

Intelligent Operations Center Restarting Server End User Guide

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1. Agenda:

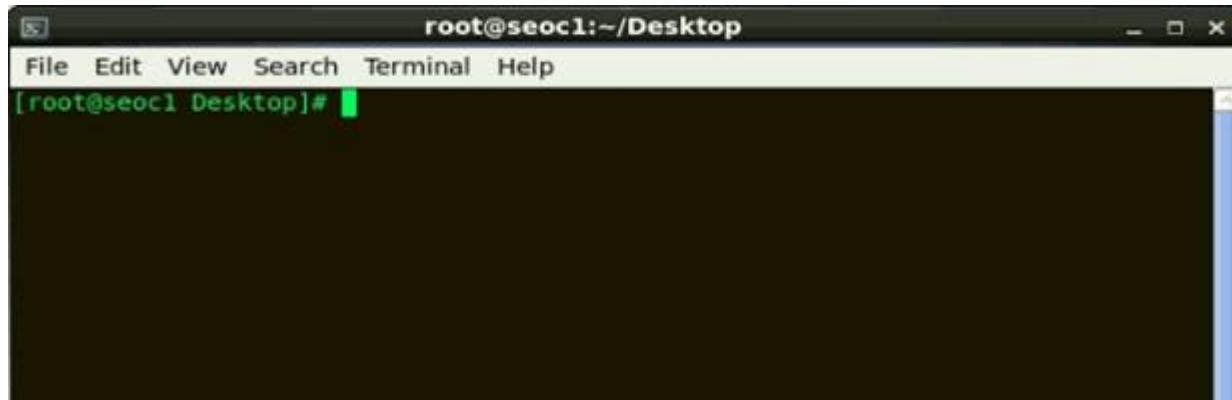
This Document would help as a Guide for restarting the IOC servers at ease. The Step by Step screenshots Captured will help for the same.

2. Necessary Information:

The below screenshot gives the details of the 3 dell servers installed where we can find username, password, IP Address etc details of the servers.

UserIDs & Passwords of Physical Servers									
S.No	Hostname	Short Hostname	MAC	IP Address	Login UserID	Password			
1	seoc1.ksdma.com	seoc1	08:94:EF:22:64:8C	192.168.1.13	root	Ganesh@999			
2	seoc2.ksdma.com	seoc2	08:94:EF:22:73:7C	192.168.1.16	root	Ganesh@999			
3	seoc3.ksdma.com	seoc3	08:94:EF:22:68:AC	192.168.1.20	Administrator	HVRaceII SERVER@1234			
4	SEOC03-HP	SEOC03-HP		192.168.1.100	seoc03	hvraceII04	tv login system		
UserIDs & Passwords of IOC Servers									
S.No	Hostname	Short Hostname	MAC	IP Address	Login UserID	Password			
1	iocapp01.kseoc.gov.in	iocapp01	52:54:00:29:58:2B	192.168.1.27	root	Ganesh@999			
2	iocapp02.kseoc.gov.in	iocapp02	52:54:00:AC:9A:22	192.168.1.38					
3	iocweb01.kseoc.gov.in	iocweb01	52:54:00:91:0D:84	192.168.1.46					
4	iocweb02.kseoc.gov.in	iocweb02	52:54:00:7B:D5:14	192.168.1.47					
5	iocdat01.kseoc.gov.in	iocdat01	52:54:00:6B:87:E4	192.168.1.44	root	Ganesh@999			
6	iocdat02.kseoc.gov.in	iocdat02	52:54:00:5D:7D:16	192.168.1.45					
7	iocana01.kseoc.gov.in	iocana01	52:54:00:F1:FE:04	192.168.1.39					
8	iocana02.kseoc.gov.in	iocana02	52:54:00:70:0D:6F	192.168.1.43					

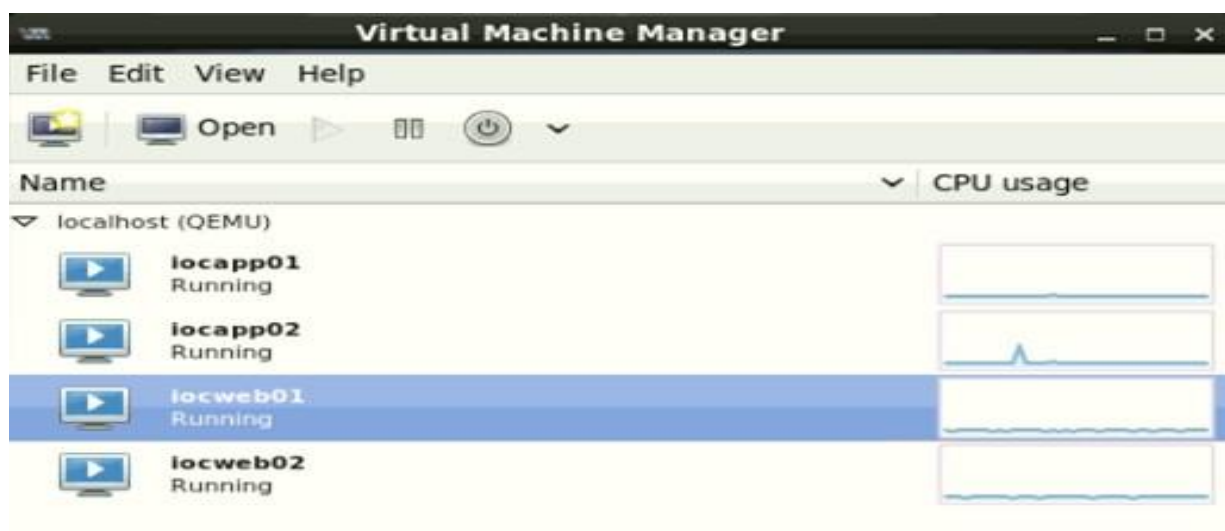
The below screenshot shows the command prompt window of seoc4.ksdma.com (seoc1) server.



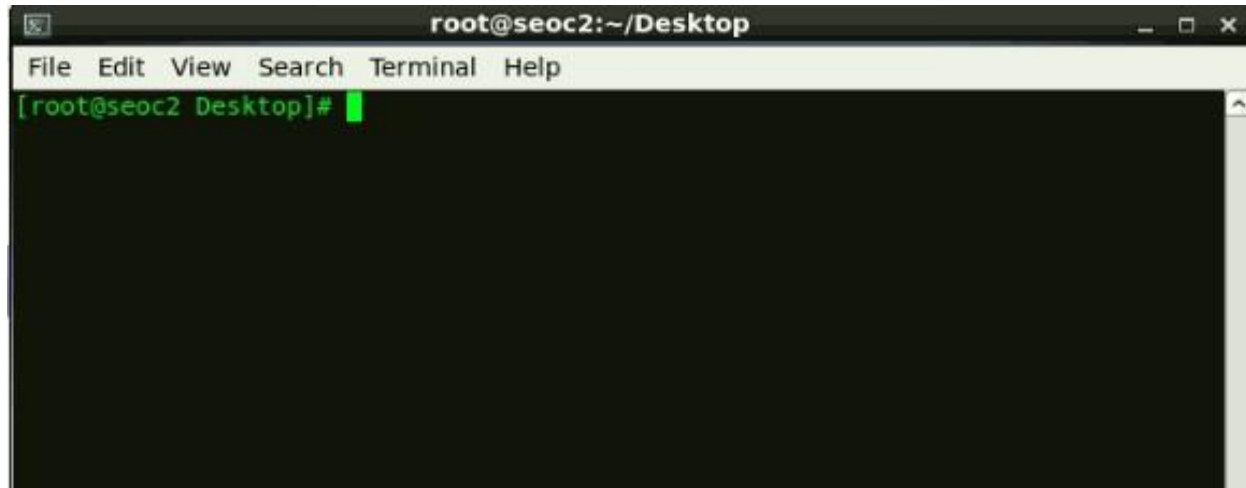
The below screenshot shows the virtual machine manager window in seoc1 server where the below mentioned VMs are installed.

The VMs installed in seoc1 server are:

- ❖ iocapp01.kseoc.gov.in (iocapp01)
- ❖ iocapp02.kseoc.gov.in (iocapp02)
- ❖ iocweb01.kseoc.gov.in (iocweb01)
- ❖ iocweb02.kseoc.gov.in (iocweb02)



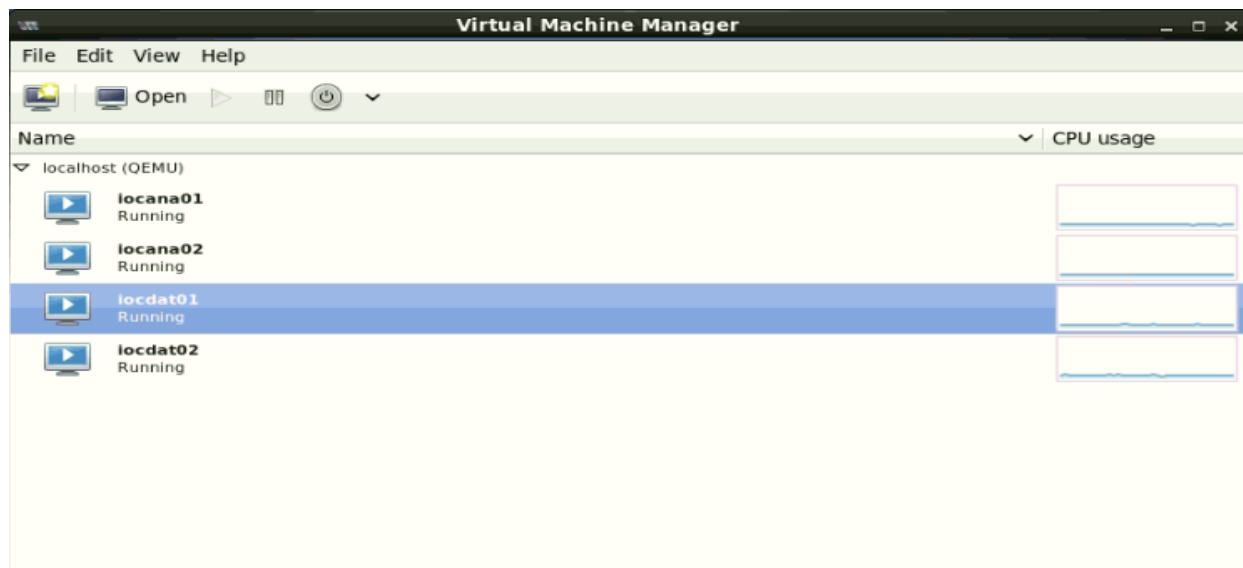
The below screenshot shows the command prompt window of seoc2.ksdma.com (seoc2) server.



The below screenshot shows the virtual machine manager window in seoc2 server where the below mentioned VMs are installed.

The VMs installed in seoc2 server are:

- ❖ iocana01.kseoc.gov.in (iocana01)
- ❖ iocana02.kseoc.gov.in (iocana02)
- ❖ iocdat01.kseoc.gov.in (iocdat01)
- ❖ iocdat02.kseoc.gov.in (iocdat02)



The below screenshot shows the IOC access URL where one can login to the dashboard of IOC.

