

# vpsAdmin, 2009-2019

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- aither na IRC freenode.net #vpsfree
- Členem od září 2009, aktivní od roku 2010
- Činnosti
  - Vývoj a údržba vpsAdminu
  - Řešení odstávek/výpadků
  - podpora@vpsfree.cz

Username: Password: 

version: 3.0.0 dev.c42c1692

Status **About vpsAdmin**

## Overview

Event Log	
[2018-11-01 09:50]	Cloning production VPS to staging with vpsAdminOS is now <a href="#">possible</a>
[2018-10-31 09:50]	Fedora 29 available in staging
[2018-10-14 02:00]	Added node17.prg, node18.prg and node4.brq
[2018-07-23 10:00]	Added Alpine Linux 3.8 and Devuan 2.0
[2018-05-20 18:20]	Staging environment for vpsAdminOS is now open: you can <a href="#">start testing VPS on the new system</a> (en)

[View all](#)

## Cluster statistics

Members total	VPS total	IPv4 left
1330	1943	249

	Node	VPS	CPU	Kernel		Node	VPS	CPU	Kernel
	vpsadmin.prg	0	7.47 %	042stab134.46		node1.prg	0	0.00 %	042stab112.15
	node2.prg	83	85.12 %	042stab134.46		node3.prg	83	41.81 %	042stab134.46
	node4.prg	66	51.19 %	042stab134.46		node5.prg	82	74.78 %	042stab134.46
	node6.prg	80	40.59 %	042stab134.46		node7.prg	64	21.22 %	042stab134.46
	node8.prg	85	40.14 %	042stab134.46		node9.prg	87	65.31 %	042stab134.46
	node10.prg	84	45.59 %	042stab134.46		node11.prg	82	43.07 %	042stab134.46
	node12.prg	81	60.37 %	042stab134.46		node13.prg	82	34.28 %	042stab134.46
	node14.prg	96	94.58 %	042stab134.46		node15.prg	70	32.24 %	042stab134.46
	node16.prg	0	0.00 %	4.14.34		node17.prg	59	56.39 %	042stab134.46
	node18.prg	58	29.72 %	042stab134.46					

Overview

[Outages](#)

Help

[Kam hášit chyby?](#)

Support vpsFree.cz

**Support mail:** [podpora@vpsfree.cz](mailto:podpora@vpsfree.cz)

Links

IRC

[chat.freenode.net#vpsfree](#)

Mailing lists

<https://lists.vpsfree.cz/>

Knowledge base

Česky: <https://kb.vpsfree.cz/>English: <https://kb.vpsfree.org/>

Sysadmins contacts

**Jakub Skokan**IRC: [alther](#) at [#vpsfree](#)

Phone: +420 775 386 453

**Pavel Šnajdr** (main admin)IRC: [snajpa](#) at [#vpsfree](#)

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- Databáze členů a plateb
- Jednoduchá správa VPS
- Diskové kvóty (ext4), limity RAM
- Správa IP adres, počítání přenesených dat
  
- Implementováno v PHP
- Vykonávání transakcí pomocí cronu

- cron nahrazen trvale běžícím skriptem v PHP
- Zálohování pomocí rdiff-backup
- Obnova a přístup jen přes podporu

- Zálohování z ext4 na ZFS
  - rsync + snapshot na backuperu
- Zálohy připojeny do /vpsadmin\_backuper

## Manage Backups

### VPS 101 [vps]

Date and time	Restore	Download
2012-11-13 08:19	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 18:40	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 18:47	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 19:16	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 19:32	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:16	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:21	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:24	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:29	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:30	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-13 20:35	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-18 16:56	<input type="radio"/>	<a href="#">[Download]</a>
2012-11-18 16:59	<input type="radio"/>	<a href="#">[Download]</a>
Current VPS state	-	<a href="#">[Download]</a>
Make a full backup before restore?	<input type="checkbox"/>	
	<input type="button" value="Restore"/>	

