# Training Agenda

## I. Product Introduction

A. Features
   1. Web-based software using HTML5 (local and remote management)
   2. Interface scales to mobile devices
   3. Backend MS SQL database, powerful robust database
   4. PoE powered – wiring advantages (material and labor)
   5. Capacities and counts
   6. Built-in lock power supply (12 volt; can use 24 volt with add-on module)
   7. Multi-partition capability for advanced administrator control
   8. Integrates with ViconNet VMS software

B. Hardware
   1. 1 x Wet (12VDC @ 500mA)
   2. 2 x Dry Solid State Relays (24VDC @ 500mA)
   3. 2 x Wiegand reader Inputs, LED status and buzzer control
   4. 12VDC output (500mA shared with reader)
   5. Inputs (REX, Door Contact, Auto Opener, Aux)
   6. PoE connection (15.4 Watts)
   7. LCD display (16 characters – 2 rows)
   8. Status LEDs
   9. Tamper sensor
   10. Standard piezo
   11. Panel Models
      1. One door controller (VAX-1D)
      2. Two door controller (VAX-2D)
      3. Elevator controller (VAX-ELV-STR)
         a. Elevator-I/O expander board for 8 floors (VAX-IO-EXP8 )
         b. Elevator-I/O expander board for 16 floors (VAX-IO-EXP16)
      4. I/O Controller (VAX-IO-STR)
         a. I/O expander board for 8 I/Os (VAX-IO-EXP8 )
         b. I/O expander board for 16 I/Os (VAX-IO-EXP16)

C. Options
   1. Integrated PIR Request to Exit Motion (add “-REX” to model number)
   2. 24VDC lock Power Convertor
   3. 12VDC lock Power to Dry Contact Convertor
   4. 100db sounder
   5. Black or White paintable housing
   6. Memory module for APB
   7. Serial RS-422 Output for I/O board and Aperio

## II. Software Installation

A. Minimum requirements
B. Supported Operating Systems
C. Introduce software installer
D. Demonstrate software installation
E. Discuss Web Browser access (e.g. Google Chrome or IE 11 preferred)

## III. Hands on Training

**STUDENTS HANDS ON – UNIT #1 VAX Server Account Setup and Panel Initial Config**

A. Create initial Admin Email account/log in
B. Overview of software icons and screens (Home screen, overrides, update panels)
C. Demonstrate use of System Monitor
D. Explain about licensing
    1. Receive account number from Vicon
    2. Go to Vicon web portal vax.vicon-security.com and enter account number and password given by Vicon
    3. Input account number, give request key
    4. Input response key

E. Power Panel and Connect to PC via PoE Switch
F. Review Panel Menus and Button use
    1. Show the on board reader/input/output tests and how they can be useful
    2. Show read only menus
    3. Panel also has its own web interface for configuration

G. Prepare first Panel for communication to Server
    1. Talk about panel auto discovery
    2. Identify Network settings and properties (IP range, Subnet, Gateway, DNS)
    3. Determine current Server IP address
    4. Program Server IP address into Panel
    5. Determine Panel Communication Mode [Static or DHCP (default)]
    6. Review and program Panel Communication Settings into Panel
H. Program initial Communication to first Panel
    1. Software Notification of Connection Attempt (via MAC address)
    2. Identify MAC address
    3. Create first Panel/Associate to MAC address
    4. Set IP mode, Panel password, motion, door contact
    5. Update panels and talk about common issues with the first update
    6. Verify Panel online
I. Review/discuss the Edit Panel screen and options

J. Review I/O screen for input and output configuration
K. Disable tamper sensor on options screen.
L. Program first Door and associate to Panel

1. Create new Door
2. Give initial Time Zone and Default Holiday Time Zone Group
3. Select Panel and Door port
4. Enable first Reader and assign to Reader port and create
5. Review/discuss Edit Door screen and various settings
6. Enable second Reader (if no motion)
7. Test Door Override/Verify Outputs State change

**STUDENTS HANDS ON – UNIT #2 Door Time Zones and Door States**

A. Door Time zones

1. Review default Door Time Zones supplied with software
2. Create new Door Time Zone
3. Review differences of Door States (Lockdown, Card Only, PIN Only, Card or PIN, Card and PIN, Unlock, First Credential In, Dual Credential)
4. Discuss maximum number of Door Time Zones per Day (20)
5. Demonstrate Time Zone Editor
6. Demonstrate drag to Week, Weekday, Weekend
7. Create new Door Time Zone and apply to Door Panel
8. Show off the system overview where we can see the door state
9. Supply two Door Time Zone parameters for students to create and instructor verify accuracy
    i. Unlocked 8am to 5pm M-F, card mode otherwise.
    ii. Dual credential all day M-F, lock down otherwise

**STUDENTS HANDS ON – UNIT #3 Access Privilege Groups and User Time Zones**

A. Access Privilege Groups (APG) and User Time Zones (UTZ): Discuss how APG and UTZ interact with each other and how they fit together
B. User Time Zones
    1. Review the default User Time Zones
    2. Create new user time zone, discuss differences between user time zone and door time zone (Allowed, Not allowed).
    3. Discuss maximum number of User Time Zones per Day (4)
    4. Demonstrate Time Zone Editor
    5. Create new Time Zone

C. Supply two User Time Zone parameters for students to create and instructor verify accuracy
    1. Access 7am to 5pm M-F, Not allowed otherwise.
    2. Access 9am to 6pm M-F, Not allowed otherwise.