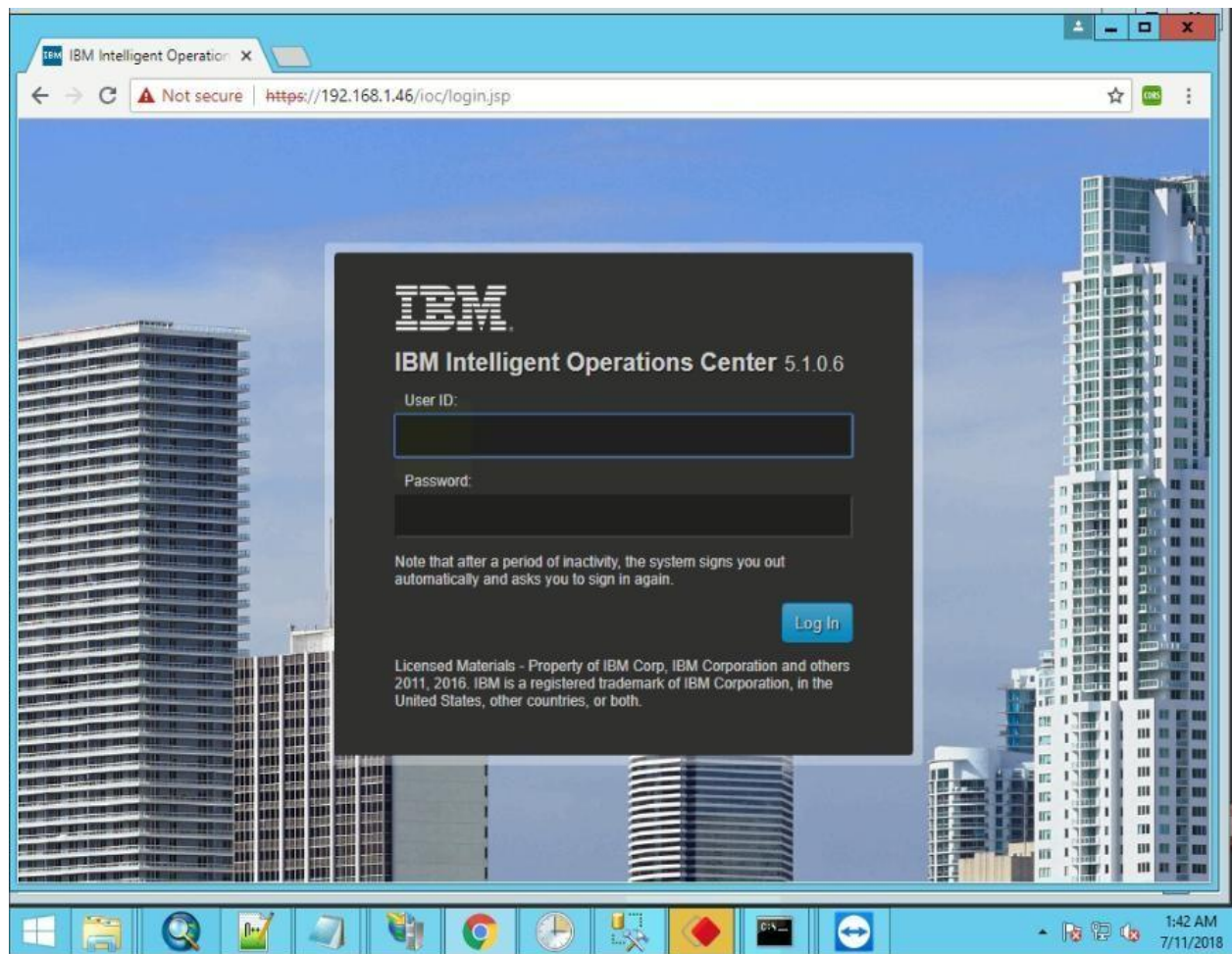
The URL for the IOC login is:

<https://192.168.1.46/ioc>

The login details are:

User ID: *sysadmin*

Password: *ChangeM3N0w!*



3. Stopping the IOC Server:

As IOC runs through different services installed on the VMs of the seoc1 and seoc2 servers.

So, in order to stop the IBM Intelligent Operations Center, we need to stop all the services running on the VMs of seoc1 and seoc2 including the LVM services.

1. *Stopping the IOC platform components:*

1. Table for stopping platform components:

The below table provides a summary of the commands for stopping the platform components.

***Please note that the below table doesn't give any information about stopping LVM services.**

Commands for stopping the platform components in sequential order

Command number	Platform component	User	Location	Command
1	HTTP server	root	iocweb02	"/opt/IBM/HTTPServer/bin/apachectl" stop "/opt/IBM/HTTPServer/bin/adminctl" stop
2	HTTP server	root	iocweb01	"/opt/IBM/HTTPServer/bin/apachectl" stop "/opt/IBM/HTTPServer/bin/adminctl" stop

3	WebSphere Application Server Liberty Profile server instances	iocadmin	iocapp02	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server stop iocapp02”
4	WebSphere Application Server Liberty Profile server instances	iocadmin	iocapp01	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server stop iocapp01”
5	WebSphere Application Server Liberty Profile server instances	iocadmin	iocana02	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server stop iocana02”
6	WebSphere Application Server Liberty Profile server instances	iocadmin	iocana01	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server stop iocana01”
7	IBM SPSS Modeler Server Premium	iocadmin	iocana02	su – iocadmin -c “/opt/IBM/SPSS/ModelerServer/17.0/modelers rv.sh stop”
8	IBM SPSS Modeler Server Premium	iocadmin	iocana01	su – iocadmin -c “/opt/IBM/SPSS/ModelerServer/17.0/modelers rv.sh stop”

9	DB2	root	Iocdat02	stoprpnod iocdat02 stoprpdomain IOC_DOMAIN(run this command only after checking whether domain is stopped or not)
10	DB2	root	Iocdat01	stoprpnod -f iocdat01 stoprpdomain IOC_DOMAIN(run this command only after checking whether domain is stopped or not)

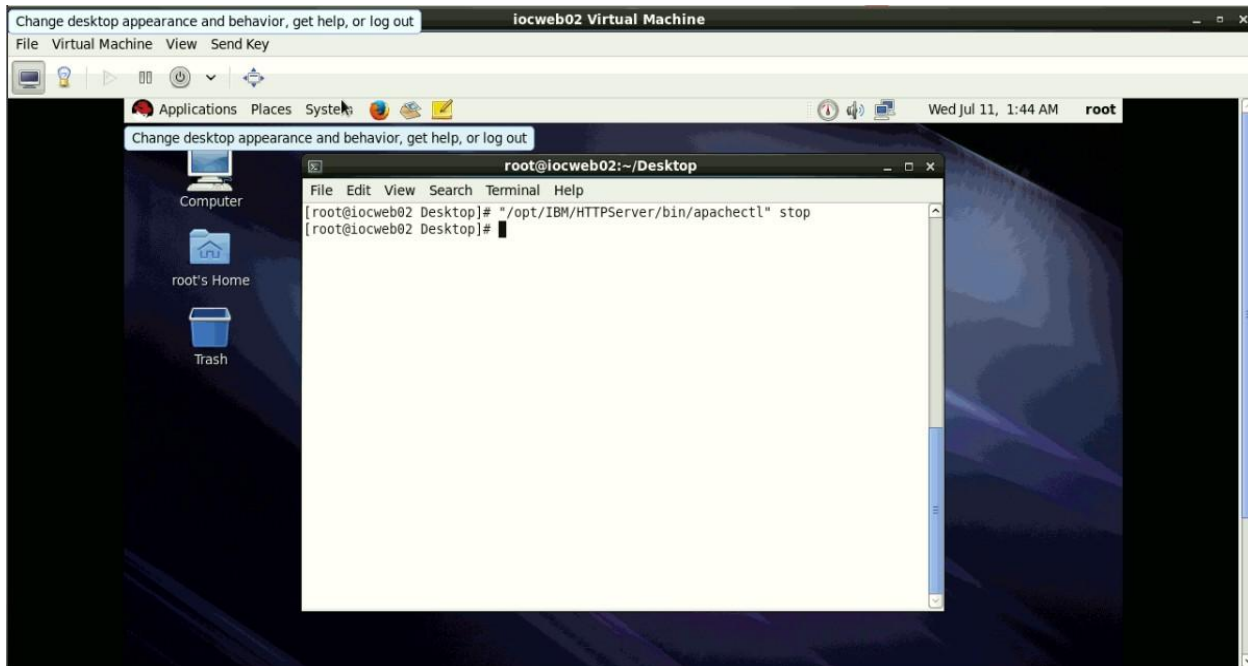
2. Step-by-Step Procedure for stopping platform components (with Screen-shots):

Below are the steps for stopping IOC platform component in all the VMs in a sequence and also find the subsequent screenshot for each step:

***Please note that the lines which are in bold and underlined are the command which has to run in command prompt as it is written.**

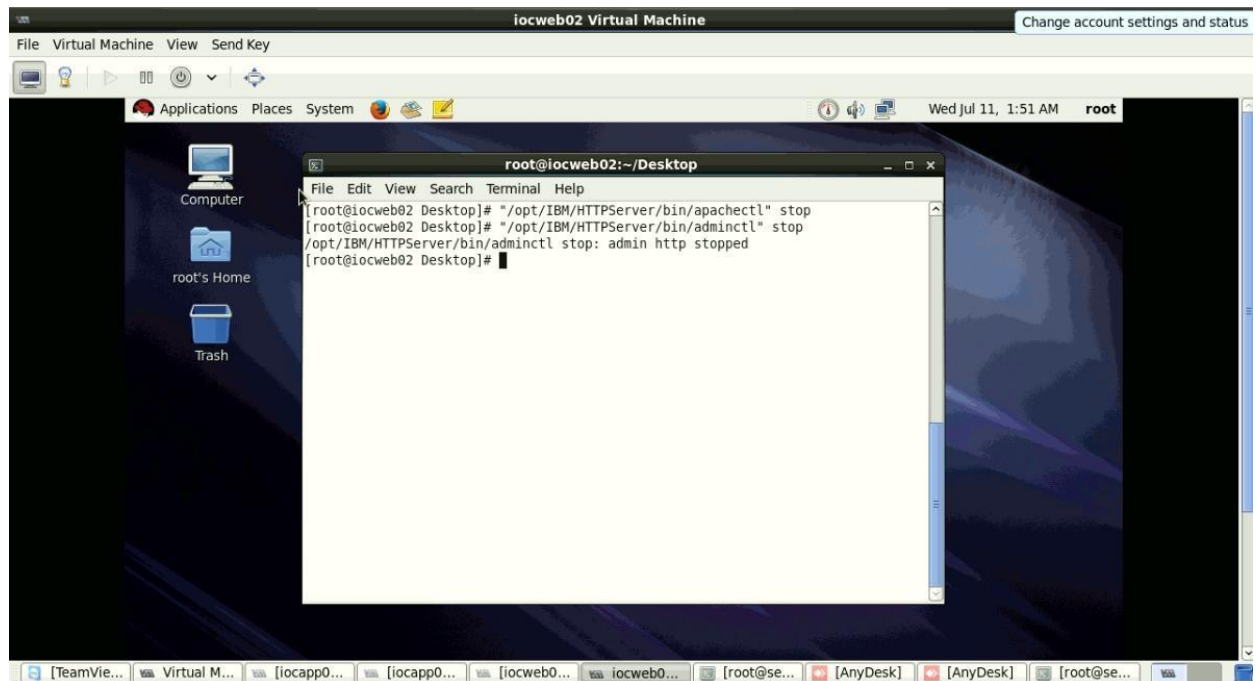
Open command prompt in **iocweb02** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/apachectl" stop



Open command prompt in **iocweb02** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/adminctl" stop



Open command prompt in **iocweb01** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/apachectl" stop

A terminal window titled 'root@iocweb01:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command `"/opt/IBM/HTTPServer/bin/apachectl" stop` being entered and executed. The prompt is `[root@iocweb01 Desktop]#`.

```
root@iocweb01:~/Desktop
File Edit View Search Terminal Help
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/apachectl" stop
[root@iocweb01 Desktop]#
```

Open command prompt in **iocweb01** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/adminctl" stop

A terminal window titled 'root@iocweb01:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command `"/opt/IBM/HTTPServer/bin/adminctl" stop` being entered and executed. The prompt is `[root@iocweb01 Desktop]#`. The output of the command is `/opt/IBM/HTTPServer/bin/adminctl stop: admin http stopped`.

