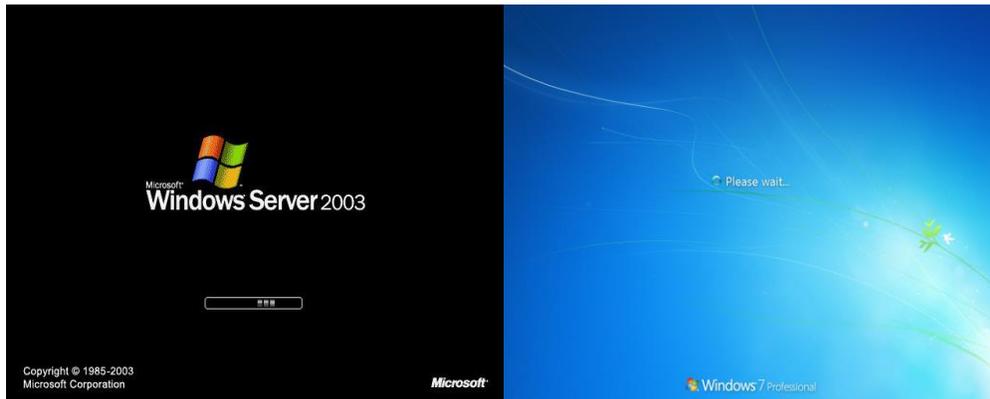


VM BOOT-UP TIME IS LAGGED DURING DISASTER RECOVERY & HOW TO BOOT VM IN SAFE MODE

SCOPE

- From time to time Virtual Machines that are hosted on a QBR-S device may experience a painfully slow boot process.
- This article aims to lay out the steps to circumvent this issue in an efficient manner to help swiftly boot up a Virtual Machine.

Please Note: This applies only to slow Virtual Machines in a Disaster Recovery environment that are configured to have regular live network connectivity.



Example: 2003 and 2008 OS exhibiting slow boot process

CAUSE

- Most commonly these machines have services by manufacturers other than Microsoft enabled in msconfig.
- These services commonly are found to be what is slowing down start-up of the OS of the virtual machine.
- Too many services starting up with the machine.

ELIMINATING LAG EXPERIENCED DURING THE BOOT PROCESS

- First step is to access the "Advanced Boot Options" for the Operating System by pressing F8 on boot.
- This may be very difficult to perform via an RDP session so it is suggested to VNC into your QBR Appliance.

QBR *Knowledge base*

- VNC access to QBR-S devices can be obtained using any VNC client from a machine on the local subnet, or remotely using the QBR Partner Portal task "remoteVNC" as shown below.

TeachingDemo

Device **Advanced** RoundTrip Billing

ADVANCED INFO

Device Login: backup-admin / history64332

OS Version: 2.661

Manufactured on: Mon. Dec 10, 4:11 PM

Registered on: Tue. Dec 18, 6:03 PM

Smart Status [View](#) ▼

CHANGE DEVICE USERNAME

 [Accept](#)

