Eureka Streams

Fedora Installation

Paul Morgan

Eureka Streams Fedora Installation
Edition 0

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This document provides step-by-step instructions for installing a private instance of Eurekastreams from Lockheed-Martin. Eurekastreams combines social features to enable employees within your company or organization to collaborate in new ways. Eurekastreams provides features that bring multiple, disparate sources of content into manageable streams.

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Executive Summary

This chapter provides a high-level overview of the project.

1.1. Related documents

- Statement of Work (SOW)

1.2. Technologies used

This project incorporates the following technologies:

Red Hat

- Publican
- Red Hat Enterprise Linux 5
- Fedora Linux

1.3. Scope

1.3.1. Focus on content, *not* formatting

This documentation system leverages open-source tools to create professional documents without worrying about the format. It provides several advantages:

- Rapid document creation
  - Include files directly
  - Manage revisions
  - Publish content automatically
- Automatic formatting based on stylesheets
  - Consistent look and feel
  - Format is based on semantic content
- Automatic creation of
  - Table of contents
  - List of figures
  - Index (based on tagged content)

1.3.2. Create professional documents based on templates

This package provides the **`ej`** command for creating documents. The **`ej`** command is short for **engagement journal** and does several things:

- Creates a working directory containing a template engagement journal
- Enables the author to work with plain-text files
- Provides a **`Makefile`**, which…
  1. converts plain-text, lightweight markup into **`docbook`**
  2. converts **`docbook`** into well-formatted output, such as PDF

Note

The **`ej`** command provides the above features *now*.

1.3.3. Manage a central document repository

The **`ejadm`** command administers a collection of documents. In the future, the **`ejadm`** command will provide a front-end to version control and publishing, enabling users to:

- List documents by author, client name, or document title
- Search documents
- Publish documents
- Manage revisions
- Check-out documents
- Check-out document *modules*; e.g., runbook procedures

Important

The **`ejadm`** command does not *yet* provide the features listed above.

1.3.4. Another scope element

Use asciidoc in your source to denote things that should be **bold** or *italicized*.

List titles are optional and begin with a dot (no space)

- First bullet point in no implied order of progression
- Second bullet point
  - Sub-bullet
  - Another sub-bullet
- Third bullet point
- Denote commands, such as the **`cat /proc/cpuinfo`** command, in backticks

List titles are bold, and *this portion is also italicized*

1. Numbered lists are good for procedures
2. Pretty easy, right?
    a. A sub-step
    b. Second sub-step
3. Third major step

1.4. Challenges and Risks

1.4.1. Publican versions

Publican embeds a *product* version number in the title of the document. This is really annoying, but fits within the design goals of **Publican**.

Sigh…to get rid of it:

1. Edit **`en-US/Book_Info.xml`**
2. Find the tag **`<productnumber>0.1</productnumber>`**
3. Change it to read **`<productnumber></productnumber>`**
4. Rebuild by running the **`make all`** command

Note

A future version of the **`ej`** command will probably do this for you.

1.4.2. Low-latency Environment

This solution does not require any background process (also known as a *daemon*) to run. This avoids any impact on low-latency requirements for RHEL.

1.4.3. DNS Architecture

Any network infrastructure based on TCP/IP protocols should have a well-designed DNS. This document provides work-arounds for an infrastructure in which DNS is less than optimal.

Causes

- Lack of heirarchical delegation to subdomains
- Missing **A** records
- Inconsistent **`cname`** records
- Improper forwarders

Effects

- Hosts cannot reach each other
- Kerberos-based authentication fails

Workarounds

- Pre-populating the **`/etc/hosts`** file provides unique names for each record
- A naming standard has been developed for adding entries to the **`/etc/hosts`** file
- Use RHN Satellite Server to push out the **`/etc/hosts`** file

1.4.4. Multicast traffic

Red Hat Cluster Suite requires multicast traffic on intervening switches.

1.5. Recommendations

1.5.1. Fix your DNS

Please fix your DNS asap.

1.5.2. Implement multicast correctly

Really, I mean a $35 D-Link switch can do it.

