

USER GUIDE MAN0151 Rev 5

NEXUS-3 Series



	nventions used in this document:
UI Text:	Text that represents elements of the UI such as button names, menu options etc. is presented with a grey background and border, in Tahoma font which is traditionally used in Windows UIs. For example: Ok
Standar	d Terms (Jargon) : Text that is not English Language but instead refers t industry standard concepts such as Strategy, BACnet, or Analog Input is represents in slightly condensed font. For example: BACnet
Code:	Text that represents File paths, Code snippets or text file configuration settings is presented in fixed-width font, with a grey background and border. For example:
	<pre>\$config_file = c:\CYLON\settings\config.txt</pre>
Parame Product	 er values: Text that represents values to be entered into UI fields or displayed in dialogs is represented in fixed-width font with a shaded background. For example 10°C Names: Text that represents a product name is represented in bold colored text. For example INTEGRA™
Compar	by Brand names: Brands that are not product names are represented by bold slightly compressed text: ABB Active Energy

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1 Overview

This chapter provides an overview of the NEXUS-3 Series device system.



Bottom

FRONT I/O



TOP I/O





" _ 2 A8 00 🗢 A7 A12 m ß A9 A10 00 A11 A6 **₩** ************ I <u>_</u> AVA AVA 2 A1 A5 A2 A3 A4

ltem	Function Description
A1	Power button
A2	3.5 mm Audio jack
A3	4 x USB 3.0 Type A ports
A4	Not Used
A5	Not Used
A6	2 x Full-size DisplayPort
A 7	1 x RJ45 GbE LAN port
A7	2 x RJ45 GbE LAN ports with optional PoE (30W total)
A8	3-pin power input (9 ~ 36 VDC)
A9	2 x Serial RS-232/422/485 ports
A10	Full-size mPCIe
A11	M.2 2280 M-key for NVMe or SATA storage
A12	M.2 2230 E-key for Wi-Fi or WAN card

MOTHERBOARD FEATURES

SERIAL PORTS

	Pin	RS-232	RS-422	RS-485
	1	DCD	TX-	TX-/RX-
	2	RX	TX+	TX+/RX+
	3	ТХ	RX+	NC
	4	DTR	RX-	NC
	5	GND	NC	NC
	6	DSR	NC	NC
	7	RTS	NC	NC
	8	CTS	NC	NC
	9	RI	NC	NC

NC = Not Connected

LEDS



LED	On	Off	Blink	Pulse
HDD	-	-	Internal storage drive activity	-
Power	Device is on	Device is off	Device is asleep	-
Watchdog	Internal MCU is not functioning normally	Internal MCU is not functioning normally	Firmware bootloader is active	Internal MCU is functioning normally
LEDs 1-4	Currently selected user mode	-	-	-

ETHERNET PORTS

	LED	Color	State	Condition
	Link	-	Off	LAN link is not established
		Green	On	LAN link is established
			Blinking	LAN activity occurring
Link LED Speed LED	Speed	-	Off	10 Mb/s data rate
		Green	On	100 Mb/s data rate
		Yellow	On	1000 Mb/s data rate

2 Installation and configuration

Note: The information in this chapter provides an overview of the installation and configuration requirements of the NEXUS-3 Series device. The NEXUS-3 Series device is designed for specific applications and needs to be installed by qualified personnel with RF and regulatory-related knowledge.

POWERING ON THE NEXUS-3 SERIES DEVICE

- 1. Install the NEXUS-3 Series device on the wall mount using a wall mounting kit, or Install the NEXUS-3 Series device on the rack infrastructure using DIN-rail mounting brackets.
- 2. Connect a network cable.
- 3. Connect the supplied PSU to the NEXUS-3 Series device



4. Press the power button to turn it on.

Note: For warranty purposes it is recommended that <u>only</u> the included power supply should be used with NEXUS-3 Series devices.



Warning: NEXUS-3 can be powered by a 24 V DC supply only.

The device will be damaged if connected to a 24 V AC power source.



5. Attach the supplied DB9-to-screw-terminal adapters to the two COM ports.

6. Connect and configure devices using the RS485 ports.

MOUNTING INSTRUCTIONS

DIN RAIL MOUNTING

Step 1: Attach wall mounting brackets to the chassis Step 2: Attach DIN Rail mounting brackets to the chassis

Step 3: Clip system to the DIN Rail



DIN Rail Edge Mounting

DIN Rail Back Mounting

BBB

fadage 1

at the

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WALL (SHOCK AND VIBRATION) MOUNTING

Step 1: Attach wall mounting brackets to the chassis

Step 2: Mark and prep holes in surface for mounting

Step 3: Fasten system to surface



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3 Software Configuration

INTRODUCTION

The following provides details on the software configuration of the **NEXUS-3 Series** hardware. Please follow the steps contained within this section for proper setup and configuration.

TOOLS REQUIRED

The following tools will be required for proper configuration of the system:

- PC/Laptop
- Ethernet cross-over cable, or other network connection to your NEXUS-3 Series device
- Standard web-browser such as Windows Edge, Mozilla Firefox, Apple Safari, or other.
- NEXUS-3 Series License file pre-installed

CONNECTING TO A NEXUS-3 SERIES DEVICE

The NEXUS-3 Series device is shipped with a default IP address (192.168.1.251) and subnet mask (255.255.255.0) on the primary Ethernet Port.