SCHEDULE NEW TASK

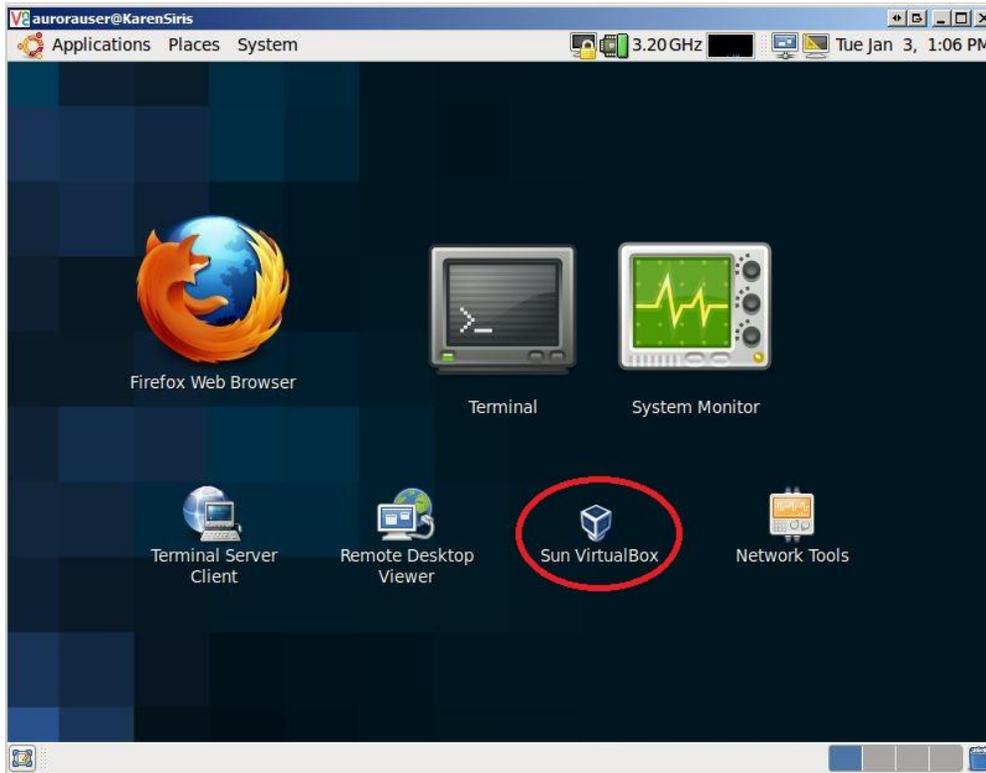
▼ [Assign Task](#)

i Generates a URL that allows remote VNC access to the Aurora and Viridian devices. Please specify an email address where the URL should be sent.

Example: "remoteVNC" Portal Task

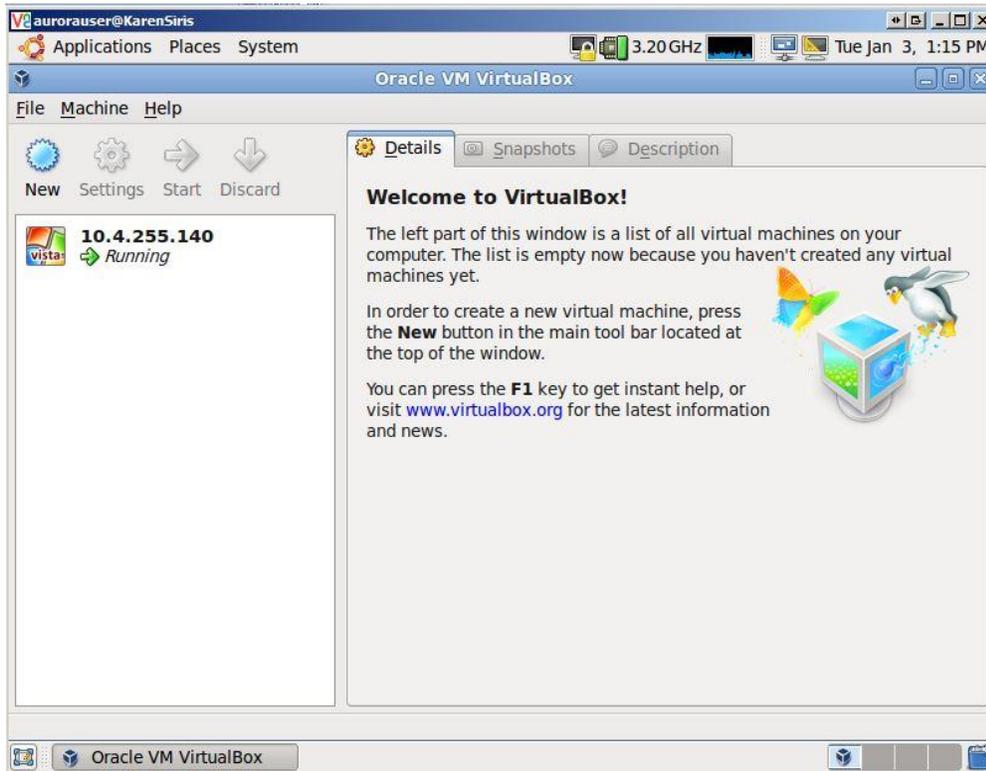
QBR *Knowledge base*

- If prompted for a password please use either the password configured in the QBR-S web console, if this has not been changed then use the default QBR-S VNC Password:
Northern
- Once connected double click the icon on the desktop for "*Sun Virtual Box*".