1.5.3. Design a standard operating environment around Client Name's Satellite Server

Client Name has an RHN Satellite Server. We should develop a plan to:

- Define standard configurations for Client Name RHEL servers
- Add existing servers to the satellite server for management of
  - Patches
  - In-house software
  - Configuration files that deviate from stock. RHN Satellite server provides basic revision control for config files.
- Deploy future servers

1.5.4. Disable unnecessary services

A number of services are enabled by default and can be disabled to save resources. The following code snippet can be added as a standard part of **`%post`** in a baseline kickstart.

```
#!/bin/bash

unnecessary="
```

```
avahi-daemon
pcscd
bluetooth
hidd
iptables
cpuspeed
"

prog=$(basename $0)
def_run=$(grep -'^id.*initdefault' -/etc/inittab -| cut --d: --f2)

for svc in $unnecessary; do
  chkconfig ---list $svc -| grep --q -"$def_run:on" && continue
  logger --t $prog -"disabling $svc"
  service $svc stop
  chkconfig $svc off
done

file=/etc/sysconfig/network
grep --q NOZEROCONF $file -|| \
(
  logger --t $prog -"disabling zeroconf"
  echo -"NOZEROCONF=disabled" >> $file
)
```

The script reports its actions in **`/var/log/messages`**, as shown in this example output:

```
Nov 17 16:51:42 hostname disable-services: disabling avahi-daemon
Nov 17 16:51:42 hostname disable-services: disabling pcscd
Nov 17 16:51:44 hostname disable-services: disabling bluetooth
Nov 17 16:51:44 hostname disable-services: disabling hidd
Nov 17 16:51:44 hostname disable-services: disabling iptables
Nov 17 16:51:44 hostname disable-services: disabling cpuspeed
```

1.5.5. Centralized logging

We should consider making **rsyslog** a part of the baseline build. A centralized log host can be virtualized and addressed using a DNS CNAME, such as **syslog01**. This would allow the virtual host to be relocated as needed without impacting existing configurations.

> Rsyslog is an enhanced multi-threaded syslogd supporting, among others, MySQL, syslog/tcp, RFC 3195, permitted sender lists, filtering on any message part, and fine grain output format control. It is quite compatible to stock sysklogd and can be used as a drop-in replacement. Its advanced features make it suitable for enterprise-class, encryption protected syslog relay chains while at the same time being very easy to setup for the novice user.

1.5.6. Event correlation

Client Name should consider installing **Simple Event Correlator** (**SEC**) on the **`syslog`** host.

See *http://simple-evcorr.sourceforge.net* for more information on **SEC**.

> SEC is an open source and platform independent event correlation tool that was designed to fill the gap between commercial event correlation systems and homegrown solutions that usually comprise a few simple shell scripts. SEC accepts input from regular files, named pipes, and standard input, and can thus be employed

> as an event correlator for any application that is able to write its output events to a file stream. The SEC configuration is stored in text files as rules, each rule specifying an event matching condition, an action list, and optionally a Boolean expression whose truth value decides whether the rule can be applied at a given moment. Regular expressions, Perl subroutines, etc. are used for defining event matching conditions. SEC can produce output events by executing user-specified shell scripts or programs (e.g., snmptrap or mail), by writing messages to pipes or files, and by various other means.
>
> SEC has been successfully applied in various domains like network management, system monitoring, data security, intrusion detection, log file monitoring and analysis, etc. The applications SEC has been used or integrated with include HP OpenView NNM and Operations, CiscoWorks, BMC Patrol, Nagios, SNMPTT, Snort IDS, Prelude IDS, etc.
>
> —*http://simple-evcorr.sourceforge.net*

1.5.7. Bash Scripting

Client Name admins should develop Bash scripting skills. I spent some time with the Linux team to cover scripting and command-line navigation. Using scripts to automate management tasks provides useful benefits:

Benefits of Bash scripting

- Understand how system scripts operate
- Resolve run-time issues with servers
- Ability to test scripts before running in production
- Avoids risk of entering commands by hand on production servers
- Reproduce tasks efficiently
- Over time, build a library of common scripts

Free, self-study resources

The following two resources are freely available online and provide a great reference for individuals who prefer to self-study.

