

# Install perfSONAR-PS BUOY

## Install Server

- output may not be same for others as PingER already installed

```
$ sudo yum install perl-perfSONAR_PS-perfSONARBUOY-server.noarch
Password:
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
--> Package perl-perfSONAR_PS-perfSONARBUOY-server.noarch 0:3.1-4.pSPS set to be updated
--> Processing Dependency: perl(Data::Validate::IP) for package: perl-perfSONAR_PS-perfSONARBUOY-server
--> Processing Dependency: perl(Sleepycat::DbXml) for package: perl-perfSONAR_PS-perfSONARBUOY-server
--> Processing Dependency: perl-perfSONAR_PS-perfSONARBUOY-config for package: perl-perfSONAR_PS-perfSONARBUOY-server
--> Processing Dependency: perl(Net::IPv6Addr) for package: perl-perfSONAR_PS-perfSONARBUOY-server
--> Running transaction check
--> Package dbxml.i386 0:2.3.11-1.pSPS set to be updated
--> Package perl-Data-Validate-IP.noarch 0:0.10-1.el5.rf set to be updated
--> Processing Dependency: perl(Net::Netmask) for package: perl-Data-Validate-IP
--> Package perl-Net-IPv6Addr.noarch 0:0.2-1.el5.rf set to be updated
--> Processing Dependency: perl(Net::IPv4Addr) for package: perl-Net-IPv6Addr
--> Package perl-perfSONAR_PS-perfSONARBUOY-config.noarch 0:3.1-4.pSPS set to be updated
--> Running transaction check
--> Package perl-Net-IPv4Addr.noarch 0:0.10-1.2.el5.rf set to be updated
--> Package perl-Net-Netmask.noarch 0:1.9015-1.el5.rf set to be updated
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                                Arch      Version      Repository    Size
=====
Installing:
perl-perfSONAR_PS-perfSONARBUOY-server  noarch    3.1-4.pSPS   Internet2     188 k
Installing for dependencies:
dbxml                                     i386      2.3.11-1.pSPS Internet2     20 M
perl-Data-Validate-IP                   noarch    0.10-1.el5.rf rpmforge     14 k
perl-Net-IPv4Addr                       noarch    0.10-1.2.el5.rf rpmforge     14 k
perl-Net-IPv6Addr                       noarch    0.2-1.el5.rf rpmforge     32 k
perl-Net-Netmask                       noarch    1.9015-1.el5.rf rpmforge     22 k
perl-perfSONAR_PS-perfSONARBUOY-config  noarch    3.1-4.pSPS   Internet2     19 k

Transaction Summary
=====
Install      7 Package(s)
Update       0 Package(s)
Remove       0 Package(s)

Total download size: 20 M
Is this ok [y/N]: y
Downloading Packages:
(1/7): perl-Data-Validate-IP-0.10-1.el5.rf.noarch.rpm | 14 kB 00:00
(2/7): perl-Net-IPv4Addr-0.10-1.2.el5.rf.noarch.rpm | 14 kB 00:00
(3/7): perl-perfSONAR_PS-perfSONARBUOY-config-3.1-4.pSPS.noarch.rpm | 19 kB 00:00
(4/7): perl-Net-Netmask-1.9015-1.el5.rf.noarch.rpm | 22 kB 00:00
(5/7): perl-Net-IPv6Addr-0.2-1.el5.rf.noarch.rpm | 32 kB 00:00
(6/7): perl-perfSONAR_PS-perfSONARBUOY-server-3.1-4.pSPS.noarch.rpm | 188 kB 00:00
(7/7): dbxml-2.3.11-1.pSPS.i386.rpm | 20 MB 00:05
-----
Total                                     2.2 MB/s | 20 MB 00:09
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
```

```

Installing      : perl-Net-IPv4Addr                      1/7
Installing      : perl-Net-IPv6Addr                      2/7
Installing      : perl-perfSONAR_PS-perfSONARBUOY-config 3/7
Installing      : perl-Net-Netmask                      4/7
Installing      : dbxml                                  5/7
Installing      : perl-Data-Validate-IP                  6/7
Installing      : perl-perfSONAR_PS-perfSONARBUOY-server 7/7

```

Installed:

```
perl-perfSONAR_PS-perfSONARBUOY-server.noarch 0:3.1-4.pSPS
```

Dependency Installed:

```

dbxml.i386 0:2.3.11-1.pSPS
perl-Data-Validate-IP.noarch 0:0.10-1.el5.rf
perl-Net-IPv4Addr.noarch 0:0.10-1.2.el5.rf
perl-Net-IPv6Addr.noarch 0:0.2-1.el5.rf
perl-Net-Netmask.noarch 0:1.9015-1.el5.rf
perl-perfSONAR_PS-perfSONARBUOY-config.noarch 0:3.1-4.pSPS

```

Complete!

