

Kako do vlastitog oblaka?



Open Media Vault [1]je NAS softver baziran na Debian Linuxu, rješenje za spremanje većih količina podataka za kućne korisnike i manje urede, ustanove. Podržava standardne protokole kao štu su NFS, Samba, ftp, ssh, rsync itd. Međutim sistemcima bi mogli biti zanimljivi pluginovi kao što su **owncloud** sa multimedijalnom podrškom ili autentikacija korisnika iz LDAP imenika. S ovim dodacima OMV može poslužiti za nešto više od NAS rješenja.

Za ovaj test je korišten stariji PC hardware sa "low cost" hard diskovima. Za spajanje 2 x 2 TB SATA diskova nove generacije dodan je PCI 2 X SATA kontroler.

Osnovni OMV sustav zahtijeva minimalno 2 GB diskovnog prostora, za što smo iskoristili stari 80 GB IDE disk te minimalno 1 GB radne memorije. Minimalni zahtjevi su bili zadovoljeni moglo se krenuti sa testiranjem. Instalirao sam zadnje rasploživo izdanje Open Media Valut 0.5.0.24. Ovo izdanje vezano je za Debian Squeeze.

Proces instalacije nećemo posebno komentirati, nego dati ubrzani pregled razlika u odnosu na standardni Debian.





Odabir: Install Select a language -> English Select your location ->Other->Europe->Croatia Configure locales -> US Select a keyboard layout -> Croatian Configure the network -> "postavite statički IP ili pustite DHCP"

<Tab> moves; <Space> selects; <Enter> activates buttons

Ako koristimo lokalni DHCP bez DNS-a ostavlja se ponuđeni odabir, u protivnom zadajemo postavke.

	I [!] Configure the network	
Please enter	the hostname for this system.	
network. If y network admin you can make Hostname:	ou don't know what your hostname should be, consult y istrator. If you are setting up your own home network something up here.	Jour <,
openmediavaul		
<go back=""></go>	<continue></continue>	



[!] Configure the network

The domain	name i	s the	part of	your	Internet	address	s to t	he righ	it of
your host	name.	It is	often s	omethi	ing that	ends in	.com,	.net,	.edu,
or .org.	If you	are se	tting u	p a ho	ome netwo	ork, you	can m	nake	
something computers.	up, but	make	sure yo	u use	the same	e domain	name	on all	your

Domain name:

local

<Go Back>

<Continue>

<Tab> moves; <Space> selects; <Enter> activates buttons

Set up users and passwords-Root password Set up users and passwords-Re-enter to verify

Specifično je da u instalaciji OMV ne stvara običnog korisnika.

Za instalaciju OMV sistema uzmemo "sve u jedan" instalaciju na stari IDE disk sdc.



If you continue, the changes listed below will disks. Otherwise, you will be able to make fur	l be written to the rther changes manually.
The partition tables of the following devices SCSI1 (0,0,0) (sdc)	are changed:
The following partitions are going to be forma partition #1 of SCSI1 (0,0,0) (sdc) as exter partition #5 of SCSI1 (0,0,0) (sdc) as swap	atted: 4 D
Write the changes to disks?	
<mark><yes></yes></mark>	<no></no>

Nakon završenog particioniranja i instalacije sistema slijede odabiri:

Configure the package manager -> Croatia Configure the package manager-Debian archive mirror -> ftp.carnet.hr Configure the package manager-HTTP proxy information -> none

Slijedi još konfiguracija apt-a i instalacija GRUB loadera. Time je obavljena osnovna instalacija. Nakon restarta prvi puta se podiže Open media vault server.



Setting console screen modes. Skipping font and keymap setup (handled by console–setup). Setting up console font and keymap...done. INIT: Entering runlevel: 2 Using makefile–style concurrent boot in runlevel 2. Starting portmap daemon...Already running.. Starting NFS common utilities: statd. Starting watchdog keepalive daemon: wd_keepalive. Starting enhanced syslogd: rsyslogd. Starting daemon monitor: monit. Starting ACPI services.... Starting anac(h)ronistic cron: anacron. Starting web server: apache2. Starting system message bus: dbus. Starting periodic command scheduler: cron. Starting statistics collection and monitoring daemon: collectd. Starting Avahi mDNS/DNS–SD Daemon: avahi–daemon. Loading cpufreq kernel modules...done (none). CPUFreq Utilities: Setting conservative CPUFreq governor...disabled, governor no t available...done. Starting MD monitoring service: mdadm ——monitormdadm: No mail address or alert c ommand – not monitoring. Starting OpenMediaVault engine daemon: omv–engined. Stopping watchdog keepalive daemon...