Your laptop's network card must be configured in a manner where it may access this IP network setting. Refer to your operating system documentation for details on how to configure your network card.

See Ethernet Settings on page 26 for details on how to reconfigure NEXUS-3 Series device IP Address.

Note: The recovery Ethernet Port is configured with a default IP address (192.168.1.250) and subnet mask (255.255.255.0), so that if connectivity is lost on the primary LAN port, you can use the recovery port to gain access to the **NEXUS-3 Series** controller as described below and reset it.

Primary and Recovery ports should not be both connected at the same time – unplug the primary port when connecting your laptop to the recovery port.

To use the recovery port:

• Depending on your Operating System, set your Network Adaptor to the 192.168.1.0/24 IP network. e.g. in Windows, in Settings > Network & Internet set the IP address to 192.168.1.1 and Subnet Mask to 255.255.255.0 (i.e. the default value).

• You should now be able to reach http://192.168.1.250/ in a browser on your PC and proceed from there. (If you have HTTPS enabled, you can reach the target at https://192.168.1.250/ instead.)

Once recovery is complete, the NEXUS-3 Series device must be rebooted.

LOG-IN

To log-in to the NEXUS-3 Series device:

- $1. \hspace{0.5cm} \mbox{With your PC's network card configured, open any standard web browser.}$
- 2. Browse to the IP address of your NEXUS-3 Series device as defined during installation.
- 3. If your connection is successful, the main login page of ASPECT will be displayed:

Username	
Password	
L	og In

- 4. Enter the case-sensitive default username and password into the fields provided.
- 5. Click the Log In button.

CONTROL PANEL

When you successfully log-in, you will be directed to the Control Panel. The Control Panel contains a navigation tree to the left of the web user interface; allowing users to select different configuration areas of the product.

S Aspect Control Panel	Introduction
🖻 😋 Instance 1	
Application	Welcome to the configuration pages for Aspect.
🗉 🛅 Users and Groups	Select a link from the Aspect Control Panel tree on your left to access and manage your system
🖻 🧰 Maverick	
🖻 🗀 Mobile	
🗄 🚞 Calendar Configuration	
Project Source	
- de License Item Status	
Project Performance	
🖻 🧰 Instance 2	
🖻 😋 Database Management	
- MySQL Administration	
SQLite Maintenance	
🖻 🧰 Licensing	
🖻 🛅 Modem Configuration	
🖻 😋 Communication Setup	
- 👘 OOS Manager	
-O Port Configuration	
- 🔊 SDP Configuration	
🗄 🗀 PUP	
🖻 🛅 BACnet	
🗄 🛅 Simple Mobile Web Configural	
🖻 😑 System Administration	
-O System Services	
- 🕘 System Status	
Process Status	
- System Updates	
- OS Auto-Update	
Backup/Restore	
Ethernet Settings	
Network Diagnostics	
Time Settings	
- Web Server Configuration	
Image Proxy Configuration	
CalDAV Server Configuration	
🗄 📋 System Logs 🛛 👻	

PROJECT INSTANCES

Two instances are available within the **NEXUS-3 Series** device. This provides the capability to host up to two projects within the target. Each instance runs its own Aspect Control Engine allowing service to be performed on separate instances. Within Instance 1 and Instance 2, the same options exist for the following:

- Calendar Configuration
- Users and Groups
- Mobile
- Instance Services
- Project Source
- Project Removal
- Aspect Control Engine Logs
- License Item Status
- Project Thread Status

CALENDAR CONFIGURATION

The Calendar Configuration area is used to configure iCalendar integration variables of the **NEXUS-3 Series** device. Within this section there are two pages:

- Calendar File
- Calendar User

Calendar File

Calendar File can be used to browse and modify what calendars have been previously published to the instance, as well as allow users to manually upload iCalendar files (files with .ics extensions) to the device.

- To upload a saved calendar file, simply select the Browse/Choose File button and locate the iCalendar file on your computer. Once located, click the Upload button.
- To delete a previously published calendar, place a check mark next to the corresponding file and select the Delete button.



Calendar User

Calendar User provides the ability to change the default username and password credentials that are required to allow iCalendar-based tools to publish data to the **NEXUS-3 Series** device. By default, the username (*calendar*) and password (*user*) can be changed to any desired credential set. When referencing Calendars in Aspect Studio, these credentials must be specified in order to properly access the file.

Sepect Control Panel	Calender Configuration
Application Users and Groups Maverick Mobile Calendar Configuration Calendar File Galendar File Dinstance Services Pristee Services Pristee Services	Use the following form to configure the Calender username and password. Username calendar Password Confirm Password Submit
Project Source Project Removal Project Removal Project Thread Status Project Thread Status Distance 2 Project Thread Status Project Thread Status Project Thread Status Project Thread Status Project St	

USERS AND GROUPS

Users and Groups are included within each instance in the **NEXUS-3 Series** device. This provides the ability to manage users in the Aspect control instance it serves.