## Install Client

```

$ sudo yum install perl-perfSONAR_PS-perfSONARBUOY-client.noarch
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
--> Package perl-perfSONAR_PS-perfSONARBUOY-client.noarch 0:3.1-4.pSPS set to be updated
--> Finished Dependency Resolution

```

Dependencies Resolved

```

=====
Package                        Arch      Version      Repository    Size
=====
Installing:
perl-perfSONAR_PS-perfSONARBUOY-client    noarch    3.1-4.pSPS    Internet2     167 k

```

Transaction Summary

```

=====
Install      1 Package(s)
Update       0 Package(s)
Remove       0 Package(s)

```

Total download size: 167 k

Is this ok [y/N]: y

Downloading Packages:

```
perl-perfSONAR_PS-perfSONARBUOY-client-3.1-4.pSPS.noarch.rpm | 167 kB    00:00
```

Running rpm\_check\_debug

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

```
Installing      : perl-perfSONAR_PS-perfSONARBUOY-client                      1/1
```

Installed:

```
perl-perfSONAR_PS-perfSONARBUOY-client.noarch 0:3.1-4.pSPS
```

Complete!

## Database configuration

```

$ cd /opt/perfsonar_ps/perfsonarbuoy_ma/bin
$ sudo ./owdb.pl -c ../etc -i root
Enter root password:
creating new database owamp
Creating user account perfsonar
Granting user perfsonar@localhost access to owamp
Creating user account readonly
Granting user readonly@localhost read-only access to owamp
Granting user readonly@ '%' read-only access to owamp
Initializing DBI:mysql:owamp:localhost
$ sudo ./bwdb.pl -c ../etc -i root
Enter root password:
creating new database bwctl
Creating user account perfsonar
Granting user perfsonar@localhost access to bwctl
Creating user account readonly
Granting user readonly@localhost read-only access to bwctl
Granting user readonly@ '%' read-only access to bwctl
Initializing DBI:mysql:bwctl:localhost

```

## Installation Binary Components

### bwctl

```

$ sudo yum install iperf
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package iperf.i386 0:2.0.4-1.el5.rf set to be updated
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch             Version           Repository        Size
=====
Installing:
iperf                  i386             2.0.4-1.el5.rf    rpmforge          54 k

Transaction Summary
=====
Install      1 Package(s)
Update      0 Package(s)
Remove      0 Package(s)

Total download size: 54 k
Is this ok [y/N]: y
Downloading Packages:
iperf-2.0.4-1.el5.rf.i386.rpm                | 54 kB    00:00
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing      : iperf                                1/1

Installed:
  iperf.i386 0:2.0.4-1.el5.rf

Complete!

```

```
$ sudo yum install nttcp
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package nttcp.i386 0:1.47-0.2.el5.rf set to be updated
--> Finished Dependency Resolution
```

Dependencies Resolved

```
=====
Package                Arch          Version           Repository        Size
=====
Installing:
nttcp                  i386          1.47-0.2.el5.rf   rpmforge          25 k
```

Transaction Summary

```
=====
Install      1 Package(s)
Update       0 Package(s)
Remove       0 Package(s)
```

Total download size: 25 k

Is this ok [y/N]: y

Downloading Packages:

```
nttcp-1.47-0.2.el5.rf.i386.rpm | 25 kB 00:00
```

Running rpm\_check\_debug

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

```
Installing      : nttcp                                     1/1
```

