Preparación de Servidor Linux Debian con Ansible

Este documento describe los pasos necesarios para preparar un servidor Linux Debian utilizando Ansible. El objetivo es automatizar la configuración inicial del sistema y aplicar una configuración base estándar.

Tareas realizadas por el playbook

- Cambio del nombre del servidor (hostname).
- Configuración de una dirección IP estática.
- Configuración de la zona horaria.
- Creación de un usuario local de aplicación.
- Instalación de herramientas básicas: htop, fail2ban, net-tools, unzip y rsync.

Requisitos previos

- Servidor controlador con Ansible instalado.
- Acceso SSH a los servidores Debian.
- Usuario con privilegios sudo en los servidores remotos.
- Debian 12 o Debian 13 instalado.

Pasos para la preparación del servidor

1. Crear un usuario de administración en el servidor Debian con el mismo nombre que el usuario utilizado en el servidor controlador de Ansible (por ejemplo: srvcansi).
2. Asegurar que dicho usuario tenga privilegios de sudo (root), en este caso agregue el grupo de AD en el archivo sudoers

```
 GNU nano 7.2                                                  /etc/sudoers
#Defaults:%sudo env_keep += "EDITOR"

# Completely harmless preservation of a user preference.
#Defaults:%sudo env_keep += "GREP_COLOR"

# While you shouldn't normally run git as root, you need to with etckeeper
#Defaults:%sudo env_keep += "GIT_AUTHOR_* GIT_COMMITTER_*"

# Per-user preferences; root won't have sensible values for them.
#Defaults:%sudo env_keep += "EMAIL DEBEMAIL DEBFULLNAME"

# "sudo scp" or "sudo rsync" should be able to use your SSH agent.
#Defaults:%sudo env_keep += "SSH_AGENT_PID SSH_AUTH_SOCK"

# Ditto for GPG agent
#Defaults:%sudo env_keep += "GPG_AGENT_INFO"

# Host alias specification

# User alias specification

# Cmnd alias specification

# User privilege specification
root     ALL=(ALL:ALL) ALL
ansible  ALL=(ALL:ALL) ALL
#%TEST\\sudoers ALL=(ALL:ALL) ALL

# Members of the admin group may gain root privileges
%admin ALL=(ALL) ALL
%sudoers ALL=(ALL:ALL) ALL

# Allow members of group sudo to execute any command
%sudo   ALL=(ALL:ALL) ALL

# See sudoers(5) for more information on "@include" directives:
```

3. Generar una clave SSH en el servidor controlador de Ansible si no existe.

```
srvcansi@lablansi:~$ ssh-keygen
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/srvcansi@test.local/.ssh/id_ed25519):
```

```
srvcansi@lablansi:~$ ssh-keygen
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/srvcansi@test.local/.ssh/id_ed25519):
/home/srvcansi@test.local/.ssh/id_ed25519 already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/srvcansi@test.local/.ssh/id_ed25519
Your public key has been saved in /home/srvcansi@test.local/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:wG1Twq3pCFK3FSaNLJTmI4qj02tHmN5Ib5lM8VkPR94 srvcansi@lablansi
The key's randomart image is:
+--[ED25519 256]--+
|    ..o.++o.     |
|     =.+++oo     |
|    + ooo+= .    |
|   o = .o=.o E   |
|.. = = =S+       |
|+ + o + . .      |
|.= B o           |
|o = O            |
| o.+             |
+----[SHA256]-----+
srvcansi@lablansi:~$
```

4. Copiar la clave pública SSH al servidor Debian utilizando ssh-copy-id.

```
srvcansi@lablansi:~$ ssh-copy-id 192.168.91.167
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/srvcansi@test.local/.ssh/id_ed25519.pub"
The authenticity of host '192.168.91.167 (192.168.91.167)' can't be established.
ED25519 key fingerprint is SHA256:BbXgvhQc47Yb+dnA7gnnRDVZv4lqFM3kXPHvos9XdT0.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already instal
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new
srvcansi@192.168.91.167's password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh '192.168.91.167'"
and check to make sure that only the key(s) you wanted were added.

srvcansi@lablansi:~$
```

