

OCI Web shell / Cloud shell



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Modified Today

Process to access any (private/public) instances without ssh key

Use Case 1:

1. The instance has crashed. Need to see console output
2. Become root in an instance. Reset OPC via serial console

- Click on Launch Cloud Shell Connection in OS Management

The screenshot shows the OCI Cloud console interface. The left sidebar contains the 'Compute' menu with options like Overview, Instances, Instance Maintenance, etc. The main content area is under the 'OS Management' tab. It features a 'Top processes' section with a warning message: 'Top processes are not available. Refer to the documentation for additional troubleshooting.' Below this is the 'Console connection' section, which includes a search bar and two buttons: 'Launch Cloud Shell connection' and 'Create local connection'. At the bottom, there is a table with headers: 'State', 'Fingerprint of the server host key', 'Fingerprint of your public key', and 'Compartment'.

- actions -> reboot (top of web browser)
e for edit (booting up)

```
Cloud Shell

#####
0
0
0load_video
0set gfxpayload=keep
0insmod gzio
0linux ($root)/vmlinuz-6.12.0-106.55.4.2.el9uek.x86_64 root=/dev/mapper/ociv\0
0lume=root ro LANG=en_US.UTF-8 console=tty0 console=ttyS0,115200 rd.luks=0 \0
0rd.md=0 rd.dm=0 rd.lvm.vg=ocivolume rd.lvm.lv=ocivolume/root rd.net.timeout\0
0,dhcp=10 rd.net.timeout.carrier=5 rd.iscsi.param=node.session.timeo.replace\0
0ment_timeout=6000 net.ifnames=1 nvme_core.shutdown_timeout=10 ipmi_si.tryac\0
0pi=0 ipmi_si.trydmi=0 libiscsi.debug_libiscsi_ah=1 loglevel=4 crash_kexec_p\0
0ost_notifiers crashkernel=1G-64G:448M,64G-:512M netroot=iscsi rd.iscsi.firm\0
0ware=1
0

initrd ($root)/initramfs-6.12.0-106.55.4.2.el9uek.x86_64.img $tuned_initrd v
command-line or ESC to discard edits and return to the GRUB menu.
```

```
Cloud Shell

#####
0
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0load_video
0set gfxpayload=keep
0insmod gzio
0linux ($root)/vmlinuz-6.12.0-106.55.4.2.el9uek.x86_64 root=/dev/mapper/ociv\0
0lume=root ro LANG=en_US.UTF-8 console=tty0 console=ttyS0,115200 rd.luks=0 \0
0rd.md=0 rd.dm=0 rd.lvm.vg=ocivolume rd.lvm.lv=ocivolume/root rd.net.timeout\0
0,dhcp=10 rd.net.timeout.carrier=5 rd.iscsi.param=node.session.timeo.replace\0
0ment_timeout=6000 net.ifnames=1 nvme_core.shutdown_timeout=10 ipmi_si.tryac\0
0pi=0 ipmi_si.trydmi=0 libiscsi.debug_libiscsi_ah=1 loglevel=4 crash_kexec_p\0
0ost_notifiers crashkernel=1G-64G:448M,64G-:512M netroot=iscsi rd.iscsi.firm\0
0ware=1 init=/bin/bash
0

initrd ($root)/initramfs-6.12.0-106.55.4.2.el9uek.x86_64.img $tuned_initrd 0
command-line or ESC to discard edits and return to the GRUB menu.
```

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- add `init=/bin/bash` to the linux line

ctrl+x and enter

Code block

```
1 # ssh key must be rsa-sha2-512
2 /bin/mount -o remount, rw /
3 cd ~opc/.ssh
4 echo '<contents of public key file>' | base64 -d >> authorized_keys
5 chmod 600 /home/opc/.ssh/authorized_keys
6 chown -R opc:opc /home/opc/.ssh
7
8 # safe umount
9 cd /
10 umount /
11
12 # force a reboot
13 /usr/sbin/reboot -f
14
```

```
Cloud Shell

[ OK ] Stopped D-Bus System Message Bus.
[ OK ] Closed D-Bus System Message Bus Socket.
[ OK ] Stopped Create Volatile Files and Directories.
[ OK ] Stopped Rule-based Manager for Device Events and Files.
[ OK ] Closed udev Control Socket.
[ OK ] Closed udev Kernel Socket.
[ OK ] Stopped dracut pre-udev hook.
[ OK ] Stopped dracut cmdline hook.
[ OK ] Stopped dracut ask for additional cmdline parameters.
      Starting Cleanup udev Database...
[ OK ] Stopped Create Static Device Nodes in /dev.
[ OK ] Stopped Create List of Static Device Nodes.
[ OK ] Stopped Create System Users.
[ OK ] Stopped Setup Virtual Console.
[ OK ] Finished Cleanup udev Database.
[ OK ] Reached target Switch Root.
      Starting Switch Root...
bash-5.1#
```

