



Brivo Technical Training and Certification Program

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Introduction

Brivo offers several options for certification through distance learning and on-premise training courses to provide students with the knowledge and skills that are required for system design and installation, while providing ongoing services for all Brivo-related hardware and software products. The target audience for these courses is the installation and technical staff of Brivo authorized resellers. The goal is for all installers and technicians working on Brivo systems to have the knowledge needed to increase productivity and profitability for their dealerships. Starting in 2010, all Brivo dealerships will be expected to maintain a minimum of two certified technicians on staff. This will require initial certification and periodic re-certification so that the dealership maintains a technical staff that is fully qualified to install and service Brivo security systems.

Scope of Certification Program

Every technician who will be certified will either choose the distance learning or on-premise method. There will be two individual certification paths available. Authorized Brivo resellers will choose ACS WebService™ and/or ACS OnSite™ products. The certification requirements are based on the terms of the Brivo reseller agreement. The distance learning seats will be purchased individually at the time of enrollment registration. The on-premise training and certification will be purchased as a 5-seat, single-day bundle.

Certification Verification and Test

Once a student has completed the prerequisite training that includes all of the course content in a certification path, he or she will be eligible for the certification session. Certification will be achieved through an instructor-led webinar session or instructor-led on-premise session at the dealer location. The certification session consists of a system overview discussion, hands on configuration of a live system, and a written test of randomly selected questions that will cover the course content that was provided to the student prior to the certification session. The technicians that successfully complete the certification prerequisites and certification session written test will become a Brivo Certified Technician for ACS WebService or ACS OnSite™ systems.

Getting Started

To schedule and complete the certification program, the dealership will pre-purchase the desired certification training method and certification path.

Renewal of Certification Status

Brivo is constantly improving and expanding feature sets across all product lines. Because of this dynamic, all Brivo Certified Technicians will be required to re-certify. The re-certification sessions will review existing and new feature sets with a short test to verify content retention. Recertification will be accomplished through a distance learning session.

Scheduling – Brivo will be contacting each Brivo certified reseller annually to schedule the recertification sessions for each certified technician on file.

Course Descriptions

Please note: course content outlined below is subject to change at any time due to the rapidly changing feature sets in the Brivo product lines.

ACS WebService Distance Learning Courses and Certification

(Brivo P/N – ACSWEBTRN-CERT-WS (1 Seat))

This is a series of individual or multi-module courses that will cover specific fundamentals for installing Brivo products. Each course will have a quiz to insure that the content that is covered is understood by the student. The estimated course time (XX:XX) listed below will include content review and quiz completion. Once all of the courses in this certification path have been successfully completed, the student will be a candidate for the Certification Webinar (Course ID 150).

Self Paced Online Prerequisite Courses

Course ID: 102 – ACS5000 Hardware Component Overview (15 min)

This is a self-led online video presentation that provides a complete overview of the ACS5000-S, ACS5008-S, ACS5000-E, ACS5008-E, and ACS5000-WG Panel Systems including chassis and board level components.

Course ID: 103 – ACS5000 Assembly and Wiring (30 min)

This is a self-led online video presentation that illustrates ACS5000 component review, board assembly, board addressing, and board to board wiring requirements.

Course ID: 104 – ACS5000-WG Configuration and Assembly (15 min)

This is a self-led online video presentation that illustrates antenna component connections, SIM registration requirements and field strength diagnostics for connection to a Brivo ACS WebService host.

Course ID: 105 – OVR WebService™ Overview (25 min)

This course is a self-led online video presentation that illustrates the technical overview of current components, configuration, and operation of Brivo's fully integrated Online Video Recorder™ (OVR) service in an ACS WebService account.

Course ID: 108 – Configure an ACS5000-EDGE in a WebService Account (25 min)

This course consists of the mounting, configuration options, and programming of an ACS5000-EDGE into an ACS WebService account.

Course ID: 109 – WebService Set-up and Administration Programming (1 hour)

This course consists of multiple short video presentation modules that will guide you through creating cards, access groups, panels, sites, doors, users, and other access control fundamental programming of an ACS WebService account.

Course ID: 150 - Instructor-led Online Training Session – WebService Products (2 Hour Webinar)

This instructor-led certification session can only be attended by students that have successfully completed and passed all of the above self-paced LMS prerequisite courses.

