

## userauth\_pubkey: signature algorithm ssh-rsa not in PubkeyAcceptedAlgorithms

518 Nesvin KN January 28, 2025 [Common Errors & Troubleshooting](#) 15532



## userauth\_pubkey: signature algorithm ssh-rsa not in PubkeyAcceptedAlgorithms

---

**Overview:** This article provides steps to troubleshoot and resolve the "userauth\_pubkey: signature algorithm ssh-rsa not in PubkeyAcceptedAlgorithms" error, enable ssh-rsa authentication, and view available key types and key exchange algorithms on a Linux server.

---

**Step 1.** Login to server and tail `/var/log/secure` to check errors. Refer below example.

```
root@gateway ~]# tail -f /var/log/secure
```

```
userauth_pubkey: signature algorithm ssh-rsa not in PubkeyAcceptedAlgorithms
```

**Step 2.** Find which key type is used in the server by running the below command.

```
root@gateway ~]# ssh-keygen -l -f /usr/local/etc/ezlogin/id_key.pub
4096 SHA256:n4lmX53/gwkKB4+nSQ30hZXxXK+DRG1LPc7N1KN/1Ag ezlogin (RSA)
```

In the above example, the RSA key type is used.

**Step 3.** Run the following command to see which all key types are enabled on the server.

```
root@gateway ~]# sshd -T | grep -i key

pubkeyacceptedalgorithms ssh-ed25519-cert-v01@openssh.com,ecdsa-sha2-nistp256-cert-v01@openssh.
com,ecdsa-sha2-nistp384-cert-v01@openssh.com,ecdsa-sha2-nistp521-cert-v01@openssh.com,sk-ssh-ed
25519-cert-v01@openssh.com,sk-ecdsa-sha2-nistp256-cert-v01@openssh.com,rsa-sha2-512-cert-v01@o
penssh.com,rsa-sha2-256-cert-v01@openssh.com,ssh-ed25519,ecdsa-sha2-nistp256,ecdsa-sha2-nistp384,
ecdsa-sha2-nistp521,sk-ssh-ed25519@openssh.com,sk-ecdsa-sha2-nistp256@openssh.com,rsa-
sha2-512,rsa-sha2-256
```

**Step 4.** Open `/etc/ssh/sshd_config` and append the below line to enable ssh-rsa.

```
root@gateway ~]# vim /etc/ssh/sshd_config
```

```
PubkeyAcceptedKeyTypes +ssh-rsa
```

```
root@gateway ~]# systemctl restart sshd
```

**Step 5.** Re-run the below command and confirm that ssh-rsa has been enabled.

```
root@gateway ~]# sshd -T | grep -i key
```

```
pubkeyacceptedalgorithms ssh-ed25519-cert-v01@openssh.com,ecdsa-sha2-nistp256-cert-v01@openssh.
com,ecdsa-sha2-nistp384-cert-v01@openssh.com,ecdsa-sha2-nistp521-cert-v01@openssh.com,sk-ssh-ed
25519-cert-v01@openssh.com,sk-ecdsa-sha2-nistp256-cert-v01@openssh.com,rsa-sha2-512-cert-v01@o
penssh.com,rsa-sha2-256-cert-v01@openssh.com,ssh-ed25519,ecdsa-sha2-nistp256,ecdsa-sha2-nistp384,
ecdsa-sha2-nistp521,sk-ssh-ed25519@openssh.com,sk-ecdsa-sha2-nistp256@openssh.com,rsa-
```

```
sha2-512,rsa-sha2-256,ssh-rsa
```

**Step 6.** Try to modify the user now and confirm it's working fine.

## How to view the list of KEX and Keys in the Linux server?

- How to list **keys** in the Linux server?

```
root@linux ~]# ssh -Q key

ssh-ed25519
ssh-ed25519-cert-v01@openssh.com
ssh-rsa
ssh-dss
ecdsa-sha2-nistp256
ecdsa-sha2-nistp384
ecdsa-sha2-nistp521
ssh-rsa-cert-v01@openssh.com
ssh-dss-cert-v01@openssh.com
ecdsa-sha2-nistp256-cert-v01@openssh.com
ecdsa-sha2-nistp384-cert-v01@openssh.com
ecdsa-sha2-nistp521-cert-v01@openssh.com
```

- How to list **KEX** in the Linux server?

```
root@linux ~]# ssh -Q kex

diffie-hellman-group1-sha1
diffie-hellman-group14-sha1
diffie-hellman-group14-sha256
diffie-hellman-group16-sha512
diffie-hellman-group18-sha512
diffie-hellman-group-exchange-sha1
diffie-hellman-group-exchange-sha256
ecdh-sha2-nistp256
ecdh-sha2-nistp384
ecdh-sha2-nistp521
curve25519-sha256
curve25519-sha256@libssh.org
```

**Related Articles:**

Error: User modify failed. Cannot modify user on this node: Authentication by SSH key failed!

Error: User modify failed. Cannot modify user on other node: Authentication by SSH key failed!

Online URL:

[https://www.ezeelogin.com/kb/article/userauth\\_pubkey-signature-algorithm-ssh-rsa-not-in-pubkeyacceptedalgorithms-518.html](https://www.ezeelogin.com/kb/article/userauth_pubkey-signature-algorithm-ssh-rsa-not-in-pubkeyacceptedalgorithms-518.html)