SmartLock® Surf

OPERATOR GUIDE

October 2009

Cansec Systems Ltd.

Cutting edge simplicity

Table of Contents

Introduction

Connect to your access control system from anywhere in the world with Cansec's browser-based SmartLock Surf software. Whether you are working from home, on the road, or just out of the office, SmartLock Surf keeps you connected - all you need is internet access!

SmartLock Surf supports 4,800 users and up to 30 doors. Surf also supports 10 concurrent client connections, so up to 10 users can connect and manage the access control system at the same time.

Using Internet Explorer, users can connect to a server computer running SmartLock Surf from virtually anywhere.

Key Features

- Browser-based
- Supports 10 simultaneous client connections
- Connect to your system over the internet
- 4,800 cardholder/user capacity
- 30 door capacity
- Real-time communications
- Programmable access profiles
- Programmable holidays
- Automatic door unlock schedules
- Extremely easy to learn and use

Server PC Requirements

- Pentium 4, 1.2 GHz processor
- Windows® 2000, Windows® XP or Windows® Vista (32-bit)
- 256 MB of memory, 20 GB hard disk space
- Network adapter (if using Canlan network communications device)
- USB port (if using CLAUSB serial communications device)
- Static IP address
- Firewall open to port 80 and 5800 to incoming traffic from specified local and remote access

Client PC Requirements

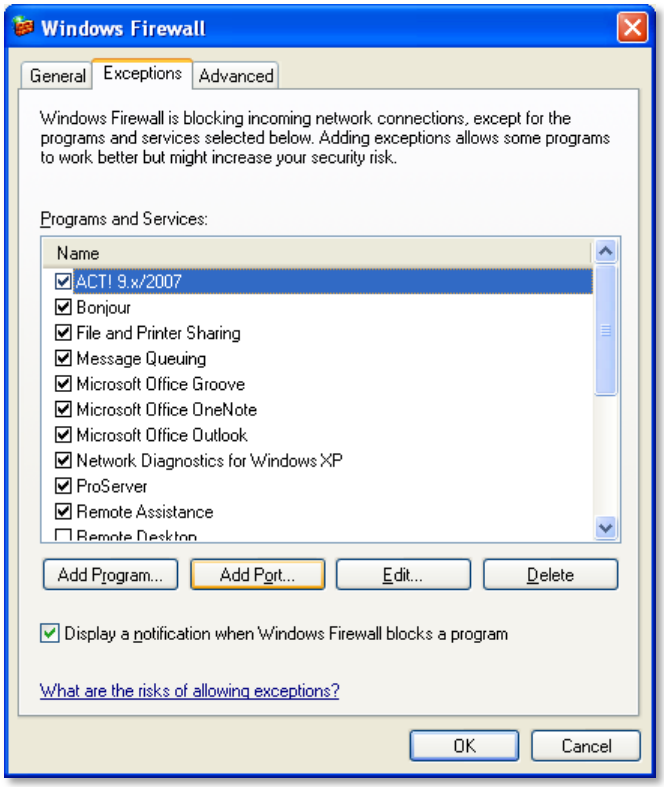
- Internet Explorer 7.0 or higher
- Internet connection

Step 1. Software Installation

1. Insert the SmartLock Surf software CD into the server PC's CD drive.
2. At the welcome screen, click **Next**.
3. Enter the software key that came with your CD.
4. Enter your company information.
5. Choose **Complete Install**.
6. Click **Install** to begin the installation.
7. Click **Finish** to complete the installation.

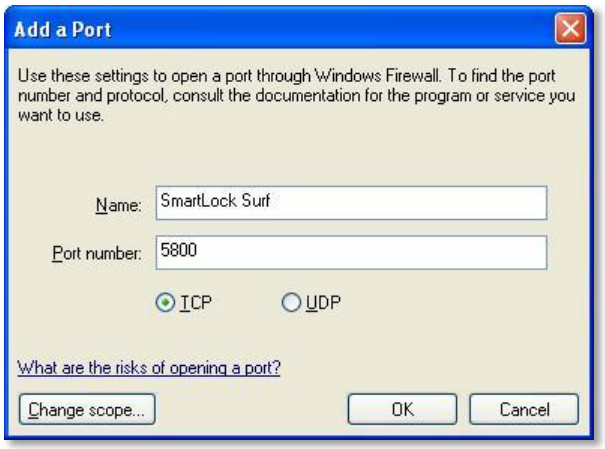
Step 2. Firewall

1. Go to **Start > Control Panel > Windows Firewall**.
2. Click the *Exceptions* tab.



3. Click **Add Port**...

4. In the **Name** field, enter a descriptive name for the port.



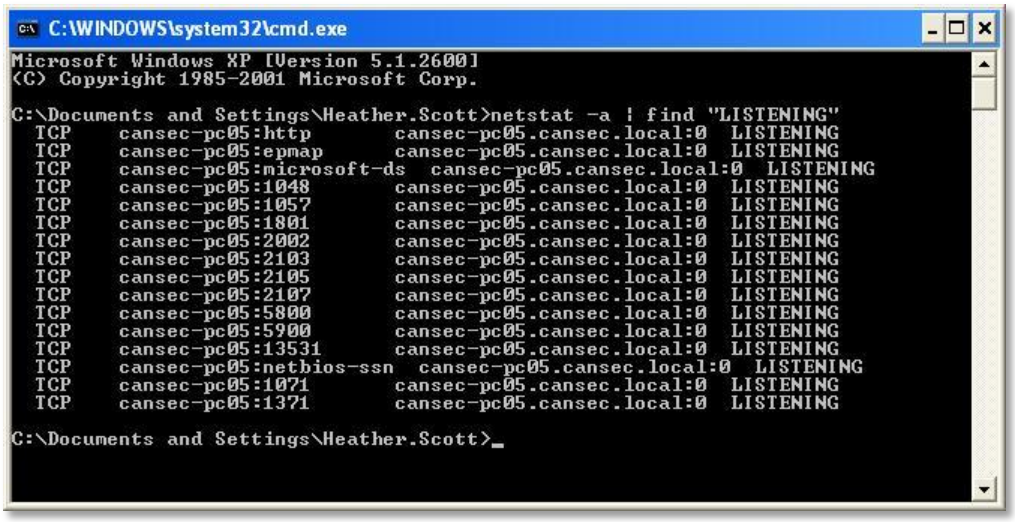
5. In the **Port Number** field, enter **5800**.
6. Click **OK** to save the port changes.
7. Repeat the above steps for **port 80**.
8. Click **OK** to close the *Windows Firewall* window.

Step 3. Port Listening

Port 5800 is used by SmartLock Surf. If other applications are listening on, or connected to port 5800, they must be closed. SmartLock Surf will not function if port 5800 is not free.

1. Close *Pro Server* and *Surf Server* if running.
2. Go to **Start > Run**.
3. Type **cmd** and press **OK**.

4. At the command prompt, type: **netstat -a | find "LISTENING"**.
5. Press **Enter**.
6. A list of port numbers will be shown. If port 5800 appears on the list, an application is listening on port 5800. SmartLock Surf will not function until this application is closed.



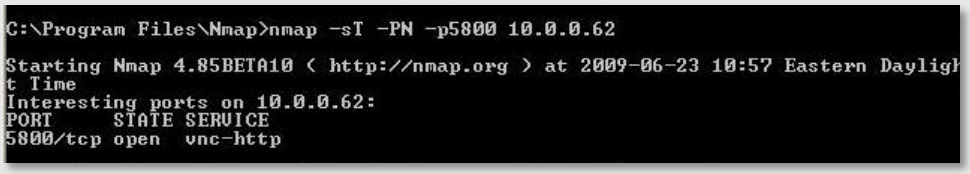
NOTE: If you know which application is listening on port 5800, you can close it using Windows® Task Manager:

1. Press **CTRL+ALT+DEL**.
2. Click on the *Processes* tab.
3. Select the appropriate process and click **End Process**.

7. If you do not know which application is listening on port 5800, download a free port scanner application such as Nmap.

EXAMPLE: Using Nmap

1. Download and install Nmap.
2. Go to **Start > Run**.
3. Type **cmd** and press **OK**.
4. At the command prompt, type: **cd "C:\Program Files\Nmap"**
5. Press **Enter**.
6. Type **nmap.exe** and press **Enter**.
7. Type **nmap -sT -PN -p5800 [Server PC IP Address]**
8. Press **Enter**.
9. Nmap will list any applications (services) listening on port 5800 as shown below.



10. Use task manager to end the application or adjust the application's connection settings to prevent it from using port 5800.