Aspect Control Panel Aspect Control Panel Asplication Generation Series and Groups Groups	User Manag Add, edit, an Add User Print	ger d delete users. <u>t Users</u>	
B C Users Maverick B C Mobile B C Calendar Configuration	User aamuser	Groups MIXAdmin	Delete 🗖
Instance Services Project Source Project Source Project Source Project Manager Project Manager Project Manager License Item Status Project Thread Status Database Management Licensing Modem Configuration Source Administration System Logs	Delete		

INSTANCE SERVICES

The Instance Services provides users with the ability to restart the Aspect Control Engine for the instance they are working with. Only one option is available in the Instance Services drop-down which will allow the instance to be reset.

😼 Aspect Control Panel	System Services
🖻 😋 Instance 1	
- Chapplication	Start, stop, and restart services.
🖻 🦳 Users and Groups	
Groups	Service Aspect Control Engine 1 - Restart
Lisers	
The Mayorick	Submit
inavence Makila	
H Mobile	
Calendar Configuration	
Project Source	
Aspect Control Engine Log	
Project Thread Status	
Instance 2	
Detabase Management	
Database Management	
En licensing	
H Modem Configuration	
🖽 🧫 Communication Setup	
🕀 🛅 Simple Mobile Web Configuration	

PERSISTENCE MANAGER

The Persistence Manager area is used to manage and delete Persisted data. Persisted data is localized data stored from Persisted Elements that may be present in an Aspect project, as well as data persisted by vSTAT elements when such functionality is implemented in a delivered solution.



PROJECT SOURCE

The Project Source page provides administrators with the ability to download a password protected copy of the Aspect project deployed to the Instance. When selecting this in the Control Panel, you will be prompted to re-enter your credentials in order to download a copy of the project.

The required credentials will be the same as the ones used to originally deploy the project.

Aspect Control Panel	Deployed Project Inf	formation						
Application	Project Name Deployment Date Archive Size							
	test 10803.zip	2013-04-11 09:40:47	679.2 KB					
Calendar Configuration Instance Services								
Project Source Project Removal Aspect Control Engine Log								
License Item Status Project Thread Status								

PROJECT REMOVAL

The project removal page provides administrators the ability to remove a currently deployed project from an Aspect instance.

🖁 Aspect Control Panel	Aspect Project Removal
Application	Remove the deployed application.
Groups Groups Groups Groups	Click the button to remove the deployed application.
🖻 😋 Mobile	Remove
🗉 🛅 Calendar Configuration	
Persistence Manager	
Project Source	
Aspect Control Engine Log	
License Item Status	
Instance 2	
🖻 🚞 Database Management	

ASPECT CONTROL ENGINE LOG

The Aspect Control Engine log provides administrators and technicians the ability to view project status and debugging information relating to the health of the deployed Aspect project. Up to 10 pages of Aspect logs are contained and individual logs can be downloaded.

		10.000
S Aspect Control Panel	INFO : 2013-04-16 12:42:05,025 WATCHDOG PET - petInterval=[14.0] com.aamatrix.mix.server.Controller.tick(Controller.java:325)	-
🗄 😋 Instance 1	INFO : 2013-04-16 12:41:52,294 RESETTING WATCHDOG TIMEOUT - watchDogTimeout=[68] com.aamatrix.mix.server.Controller.tick(Controller.java:315)	
	INFO : 2013-04-16 12:41:52,251 LOAD COMPLETE (LOGIC INIT/START DONE) FOR PROJECT>>> [test_10803] com.ergotech.mix.server.HeadlessController.reloadLogic(HeadlessController.java:537)	
B Stat	INFO : 2013-04-16 12:41:52,250 Lifecyle Start Complete for [GlobalDeviceLogic] Elapsed Time [14] milliseconds com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Calendar Configuration Ontropy Instance Services	INFO : 2013-04-16 12:41:52,247 [GPC1_2738] Establishing [4] Socket connection(s) to [10.10.4.7:4222] com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
	INFO : 2013-04-16 12:41:52,244 [ASC_884] Establishing [4] Socket connection(s) to [10.10.4.7:4222] com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Project Removal Aspect Control Engine Log	INFO : 2013-04-16 12:41:52,240 [VAV_9934] Establishing [4] Socket connection(s) to [10.10.4.7:4222] com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Project Thread Status	INFO : 2013-04-16 12:41:52,233 Lifecyle Start Complete for [GlobalConfigLogic] Elapsed Time [68] milliseconds com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Instance 2 Database Management Licensing	INFO : 2013-04-16 12:41:52,215 [BACnetDriver] Establishing [5] Socket connection(s) to [10.10.4.7:4224] com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Communication Communication Setup	INFO : 2013-04-16 12:41:52,207 [Nexus] Establishing [1] Socket connection(s) to [10.10.4.7:4222] com.ergotech.vib.utils.Log4JLogger.info(Log4JLogger.java:49)	
Simple Mobile Web Configuration	INFO : 2013-04-16 12:41:51,668 LOADING PROJECT >>> [test_10803] deployed from AspectStudio version=[1.08.03] on=[2013-04-11 09:40:16.780] com.ergotech.util.ProjectLogicImpl.java:72)	
🗄 📋 System Logs	INFO : 2013-04-16 12:41:51,447 Loading Logic for: /home/aspect1/./htmlroot/mix rom erronterb mix server HeadlessController reloadl onic/HeadlessController java:484)	

LICENSE ITEM STATUS

The License Item Status area provides the ability to view how many current license items a project may be using, as well as the maximum amount of licenses available for a particular feature or function.

