Procedure to reinitialise IBM Storwize V7000 storage Subsystem

Equipment required :-

- Laptop or PC with Ethernet connectivity with XP, Vista or Windows 7 installed
- Ethernet switch
- Ethernet cables x3 (Length to suit test bed)
- USB memory stick (500MB or better)
- V7000 initialisation program (must be on the USB stick)
- Enough power outlet points to supply :-

  - V7000 (two power leads) (Figure 1)
  - PC / Laptop
  - Ethernet switch

Ethernet Connection :- (see figure 2 for connection locations)

- Connect Ethernet cables from the Ethernet switch to "port 1" on both V7000 controllers.

- Connect Ethernet cables from the Ethernet switch to the PC / Laptop

Configure Pc / Laptop Ethernet port

- The Ethernet port on the PC should be set to :-

  - IP Address   :-192.168.70.125
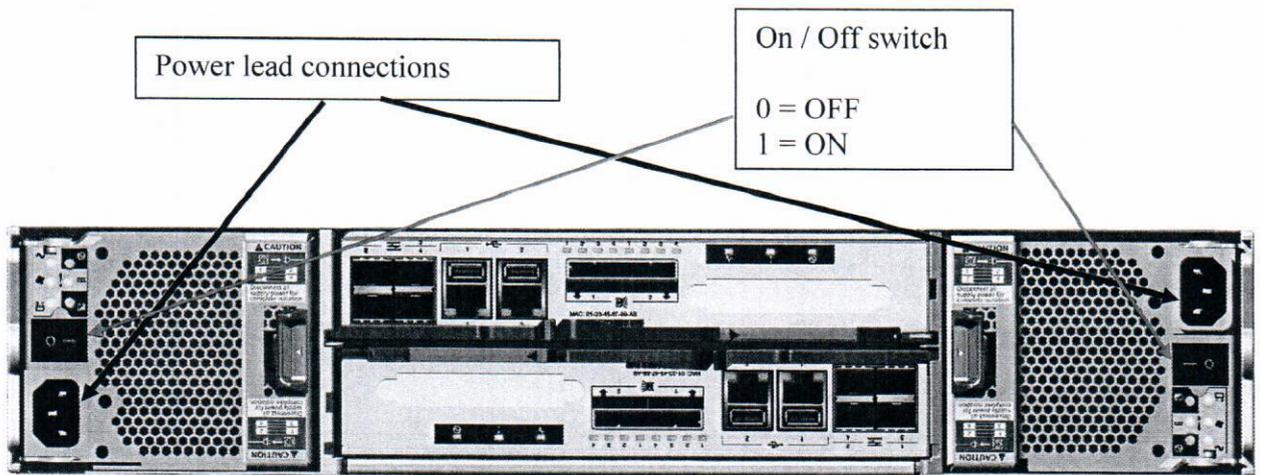 - Subnet mask   :- 255.255.255.0
  - No gateway address required

Figure 1 Power socket and on / off switch

NOTE :- Power the Storwize V7000 Storage Subsystem on and off using only the power on / off switch on both power supply / Fan assemblies.

Failure to do so may lead to the onboard batteries being depleted and very long power on duty cycles.
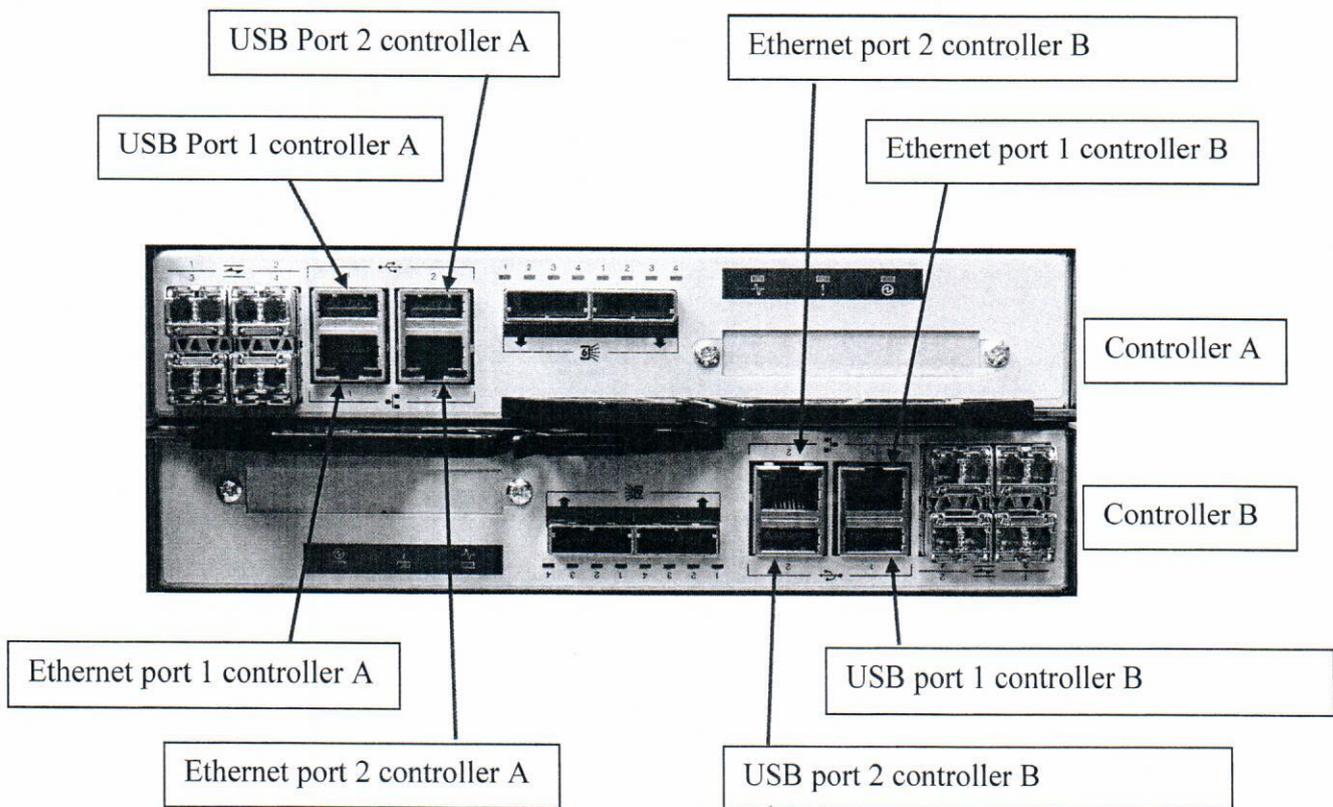