Introductory tutorial on Bash scripting
http://tldp.org/HOWTO/Bash-Prog-Intro-HOWTO.html

Advanced Bash scripting guide (PDF)
http://freshmeat.net/projects/advancedbashscriptingguide

Instructor-led training

For instructor-led training with labs, Red Hat offers a course that includes Bash scripting and Linux command-line skills. RH033 *Red Hat Linux Essentials for Windows Professionals and other Operating System Users* is available in a traditional corporate classroom environment or as a virtual Internet-based class.

Red Hat classroom course RH033
https://www.redhat.com/courses/rh033_red_hat_linux_essentials

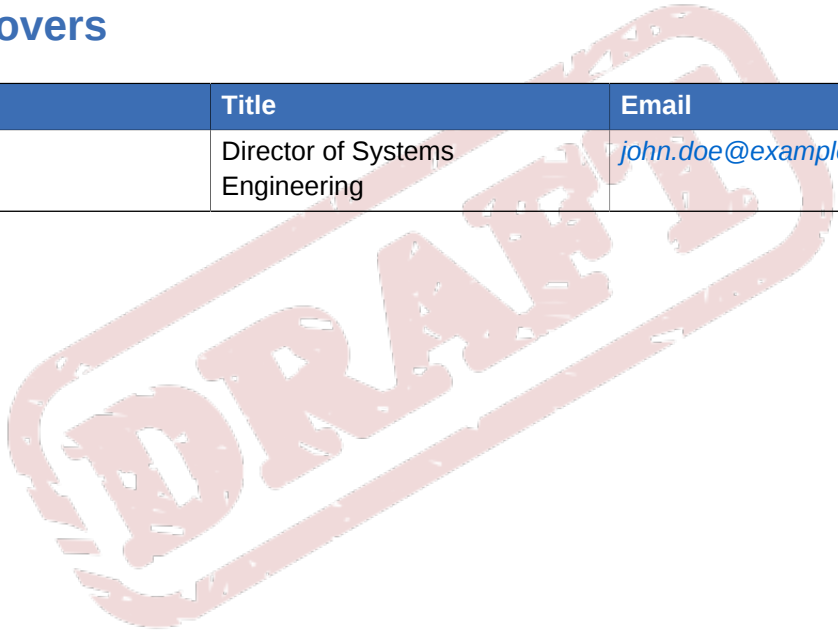
Red Hat virtual course RH033VT
https://www.redhat.com/elearning/rh033vt_red_hat_linux_essentials/

1.6. Reviewers

Name	Title	Email
Jane Austen	Technical Writer	*jane.austen@example.com*[1]
Compliance Person	Senior Auditor	*compliance.person@example.com*[2]
Another Name	Project Manager	*another.name@redhat.com*[3]
Yet Another	Technical Account Manager	*yet.another@redhat.com*[4]

1.7. Approvers

Name	Title	Email
John Doe	Director of Systems Engineering	*john.doe@example.com*[5]

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Runbook Procedures

2.1. Installation

This installation is based on the instructions at *http://www.eurekastreams.org/build-and-run/*.

2.1.1. Install prerequisite packages

These steps install numerous dependencies.

Note

These steps use **`sudo`** to run commands as **`root`**. You could also run **`sudo -i`** to become **`root`**.

1. Install **`maven2`**

```
sudo yum --y install maven2 maven2-manual
```

2. Install **`memcached`**

```
sudo yum --y install memcached
sudo -/sbin/service memcached start
sudo -/sbin/chkconfig memcached on
```

3. Install Git

```
sudo yum --y install git-all
```

4. Install Postgres client and server

```
sudo yum --y install postgresql postgresql-server
```

5. Install Java from *http://www.java.com/en*


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Technical Discussion

This section provides technical details about the packaging and deployment of HP PSP components for ISE.