Starting MD monitoring service: mdadm ——monitormdadm: No mail address or alert c ommand — not monitoring. failed! Starting OpenMediaVault engine daemon: omv–engined. Stopping watchdog keepalive daemon... Starting watchdog daemon.... OpenMediaVault 0.5.0.24 (Sardaukar) openmediavault tty1 Copyright (C) 2009–2013 by Volker Theile. All rights reserved.

To manage the system visit the OpenMediaVault web management interface via a web browser:

eth0: 192.168.5.156

The default web management interface administrator account has the username 'admin' and password 'openmediavault'. It is recommended that you change the password for this account via the web management interface or using the 'omv-firstaid' CLI command.

For more information regarding this appliance, please visit the web site: http://www.openmediavault.org

Ulogiramo se kao "root" sa lozinkom koju smo odabrali tokom instalacije, pokrenemo naredbu:

#omv-firstaid

Podesimo Web GUI parametre i Web GUI administratorsku lozinku.



The default web management interface administrator account has the username 'admin' and password 'openmediavault'. It is recommended that you change the password for this account via the web management interface or using the 'omv-firstaid' CLI command.

For more information regarding this appliance, please visit the web site: http://www.openmediavault.org

openmediavault login: admin Password:

Login incorrect openmediavault login: root Password: Linux openmediavault 2.6.32–5–486 #1 Fri May 10 08:01:28 UTC 2013 i686

The programs included with the Debian GNU/Linux system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law. root@openmediavault:~# omv_firstaid_

OpenMediaVault – Copyright (C) 2009–2013 by Volker Theile. All	rights reserved.
First aid 1 Configure network interface 2 Configure WebGUI 3 Change WebGUI administrator password 4 Restore configuration backup 5 Exit	
<0k>	

Na adresi 192.168.5.156 putem web browsera ulogiramo se u admin web sučelje podacima koje smo odabrali pokretanjem omv-firstaid naredbe.



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@ 192.168.5.156 > 😰 🔘 🖓 ā 🏠 OpenMediaVault ~ = --Diagnostics | System Information English • Certificates Overview Processes Status Cron Jobs Hostname openmediavalut Update Manager Version 0.5.30 (Sardaukar) Plugins AMD Sempron(tm) 2500+ Processor Storage Kernel Linux 2.6.32-5-486 Physical Disks System time Sun 19 Jan 2014 10:33:54 AM CET S.M.A.R.T. Uptime 2 days 15 hours 23 minutes 29 seconds S RAID Management 0.03, 0.01, 0.00 Load average Filesystems CPU usage 0% 🖃 🔚 Access Rights Management Memory usage 3% of 1.48 GiB User Group Shared Folders Services FTP FTP NFS Rsync SMB/CIFS SNMP >. SSH TFTP 5 Diagnostics System Information -🙆 🔻 🛛

U rubrici "storage" provjeravamo da li su fizički diskovi uredno prepoznati.



OpenMediaVault

**	Storage Physical	Disks				
System	/ Edit 💧 Wipe	Q Scan				
General Settings	Device A	Model	Serial Number	Vendor	Capacity	
Date & Time	/dev/sda	WDC WD20EZRX-	WD-WMC4M07260	ATA	1.82 TiB	
Network	/dev/sdb	WDC WD20EZRX-	WD-WMC4M10146	ATA	1.82 TiB	
Notification	/dev/sdc	HDS728080PLAT2	PED202S2SMZB0H	ATA	76.69 GiB	
Power Management						
Certificates						
Cron Jobs						
Update Manager						
Plugins						
Storage						
 Physical Disks 						
S.M.A.R.T.						
RAID Management						
Filesystems						
Access Rights Management						
- User						
Group						
Shared Folders						
Services						
FTP						
- E NFS						
Rsync						
SMB/CIFS						
SNMP						
SSH						
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Diagnostics						
System Information						
System Logs						
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Information						
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	Page	1 of 1	Displaying it	ems 1 - 3 of 3		

Za ovaj test formiramo RAID1 kroz web sučelje. Odabiremo Storage->RAID Management-> Create, uredimo postavke kao na slici i odaberemo "Save".