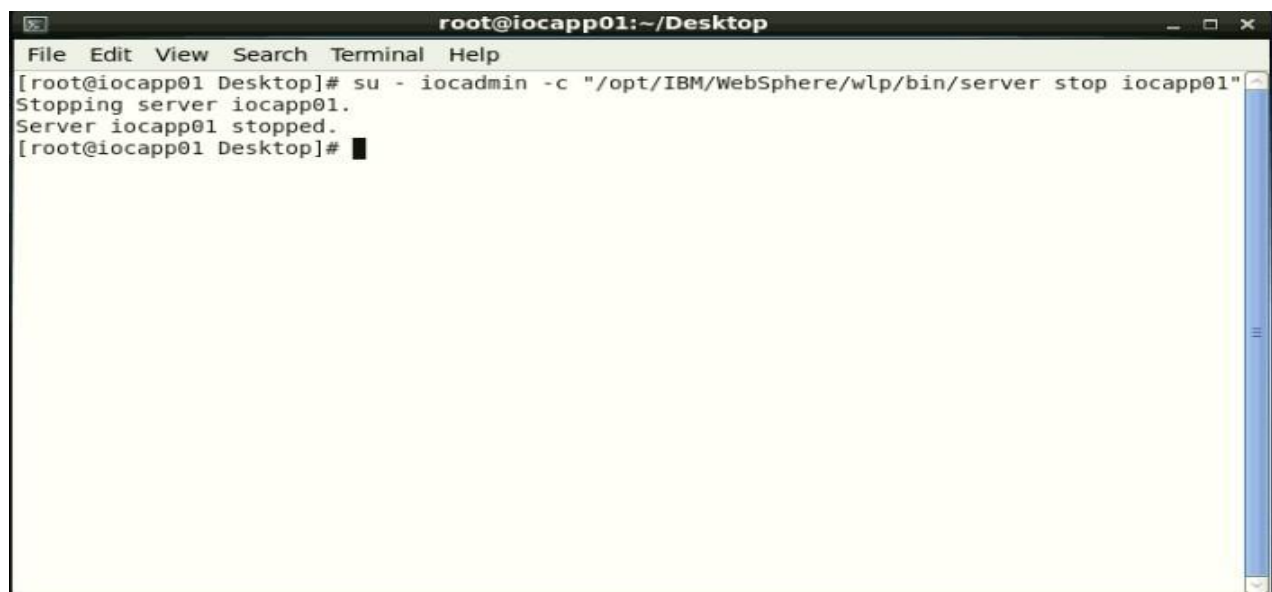
```
root@iocweb01:~/Desktop
File Edit View Search Terminal Help
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/apachectl" stop
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/adminctl" stop
/opt/IBM/HTTPServer/bin/adminctl stop: admin http stopped
[root@iocweb01 Desktop]#
```

Open command prompt in **iocapp02** and type the below command and press enter:
su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp02"

A terminal window titled 'root@iocapp02:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[root@iocapp02 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp02"' has been entered. The output shows 'Stopping server iocapp02.' and 'Server iocapp02 stopped.' followed by a new prompt '[root@iocapp02 Desktop]#'.

```
root@iocapp02:~/Desktop
File Edit View Search Terminal Help
[root@iocapp02 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp02"
Stopping server iocapp02.
Server iocapp02 stopped.
[root@iocapp02 Desktop]#
```

Open command prompt in **iocapp01** and type the below command and press enter:
su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp01"

A terminal window titled 'root@iocapp01:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The command '[root@iocapp01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp01"' has been entered. The output shows 'Stopping server iocapp01.' and 'Server iocapp01 stopped.' followed by a new prompt '[root@iocapp01 Desktop]#'.

```
root@iocapp01:~/Desktop
File Edit View Search Terminal Help
[root@iocapp01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocapp01"
Stopping server iocapp01.
Server iocapp01 stopped.
[root@iocapp01 Desktop]#
```

Open command prompt in **iocana02** and type the below command and press enter:
su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana02"



```
root@iocana02:~  
File Edit View Search Terminal Help  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana02"  
Stopping server iocana02.  
Server iocana02 stopped.  
[root@iocana02 ~]#
```

Open command prompt in **iocana01** and type the below command and press enter:
su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana01"



```
root@iocana01:~/Desktop  
File Edit View Search Terminal Help  
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana01"  
Stopping server iocana01.  
Server iocana01 stopped.  
[root@iocana01 Desktop]#
```

Open command prompt in **iocana02** and type the below command and press enter:

su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh stop"



```
root@iocana02:~  
File Edit View Search Terminal Help  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana02"  
Stopping server iocana02.  
Server iocana02 stopped.  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh stop"  
IBM SPSS Text Analytics Server stopped  
IBM SPSS Modeler Server stopped  
[root@iocana02 ~]#
```

Open command prompt in **iocana01** and type the below command and press enter:

su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh stop"



```
root@iocana01:~/Desktop  
File Edit View Search Terminal Help  
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server stop iocana01"  
Stopping server iocana01.  
Server iocana01 stopped.  
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh stop"  
IBM SPSS Text Analytics Server stopped  
IBM SPSS Modeler Server stopped  
[root@iocana01 Desktop]#
```

So, till now we have stopped both the web servers, application servers and analytical servers.

Once all the above commands ran successfully, then data servers need to be stopped.

Some important points to be kept in mind to stop data servers successfully on both iocdat01 and iocdat02:

- ❖ Both data servers are synchronized to each other so if any changes made on one data server is reflected in other data server too.
- ❖ To synchronize both the data servers, a domain is created and both the data servers are added to it as nodes.
- ❖ So there are two nodes named as **iocdat01** and **iocdat02** and a domain called **IOC_DOMAIN**.
- ❖ Therefore you need to stop iocdat02 and then iocdat01 and finally IOC_DOMAIN.
- ❖ Also note that stopping nodes also stops domain automatically. Once nodes are stopped just check whether domain is stopped or not and if it is stopped so no need to stop it manually.
- ❖ The command to stop domain is:

stoprpdomain IOC DOMAIN

Open command prompt in **iocdat02** and type the below command and press enter:

lsrpnode

(This command is used to verify whether the node is running or not. If it is sure enough that node is running then no need to run this command.)



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpnode
Name      OpState  RSCTVersion
iocdat01  Online   3.1.5.5
iocdat02  Online   3.1.5.5
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:

lsrpdomain

(This command is used to verify whether the domain is running or not. If it is sure enough that the domain is running then no need to run this command.)



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5      No          12347 12348
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:

stoprpnnode iocdat02



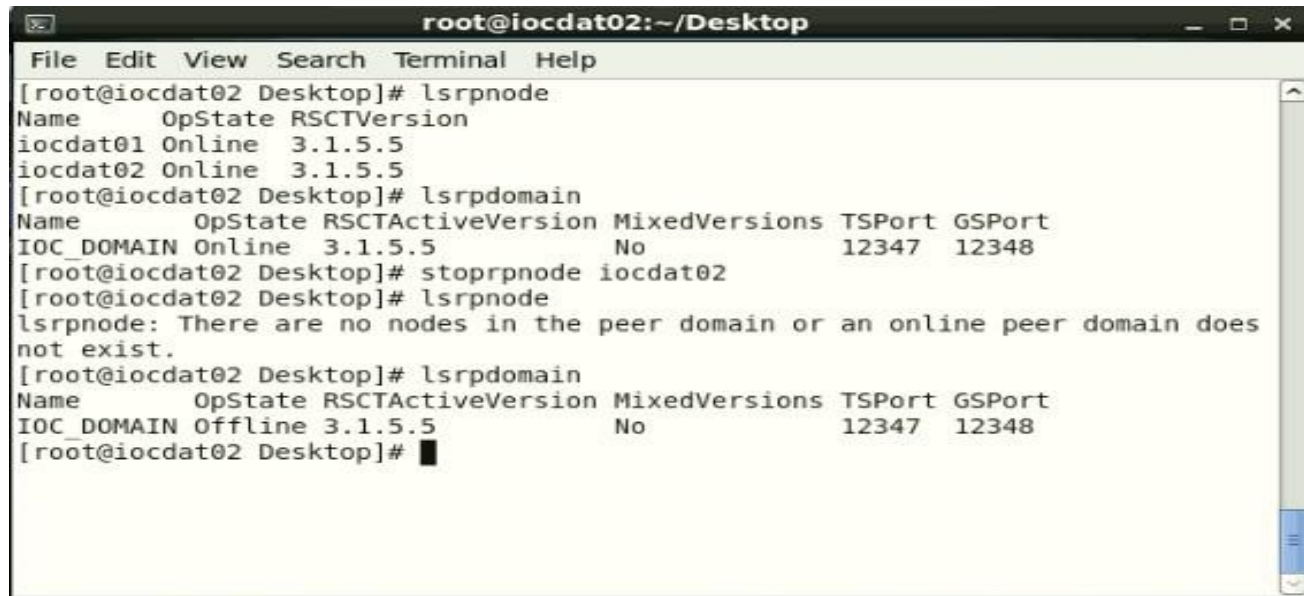
```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5      No          12347 12348
[root@iocdat02 Desktop]# stoprpnnode iocdat02
[root@iocdat02 Desktop]#
```


Open command prompt in **iocdat02** and type the below command and press enter:

lsrpnode

lsrpdomain

(It takes some time to stop the domain and in the meanwhile if **lsrpdomain** command runs then it displays **pending offline** instead of **offline**.)



