1. Host name
2. Component IP
3. iDRAC8 Settings
4. Dual port PXE 10GIG Enabled
5. Dual port PXE 1GIG Disabled
6. Verify SR-IOV Disabled
7. Raid 1/10 setup
8. CPU Type and Qty
9. User Account settings
10. Logical Processor (Intel Hyperthreading) Enabled
11. iDRAC8 Controller FW Version
12. System Profile = Performance
13. CPU Power Management = Maximum Performance
14. Power mode - Static - Maximum power
15. Collaborative CPU Performance Control = Disabled
16. High fan speed

Avoid Credential Warning message

```
# racadm -r 192.168.0.120 -u root -p calvin set iDRAC.Tuning.DefaultCredentialWarning Disabled
```

Get system info

```
# racadm -r 192.168.0.120 -u root -p calvin getsysinfo --nocertwarn
```

1. How to update HOSTNAME on Dell

```
# racadm -r 192.168.0.120 -u root -p calvin config -g ifcRacManagedNodeOs -o ifcRacMnOsHostname HOSTNAME
```

2. How to configure a Dell iDRAC card IP

```
# racadm -r 192.168.0.120 -u root -p calvin setniccfg -s 192.168.0.122 255.255.255.0 192.168.0.254
```

3 N/A. iDRAC8 Settings

```
?
```

```
n/a
```

4. Dual port PXE 10GIG Enabled

```
# racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.1.legacybootproto

[Key=NIC.Integrated.1-1-1#nicconfig]
legacybootproto=PXE (PASS)

# racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.2.legacybootproto
[Key=NIC.Integrated.1-2-1#nicconfig]
legacybootproto=NONE (FAIL)
```

How set value to PXE

```
# racadm -r 192.168.0.120 -u root -p calvin set nic.nicconfig.2.legacybootproto PXE
# racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.2 | grep Legacy

# racadm -r 192.168.0.120 -u root -p calvin jobqueue create NIC.Integrated.1-2-1
```

```
  # racadm -r 192.168.0.120 -u root -p calvin jobqueue create BIOS.Setup.1-1

  # racadm -r 192.168.0.120 -u root -p calvin serveraction powercycle

  # racadm -r 192.168.0.120 -u root -p calvin jobqueue view


-----------------------JOB QUEUE-----------------------
[Job ID=JID_452588031211]
Job Name=Configure: NIC.Integrated.1-2-1
Status=Completed
Start Time=[Now]
Expiration Time=[Not Applicable]
Message=[PR19: Job completed successfully.]
Percent Complete=[100]
-----------------------------------------------------------
[Job ID=JID_452588619600]
Job Name=Configure: BIOS.Setup.1-1
Status=Completed
Start Time=[Now]
Expiration Time=[Not Applicable]
Message=[PR19: Job completed successfully.]
Percent Complete=[100]
-----------------------------------------------------------

 check:
 # racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.2 | grep Legacy
 LegacyBootProto=PXE
```

5. Dual port PXE 1GIG Disabled

```
# racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.3 | grep Legac
LegacyBootProto=NONE
# racadm -r 192.168.0.120 -u root -p calvin get nic.nicconfig.4 | grep Legac
LegacyBootProto=NONE
```

6. Verify SR-IOV Disabled

```
# racadm -r 192.168.0.120 -u root -p calvin set biOS.integratedDevices.sriovGlobalEnable Disabled
```

7. Raid 1/10 setup

```
# racadm -r 192.168.0.120 -u root -p calvin storage get vdisks -o |egrep -i "Layout|Size" |head -n 2 |xargs
Layout = Raid-10 Size = 4469.00 GB

or

# racadm -r 192.168.0.120 -u root -p calvin storage get vdisks -o

 Disk.Virtual.0:RAID.Integrated.1-1
 Status                        = Ok
 DeviceDescription             = Virtual Disk 0 on Integrated RAID Controller 1
 Name                          = Virtual Disk 0
 RollupStatus                  = Ok
 State                         = Online
 OperationalState              = Not applicable
 Layout                        = Raid-10
 Size                          = 4469.00 GB
 SpanDepth                     = 1
 AvailableProtocols            = SAS
 MediaType                     = HDD
 ReadPolicy                    = Read Ahead
 WritePolicy                   = Write Back
 StripeSize                    = 64K
 DiskCachePolicy               = Default
 BadBlocksFound                = NO
 Secured                       = NO
 RemainingRedundancy           = 1
```

```
EnhancedCache                  = Not Applicable
T10PIStatus                    = Disabled
BlockSizeInBytes               = 512
```

8. CPU Type and Qty

```
# racadm -r 192.168.0.120 -u root -p calvin get BIOS.ProcSettings |egrep -i "Proc1Brand|Proc2Brand" |nl
   1 #Proc1Brand=Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz
   2 #Proc2Brand=Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz


# racadm -r 192.168.0.120 -u root -p calvin get BIOS.MemSettings |egrep -i "SysMemSize|Speed" |nl
   1 #SysMemSize=256 GB
   2 #SysMemSpeed=2133 Mhz
```