Step 4. Network Setup

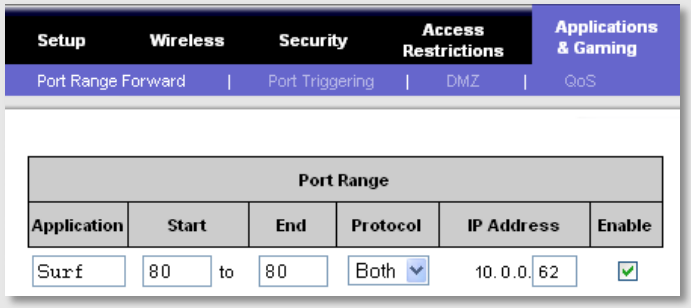
WIDE AREA NETWORK (WAN)

To allow remote computers on a WAN to connect to the Server PC running SmartLock Surf, you must configure the router to reroute any incoming traffic on port 80 to the Server PC.

1. Start your router's configuration software. For many routers, type the router's IP address into the address bar on your internet browser.
2. Choose port 80 as the forwarded port.
3. Enter the IP address of the Server PC running SmartLock Surf as the destination IP address.
4. Save the changes.

EXAMPLE: Using Linksys WRT54G Router

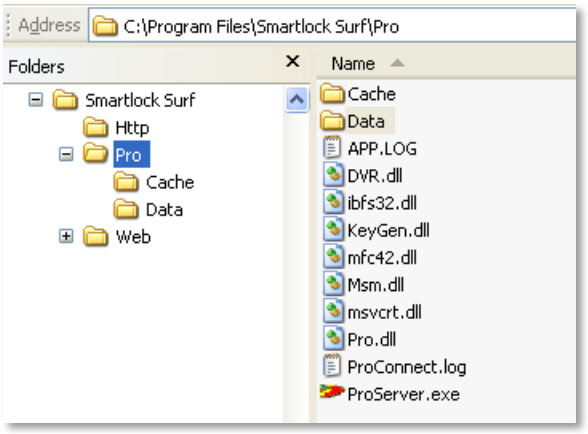
1. In your browser's address bar, enter the router's IP address.
2. Enter the username and password and press **OK**.
3. Click the **Applications and Gaming** tab.
4. In the **Port Range Forward** section, enter the following information:
   - Application Name = **Surf**
   - Start = **80**
   - End = **80**
   - IP Address = **[IP Address of the Server PC]**
5. Check the **Enable** box and click **Save Settings**.



Step 5. Server Setup

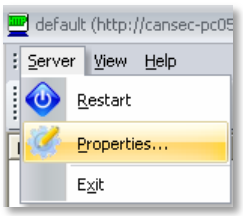
This section describes the initial steps to configure the SmartLock Surf system. These steps are typically done by the installation company or system administrator.

Software settings are saved to the default location C:\Program Files\Smartlock Surf\Pro\Data. *It is good practice to backup this data folder on a regular basis and when any significant changes have been made.*

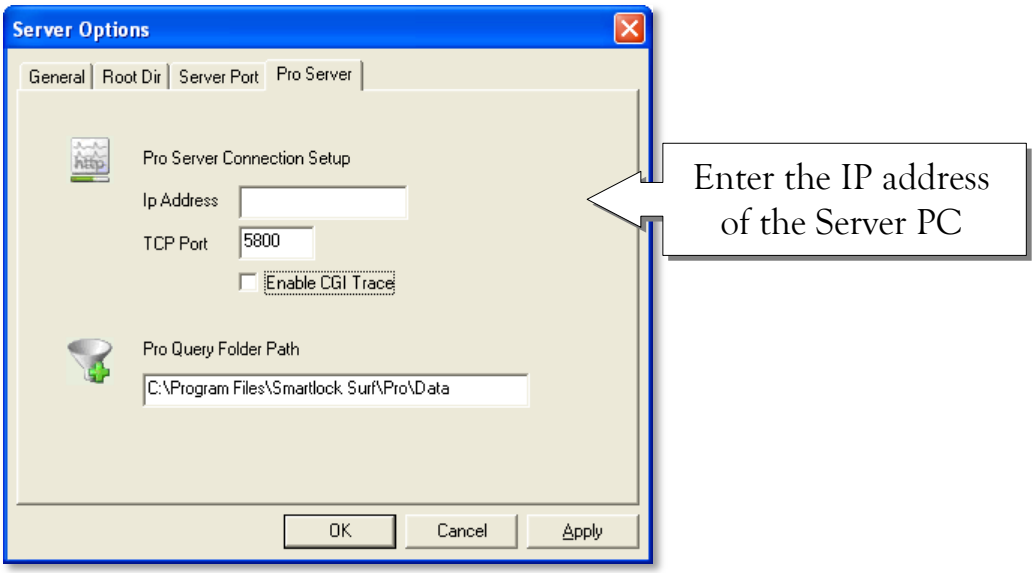


SURF SERVER

1. Go to **Start > All Programs > SmartLock Surf > Launch Surf Server**.
2. From the main menu, go to **Server > Properties**.



3. On the *Pro Server* tab, enter the **IP address** of the Server PC.



NOTE: if you do not know the IP Address of the Server PC:

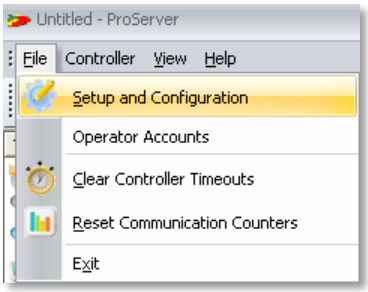
1. Go to **Start > Run**.
2. Type **cmd** and press **OK**.
3. At the command prompt, type **ipconfig** and press enter.
4. The IP Address will be displayed as shown.

```
C:\Documents and Settings\Heather.Scott>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

        Connection-specific DNS Suffix  . : cansec.local
        IP Address. . . . . . . . . . . . : 10.0.0.62
        Subnet Mask . . . . . . . . . . . : 255.255.255.0
        Default Gateway . . . . . . . . . : 10.0.0.1
```

4. Enter **5800** in the **TCP Port** field.
5. Enter the path to the SmartLock Pro Server data folder.
   Example: **C:\Program Files\Smartlock Pro Server\Data**.
6. Click **OK**.

7. Go to **Start > All Programs > SmartLock Surf > Pro Server**.
8. If you get an error message, port 5800 is not free. Repeat the instructions in *Step 3. Port Listening*.

9. From the main menu, go to **File > Setup and Configuration**.



10. If you are using a CLAUSB communications device, choose a communications port from the drop-down menu.

NOTE: If you do not know the port number:

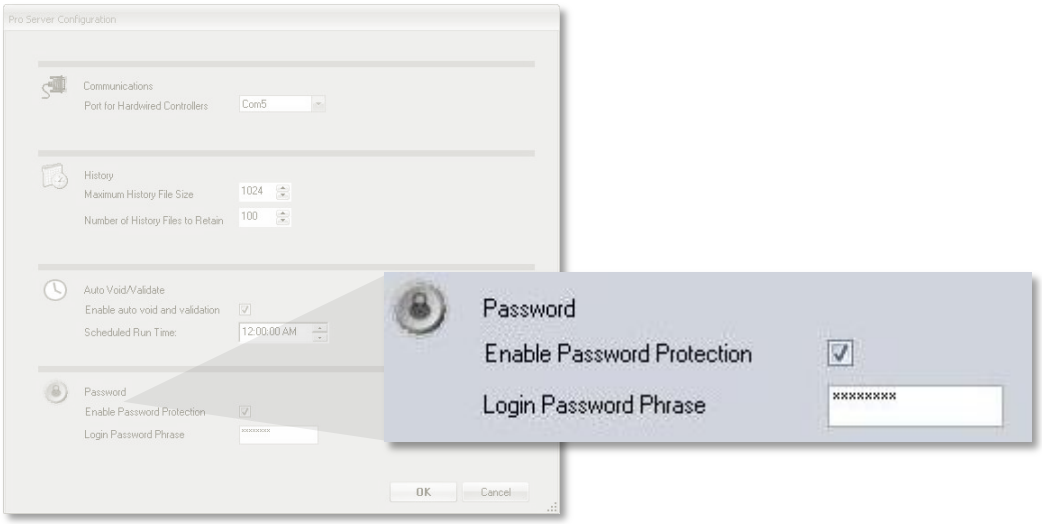
1. Go to **Start > Control Panel > System**.
2. Click on the **Hardware** tab and choose **Device Manager**.
3. Expand the **Ports** section to display the port number (shown in brackets). *Refer to the CLAUSB configuration guide for jumper settings.*

11. If you are finished configuring the system properties, click **OK**.

PASSWORD SETUP

To restrict access to the Pro Server software, follow the instructions below to require a system password when the software is run. *This section is optional.*

12. In the *Password* section on the *Pro Server Configuration* window, check **Enable Password Protection**.



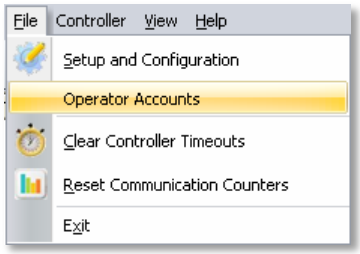
13. Enter a password in the **Login Password Phrase** field.
14. If you are finished configuring the system properties, click **OK**.