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]# stoprpnode iocdat02
[root@iocdat02 Desktop]# lsrpnode
lsrpnode: There are no nodes in the peer domain or an online peer domain does
not exist.
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:

lsrpnode

lsrpdomain



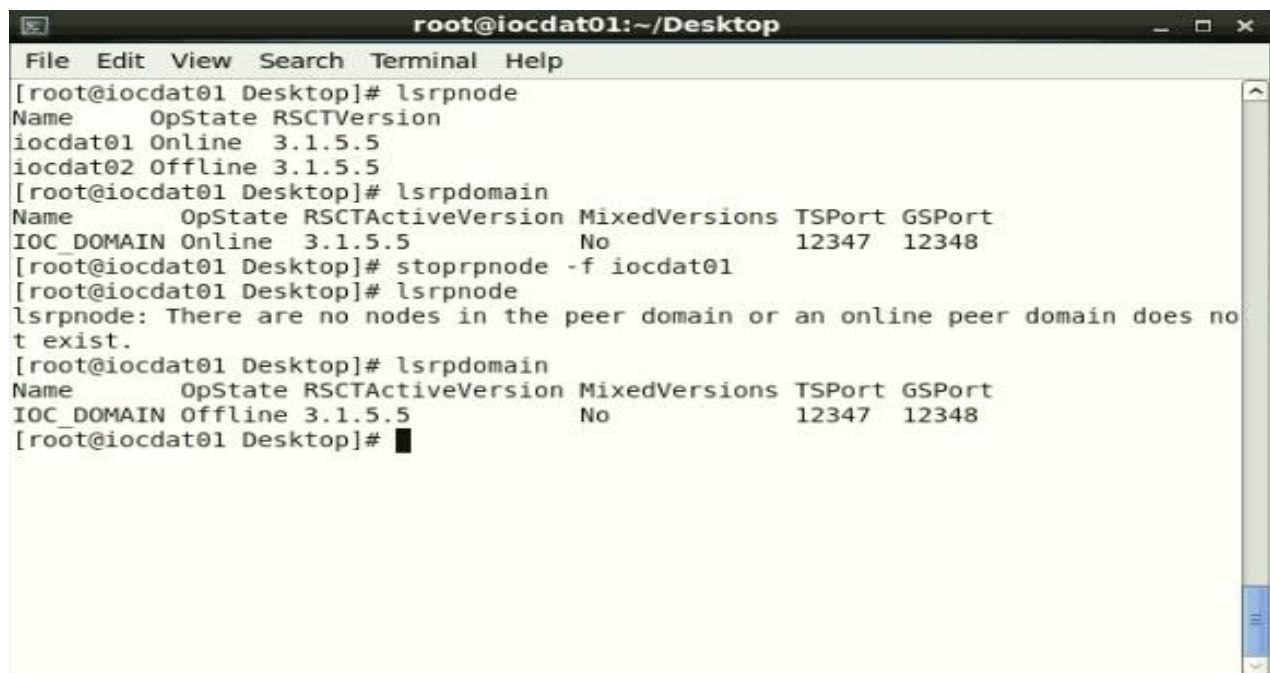
```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:
stoprpnnode -f iocdat01



```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# stoprpnnode -f iocdat01
[root@iocdat01 Desktop]#
```

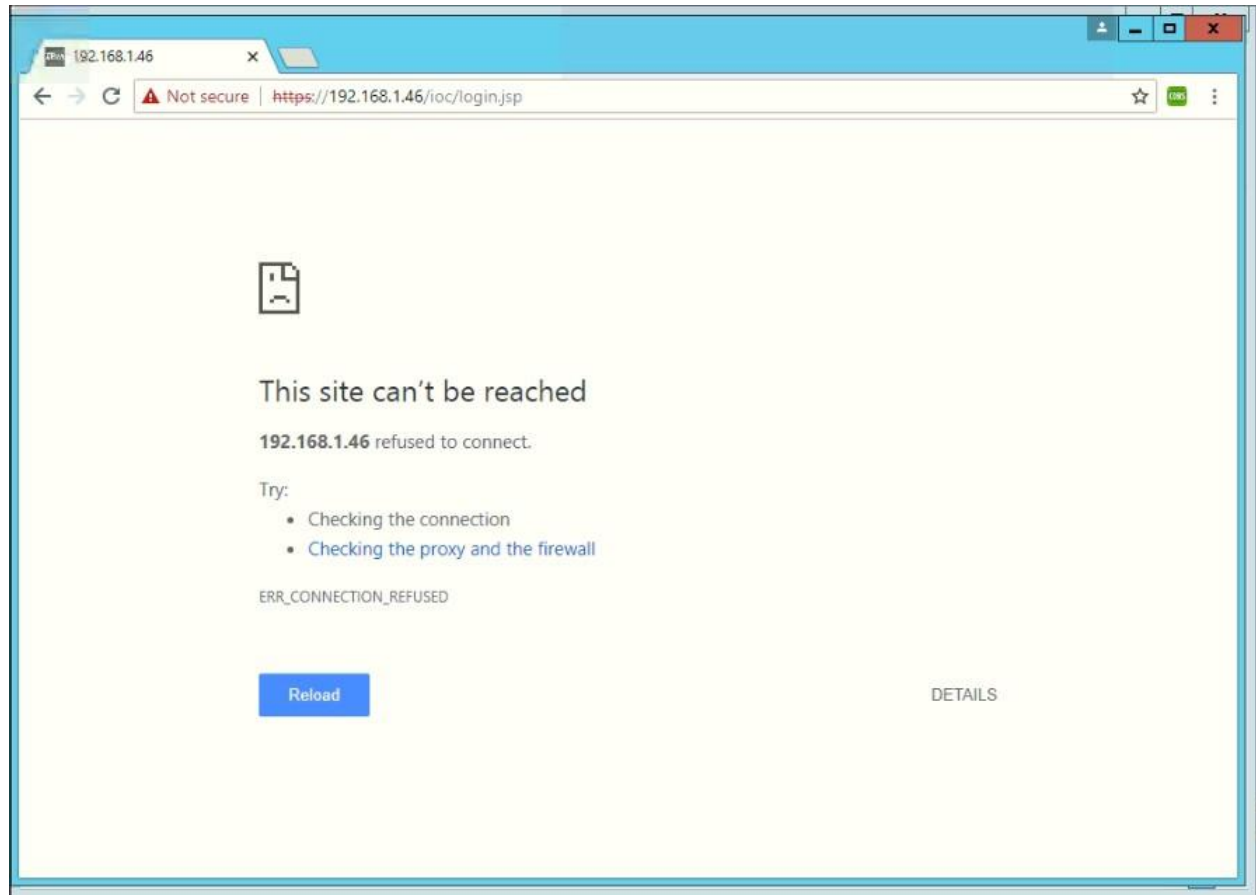
Open command prompt in **iocdat01** and type the below command and press enter:
lsrpnode
lsrpdomain



```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# stoprpnnode -f iocdat01
[root@iocdat01 Desktop]# lsrpnode
lsrpnnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]#
```

Once all the above commands ran successfully, the IOC platform components are stopped successfully.

It can be checked by accessing the IOC URL mentioned in the document earlier.



***Please note that the LVM services are not yet stopped.**

2. *Stopping the LVM services:*

LVM stands for *Logical Volume Management*. It is a system of managing logical volumes, or file systems, that is much more advanced and flexible than the traditional method of partitioning a disk into one or more segments and formatting that partition with a file system.

As it is known that data servers i.e. **iocdat01** and **iocdat02** are database servers and are synchronized to each other, it uses only one physical space in the system to save all the data of IOC. Hence, irrespective of data servers working at a moment the data is saved to only one physical location assigned to the data server.

To provide this mechanism to the servers, LVM is being used in our project. LVM creates a different file system in the server and assigns that file system to both the data servers. For this purpose, it uses two services of LVM and they are:

- ❖ TGT service
- ❖ ISCSI service

These services provide host-client mechanism for sharing the file system with each other. ISCSI service is the client service wherein TGT is the host service in the mechanism.

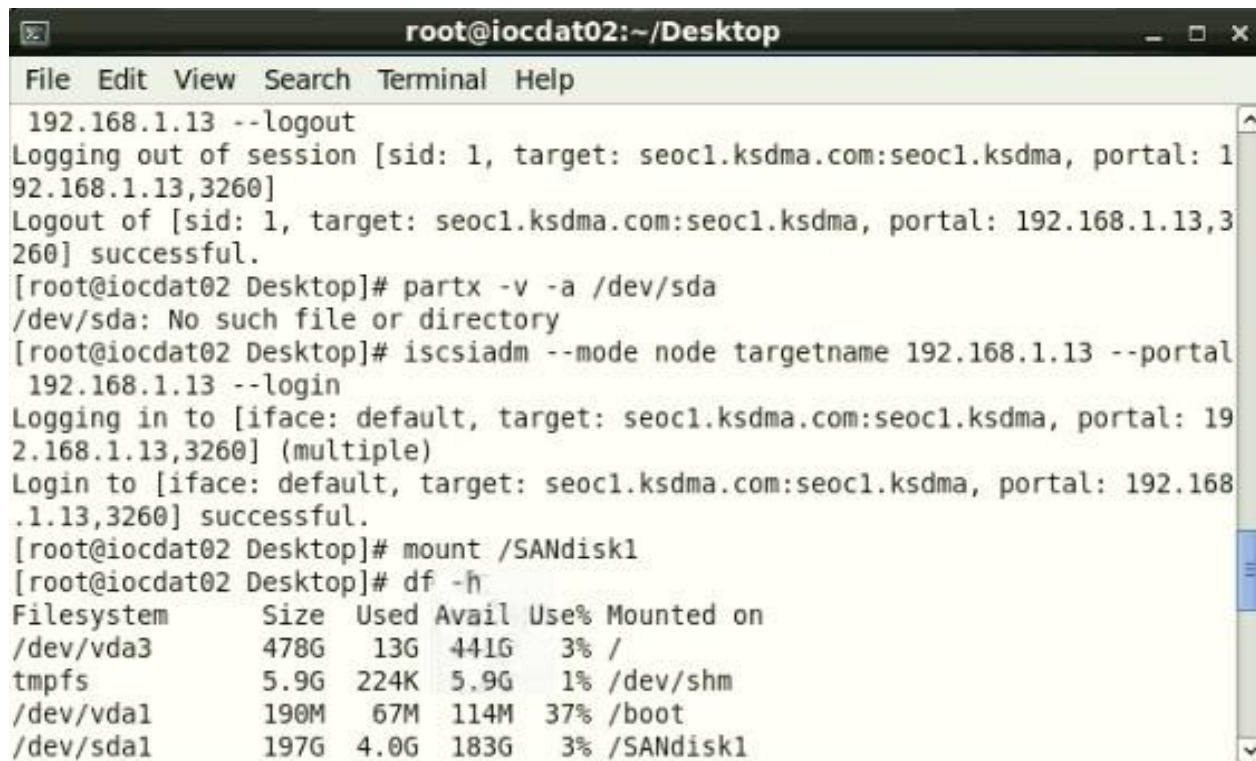
So, **iocdat01** and **iocdat02** are the clients in our servers wherein **seoc1** is the host in our servers which means **iocdat01** and **iocdat02** uses physical memory of **seoc1**. **seoc1** has a file system where a folder SANdisk1 is created which is being used by **iocdat01** and **iocdat02**.

Below are the steps for stopping LVM services in both the data servers and seoc1 with subsequent screenshot for each step:

Open command prompt in **iocdat02** and type the below command and press enter:

df -h

(This command is used to verify whether **/SANDisk1** is mounted or not.)



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
192.168.1.13 --logout
Logging out of session [sid: 1, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260]
Logout of [sid: 1, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat02 Desktop]# partx -v -a /dev/sda
/dev/sda: No such file or directory
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login
Logging in to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] (multiple)
Login to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat02 Desktop]# mount /SANDisk1
[root@iocdat02 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3       478G   13G  441G   3% /
tmpfs           5.9G  224K   5.9G   1% /dev/shm
/dev/vda1       190M   67M  114M  37% /boot
/dev/sda1       197G  4.0G  183G   3% /SANDisk1
```