3.1. PSP Software

To download the PSP software:

1. Visit *http://www.hp.com/servers/psp*
   a. Follow the link for **Downloads**
   b. Choose RHEL 5 Server x86_64
2. The HP site delivers three parts
   a. Download Part 1 (XML file) as **`psp.xml`**
   b. Download Part 2 (tarball) with name intact
   c. Download Part 3 (MD5 checksum) and save as **`md5sum.txt`** in the *same* directory as tarball
3. Verify integrity of the download

```
md5sum --c md5sum.txt
```

Expected output:

```
psp-8.31.rhel5.x86_64.en.tar.gz: OK
```

Important

This is not a true integrity check since it lacks a digital signature, but it is the best we can do at the moment.

4. Extract the tarball to inspect its contents
   a. Extract the distribution tarball

```
[pmorgan@x200 hp-psp]$ tar xvzf psp-8.31.rhel5.x86_64.en.tar.gz
compaq/
compaq/csp/
compaq/csp/linux/
compaq/csp/linux/cpqacuxe-8.30-5.0.noarch.rpm.tar.gz
compaq/csp/linux/cpq_cciss-3.6.20-30.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/e1000-8.0.16-1.src.rpm.tar.gz
compaq/csp/linux/e1000e-1.0.15-1.src.rpm.tar.gz
compaq/csp/linux/fibreutils-2.5-4.x86_64.rpm.tar.gz
compaq/csp/linux/hpacucli-8.30-5.0.noarch.rpm.tar.gz
compaq/csp/linux/hpahcisr-1.2.1-9.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/hpdiags-8.3.0-14.linux.x86_64.rpm.tar.gz
compaq/csp/linux/hp-fc-enablement-1.1-9.noarch.rpm.tar.gz
compaq/csp/linux/hp-health-8.3.1.2-2.rhel5.x86_64.rpm.tar.gz
```

```
compaq/csp/linux/hp-ilo-8.3.0-118.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/hp-lpfc-8.2.0.22-8.noarch.rpm.tar.gz
compaq/csp/linux/hpmouse-1.1.2-33.noarch.rpm.tar.gz
compaq/csp/linux/hponcfg-2.2.0-5.noarch.rpm.tar.gz
compaq/csp/linux/hp-OpenIPMI-8.3.1-15.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/hp_qla2x00src-8.02.23-1.noarch.rpm.tar.gz
compaq/csp/linux/hp_qla2x00src-mezz-8.02.23-1.noarch.rpm.tar.gz
compaq/csp/linux/hpsmh-3.0.2-77.x86_64.rpm.tar.gz
compaq/csp/linux/hp-smh-templates-8.3.0.9-13.noarch.rpm.tar.gz
compaq/csp/linux/hp-snmp-agents-8.3.0.27-24.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/hpvca-2.2.1-3.linux.rpm.tar.gz
compaq/csp/linux/mptlinux-4.00.13.07-1.rhel5.x86_64.rpm.tar.gz
compaq/csp/linux/netxtreme2-5.0.17-1.src.rpm.tar.gz
compaq/csp/linux/nx_nic-4.0.406-5.src.rpm.tar.gz
compaq/csp/linux/qla4xxx-5.01.01.04-1.src.rpm.tar.gz
compaq/csp/linux/tg3-3.99h-1.src.rpm.tar.gz
compaq/csp/linux/hppldu-1.0.26-1.tar.gz
compaq/csp/linux/hppldu-librpms-1.0.26-1.tar.gz
compaq/csp/linux/install830.sh
compaq/csp/linux/bp000666.xml
compaq/csp/linux/hppldu_v831.rhel5.txt
```

b. Extract additional tarballs

```
find compaq/ --regex -'.*tar.gz' --exec tar xvf {} \;
```

c. Some of the packages appear from the name to conflict, so check the packager for each:

```
{
for rpm in $(ls *rpm); do
  echo -" ========= $rpm ==========="
  rpm --qip $rpm
done
} 2> -/dev/null -| tee -/tmp/pkg-descriptions -| less
```

Note

See the relevant appendix for the complete **`pkg-descriptions`** file.

Warning

Some of the components are specific, *out-of-date* versions of vendor packages; others, *uncertified* replacements for certified drivers.

