Equinox Installation Guides

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Document Control

Version History

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Document Conventions

The following typefaces are used throughout this guide:

- `The 'Courier' typeface is used for directory objects and attributes, file names and command line code.`
- *'Italics' are used for emphasis and for cross references*.
- **This bold typeface is used to represent information you should type in at the keyboard.**

Note: This Note is used to illustrate that you should pay particular attention to its accompanying information.

References

[1] None

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Chapter 1: Introduction

Equinox is an application server providing a general purpose interworking function between other network elements over a number of IT de-facto protocols. Equinox can be used to convert protocol or to exchange sequences of messages with other systems.

Equinox Application Server (EAS) provides resilience through it's distributed and replicated architecture which means that EAS is deployed on a number of "commodity" hardware platforms and can be supported on either Solaris 10 or Linux.

The EAS maintains all data in memory storage for the fastest possible access, but for availability reasons (since memory is a volatile storage medium) the memory critical process (E11) is actually realized by a number of synchronized physical/logical servers. Each server within an EAS E11 process has an identical copy of the data which represents the portion of the session/instance held by that EAS.

For whatever application is loaded onto the EAS, the EAS functions as a hosting platform for the software and provides a session database management.

This engineering specification is use to determine how the EAS performs in terms of responsiveness and stability under a particular workload. This can also serve to investigate measure, validate or verify other quality attributes of the system, such as scalability, reliability, and resource usage.

Installation guides refer to how to install Equinox on Linux OS (Debian , Red Hat) they have different step installation

Chapter 2: Prerequisite

This release of software has been fully tested with following environments, and all installation procedures require super user privilege.

1. Linux kernel 2.6.18 (kernel 2.6.x should be compatible)
2. gcc 4.1.2 (version 4.1.x should be compatible)
3. cyrus-sasl-2.1.22-4 (version 2.1.x should be compatible)
4. openssl-0.9.8b-10.el5 (version 0.9.x should be compatible)
5. openldap 2.4.16 (require)
6. JDK version 1.6.0_38

Chapter 3: Installation on Debain

This chapter will guide how to install Equinox on Debain OS and setting configuration.

1. Copy Equinox package file into directory [/opt/package/]

```
cp equinox_1.0.0-final_amd64.deb  /opt/package/
```

2. Install Equinox package file and verify package

```
dpkg –i equinox_1.0.0-final_amd64.deb
dpkg -l |grep equinox
```

Result:

```
ii      equinox         1.0.0-final         Application Framework Debian Version
```

3. Set up crontab by command

```
crontab -e
```

4. Insert this command into crontab

```
0 * * * * . /opt/equinox/.profile; /opt/equinox/utils/files_housekeeper
```

5. Verify crontab by command

```
crontab -l
```

Result:

```
0 * * * * . /opt/equinox/.profile; /opt/equinox/utils/files_housekeeper
```

Upgrade Equinox

Use this follow command

```
dpkg –i equinox_x.x.x-release_amd64.deb
```

Uninstall Equinox

Use this follow command

```
dpkg –r equinox
```

Note: If this command has a problem with debian package, you will use other command.

```
dpkg –-purge equinox
```

Verify these command by command (It must be exist in list.)

```
dpkg –l |grep equinox
```

Chapter 4: Installation on Red Hat

This chapter will guide how to install Equinox on Red Hat OS and setting configuration.

1. Copy Equinox package file into directory [/opt/package/]

```
cp equinox-1.0.0-final.x86_64.rpm /opt/package/
```

2. Install Equinox package file and verify package

```
rpm -ivh /opt/packages/equinox-1.0-0-final.x86_64.rpm
rpm -qa |grep equinox
```

Result:

```
equinox-1.0.0-final
```

3. Set up crontab by command

```
crontab -e
```

4. Insert this command into crontab

```
0 * * * * . /opt/equinox/.profile; /opt/equinox/utils/files_housekeeper
```

5. Verify crontab by command

```
crontab -l
```

Result:

```
0 * * * * . /opt/equinox/.profile; /opt/equinox/utils/files_housekeeper
```

Upgrade Equinox

Use this follow command

```
rpm -Uvh equinox-x.x.x-release.rpm
```

Uninstall Equinox

Use and verify with this follow

```
rpm –e equinox
rpm –qa |grep equinox
```

Rollback Equinox with RPM package

When you install rpm package file and it have many problem . You can rollback to stable earlier version with this follow.

1. In directory [/etc/yum.conf] add this command

```
tsflags=repackage
```

2. In directory [/etc/rpm/macros] add the line (create this file if it doesn't exist)

```
%_repackage_all_erasures 1
```

3. Use this command to rollback version

```
rpm -Uhv '[timing parameter]'
```

Note: You should know earlier version when it was installed. Timing parameter can use in format time, date such as (HH:MM, X hours ago, Month Date, yesterday)

Example

```
rpm -Uhv –rollback '14:00′
rpm -Uhv –rollback '9 hours ago'
rpm -Uhv –rollback 'december 12′
rpm -Uhv –rollback 'yesterday'
```

Chapter 5: Install EquinoxAS on Debian

EqunoxAS is use for communicate with application they connect between application and EAS Core Layer.

