input points from reporting an alarm. Input points can be shunted individually or by group.

Shunt Time: The length of time a door open alarm is suppressed (shunted) after a valid card access or free exit request. This time should be just enough to allow a card user to open a door or gate, pass through and then close it.

Signal Strength: Indicates the size or quality of an electrical signal. The signal strength decreases as the length of its path in the medium increases. The media type (generally cable) and length are selected so that a signal can travel from the transmitter to the receiver and still be interpreted. If the signal is transmitted via a radio signal the choice of antenna type and location will affect the signal strength.

Specifications: Rules and measures governing what a device does and how it can be used.

Split Time Zones: An option that allows you to apply different time zones to readers on a single panel.

Stand-alone System: A single, independently working computer or EAC controller that is not networked with other computers.

State: A device's current mode. A change of state means that the mode of a device has changed.

Status: The current state or condition of a system parameter, such as the state of an alarm point.

Supervision: Special electronic protection of a communi-

cations line that is accomplished by sending a continuous or coded signal through the circuit. When this feature is enabled, any change of the circuit will be detected and a tamper alarm will result.

Surge Protection: A device that prevents power surges in system or power wiring from affecting or damaging the EAC system or its components.

Switching Power Supply: A power supply system that uses high frequency switching to regulate voltage and current. This type of regulation is more efficient, but may allow some high frequency noise to be present in the power supply output.

System Administrator: A system operator who maintains full privileges to all applications that are part of the access control system. This person is familiar with hardware components and the software that controls them. He or she is also responsible for assigning passwords and privileges to other system operators.

System Operators (Users): The people who operate the system directly through WIN-PAK 2.0. Operator privilege is determined by Operator Level.

System Thresholds: The maximum number of components the system is designed to handle.

T

Tailgating: In access control, this is the act of two or more people entering a controlled area by using a single card. (Also known as *piggybacking*.)

Tamper Alarm: An alarm related to the tampering of the systems, such as opening the N-1000 control panels cabinet or removing a reader from a wall, etc.

Tamper Switch: A special switch or contact sensor used to create an alarm when an enclosure or device is opened in an unauthorized manner.

Tampering: The unauthorized act of destroying, modifying, or removing a device.

Terminals: Points on a circuit board where cables from

various devices are attached.

Throughput Rate: This can be the rate at which people or vehicles pass through a controlled area, or the rate that information (data) moves through the computer and controller network.

Time and Attendance: The means of recording employee time and attendance through a computer-controlled reader.

Time Zone: A range of times and days of the week that are assigned to clearance codes (access levels). These allow usage of the system within their specifications.

Timing: A procedure that times events so the controller can determine whether the event is normal and within limits or not.

Tracking Areas: An area defined by readers. When a person is inside the tracking area, the computer reports that that person is being tracked until such time as that person uses a muster reader or a different tracking-area reader. This feature does not require anti-passback.

Transaction: An event that occurs as a result of a card read, alarm, or other physical or software action or circumstances occurring at a panel or workstation in the system. All transactions are recorded in the real-time Transaction History log.

Transmit when Buffer Full: Enables a panel to transmit all activity reports when the buffer nears capacity.

Trigger: An input or condition that initiates a set response to an output or action.

Trouble State: A condition when an alarm circuit is out of specified tolerance, which may indicate tampering or other troubles with the alarm point.

Troubleshooting: The act of figuring out a problem through deductive reasoning.

TTL: Abbreviation for *Transistor-Transistor Logic*.

Turnstile: A type of rotating gate.

U

Unbuffer: A panel mode in which transactions are not stored in the panel's RAM memory. When a panel is unbuffered, it either transmits stored information to a computer, then continues to transmit ongoing access transactions to that computer, or it ignores access transactions. *See Buffer.*

Uninterruptable Power Supply (UPS): A device that continues to provide power even after the main power has been accidentally shut down. It also protects equipment against voltage spikes that can cause damage.

Unshunt: *See Shunt.*

UPS: *See Uninterruptable Power Supply.*

Users: The people who operate the system directly through the software; operators.

User Defined Fields: User-customizable fields for the Card Holder Database.

W

Wiegand Card: A card that has specially treated wires embedded in it that, when it passes through a Wiegand reader, emit a discrete electrical signal.

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