Open command prompt in **iocdat01** and type the below command and press enter:

df -h

(This command is used to verify whether **/SANDisk1** is mounted or not.)

```

root@iocdat01:~/Desktop
File Edit View Search Terminal Help
/dev/vda3      478G   42G   412G   10% /
tmpfs         5.9G   228K   5.9G    1% /dev/shm
/dev/vda1     190M    67M   114M   37% /boot
/dev/sda1     197G   4.0G   183G    3% /SANDisk1
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC DOMAIN Offline 3.1.5.5          No           12347 12348
[root@iocdat01 Desktop]# startlrpdomain IOC DOMAIN
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC DOMAIN Pending online 3.1.5.5          No           12347 12348
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC DOMAIN Online 3.1.5.5          No           12347 12348
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online 3.1.5.5
iocdat02 Online 3.1.5.5
[root@iocdat01 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3      478G   42G   412G   10% /
tmpfs         5.9G   236K   5.9G    1% /dev/shm
/dev/vda1     190M    67M   114M   37% /boot
/dev/sda1     197G   4.0G   183G    3% /SANDisk1

```

Open command prompt in **iocdat02** and type the below command and press enter:

umount /SANDisk1

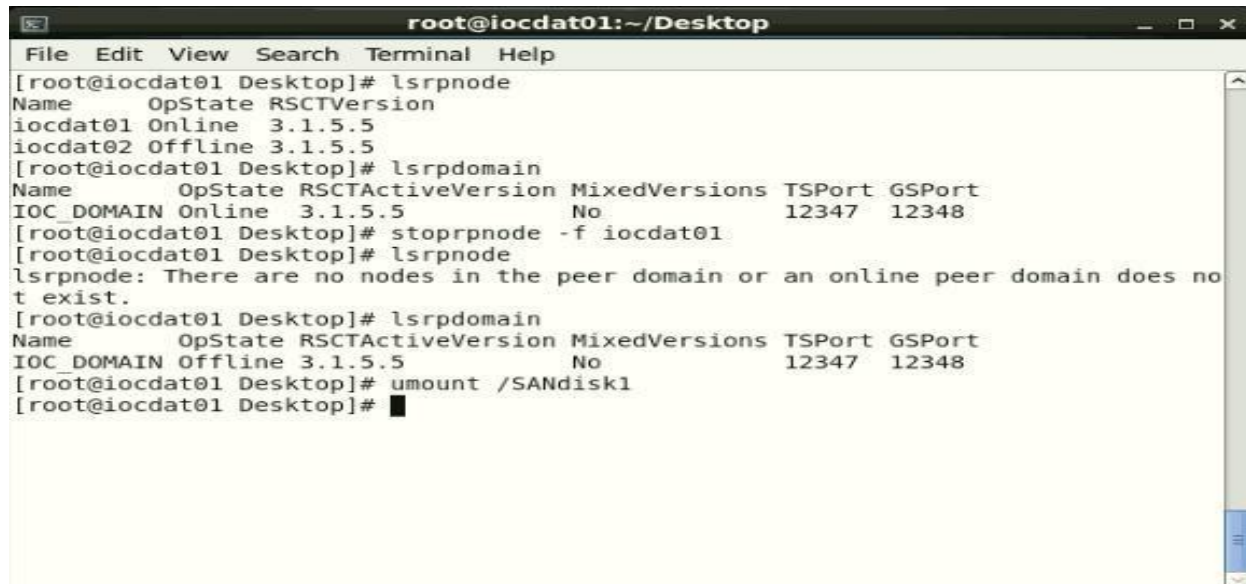
```

root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online 3.1.5.5
iocdat02 Online 3.1.5.5
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC DOMAIN Online 3.1.5.5          No           12347 12348
[root@iocdat02 Desktop]# stoplrpnode iocdat02
[root@iocdat02 Desktop]# lsrpnode
lsrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC DOMAIN Offline 3.1.5.5          No           12347 12348
[root@iocdat02 Desktop]# umount /SANDisk1
[root@iocdat02 Desktop]# █

```


Open command prompt in **iocdat01** and type the below command and press enter:

umount /SANDisk1



```

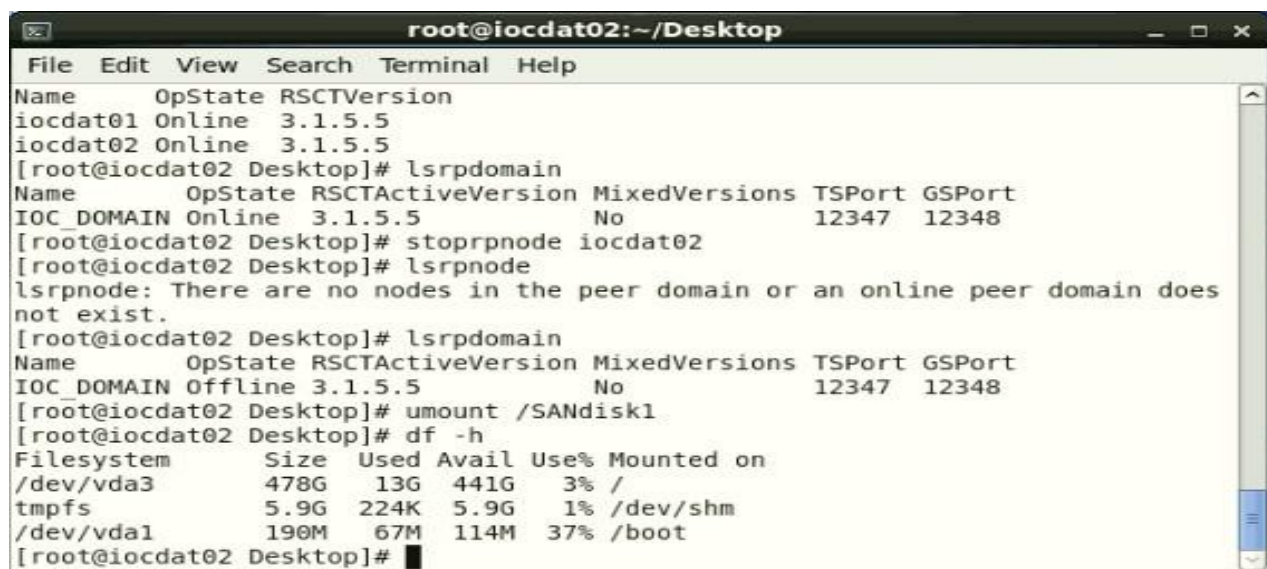
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# stoprrpnode -f iocdat01
[root@iocdat01 Desktop]# lsrpnode
lsrrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat01 Desktop]# lsrrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# umount /SANDisk1
[root@iocdat01 Desktop]#

```

Open command prompt in **iocdat02** and type the below command and press enter:

df -h

(This command is used to verify whether **/SANDisk1** is mounted or not. Once umount command ran successfully, need to check whether **/SANDisk1** is removed or not.)



```

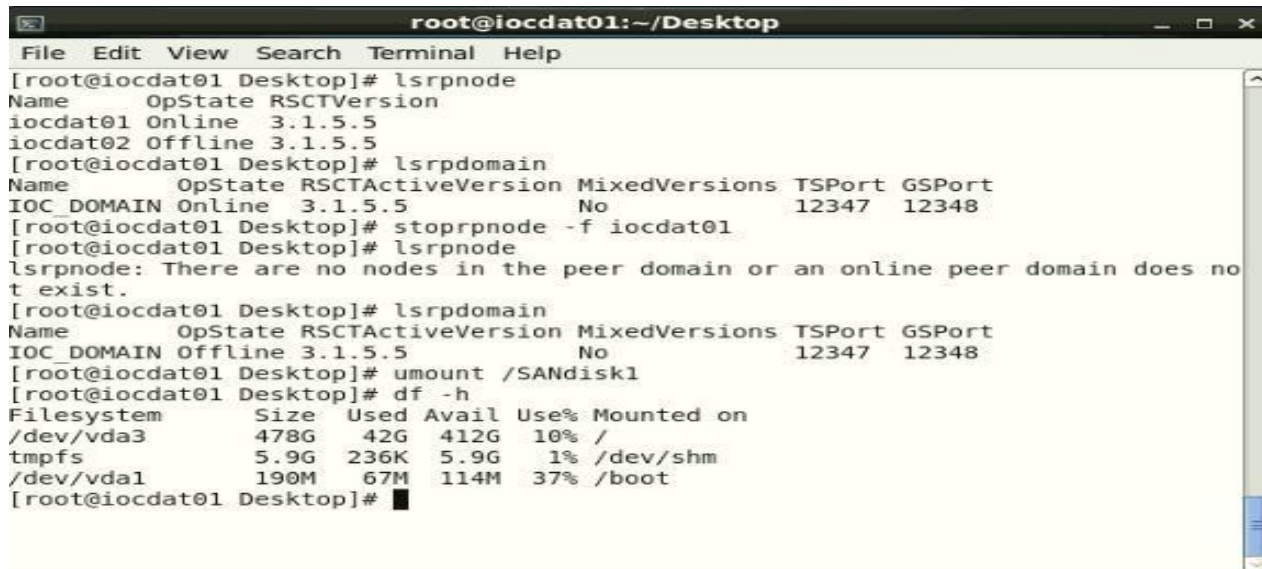
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat02 Desktop]# lsrrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]# stoprrpnode iocdat02
[root@iocdat02 Desktop]# lsrpnode
lsrrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat02 Desktop]# lsrrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]# umount /SANDisk1
[root@iocdat02 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G   13G  441G   3% /
tmpfs            5.9G   224K   5.9G   1% /dev/shm
/dev/vda1        190M    67M   114M  37% /boot
[root@iocdat02 Desktop]#

```

Open command prompt in **iocdat01** and type the below command and press enter:

df -h

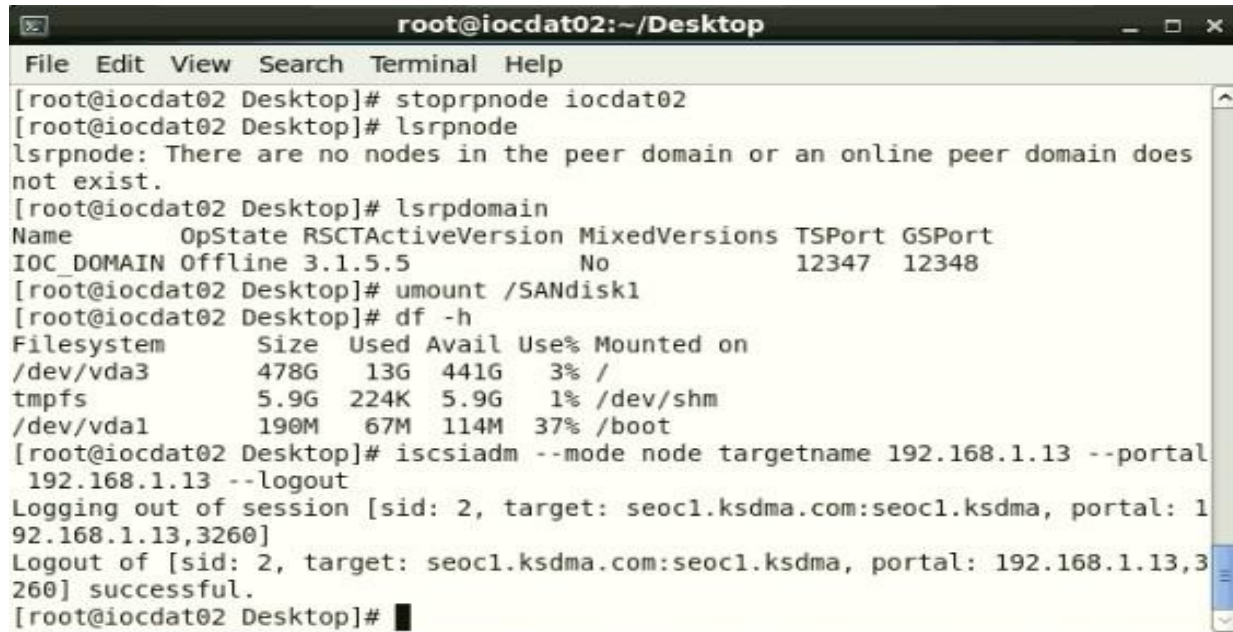
(This command is used to verify whether **/SANDisk1** is mounted or not. Once umount command ran successfully, need to check whether **/SANDisk1** is removed or not.)



```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# lsrpnode
Name      OpState RSCVersion
iocdat01 Online  3.1.5.5
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# stoprpnode -f iocdat01
[root@iocdat01 Desktop]# lsrpnode
lsrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState RSCActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# umount /SANDisk1
[root@iocdat01 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G  42G  412G  10% /
tmpfs            5.9G  236K  5.9G   1% /dev/shm
/dev/vda1        190M   67M  114M  37% /boot
[root@iocdat01 Desktop]#
```

At this point of time **/SANDisk1** is un-mounted from both the data servers. Now we need to stop the ISCSID services in both the data servers.