Based on the above, the most interesting components *on initial review* seem to be:

- **cpqacuxe**: HP Array Configuration Utility

```
Name        -: cpqacuxe                    Relocations: (not relocatable)
Version     -: 8.30                             Vendor: Hewlett-Packard Company
Release     -: 5.0                       Build Date: Wed 08 Jul 2009 10:14:24 PM EDT
Install Date: (not installed)            Build Host: Prowl.americas.hpqcorp.net
Group       -: Applications/System        Source RPM: cpqacuxe-8.30-5.0.src.rpm
Size        -: 12284428                      License: See cpqacuxe.license
```

```
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/linux
Summary     -: HP Array Configuration Utility
Description -:
The HP Array Configuration Utility is the web-based disk array
configuration program for Array Controllers.
```

- **hpacucli**: HP Command Line Array Configuration Utility

```
Name        -: hpacucli                    Relocations: (not relocatable)
Version     -: 8.30                             Vendor: Hewlett-Packard Company
Release     -: 5.0                          Build Date: Wed 08 Jul 2009 06:14:52 PM EDT
Install Date: (not installed)              Build Host: Prowl.americas.hpqcorp.net
Group       -: Applications/System          Source RPM: hpacucli-8.30-5.0.src.rpm
Size        -: 15748051                        License: See hpacucli.license
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/linux
Summary     -: HP Command Line Array Configuration Utility
Description -:
The HP Command Line Array Configuration Utility is the disk
array configuration program for Array Controllers.
```

- **hpdiags**: hp Insight Diagnostics

```
Name        -: hpdiags                     Relocations: (not relocatable)
Version     -: 8.3.0                            Vendor: (none)
Release     -: 14                           Build Date: Mon 10 Aug 2009 04:53:48 PM EDT
Install Date: (not installed)              Build Host: linux-X64
Group       -: Applications/System          Source RPM: hpdiags-8.3.0-14.src.rpm
Size        -: 64303983                        License: commercial
Signature   -: (none)
URL         -: http://www.hp.com/linux
Summary     -: hp Insight Diagnostics
Description -:
Identifies and exercises system components.
```

- **hp-health**: HP System Health Application and Command Line Utilities

```
Name        -: hp-health                   Relocations: (not relocatable)
Version     -: 8.3.1.2                          Vendor: Hewlett-Packard Company
Release     -: 2                            Build Date: Thu 17 Sep 2009 03:21:17 PM EDT
Install Date: (not installed)              Build Host: bld72.sdg.adapps.hp.com
Group       -: System Environment           Source RPM: hp-health-8.3.1.2-2.src.rpm
Size        -: 1506986                         License: 2008 Hewlett-Packard Development
Company, L.P.
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/go/proliantlinux
Summary     -: HP System Health Application and Command Line Utilities
Description -:
This package contains the System Health Monitor for all hp Proliant systems
with ASM, ILO, & ILO2 embedded management asics.  Also contained are the
command line utilities.
```

- **hp-ilo**: HP iLO Channel Interface Driver

```
Name        -: hp-ilo                      Relocations: (not relocatable)
```

```
Version     -: 8.3.0                            Vendor: Hewlett-Packard Company
Release     -: 118.rhel5                     Build Date: Fri 26 Jun 2009 01:10:10 PM EDT
Install Date: (not installed)               Build Host: rhel5ebuild
Group       -: System Environment/Kernel     Source RPM: hp-ilo-8.3.0-118.rhel5.src.rpm
Size        -: 1910611                          License: GNU Public License
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/go/proliantlinux
Summary     -: HP iLO Channel Interface Driver
Description -:
This is the Hewlett-Packard integrated Lights-Out (iLO) system management
controller channel interface device driver. This driver establishes a channel
from the iLO 2 controller to an application such that the application can
communicate directly to the iLO 2 controller.
```

- **`hponcfg`**: RILOE II/iLo online configuration utility

```
Name        -: hponcfg                      Relocations: (not relocatable)
Version     -: 2.2.0                            Vendor: Hewlett-Packard Company
Release     -: 5                             Build Date: Tue 02 Jun 2009 11:35:56 PM EDT
Install Date: (not installed)               Build Host: nt179237.ind.hp.com
Group       -: Utilities/System              Source RPM: hponcfg-2.2.0-5.src.rpm
Size        -: 200492                           License: Proprietary
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/go/ilo
Summary     -: hponcfg -- An RILOE II/iLo online configuration utility
Description -:
Hponcfg is a command line utility that can be used to configure iLO/RILOE II from with in
the operating system without requiring a reboot of the server.
```