Figure 2 Ethernet and USB port locations V7000

Reinitialise IBM Storwize V7000 storage Subsystem steps

1) Power on V7000 and allow to complete its power up routine.

2) Open a DOS (Command) screen and at the c:\ prompt type :-

   ping 192.168.70.121

   If you get a reply from the "Ping" go to step 10

   If you do not get a reply from the "Ping" continue to step 3 below

3) Plug the USB memory stick into the USB port on the PC or Laptop

4) Run windows explorer and open the drive letter that has been associated with the USB device you plugged in.

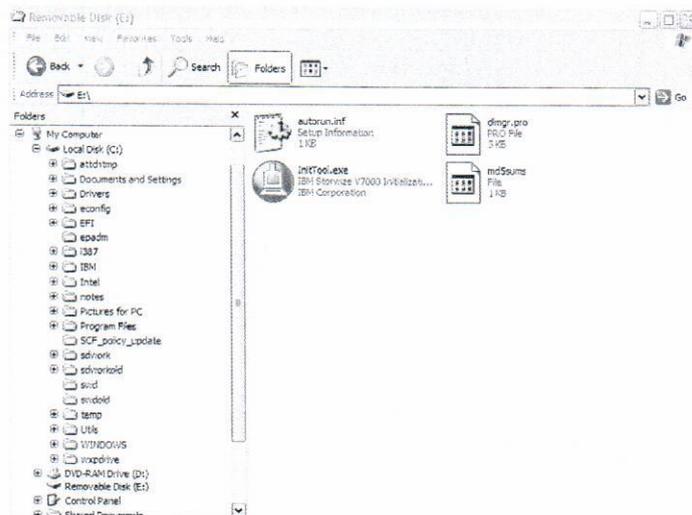You should see the information as shown in figure 3.

Figure 3 V7000 Initialisation programme on USB memory stick

5) Click on the ICON labelled Inittool.exe (Figure 4)

Figure 4 Intitool.exe icon

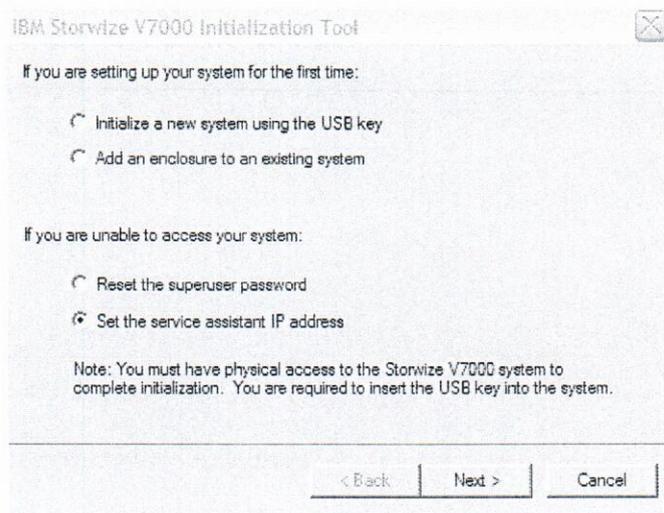6) The Storewize V7000 initialisation tool window will appear (Figure 5)

IBM Storwize V7000 Initialization Tool

If you are setting up your system for the first time:

      ○ Initialize a new system using the USB key

      ○ Add an enclosure to an existing system

If you are unable to access your system:

      ○ Reset the superuser password

      ⦿ Set the service assistant IP address

Note: You must have physical access to the Storwize V7000 system to complete initialization. You are required to insert the USB key into the system.

                < Back   Next >   Cancel

Figure 5 Storewize V7000 initialisation tool window.

      a. Check the radio button for "Set the service assist IP Address"

      b. Click on the Next Button

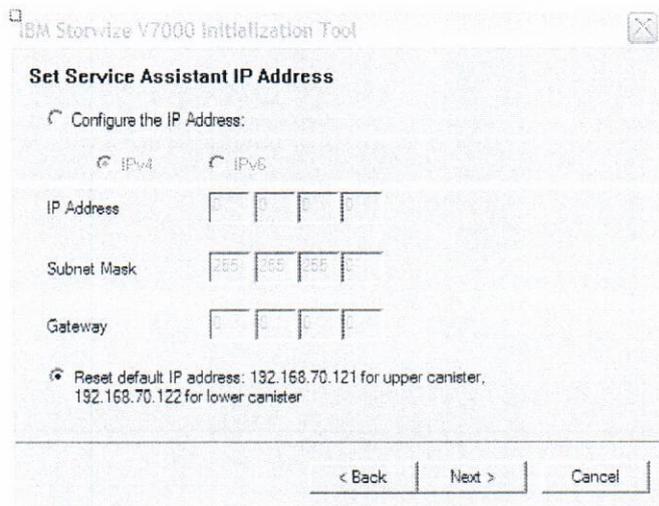7) The Set Service Assist IP Address window will appear (Figure 6)

