Administering the RFPK Sunfire v20z Server

As the computation server for the pilot installation of the System for Population Kinetics (SPK), a Sunfire V20z server, manufactured by Sun Microsystems, is employed. This document describes some of the details of system administration required to configure and maintain this computer for its assigned role.

The information in this document is targeted primarily towards the RFPK Software Team and associates and is specific to the computer systems and network installed in the RFPK Laboratory of the Department of Bioengineering of the University of Washington. RFPK is the Resource for Population Kinetics. Its work is supported, in part, by grant P41 EB-001975 of the National Institutes of Health (NIH) of the U.S. Department of Health and Human Services.

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Operating System

RFPK uses the same operating system for the v20z as for *aspkserver* (a.k.a. whitechuck), for *webserver* and for development workstations. The operating system is RedHat Enterprise Linux (RHEL), Workstation Edition. At present, the v20z is the only RFPK computer with 64-bit processors, however, hence the AMD64 version rather than the x86 version of RHEL should be used for it.

RHEL can be kept up-to-date by simply using the RHN **up2date** utility. If, however, it should become necessary to install the software again from scratch, the following procedure can be followed:

1. *Download the software and burn CDROMs*. If you do not have CDROMs for the latest version of RHEL WS for AMD64, go to the Easy ISOs [1] page, download the iso files that you need, then burn a set of CDROMs, using **cdrecord** as described in RHEL Step By Step Guide [2].
2. *Delete the system profile from the RHN database.* The v20z was previously registered with RHN and, consequently, RHN has in its database a description of the hardware and software in the system. Because we are going to change the software, we start by deleting the profile currently in the RHN database. At the RHN System Overview [3] page, click the link to the v20z, and then the **delete system** link.
3. Place *disc1* of your set of CDROMs in the CD reader of the v20z, and boot the machine. Let the installation wizard guide you. Be sure to include the scientific software package in the set of packages to be installed. As for network configuration, choose the option which relies on a DHCP server (there is a DHCP server in the firewall).

   When the installation is complete, the system will reboot, and you will be guided to register with RHN. Select the *existing account* option, using alanwesthagen as the username and aerlrfpk as the password. Let the wizard guide you through the registration.

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Notes

1. https://rhn.redhat.com/network/software/download_isos.pxt
2. https://www.redhat.com/docs/manuals/enterprise/RHEL-3-Manual/step-guide/s1-disks-cdrw.html
3. https://rhn.redhat.com/network/systems/index.pxt
4. http://www.opencontent.org/openpub/