## Remote Console for VPS #101

```
Welcome to vpsFree.cz Remote Console
Debian GNU/Linux 6.0 vps tty0

vps login:
Debian GNU/Linux 6.0 vps tty0

vps login: root
Password:
Last login: Thu Nov 29 14:57:49 CET 2012 on tty0
Linux vps 2.6.32-042stab062.2 #1 SMP Wed Oct 10 18:28:35 MSK 2012 x86_64

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.
-bash: no job control in this shell
root@vps:~# w
 15:12:19 up 4 days, 34 min,  1 user,  load average: 0.00, 0.00, 0.00
USER  TTY      FROM          LOGIN@   IDLE   JCPU   PCPU WHAT
root  tty0          15:12    0.00s   0.00s  0.00s -bash
root@vps:~#
```

### Manage VPS

[Start](#)

[Stop](#)

[Restart](#)

### Transaction log [last 10]

#ID	HW	VPS	Action	
715	kvm1.dev0.prg	110	Restart	✓
714	kvm1.dev0.prg	110	DNS Server	✓
713	kvm1.dev0.prg	110	Limits	✓
712	kvm1.dev0.prg	110	Limits	✓
711	kvm1.dev0.prg	110	Limits	✓
710	kvm1.dev0.prg	110	Reinstall	✓
709	kvm1.dev0.prg	122	Start	✓
708	kvm1.dev0.prg	122	Stop	✓
707	kvm1.dev0.prg	110	Start	✓
706	kvm1.dev0.prg	110	Stop	✓



- vpsAdmin
  - Démon běžící na všech nodech
  - Paralelní vykonávání příkazů
  - Ruby

```
[root@node2.prg.vpsfree.cz]
~ # vpsadminctl status
Version: 1.4.0
State: running
Uptime: 6 days, 22:56:19
Consoles: 0
Queue size: 0
Queues:
  general  0 / 6 (+6)
  storage  0 / 2 (+2)
  network  0 / 1 (+0)
  vps      0 / 4 (+4)
  zfs_send 0 / 1 (+0)
  mail     0 / 2 (+2)
```

- Playground VPS
  - Klonování a swap
- NAS
  - Exporty a mounty
- Závislosti mezi transakcemi

- Kompletní přepis do Ruby
- [api.vpsfree.cz](http://api.vpsfree.cz)
  - REST
  - HaveAPI
  - Přesun aplikační logiky do API
  - vpsfreectl




# 2015 - Nový transakční systém

## Transaction log [last 10]

#ID	Object	Action	%	
<a href="#">2216374</a>	UserPayment <a href="#">23524</a>	Create	100 %	✓
<a href="#">2216373</a>	Dataset 1237	Alert	100 %	✓
<a href="#">2216372</a>	Dataset 4644	Snapshot	100 %	✓
<a href="#">2216371</a>	Dataset 2710	Alert	100 %	✓
<a href="#">2216370</a>	UserPayment <a href="#">23523</a>	Create	100 %	✓
<a href="#">2216369</a>	VPS <a href="#">12052</a>	Pubkey	100 %	✓
<a href="#">2216368</a>	UserPayment <a href="#">23522</a>	Create	100 %	✓
<a href="#">2216367</a>	UserPayment <a href="#">23521</a>	Create	100 %	✓
<a href="#">2216366</a>	VPS <a href="#">12842</a>	Stop	100 %	✓
<a href="#">2216365</a>	Dataset 7586	Alert	100 %	✓



# 2015 - Datasets, snapshoty, mouny, ZFS

## Datasets

#	Dataset	Reference quota	Used space	Referenced space	Available space	Mount			
<a href="#">6311</a>	7702	80 GiB	1.54 GiB	1.53 GiB	78.47 GiB	<a href="#">Mount</a>			

[Create a new dataset](#)

## Mounts

Dataset	Snapshot	Mountpoint	On mount fail	State	Expiration	Action		
1754	---	/mnt/nas	Mount later	Mounted	---	<a href="#">Disable</a>		








[Create a new mount](#)

## User #1754: Cluster resources

---

### Production

---

Resource	Value	Step size	Used	Free	
Memory	4 GiB	1 MiB	3 GiB	1 GiB	
Swap	none	1 MiB	none	none	
CPU	8	1	4	4	
Disk space	120 GiB	1 MiB	80 GiB	40 GiB	
IPv4 address	1	1	1	0	
IPv6 address	32	1	2	30	
Private IPv4 address	1	1	1	0	