NOTE: for more information about configuring the History and Auto Void/Validate options, see *Step 8. History and Audit* and *Step 7. Cardholders*.

USER ACCOUNTS

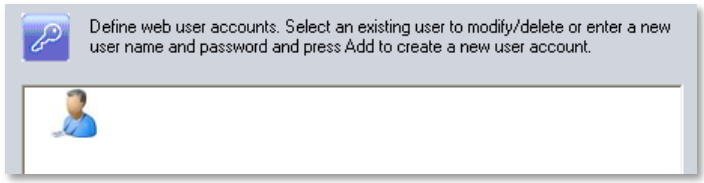
Specify operator user names and passwords for people who will be managing the SmartLock Surf access control system. An operator must enter his or her user name and password before logging on to the SmartLock Surf software. *There is no default account, so you must set up at least one operator account.*

1. Go to **File > Operator Accounts**.

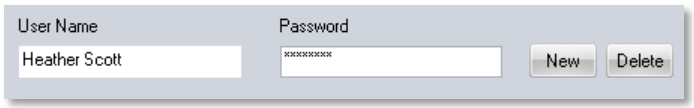


2. Click **New**.

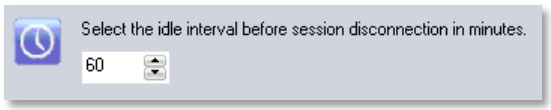
3. A new operator account icon will appear in the *User Accounts* window.



4. Enter a user name and password for the operator account.

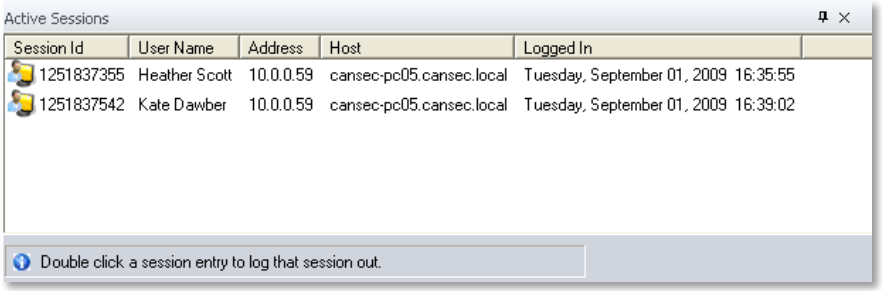


5. Create additional operator accounts if necessary. *There is no limit to the number of operator accounts.*
6. Operators will be automatically logged out of the SmartLock Surf browser after a specified period of inactivity (max. 60 minutes).
7. Enter a new interval if desired.



8. Click **OK**.

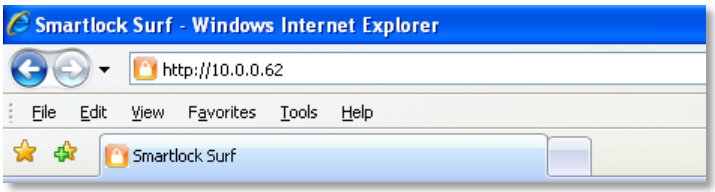
9. Online users will appear in the *Active Sessions* section of the *Pro Server*.



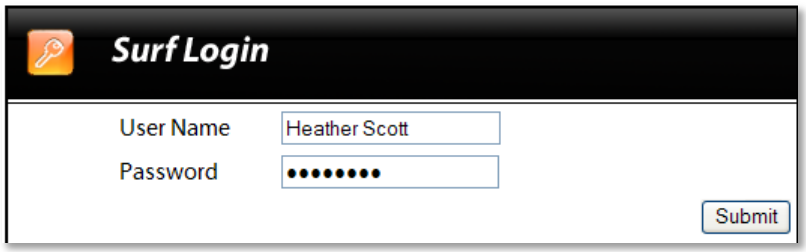
Step 6. Readers

STARTING THE BROWSER

1. Start *Pro Server* and *Surf Server* if not already running.
2. Launch **Internet Explorer 7.0**.
3. In the address bar, type the IP address of the Server PC.
4. Press **Enter**.



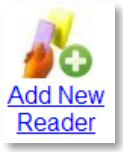
5. Enter the user name and password of your operator account.



6. To log off, click the **Log Off** button.

ADD READERS

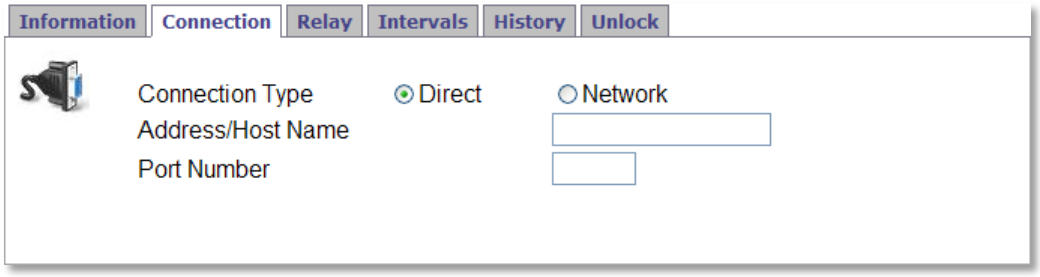
1. In the *Readers* section, click **Add New Reader**.



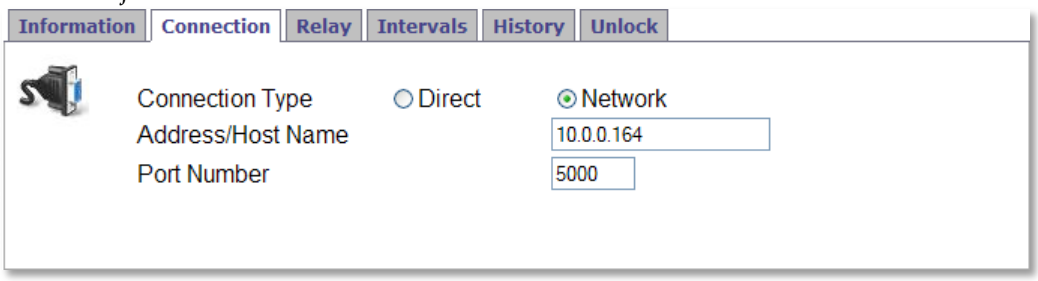
2. On the *Information* tab, enter the panel's unique address (1 to 30).

> **NOTE**: the address of the panel is set using DIP switches 1 thru 6. Refer to the *SmartLock Installation Manual* for more details.

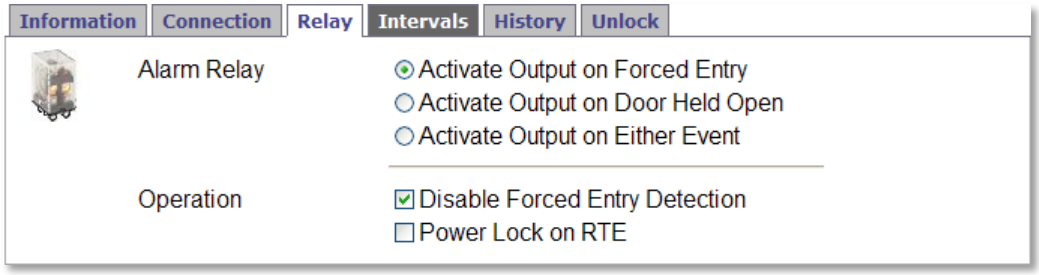
3. Enter a descriptive name for the reader and exit reader (if applicable).
4. Click on the *Connection* tab.
5. If you are using a CLAUSB, select **Direct**.



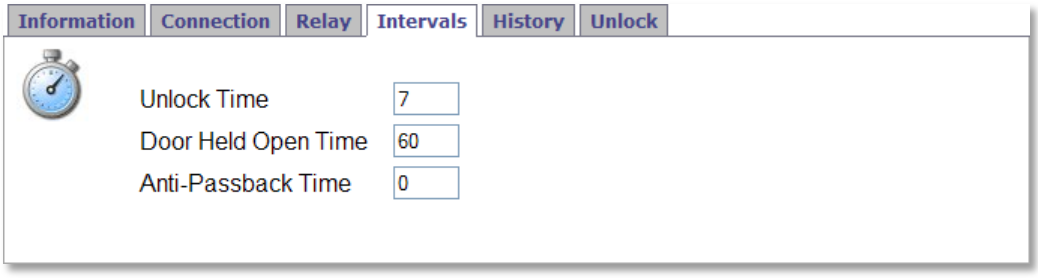
6. If you are using a Canlan, select **Network** and enter the IP address (or host name) and port number of the Canlan. *See the Canlan Installation Manual for more details.*



7. Click on the *Relay* tab.
8. The SmartLock control panel's built-in OP2 relay can be used to trigger a siren, strobe light, or other device when forced-entry or door-held-open events occur.
9. Select which event(s) will trigger the relay.
10. If door contacts are installed, but there is no request-to-exit button or pushbar at the door, a forced-entry event will occur whenever someone exits the door. To disable forced entry detection in this case, check the **Disable Forced Entry Detection**.