Figure 6 Set Service Assist IP Address window

      a. Check the radio button for "Reset default IP Address 192.168.70.121 for upper canister …etc"

      b. Click on the Next Button

8) The Transfer information to system screen will appear (Figure 7)

    Read the information that is displayed and then click on the Finish button to complete the preparation of the initialisation tool on the USB memory stick
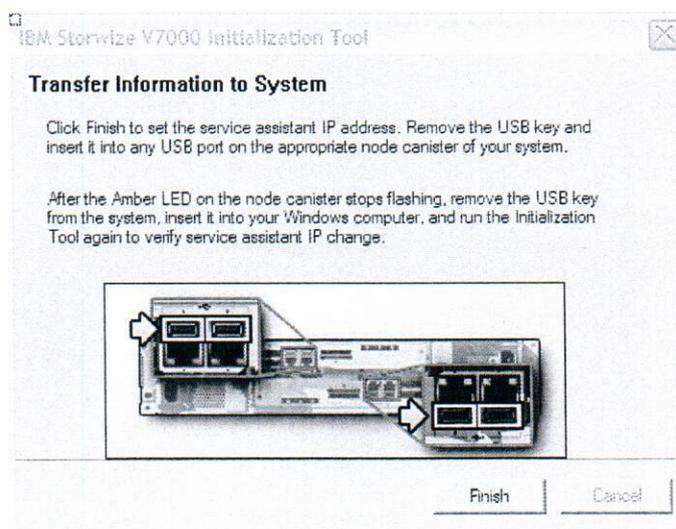

Figure 7 Transfer information to system window

Remove the USB memory stick form the computer.

Note :- Use the "Safely Remove hardware" function in Windows to prepare the USB Memory stick before removal.

9) Plug the USB memory stick (removed from the PC / Laptop) into the USB connection (either 1 or 2) on controller A of the Storwize V7000 (Refer to Figure 2 for the USB port location on controller A and B)

   After a few seconds (it can take 30 or more seconds) an "Amber LED" blinking above the "!" symbol on the decal on Controllers A canister. (Figure 8)

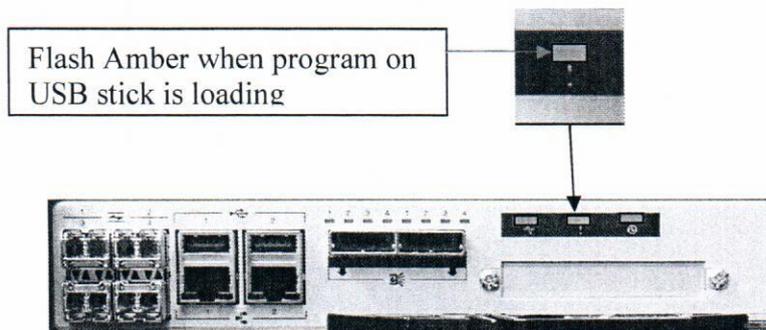
Flash Amber when program on USB stick is loading

Figure 8 Location for flashing Amber LED

Once the Amber LED stops flashing, unplug the USB memory stick from the USB port on Controller A

Repeat the process above for controller B

10) Open a WEB browser (Internet Explorer or Fire Fox etc) and ensure that the "pop-up blocker is disabled.

11) Clear the HTTP address and enter :- **192.168.70.121/service** and search for that address (carriage return ↵)
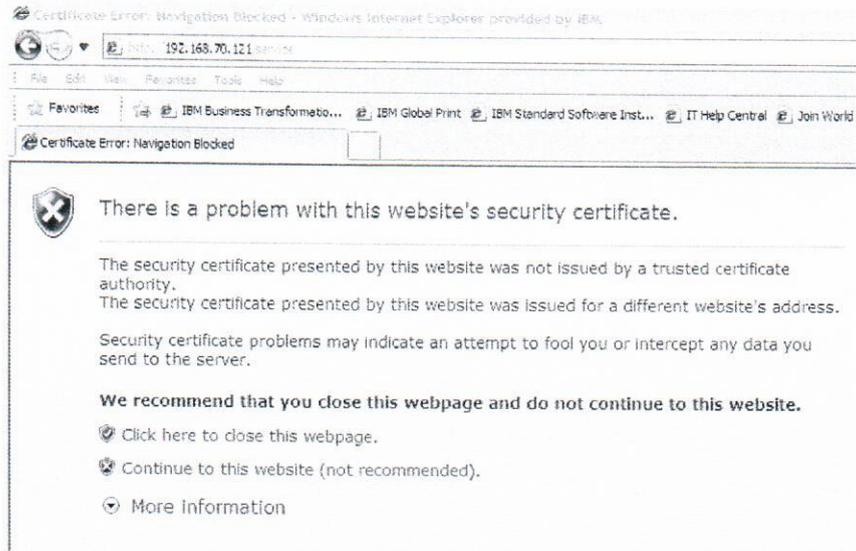
12) You may receive a security warning window (Figure 9)

Figure 9 Security warning window

Select the Continue option. (Figure 10)