Installed:

```
nttcp.i386 0:1.47-0.2.el5.rf
```

Complete!

```

$ sudo yum install bwctl-client bwctl-server
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package bwctl-client.i386 0:1.3-1 set to be updated
---> Package bwctl-server.i386 0:1.3-2 set to be updated
--> Processing Dependency: I2util for package: bwctl-server
--> Running transaction check
---> Package I2util.i386 0:1.1-1 set to be updated
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch          Version      Repository    Size
=====
Installing:
bwctl-client            i386          1.3-1        Internet2     99 k
bwctl-server            i386          1.3-2        Internet2     124 k
Installing for dependencies:
I2util                  i386          1.1-1        Internet2     56 k
=====

Transaction Summary
=====
Install      3 Package(s)
Update      0 Package(s)
Remove      0 Package(s)

Total download size: 279 k
Is this ok [y/N]: y
Downloading Packages:
(1/3): I2util-1.1-1.i386.rpm | 56 kB 00:00
(2/3): bwctl-client-1.3-1.i386.rpm | 99 kB 00:00
(3/3): bwctl-server-1.3-2.i386.rpm | 124 kB 00:00
-----
Total                               181 kB/s | 279 kB 00:01
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : I2util                                1/3
  Installing : bwctl-server                          2/3
  Installing : bwctl-client                          3/3

Installed:
  bwctl-client.i386 0:1.3-1                bwctl-server.i386 0:1.3-2

Dependency Installed:
  I2util.i386 0:1.1-1

Complete!

```

**OWAMP**

```

$ sudo yum install owamp-client owamp-server
Loaded plugins: rhnplugin
Setting up Install Process
Resolving Dependencies
--> Running transaction check
---> Package owamp-client.i386 0:3.2rc1-1 set to be updated
---> Package owamp-server.i386 0:3.2rc1-1 set to be updated
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch          Version          Repository        Size
=====
Installing:
owamp-client            i386          3.2rc1-1         Internet2          198 k
owamp-server            i386          3.2rc1-1         Internet2          111 k

Transaction Summary
=====
Install      2 Package(s)
Update       0 Package(s)
Remove       0 Package(s)

Total download size: 309 k
Is this ok [y/N]: y
Downloading Packages:
(1/2): owamp-server-3.2rc1-1.i386.rpm           | 111 kB    00:00
(2/2): owamp-client-3.2rc1-1.i386.rpm           | 198 kB    00:00
-----
Total                                           266 kB/s | 309 kB    00:01
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing      : owamp-client                                1/2
  Installing      : owamp-server                                2/2

Installed:
  owamp-client.i386 0:3.2rc1-1                                owamp-server.i386 0:3.2rc1-1

Complete!

```

## Starting testing service

### binaries

```

$ sudo /etc/init.d/bwctld restart
/etc/init.d/bwctld stop: bwctld stopped
waiting...
/usr/bin/bwctld -c /etc/bwctld -R /var/run
bwctld[32396]: FILE=policy.c, LINE=473, WARNING: regular: Using parents more restrictive limits for duration.
bwctld[32396]: FILE=iperf.c, LINE=114, IperfAvailable(): iperf_cmd unset, using "iperf"
bwctld[32396]: FILE=nuttcp.c, LINE=114, NuttcpAvailable(): nuttcp_cmd unset, using "nuttcp"
bwctld[32396]: FILE=nuttcp.c, LINE=220, NuttcpAvailable(): We were unable to verify that nuttcp is working.
Likely you do not have it installed. exit status: 1: output: exec(nuttcp): No such file or directory
bwctld[32396]: FILE=tools.c, LINE=296, Couldn't initialize tool "nuttcp". Disabling it.
/etc/init.d/bwctld start: bwctld started

```

```
$ sudo /etc/init.d/owampd restart
/etc/init.d/owampd stop: owampd (no pid file) not running
waiting...
/usr/bin/owampd -c /etc/owampd -R /var/run
/etc/init.d/owampd start: owampd started
```

```
$ sudo /etc/init.d/perfsonarbuoy_bw_collector restart
Sent HUP to 32499
perfSONAR-BUOY BWCTL Measurement Collector Daemon Restarted
$ sudo /etc/init.d/perfsonarbuoy_owp_collector restart
Sent HUP to 32487
perfSONAR-BUOY OWAMP Measurement Collector Daemon Restarted
```

## perfsonar service

```
$ sudo /etc/init.d/perfsonarbuoy_ma start
/opt/perfsonar_ps/perfsonarbuoy_ma/bin/daemon.pl --config=/opt/perfsonar_ps/perfsonarbuoy_ma/etc/daemon.conf --
pidfile=perfsonarbuoy_ma.pid --piddir=/var/run --logger=/opt/perfsonar_ps/perfsonarbuoy_ma/etc/daemon_logger.
conf --user=perfsonar --group=perfsonar
/etc/init.d/perfsonarbuoy_ma start: perfSONAR perfSONAR-BUOY MA Service started
```