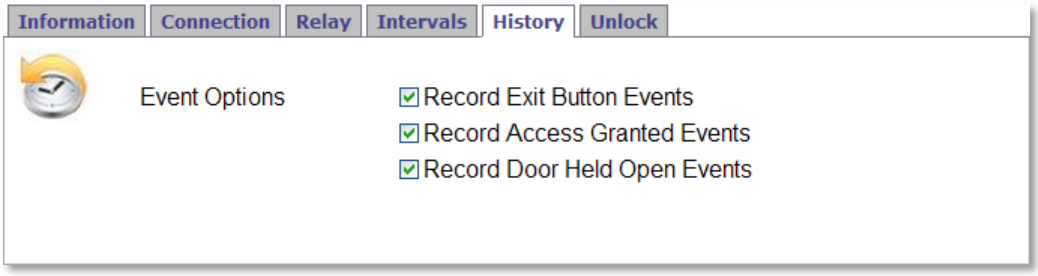
11. If a request-to-exit button, pushbar, or similar device is installed at the door, check **Power Lock on RTE** to activate the lock when a request-to-exit event occurs.
12. Click the *Intervals* tab.



13. If desired, adjust the intervals.

Unlock Time	This is the number of seconds the door will remain unlocked after an access granted event.
Door Held Open Time	This is the number of seconds the door can be propped open before a door-held-open alarm event is generated at the PC. (Door contact required.)
Anti-Passback Time	This is the number of minutes before a cardholder can reuse his credential at a reader. Default time is 0 minutes (disabled).

14. Click on the *History* tab.



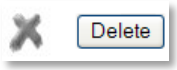
15. Select the events that will appear in the browser's *History* window and stored in the audit file. If the control panel is not online with the PC, the events will be stored in the audit buffer.
16. Click **Save** to save the reader settings.
17. Repeat for all readers.
18. Refresh your browser to view the changes.

NOTE: for more information about configuring the *Unlock* settings, see the *Door Unlock Schedules* section on page 26.

EDIT AND DELETE READERS

To edit a reader's settings, click the reader you wish to edit and click the **Edit** icon on the sidebar.

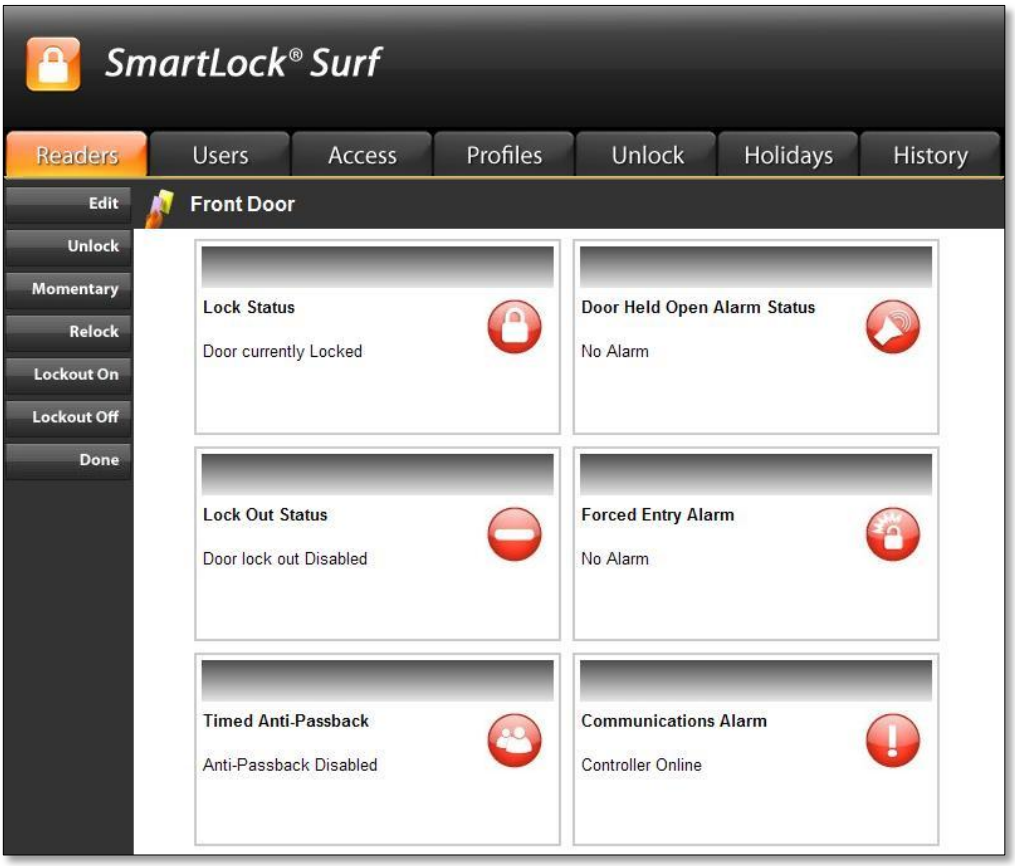
To delete a reader, click the reader you wish to delete, click the **Edit** icon on the sidebar and then click **Delete**.



Refresh your browser to view the changes.

READER STATUS

Click on a reader to view its status. Status notifications will be indicated in the appropriate box.



READER COMMANDS

Reader commands are available from the sidebar.

COMMAND	DESCRIPTION
Unlock	Unlocks a door in a maintained state. Door must be relocked by a command or by schedule.
Momentary	Unlocks a door momentarily for the time specified in the reader configuration.
Relock	Relocks an unlocked door.
Lockout On	Disables a reader so that no cardholders can unlock the door. Useful to prevent access to a hazardous area.
Lockout Off	Remove the Lockout condition from a "locked out" reader.
Done	Return to the main menu.

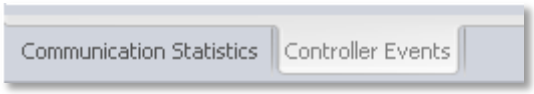
READER COMMUNICATIONS

To test communications between the control panel and the communications device (CLAUSB or Canlan) initiate a momentary unlock command from the Server PC:

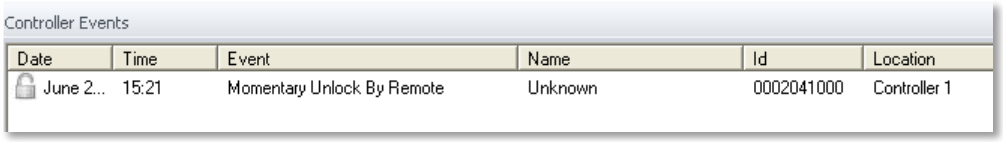
1. Click on the desired reader.
2. Click **Momentary** from the sidebar.

3. Bring up the *Pro Server* window.

4. Click on the *Controller Events* tab.



5. The unlock event will be shown.

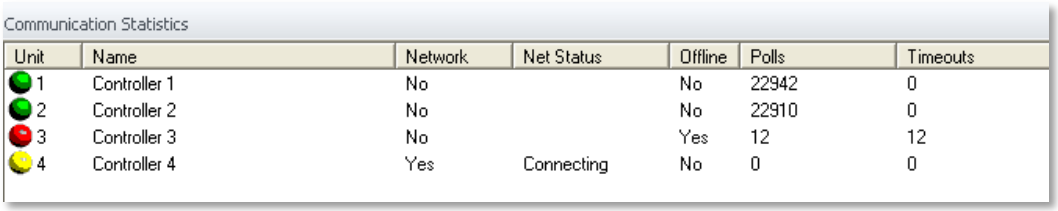


COMMUNICATION STATISTICS

You can also test the communications between the control pannel and the communications device by checking the communication statistics from the Server PC:

1. Bring up the *Pro Server* window.
2. Click on the *Communication Statistics* tab.

3. Online controllers are indicated by a **Green** icon and offline controllers by a **Red** icon.



DOWNLOAD CONTROLLERS

If communications is lost with the controllers, you can download user data and reader configuration settings to the controllers manually once communications are restored.

1. Bring up the *Pro Server* window.
2. Click the **Download** icon from the toolbar. 
3. Select which panels will be updated and click **OK**.