🖁 Aspect Control Panel 占 😋 1 - STC14MapNexusBACnetPup	Instance License	Status:	
STC14MapNexusBACnetPup	Token	Current	Max
STC14MapNexusBACnetPup F	ModbusRTUDevice	0	64
Groups Groups Mayerick	LicensedDevices	64	64
Mobile	BACnetIPDevice	0	64
🗈 🦲 Calendar Configuration	VStat	0	128
-OINSTANCE Services	FTNetDevice	1	999999
Persistence Manager	LicensedPoints	1247	4000
Project Removal	ModbusIPDevice	0	64
	UnitronNetwork	0	4096
	PupDevice	0	64
Cicense Item Status	BACnetDevice	0	64
Instance 2	FT	1	2
Database Management	LicensedAamnet	1	999999
🗉 🛅 Licensing	SdpDevice	0	0

PROJECT PERFORMANCE

The Project Performance area provides the ability to dynamically view and monitor the status of Threads, Maps, and Ports being used by the Aspect project loaded into the target.

By default, the all Tabs will update information every 15 seconds. You may adjust this update timer by choosing the Settings tab, and changing the Global Settings Update time.



DATABASE MANAGEMENT

Database Management is the centralized location for all database storage and contains paths to MySQL Administration and SQLite Maintenance.

MYSQL ADMINISTRATION



The MySQL Administration item in the webUI tree links to an administration interface for ASPECT's MySQL Database Server. To access the Database Interface, the user must enter (case sensitive) login credentials. The default credentials are:

- Username *matrixac1*
- Password aam

Language: English v	MySQL » Server			
Adminer 4.7.3	Select database			
DB:	Create database Privileg	jes Process list	Varia	ables Status
SQL command Import Export	MySQL version: 5.1.73 th Logged as: matrixac1@lo	rough PHP extensi ocalhost	ion My :	SQLI
	Database - Refresh	Collation	Tables	Size - Compute
	Aspect	latin1_swedish_ci	?	?
	information_schema	utf8_general_ci	?	?
	🔲 mysql	latin1_swedish_ci	?	?
	phpmyadmin	latin1_swedish_ci	?	?
	web_configuration	latin1_swedish_ci	?	?
	Calastad (0)			

Note: MySQL administration in ASPECT 3.03.02 and later uses Adminer. However, on devices running 3.03.01 or earlier the UI for MySQL administration is based on phpMyAdmin:

		· · · · ·								•	•	-	
phpMyAdmin	89	Server: Matrix S	erver	ا ش (Jataba	ise: t	est						
🗗 🔤 🚾 📮 🔍	đ	Structure 🛛 👧 S	QL 💡	© Sear	ch ह	Que	ry đ	Sexport	import ्	Designer %Oper	ations 🐒	Privileges	Drop
Database		Table		1	Action			Records	Туре	Collation	Size	Overhead	
test (5)		alarms		f	3	Ĩ	X	539	MyISAM	latin1_swedish_ci	73.7 KiB	-	
tost (5)	Г	select_chain		B	3	Ĩ	×	25	MyISAM	latin1_swedish_ci	3.9 KiB	-	
test (5)	Γ	sqls		6	3	Ĩ	×	49	MyISAM	latin1_swedish_ci	2.8 KiB	-	
select_chain		trend1		1	3	Ĩ	×	49	MyISAM	latin1_swedish_ci	3.2 KiB	-	
sqls trend1	Г	trend2	I	6	3	Ĩ	×	49	MyISAM	latin1_swedish_ci	3.0 KiB	-	
trend2		5 table(s)			Sum			711	MyISAM	latin1_swedish_ci	86.6 KiB	0 B	
	t	Check All / U	Inched	k All	Ľ	With	select	ed: 💌					
	8	Print view 📠 Dat	a Dicti	onary									
	Na	Create new tal	ole on	datab	ase <mark>te</mark>	st —	Num	ber of fields:					

WWW.CYLON.COM

SQLITE MAINTENANCE

The SQLite Maintenance page provides users with the ability to manage the SQLite database. This page shows the database files and sizes.

Aspect Control Panel	Database File Management
📮 🗖 Database Management	Download and manage database files stored on this device.
MySQL Administration SQLite Maintenance Journal Solution Modem Configure Database	Database File Size Delete
 Simple Mobile Web Configuration System Administration System Logs 	

LICENSING

The License page provides the ability to view the current license status of the NEXUS-3 Series device as well as a method to upload/download license files. If a license file is uploaded, Cylon Controls recommends rebooting the NEXUS-3 Series device to ensure the license file is successfully applied.

Sepect Control Panel	License Management
Instance 2 Solution and the second	Hardware ID: GY6PN42 License ID: GY6PN42 License ID Match License Signature Valid
Licensing License Device Licensing Modem Configuration	Upload license file: Browse No file selected. Upload
E Communication Setup	Contents of license file:
 Bimple Mobile Web Configuration Bimple Mobile Web Configuration Bimple System Logs 	<pre># Aspect Nexus license file # General Information DateGenerated = 11/04/2019 HardwareID = GY6PN42 HardwareType = 501 Dealer = Cylon Controls Ltd SiteID = Comment =</pre>

COMMUNICATION SETUP

The **Communication Setup** page provides administrators the ability to configure manual Out of Service entries, SDP Network Properties, BACnet IP Router, BBMD and Time Synchronization settings.