D. Access Privilege Groups (APG)
    1. Discuss how APGs give Users permissions to readers
    2. Show how User Time Zones are selected when making APGs
    3. Touch on the planning aspect of deployments and how you might plan your groups
    4. Explain how APG conflicts can happen and how to prevent them from happening.

E. Supply two User Access Groups parameters for students to create and instructor verify accuracy
    1. Exterior doors always access
    2. Exterior doors 9am to 5pm M-F

**STUDENTS HANDS ON – UNIT #4 Users/Cardholders**

A. Users (Cardholders)
    1. Create a New User
    2. Explain First/Last Name
    3. Explain `Starts On – Expires On' option
    4. Explain `Master` option
    5. Explain `Supervisor` option
    6. Explain `First Card In Enabled` option
    7. Summarize Triple Swipe option (configuration reviewed later)
    8. Explain Auto Opener Required option
    9. Touch on cardholder images, how you can import picture to associate with card
    10. Assign a credential to User (Multiples permitted)
    11. Explain Automatically Generated PIN number
    12. Assign a PIN Only Record to User (Multiples permitted)
    13. Assign an Available Access Group to User
    14. Create a Record and review in EDIT Mode
    15. Managing an Existing User (Edit User, Remove Card, Delete User)
    16. Create User Custom Fields
        i. Demonstrate where and how to add Custom Fields
        ii. Demonstrate where and how to add Data Within User Record

B. Supply three User Cards templates for students to create and instructor verify accuracy

C. Import Cards:

1. Explain Card Importer in VAX
2. Make sample file with 5 users and 5 cards
3. Explain the limitations of the card importer
4. Import the card file

D. Adding users with enrollment

1. Show how to add a user through enrollment (present invalid card, click on notification)
2. Perform an update and test the new cards

**STUDENTS HANDS ON – UNIT #5 Partitions and Sites**

A. Partitions and Sites

1. Discuss the concepts of partitions in VAX
2. Discuss how administrator permissions tie into partitions
3. Create an additional partition in their system
4. Discuss how sites are attached to partitions, show demo system for a practical example
5. Create an additional site attached to the new partitions
6. Discuss how Users can exist across partitions and situations where that might make sense
7. Discuss logical naming structures for partitions and sites
8. Sites:
    i. Discuss time zone assignment for automatic time conversion
9. Areas:
    i. Discuss how areas are used with Muster and anti-passback

**STUDENTS HANDS ON – UNIT #6 Administrator Privileges**

A. Administrators and privileges

1. Show the add administrator page
2. Discuss the two types, System admin and non-system administrative
3. Discuss how the interface scales down depending on privilege
4. Create an administrator for main partition with limited permissions
    i. View Status
    ii. Manage Users
5. Log off and log back on

**STUDENTS HANDS ON – UNIT #7 Holidays**

A. Talk about the various Holiday components and how they fit together (break out the chart)

B Door Holiday Time Zones

1. Prepare a new Door Holiday Time Zone
2. Review differences of Door States
3. Discuss maximum number of Door Holiday Time Zones per Day (4)
4. Demonstrate Time Zone Editor
5. Demonstrate copy to Week, Weekday, Weekend
6. Create new Door Holiday Time Zone
7. Apply new Door Holiday Time Zone to applicable Door Panel(s)

C. Door Holiday Groups

1. Create new Door Holiday Group

D. User Holiday Time Zones

1. Create new User Holiday Time Zone
2. Review Differences of User Access States (Not Allowed, Allowed)
3. Discuss maximum number of User Holiday Time Zones per Day (4)
4. Demonstrate Time Zone Editor
5. Demonstrate copy to Week, Weekday, Weekend
6. Create New User Holiday Time Zone

E. User Holiday Groups

1. Create new User Holiday Group

F. Holidays

1. Identify Date required for Holiday Access to be controlled differently than Regular Access
2. Create a new Holiday Instance via Applicable Name and Description
3. Enter Date Using Interactive Calendar
4. Select if Holiday Occurs Annually on Same Date Each Year
5. From Available User Holiday Groups List, assign Applicable Group(s)
6. From Available Door Holiday Groups List, assign Applicable Group(s)
7. Create the Instance of the Holiday
8. Supply Door and User Holiday parameters for students to create and instructor verify accuracy, e.g. Christmas and Independence Day