UPDATE DATE AND TIME

The SmartLock Surf software synchronizes the date and time of all readers with the date and time of the Server PC. The date and time of all readers is automatically updated once a day if the following conditions are met:

- The readers are online
- The software is running
- A date and time command has not *already* been initiated on that day

To manually update the date and time of all your system's panels:

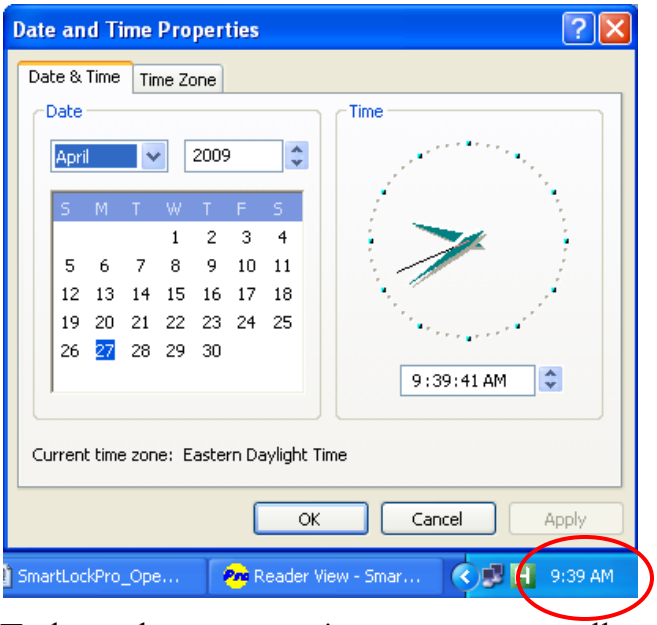
1. Bring up the *Pro Server* window.
2. Click the **Date and Time** icon from the toolbar. 
3. The date and time for all of the panels will be updated with the Server PC's date and time.

DAYLIGHT SAVINGS TIME

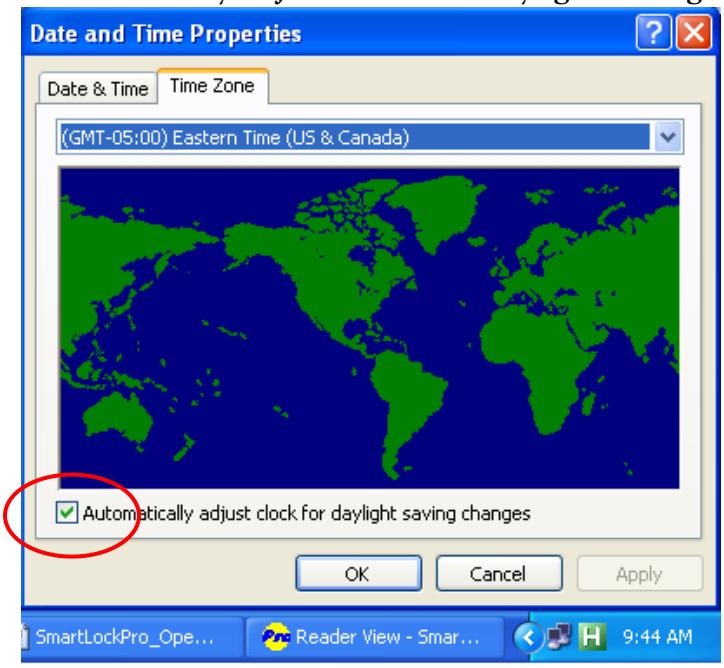
To manually adjust the date and time for daylight savings changes:

1. Make sure the date and time is correct on the Server PC.

2. To adjust the computer's date and time, double-click the time display on the taskbar.



3. To have the computer's time automatically updated when daylight savings changes occur, click the *Time Zone* tab and check **Automatically adjust clock for daylight savings changes**.



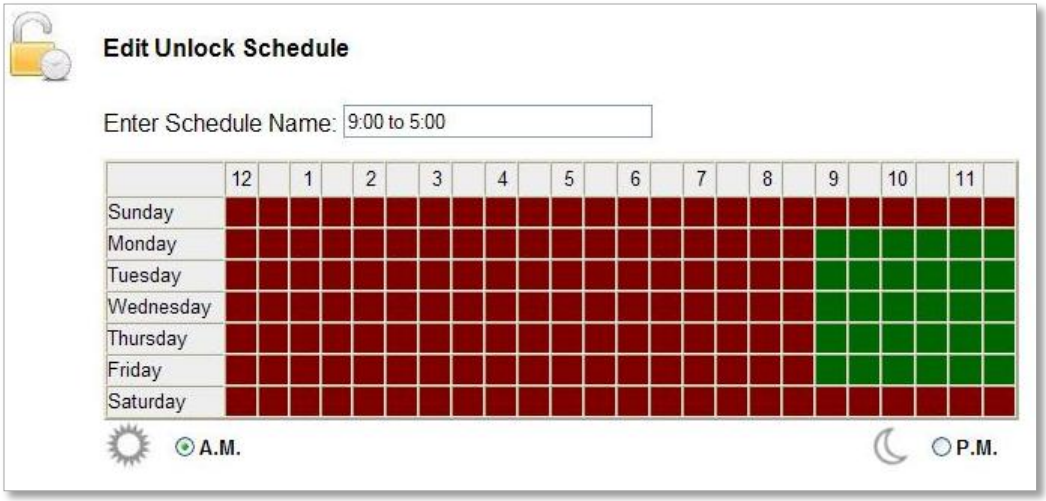
4. When the computer's date and time is correct, update the panels' date and time by clicking the **Date and Time** icon in the *Pro Server* window.

DOOR UNLOCK SCHEDULES

Unlock schedules automatically lock and unlock doors at specific times and days. To create a new unlock schedule:

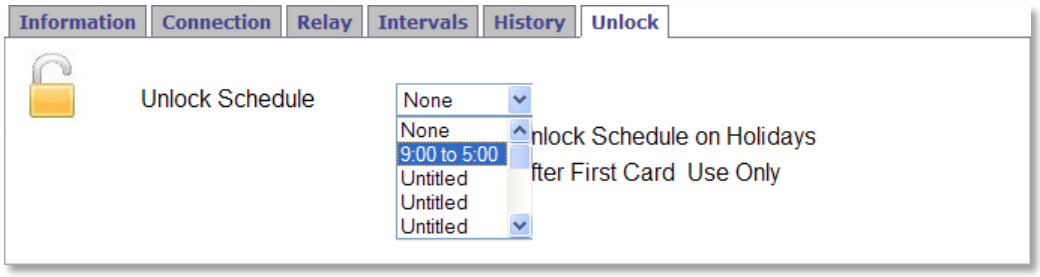
1. Click the **Unlock** tab from the SmartLock Surf browser interface.
2. Click one of the 60 available unlock schedules.

3. Enter a name for the unlock schedule.
4. Click-and-drag to select the times and days when the door will be automatically unlocked. Selected times will turn green.



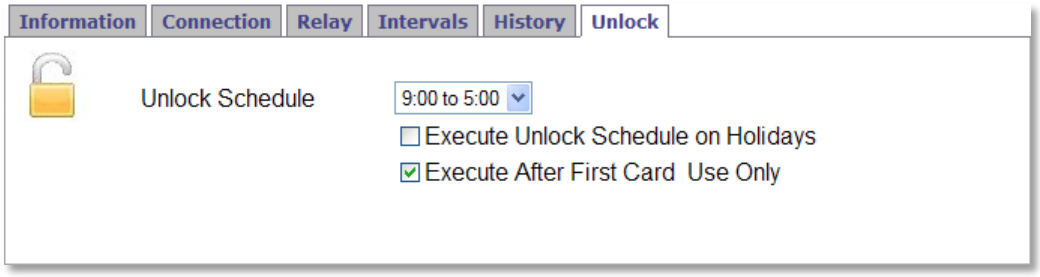
5. Click **Save**.
6. Now associate the unlock schedule with a reader.
7. Click the **Readers** tab from the SmartLock Surf browser interface.
8. Click the desired reader and click **Edit** from the sidebar.
9. Click the *Unlock* tab.

10. Select the unlock schedule from the drop-down list.



11. Check **Execute Unlock Schedule on Holidays** if you would like the door to automatically unlock *even* on holidays (see next section for programming holidays).

12. Check **Execute After First Card Use Only** if you would like the unlock schedule to take effect *only* after a valid access granted event.



13. Click **Save**.

Step 7. Cardholders

ACCESS SCHEDULES

Access schedules specify when cardholders can use their credentials to access a door. To create a new access schedule:

1. Click the **Access** tab from the SmartLock Surf browser interface.
2. Click one of the six available access schedules.

