🔧 100 Essential VMware Commands for Administrators 🛠️

#ESXi Host Commands#

1. Check ESXi version:

vmware -v

2. List all VMs on the ESXi host:

vim-cmd vmsvc/getallvms

3. Power on a VM:

vim-cmd vmsvc/power.on <VMID>

4. Power off a VM:

vim-cmd vmsvc/power.off <VMID>

5. Restart the ESXi management agents:

services.sh restart

6. List all network interfaces:

esxcli network nic list

7. View active network connections:

esxcli network ip connection list

8. Check ESXi host uptime:

esxcli hardware platform get

9. Get host hardware information:

esxcli hardware get

10. Check system health:

esxcli system health status get

11. View host configuration:

vim-cmd hostsvc/hostsummary

12. Show CPU information:

esxcli hardware cpu list

13. Show memory usage:

esxcli memory get

14. List installed patches:

esxcli software vib list

15. Get the host's current configuration:

vim-cmd hostsvc/configinfo

16. View the power status of all VMs:

vim-cmd vmsvc/get.powerstate <VMID>

17. Get the list of VM resources:

vim-cmd vmsvc/get.resource <VMID>

18. Check for hardware changes:

esxcli hardware platform get

19. Display ESXi system logs:

less /var/log/syslog.log

20. List all VMs with their configurations:

vim-cmd vmsvc/getallvms | more

#VM and Resource Management#

21. Migrate a VM using vMotion

vim-cmd vmsvc/migrate <VMID> <destination_host>

22. List VM snapshots:

vim-cmd vmsvc/snapshot.get <VMID>

23. Create a new snapshot:

vim-cmd vmsvc/snapshot.create <VMID> <snapshot_name> <description>

24. Remove all VM snapshots:

vim-cmd vmsvc/snapshot.removeall <VMID>

25. Monitor ESXi performance (CPU, Memory):

esxtop

26. Rescan all storage adapters:

esxcli storage core adapter rescan –all

27. List all storage devices:

esxcli storage core device list

28. List available datastores:

esxcli storage filesystem list

29. Check disk usage:

```
df -h
```

30. View VM resource allocation:

```
vim-cmd vmsvc/get.resource <VMID>
```

31. Add a new VM network adapter:

```
vim-cmd vmsvc/nic.add <VMID> <adapter_type> <network_name>
```

32. Change VM resource allocation:

```
vim-cmd vmsvc/reconfig <VMID> <new_config>
```

33. Display VM logs:

```
tail -f /vmfs/volumes/<datastore>/<vm_name>/vmware.log
```

34. Clone a VM:

```
vim-cmd vmsvc/clone <VMID> <new_name>
```

35. Power off all VMs on the host:

```
for vmid in $(vim-cmd vmsvc/getallvms | awk '{print $1}'); do vim-cmd vmsvc/power.off $vmid; done
```