The certification Webinar session will start with a section by section navigation overview in a live WebService system with a discussion of design concepts, advanced feature programming, troubleshooting, and system administration applications. The student will then be required to program a live working system. The instructor will provide guidance for best practices for configuration and will verify successful operation of the student's configuration. Finally, the student will take a written test of that will cover the course path content, provided to the student prior to the certification webinar. The technicians that complete the certification prerequisites and certification session written test will become certified as a Brivo Certified Technician for the ACS WebService product line.

ACS OnSite Distance Learning Courses and Certification

(Brivo P/N – ACSWEBTRN-CERT-OS (1 Seat))

This is a series of individual or multi-module courses that will cover specific fundamentals for installing Brivo ACS OnSite™ products. Each course will have a quiz to insure that the content that is covered is understood by the student. Once all of the

courses in this certification path have been successfully completed, the student will be a candidate for the Certification Webinar.

Self Paced Online Prerequisite Courses

Course ID: 115 – ACS OnSite Aparato™ New Features Overview

This self-led online video presentation covers the new features of the ACS OnSite Aparato that meet and exceed the previous ACS SE/XE appliance platform such as Graphic Maps, Definable Threat Levels, Anti-Passback, Mustering and more.

Course ID: 102 – ACS5000 Hardware Component Overview

This is a self-led online video presentation that provides a complete overview of the ACS5000-S, ACS5008-S, ACS5000-E, ACS5008-E, and ACS5000-WG Panel Systems including chassis and board level components.

Course ID: 103 – ACS5000 Assembly and Wiring

This is a self-led online video presentation that illustrates ACS5000 component review, board assembly, board addressing and board to board wiring requirements.

Course ID: 116 – ACS OnSite Aparato™ System Configuration – ACS5000-S

This self-led online video presentation covers the use of a laptop for initial commissioning of an OnSite Aparato system on an Ethernet network with a static IP address. Also includes logging into an ACS5000-S control panel to set up a static IP, mapping to an ACS appliance on an Ethernet network, and ACS5000-S panel configuration in the Aparato appliance.

Course ID: 118 – Initial Configuration of an ACS5000-S – Standalone Mode

This self-led online video presentation provides a brief overview of an ACS5000-S panel in standalone mode. Training covers a step-by-step process adding a static IP address, expansion boards, doors, cards, groups and users to test a valid card read.

Course ID: 119 – ACS OnSite Aparato™ Set-up and Administration Programming

This self-led online video presentation consists of multiple short video presentation modules that will guide you through creating cards, access groups, doors, users, schedules and other access control fundamental programming of an ACS OnSite Aparato system.

Course ID: 120 – ACS OnSite Aparato™ Configuration – ACS5000-EDGE

This self-led online video presentation is a self-paced online presentation that illustrates logging into an ACS5000-EDGE controller to set up a static IP, mapping to an OnSite system on an Ethernet network that includes ACS5000-EDGE controller configuration in the appliance.

**Course ID: 151 – Instructor-led Online Training Session – ACS OnSite Products
(2 Hour Webinar)**

This instructor-led Web-based training session can only be attended by students that have successfully completed and passed all of the above self-paced LMS prerequisite courses.

The certification session will start with a section by section navigation overview in a live ACS OnSite™ system with a discussion of design concepts, advanced feature programming, troubleshooting, and system administration applications. The student will then be required to program a live working system. The instructor will provide guidance for best practices for configuration and will verify successful operation of the student's configuration. Finally, the student will take a test of randomly selected questions that will cover the course content, provided to the student prior to the certification webinar. The technicians that complete the certification prerequisites and certification session written test will become certified as a Brivo Certified Technician for the ACS OnSite product line.

**ACS WebService On-premise Training and Certification
(Brivo P/N - ACSLOCTRN-CERT-WS (5 Seats))**

This course will cover all training and certification test for all ACS WebService systems. This instructor-led on-premise training session that will be held at the Brivo authorized reseller location will consist of a slide presentation that covers hardware component assembly, wiring requirements, networking concepts, the administrative interface, account setup, configuration programming and administration using live hardware in a presentation and workshop environment. There will be a certification session at the end of this training date that includes a written test that must be passed for certification.