Create Create RAID de Name Level Devices	BAZA Mirror Stripe Mirror	State	Level	Capacity	Devices
Create RAID de Name Level Devices	Device ★ evice BAZA Mirror Stripe Mirror	State	Level	Capacity	Devices
Create RAID de Name Level Devices	BAZA Mirror Stripe Mirror				×
Name Level Devices	BAZA Mirror Stripe Mirror				
Name Level Devices	BAZA Mirror Stripe Mirror				
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	RAID 10				
	RAID 5				
	RAID 6				
				<u></u>	
		Save	Cancel		
	o/dev/sda	Označimo 2 Ti	B diskove /dev/sda	i /dev/sdb upišemo ime	i dodamo "Mirror
L					
		o /dev/sda	o/dev/sdb	o /dev/sdb	o/dev/sda

Prije početka formiranja RAID polja višestruko se ponavlja "Yes" "Apply" pitanje. Treba odgovoriti potvrdno na sve.

	44	Storage RAID M	anagement					English	~ = -
Q Certificates		+ Create 50	Srow	III Detail X De					
Cron Jobs		Name	Device +	State	Lovel	Canachy	Devices		
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Plugins		Create RAID	device						
🖃 🚞 Storage		Name	BAZA						
Physical Disks		Level	Mirror				v		
S.M.A.R.T.			Confirmat	tion		×			
RAID Management		Devices				Sen	al Number		
Filesystems				Do you really wan	t to create the RA	ID device?			
E Access Rights Management									
- <u>1</u> User				Yes	No				
Group									
Shared Folders									
🖃 🚞 Services									
CO FTP				Save	Cancel				
NFS									
Rsync									
SMB/CIFS									
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D. SSH									
TFTP									
Diagnostics		Id d Page	0 del b	No items to	o display				
	Ŧ	it t Page	0.01	NO ILENTS D	o orapiny				



		Storage RAID Ma	inagement					English	× = -
Certificates	*	A The configura	ation has been chan	ged. You must apply t	he changes in	order for them to take e	effect.		🖌 Apply
Update Manager		+ Create 53	irow 💼 Recover						
A Plugins		Name	Device -	State	Level	Capacity	Devices		
Storage		OMV:BAZA	/dev/md0	active, resyncing (0.0% (659712/19535	Mirror	1.82 TiB	/dev/sda /dev/sdb		
RAID Management		Inform	ation) Please wait u	ntil the RAID has be	en initialized	before creating a file	esystem.		
Access Rights Management	11			0	К				
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- X System Information	¥	14 4 Page	1 of 1 >	Displaying	items 1 - 1 of 1				

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the Plugins		Name	Device -	State	Level	Capacity	Devices		
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S.M.A.R.T. RAID Management			Confirmat	tion Do you really wan	t to apply the	configuration?			
Access Rights Management	111			Yes	No				
Services									
	Ŧ	14 4 Page	1 of1 >	Displaying	items 1 - 1 of 1	L			

Proces formiranja polja može potrajati i desetak sati.



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Cron Jobs		Name	Device +	State	Level	Capacity	Devices		
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Plugins				(0.1%)			/dev/sdb		
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SNMP									
SSH									
TFTP									
Diagnostics		N A Page	1 of 1	Displaying	items 1 - 1 of 1				
System Information	*	Le le Fage		- Dopaying	1011				

Nakon što formiranje završi situacija u RAID managmentu izgleda kao na slici.

		diaVau	ult.						
		Storage RAID	Management					English	· =·
Q Certificates		+ Create 52	Grow B Recove	r 🔚 Detail 💥					
Cron Jobs		Name	Device +	State	Level	Capacity	Devices		
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S.M.A.R.T.									
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Filesystems									
Access Rights Management									
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Rsync									
SMB/CIFS									
SNMP									
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TETP .									
Diagnostics				ul di mun					
- X System Information	-	Page	e 1 of 1 P	PI at Displayi	ng items 1 - 1 of 1				

Prelazi se sa na slijedeći korak kreiranja datotečnog sustava. Pokrenemo preko Filesystems->Create odabriranje uređaja Software RAID OMV :BAZA dodamo LABEL , EXT4 filesystem. Spremaju se postavke i potvrđuju se upozorenja o brisanju sadržaja diska sve dok ne krene proces formatiranja.



