

Eureka Streams

Fedora Installation



Eureka Streams Fedora Installation

Edition 0

Author

Paul Morgan

pmorgan@redhat.com

Copyright © 2010 Paul Morgan.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at <http://creativecommons.org/licenses/by-sa/3.0/>. The original authors of this document, and Red Hat, designate the Fedora Project as the "Attribution Party" for purposes of CC-BY-SA. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, JBoss, MetaMatrix, Fedora, the Infinity Logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

For guidelines on the permitted uses of the Fedora trademarks, refer to https://fedoraproject.org/wiki/Legal:Trademark_guidelines.

Linux® is the registered trademark of Linus Torvalds in the United States and other countries.

Java® is a registered trademark of Oracle and/or its affiliates.

XFS® is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

All other trademarks are the property of their respective owners.

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

1. Executive Summary	1
1.1. Scope	1
1.2. Technologies used	1
1.3. Challenges and Risks	1
1.4. Recommendations	1
1.5. Reviewers	1
1.6. Approvers	1
2. Runbook Procedures	3
2.1. Installation	3
2.1.1. Install prerequisite packages	3
3. Technical Discussion	5
3.1. PSP Software	5
3.2. Test installation of PSP components	9
3.2.1. Goals of test installation	9
3.2.2. Procedure for test installation	10
3.2.3. Test configuration	12
3.3. RPM Details	12
A. Revision History	13
B. Reference Material	15
B.1. Eureka Streams	15
B.2. AsciiDoc	15



DRAFT

Executive Summary

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

1.1. Scope

This document provides detailed instructions for installing Eureka Streams on Fedora Linux. The instructions probably relate closely to the steps needed to install on other distributions, such as Red Hat Enterprise Linux and Centos.

Installing Fedora Linux is well-documented and is beyond the scope of this document.

1.2. Technologies used

This project incorporates the following technologies:

- Fedora Linux 11
- Eureka Streams
- Memcached
- Java
- Maven
- Postgres

1.3. Challenges and Risks

stub text

1.4. Recommendations

stub text

1.5. 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

1.6. Approvers

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

DRAFT

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>

DRAFT

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.
```

- **hpdiaags**: hp Insight Diagnostics

```
Name          -: hpdiaags                      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: hpdiaags-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 within
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(GLIBCXX_3.2) is needed by hpdiags-8.3.0-14.x86_64
    libstdc++.so.5(GLIBCXX_3.2)(64bit) is needed by hpdiags-8.3.0-14.x86_64
    libstdc++.so.5(GLIBCXX_3.2.2)(64bit) is needed by hpdiags-8.3.0-14.x86_64
    libsensors.so.3()(64bit) is needed by hp-snmpp-agents-8.3.0.27-24.x86_64
    net-snmpp is needed by hp-snmpp-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-snmpp     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-snmpp              [ 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.

DRAFT

Appendix A. Revision History

Revision 0 Fri Aug 13 2010

Paul Morgan pmorgan@redhat.com

Initial creation of book by publican



DRAFT

Appendix B. Reference Material

B.1. Eureka Streams

Eureka Streams official 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>



DRAFT