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```
Cloud Shell

M... KRJrkKav
OE... B66Ks4CI
+S... 7E6uJNuY
wO... k+Q9r+Ei
Nk... kshitiJ
.patil@bytedance.com
ssh-rsa
U0S2NxKd
2UNqWvjV
//cxEJu
a6zDMA2Q
0r7+PCfV
fsk+aBDc
msaALkv8
kqdy1507
XQ== akshar.pande@USMAC-GY94WPVFCC.local4B
bash-5.1#
```

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Cloud Search resources, services, documentation, and Marketplace US East (Ashburn)

← Instances

instance-20260217-1145 Starting Actions Start

Instance details

Details Networking Storage Security Management **OS Management** Monitoring Work requests Tags

Overview

Use the OS Management Hub service to manage updates and patches on compute instances.

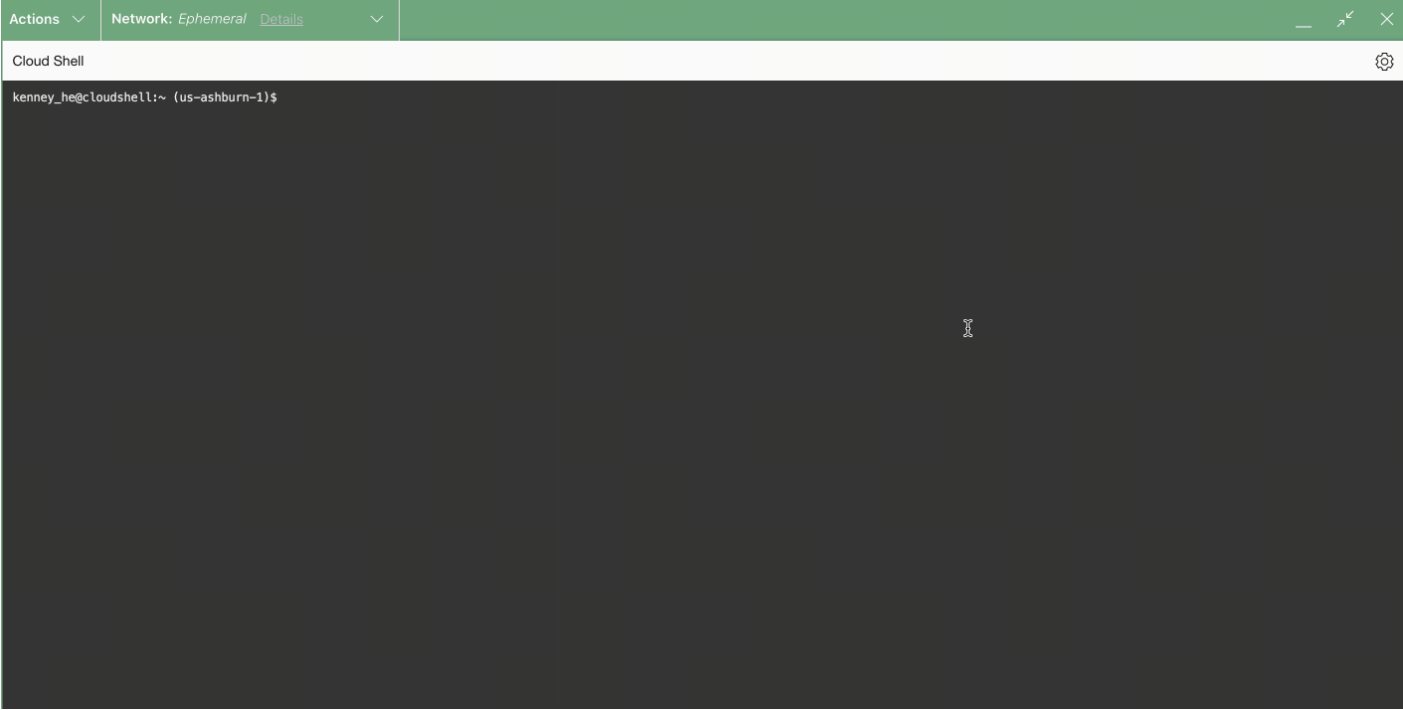
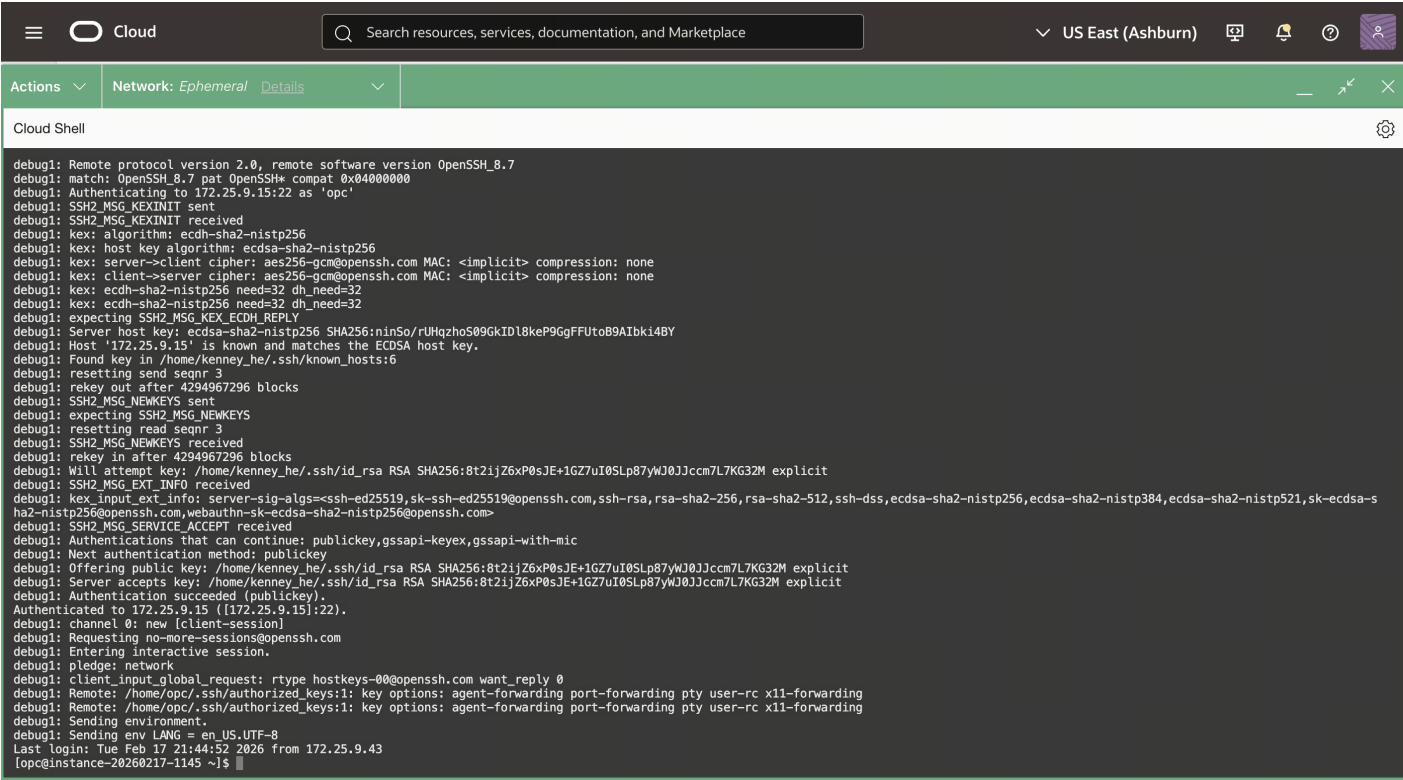
▲ OS Management Hub Agent is not enabled for this instance.

Go to the Management tab and enable it in the Oracle Cloud Agent section. [Examine the logs](#) on the instance to identify any [registration issues](#).