Figure 10 Continue to this website option

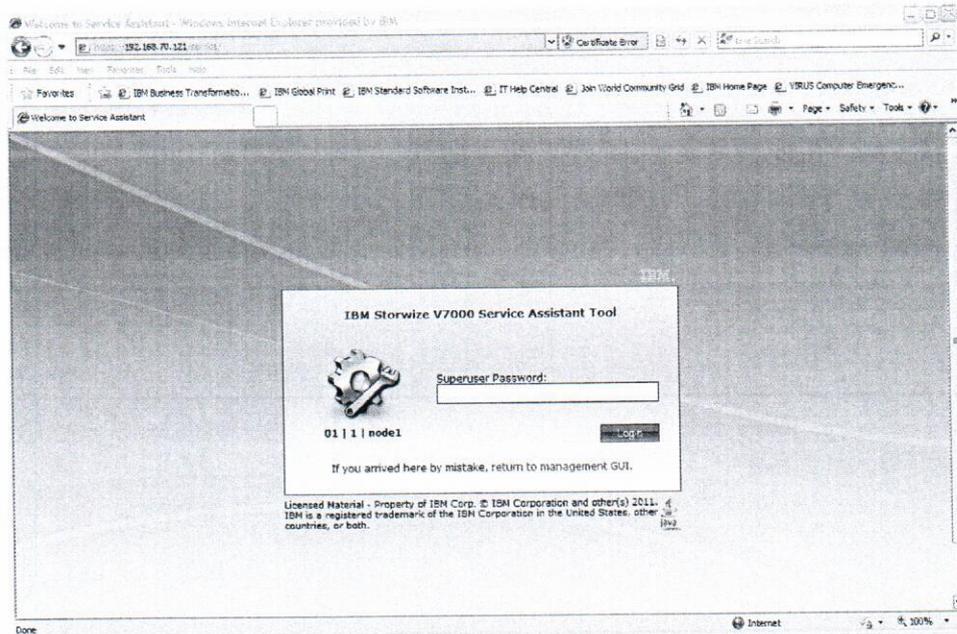13) The IBM Storwize V7000 Service Assist WEB interface opens (Figure 11)

Figure 11 IBM Storwize V7000 Service Assist WEB interface

In the "Superuser Password box type "**passw0rd**" and click on the logon button

Note :- If the superuser password has been changed, go to appendix 1 for the "change superuser password procedure"

14) The service Management WEB page will open. (Figure 12)

Select the "HOME" option from the Status activity menu options on the left hand side of the displayed WEB page.
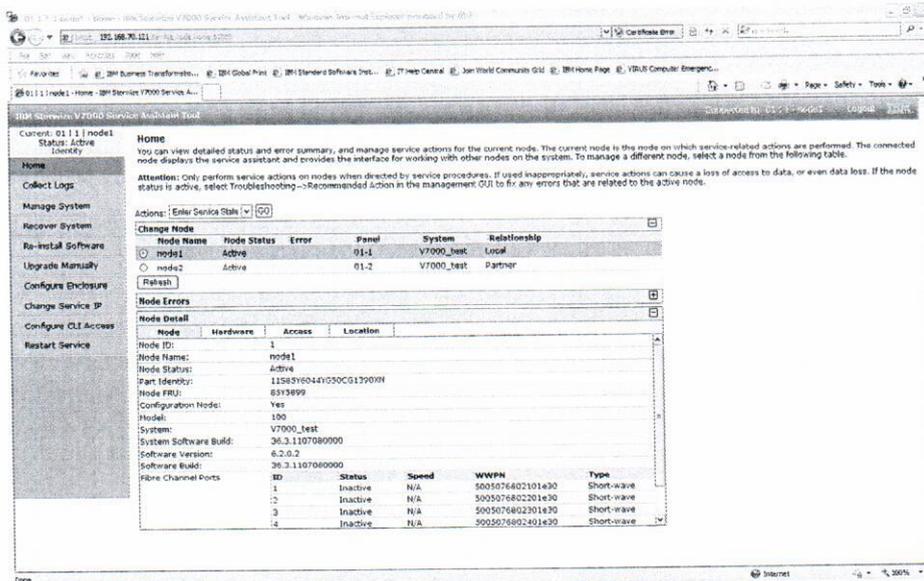

Figure 12 Service management WEB page

Figure 12a Highlight of Node Active information

Note that the nodes are in a Local / Partner relationship, are named and that the node status is "Active". (figure 12a)

15) Check the radio button beside the "Node 1" entry and from the drop down menu box above, Titled "Actions" select "Enter Service Mode " and then click on the "GO" button. (Figure 13)
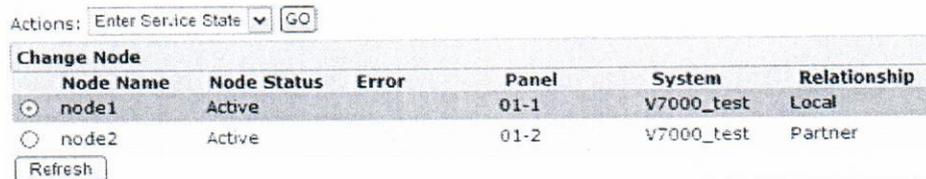

Figure 13 Enter Service Mode

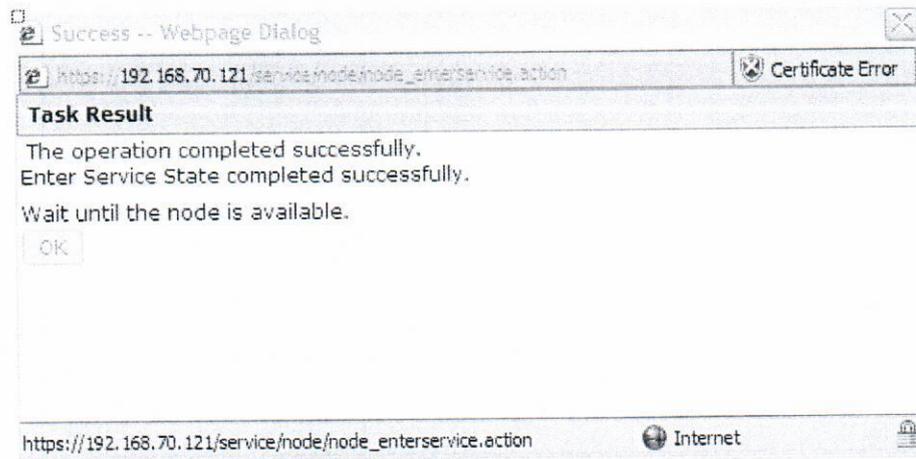16) A WEB Page dialog window "Task Result" window will appear (figure 14)

Success -- Webpage Dialog

https:// 192.168.70.121 /service/node/node_enterservice.action   Certificate Error

Task Result

The operation completed successfully.
Enter Service State completed successfully.