Example: VNC connection established with Virtual Box icon identified.

- If no Virtual Machines appear in the Virtual Box program then re-start the VM from the "*Local Virtualization*" tab on the QBR-S web console and continue to the next step.
- If the Virtual Machine appears in Virtual Box and is running then it will need to be stopped from the "*Local Virtualization*" tab on the QBR-S web console.



Example: Virtual Box launched with Virtual Machine in a "Running" state.

↑ WIN-XDW4URKM3F6

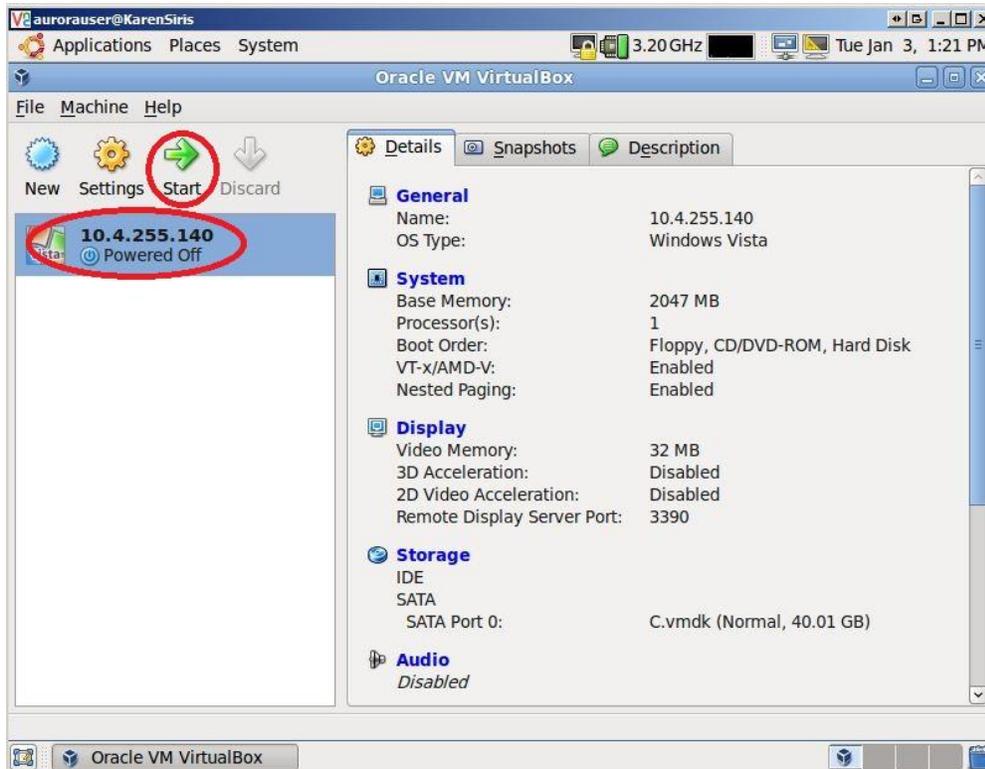
Stop Mounted VM

- Stop & Unmount Current VM Image
- Connect to VM via RDP
- Configure Networking
- Send CTL + ALT + DEL
- Send ALT + TAB