Open command prompt in **iocdat02** and type the below command and press enter:
iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --logout




```

root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# stoprpnode iocdat02
[root@iocdat02 Desktop]# lsrpnode
lsrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat02 Desktop]# lsrpdomain
Name          OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]# umount /SANDisk1
[root@iocdat02 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G   13G  441G   3% /
tmpfs            5.9G   224K   5.9G   1% /dev/shm
/dev/vda1        190M    67M   114M  37% /boot
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --logout
Logging out of session [sid: 2, target: seocl.ksdma.com:seocl.ksdma, portal: 192.168.1.13,3260]
Logout of [sid: 2, target: seocl.ksdma.com:seocl.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat02 Desktop]#

```

Open command prompt in **iocdat01** and type the below command and press enter:
iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --logout



```

root@iocdat01:~/Desktop
File Edit View Search Terminal Help
iocdat02 Offline 3.1.5.5
[root@iocdat01 Desktop]# lsrpdomain
Name          OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# stoprpnode -f iocdat01
[root@iocdat01 Desktop]# lsrpnode
lsrpnode: There are no nodes in the peer domain or an online peer domain does not exist.
[root@iocdat01 Desktop]# lsrpdomain
Name          OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# umount /SANDisk1
[root@iocdat01 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G   42G  412G  10% /
tmpfs            5.9G   236K   5.9G   1% /dev/shm
/dev/vda1        190M    67M   114M  37% /boot
[root@iocdat01 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --logout
Logging out of session [sid: 1, target: seocl.ksdma.com:seocl.ksdma, portal: 192.168.1.13,3260]
Logout of [sid: 1, target: seocl.ksdma.com:seocl.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat01 Desktop]#

```

Open command prompt in **iocdat02** and type the below command and press enter:
for i in iscsid iscsi; do chkconfig \$1 on; service \$i stop; done

```

root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No           12347 12348
[root@iocdat02 Desktop]# umount /SANDisk1
[root@iocdat02 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G   13G  441G   3% /
tmpfs            5.9G   224K   5.9G   1% /dev/shm
/dev/vda1        190M    67M  114M  37% /boot
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal
192.168.1.13 --logout
Logging out of session [sid: 2, target: seoc1.ksdma.com:seoc1.ksdma, portal: 1
92.168.1.13,3260]
Logout of [sid: 2, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3
260] successful.
[root@iocdat02 Desktop]# for i in iscsid iscsi; do chkconfig $1 on; service $i
stop; done
Stopping iscsid:
Stopping iscsi:
[ OK ]
[root@iocdat02 Desktop]#

```

Open command prompt in **iocdat01** and type the below command and press enter:
for i in iscsid iscsi; do chkconfig \$1 on; service \$i stop; done

```

root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# stoprpnnode -f iocdat01
[root@iocdat01 Desktop]# lsrdnode
lsrdnode: There are no nodes in the peer domain or an online peer domain does no
t exist.
[root@iocdat01 Desktop]# lsrdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Offline 3.1.5.5          No           12347 12348
[root@iocdat01 Desktop]# umount /SANDisk1
[root@iocdat01 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3        478G   42G  412G  10% /
tmpfs            5.9G   236K   5.9G   1% /dev/shm
/dev/vda1        1.9G  267M  114M  37% /boot
[root@iocdat01 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 1
92.168.1.13 --logsktop]
Logging out of session [sid: 1, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192
.168.1.13,3260]
Logout of [sid: 1, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,326
0] successful.
[root@iocdat01 Desktop]# for i in iscsid iscsi; do chkconfig $1 on; service $i s
top;done
Stopping iscsid:
Stopping iscsi:
[ OK ]
[root@iocdat01 Desktop]#

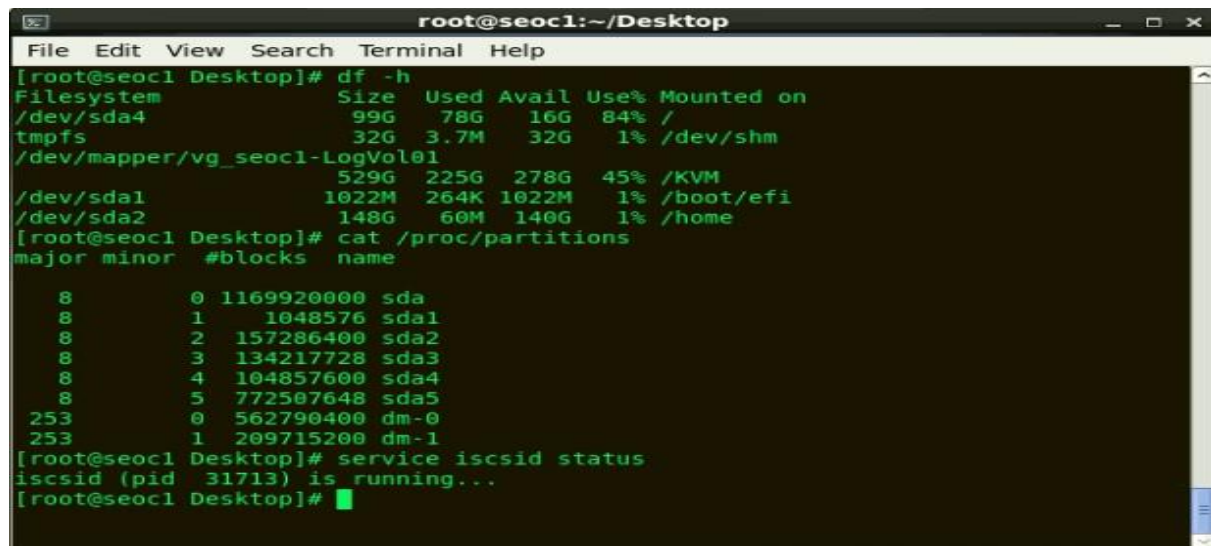
```

If the above commands ran successfully, then **ISCSID** services are stopped in both the data servers.

It is time to stop the **TGTD** service in **seoc1**.

Open command prompt in **seoc1** and type the below command and press enter:

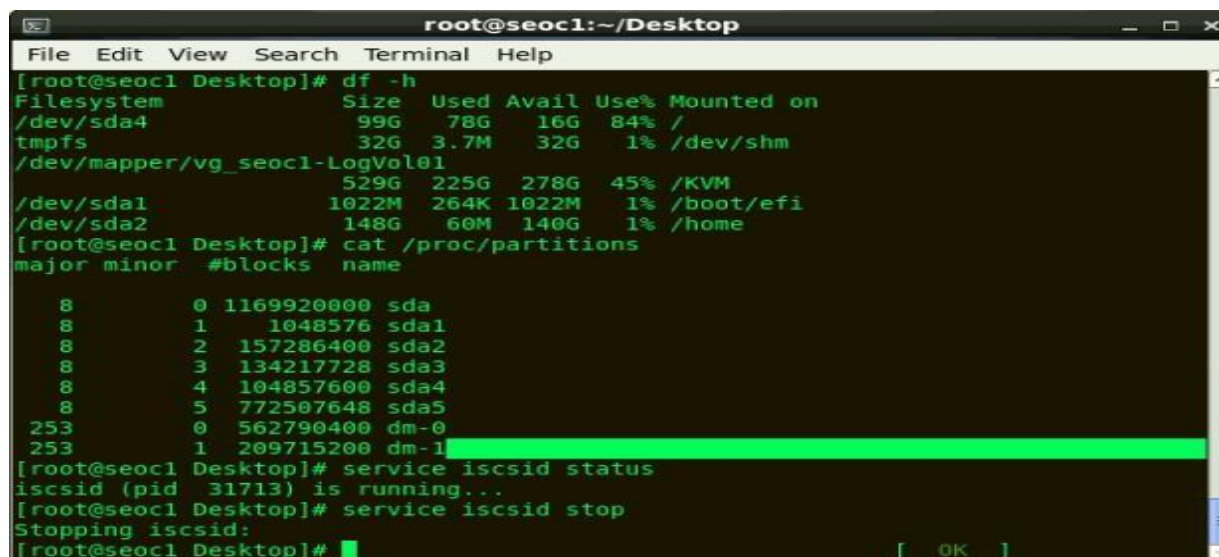
service iscsid status



```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda4        99G   78G   16G   84% /
tmpfs            32G   3.7M   32G    1% /dev/shm
/dev/mapper/vg_seoc1-LogVol01
529G   225G   278G   45% /KVM
/dev/sda1       1022M   264K 1022M    1% /boot/efi
/dev/sda2       148G    60M  140G    1% /home
[root@seoc1 Desktop]# cat /proc/partitions
major minor  #blocks  name
   8         0 1169920000 sda
   8         1  1048576 sda1
   8         2 157286400 sda2
   8         3 134217728 sda3
   8         4 104857600 sda4
   8         5  772507648 sda5
 253         0 562790400 dm-0
 253         1 209715200 dm-1
[root@seoc1 Desktop]# service iscsid status
iscsid (pid 31713) is running...
[root@seoc1 Desktop]#
```

Open command prompt in **seoc1** and type the below command and press enter:

service iscsid stop



```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda4        99G   78G   16G   84% /
tmpfs            32G   3.7M   32G    1% /dev/shm
/dev/mapper/vg_seoc1-LogVol01
529G   225G   278G   45% /KVM
/dev/sda1       1022M   264K 1022M    1% /boot/efi
/dev/sda2       148G    60M  140G    1% /home
[root@seoc1 Desktop]# cat /proc/partitions
major minor  #blocks  name
   8         0 1169920000 sda
   8         1  1048576 sda1
   8         2 157286400 sda2
   8         3 134217728 sda3
   8         4 104857600 sda4
   8         5  772507648 sda5
 253         0 562790400 dm-0
 253         1 209715200 dm-1
[root@seoc1 Desktop]# service iscsid status
iscsid (pid 31713) is running...
[root@seoc1 Desktop]# service iscsid stop
Stopping iscsid:
[root@seoc1 Desktop]#
```

Open command prompt in **seoc1** and type the below command and press enter:
service tgtd status