OUT OF SERVICE MANAGER (OSS)

The Out Of Service Manager (OSS) provides a single location that allows administrators to manually mark devices out of service using the Manual OOS check boxes.

Aspect Control Panel	Commit OOS Setting PUP Devices	s		
Consing Modem Configuration			Search:	
🖶 🤆 Communication Setup	Device	Last Transaction	005	Manual OOS
	Line:0 ID:11305	60s		
	Line:0 ID: 64	60s		
🗈 🧰 BACnet	Line:0 ID: 100	60s		Г
Gimple Mobile Web Configuration	Line:0 ID: 9934	60s		
System Logs	Line:0 ID:15163	60s		Г
	BACnet Devices			🚽 Previous Next 🕨
			Search:	
	Device	Last Transaction	005	Manual OOS
	Network: 3691 ID:0.0.0.0):14 46s		
	Network: 3691 ID:0.0.0.0):5 1s		
				🚽 Previous Next 🕨

BACNET SETTINGS

The BACnet Configuration area allows configuration of read/write retries, port configuration, and router settings for BACnet/IP.

spect Control Panel	BACnet Configuration								
Instance 1 Instance 2 Database Management Determing	BACnet IP Configuration								
	UDP Port	47808							
Modem Configuration	IP Timeout (seconds)	0.5							
OPort Configuration	IP Write Retries	1.							
BACnet	IP Read Retries	1							
BACnet Settings	IP Out Of Service Time (seconds)	60 -							
Time Sync Settings	IP Discovery Timeout (seconds)	3 -							
System Administration	BACnet MSTP Configuration								
System Logs	MSTP Timeout (seconds)	1.0 💌							
	MSTP Write Retries	1.							
	MSTP Read Retries	1.							
	MSTP Out Of Service Time (seconds)	60 💌							
	BACnet Router Configuration								
	Device Name	NexusX							
	BACnet Device Instance Number	541							
	BACnet Ethernet Enabled	No							
	BACnet IP Enabled	Yes -							
	BACnet IP Network Number	555							
	BACnet Internal Network Number	2651							
	BACnet NAT Network Enabled	No 💌							
	Router Debug Level	1.							
	BACnet Debug Level	1							
		Submit							

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BBMD SETTINGS

The BBMD settings area is used to configure the BACnet/IP Broadcast Management Device (BBMD) table setup for BACnet networks.

Aspect Control Panel Control Panel	BBMD Configuration Configure BBMD. Add Device Entries may only be added to the BBMD configuration when BACnet IP or BACnet Ethernet protocols are enabled										
	IP Address	UDP Port	Subnet Mask	Delete							
B- PUP	192.168.50.100	47808	255.255.255.255								
BAChet Settings	Entries may only be add	led to the BBMD NAT confi	guration when BACnet NAT	is enabled							
Simple Mobile Web Configuration	IP Address UDP Port Subnet Mask Delete										
🗉 🧰 System Administration	Submit	Submit									

MODBUS NETWORK PROPERTIES

The Modbus Network Properties page is used to set the configuration for Modbus communications.



TIME SYNC SETTINGS

The Time Sync Settings area provides the ability to configure BACnet network time synchronizations.



SYSTEM ADMINISTRATION

The System Administration area contains system settings for the **NEXUS-3 Series** device. These fields include the User Manager, System Services, System Status, System Updates, Ethernet Settings, Time Settings Web Server Configuration, Process Status, Image Proxy Configuration, and CalDAV Server Configuration.

USER MANAGER

The User Manager area provides fields to setup, add and remove administrative users from the NEXUS-3 Series device. Administrative users are granted full access to the Aspect Control Panel while users/groups created within an instance are only allowed access to deployed projects.

Aspect Control Panel Instance 1 Diatance 2 Diatance 2 Diatabase Management Dicensing Communication Setup Simple Mobile Web Configuration System Administration Des Veser Manager	Administration	Administrative Users Use the following form to manage Administrator User Names and Passwords.								
	Username aamuser	Password	Delete Save]						
System Services										

SYSTEM SERVICES

The System Services area provides administrators with the ability to control key services relative to the target. Through this area, users can restart specific services of the **NEXUS-3 Series device**. Simply select an option from the drop-down and click Submit. A message will indicate that the service has been stopped/started/restarted successfully.



SYSTEM STATUS

The System Status page provides details on the current health of the system including Uptime, memory (RAM) utilization, disk space and all information pertaining to revision levels.



PROCESS STATUS

-

This shows the result of a top command which produces an updating list of current processes running.