36. Create a new VM:

```
vim-cmd vmsvc/create <VM_Name> <Datastore> <VM_ID>
```

37. View VM summary:

```
vim-cmd vmsvc/get.summary <VMID>
```

38. Get VM hardware compatibility:

vim-cmd vmsvc/get.hardware.version <VMID>

39. Enable VM tools:

vim-cmd vmsvc/tools.install <VMID>

40. Disable VM tools:

vim-cmd vmsvc/tools.uninstall <VMID>

#ESXi Host Maintenance#

41. Enable maintenance mode:

vim-cmd hostsvc/maintenance_mode_enter

42. Exit maintenance mode:

vim-cmd hostsvc/maintenance_mode_exit

43. Reboot the ESXi host:

reboot

44. Shutdown the ESXi host:

shutdown

45. Display a list of services:

vim-cmd hostsvc/services list

46. Check the health of the ESXi host:

```
esxcli system health status get
```

47. Get host's current configuration:

```
vim-cmd hostsvc/hostsummary
```

48. Change the hostname of the ESXi host:

```
esxcli system hostname set --host=<new_hostname>
```

49. Reset the ESXi host:

```
esxcli system maintenanceMode set --enable
```

50. Check for hardware compatibility:

```
esxcli system maintenanceMode get
```

51. Check power state of ESXi host:

```
vim-cmd hostsvc/powerstate
```

52. Check the status of VMs in a cluster:

```
vim-cmd vmsvc/getallvms | grep <cluster_name>
```

53. Check for pending reboots:

esxcli system maintenanceMode get

54. Check current configuration of a VM:

vim-cmd vmsvc/get.config <VMID>

55. List all running tasks:

vim-cmd vimsvc/task list

#Troubleshooting and Logs#

56. View ESXi logs:

cat /var/log/vmkernel.log

57. Check VM logs:

tail -f /vmfs/volumes/<datastore>/<vm_name>/vmware.log

58. View hardware logs:

esxcli system syslog config get

59. Clear ESXi logs:

esxcli system syslog reload

60. Check disk I/O statistics:

esxcli storage core stats get

61. Display kernel logs:

less /var/log/vmkernel.log

62. Show the last 100 lines of the syslog:

tail -n 100 /var/log/syslog.log

63. Check VM performance metrics:

esxtop -b

64. Monitor CPU usage per VM:

esxtop -c

65. Monitor memory usage:

esxtop -m

#Networking and Security#

66. List all firewall rules:

esxcli network firewall ruleset list

67. Enable a firewall rule:

esxcli network firewall ruleset set --ruleset-id=<ruleset_name> --enabled=true

68. Test network connectivity (Ping):

vmkping <ip_address>

69. Show network configuration:

esxcli network ip addr

list

70. View the ARP table:

esxcli network ip neighbor list

71. Display the DNS configuration:

esxcli network ip dns search list

72. Check DHCP configuration:

esxcli network ip dhcp client list

73. Set a static IP address:

esxcli network ip interface ipv4 set --interface-name=<interface_name> --ipv4=<ip_address> --netmask=<netmask> --type=static

74. List all VLANs:

esxcli network vswitch standard portgroup list

75. View traffic statistics for a vSwitch:

esxcli network vswitch standard list

#Storage Management#

76. Display storage statistics:

esxcli storage core device stats get --device=<device_name>

77. List VMFS datastores:

esxcli storage vmfs extent list

78. Create a VMFS datastore:

esxcli storage vmfs create --volume-label=<label> --device=<device_name>

79. Unmount a datastore:

esxcli storage vmfs unmount --volume-label=<label>

80. List available LUNs:

esxcli storage core device list

81. Rescan a specific storage device:

esxcli storage core adapter rescan --adapter=<adapter_name>

82. View storage path status:

esxcli storage path list

83. Check SCSI device information:

esxcli storage core device smart get --device=<device_name>

84. Create a new VMFS datastore.

esxcli storage vmfs create -l <datastore_name> -d <device>

85. Check VMFS datastore size.

esxcli storage vmfs extent list

#Miscellaneous Commands#

86. Display the ESXi configuration.

esxcli system settings advanced list

87. List all services:

esxcli system service list

88. Check installed VIBs (VMware Installation Bundles):

esxcli software vib list

89. Update a VIB.

esxcli software vib update --depot=<depot_file>

90. Check network adapter statistics:

esxcli network nic stats get --nic=<nic_name>

91. List all running tasks:

vim-cmd vimsvc/task list

92. Show NTP configuration.

esxcli system ntp get

93. Start NTP service:

esxcli system ntp start

94. Stop NTP service:

esxcli system ntp stop

95. Sync time with NTP server:

esxcli system ntp sync

96. Enable SNMP service:

esxcli system snmp set --enable true

97. Disable SNMP service.

esxcli system snmp set --enable false

98. Show current ESXi host settings:

vim-cmd hostsvc/hostsummary

99. Reset the ESXi host to factory defaults:

vim-cmd hostsvc/hostconfig --reset

100. Display the ESXi host license:

vim-cmd vimsvc/license --show