

Digital Watchdog Servers SETUP GUIDE Rev7

Setup Guide for:

Digital Watchdog BJ-1x / BJ2x / DX Series servers

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SOFTWARE SETUP INSTRUCTIONS APPLY TO:

123-210	DW BJP1U Server inc Linux & Spectrum on SSD no HDD
123-210-6	DW BJP1U Server inc Linux & Spectrum inc 6TB HDD
123-211	DW BJP2U Server inc Linux & Spectrum on SSD no HDD
123-211-6	DW BJP2U Server inc Linux & Spectrum inc 6TB HDD
123-212-NX	DW BJ-DX1 Server inc Linux & NX - no HDD
123-212-SP	DW BJ-DX1 Server inc Linux & Spectrum - no HDD
123-213-SP	DW BJ-DX3 Server inc Linux & Spectrum - no HDD
123-215-SP	DW BJ-DX5 Server inc Linux & Spectrum - no HDD
123-217-SP	DW BJ-DX7 Server inc Linux & Spectrum - no HDD

HARD DRIVE INSTALLATION INSTRUCTIONS APPLY TO:

123-212-NX	DW BJ-DX1 Server inc Linux & NX - no HDD
123-212-SP	DW BJ-DX1 Server inc Linux & Spectrum - no HDD
123-213-SP	DW BJ-DX3 Server inc Linux & Spectrum - no HDD
123-215-SP	DW BJ-DX5 Server inc Linux & Spectrum - no HDD
123-217-SP	DW BJ-DX7 Server inc Linux & Spectrum - no HDD



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INFORMATION AND WARNINGS

IMPORTANT NOTE

DO NOT UPDATE THE LINUX OPERATING SYSTEM

Your NX and SPECTRUM recording licenses are linked to the server's OS and hardware ID. Upgrading the OS may cause your licenses to stop working.

IMPORTANT NOTE

NX OR SPECTRUM CLIENT MUST NOT BE INSTALLED ON THE SERVER

Always run the Client app on a separate PC/laptop.



NX Client User Guide



SPECTRUM User Guide



NX Client Download



SPECTRUM Client Download



NX Server / SPECTRUM Server

The latest NX Server or DW SPECTRUM Server software is pre-installed on this machine.

NX Client / SPECTRUM Client

A pc/laptop connected to the same network as this server needs to have the NX Client or SPECTRUM Client software installed for you to complete the setup of NX Witness or DW SPECTRUM and to view and playback footage. DO NOT INSTALL CLIENT SOFTWARE ON THIS SERVER.

NETWORK

This server is currently set for DHCP. Your router will assign a IP address which will be automatically discovered once you run NX or SPECTRUM Client software on a separate PC.

MONITOR

A permanent monitor is only required if you wish to setup and configure the server locally rather than via NX or Spectrum client over the network.

HARD DRIVE/S

DX Servers support up to 2 x 20TB hard drives (not supplied). Once installed, hard drives must be mounted and enabled in NX or SPECTRUM server software.

ADMIN

DEFAULT CREDENTIALS FOR THE SERVER OS.

Username: nessvms Password: Ness1234 (capital 'N')

VMS LICENSES

NX and SPECTRUM recording licences are sold separately.

Licences are easy to order by contacting Ness Sales sales@ness.com.au or order online https://ness.com.au

Activating licence keys is an easy process within NX or SPECTRUM client software.

Note: Use NX licences on NX server and Spectrum licences on Spectrum server. The licences are not inter-compatible.

SUPPORT

If required phone Ness Tech Support on 1300 551 991 during business hours or email techsupport@ness.com.au



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THE INSTRUCTIONS ON THIS PAGE APPLY TO THE FOLLOWING MODELS ONLY:

123-212-NX	DW BJ-DX1 Server inc Linux & NX - no HDD
123-212-SP	DW BJ-DX1 Server inc Linux & Spectrum - no HDD
123-213-SP	DW BJ-DX3 Server inc Linux & Spectrum - no HDD
123-215-SP	DW BJ-DX5 Server inc Linux & Spectrum - no HDD
123-217-SP	DW BJ-DX7 Server inc Linux & Spectrum - no HDD

HARD DRIVE INSTALLATION

DX Servers are supplied without hard drives allowing you to install storage of your choice. Supports up to 2 x 3.5" SATA, 20TB each max.

At least one hard drive is required to be installed (in addition to the factory fitted SSD).

The physical installation of hard drives is the same as installation in a PC.

- Install a hard drive in the removable tray and secure with HDD screws.
- An optional second drive can be installed in the bottom tray. Secure by closing the hinged flap.
- Connect HDD power and SATA cables.
- Follow instructions on the following pages for enabling (mounting) the drives in the OS.

Note, the SSD containing the operating system is factory fitted to the bottom of the removable HDD tray. The SSD is pre-loaded with Linux OS and Spectrum (or NX) server software.





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THE INSTRUCTIONS ON THE FOLLOWING PAGES APPLY TO ALL DW SERVERS

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MOUNTING (ENABLING) A NEW DRIVE

You can run the Linux COCKPIT configuration utility either locally by connecting a monitor, keyboard and mouse to the server or via the network using NX or Spectrum Client on a separate PC/Laptop.

SETUP VIA NETWORK (typical method): Install NX Client or Spectrum Client on a separate PC/Laptop running on the same network. Client will automatically discover the server as 'New System'. Refer to the NX or Spectrum setup guides for full details on completing setup via Client. Note: CLIENT must not be installed on the server.

LOCAL SETUP: Follow the steps below.

MOUNTING A NEW DRIVE

Step 1: Type localhost:9090 in your browser.