Wait until the node is available.

OK

https://192.168.70.121/service/node/node_enterservice.action   Internet

Figure 14 WEB Page dialog window

Wait for the Node to become available.

When available the OK button will become active (Figure 15)

Success -- Webpage Dialog

https:// 192.168.70.121 /service/node/node_enterservice.action   Certificate Error

Task Result

The operation completed successfully.
Enter Service State completed successfully.

The node is available.

OK

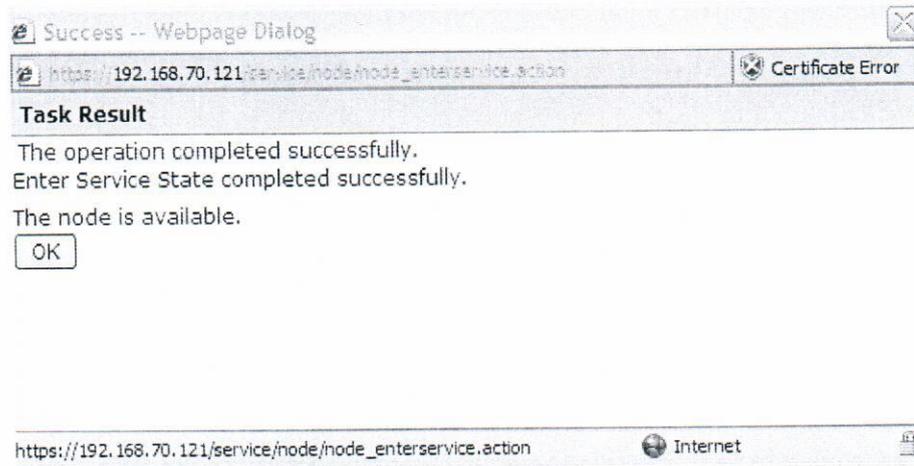https://192.168.70.121/service/node/node_enterservice.action   Internet

Figure 15 WEB Page dialog window. OK to continue

Click on the "OK button

You will be returned to the "HOME" WEB page

17) On the HOME WEB Page, check that Node 1 service status has changes to "Service" and error 690 is displayed (Node in service state message) (Figure 16)

Actions: [Hold Service State ▼] [GO]

Change Node

Node Name	Node Status	Error	Panel	System	Relationship
● node1	Service	690	01-1	V7000_test	Local
○ node2	Active		01-2	V7000_test	Partner

Figure 16 Check that Node 1 service status has changes

18) Select the "Manage System " option from the Status activity menu options on the left hand side of the displayed WEB page. (Figure 17)

IBM Storwize V7000 Service Assistant Tool

Current: 01 | 1 | node1
Status: Service
Identify

Home

Collect Logs

Manage System

Recover System

Re-install Software

Upgrade Manually

Configure Enclosure

Change Service IP

Configure CLI Access

Restart Service

Manage System

The Remove System Data action removes all i information. The node restarts and checks to service state or there are other critical node e

System Information

The selected node is in service and is not in addresses:

System Name: V7000_test

System Port 1

   IPv4 Address:

   IPv6 Address:

System Port 2

   IPv4 Address:

   IPv6 Address:

[Remove system data]

Figure 17 Manage System Menu with Remove System Data button active

Click on the "Remove System Data" button

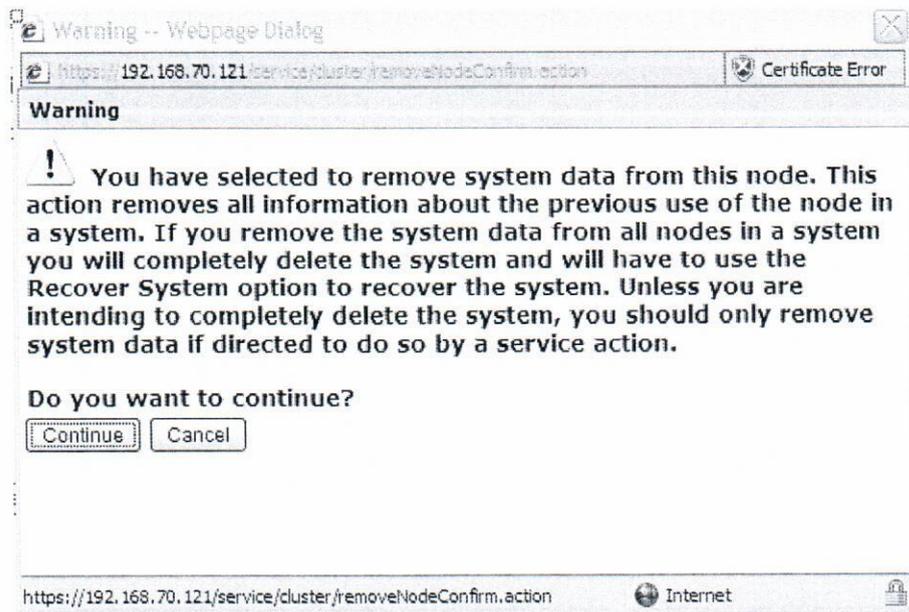A warning Web Page dialog window will appear. (Figure 18)