Sapect Control Panel	top -	15:46:	11 u	р 3	days,	2:4	5, 0	us	ers,	load a	average	: 0.03, 0.02,
🖻 😋 Instance 1	Tasks	: 150 t	otal	, 1	runni	ing,	149 s	le	eping	, 0 st	copped,	0 zombie
Application	Cpu (s): 0.1%	us,	0.3	%sv, ().0%n;	i, 99	9.4	%id,	0.1%wa	a, 0.0%]	hi, 0.0%si, (
🗄 🛅 Users and Groups	Mem:	1912684	k to	tal	, 1089	852k	used	i,	82283	2k fre	ee, 146	460k buffers
🗄 🛅 Maverick	Swap:	209714	4k t	ota	l, Ok	used.	, 209	71	44k f	ree, 2	282172k	cached
🖻 😋 Mobile												
	PID	USER	PR	NI	VIRT	RES	SHR	s	*CPU	%MEM	TIME+	COMMAND
🗉 🧰 Calendar Configuration	19533	apache	20	0	15028	1120	820	R	3.8	0.1	0:00.04	top
Instance Services	2241	root	20	0	1468m	3116	700	S	1.9	0.2	74:12.41	mix-com-srv
Persistence Manager	1	root	20	0	19352	1528	1220	S	0.0	0.1	0:02.04	init
Project Source	2	root	20	0	0	0	0	S	0.0	0.0	0.00 01	ktbreadd
Acport Control Engine Log	2	root	PT	0	0	0	0	0	0.0	0.0	0:00.21	migration/0
License Item Status	1	root	20	0	0	0	0	0	0.0	0.0	0.00.00	keeftirad/0
Project Thread Status	-	1000	20	0	0	0	0	5	0.0	0.0	0.00.99	ksorurqu/o
H Instance 2	5	TOOL	RI	0	0	0	0	5	0.0	0.0	0:00.00	migration/0
🗉 🧰 Database Management	0	root	RI	0	0	0	0	5	0.0	0.0	0:00.36	watchdog/u
E C Licensing	/	root	RI	0	0	0	0	5	0.0	0.0	0:00.31	migration/1
🗄 🦳 Modem Configuration	8	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/1
🗄 🦳 Communication Setup	9	root	20	0	0	0	0	S	0.0	0.0	0:01.97	ksoftirqd/1
🗄 🫅 Simple Mobile Web Configuration	10	root	RT	0	0	0	0	S	0.0	0.0	0:00.39	watchdog/1
🖻 😋 System Administration	11	root	RT	0	0	0	0	S	0.0	0.0	0:00.34	migration/2
	12	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/2
	13	root	20	0	0	0	0	S	0.0	0.0	0:01.80	ksoftirqd/2
O System Status	14	root	RT	0	0	0	0	S	0.0	0.0	0:00.34	watchdog/2
Process Status	15	root	RT	0	0	0	0	S	0.0	0.0	0:00.32	migration/3
System Updates	16	root	RT	0	0	0	0	s	0.0	0.0	0:00.00	migration/3
OS Auto-Update	17	root	20	0	0	0	0	S	0.0	0.0	0:01.75	ksoftirad/3
Backup/Restore	18	root	RT	0	0	0	0	S	0.0	0.0	0:00.36	watchdog/3
Ethernet Settings	19	root	20	0	0	0	0	5	0.0	0.0	0:22.84	events/0
Network Diagnostics	**	1000	20	~				5	0.0	0.0	ULL IUT	Cronco, C

SYSTEM UPDATES

The System Updates area is used to perform firmware upgrades to the ASPECT device. These firmware updates can be obtained from the ABB Cylon Toolbox / Support Site.



Update System - Confirm

CAUTION: Please be aware that the Aspect Control Engine will be shut down once you click continue. It is recommended to download a Configuration Backup using <u>Backup/Restore</u> before applying updates.

Click "Continue" to proceed to upload stage.

Continue

Clicking on the Continue button opens the upload page:



OS AUTO UPDATE

Permits whether to allow or disallow automatic YUM updates. It is recommended that this setting be left at "Enabled".

Aspect Control Panel Application Application Mobile Calendar Configuration Onstance Services Descriptore Manager	YUM automatic updates and patches for OS: (Does not update Aspect software) Enabled

BACKUP/RESTORE

Backup /Restore provides the means to backup an ASPECT target's device configuration (network addresses, port and driver configuration, etc). To create a backup, simply click the Download button.



ETHERNET SETTINGS

The Ethernet Settings area permits for Ethernet address configuration of the NEXUS-3 Series device. The NEXUS-3 Series device can support static IP addresses or DHCP addressing from a valid DHCP server. Simply select the appropriate address setting for your application.

- To configure the device to use DHCP addressing, select the Obtain an IP Address Automatically radio button. In most DHCP environments, a resolvable DNS name or reserved IP address is assigned to the NEXUS-3 Series device by the local network administrator prior to configuring the device for this option.
- To configure the device to use a static IP address, select the Use the following IP Address radio button, then enter your IP address, Subnet Mask, Gateway, and DNS information into the boxes provided below.

😼 Aspect Control Panel	Ethernet Settings
🖻 🧰 Instance 1	
🗈 🗀 Instance 2	Manage ethernet settings.
🔅 🗀 Database Management	
🔅 🚞 Licensing	Obtain an IP Address Automatically
Communication Setup	C Use the following IP Address:
🖻 🗀 Simple Mobile Web Configuration	
🖨 😋 System Administration	IP Address . . .
	Subnet Mask
) System Status	
Process Status	
🚳 System Updates	Preferred DNS Server
Ethernet Settings	
Network Diagnostics	Alternate DNS Server
	Submit
Image Proxy Configuration	
🗈 🧰 System Logs	

NETWORK DIAGNOSTICS

The **Network Diagnostics** area contains useful troubleshooting methods for network connectivity problems without the need for additional tools.