1. Before install EqunoxAS module you should be check user & group. (See in Ch 3,4)

2. Copy EqunoxAS package file into directory [/opt/package/]

```
cp equinoxAS_2.2.2-final_amd64.deb /opt/package/
```

3. Install EqunoxAS package file and verify package

```
dpkg –i equinoxAS_2.2.2-final_amd64.deb
dpkg -l |grep equinoxAS
```

4. Configure (app.EC02.serv.ins) for starting EC02 Process

5. Create symbolic link on /opt/equinox/conf with this command

```
ln -s /opt/equinoxAS/conf/app.EC02.serv.ins app.EC02.serv.ins
```

Upgrade EquinoxAS

Use this follow command

```
dpkg –i equinoxAS_x.x.x-release_amd64.deb
```

Uninstall EquinoxAS

Use this follow command

```
dpkg –purge equinoxAS
```

Chapter 6: Install EquinoxAS on Redhat

EquinoxAS is use for communicate with application they connect between application and EAS Core Layer.

1. Before install EquinoxAS module you should be check user & group. (See in Ch 3,4)

2. Copy EquinoxAS package file into directory [/opt/package/]

```
cp equinoxAS-2.2.2-final.x86_64.rpm /opt/package/
```

3. Install EquinoxAS package file and verify package

```
rpm –ivh equinoxAS-2.2.2-final.x86_64.rpm
rpm -qa |grep equinoxAS
```

4. Configure (app.EC02.serv.ins) for starting EC02 Process

5. Create symbolic link on /opt/equinox/conf with this command

```
ln -s /opt/equinoxAS/conf/app.EC02.serv.ins app.EC02.serv.ins
```

Upgrade EquinoxAS

Use this follow command

```
rpm -Uvh equinoxAS-x.x.x-release.rpm
```

Uninstall EquinoxAS

Use this follow command

```
rpm -e equinoxAS
```

Chapter 7: Miscellaneous

Add group

configure by this follow

```
groupadd –g 1000 sanduser
```

Add user

configure by this follow

```
useradd -u 1001 -g 1000 -d /home/toro -s /bin/bash toro
```

Profile

In UNIX operating system have many different configuration. In Debain it read from .profile but Red Hat it read from ***.bash_profile***. When bash is invoked as an interactive login shell, or as a non-interactive shell with the --login option, it first reads and executes commands from the file ***/etc/profile***, if that file exists. After reading that file, it looks for **~/.bash_profile, ~/.bash_login**, and **~/.profile**, in that order, and reads and executes commands from the first one that exists and is readable. The --noprofile option may be used when the shell is started to inhibit this behavior.

Equinox command utilities

This utilities may help you to manage Equinox process.

```
eqx[Option]<Application>[Process][forcestop|start|stop|getstats|flushstats|resetstats
|show|status]
```

Description:

Application	Process when you match flow on.
Process	Indentify process you want to start.(When you want to start all process don't input this parameter.)

[Command Description]

start	Start process follow configuration.
stop	Stop process which is running.
forcestop	Force stop process.
getstats	Display current stats in buffer.
flushstats	Flushing all stat in buffer to file.
resetstats	Clear and Reload stats configuration.
show	Show all process equinox.
status	Show current status process equinox.
flushcdr	Flushing buffer into temporary file.
rotatecdr	Rotating temporary file into current file.
backup	Backup data for Data Base(E01).
clearlog	Delete log file.
clearmon	Delete mon file.
clearstats	Delete stats file.
***version**	Show revision history eqx utility.
***showapp**	Show current application was running.
***clrmem**	Clear unused shared memory.

[Option Description]

-a all	Default is disable.
-p port	Default is 7878.
-h host	Default is localhost.
-i iteration	Iteration is number of loop to get stats.
-d delay	Delay time before begin next command.
-b Bases	Directory Equinox, default /opt/equinox.
-w filename	Name for backup, Default is EQXBACKUP.
-g ignore	Ignore process,when use start command.
-m mandotory	Mandatory process, default is all process.

[NOTE]

* You can insert only command..

```
progess ##### [100%]
|-------------------------------------------------------------------------------|
|      PID       |    PROCESS     |    SERVICE     |    INSTANCE    |    STATTUS     |
|-------------------------------------------------------------------------------|
|  19690(19689)  |      E00       |       0        |       0        |    running     |
|  19710(19709)  |      E11       |       0        |       0        |    running     |
|  19730(19729)  |      E11       |       0        |       1        |    running     |
|  19744(19743)  |      ES00      |       0        |       0        |    running     |
|  19764(19763)  |      ES04      |       0        |       0        |    running     |
|  19784(19783)  |      ES05      |       0        |       0        |    running     |
|-------------------------------------------------------------------------------|
```

Figure 1 : Show status process

```
toro     19689     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/E00 coke 0 start
toro     19690 19689  0 Aug17 ?        00:00:00 /opt/equinox/bin/E00 coke 0 start
toro     19709     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/E11 coke 0 0 start
toro     19710 19709  0 Aug17 ?        00:00:00 /opt/equinox/bin/E11 coke 0 0 start
toro     19729     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/E11 coke 0 1 start
toro     19730 19729  0 Aug17 ?        00:00:00 /opt/equinox/bin/E11 coke 0 1 start
toro     19743     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES00 coke 0 start
toro     19744 19743  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES00 coke 0 start
toro     19763     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES04 coke 0 0 start
toro     19764 19763  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES04 coke 0 0 start
toro     19783     1  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES05 coke 0 0 start
toro     19784 19783  0 Aug17 ?        00:00:00 /opt/equinox/bin/ES05 coke 0 0 start
toro      5265  5259  0 10:33 pts/0    00:00:00 grep /bin/java
```

Figure 2 : Show technical process for debug