**STUDENTS HANDS ON – UNIT #8 Door Overrides**

A. Door Overrides

1. Discuss the purpose and methods of performing overrides
    i. Override through web interface
    ii. Override with Triple Swipe action
    iii. Override with Aux input function
2. Select Applicable Door(s)
3. Apply Required State Change to Door (Lockdown, Card Only, PIN Only)
4. Discuss difference between Override until resume and Override auto-resume

**STUDENTS HANDS ON – UNIT #9 One Time Run Zones (OTR)**

A. One-Time-Run Door Time Zones
1. Discuss the purpose of One Time Run zones
i. Special events
ii. Extended holidays
iii. Meetings
2. Create example where we change the state of a door for 3 minutes

**STUDENTS HANDS ON – UNIT #10 Reports**

A. Reports
1. Discuss the various reports available in VAX
i. Administrative Log
ii. User List
iii. Notifications
iv. Door Activity
v. Floor Activity
vi. User Activity
vii. Muster Report
viii. Configuration Reports
2. Discuss export options, including CSV and HTML (PDF)
3. Discuss how historical events can be linked to historical video

**STUDENTS HANDS ON – UNIT #11 System Settings**

A. General Configuration
1. Discuss settings that were configured during initial configurable
B. Security
1. Briefly touch on Active Directory LDAP
2. Enhanced Manual PIN Security
C. Email Configuration
1. Purpose of Email Configuration is to send lost password information
2. Enter Email settings, SMTP authentication
3. Talk about alert emails and how you can set that up for specific events (Briefly touch on Alert Monitoring)

**STUDENTS HANDS ON – UNIT #12 Triple Swipe**

A. Purpose of Triple Swipe
1. Discuss why you could use triple swipe
i. Lock a public door early
ii. Arm/disarm an alarm system
iii. Cause actions on external systems by changing the state of the relays

2. Demonstrate only users with Triple Swipe option can perform Triple Swipe actions
3. Demonstrate that readers with keypads can use additional actions

**STUDENTS HANDS ON – UNIT #13 Crisis Security Levels**

A. Discuss purpose of crisis mode
   1. Way of restricting access in critical situations, mainly built for schools and public buildings
   2. Demonstrate the drop down menu for crisis modes
   3. Show the customization of the crisis modes screen (mention that it also overrides the door)

B. Discuss User Security levels, demonstrate that a user with equal or higher can get through a door (as long as the access group and door mode allow it)
   1. Apply a security level to a user
   2 Update panels, place into crisis mode. Observe mode change and user denied.

**STUDENTS HANDS ON – UNIT #14 System Management UI**

A. How to access the system management interface on 11002
B. Discuss the purpose of the management interface
   1. Control of the web service
   2. Basic network settings
   3. Backup database
   4. Create Automated backup schedules
   5. Database Restore
      i. Touch on when this can be tricky
         a. Moving database to different OS
         b. Different version of MSSQLSERVER

**STUDENTS HANDS ON – UNIT#15 ViconNet VMS integration**

A. Discuss the level of integration VAX is capable of
   1. How to get ViconNet camera list
   2. View live or historical video based on date parameters
   3. Integrate with multiple instances of ViconNet via WAN or LAN
   4. Historical events can be linked to historical video

B. Requirements
   1. Internet Explorer 11 preferred, Firefox and Safari compatible with correct plugins
   2. Google Chrome no longer supported
   3. ViconNet 8.0+ with web server enabled and a defined port (http or https)
   4. DNS name service must be present to resolve certification of ViconNet server

5. Vicon username/password

C. Synchronize cameras by adding the camera system and filling in the required fields
    1. Name, Address (http://camera-system, https://camara-system:443), username, password, timezone, partition
    2. Synchronize cameras and select cameras you'd like VAX to have access to

D. Add ViconNet Server Certification: (only required if using https)
    1. Browse to the http/https address of the ViconNet software
    2. Follow instructions from tech guide for adding the certificate to the browser computer viewing ViconNet
    3. Restart web browsers

E. Camera to Door/Elevator Associations
    1. Navigate to the edit Door/Elevator screen
    2. Associate the door with one or more cameras

F. View Cameras
    1. Show the View Camera screen and the available parameters
    2. If camera is recording, show how to view historical video
    3. Demonstrate historical events ability to spawn historical video feed

G. Notification Settings
    1. Browse to administrator personal notification settings
    2. Demonstrate in-line camera view based off of event such as 'Forced open'

**STUDENTS HANDS ON – UNIT#16 ViconNet VAX software Upgrades**

A. Discuss how our application is upgraded

    1. Single VAX exe file, upgrades and new installations
    2. Can be done remotely via remote access software or via site visit
    3. Require firmware on the Panels to be upgraded
    4. Update the firmware on a Panel
    5. Show how to manually place the Panel into Upgrade mode

B. Discuss troubleshooting/common problems with firmware updates

## IV. Introduction to Additional/Optional Features

A. Discuss Auto-operator integration
B. Discuss Mantrap configuration
C. Discuss Elevator and IO Specifications
D. Discuss Elevator and Floors Configuration

## V. Multiple Choice Test