# 2016 - Vzdálená konzole VPS v terminálu

```
[aither@orion:~]$ vpsfreectl vps remote_console 11326
Locating VPS.. VPS is on node1.stg, located in Staging.
Console router URL is https://console-prg.vpsfree.cz
Obtaining authentication token...
Connecting to remote console...
Press ENTER ESC . to exit
```

```
<<< Welcome to NixOS 18.09.git.0ac8eac (x86_64) - console >>>
```

Run `nixos-help` for the NixOS manual.

```
titan login: root
Password:
```

```
[root@titan:~]# w
 09:19:24 up 20 days, 14:47,  2 users,  load average: 0.02, 0.01, 0.00
USER      TTY      LOGIN@  IDLE   JCPU   PCPU WHAT
root      console  09:19   4.00s  0.03s  0.00s w
root      pts/4    09:16  36.00s  0.03s  0.03s -bash
```

```
[root@titan:~]# █
```

# 2016 - Stahování záloh v CLI

```
[aither@orion:~]$ vpsfreectl backup vps storage/backups/vps
```

```
(1) VPS #12128
```

```
(2) VPS #7702
```

```
Pick a dataset to backup: 1
```

```
Will download 14 snapshots:
```

```
@2019-02-07T00:00:10
```

```
@2019-02-08T00:00:17
```

```
@2019-02-09T00:00:43
```

```
@2019-02-10T00:00:27
```

```
@2019-02-11T00:00:45
```

```
@2019-02-12T00:00:50
```

```
@2019-02-13T00:00:18
```

```
@2019-02-14T00:00:28
```

```
@2019-02-15T00:00:17
```

```
@2019-02-16T00:00:48
```

```
@2019-02-17T00:00:36
```

```
@2019-02-18T00:01:10
```

```
@2019-02-19T00:00:19
```

```
@2019-02-20T00:00:36
```

```
Performing a full receive of @2019-02-07T00:00:10 to storage/backups/vps/0
```

```
The download is being prepared...
```

```
[ ] ETA: 00:14:18 Downloading ~0.9 GB: [=
```

```
] 3% 1084 kB/s
```



- Privátní IP adresy
- Nahrávání veřejných klíčů do VPS
- vpsfree.org

# 2017 - Automatické zpracování příchozích plateb

## Incoming payments

Limit:	<input type="text" value="25"/>
Offset:	<input type="text" value="0"/>
State:	<input type="text" value="queued"/> ▼
	<input type="button" value="Show"/>

DATE	AMOUNT	STATE	FROM	MESSAGE	VS	COMMENT	
2019-02-20	900.0 CZK	processed	4Sky a.s.	Faktura 2019-0141 - 4Sky	3597	4Sky a.s.	
2019-02-20	900.0 CZK	processed	PAVEL SLAMA ML.	VPS - 3 MESICE	1339	PAVEL SLAMA ML.	
2019-02-20	300.0 CZK	processed	JIRI MELNIKOV	CLENSKY PRISPEVEK	1884	JIRI MELNIKOV	
2019-02-20	300.0 CZK	processed	Tomáš Hujer	Platba příspěvku Tomas Hujer	269	Tomáš Hujer	
2019-02-20	300.0 CZK	processed	Gary Fibiger	VPSFREE garyfibiger	3410	Gary Fibiger	
2019-02-20	900.0 CZK	processed	Ondřej Kopr		2350	Ondřej Kopr	
2019-02-20	900.0 CZK	processed	Tomáš Jelínek	VPS	3462	Tomáš Jelínek	
2019-02-20	900.0 CZK	processed	Ružička Andrej,Bc.	Andrej Ruzicka	2410	Ružička Andrej,Bc.	

