

Nirin Troubleshooting

Recovering an Instance/Virtual Machine (VM) that is refusing to boot

1. Navigate to the Nirin Dashboard at cloud.nci.org.au
2. Click on the Instance which does not boot.
3. Click on the **Console** tab and open the console in a separate browser window.
4. In the Console window click on the **Send Ctrl-Alt-Del** button
5. Wait for the Instance to reboot to the GRUB menu
6. Press 'e' when one of the GRUB boot option lines are selected
7. Scroll down to the Kernel Command Line
8. Remove the text `console=ttyS0,115200` to ensure that the (novnc based) Console is able to accept IO from keyboard
9. Add a relevant option to drop down to a recovery terminal
 - a. If you want to drop down to your ramdisk image with no filesystems mounted, add **rd.break** to the kernel command line.
 - b. If you want a bash prompt with the rootfs mounted, add **init=/bin/bash**
10. Press Ctrl-x to boot with modified kernel command line
11. You should see a bash prompt after some initial boot steps. At this point if you need to make changes to any files on the rootfs, please remount it with the **rw** flag: `mount -o remount,rw /`
12. Make the changes as required. For example, if you have an issue with a /g/data mount included in /etc/fstab, open /etc/fstab and comment the problematic line
13. `touch ~/.autorelabel`
14. `exec /sbin/init`
15. Your Instance should now boot