9 N/A. User Account settings

? na

10. Logical Processor (Intel Hyperthreading) Enabled

```
# racadm -r 192.168.0.120 -u root -p calvin get BIOS.ProcSettings.LogicalProc
# racadm -r 192.168.0.120 -u root -p calvin set BIOS.ProcSettings.LogicalProc Enabled
```

11. iDRAC8 Controller FW Version

```
# racadm -r 192.168.0.120 -u root -p calvin getversion -f idrac
iDRAC Version                  = 2.50.50.50
```

12. System Profile = Performance

```
# racadm -r 192.168.0.120 -u root -p calvin set bios.SysProfileSettings.SysProfile PerfOptimized
# racadm -r 192.168.0.120 -u root -p calvin set bios.SysProfileSettings.EnergyPerformanceBias MaxPower
```

13. CPU Power Management = Maximum Performance

```
ProcPwrPerf -- This field sets CPU Power Management to Maximum Performance OS DBPM or System DBPM (DAPC) mode.
Dependency  -- Read Only if 'SysProfileSettings.SysProfile' is not set to 'Custom'

# racadm -r 192.168.0.120 -u root -p calvin get bios.SysProfileSettings.ProcPwrPerf
[Key=BIOS.Setup.1-1#SysProfileSettings]
ProcPwrPerf=MaxPerf
```

14. Power mode - Static - Maximum power

```
# racadm -r 192.168.0.120 -u root -p calvin --nocertwarn get BIOS.SysProfileSettings.EnergyPerformanceBias

[Key=BIOS.Setup.1-1#SysProfileSettings]
EnergyPerformanceBias=MaxPower

 if not please set it:
#racadm -r 192.168.0.120 -u root -p calvin --nocertwarn set BIOS.SysProfileSettings.EnergyPerformanceBias MaxPower
```

15. Collaborative CPU Performance Control = Disabled

```
# racadm -r 192.168.0.120 -u root -p calvin --nocertwarn get BIOS.SysProfileSettings.CollaborativeCpuPerfCtrl
[Key=BIOS.Setup.1-1#SysProfileSettings]
CollaborativeCpuPerfCtrl=Disabled
```

16. High fan speed.

```
# racadm -r 192.168.0.120 -u root -p calvin get system.thermalsettings.FanSpeedOffset
[Key=system.Embedded.1#ThermalSettings.1]
FanSpeedOffset=Off
# racadm -r 192.168.0.120 -u root -p calvin set system.thermalsettings.FanSpeedOffset 1
```

Values are:

0 - Low Fan Speed

1 - High Fan Speed

2 - Medium Fan Speed

3 - Max Fan Speed

255 - None

How to get HW inventory to file

```
# racadm -r 192.168.0.120 -u root -p calvin hwinventory export -f FILENAME
```

How to get BIOS settings to file

```
# racadm -r 192.168.0.120 -u root -p calvin --nocertwarn get -t xml -f bios_conf.xml
```

How to set BIOS setting to server

Configure a RAC from an .xml file, with a wait time of 10 minutes, shutdown type graceful and end host type power on.

```
# racadm -r 192.168.0.120 -u root -p calvin --nocertwarn set -f bios_conf.xml -t xml -b "graceful" -w 600 -s "on"
# racadm set -f myfile.xml -t xml -b "graceful" -w 600 -s "on"
```

Reset

```
# racadm -r 192.168.0.120 -u root -p calvin --nocertwarn racreset soft
```

This will perform a "soft" reset, or a power cycle. No settings will be lost or changed.This is useful as the DRAC operates independently of the server and does not power cycle when the server does

Example: **#racadm -r 192.168.0.120 -u root -p calvin serveraction powercycle**

Synopsis racadm serveraction <action> -f Input <action> — Specifies the power management operation to perform. The options are:

```
hardreset — Performs a force reset (reboot) operation on the managed system.
powercycle — Performs a power-cycle operation on the managed system. This action is similar to pressing the
power button on the system's front panel to turn off and then turn on the system.
powerdown — Powers down the managed system.
powerup — Powers up the managed system.
powerstatus — Displays the current power status of the server (ON or OFF).
graceshutdown — Performs a graceful shutdown of the server. If the operating system on the server cannot shut
down completely, then this operation is not performed.
-f — Force the server power management operation.
```

This option is applicable only for the PowerEdge-VRTX platform. It is used with powerdown, powercycle, and hardreset options.

NOTE: The action powerstatus is not allowed with -a option.

Factory defaults

```
racadm -r 192.168.0.120 -u root -p calvin --nocertwarn racresetcfg
```

This reset will set everything back to factory defaults. You will lose connection remotely as it will also reset the DRAC back to the default IP scheme.

Configure the iDRAC using a file.

```
$ racadm -r 192.168.0.120 -u root -p calvin --nocertwarn set -f myrac.cfg
```

Export configuration

```
ExportSystemConfigurationLocalREDFISH.py -ip 192.168.0.120 -u root -p calvin -i 4 -t ALL
```

Import configuration

```
ImportSystemConfigurationLocalFilenameREDFISH.py -ip 192.168.0.120 -u root -p calvin -t ALL --filename
golden_configuration.xml
```