```
Cloud Shell

[ 45.991490] [5707]: /usr/lib/systemd/system-shutdown/uptrack-save.sh failed with exit status 1.
[ 45.993114] systemd-shutdown[1]: Successfully changed into root pivot.
[ 45.995178] systemd-shutdown[1]: Returning to initrd...
[ 46.031464] dracut: Taking over mdmon processes.
[ 46.033153] dracut Warning: Killing all remaining processes
dracut Warning: Killing all remaining processes
[ 46.091112] XFS (dm-0): Unmounting Filesystem 3aa327e4-ce2d-4637-9f24-7687e2c0e8b9
[ 46.105992] dracut Warning: Unmounted /oldroot.
dracut Warning: Unmounted /oldroot.
46.456072 | /etc/multipath.conf does not exist, blacklisting all devices.
46.458032 | You can run "/sbin/mpathconf --enable" to create
46.458768 | /etc/multipath.conf. See man mpathconf(8) for more details
46.459546 | invalid value for WatchdogSec: "0"
[ 46.128709] dracut: Disassembling device-mapper devices
[ 46.156996] dracut: Waiting for mdraid devices to be clean.
[ 46.160230] dracut: Disassembling mdraid devices.
Powering off.
[ 46.188141] ACPI: PM: Preparing to enter system sleep state S5
[ 46.189604] reboot: Power down
```

- Click on webshell and login with the ssh key you added



3. Remote serial console connection below [Automation]

- Start your serial console session

Console connection

Use a [console connection](#) to remotely troubleshoot a malfunctioning instance.

Search and Filter

Launch Cloud Shell connection Create local connection

State	Fingerprint of the server host key	Fingerprint of your public key	
Active	SHA256:8Swnw+wHLvuo0vXebJnmdBdf/Yu/nezt8p1S/cyEXHE	SHA256:gvOAaMJGjQAOydJJIBSTAv48JRRyXwyCulVMs99AsAY	DevOf ...

Page 1 of 1 (1 - 1 of 1 total items) Items per page 25

Console history

The [console history](#) displays OS-level error messages that are captured by the serial console. Use it to check the status of an instance or diagnose problems.

Search and Filter Search

View current history

Display name Date created

No console histories

- Script to connect to console is below

main.py
1.74KB

OKE

```

message for node" node="10.0.3.189" event="NodeHasNoDiskPressure"
[8097904.723852] kubelet[9618]: I0209 19:07:19.428616 9618 kubelet_node_status.go:645] "Recording event
message for node" node="10.0.3.189" event="NodeHasSufficientPID"
[8097904.724409] kubelet[9618]: I0209 19:07:19.428636 9618 kubelet_node_status.go:75] "Attempting to reg
ister node" node="10.0.3.189"
[8097904.754636] kubelet[9618]: E0209 19:07:19.460141 9618 kubelet_node_status.go:113] "Unable to regist
er node with API server, error getting existing node" err="nodes \"10.0.3.189\" not found" node="10.0.3.189
"
[8097904.774795] kubelet[9618]: E0209 19:07:19.480305 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097904.830797] kubelet[9618]: I0209 19:07:19.536275 9618 csi_plugin.go:990] Failed to contact API serv
er when waiting for CSINode publishing: csinodes.storage.k8s.io "10.0.3.189" is forbidden: User "system:nod
e:10.0.3.226" cannot get resource "csinodes" in API group "storage.k8s.io" at the cluster scope: can only a
ccess CSINode with the same name as the requesting node
[8097904.846598] kubelet[9618]: . Opc-Request-Id: <nil>
[8097904.881223] kubelet[9618]: E0209 19:07:19.586710 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097904.987543] kubelet[9618]: E0209 19:07:19.693058 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.094162] kubelet[9618]: E0209 19:07:19.799658 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.201196] kubelet[9618]: E0209 19:07:19.906395 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.307664] kubelet[9618]: E0209 19:07:20.013027 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.414919] kubelet[9618]: E0209 19:07:20.120435 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.520923] kubelet[9618]: E0209 19:07:20.226319 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.627907] kubelet[9618]: E0209 19:07:20.333350 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"
[8097905.734607] kubelet[9618]: E0209 19:07:20.440003 9618 reconstruct.go:189] "Failed to get Node statu
s to reconstruct device paths" err="nodes \"10.0.3.189\" not found"

```

Private Cloud Instance

Code block

```

1
2  → ~ ssh -v -i ~/.ssh/id_rsa -o HostKeyAlgorithms=+ssh-rsa -o
   PubkeyAcceptedKeyTypes=+ssh-rsa -o ProxyCommand='ssh -W %h:%p -p 443
   ocid1.instanceconsoleconnection.oc1.iad.anuwcljrqw2xtbqcqvr6jl3azlv3gvwz4iim
   gh0q3lfgtimwzembat6hxca@instance-console.us-ashburn-1.oci.oraclecloud.com'
3
4
   ocid1.instance.oc1.iad.anuwcljrqw2xtbqcoe6clwbv4dk34gomiariwrjup77xscycphi4ue
   gcrleq
5  OpenSSH_9.9p2, LibreSSL 3.3.6
6  debug1: Reading configuration data /Users/kenney.he/.ssh/config
7  debug1: Reading configuration data /Users/kenney.he/.byted-ide/ssh_config
8  debug1: Reading configuration data /etc/ssh/ssh_config
9  debug1: /etc/ssh/ssh_config line 21: include /etc/ssh/ssh_config.d/* matched
   no files
10 debug1: /etc/ssh/ssh_config line 54: Applying options for *
11 debug1: Authenticator provider $SSH_SK_PROVIDER did not resolve; disabling
12 debug1: Executing proxy command: exec ssh -W
   ocid1.instance.oc1.iad.anuwcljrqw2xtbqcoe6clwbv4dk34gomiariwrjup77xscycphi4ue
   gcrleq:22 -p 443

```