Figure 18 Webpage Dialog warning window

Read carefully and click on the "Continue" button to proceed

The Success Web Page dialog window will appear. Figure 19)
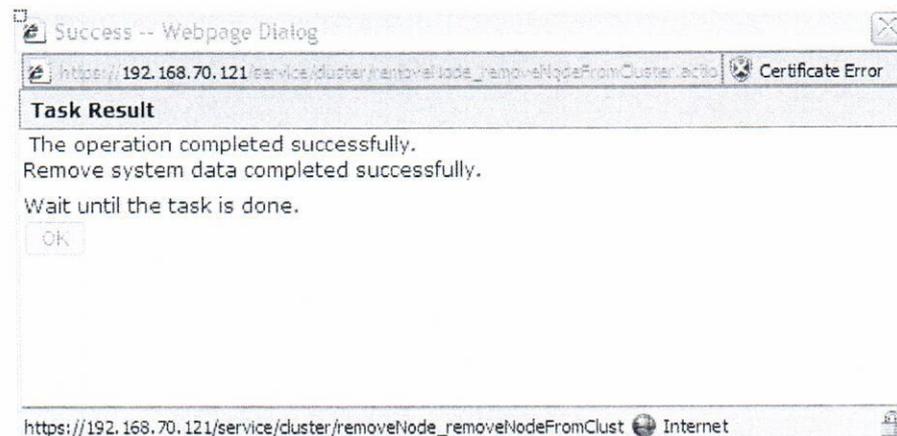

Figure 19 Webpage Dialog Task Result window

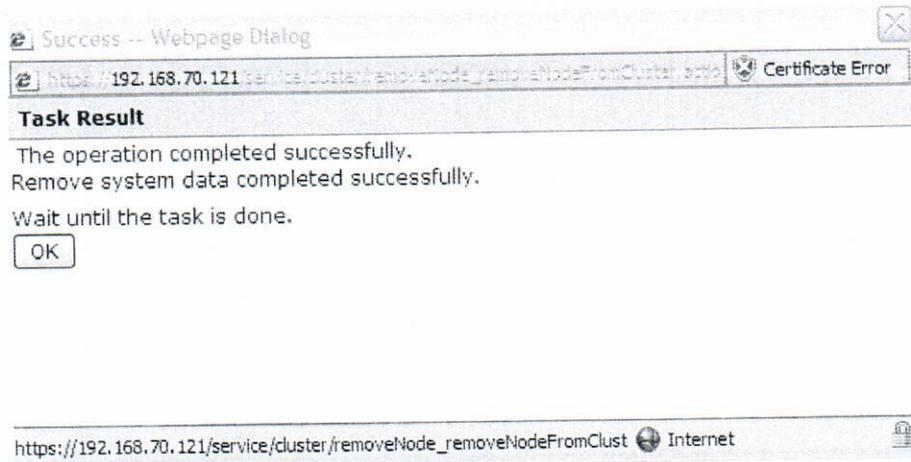Wait for the OK button to become active (Figure 20)

Figure 19 Webpage Dialog Task Result window OK button active

Click on the OK button.

You will be returned to the Manage System WEB Page window.

19) **For Node ONE only**

Select the "Configure Enclosure " option from the Status activity menu options on the left hand side of the displayed WEB page. (Figure 19)
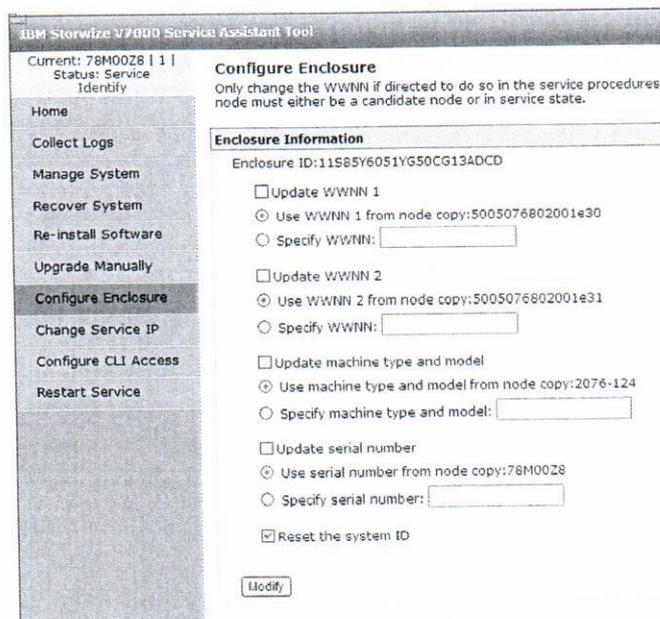

Figure 19 Configure Enclosure Menu

Check the radio button next to "Reset the system ID"

☑ Reset the system ID

[Modify]

Figure 19 Configure Enclosure Menu "Reset the System ID" radio button checked

Click on the "Modify " button

You will be returned to the Configure Enclosure WEB Page window

20) Repeat sets 13 through 17 above, but selecting Node 2 for the operation.
(Step 18 is not applicable for Node 2)

21) Select the "HOME" option from the Status activity menu options on the left
hand side of the displayed WEB page.

Check that both Node are e "Service " Mode and that there is no entry in the
"system Identity" space. (Figure 20)

Actions: [Exit Service State ▼] [GO]

Change Node						⊟
Node Name	Node Status	Error	Panel	System	Relationship	
○	Service	690	78M00Z8-1		Local	
⊙	Service	690	78M00Z8-2		Partner	

Figure 20 Both nodes states shown as "Service mode"

Check the radio button beside Node 2

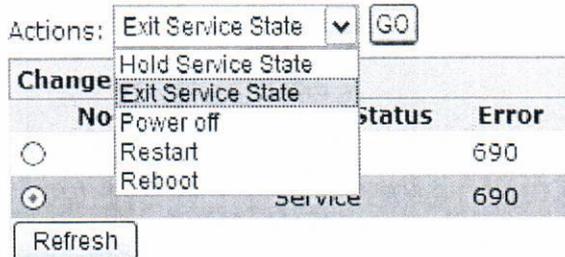From the "Action" box select from the drop down menu "Exit Service State" (Figure 21)

Figure 21 Select "Exit service state"

And click on the "Go" Button.