**ACS OnSite On-premise Training and Certification
(Brivo P/N - ACSLOCTRN-CERT-OS (5 Seats))**

This course will cover all training and certification test for ACS OnSite™ systems. This instructor-led on-premise training session that will be held at the Brivo authorized reseller location will consist of a slide presentation that covers hardware component assembly, wiring requirements, networking concepts, the administrative interface, account setup, configuration programming and administration using live hardware in a presentation and workshop environment. There will be a certification session at the end of this training date that includes a written test that must be passed for certification.

Ordering Information for Distance Learning Certification		
ACSWEBTRN-CERT-WS	Distance learning includes login to online LMS and Certification webinar verification for WebService – 1 Seat	See MSRP for pricing.
ACSWEBTRN-CERT-OS	Distance Learning includes login to Online LMS and Certification Webinar verification for ACS OnSite™ Systems – 1 seat	See MSRP for pricing.
Ordering Information for On-premise Training and Certification		
ACSLOCTRN-CERT-WS	Instructor-led on-premise training and Certification – ACS WebService products (1 full day at customer premise for up to 5 seats)	See MSRP for pricing.
ACSLOCTRN-CERT-OS	Instructor-led on-premise Training and Certification – ACS OnSite™ products (1 full day at customer premise for up to 5 seats)	See MSRP for pricing.

Syllabus Details for all Technical Training Courses

Course ID: 115 – ACS OnSite Aparato New Features Overview (19:31 min)

Introduction

This self-led online video presentation covers the new features of the ACS OnSite Aparato that meet and exceed the previous ACS SE/XE appliance platform such as Graphic Maps, Definable Threat Levels, Anti-Passback, Mustering and more.

Audience

This course is intended for system design engineers, installers, and technicians that will be responsible for the design, layout, installation and ongoing servicing for the OnSite Aparato system.

Course Objectives

- Provides a comparison of feature sets between the existing ACS OnSite SE/XE appliances to the new ACS OnSite Aparato appliance.
- Lists new security features that meet FIPS and ISO standards.
- Description of license keys
- Description of Graphic Maps, placement of icons and device control operation
- Description of Threat Levels operation
- Setup and operation of Hard and Soft Anti-Passback Zone layouts
- Setup of lock sharing for In/Out reader doors
- Description of Mustering
- Description of new User configuration including web camera cropping

- Description and configuration of role based administration
- Understanding how the new Report Service is configured with a ODBC connection so that 3rd party report generator products can be used.

Course ID: 102 – ACS5000 Hardware Component Overview (15 min)

This is a self-led online video with test that provides a complete overview of the ACS5000-S, ACS5008-S, ACS5000-E, ACS5008-E, and ACS5000-WG panel systems including chassis and board level components.

Audience

This course is intended for system design engineers, installers, and technicians that will be responsible for the design, layout, installation, and ongoing servicing for all Brivo systems.

Course Objectives

- Learning all of the ACS5000 part numbers
- Review of all ACS5000-E and ACCS5000-S components
- Review of all ACS5008-E and ACCS5008-S components
- Review of all ACS5000-WG components
- Power Supply and transformer specifications
- Understanding all ACS5000 control board functions, connections and layout
- Understanding all ACS5000 expansion board functions, connections and layout
 - Review of all ACS5000-DB components
 - Review of all ACS5000-IO components
- Reviewing the ACS5000-EXP and ACS5008-EXP expansion chassis components
- Post Test to complete the course

Course ID: 103 – ACS5000 Assembly and Wiring (30 min)

This is a self-led online video with test that illustrates ASC5000 component review, board assembly, board addressing, and board to board wiring requirements.

Audience

This course is intended for system installers and technicians that will be responsible for the design, layout, installation, and ongoing servicing for all Brivo systems.

Course Objectives

- ACS5000 control panel packaging and component review
- Mounting the boards in the control chassis
- Addressing the boards and jumper terminations
- CAN bus termination for inline and end of line locations
- Onboard LED diagnostics
- Wiring specifications for power, reader, lock and CAN bus
- Expansion board location consideration
- Connecting a test reader

- Connecting the lock output for power-to-lock and power-to-unlock termination
- Request-to-Exit (REX) termination
- Cabling options
- Post test to complete the course

Course ID: 104 - ACS5000-WG Configuration and Assembly (15 min)

This is a self-led online video with test that illustrates antenna component connections, SIM registration requirements and field strength diagnostics for connection to a Brivo ACS WebService host.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS WebService systems that include ACS5000-WG cellular wireless systems.