```

    ocid1.instanceconsoleconnection.oc1.iad.anuwcljrqw2xtbqcqvr6jl3azlvy3gvwz4iim
    ghog3lfgtimwzembat6hxca@instance-console.us-ashburn-1.oci.oraclecloud.com
13  debug1: identity file /Users/kenney.he/.ssh/id_rsa type 0
14  debug1: identity file /Users/kenney.he/.ssh/id_rsa-cert type -1
15  debug1: Local version string SSH-2.0-OpenSSH_9.9
16
17  =====
18  IMPORTANT: Use a console connection to troubleshoot a malfunctioning
    instance. For normal operations, you should connect to the instance using a
    Secure Shell (SSH) or Remote Desktop connection. For steps, see
    https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/accessinginstance.ht
    m
19
20  For more information about troubleshooting your instance using a console
    connection, see the documentation: https://docs.cloud.oracle.com/en-
    us/iaas/Content/Compute/References/serialconsole.htm#four
21  =====
22  debug1: Remote protocol version 2.0, remote software version
    InstanceConsoleSSHD
23  debug1: compat_banner: no match: InstanceConsoleSSHD
24  ...
25  nexus-repository login:

```

Challenges

- OCI webconsole is subpar and provides no answers, for Kerberos enabled instance due to lack of tickets

Below will cause errors if you copy and paste so use above options

Code block

```

1  →  ssh -o ProxyCommand='ssh -W %h:%p -p 443
    ocid1.instanceconsoleconnection.oc1.iad.anuwcljrqw2xtbqcqvr6jl3azlvy3gvwz4iim
    ghog3lfgtimwzembat6hxca@instance-console.us-ashburn-1.oci.oraclecloud.com'
    ocid1.instance.oc1.iad.anuwcljrqw2xtbqcoe6clwbv4dk34gomiarjwrjup77xscycphi4ue
    gcrleq
2
3  =====

```

```
4  IMPORTANT: Use a console connection to troubleshoot a malfunctioning
   instance. For normal operations, you should connect to the instance using a
   Secure Shell (SSH) or Remote Desktop connection. For steps, see
   https://docs.cloud.oracle.com/iaas/Content/Compute/Tasks/accessinginstance.ht
   m
5
6  For more information about troubleshooting your instance using a console
   connection, see the documentation: https://docs.cloud.oracle.com/en-
   us/iaas/Content/Compute/References/serialconsole.htm#four
7  =====
8  Unable to negotiate with UNKNOWN port 65535: no matching host key type
   found. Their offer: ssh-rsa
9
10
```

- <https://docs.oracle.com/en-us/iaas/Content/Compute/References/serialconsole.htm>
- Reset OPC user
- Reboot and ESC in cloud console
- Below Policy is required if not administrator

Required IAM Policies

To use Oracle Cloud Infrastructure, an administrator must be a member of a group granted security access in a **policy** ⓘ by a tenancy administrator. This access is required whether you're using the Console or the REST API with an SDK, CLI, or other tool. If you get a message that you don't have permission or are unauthorized, verify with the tenancy administrator what type of access you have and which **compartment** ⓘ your access works in.

To create an instance console connection, an administrator needs to grant user access to manage instance console connections and to read instances through an IAM policy. The resource name for an instance console connection is `instance-console-connection`. The resource name for instances is `instance`. The following policies grant users the ability to create an instance console connection:

 Copy

```
Allow group <group_name> to manage instance-console-connection in tenancy
Allow group <group_name> to read instance in tenancy
```

Instance console connection also supports [network sources](#). The following policies grant users the ability to create an instance console connection with a network source:

 Copy

```
Allow group <group_name> to manage instance-console-connection in tenancy wh
Allow group <group_name> to read instance in tenancy whe
```