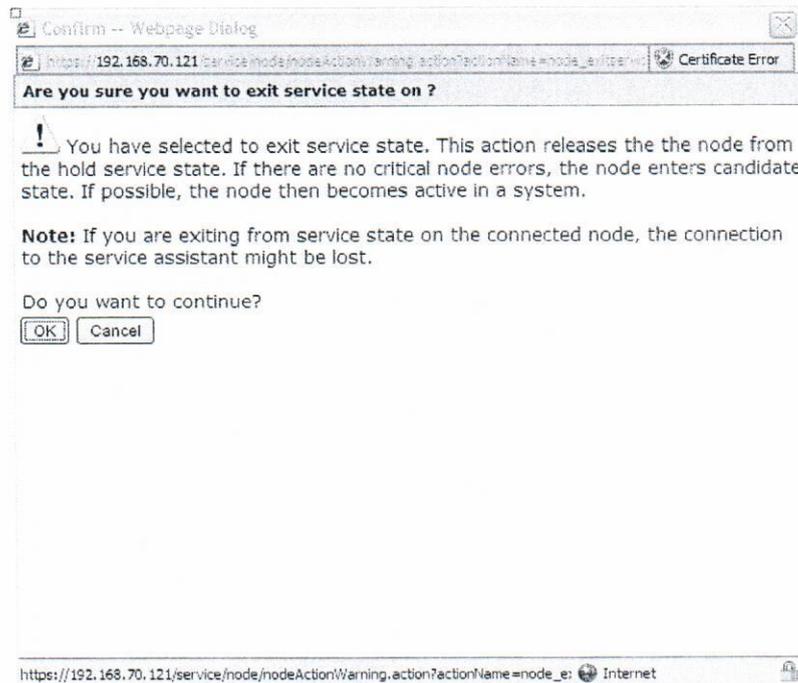The "Confirm"Web page dialog window will appear. (Figure 22)

Figure 22 "Confirm"Web page dialog window

Read the information carefully and when ready, click on the "OK" button

The "Success WEB page dialog window will appear. Wait for the node to become available (Figure 23)
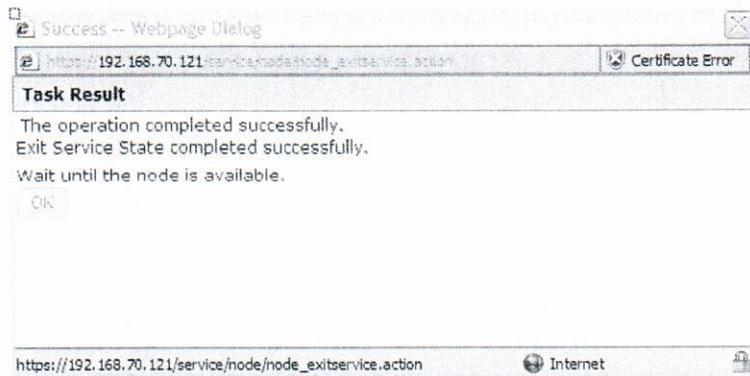
Figure 23 "Success" Web page dialog window waiting on node availability

The "OK" button will become active when the node is ready and available (Figure 24)
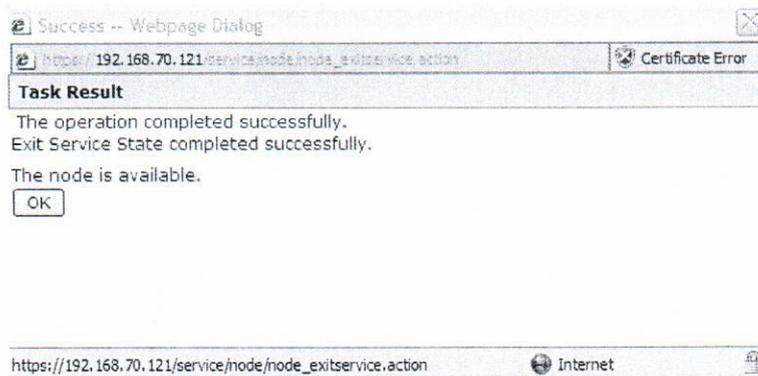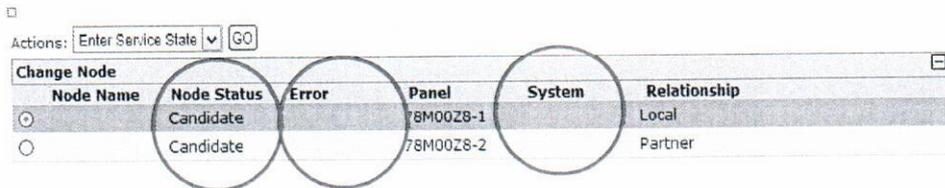

Figure 24 "Success" Web page dialog window node available

You will be returned to the "HOME" WEB page window

22) Repeat step 20, but select node 1 as the target for this operation

23) After completion of steps 20 and 21 above the information in the "HOME" option from the Status activity menu options on the left hand side of the displayed WEB page should appear as in Figure 25

Figure 25 Nodes indicate Candidate status

Note that the Node Status is set as "Candidate", that there are no errors reported and that there is no entries in "System"

This completes the Re-initialisation of the Storwize V7000 Storage subsystem.

Remember to power down using the On / Off power switches located on the PSU / Fan assemblies (Figure 1)

Appendix 1

Resetting the Superuser Password.

If the superuser password has be changes and unknown, it will need to be reset to a factorey default before the Storwize V7000 storage subsystem can be re-initialised..

The following is a procedure to reset the superuser password.

1) Plug the USB memory stick into the USB port on the PC or Laptop

2) Run windows explorer and open the drive letter that has been associated with the USB device you plugged in.