Course Objectives

- SIM card registration for the cellular network
- Connecting the antenna to the cellular modem
- Extending the antenna using the extension cable and antenna mount
- ACS5000-WG power up and onboard LED diagnostic review
- Accessing the administrative interface with a laptop for advanced diagnostics
- Post test to complete the course

Course ID: 105 – OVR WebService Overview (11:23 min)

This course is a self-led online video presentation that illustrates the technical overview of current components, configuration, and operation of Brivo's fully integrated Online Video Recorder (OVR) service in an ACS WebService account.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS WebService based systems that include OVR functionality.

Course Objectives

- Understand theory of operation
- Learn specifications of all supported OVR cameras
- Understand setup and configuration options of the OVR camera
- Setting up hosted cameras in the WebService video section
- Accessing the administrative interface with a laptop for advanced diagnostics

Course ID: 108 – Setting up an ACS5000-EDGE in an ACS WebService Account (17:20)

This course consists of the mounting, configuration options and programming of an ACS5000-EDGE into an ACS WebService account.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS OnSite Aparato™ systems that include ACS5000-EDGE connectivity.

Course Objectives

- Understand theory of operation
- Learn specifications of all supported Edge Plus controllers
- Configuration of IP addressing
- Mapping the ACS5000-EDGE to the OnSite Appliance host in a network
- Programming the ACS5000-EDGE into the OnSite Appliance host Device section

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS WebService based systems that include ACS5000-EDGE connectivity.

Course Objectives

- Understand theory of operation
- Learn specifications of the ACS5000-EDGE controller
- Mounting the ACS5000-EDGE
- Jumper options and wire termination
- Configuration of IP addressing
- Programming the ACS5000-EDGE into the ACS WebService account

Course ID: 117 – ACS OnSite Aparato™ System Configuration – ACS5000-EDGE

This self-led online video presentation is a self-paced online presentation that illustrates logging into an ACS5000-EDGE controller to set up a static IP, mapping to an OnSite system on an Ethernet network that includes ACS5000-EDGE controller configuration in the appliance.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS OnSite Aparato based systems that include ACS5000-EDGE connectivity.

Course Objectives

- Understand theory of operation
- Learn specifications of the ACS5000-EDGE controller
- Mounting the ACS5000-EDGE
- ACS5000-EDGE jumper options and wire termination
- Configuration of IP addressing
- Programming the ACS5000-EDGE into the ACS OnSite Aparato

Course ID: 118 – Initial Configuration of an ACS5000-S – Standalone Mode

This self-led online video presentation provides a brief overview of an ACS5000-S panel in standalone mode. Training covers a step-by-step process adding a static IP address, expansion boards, doors, cards, groups and users to test a valid card read.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS5000-S standalone systems.

Course Objectives

- Setting up an ACS5000-S for the first time
- Configuration of IP addressing
- Configuring Expansion Boards, Doors, Groups and Users
- Testing a valid credential read in the ACS5000-S Dashboard

Course ID: 119 – ACS OnSite Aparato™ Set-up and Administration Programming

This self-led online video presentation consists of multiple short video presentation modules that will guide you through creating cards, access groups, doors, users, schedules and other access control fundamental programming of an ACS OnSite Aparato system.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS WebService.

Course Objectives

- Learn step-by-step configuration and administration programming in an ACS OnSite Aparato system.

Course ID: 120 – ACS OnSite Aparato™ System Configuration – ACS5000-S

This self-led online video presentation covers the use of a laptop for initial commissioning of an OnSite Aparato system on an Ethernet network with a static IP address. Also includes logging into an ACS5000-S control panel to set up a static IP, mapping to an ACS appliance on an Ethernet network, and ACS5000-S panel configuration in the Aparato appliance.

Audience

This course is intended for system installers and technicians that will be responsible for the installation and ongoing servicing for Brivo ACS OnSite Aparato based systems that include ACS5000-S connectivity.