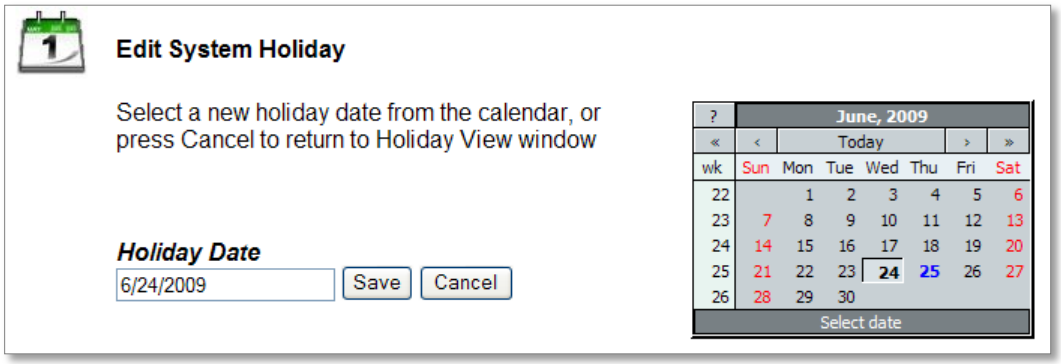
3. Enter a name for the access schedule.
4. Select the days and times when cardholders can use their credentials to unlock a door.
5. Click **Save**.

HOLIDAY SCHEDULES

Holidays can be defined so that automatic door unlock schedules and access schedules do not take effect on the day specified. To create a new holiday:

1. Click the **Holidays** tab.
2. Double-click one of the 60 available holiday schedules.

3. Use the arrows to select the month, and then click on the desired day.



4. Click **Save**.

> **NOTE**: Holidays do not repeat and should be updated on a yearly basis.

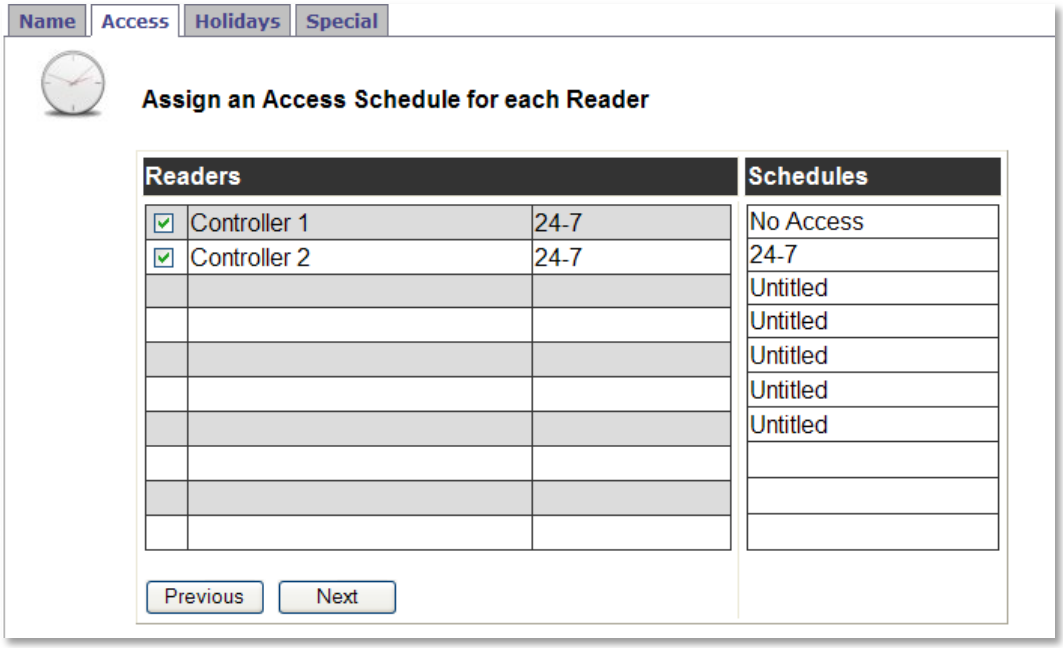
USER PROFILES

User profiles specify which doors a group of cardholders can access, and link those doors with access schedule that define when those cardholders can access them. To create a new user profile:

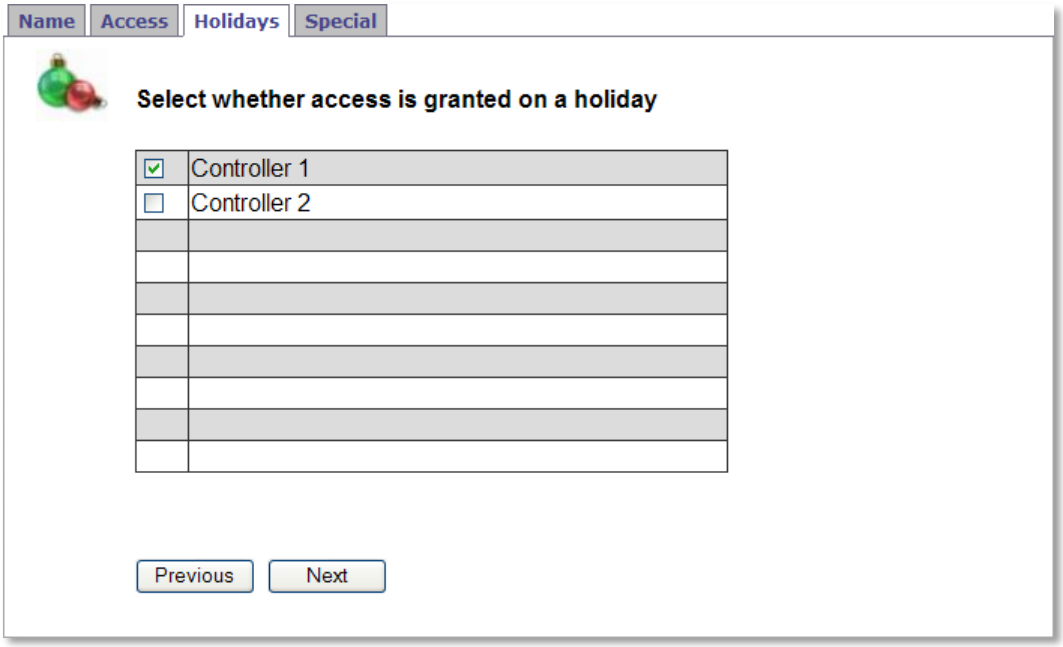
1. Click the **Profiles** tab.
2. Click **Add New Profile**.

3. On the *Name* tab, enter a name for the user profile.
4. On the *Access* tab, select a reader (or readers).

5. Click an access schedule to apply it to the reader.



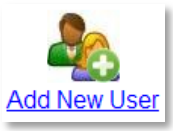
6. Cardholders who belong to this profile will only be able to access the reader during the times specified in the access profile.
7. Repeat for all readers.
8. On the *Holidays* tab, select which readers cardholders belonging to this profile can access during a holiday.



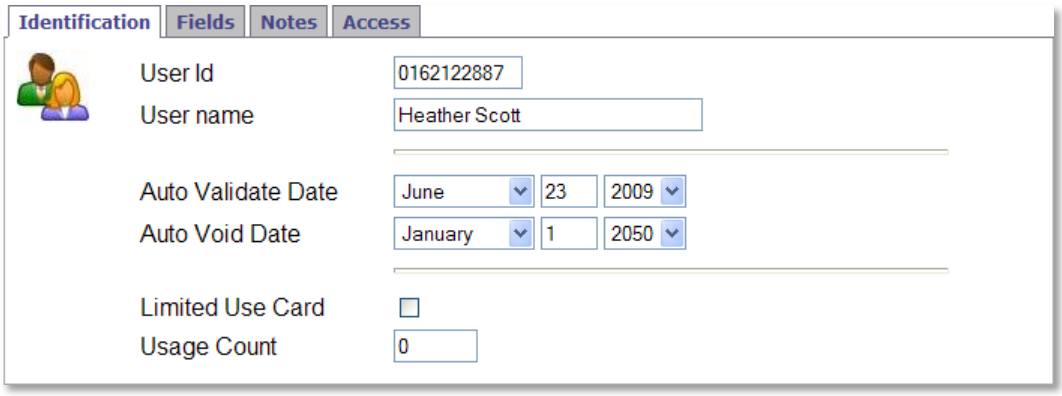
9. On the *Special* tab, select readers cardholders belonging to this profile can lock or unlock in a maintained state by presenting their credential twice (double-bumping).
10. Click **Save**.

ADD CARDHOLDERS

1. Click the **Users** tab.
2. Click Add **New User**.

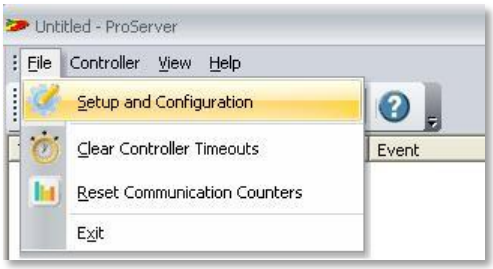


3. On the *Identification* tab, enter the 10-digit User ID number of the cardholder. Add leading zeroes if necessary to make 10 digits.

