

Day 12 - Ubuntu Server 24.02 Installation

Obiettivi

- **Setup di Server SSH**
- **Vedere Log di Autenticazione**

Ubuntu Server

Procediamo con il deployment di un **Ubuntu Server**, configurato con le seguenti specifiche:



Optimized Cloud Compute - Dedicated CPU

Virtual machines for more demanding business apps, e.g. production websites, CI/CD, video transcoding, or larger databases.



Ubuntu

24.04 LTS x64



Toronto

Canada


Choose Plan

General Purpose ?

CPU Optimized ?

Memory Optimized ?

Storage Optimized ?

Name	Cores	Memory	Storage	Bandwidth	Price
 30 GB NVMe	1 vCPU	4 GB	30 GB NVMe	4 TB	\$30/month \$0.045/hour

Ubuntu Server

Anche in questo caso, mi collego all' **Ubuntu Server** tramite **SSH**, eseguo l'aggiornamento dei repository con i comandi ``apt-get update`` e ``apt-get upgrade``.

```
root@Linux-johndoe: ~  
Prova la nuova PowerShell multiplatforma https://aka.ms/pscore6  
PS C:\Windows\system32> ssh [redacted]  
The authenticity of host '[redacted]' can't be established.  
[redacted]  
* Support: https://ubuntu.com/pro  
System information as of Sun Sep 22 10:12:24 AM UTC 2024  
System load: 0.07      Processes: 132  
Usage of /: 24.8% of 22.88GB  Users logged in: 0  
Memory usage: 19%      IPv4 address for enp1s0: 155.138.129.165  
Swap usage: 0%  
Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
root@Linux-johndoe:~# apt-get update && apt-get upgrade
```

Ubuntu Server

Ora accediamo alla cartella dei log, e puntiamo il file auth.log.

Qui possiamo osservare i tentativi di autenticazione.

Per simulare dei tentativi, ho aperto un'altra shell dove ho intenzionalmente inserito delle password errate.

Windows PowerShell

Windows PowerShell

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Prova la nuova PowerShell multiplatforma <https://aka.ms/pscore6>

PS C:\Users\royve> ssh root@155.138.129.165

root@155.138.129.165:~# password:

password: [REDACTED]

[REDACTED]

publickey,password).

PS C:\Users\royve>

root@Linux-johndoe: ~

* Management: <https://landscape.canonical.com>
* Support: <https://ubuntu.com/pro>

System information as of Sun Sep 22 10:12:24 AM UTC 2024

System load:	0.07	Processes:	132
Usage of /:	24.8% of 22.88GB	Users logged in:	0
Memory usage:	19%	IPv4 address for enp1s0:	155.138.129.165
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applicable law.

root@Linux-johndoe:~# apt-get update && apt-get upgrade

Ubuntu Server

Col comando 'grep -i failed auth.log' possiamo filtrare tutte le entries che contengono la parola 'Failed' (-i ignora la 'Case Sensitivity').

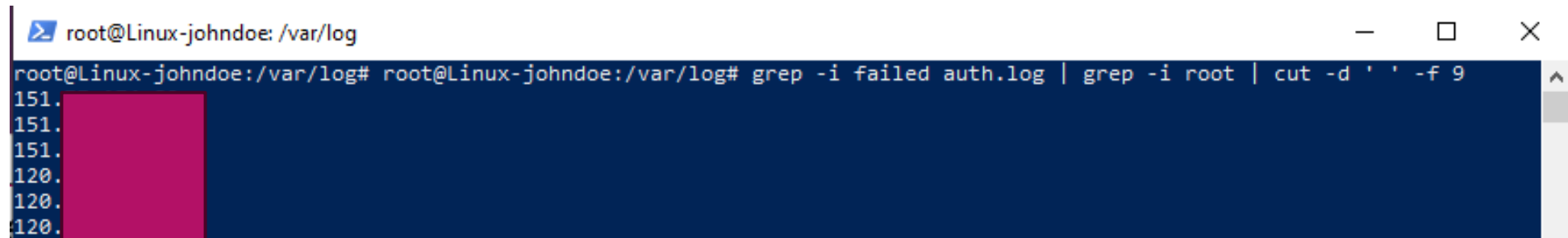
```
root@Linux-johndoe:/var/log# grep -i failed auth.log
2024-09-22T10:25:05.764976+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
2024-09-22T10:25:10.902327+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
2024-09-22T10:25:14.296620+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
```

Potrebbe non bastarci per cui andiamo oltre e tra i risultati che abbiamo ottenuto con failed filtriemo quelli per l'utente root col comando 'grep -i failed auth.log | grep -i root':

```
root@Linux-johndoe:/var/log# grep -i failed auth.log | grep -i root
2024-09-22T10:25:05.764976+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
2024-09-22T10:25:10.902327+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
2024-09-22T10:25:14.296620+00:00 Linux-johndoe sshd[9874]: Failed password for root from 151.101.1.1 port 57482 ssh2
2024-09-22T10:39:20.386180+00:00 Linux-johndoe sshd[9947]: Failed password for root from 120.255.255.255 port 50002 ssh2
2024-09-22T10:39:25.355017+00:00 Linux-johndoe sshd[9949]: Failed password for root from 120.255.255.255 port 50003 ssh2
```

Ubuntu Server

Fatto ciò, potrebbe essere utile conoscere solo l'IP delle macchine attaccanti. Per farlo, filtriamo ulteriormente l'output dell'ultimo comando utilizzando il comando 'cut':



```
root@Linux-johndoe: /var/log
root@Linux-johndoe:/var/log# root@Linux-johndoe:/var/log# grep -i failed auth.log | grep -i root | cut -d ' ' -f 9
151.
151.
151.
120.
120.
120.
```

- Con -d ' ' indichiamo di separare i campi all'interno dei record utilizzando lo spazio (' ') come delimitatore.
- Con -f 9 specifichiamo di mostrare solo il nono campo a partire da sinistra, che corrisponde agli IP delle macchine che stanno tentando di accedere al server.