- **`hpsmh`**: HP System Management Homepage

```
Name        -: hpsmh                        Relocations: (not relocatable)
Version     -: 3.0.2                            Vendor: Hewlett-Packard Company
Release     -: 77                            Build Date: Sat 20 Jun 2009 12:45:38 PM EDT
Install Date: (not installed)               Build Host: linux
Group       -: Applications/System           Source RPM: hpsmh-3.0.2-77.src.rpm
Size        -: 43065778                         License: COPYRIGHT 2004-2009 Hewlett-
Packard Development Company, L.P.  All rights reserved.
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/linux
Summary     -: HP System Management Homepage
Description -:
The HP System Management Homepage v3.0.2.77
```

- **`hp-snmp-agents`**: Insight Management Agents(SNMP) for HP ProLiant Systems

```
Name        -: hp-snmp-agents               Relocations: (not relocatable)
Version     -: 8.3.0.27                         Vendor: Hewlett-Packard Company
Release     -: 24                            Build Date: Tue 28 Jul 2009 12:52:56 PM EDT
Install Date: (not installed)               Build Host: bld73.sdg.adapps.hp.com
Group       -: System Environment            Source RPM: hp-snmp-agents-8.3.0.27-24.src.rpm
Size        -: 5428602                          License: 2008 Hewlett-Packard Development
Company, L.P.
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com/go/proliantlinux
Summary     -: Insight Management Agents(SNMP) for HP ProLiant Systems
```

```
Description -:
This package contains the SNMP server, storage, and nic agents for all
hp Proliant systems with ASM, ILO, & ILO2 embedded management asics.
```

Note

The above components are binary-only and do not require building.

These additional components appear interesting, but possibly invasive:

- **`fibreutils`**: Complimentary programs and scripts for HP supported FC HBAs

```
Name        -: fibreutils                   Relocations: (not relocatable)
Version     -: 2.5                               Vendor: Hewlett-Packard Company
Release     -: 4                             Build Date: Tue 25 Nov 2008 11:42:36 AM EST
Install Date: (not installed)               Build Host: deimos.mro.cpqcorp.net
Group       -: Applications/System           Source RPM: fibreutils-2.5-4.src.rpm
Size        -: 161229                           License: Proprietary
Signature   -: (none)
Packager    -: Hewlett-Packard Company
URL         -: http://www.hp.com
Summary     -: Provides complimentary programs and scripts for HP supported FC HBAs
Description -:
This RPM has the following components:

* Miscellaneous scripts and programs to compliment HP supported FC drivers:

lssd
lssg
adapter_info
probe-luns
hp_rescan
hp_system_info
scsi_info
sysfs_scandisk
sysfs_scan_rport
```

Note

This component may provide redundant functionality with standard tools provided by **`sg3_utils`**, **`lspci`**, **`dmidecode`**, and other packages.

3.2. Test installation of PSP components

This section describes how to test the installation of interesting PSP components in an isolated environment with no impact on other environments.

3.2.1. Goals of test installation

The goals of a test installation procedure:

- Build in an isolated environment
- Determine whether components are buildable

- Determine build dependencies
- Determine run-time dependencies

3.2.2. Procedure for test installation

1. Copy the binary PSP packages to **lunch18**
2. Attempt to install without yum

```
[pmorgan@lunch18 ~]$ sudo rpm --Uvh *rpm
error: Failed dependencies:
        libGLU.so.1()(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libXaw.so.7()(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libXmu.so.6()(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5 is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5()(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5(CXXABI_1.2) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5(CXXABI_1.2)(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5(GLIBCPP_3.2) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5(GLIBCPP_3.2)(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libstdc++.so.5(GLIBCPP_3.2.2)(64bit) is needed by hpdiags-8.3.0-14.x86_64
        libsensors.so.3()(64bit) is needed by hp-snmp-agents-8.3.0.27-24.x86_64
        net-snmp is needed by hp-snmp-agents-8.3.0.27-24.x86_64
```