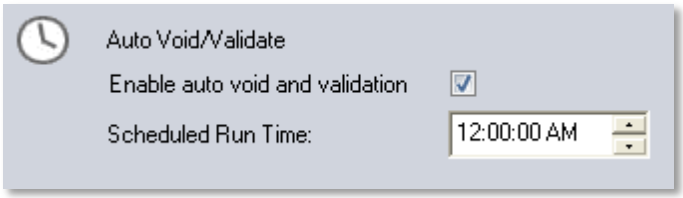


NOTE: The first five digits are the system code and the last five digits are the credential ID number.

4. Enter the name of the cardholder. Keep in mind that cardholder searches are case sensitive, so enter all names using the same convention.
5. If you would like the credential to be automatically validated/voided, (optional) enable Auto Void and Validation by going to **File > Setup and Configuration** in the Pro Server window.



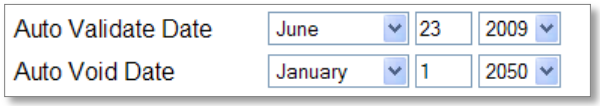
6. Check the **Enable auto void and validation** box.
7. Choose a time you'd like the SmartLock Surf software to do a daily auto validate/void update.



8. Click **OK**.

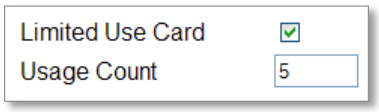
   NOTE: both *Pro Server* and *Surf Server* must be running for the auto validate/void feature to take effect.

9. On the *Identification* tab, enter auto validate/void dates.



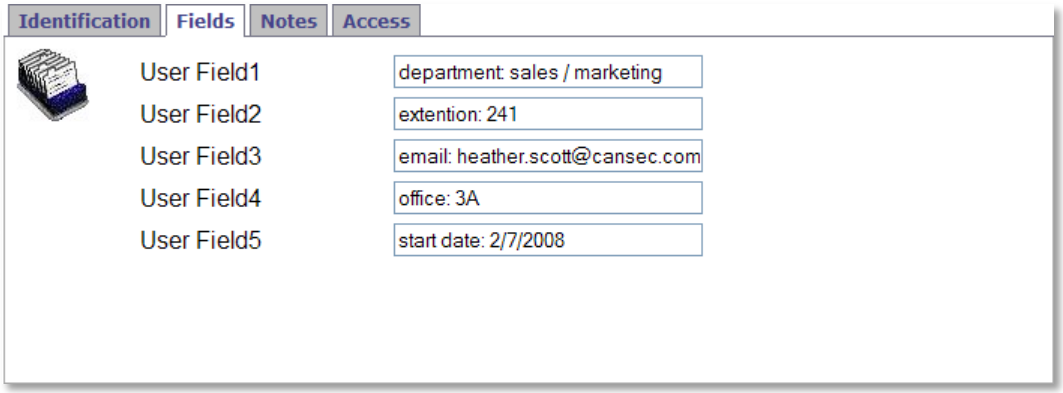
10. The cardholder's credential will be automatically validated/voided.

11. To restrict the number of times the cardholder can use his credential, check **Limited Use Card** and enter the maximum number of times the credential can be used in the **Usage Count** field. When the maximum use count is reached, you will receive a *User Voided* event message and the credential will no longer be valid.

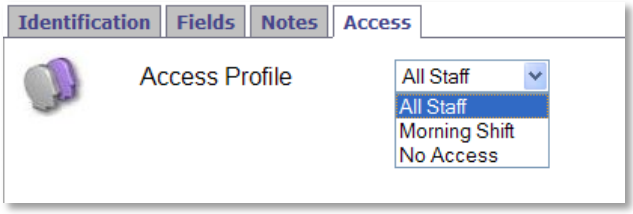


NOTE: To add more uses to the credential after it has been voided, increase the maximum use count, and then select an access profile from the *Access* tab.

12. Click on the *Fields* tab.
13. Enter optional information about the cardholder.



14. Add any additional information about the cardholder or credential on the *Notes* tab.
15. Click the *Access* tab.
16. Choose an access profile from the drop-down menu.

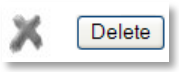


17. Click **Save**.
18. If the system's panels are online, the user data will be automatically downloaded.

EDIT AND DELETE CARDHOLDERS

To edit a cardholder's settings, click on the cardholder you wish to edit.

To delete a cardholder, click the cardholder you wish to delete and click the **Delete** icon.



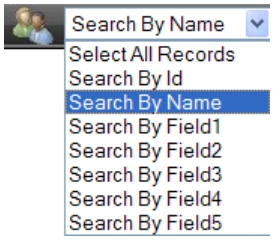
NOTE: only the first 100 cardholders are displayed in the Users section. To display a particular cardholder, search for the user using one of the methods below.

CARDHOLDER SEARCHES

There are a number of options available for searching for a cardholder. These are selected from the search toolbar. Available search options include:

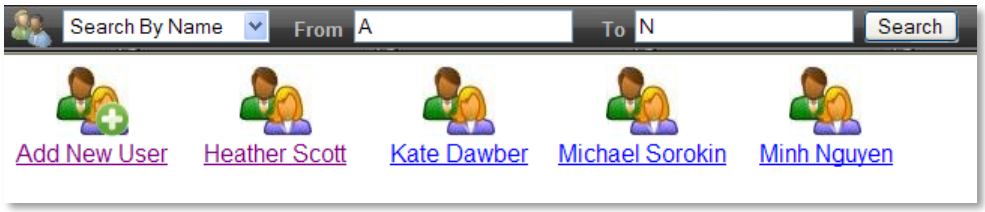
- **Select All Records -** Displays the first 100 records by ID number.
- **Search By ID -** Specify an ID range by entering values in the From and To fields. ID numbers in the range specified will be displayed. To search for a specific ID, enter the ID in *both* the From and To fields.
- **Search By Name -** Enter a user name, part of a user name, or first initials in the From and To fields to display users with that name. Search criteria is *case sensitive*.
- **Search By User Information Fields -** Enter a phone number, department, or other optional data saved in the user information fields to display users with that information.

1. Select one of the search methods from the drop-down menu.



2. Entered the desired data in the **From** and **To** fields.

3. Click **Search** to view the users who match the criteria you entered.



SEARCH TIPS

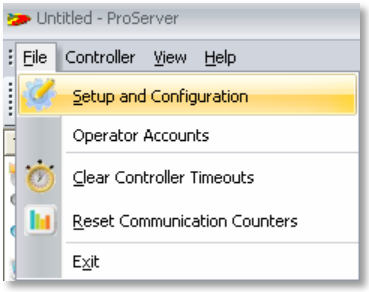
1. Search values are *case sensitive*.
2. If the From and To fields are blank, *all* records are displayed.
3. If you defined names for the user information fields, the field names will be displayed in the search criteria drop-down menu.
4. To return to the default view, choose the **Select All Records** option and click **Search**.
5. Only the first 100 cardholders are displayed in the User section. To find a cardholder not displayed, search for the user using one of the search methods on page 43.

Step 8. History and Audit

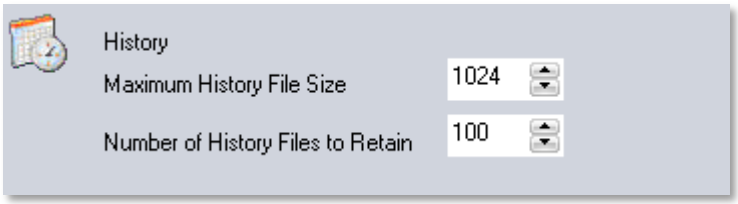
SETUP

The SmartLock Surf software records all events on the Server PC. Because SmartLock Surf is a "real-time" system, these events are constantly being recorded in one file, called the *Current History File*. To specify the size of the current history file:

1. Bring up the *Pro Server* window.
2. Go to **File > Setup and Configuration**.



3. Enter the maximum file size in the **Maximum History File Size** field.



Once the current history file reaches the maximum specified file size, it is archived as a backup file for future viewing and reporting. To specify the number of backup files to store:

4. Enter the maximum number of files in the **Number of History Files to Retain** field.

Once the number of backup files reaches the maximum, the oldest backup file will be deleted to make room for the newest file.

NOTE: the default settings (shown above) will require approximately 100 MB of space.

PANEL MEMORY

The SmartLock control panel holds a maximum of 1,000 events in memory. This is useful to know when the panel is offline and events cannot be sent to the computer. When 1,000 events have been stored in the on-board memory, a new event will replace the oldest event.