Example: Stop Mounted VM

QBR *Knowledge base*

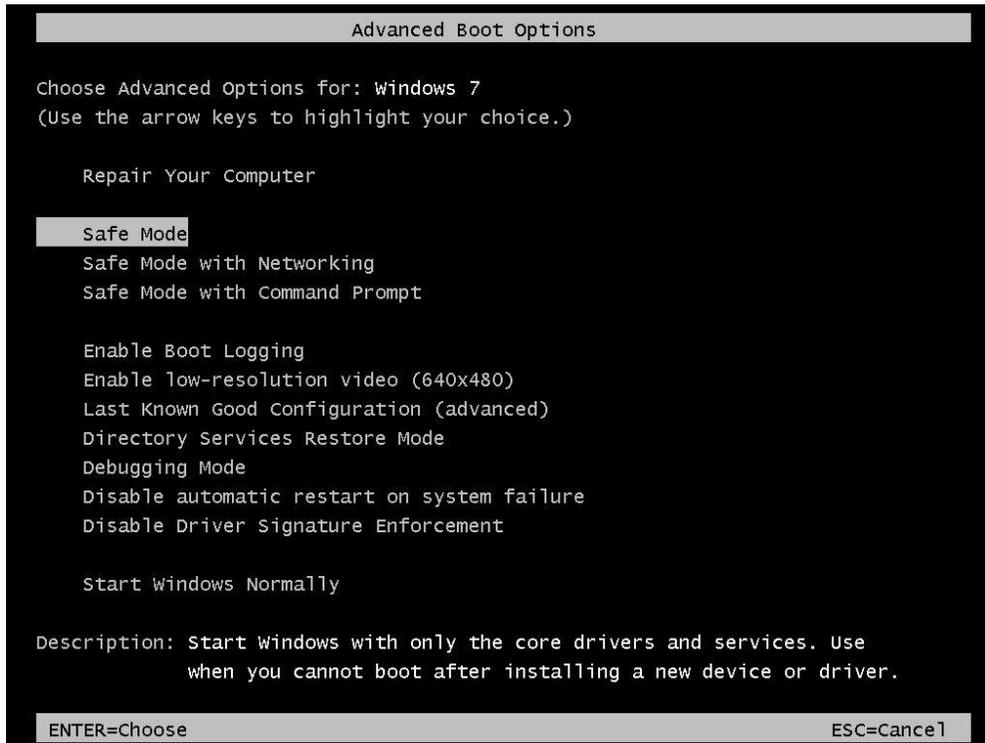
- Once the Virtual Machine appears in Virtual Box as being "Powered Off" it may be launched by clicking on the Virtual Machine's name, followed by clicking the button "Start".



Example: Virtual Box showing Virtual Machine mounted but not running.

QBR *Knowledge base*

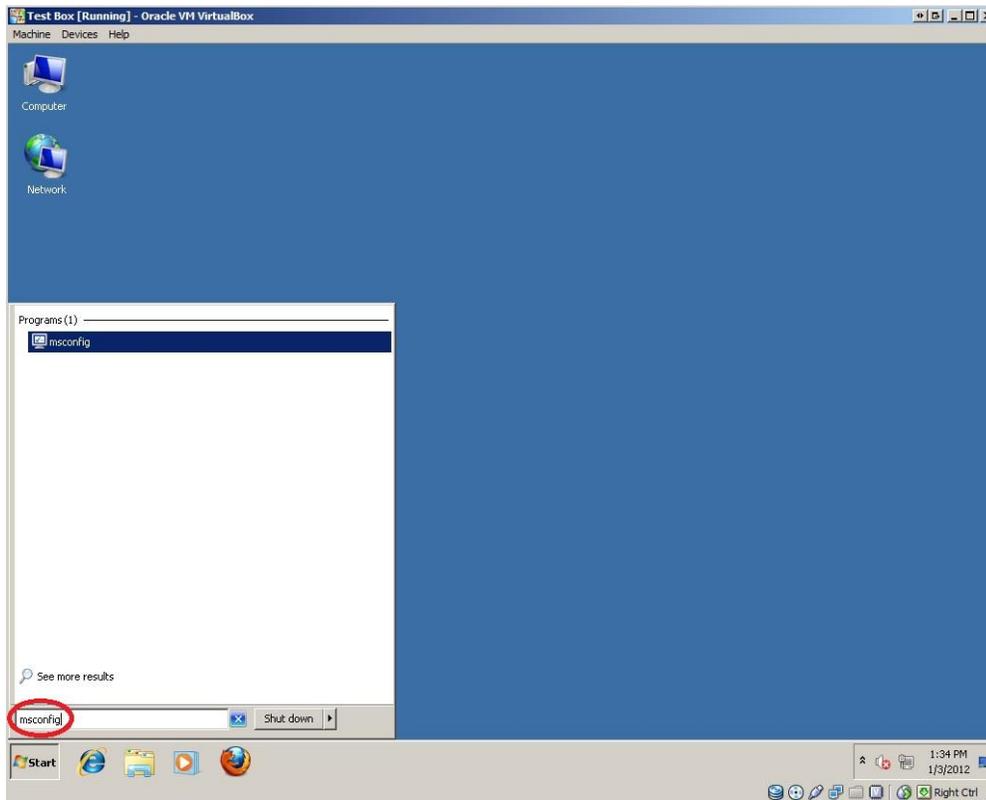
- The Virtual Machine will instantly start to boot on the screen so immediately start to repeatedly press F8 to access the "Advanced Boot Options" screen.
 - **Please Note:** If the timing to input the key F8 is missed then simply close the window which will power off the Virtual Machine. Then repeat previous step to start the Virtual Machine again.