A terminal window titled 'root@seoc1:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command '[root@seoc1 Desktop]# service tgtd status' and its output 'tgtd (pid 30878 30875) is running...'. The prompt '[root@seoc1 Desktop]#' is followed by a green cursor.

```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# service tgtd status
tgtd (pid 30878 30875) is running...
[root@seoc1 Desktop]#
```

Open command prompt in **seoc1** and type the below command and press enter:
service tgtd stop

A terminal window titled 'root@seoc1:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command '[root@seoc1 Desktop]# service tgtd stop' and its output 'Stopping SCSI target daemon: [OK]'. The prompt '[root@seoc1 Desktop]#' is followed by a green cursor.

```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# service tgtd status
tgtd (pid 30878 30875) is running...
[root@seoc1 Desktop]# service tgtd stop
Stopping SCSI target daemon: [ OK ]
[root@seoc1 Desktop]#
```

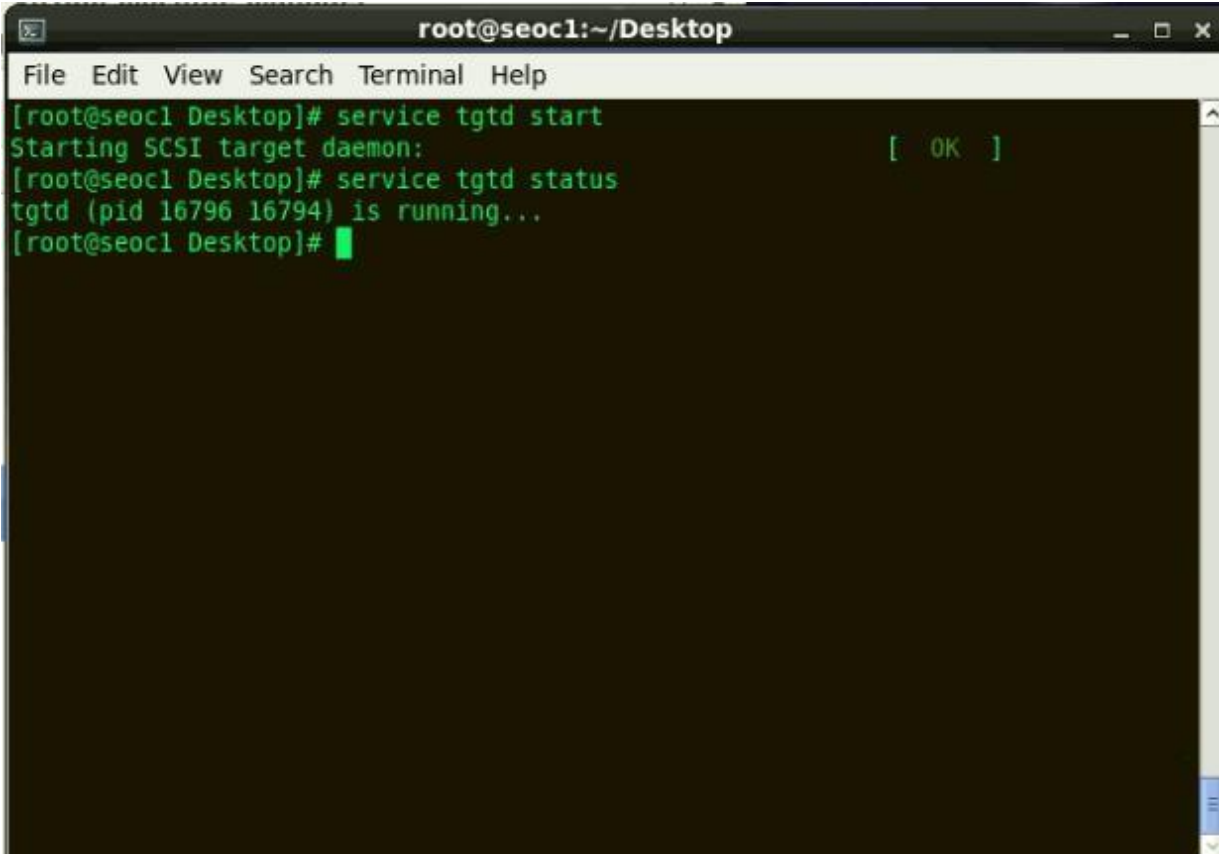

The IOC servers are now in a down state and it is safe to shut down the servers completely.

4. Starting the IOC Server:

1. *Starting the LVM services:*

Open command prompt in **seoc1** and type the below command and press enter:

service tgtd start
service tgtd status



```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# service tgtd start
Starting SCSI target daemon: [ OK ]
[root@seoc1 Desktop]# service tgtd status
tgtd (pid 16796 16794) is running...
[root@seoc1 Desktop]#
```

Open command prompt in **seoc1** and type the below command and press enter:
for i in iscsid iscsi; do chkconfig \$i on; service \$i stop; service \$i start; done



```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# for i in iscsid iscsi; do chkconfig $i on; service $i stop
; service $i start; done
Stopping iscsi:
[ OK ]
[root@seoc1 Desktop]#
```

Open command prompt in **seoc1** and type the below command and press enter:
iscsiadm --mode discovery --type sendtargets --portal 192.168.1.13
service iscsid status



```
root@seoc1:~/Desktop
File Edit View Search Terminal Help
[root@seoc1 Desktop]# for i in iscsid iscsi; do chkconfig $i on; service $i stop
; service $i start; done
Stopping iscsi:
[ OK ]
[root@seoc1 Desktop]# iscsiadm --mode discovery --type sendtargets --portal 192.
168.1.13
Starting iscsid:
[ OK ]
iscsiadm: No portals found
[root@seoc1 Desktop]# service iscsid status
iscsid (pid 18127) is running...
[root@seoc1 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:
for i in iscsid iscsi; do chkconfig \$1 on; service \$i stop; service \$i start; done



```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# for i in iscsid iscsi; do chkconfig $1 on; service $i s
top;service $i start;done
Starting iscsid:                                [ OK ]
Stopping iscsi:                                [ OK ]
Starting iscsi:                                [ OK ]
[root@iocdat01 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:
iscsiadm --mode discovery --type sendtargets --portal 192.168.1.13
service iscsid status



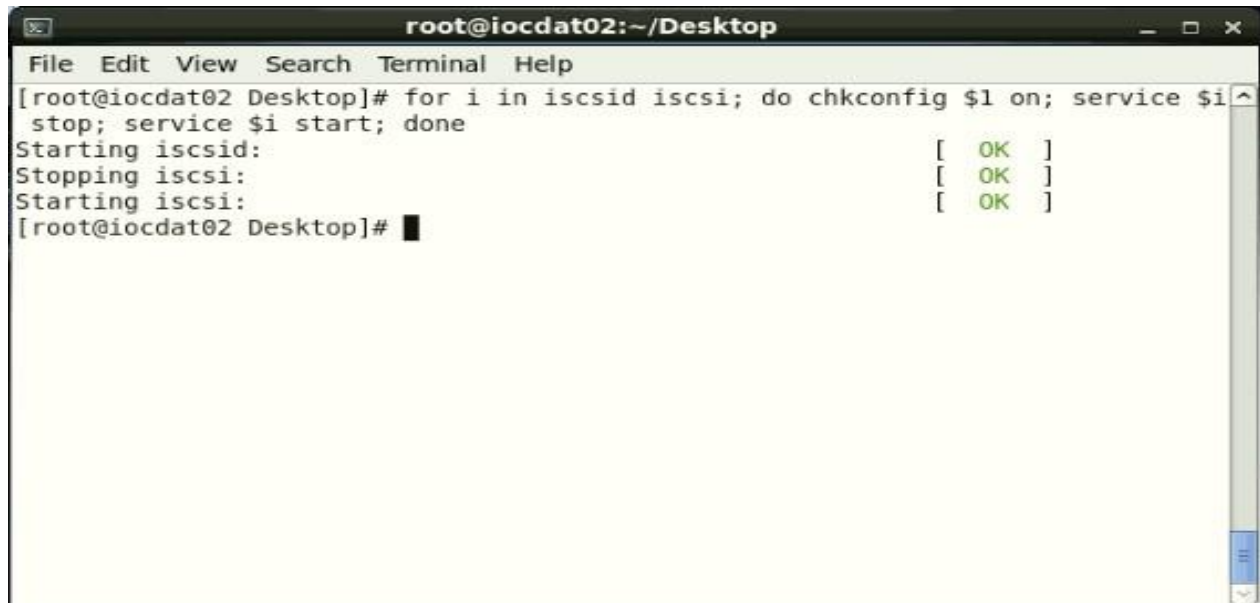
```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# for i in iscsid iscsi; do chkconfig $1 on; service $i s
top;service $i start;done
Starting iscsid:                                [ OK ]
Stopping iscsi:                                [ OK ]
Starting iscsi:                                [ OK ]
[root@iocdat01 Desktop]# iscsiadm --mode discovery --type sendtargets --portal 1
92.168.1.13
192.168.1.13:3260,1 seocl.ksdma.com:seocl.ksdma
[root@iocdat01 Desktop]# service iscsid status
iscsid (pid 2253) is running...
[root@iocdat01 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:
iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login

A terminal window titled 'root@iocdat01:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the command '[root@iocdat01 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login' and its output: 'Logging in to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] (multiple)' and 'Login to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.' The prompt returns to '[root@iocdat01 Desktop]#'.

```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login
Logging in to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] (multiple)
Login to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat01 Desktop]#
```


Open command prompt in **iocdat02** and type the below command and press enter:
for i in iscsid iscsi; do chkconfig \$i on; service \$i stop; service \$i start; done



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# for i in iscsid iscsi; do chkconfig $i on; service $i
stop; service $i start; done
Starting iscsid: [ OK ]
Stopping iscsi: [ OK ]
Starting iscsi: [ OK ]
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:
iscsiadm --mode discovery --type sendtargets --portal 192.168.1.13
service iscsid status



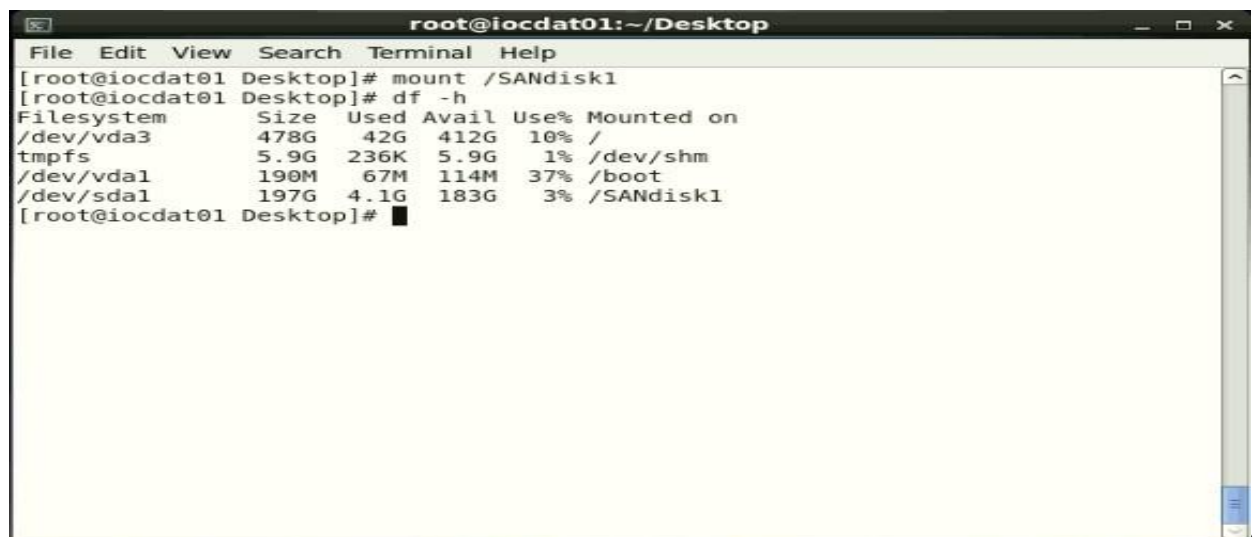
```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# for i in iscsid iscsi; do chkconfig $i on; service $i
stop; service $i start; done
Starting iscsid: [ OK ]
Stopping iscsi: [ OK ]
Starting iscsi: [ OK ]
[root@iocdat02 Desktop]# iscsiadm --mode discovery --type sendtargets --portal
192.168.1.13
192.168.1.13:3260,1 seoc1.ksdma.com:seoc1.ksdma
[root@iocdat02 Desktop]# service iscsid status
iscsid (pid 15157) is running...
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:
iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login