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Access Rights Management					THE VI	oume laber for the f	esystem.		100		
- L User	-		Filesys	tem	EXT	4			~		
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NFS											
Rsync											
SMB/CIFS											
SNMP Could											
D_ SSH											
System Information	¥		Page	0 of 0		🖂 🖓 No items	to display				

		diaVc		<u>†</u>						
	-	Storage Fi	lesyste	ms					English	~ = -
Certificates		+ Create	52 1	estze 11 Quota	► Mount 📥 Ur	nmount 🗙 Del				
Cron Jobs Dpdate Manager		Device		Label	Filesystem	Capacity	Available	Used	Mounted	Status
Plugins										
Storage		C	reate f	ilesystem				×		
S.M.A.R.T.		Confirmatio	m					×		
RAID Management Filesystems Access Rights Management		٢	Do you ilesys	really want to for tem creation may t	mat this device? A take some time.	ll data on it will	be deleted. Please no	te that the		
User					Yes	No				
Shared Folders			-		Save	Cancel				
G The Services										
- CO FTP										
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SNMP										
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System Information	Ψ	14 4 1	Page	0 010 P P	No items t	o display				



	ec	dia V	aul	† ''								
	46	Storage	torage Filesystems English 🗸 🚍									
Q Certificates	-	- Crea	Create 55 Restre It Ounts In Mount A Unmount X Delete									
O Cron Jobs		Device		Label		Eilesystem	Canacity	Available	11	ind.	Mounted	Status
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- Plugins		/dev/md	0	BALA		2014	rva.	nva	1	ra	ND	™r Initializing
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Physical Disks			Create f	ilesystem					×			
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RAID Management			Device		Sommer (Nib Ont. Brack previnter, failer, r.or fib)							
Filesystems			Label		BAZA							
🖃 🚞 Access Rights Management					The volume label fill the country							
- <u>1</u> User			Filesys	dem EXT4								
- It Group				Save Cassel								
Shared Folders			Carter									
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Diagnostics			Deer	1 011		1.01 mint	a home to tota					
System Information	-	14 4	Page	1 0/1	1	Displayin	g werns 1 - 1 of 1					

Upozorenja sa slijedeće slike slobodno zanemarite iako djeluju katastrofično. Vidjet ćemo u statusnoj traci da formatiranje napreduje. Formatiranje može potrajati, ovisno o veličini diska.

	46	Storage Fi	orage Filesystems English 🛩								
Q Certificates		+ Create 50 Resize 11 Quota > Mount 🔺 Unmount 💥 Delete									
Cron Jobs		Device		Label	Filesystem	Canacity	Available	Used	Mounted	Status	
Update Manager		/deu/md0		BAZA	evit	n/a	nia	n/a	No	- Me	
Plugins		naevinnao		Line n	0.00	10.01	1010	10.0	140	w ^c Initializing	
🖃 🏧 Storage											
Physical Disks		C	Create filesystem								
S.M.A.R.T.			Device	Error			×	v			
RAID Management			abal		or has occured						
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Access Rights Management			Jane	communication fr	ilura						
User		Ľ	-nesys	communication le	Indire						
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TFTP											
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System Information	*		Page 1	of1 👂 🕅	Displaying) items 1 - 1 of 1					
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Nakon što se pojavi status "Online" u krajnje desnom stupcu možemo pristupiti montiranju uređaja sa "Mount" opcijom iz alatne trake sa obaveznim "Apply" konfiguracije obično žuto naznačenim.









	44	Storage Filesyste	ms					English	× =		
Certificates	*	🛕 The configuration has been changed. You must apply the changes in order for them to take effect.									
Update Manager		+ Create 53 P	Resize 🔣 Qi	uota 🕨 Mount 📥	Unmount 🗙 Dek	ete					
Plugins		Device	Label	Filesystem	Capacity	Available	Used	Mounted	Status		
G Storage		/dev/md0	BAZA	ext4	1.79 TiB	1.79 TiB	195.33 MiB	Yes	Online		
SM.A.R.T. RAID Management Filesystems Access Rights Management User Shared Folders FTP NFS Rsync SMB/CIFS SMB/CIFS SSH TFTP Diagnostics			Conf	Irmation Do you really w Yes	nant to apply the co	ix onfiguration?					
■ Diagnostics System Information	¥	I Page	1 of 1	🕨 🕅 🧬 Displayi	ing items 1 - 1 of 1						

Napokon je završena uvodna faza pripreme Open Media Vault servera. Nastavak slijedi. Do čitanja.:)

Nastavak: Konfiguracija oblaka [2]

pet, 2014-02-21 13:28 - Goran Šljivić**Kuharice:** Linux [3] Kategorije: <u>Software</u> [4] Vote: 5

Vaša ocjena: Nema Average: 5 (1 vote)

Source URL: https://sysportal.carnet.hr./node/1356

Links

- [1] http://www.openmediavault.org
- [2] https://sysportal.carnet.hr./node/1357
- [3] https://sysportal.carnet.hr./taxonomy/term/17
- [4] https://sysportal.carnet.hr./taxonomy/term/25