Course Objectives

- Setting up an Aparato for the first time
- Configuration of IP addressing

- Mapping an ACS5000-S to an Aparato through a network
- Configuration of and ACS5000-S client in an Aparato

On-premise Training Overview

Course ID: ACSLOCTRN-CERT-WS or ACSLOCTRN-CERT-OS – On-premise Technical Training and Certification for WebService or OnSite Certification Paths. (8 Hours)

Choose from either ACS WebService (hosted) or ACS OnSite™ (appliance-based) systems. This instructor-led training session that will be held at the Brivo authorized reseller location will consist of a slide presentation that covers hardware component assembly, wiring requirements, networking concepts, the administrative interface, account setup, configuration programming and administration using live hardware in a workshop environment.

Audience

This course is intended for system design engineers, installers and technicians that will be responsible for the design, layout, installation, and ongoing servicing for the ACS OnSite™ (appliance-based) or ACS WebService (hosted) systems based on registration selection.

Course Objectives

- Learning all of the ACS5000 part numbers
- ACS5000-EDGE controller components and terminations
- ACS5000-E control panel components and terminations
- Review of all ACS5000-E or ACCS5000-S components
- Review of all ACS5008-E or ACCS5008-S components
- Review of all ACS5000-WG components (ACS WebService only)
- Power Supply and transformer specifications
- Understanding all ACS5000 control board functions, connections and layout
- Understanding all ACS5000 expansion board functions, connections and layout
 - Review of all ACS5000-DB components
 - Review of all ACS5000-IO components
- Onboard LED diagnostics
- Reviewing the ACS5000-EXP and ACS5008-EXP expansion chassis components
- ACS5000 control panel packaging and component review
- Mounting the boards in the control chassis
- Addressing the boards and jumper terminations
- System terminology
- CAN bus termination for inline and end of line locations
- CAN bus wiring specifications and requirements
- Campus application design
- Wiring specifications for power, reader, lock and CAN bus
- Expansion board location consideration
- Connecting a test reader

- Operating system compatibility
- Capacities and feature overview
- Control panel to host connectivity and operation
- Logging into the administrative interface for the first time
 - Initial account setup (or the ACS OnSite™ only)
 - System management review
 - System Status
 - Logs
 - Tools
 - Date and Time
 - Network Configuration (Setting static IP address and Troubleshooting)
 - Hardware status
 - SMTP Server Setting (For ACS OnSite™ only)
 - Backup and Restore ((For ACS OnSite™ only)
 - Upgrade Firmware (For ACS OnSite™ only)
 - Wireless diagnostics

ACS OnSite™ Workshop – The instructor will work with students to set up an Ethernet switch, ACS-SE appliance, ACS5000-S control panel, and ACS5000-EDGE controller to set up static IP addresses in a private network. A working system will be created while the instructor moves through the application configuration and administration presentation that follows. (The ACS WebService workshop is similar but will be using DHCP settings in the controllers that will be communicating with the Brivo-hosted data center.)

- Logging into the application – Configuration and administration
 - Screen Navigation – Section by section review
 - Creating control panels
 - Adding expansion boards
 - Configuring door boards
 - Configuring I/O boards
 - Creating Sites (ACS WebService only)
 - Creating Tenant Accounts (ACS OnSite™ only)
 - Creating schedules and holidays
 - Adding a Door
 - Adding Cards – Batch load and swipe to enroll
 - Creating and editing groups
 - Creating a User
 - Testing a user credential – Activity log review
 - Creating an e-mail notification
 - Creating administrators
 - Changing passwords

Extended Workshop – If time allow, the instructor will use a workshop environment to cover special features and application requests such as advanced I/O programming, Photo ID badging, elevator control and DVR Integration.

- Brivo website support tools
 - Document downloads
 - Card Calculator
 - FAQ
- Online help screen review and support contact information
- A written test will complete the course.

Certification Session – Based on the certification path for up to 5 candidates, the certification session will start immediately after the on-premise training session with a section by section navigation review in a live ACS WebService or ACS OnSite system with a discussion of design concepts, advanced feature programming, troubleshooting, and system administration applications. Each student will then be required to program a live working system. The instructor will provide guidance for best practices for configuration and will verify successful operation for each of the candidate's configurations. Finally, each candidates will take a test of randomly selected questions that will cover the course content, provided to the student prior to the certification session. The technicians that complete the certification prerequisites and certification session written test will become certified as a Brivo Certified Technician for the chosen ACS WebService or ACS OnSite™ product line.