3. Attempt to use **yum** to pick up dependencies

```
sudo yum localinstall ---nogpgcheck *rpm
```

Actual output

```
 ---snip--
Installing for dependencies:
 compat-libstdc++-33
             i386   3.2.3-61         ise-rhel-5.3-x86_64                 232 k
 compat-libstdc++-33
             x86_64 3.2.3-61         ise-rhel-5.3-x86_64                 227 k
 libXaw      x86_64 1.0.2-8.1        ise-rhel-5.3-x86_64                 328 k
 libXmu      x86_64 1.0.2-5          ise-rhel-5.3-x86_64                  63 k
 libXpm      x86_64 3.5.5-3          ise-rhel-5.3-x86_64                  44 k
 lm_sensors  x86_64 2.10.7-4.el5     ise-rhel-5.3-x86_64                 528 k
 mesa-libGLU x86_64 6.5.1-7.7.el5    ise-rhel-5.3-x86_64                 226 k
 net-snmp    x86_64 1:5.3.2.2-5.el5  ise-rhel-5.3-x86_64                 716 k
 ---snip--
Running Transaction
  Installing     -: lm_sensors                                      [ 1/17]
  Installing     -: libXmu                                          [ 2/17]
  Installing     -: net-snmp                                        [ 3/17]
  Installing     -: libXpm                                          [ 4/17]
  Installing     -: libXaw                                          [ 5/17]
  Installing     -: mesa-libGLU                                     [ 6/17]
  Installing     -: compat-libstdc++-33                             [ 7/17]
Detected Red Hat Enterprise Linux AS/ES/WS/SERVER 5
Created hpsmh user and group...
  Installing     -: hpsmh                                           [ 8/17]

*********************************************************
* System Management Homepage installed successfully with *
* default configuration values.   To change the default  *
* configuration values,  type the following command at   *
```

```
* the root prompt:                                          *
*                                                          *
* -/opt/hp/hpsmh/sbin/smhconfig                             *
*                                                          *
************************************************************


This RPM is not supported on RHEL 5.3 or greater

error: %pre(fibreutils-2.5-4.x86_64) scriptlet failed, exit status 1
error:   install: %pre scriptlet failed (2), skipping fibreutils-2.5-4
  Installing     -: hp-ilo                                      [10/17]
Please read the Licence Agreement for this software at

         -/opt/hp/hp-ilo/hp-ilo.license

By not removing this package, you are accepting the terms
of the included licenses.

The man page, hp-ilo(4), describes how to enable and use
the hp-ilo device driver.
  Installing     -: hponcfg                                     [11/17]
  Installing     -: compat-libstdc++-33                         [12/17]
  Installing     -: cpqacuxe                                    [13/17]
  Installing     -: hpacucli                                    [14/17]
  Installing     -: hp-health                                   [15/17]
Please read the Licence Agreement for this software at

         -/opt/hp/hp-health/hp-health.license

By not removing this package, you are accepting the terms
of the -"HP Proliant Essentials Software End User License Agreement".
 ================================================================================
 NOTE: In order to activate the software contained in this package, you must
      type -'/etc/init.d/hp-health start' as -'root' user.
 ================================================================================
The hp-health RPM has installed successfully.
  Installing     -: hp-snmp-agents                              [16/17]
Please read the Licence Agreement for this software at

         -/opt/hp/hp-snmp-agents/hp-snmp-agents.license

By not removing this package, you are accepting the terms
of the -"HP Proliant Essentials Software End User License Agreement".
Installing -/opt/hp/hp-snmp-agents/nic/etc/HPcmanic.pp SELinux policy module
 ================================================================================
 NOTE: In order to activate the software contained in this package, you must
      type -'/sbin/hpsnmpconfig' as -'root' user.
      Once configuration is completed start the agents by typing
      -/etc/init.d/hp-snmp-agents start
 ================================================================================
  Installing     -: hpdiags                                     [17/17]
Stopping hpsmhd: [  OK  -]
Starting hpsmhd: [  OK  -]

Installed: cpqacuxe.i386 0:8.30-5.0 fibreutils.x86_64 0:2.5-4 hp-health.x86_64
0:8.3.1.2-2 hp-ilo.x86_64 0:8.3.0-118.rhel5 hp-snmp-agents.x86_64 0:8.3.0.27-24
hpacucli.i386 0:8.30-5.0 hpdiags.x86_64 0:8.3.0-14 hponcfg.noarch 0:2.2.0-5 hpsmh.x86_64
0:3.0.2-77
Dependency Installed: compat-libstdc++-33.i386 0:3.2.3-61 compat-libstdc++-33.x86_64
0:3.2.3-61 libXaw.x86_64 0:1.0.2-8.1 libXmu.x86_64 0:1.0.2-5 libXpm.x86_64 0:3.5.5-3
lm_sensors.x86_64 0:2.10.7-4.el5 mesa-libGLU.x86_64 0:6.5.1-7.7.el5 net-snmp.x86_64
1:5.3.2.2-5.el5
Complete!
```

```
---snip--
```