TIME SETTINGS

The Time Settings area allows users to configure the NEXUS-3 Series device Time and Date parameters. In this section, users can set the following items using the appropriate drop-downs and editors:

- System Time specified in military time
- System Date specified in MM/DD/YYYY
- TimeZone/Region specified in one of many configurable options
- Time Server Synchronization Specifies an NTP time server on the Internet with which to sync the system time to. Refer to pool.ntp.org for information relative to other available NTP servers available.

Sepect Control Panel	Time/Date Settings								
Application	Use the following forms to configure time and date settings.								
Users and Groups		-	-						
🖻 🦳 Maverick									
🖞 🦳 Mobile	- 6								
- A vStat	Cot Sustem Time		Submit						
🗈 🛅 Calendar Configuration	Set System Time	13 1 43	Submit						
	17								
Persistence Manager	Set System Date	04/19/2013	Submit						
Project Source									
Acpect Central Engine Log									
license Item Status	Set TimeZone/Region	America/New_York	Submit						
Project Thread Status	- 10								
🗉 🦳 Instance 2	Time Conver Synchronization	nict1 ni uctiming org	Submit						
🗉 🧰 Database Management	Time Server Synchronization	prise raij.usen mig.org	Subinic						
🗄 🛅 Licensing									
🗈 🚞 Modem Configuration									
Communication Setup									
Simple Mobile Web Configuration									
System Administration									
System Services									

WEB SERVER CONFIGURATION

The Web Server Configuration area is used to set a label for the login screen and change port settings for the following:

- Aspect Control Panel defaults to port 80 (HTTP)
- Aspect Control Engine defaults to port7226
- Simple Mobile Web defaults to port 8080

Aspect Control Panel Instance 1 Application Groups Application Groups Mobile Application Groups Mobile Application Groups Mobile Application Groups Aspect Control Configuration Groups Project Source Project Source Project Source Project Source Distance 2 Database Management Groups Mobile Communication Setup System Administration Gustem Status System Administration Gustem Status System Services	Web Server Configuration Configure web server settings.							
	Device Label	Nexus 1.08.03	Submit					
	Port	80	Submit					
	AspectFT Control Engine Port	7226	Submit					
	Simple Mobile Web Port	8080	Submit					

IMAGE PROXY CONFIGURATION

The Image Proxy Configuration page permits users to enable to disable image proxy, allowing Aspect to access external sites retrieve graphics.

Protect of protect by	
S Aspect Control Panel	Image Proxy Access
🖻 😋 Instance 1	
Application	Use the form to enable or disable image proxy access.
🕀 🛅 Users and Groups	Constant
🔅 🛅 Maverick	Proxy Enabled
😑 😋 Mobile	Proxy Disabled
- A vStat	
🗄 🛅 Calendar Configuration	Save
Instance Services	
Project Source	
🚽 Project Removal	
Aspect Control Engine Log	
- Zicense Item Status	
Q Project Thread Status	
🗉 🦳 Instance 2	
🗉 🦲 Database Management	
🕀 🧰 Licensing	
🗉 🧰 Modem Configuration	
🗉 🧰 Communication Setup	
🗉 🧰 Simple Mobile Web Configuration	
🖻 🤕 System Administration	
System Services	
System Status	
🔥 OS Auto-Update	
- Backup/Restore	
Ethernet Settings	
- Q Network Diagnostics	
- 🚱 Time Settings	
Image Proxy Configuration	
🗄 🛅 System Logs	

SYSTEM LOGS

The System Logs area provides users with the ability to view and download messages generated by the **NEXUS-3 Series device** and the Aspect control engine. The System Logs area provides the following logs:

- Diagnostic Buffer provides kernel operating system output for the device. The information shown here is for diagnostic purposes and may be referenced during troubleshooting session with Cylon Controls.
- Remote Logging The Remote Logging page is used to allow or disallow centralized syslog messaging. All Aspect targets support the ability to send their log information to a centralized Aspect target or IT-supported syslog server.
- System Log contains information processed by the sub-level operating system outside of Aspect
- Update Log- shows any recent YUM updates in the system.

DIAGNOSTIC BUFFER

The Diagnostic Buffer provides diagnostic information regarding the **NEXUS-3 Series device** hardware and OS details.