Example: Windows 7 Advanced Boot Options Screen - Safe Mode selected

QBR *Knowledge base*

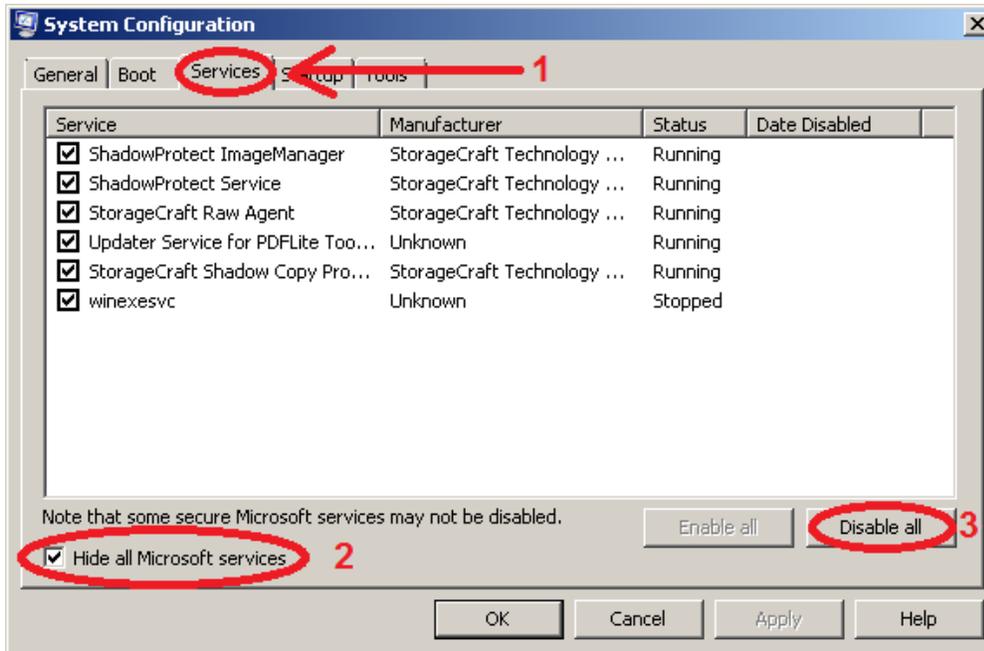
- From the Advanced Boot Options screen select option for "Safe Mode"
- Once the Virtual Machine boots in Safe Mode we will want to access msconfig by click Start > Run > msconfig



Example: Virtual Machine hosted within Virtual Box starting msconfig

QBR *Knowledge base*

- From msconfig click tab entitled "Services".
- Click checkbox entitled "Hide all Microsoft services".
- Select "Disable all" button.



Please Note: The "Virtual Box Guest Additions service" used for Virtual Drivers and is installed on the production machine during the ShadowSnap Agent installation will not be impacted by these steps. It will still start up when the Virtual Machine is rebooted.

- Reboot the machine. It should be much faster to boot fully into the Virtual Environment with live networking enabled.