# 2017 - Integrace hlášení odstávek a výpadků

Date	Duration	Planned	State	Systems	Type	Reason	Users	VPS	
2019-02-15 13:52	180	✘	closed	Node backuper.prg	tbd	System reset	<u>1</u>	<u>0</u>	
2019-02-10 01:00	180	✔	closed	Node backuper.prg	maintenance	Move backuper to a new rack	<u>3</u>	<u>0</u>	
2019-02-10 01:00	60	✔	closed	Node node5.prg, Node node6.prg	restart	Install 10GE Network Card	<u>166</u>	<u>178</u>	
2019-01-17 04:00	60	✔	closed	Node node14.prg, Node node15.prg, Node node17.prg, Node node18.prg	restart	Kernel upgrade	<u>234</u>	<u>279</u>	
2019-01-17 03:00	60	✔	closed	Node node10.prg, Node node11.prg, Node node12.prg, Node node13.prg, Node node4.brq	restart	Kernel upgrade	<u>345</u>	<u>395</u>	
2019-01-17 02:00	60	✔	closed	Node node6.prg, Node node7.prg, Node node8.prg, Node node9.prg, Node node2.brq	restart	Kernel upgrade	<u>416</u>	<u>471</u>	
2019-01-17 01:00	60	✔	closed	Node node2.prg, Node node3.prg, Node node4.prg, Node node5.prg, Node node1.brq	restart	Kernel upgrade	<u>377</u>	<u>435</u>	
2019-01-16 08:09	60	✘	closed	Node node3.brq	reset	Fix broken kernel	<u>117</u>	<u>125</u>	

The logo for vpsAdminOS is displayed on a dark blue rectangular background. It features a white Greek letter lambda (λ) on the left, followed by the lowercase letters 'vps' in orange, and the uppercase letters 'AdminOS' in white. The 'AdminOS' part is in a sans-serif font, while 'vps' is in a bold, lowercase sans-serif font.

λ vpsAdminOS

# 2018 - Staging, zkušební provoz vpsAdminOS

```
osctl ct top - 10:07:48 realtime mode, load average 7.62, 7.63, 7.28
%CPU:  5.4 us,  6.4 sy,  0.0 ni, 88.0 id,  0.0 wa,  0.0 hi,  0.1 si
Memory: 251.9G total,  19.8G free, 232.1G used,  80.7G buff/cache
ARC:    125.9G c_max,  17.3G c,   17.3G size,  97.50 hitrate,  294 missed
L2ARC:  169.0G size,  81.7G asize,  1.70 hitrate,  289 missed
Containers: 193 total,  0 starting, 125 running,  0 stopping,  68 stopped
```

Container ID	CPU	Memory	Proc	BlkIO				Network			
				Read		Write		TX		RX	
				Bytes	IOPS	Bytes	IOPS	bps	pps	bps	pps
12164	106.8	3.7G	441	0	0	0	0	768	1	313	1
11738	53.4	4.2G	75	0	0	0	0	46	1	93	1
11984	35.6	935.2M	415	0	0	0	0	0	0	0	0
12399	29.3	1.0G	24	0	0	0	0	0	0	0	0
12464	28.3	7.1G	20	0	0	0	0	38	1	76	1
[host]	22.6	5.8G	0	59.5K	15	1.2M	18	0	0	0	0
10972	16.7	5.8G	639	0	0	0	0	0	0	0	0
10995	10.5	7.6G	413	0	0	0	0	0	0	0	0
12065	7.3	2.0G	776	0	0	0	0	0	0	0	0
11644	5.2	314.4M	454	0	0	0	0	1.6K	4	714	2
11024	4.2	695.2M	52	0	0	0	0	0	0	0	0
12634	4.2	3.6G	248	0	0	0	0	0	0	0	0
12395	4.2	789.8M	397	0	0	0	0	0	0	0	0
11143	4.2	5.0G	158	0	0	0	0	2.3K	28	8.4K	26
12042	3.1	4.3G	188	0	0	0	0	1.2K	5	765	9
12810	2.1	222.8M	244	0	0	0	0	0	0	0	0
Containers:	361.1	226.3G	21498	0	0	0	0	14.3K	98	16.3K	99
All:	383.7	232.1G	21498	59.5K	15	1.2M	18	14.3K	98	16.3K	99

Selected container: none

- Migrace VPS mezi OpenVZ a vpsAdminOS nody
- NAS
- Stabilizace
- Proces migrace produkčních VPS na vpsAdminOS

- Plovoucí IP
- Šifrování dat na disku
- Vyvažování nodů
- Clustering
- Export/import VPS
- Federace
- Fakturace
- Dočasné navyšování zdrojů
- Pay-as-you-go
- Reverzní DNS
- Integrace podpory