4. Check disk usage in **`/opt`**

```
[pmorgan@lunch18 ~]$ sudo du --lsh -/opt
119M    -/opt
```

3.2.3. Test configuration

Dave Shouse provided configuration settings for the test installation.

Equinix

SNMP trap destination is 6.3.5.202

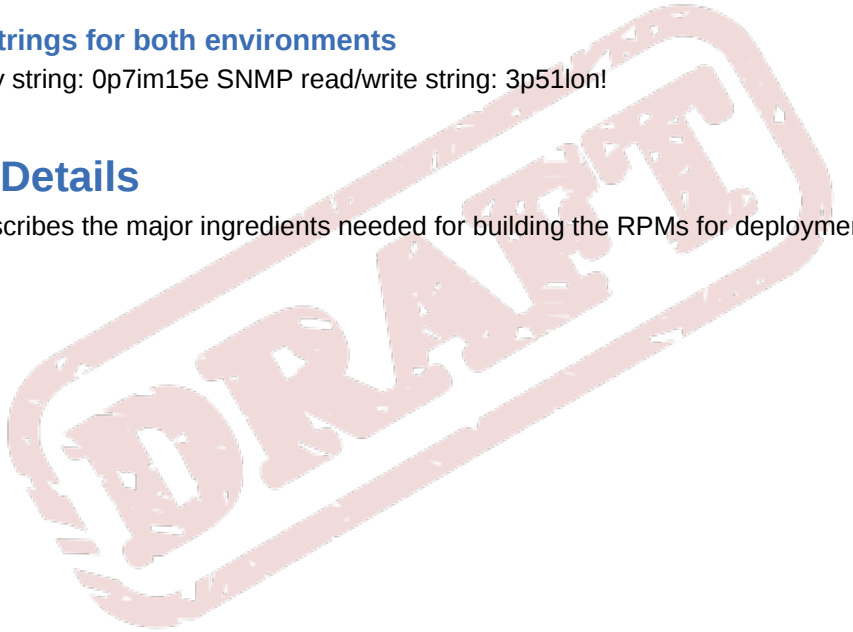
Telx SNMP trap destination is 6.4.5.202

Community strings for both environments

SNMP read only string: 0p7im15e SNMP read/write string: 3p51lon!

3.3. RPM Details

This section describes the major ingredients needed for building the RPMs for deployment.



Appendix A. Revision History

Revision 0 Fri Aug 13 2010 Paul Morgan *pmorgan@redhat.com*

Initial creation of book by publican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Appendix B. Reference Material

B.1. Eurekastreams

Eurekastreams public site

http://www.eurekastreams.org

Github

http://github.com/lmco/eurekastreams

Wikipedia

http://en.wikipedia.org/wiki/Eureka_Streams

B.2. Asciidoc

Asciidoc website

http://www.methods.co.nz/asciidoc/index.html

Asciidoc cheat sheet

http://powerman.name/doc/asciidoc


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