Overview

This chapter provides an overview of what happens as a result of the installation process, such as which packages are installed and how environment variables are set.

This guide explains how to install the servers used by both the web applications and the WAE platform.

- Before You Start—Requirements, best practices, and pre-installation instructions.
- Online Installation—Procedure for installing the software when you have access to the Internet.
- Offline Installation—Procedure for installing the software when you do not have access to the Internet.
- Post Installation—Optional procedures to follow after having installed the product, including pointers on where to go for configuration information.
- License Installation—Procedure for installing licenses for all products.
- MATE Design Floating License Server—Procedure for installing and setting up the FlexNet Publisher license server. This is applicable only if you have MATE Design and only if you need to administer floating licenses for these end users.
- Services—Procedure for starting and stopping services, as well as how to check their status.
- Accessing the Products—Describes how to access the various applications and servers once they have been installed and configured.

Installer

An installer is an executable that runs a script to install the MATE and WAE software in the proper locations. Although both MATE and WAE features are installed, they are active only if you have a license for them.

The installer automates the installation process by asking you a series of questions and performing the following tasks.

- Verifies the following.
    - Whether the device has the appropriate system requirements, including proper operating system, disk space, total memory, and required software packages.

        If the installer sees that you do not have the appropriate system requirements, it either exits, gives a warning, or prompts you whether to continue. Since the installer might be checking for more than what your specific requirements are, you can press "y" to attempt to continue.
    - Whether there are existing package installations; if there are, they are preserved

- Installs all RPM packages, creates the software directory structure (except for the installation directory), and creates symbolic links to the most recently installed packages.

- Sets the maximum file descriptors and processors as follows.

  - /etc/sysctl.conf file
    Sets fs.file-max=512000 if it is less than 65535.

  - /etc/security/limits.conf
    Sets nofile to 65535 for the WAE username.

  - /etc/security/limits.d/90-nproc.conf
    Sets nproc to 8192 for the WAE username.

- Upon logging out and back in, the WAE username and associated permissions are set, and the environment variables are set

RPM Packages

The following RPM packages are installed in /opt/cariden/software.

Package	Description
mate	MATE software and Collector server, MATE APIs
wae-cdl	Open SDN Controller
wae-collector	Collector Karaf container, Continuous Poller server
wae-core	WAE Core Karaf container, WAE Core server, WAE Core APIs
wae-db	WAE Core database
wae-demo	Demonstration UI for applications developed for WAE Core
wae-messaging	WAE messaging system that uses JMS
wae-platsvc	Platform services

Current Links

MATE (mate) Package

The current symbolic link for the mate package is `/opt/cariden/software/mate/current`.

WAE (wae) Packages

Other than the mate package, all other packages begin with wae- and all versions of these packages are listed in `/opt/cariden/software`. The current symbolic link is the abbreviated name.

Example RPM version name: `wae-core-snapshot-1.0.2-123456789`

Example corresponding current link name: `wae-core`

Versions

To determine the release version, enter the following command.

```
license_check -version
```

To determine the current RPM version, enter the following command.

```
rpm -qa | grep 'mate\|wae'
```

Environment Variables

Upon logging out and back in as the WAE user after an installation, the environment variables are automatically set using .sh scripts in `/etc/profile.d` directory

Environment Variable	Default
$WAE_ROOT	/opt/cariden
$WAE_HOME	/opt/cariden/software
$CARIDEN_ROOT	/opt/cariden
$CARIDEN_HOME	/opt/cariden/software/mate/current
$CASSANDRA_HOME	/opt/cariden/software/wae-db
$COLLECTOR_HOME	/opt/cariden/software/wae-collector
$JAVA_HOME	/usr/java/latest