The cost of the statement of		100
S Aspect Control Panel	Diagnostic Buffer	-
🖹 😁 Instance 1		
	View the output of kernel's diagnostic buffer	
🕀 🛅 Users and Groups	Download the schedule file huffer	
😟 🧰 Maverick	bownioad the output of the buller	
🖻 😋 Mobile	Taitisticing coroup subout spurset	
- A vStat	Initializing coroup subsys chuset	
E-Calendar Configuration	Introducing cycloby subsystepu Linux version 2.6 32-358.2.1 el6 x86.64 (morthuild@c6b8 have day centre ara) (acc version 4.4.7.20120313 (Red Hat 4.4.7-3) (CCC) \pm 1 SMD	
Instance Services	Wed Mar 13 00:26:49 UTC 2013	
- Persistence Manager	Command line: ro root=UUID=22da8038-b870-4e9b-baae-8862efeabc46 rd NO_LUKS rd NO_LVM rd NO_MD rd NO_DM_LANG=en_US_UTE-8	
Project Source	SYSFONT=latarcvrheb-sun16 KEYBOARDTYPE=pc KEYTABLE=us crashkernel=auto crashkernel=auto rhqb quiet 8250.nr uarts=6	
Project Source	KERNEL supported cpus:	
Project Removal	Intel GenuineIntel	
Aspect Control Engine Log	AMD AuthenticAMD	
Clicense Item Status	Centaur CentaurHauls	
Project Thread Status	BIOS-provided physical RAM map:	
🗄 🚞 Instance 2	BIOS-e820: 00000000000000 - 0000000009fc00 (usable)	
🗄 🧰 Database Management	BIOS-e820: 0000000009fc00 - 0000000000a0000 (reserved)	
🗄 🚞 Licensing	BIOS-e820: 00000000000000 - 00000000100000 (reserved)	
🗄 🚞 Modem Configuration	BIOS-e820: 00000000100000 - 00000007f6a0000 (usable)	
🗄 👝 Communication Setup	BIOS-e820: 00000007f6a0000 - 00000007f6ae000 (ACPI data)	
🗄 🧰 Simple Mobile Web Configuration	BIOS-6820: 000000007/6ae000 - 000000007/6e0000 (ACPI NVS)	
🕂 🧰 System Administration	BIOS-8820: 00000000/76600000 - 00000000/7/00000 (reserved)	
E System Logs	BIOS-820: 000000001e000000 - 00000001000000 (reserved)	
	DMI present	
Remote Logging	SMBIOS version 2.6 @ 0xFAAA0	
System Log	DMI: To Be Filled By Q.E.M. To Be Filled By Q.E.M./To be filled by Q.F.M., BIOS 080015 01/26/2010	
Dundato Log	AMI BIOS detected: BIOS may corrupt low RAM, working around it.	
I UDdate L00	The boo detected bloo hely conspired hours a constant	100.00

REMOTE LOGGING

The Remote Logging page is used to allow or disallow centralized syslog messaging. All Aspect targets support the ability to send their log information to a centralized Aspect target or IT-supported syslog server.

Aspect Control Panel	Remote Syslog Listener
🗄 😋 Instance 1	
Application	Use the form to allow or disallow incoming remote syslog messages.
🗉 🧰 Users and Groups	
🗉 🦳 Maverick	* Remote Syslog Messages Allowed
🖻 😋 Mobile	C Remote Syslog Messages Disallowed
Stat	
🗉 🗀 Calendar Configuration	Save
- O Instance Services	
Persistence Manager	
- Project Source	
🚽 Project Removal	
Aspect Control Engine Log	
- de license Item Status	
Q Project Thread Status	
Instance 2	
🗄 🦳 Database Management	
🗄 🧰 Licensing	
🗄 🧰 Modem Configuration	

SYSTEM LOG

The System Log area provides complete syslog information for the hardware. Information provided within this log includes boot up details and lower level information regarding runtime of the system.

UPDATE LOG

The update log shows all recent updates to the operating system.

		_
SAspect Control Panel	Update Log	-
Instance 1 Application	View Package Undate Logs	
Application Figure 2 Application Figure 2	view Package Opdate Logs	
Maverick	yum.log Change	
🖨 🦰 Mobile		-
- 🔒 vStat	Developed the undetailer	
🗄 🧰 Calendar Configuration	pownoad the update log	
Instance Services Dersistence Manager	Apr 17 05:17:56 Updated: krb5-libs-1.10.3-10.el6_4.2.x86_64	
Project Source	Apr 06 04:50:35 Updated: coreutils-8 4-19 el6 -4-1 x86 -64	
🚽 Project Removal		
Aspect Control Engine Log	Apr 06 04:50:31 Updated: coreutiis-iibs-8.4-19.el6_4.1.X86_64	
- de License Item Status	Mar 29 05:06:12 Updated: 32:bind-utils-9.8.2-0.17.rc1.el6_4.4.x86_64	
Project Thread Status	Mar 29 05:06:12 Updated: 32:bind-libs-9.8.2-0.17.rc1.el6_4.4.x86_64	
Database Management	Mar 28 12:03:55 Updated; tzdata-2013b-1.el6.noarch	
🗄 🛅 Licensing	Mar 28 12:03:44 Undated: tzdata-java-2013h-1 el6 noarch	
🗈 🛅 Modem Configuration		
Communication Setup	Mar 28 12:03:40 Updated: pixman-0.26.2-5.elo_4.x80_64	
Simple Mobile Web Configuration	Mar 28 12:03:40 Updated: 4:perl-Time-HiRes-1.9721-130.el6_4.x86_64	
System Administration	Mar 28 12:03:40 Updated: 1:perl-Digest-SHA-5.47-130.el6_4.x86_64	
Diagnostic Buffer	Mar 28 12:03:40 Updated: perl-Archive-Tar-1.58-130.el6_4.x86_64	
	Mar 28 12:03:39 Updated: 1:perl-Package-Constants-0.02-130.el6 4.x86 64	
System Log		
	Pial 20 12:03:39 0ptated. 1.per-ro-zilo-1.09-10-4.80_04	
	Mar 28 12:03:39 Updated: perl-Compress-Zlib-2.020-130.el6_4.x86_64	
	Mar 20 12/02/20 Undeted, and IO Comments 7% 2 020 120 dc 4/05 C4	100

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