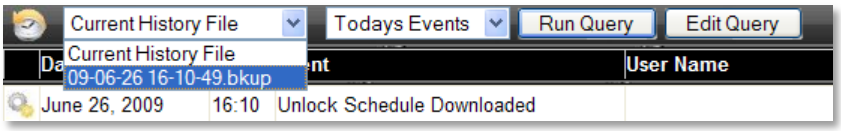
VIEW HISTORY

To view all history events stored in the *Current History File*:

1. Click the **History** tab from the SmartLock Surf browser interface.
2. The current history events for the current day will be displayed.

To view archived history events in backup files:

3. Select a backup file from the drop-down menu.

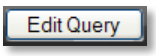


HISTORY FILTERS

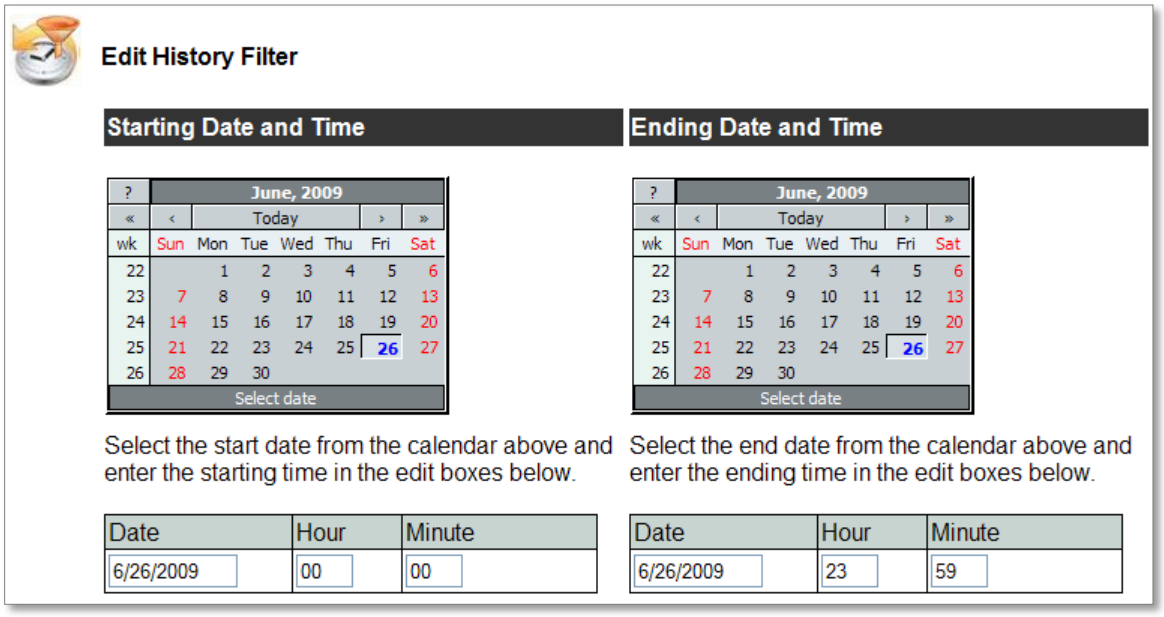
History filters make it easy to find specific events. You can use a history filter to search for events based on: date and time, event type, user name, etc. History filters can be saved to make future searches faster.

To create a history filter:

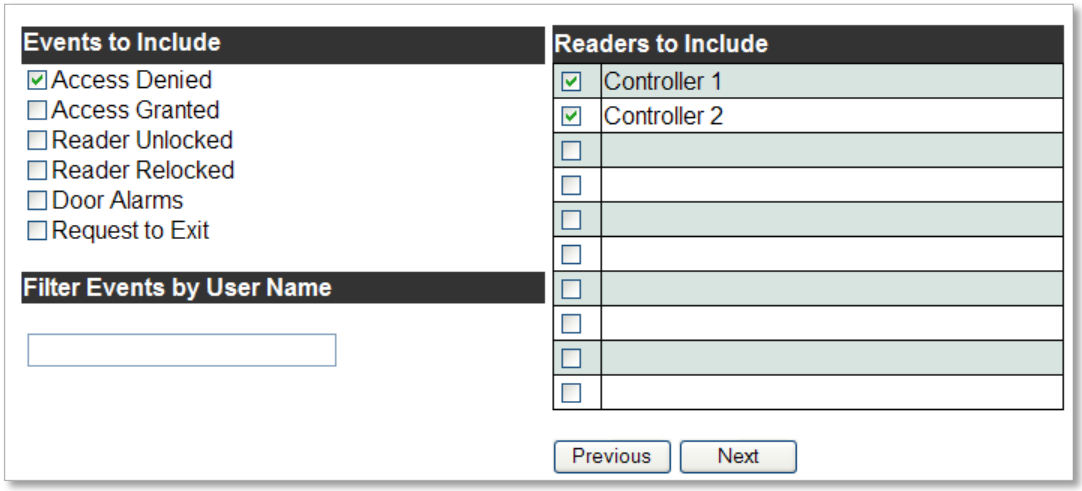
1. Click the *Edit Query* icon.



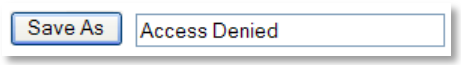
2. Select a **Starting Date and Time** and **Ending Date and Time**. The filter will retrieve all events that occured in this range.



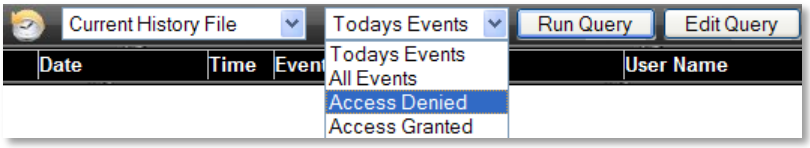
3. Select the type of event(s).
4. Enter a user name to retrieve events from only this user. (Optional.)
5. Select a reader or readers. The filter will only retrieve events that occurred at the selected readers.



6. Give the filter a name and click **Save As**.



7. Choose the saved filter from the drop-down menu on the history toolbar and click **Run Query**.



8. The filter results will be displayed in the history view menu.

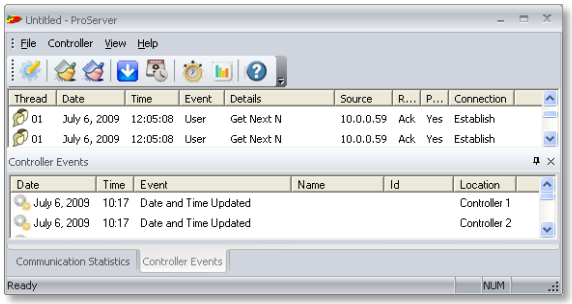
Date	Time	Event	User Name	User ID	Location
June 25, 2009	15:31	Access Denied - Not In Database	Kate Dawber	0162122888	Controller 2
June 25, 2009	15:31	Access Denied - Not In Database	Zaira Shaal	0000100162	Controller 2
June 25, 2009	15:31	Access Denied - Not In Database	Zaira Shaal	0000100162	Controller 1

9. To reset the display to show all events in the history file, select **All Events** from the drop-down menu and click **Run Query**.

Appendix

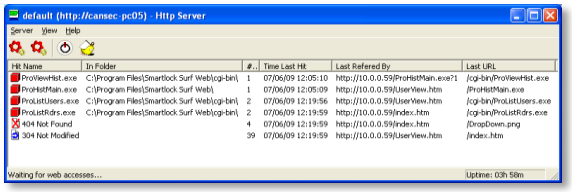
FILE AND SOFTWARE OVERVIEW

SmartLock Pro Server
This folder contains user data, reader settings, audit logs and other files that the access control system uses to grant or deny access at the door.



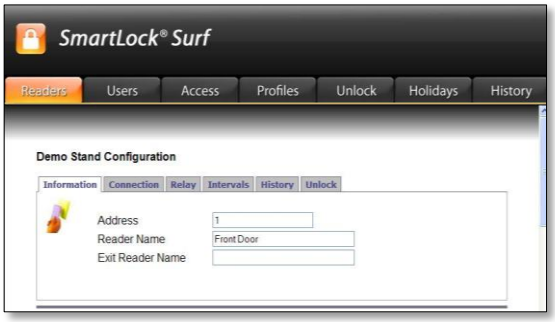
The **Pro Server** *software maintains communication with the control panels.*

SmartLock Surf Server
This folder contains the Smart Lock Surf web server.



The **Surf Server** *software is the web server for SmartLock Surf.*

SmartLock Web Site
This folder contains the html files and applications used to display the browser interface.



User, reader, and history management is done through the **Internet Explorer** *browser interface.*

DATA BACKUP

Back-up your data! Settings defined in the software such as Readers, Users and Profiles are saved to the default location **C:\Program Files\Smartlock Surf\Pro\Data**. Save a back-up copy of your data folder in another location on your computer, on portable memory (flash disk or CD-RW) or another computer or drive on your network on a regular basis and when any significant changes have been made.

Index