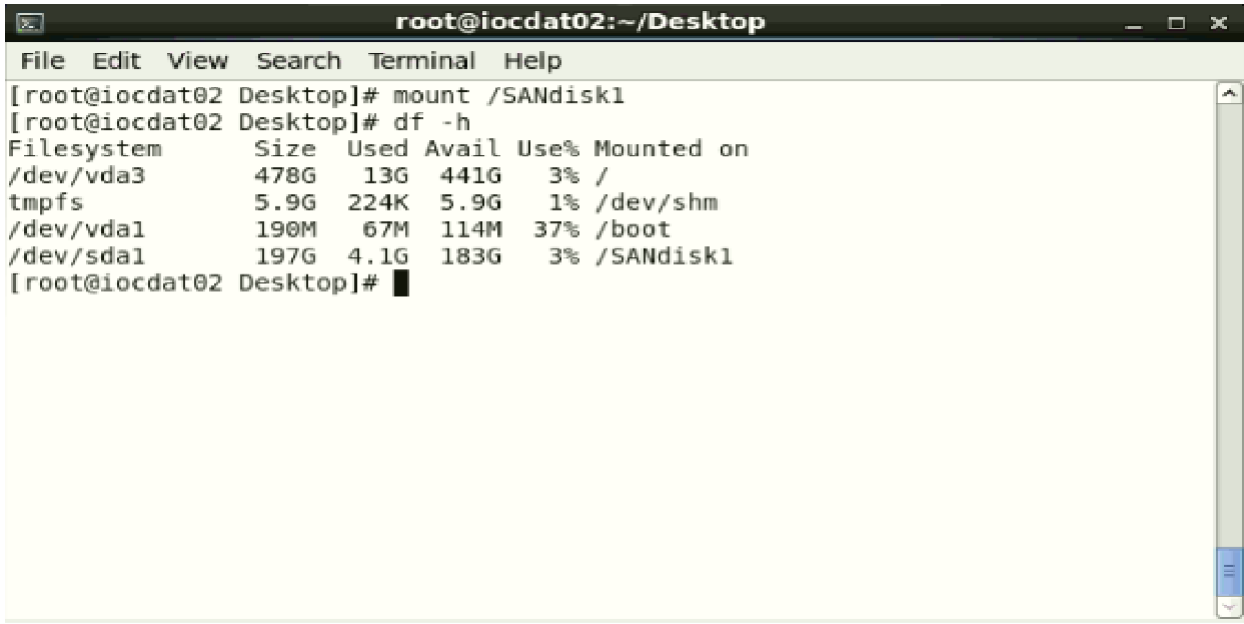
```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# iscsiadm --mode discovery --type sendtargets --portal 192.168.1.13
192.168.1.13:3260,1 seoc1.ksdma.com:seoc1.ksdma
[root@iocdat02 Desktop]# service iscsid status
iscsid (pid 15157) is running...
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --logout
Logging out of session [sid: 3, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260]
Logout of [sid: 3, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat02 Desktop]# iscsiadm --mode node targetname 192.168.1.13 --portal 192.168.1.13 --login
Logging in to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] (multiple)
Login to [iface: default, target: seoc1.ksdma.com:seoc1.ksdma, portal: 192.168.1.13,3260] successful.
[root@iocdat02 Desktop]#
```

Open command prompt in **iocdat01** and type the below command and press enter:
mount /SANdisk1
df -h



```
root@iocdat01:~/Desktop
File Edit View Search Terminal Help
[root@iocdat01 Desktop]# mount /SANdisk1
[root@iocdat01 Desktop]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda3       478G   42G  412G  10% /
tmpfs           5.9G  236K   5.9G   1% /dev/shm
/dev/vda1       190M   67M  114M  37% /boot
/dev/sda1       197G   4.1G  183G   3% /SANdisk1
[root@iocdat01 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:
mount /SANDisk1
df -h



2. *Starting the IOC platform components:*

1. **Table for starting platform components:**

Command number	Platform component	User	Location	Command
1	DB2	root	Iocdat01	<div>starttrpdomain IOC_DOMAIN</div> <div>(It automatically starts both the nodes, but if nodes doesn't start automatically start both the nodes manually by using starttrpnode)</div>

2	IBM SPSS Modeler Server Premium	iocadmin	iocana01	su – iocadmin -c “/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start”
3	IBM SPSS Modeler Server Premium	iocadmin	iocana02	su – iocadmin -c “/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start”
4	WebSphere Application Server Liberty Profile server instances	iocadmin	iocana01	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocana01 --clean”
5	WebSphere Application Server Liberty Profile server instances	iocadmin	iocana02	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocana02 --clean”
6	WebSphere Application Server Liberty Profile server instances	iocadmin	iocapp01	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocapp01 --clean”
7	WebSphere Application Server Liberty Profile server instances	iocadmin	iocapp02	su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocapp02 --clean”

2. Step-by-Step Procedure for starting platform components (with Screen-shots):

Open command prompt in **iocdat01** and type the below command and press enter:

starttrpdomain IOC_DOMAIN

lsrpdomain

lsrpnode

If node is not started automatically then only run the below commands:

Open command prompt in **iocdat01** and type the below command and press enter:

starttrpnode iocdat01

Open command prompt in **iocdat02** and type the below command and press enter:

starttrpnode iocdat02



The screenshot shows a terminal window titled "root@iocdat01:~/Desktop". The terminal output is as follows:

```
[root@iocdat01 Desktop]# starttrpdomain IOC_DOMAIN
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState      RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Pending online 3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# lsrpdomain
Name      OpState      RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat01 Desktop]# lsrpnode
Name      OpState      RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat01 Desktop]#
```

Open command prompt in **iocdat02** and type the below command and press enter:

lsrpdomain

lsrpnode



```
root@iocdat02:~/Desktop
File Edit View Search Terminal Help
[root@iocdat02 Desktop]# lsrpdomain
Name      OpState RSCTActiveVersion MixedVersions TSPort GSPort
IOC_DOMAIN Online  3.1.5.5          No          12347 12348
[root@iocdat02 Desktop]# lsrpnode
Name      OpState RSCTVersion
iocdat01 Online  3.1.5.5
iocdat02 Online  3.1.5.5
[root@iocdat02 Desktop]#
```

Open command prompt in **iocana01** and type the below command and press enter:

su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start"



```
root@iocana01:~/Desktop
File Edit View Search Terminal Help
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start"
IBM SPSS Text Analytics Server started
IBM SPSS Modeler Server started
[root@iocana01 Desktop]#
```

Open command prompt in **iocana02** and type the below command and press enter:
su – iocadmin -c “/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start”



```
root@iocana02:~  
File Edit View Search Terminal Help  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start"  
IBM SPSS Text Analytics Server started  
IBM SPSS Modeler Server started  
[root@iocana02 ~]#
```

Open command prompt in **iocana01** and type the below command and press enter:
su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocana01 --clean”



```
root@iocana01:~/Desktop  
File Edit View Search Terminal Help  
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start"  
IBM SPSS Text Analytics Server started  
IBM SPSS Modeler Server started  
[root@iocana01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server start iocana01 --clean"  
Starting server iocana01.  
Server iocana01 started with process ID 6421.  
[root@iocana01 Desktop]#
```


Open command prompt in **iocana02** and type the below command and press enter:
su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocana02 --clean”



```
root@iocana02:~  
File Edit View Search Terminal Help  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/SPSS/ModelerServer/17.0/modelersrv.sh start"  
IBM SPSS Text Analytics Server started  
IBM SPSS Modeler Server started  
[root@iocana02 ~]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server start iocana02 --clean"  
Starting server iocana02.  
Server iocana02 started with process ID 31897.  
[root@iocana02 ~]#
```

Open command prompt in **iocapp01** and type the below command and press enter:
su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocapp01 --clean”



```
root@iocapp01:~/Desktop  
File Edit View Search Terminal Help  
[root@iocapp01 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server start iocapp01 --clean"  
Starting server iocapp01.  
Server iocapp01 started with process ID 11857.  
[root@iocapp01 Desktop]#
```


Open command prompt in **iocapp02** and type the below command and press enter:
su – iocadmin -c “/opt/IBM/WebSphere/wlp/bin/server start iocapp02 --clean”



```
root@iocapp02:~/Desktop
File Edit View Search Terminal Help
[root@iocapp02 Desktop]# su - iocadmin -c "/opt/IBM/WebSphere/wlp/bin/server start iocapp02 --clean"
Starting server iocapp02.
Server iocapp02 started with process ID 12698.
[root@iocapp02 Desktop]#
```

Open command prompt in **iocweb01** and type the below command and press enter:

“/opt/IBM/HTTPServer/bin/adminctl” start



```
root@iocweb01:~/Desktop
File Edit View Search Terminal Help
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/adminctl" start
/opt/IBM/HTTPServer/bin/adminctl start: admin http started
[root@iocweb01 Desktop]#
```

Open command prompt in **iocweb01** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/apachectl" start



```
root@iocweb01:~/Desktop
File Edit View Search Terminal Help
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/adminctl" start
/opt/IBM/HTTPServer/bin/adminctl start: admin http started
[root@iocweb01 Desktop]# "/opt/IBM/HTTPServer/bin/apachectl" start
[root@iocweb01 Desktop]#
```

Open command prompt in **iocweb02** and type the below command and press enter:

"/opt/IBM/HTTPServer/bin/adminctl" start



```
root@iocweb02:~/Desktop
File Edit View Search Terminal Help
[root@iocweb02 Desktop]# "/opt/IBM/HTTPServer/bin/adminctl" start
/opt/IBM/HTTPServer/bin/adminctl start: admin http started
[root@iocweb02 Desktop]#
```

Open command prompt in **iocweb02** and type the below command and press enter:

“/opt/IBM/HTTPServer/bin/apachectl” start

A terminal window titled 'root@iocweb02:~/Desktop' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
[root@iocweb02 Desktop]# "/opt/IBM/HTTPServer/bin/adminctl" start
/opt/IBM/HTTPServer/bin/adminctl start: admin http started
[root@iocweb02 Desktop]# "/opt/IBM/HTTPServer/bin/apachectl" start
[root@iocweb02 Desktop]#
```

5. Finish:

Once all the above commands ran successfully, the IOC platform components are started successfully.

Now IOC is up and running. It can be checked by accessing the IOC URL mentioned in the document earlier.

