S2 Certification Training Courses  
Hands-on Course Syllabus

S2 Security offers two 2-day hands-on training courses for S2 Certified Systems Integrators. The **S2 Basic Certification Course** fulfills the basic training requirement for S2 Certified Systems Integrators and is offered both in Natick, MA local to S2 Headquarters, as well as in selected sites around the world as announced on [http://www.s2sys.com/resources/integrator_training/](http://www.s2sys.com/resources/integrator_training/) (login required). The **S2 Advanced Certification Course** is currently only offered in Natick, MA, provides training on advanced topics (see syllabus below) and assumes the student has completed the **S2 Basic Certification Course**

**S2 Basic Certification Course (2-days)**

The S2 Basic Certification Course is an introduction to the S2 Security NetBox® product lines with a focus on hands-on training to guide the student through basic setup and programming of the system. The student will perform lab exercises that cover all aspects of setting up the system and meets the requirements for S2 Technical Certification. The outline below summarizes the course modules:

**Initial NetBox® Controller setup** – The Network Controller is shipped in INIT mode and with default TCP/IP addresses and settings. The student will learn about the S2 system architecture and the various resources and elements of a typical S2 access control system including Network Nodes, Expansion blades and the various resources that may be connected and set up as system resources.  
**Lab:** Initializing the Network Controller and connecting to Network Nodes. These nodes can be in the same network as the Network Controller or on remote networks.

**Setup various access definitions** – The student will learn how to set up the elements that are necessary to gain access as well as more complex access definitions. You will implement card plus PIN, timed PIN entry, Two Man rule and Card or Keypad entry.  
**Lab:** Use the browser based user interface to define and setup Readers, Locks, REX and DSM resources and configure them in a Portal record. Define access levels and setup card holder records. Enroll and assign access credentials and PINs to Card holders.

**More Person Record Setup:** The card holder information is held in the “Person Information” record that also contains a Photo ID; user login ID and passwords, and up to 20 user defined search fields:  
**Lab:** Setup and enroll card holders; assign Access Levels; PIN; user Login, password and user roles. Use the S2 Mobile Security Office mobile app and the Photo ID add-on to take, store and print card holder ID Photos and badges.

**Explore Time Specs and Holidays:** The student will have an opportunity to define several holidays and time specs and time spec groups and put them to use.  
**Lab:** Setup and modify PIN entry requirements based on working vs non-working hours and holidays; require exit reader scan; require optional Two-man rule during holidays and weekends, automatic un-lock and restricted user login.
**Monitoring and Administration Functions:** We explore the various system monitoring pages including the Monitoring Desktop, the Widget Desktop, Floor Plans and Cameras.

**Lab:** Define a custom Widget Desktop and assign it to a user as their default Desktop. Set up a separate Widget Desktop layout for viewing IP cameras. Upload Floorplan backgrounds and place cameras, portals, outputs, temperature points, and monitoring resources on different floor plans and link them so detailed floor plans can be brought up from links on a larger plan overview.

**Using Threat Levels:** Learn how to use Threat Levels to achieve quick lockdown of the entire system or just specific doors or group of doors. In addition learn how Threat levels can be used as conditional fields to activate or deactivate certain features.

**Lab:** System Lockdown, Changing PIN entry requirements. Define Portal Group Unlock settings and First-in Unlock rules and Threat Level Lockdown.

**Regions:** You will learn how to set up Regions and be able to track where cardholders are located and produce a role call report at any time.

**Lab:** Setup Regions, Exit readers on Portals; print role call reports and detect Passback Violations.

**Camera and NVR Setup:** Learn how to setup IP cameras as well as integrate NVRs and DVRs.

**Lab:** IP camera and camera type definitions. Setup camera views, presets and event based video recordings.

**Elevator and Alarm Panel Integration:** Learn how the S2 system can be connected to Alarm Panels and to Elevator Controls so as to limit access to specific floors.

**Lab:** Define and setup multiple elevators and limit access to the top two floors. Allow free access to one of the restricted floors during normal office hours. See how to connect to a legacy Alarm Panel. Arm and disarm the panel through the S2 user interface and set up auto arming based on time and zone activity sensing.

**Loading Cardholder Data:** Learn how to use the S2 Data Management Tool which uses the NetBox® API to both export and import person data including cardholder information.

**Lab:** Use the Net Box API Data Management tool to upload cardholder information, including Photos, from other systems into the Net Box personal information files.

**Troubleshooting:** There are several built in reports that can be used for trouble shooting and detecting access patterns and problems.

**Lab:** Generate standard and custom reports for Access denied problems and sort by Portal, card holder departments and date and time. Print a access history report for certain individuals.

---

**S2 Advanced Certification Course (2-days)**

The S2 Advanced Certification Course covers a set of advanced topics and assumes that the student has full working knowledge of concepts covered in the S2 Basic Certification Course. As with the basic course, the advanced course involves significant hands-on training and requires the student to bring a Laptop PC with a supported web browser. Below is an outline of the 2-day curriculum:

**Network Primer:** The S2 Security NetBox® and S2 NetVR are network appliance based products. TCP/IP network architecture, IP addresses and protocols are explained in detail, especially as it relates to setting IP addresses for the S2 Controllers, S2 Nodes, and Video Systems. Topics include IP
addressing, network classes, the effect of network masks, gateways, multicast communication, and how to connect nodes on different network segments.

**Lab:** Learn how to configure remote nodes.

**Basics Review** – Review Portal, Access Levels, Person Records, Cardholders and other basics from your original certification training.

**Lab:** Basic Review

**Mercury Panel Integration** – Whether converting a system to S2 or deploying a system using Mercury panels, you will set up, connect to and configure a Mercury SCP panel and configure SIO “reader” blades.

**Lab:** EP1502 Mercury Panel setup

**Partitioning** – Learn to evaluate when to use Partitioning, how to define and configure partitions, how to configure the Widget Desktop to monitor other partitions, how to move person records to a new partition, and other functions to explore the full range of implementing Partitions.

**Lab:** Partition Setup, Mapping Access levels, use of Data Management Tool to move users between partitions.

**Custom User Roles and Mass User Updates** – We will explore defining Custom user roles to manage system operator access and how to use the Data Management Tool to manage mass updates and additions.

**Lab:** Data Management Tool

**Threat Levels, Locations, Mustering, and Event Management** – We’ll explore Mustering and other uses of Regions in addition to activating and managing threat levels by location to achieve conditional and isolated lock down as well as system wide lockdown.

**Lab:** Setting up Regions, Tailgate and Passback Detection. Setting up Threat Level changes to lock down access by Location.

**DMP Panel Integration:** Learn how to integrate a DMP Intrusion panel with an S2 controller.

**Lab:** DMP Panel to controller integration, Using DMP Remote Link, Setting up Arm/Disarm and logging from the S2 Controller, Monitoring a DMP Panel with the Widget desktop.

**Video Integration** – Perform S2 NetVR installation and integration as well as setting up Motion Detection and Event-driven video recordings.

**Lab:** S2 OVID installation, create Milestone generic events, set up Video recording events and trigger points.

**Trouble Shooting and Root Cause Workshop** - A trouble shooting and root cause problem solving workshop will provide the attendee the methods to resolve system configuration issues efficiently and make the changes needed to correct the root cause of the problem.