Refer to the default username and password on page 3.

Ubuntu 22.04.4 LTS	🕄 Ubuntu
User name	
nessvms	
Password	11
	• K
Other options	
Log in	
Server: NessVMS Log in with your server user account.	

Once logged in, click "Limited access" and confirm the password to enable administrative access.

nessvms@ NessVMS-		Limited access	🧿 Help 🔻	🔅 Session 👻
Q Search	e Web console is running in limited access mode.			
System	NessVMS- (NessVMS) running Ubuntu 22.04.4 LTS			
Overview				

Go ahead and Authenticate.

Switch to admi	nistrative access	×
Password for nessvms:		
Authenticate	Cancel	

Go to Step 2 to mount drives.



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Step 2: Click into the Storage menu

UBUNTU								🔒 Ur	nlocked 💄 NessVMSTest 🗸
	🗏 NessVMS-	Hardware	Intel Corporation	% of 4 CPU col	res				
23	System	Asset Tag	123456789	50					
-	Logs	Machine ID	1fafd2d4132e4c5f9	0					M
6	Storage	Operating System	Ubuntu 18.04.6 LTS		15:05	15:06	15:07	15:08	15:09
	Staruge	¥	Bug Fix Updates Av	GIB Memory					
	Networking	Secure Shell Keys	Show fingerprints	3					
	Accounts	Domain	loin Domain	2					
	Services	System Time	2023-03-24 15:09	1					
		Power Options	Restart ~	0	15:05	15:06	15:07	15:08	15:09
	Terminal	Performance Profile	none	MiB/s Disk I/O					
				16					
				12					
				4					
				0	15:05	15:06	15:07	15:08	15:09
				Mbps Network Tra	iffic				
				120					
				80					Ň
				40					
				0	15:05	15:06	15:07	15:08	15:09

Step 3: Select the drive you wish to mount. So long as the OS can see it, you can see it here.

UBUNTU									🔒 Unlocked 💄 NessVMSTest
	RessVMS-	KiB/s Reading			MiB/s Writing			RAI	D Devices
	System	96 64			96 64				No storage set up as RAID
	Logs	32			32			Driv	ves
	Storage Networking	15:05 15:06 Filesystems	15:07 15:08	15:09	15:05	15:06 15:07	15:08 15:09		WDC WD30EURX-63T0FY 2.73 TiB Hard Disk R: 0.00409 B/s W: 43.2 B/s
	Accounts	Name	Mount Point	Size				6	DA4064 (0x3ed93f1e)
	Services	/dev/loop0	/snap/gnome-42-2204/65				460 / 460 Mi	iB	58.2 GiB Removable Drive R: 0.001 B/s W: 572 B/s
	Terminal	/dev/loop1	/snap/snapd/18357				49.9 / 49.9 M	В	
		/dev/loop10	/snap/core18/2708				55.6 / 55.6 M	Oth	er Devices

nessvms@ NessVMS-4e75 ▼	Administrative access 3	Help 🔹 🏟 Session 👻
Q , Search	Storage > WDC WD30PURX-78P6ZY0 (WD-WCC4N2PHIRZI)	
System		
Overview	Drive	
Logs	Model WDC WD30PURX-78P6ZY0	
Storage	Firmware version 80.00A80	
Networking	World wide name (0x50014ee20e16c715) Highlight and copy the World Wide Name	
Accounts	Capacity 2.73 TiB, 3.00 TB, 3000592982016 bytes	
Services	Assessment Disk is OK(27.0° C / 80.6° F)	
	Device file /dev/sda	
Tools		
Applications	Content	Create partition table
Software Updates		
Terminal	/dev/sda Unrecognized data	2.73 TB Format

Step 4: Under 'Content' expand the 'File System' > Click Format



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Step 5.

(a) Give the drive a name.

(b) Tick Custom mount options and enter nosuid, nodev, nofail, noatime

(c) In the Mount Point field, enter /mnt/wwn- and paste in the World Wide Name. *Hint, to avoid typos, paste in the World Wide Name copied at the previous step. Make sure there are no spaces in the World Wide Name including at the end of the line.*Leave all other settings as default.

(d) Click 'Format'.

nessvms@ NessVMS-4e75			Administrative access	🕐 Help 🔹
Q Search	Storage > WDC WD30PUR>	2-64AKYY0 (WD-WX62D22F)	SKENI	_
System		🛕 Format /dev	v/sda1	
Overview	Drive	Name	(a)	- 88
Logs	Model WD0	Туре	EXT4	•
Storage	Firmware version 80.0	Overwrite	 Overwrite existing data with zeros (slower) 	- 88
Networking	Serial number WD- World wide name 0x50	Mount point (C)	/mnt/wwn- PASTE THE WORLD WIDE NAME HERE	- 8
Accounts	Capacity 2.73	Mount options	Mount now	- 88
Services	Assessment Disk	i	Never mount at boot ③ Custom mount options	- 88
Tools	Device file /dev	(d)	nosuid,nodev,nofail,noatime	- 8
Applications	Partitions	Encryption	No encryption	 ✓ Creat
Software Updates 🛛 🕕		Eormat Canc	a on a storage device.	
Terminal	> /dev/sda1		cı	TiB

Spectrum Recording Licences - Sold Separately

DW Spectrum Recording Licence - Single
DW Spectrum Recording Licence - Group of 4
DW Spectrum Recording Licence - Group of 10
DW Spectrum Recording Licence - Group of 20
DW Spectrum Recording Licence - Group of 50
DW Spectrum Recording Licence - Group of 100

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