**A quick ML 4.2 install / configuration guide for RHEL 6**

1. Install RHEL 6, log in via ssh and update all packages (using sudo if you’re not connected as root):   
   **yum –y update**
2. Install the necessary Glibc libraries (x64) as required by the MarkLogic binary:   
   **yum install glibc.i686**
3. Download the required MarkLogic binary to /tmp and install the server using rpm:   
   **rpm -i MarkLogic-x.x-x-arch.rpm**
4. Start the server:
5. **/etc/init.d/MarkLogic start**
6. Check the server has started correctly:   
   **pgrep MarkLogic**   
   (You should see pids for 2 processes: the watcher process and the application).
7. Also verify the application has started by checking for the presence of log information:  
   **more /var/opt/MarkLogic/Logs/ErrorLog.txt**You should see a line like this close to the top of the file:  
   Notice: Starting MarkLogic Server 4.2-4 x86\_64 in /opt/MarkLogic with data in /var/opt/MarkLogic
8. Attempt to connect to the server on port 8001 from your browser to enter the licence key:  
   <http://hostname:8001>
9. If the connection times out, confirm you can access the server from the ssh connection:  
   **links http:localhost:8001**  
   If you can see a form to enter your licence key, it’s probably a firewall issue, otherwise skip to (X)
10. Check your firewall settings:  
    **iptables –L**
11. If iptables –L contains firewall information, check the connection from the browser without iptables enabled:  
    **/etc/init.d/iptables stop**  
    IMPORTANT: Remember to re-enable iptables after:   
    **/etc/init.d/iptables start**
12. Add the firewall rule to iptables to allow access for port 8001:  
    **iptables -A INPUT -p tcp -m tcp --dport 8001 -j ACCEPT**  
    NOTE – this won’t survive a reboot! Remember to configure these rules from file using iptables save and restore.
13. Check your scheduler configuration:  
    **cat /sys/block/sdb/queue/scheduler**The selected scheduler will be surrounded by square brackets, for example:  
    noop anticipatory deadline **[cfq]**
14. If deadline is not selected, update the kernel parameters by editing grub.conf:  
    **vim /boot/grub/grub.conf**  
    And on the line(s) for kernel, append elevator=deadline. Your line(s) should look like this:  
    kernel /vmlinuz-2.6.32-131.0.15.el6.x86\_64 ro root=/dev/mapper/vg00-root rd\_LVM\_LV=vg00/root rd\_NO\_LUKS rd\_NO\_MD rd\_NO\_DM LANG=en\_US.UTF-8 SYSFONT=latarcyrheb-sun16 KEYBOARDTYPE=pc KEYTABLE=us-acentos crashkernel=auto rhgb quiet **elevator=deadline**
15. Configure Huge Pages. Look in the MarkLogic ErrorLog.txt for a line that reads something like this:  
    Linux Huge Pages: detected 0, recommend 7680 to 9672  
    To set Huge Pages, edit sysctl.conf:  
    **vim /etc/sysctl.conf**  
    And add a new line specifying the size of the huge pages configuration using the vm.nr\_hugepages setting. For example:  
    **# Configure Huge Pages  
    vm.nr\_hugepages = 8192**This will set aside 8GB for Huge Pages.
16. Reboot and check to confirm that your scheduler changes and huge pages changes have been configured.
17. Post Install Checklist:

* Have you configured Huge Pages as recommended by the server?
* Is **deadline** the default I/O Scheduler in boot/grub/grub.conf? (elevator=deadline kernel option).
* Do you have twice the swap space for physical RAM? (e.g. for a server with 32GB Ram, ensure your swap is 64GB)
* Is the swap space still enabled **after** rebooting?
* As a rule, remember no more than 4 forests per host based on 8 physical cores (2 cores per forest). This *will* have an impact on system performance otherwise.
* Ensure that LSB is installed (**yum –y install redhat-lsb**)
* Ensure pstack is installed (**yum –y install pstack**)
* Ensure iostat, vmstat, sar et al are installed (**yum –y install sysstat**)
* Ensure psutils are installed (**yum –y install psutils**)
* Confirm that a Sun JDK is installed (java –version).

1. Is the server time correct? Ntp?

**Troubleshooting and general configuration information**

1. *Fedora/CentOS/Redhat has installed but on restart I have no internet access?*

chkconfig network on

/etc/init.d/network restart

2. *How can I find out whether swap is enabled after rebooting?*

cat /proc/swaps

If you only see a line of headings and no mountpoints, swap is not enabled

3. *Swap appears to be disabled, how do I enable it?*

swapon /dev/**deviceid**

4. *How can I find out how much RAM, swap and Huge Page space is/are allocated?*

cat /proc/meminfo