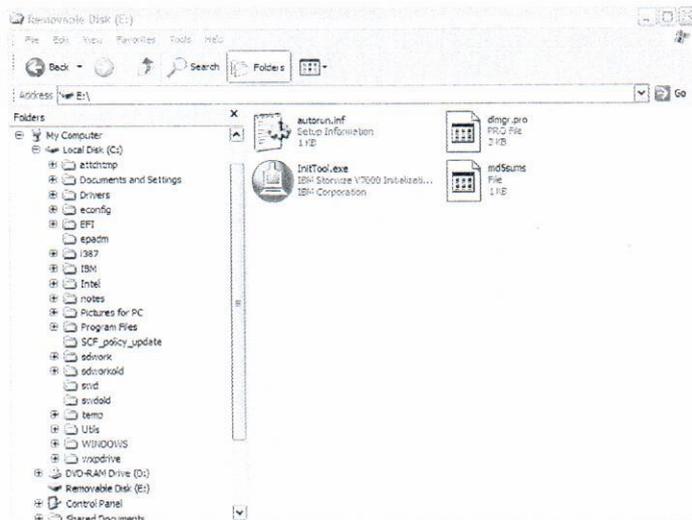You should see the information as shown in figure 1.

Figure 1 V7000 Initialisation programme on USB memory stick

3) Click on the ICON labelled Inittool.exe (Figure 2)

Figure 2 Intitool.exe icon

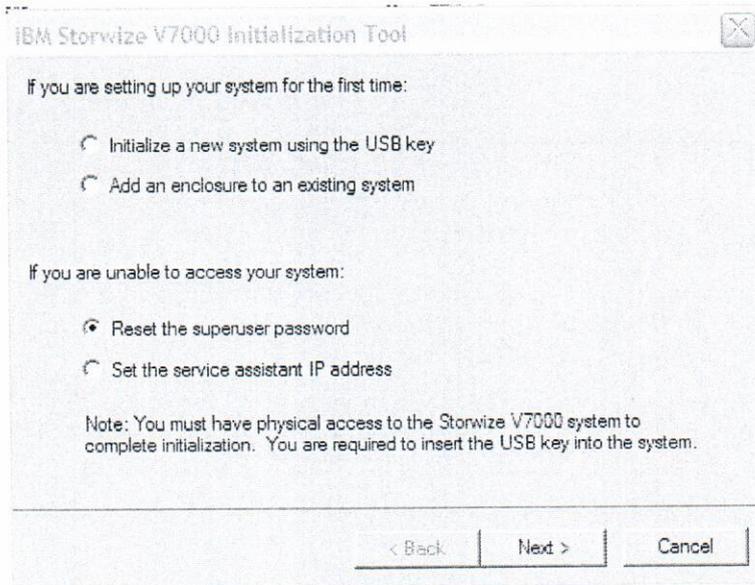4) The Storewize V7000 initialisation tool window will appear (Figure 3)

Figure 3 Storewize V7000 initialisation tool window.

    a. Check the radio button for "Reset the Superuser Password"

    b. Click on the Next Button

The Reset Superuser Password window will appear
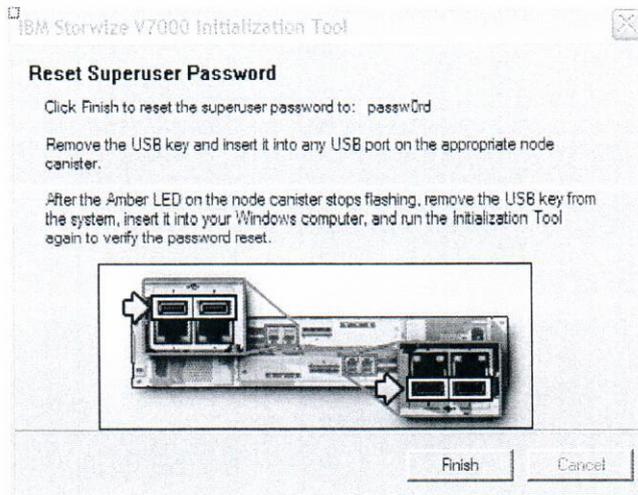
Read the information carefully (Figure 4)

Figure 4 Reset Superuser password window

When ready, click on the "Finish" button

Remove the USB memory stick form the computer.

Note :- Use the "Safely Remove hardware" function in Windows to prepare the USB Memory stick before removal.

5) Plug the USB memory stick (removed from the PC / Laptop) into the USB connection (either 1 or 2) on controller A of the Storwize V7000 (Refer to Figure 2 for the USB port location on controller A and B)

   After a few seconds (it can take 30 or more seconds) an "Amber LED" blinking above the "!" symbol on the decal on Controllers A canister. (Figure 8)

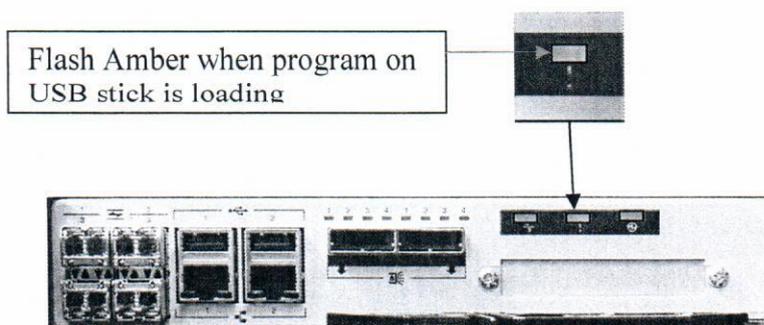Flash Amber when program on USB stick is loading

Figure 8 Location for flashing Amber LED

Once the Amber LED stops flashing, unplug the USB memory stick from the USB port on Controller A

Repeat the process above for controller B

The Superuser password has now been returned to the factory default "passw0rd"

To continue with the re-initialisation for the IBM Storwize V7000 Storage subsystem, return to step 2 in the main body of this document.