5. Verificar el acceso SSH sin contraseña al servidor remoto.

```
srvcansi@lablansi:~$ ssh 192.168.91.167
Linux LABLDEBIAN01 6.12.43+deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.43-1 (2025-08-27) 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.
Last login: Thu Dec 25 19:15:30 2025 from 192.168.91.1
srvcansi@LABLDEBIAN01:~$
```

6. Agregar la IP o hostname del servidor Debian al archivo de inventario de Ansible.

```
 GNU nano 7.2                                                inventory.txt
[servidores_linux]
#192.168.91.129
#192.168.91.150
#192.168.91.145
#192.168.91.162
192.168.91.160
192.168.91.164
labldebian01.test.local

[servidores_windows]
```

7. Copiar o clonar el playbook Baseline_LNX_debian_v2.yml en el servidor controlador de Ansible.

```
srvcansi@lablansi:~$ ls
Baseline_LNX_debian_v2.yml  inventory.txt  Join_AD2.yml
srvcansi@lablansi:~$
```

8. Ejecutar el playbook utilizando el comando ansible-playbook con la opción --ask-become-pass.

```
srvcansi@lablansi:~$ ansible-playbook Baseline_LNX_debian_v2.yml --ask-become-pass
BECOME password:

PLAY [Configurar red, hostname y zona horaria en Debian 13] ********************************************************************************

TASK [Gathering Facts] *********************************************************************************************************************
[WARNING]: Platform linux on host labldebian01.test.local is using the discovered Python interpreter at /usr/bin/python3.13, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.18/reference_appendices/interpreter_discovery.html for more information.
ok: [labldebian01.test.local]

TASK [Configurar /etc/network/interfaces] **************************************************************************************************
changed: [labldebian01.test.local]

TASK [Reiniciar servicio de red] ***********************************************************************************************************
changed: [labldebian01.test.local]

TASK [Esperar 10 segundos para aplicar IP] *************************************************************************************************
Pausing for 10 seconds
(ctrl+C then 'C' = continue early, ctrl+C then 'A' = abort)
ok: [labldebian01.test.local]

TASK [Cambiar hostname] ********************************************************************************************************************
ok: [labldebian01.test.local]

TASK [Configurar zona horaria] *************************************************************************************************************
ok: [labldebian01.test.local]

PLAY [Crear usuario de aplicación] *********************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************************
ok: [labldebian01.test.local]
```

```
TASK [Crear usuario simple] ****************************************************************************************************************************
changed: [labldebian01.test.local]

PLAY [Instalar paquetes base en servidores Debian] *****************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************************************
ok: [labldebian01.test.local]

TASK [Actualizar lista de paquetes] ********************************************************************************************************************
ok: [labldebian01.test.local]

TASK [Instalar herramientas básicas] *******************************************************************************************************************
changed: [labldebian01.test.local]

PLAY RECAP *********************************************************************************************************************************************
labldebian01.test.local    : ok=11   changed=4    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

srvcansi@lablansi:~$
```

9. Verificar que el servidor quede correctamente configurado según la baseline definida.

```
srvcansi@LABLDEBIAN01:/var/lib/dpkg/info$ ls -l /var/lib/dpkg/info/emacs.list htop.list curl.list git.list unzip.list vim.list rsync.list fail2ban.list ufw.
list
-rw-r--r-- 1 root root   549 Dec 25 21:43 curl.list
-rw-r--r-- 1 root root 25906 Dec 25 21:43 fail2ban.list
-rw-r--r-- 1 root root 38011 Dec 25 21:43 git.list
-rw-r--r-- 1 root root   577 Dec 25 21:43 htop.list
-rw-r--r-- 1 root root  1343 Dec 25 21:42 rsync.list
-rw-r--r-- 1 root root  4114 Dec 25 21:43 ufw.list
-rw-r--r-- 1 root root   614 Dec 25 21:43 unzip.list
-rw-r--r-- 1 root root   127 Dec 25 21:43 /var/lib/dpkg/info/emacs.list
-rw-r--r-- 1 root root   349 Dec 25 21:43 vim.list
srvcansi@LABLDEBIAN01:/var/lib/dpkg/info$
```

Consideraciones importantes

- El cambio de dirección IP puede interrumpir la conexión SSH.
- Se recomienda ejecutar el playbook desde consola o acceso remoto fuera de banda.
- Probar siempre en entornos de laboratorio antes de producción.

Autor

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