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**#aem**

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# About

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# Chapter 1: Getting started with aem

## Remarks

**Adobe Experience Manager (AEM)** is part of the Adobe Marketing Cloud. It's initially a content management platform but now has expanded to

## Examples

### Installation or Setup

AEM can be installed as a standalone executable JAR file or through web application servers, such as JBoss and WebSphere, as a WAR file.

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## Prerequisites

AEM 6.2 needs at minimum the following in order to run

- Java Runtime Environment (JRE) 1.8x (64bit)
- 5GB of free disk space for installation
- 2GB of RAM

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## Standalone installation

The standalone installation is the simplest. It only requires quickstart jar file. This is provided by Adobe to you or your company.

Simply double click on the jar file and AEM will start. This might take a while on the initial install (~10 minutes).

Once the initial setup has been completed, a browser window will open (<http://localhost:4502>). You can login using the default admin credentials (user: `admin`/ pass: `admin`). The initial login will prompt you to enter the license details.

## Port Number

By default, AEM will be accessible through HTTP at port 4502. If port 4502 is unavailable, it will be set to one of these ports (in order of preference):

1. 4502
2. 8080
3. 8081
4. 8082

5. 8083
6. 8084
7. 8085
8. 8888
9. 9362
10. Random number

To set the port to a different port number, there are two options:

1. **Using the -port option through the command-line** (`java -jar aem-quickstart.jar -p 6754`)
2. **Rename the file** so that it includes the port number. This has very specific rules
  - The file must start with `cq`
  - the port number must be 4 or 5 digits and must come after a dash (ex. `cq5-author-p4502.jar`, `cq5-publish-p4503.jar`)
  - If there are any other digits in the filename, the port number needs to be prefixed with `-p` (ex. `cq5-author-p4502.jar`, `cq5-publish-p6754.jar`)

## Setting Run Modes

Run modes are identifiers that allow to differentiate AEM instances (e.g. development, test, production, authoring, publish). Run modes for an instance can be configured by (in order of resolution):

1. **slings.properties** - change the `slings.run.modes` property in `<cq-installation-dir>/crx-quickstart/conf/slings.properties`
2. **Using the -r switch in the command-line** - when starting the standalone JAR include the switch `-r <runmode>` (ex. `java -jar cq-publish-p6754.jar -r publish`)
3. **system properties (or -D switch)** - Set a property in the start script (`-Dslings.run.modes=test,publish,production`)
4. **Changing the JAR filename** - Can be used to activate `author` or `publish` run modes using the following template `cq5-<run-mode>-p<port-number>.jar` (ex. `cq-publish-p6754.jar`)

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## Installation with an Application Server

AEM can be deployed in application servers such as Tomcat, JBoss and Websphere. You simply need to deploy a `war` file provided to you by Adobe.

## Setting Run Modes

Set the `slings.run.modes` property in `WEB-INF/web.xml`

Read [Getting started with aem online](https://riptutorial.com/aem/topic/1624/getting-started-with-aem): <https://riptutorial.com/aem/topic/1624/getting-started-with-aem>

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# Chapter 2: Setting up AEM as a Service

## Introduction

Step-by-step guide on how-to setup AEM as a Service on a Linux server.

## Examples

### Setting up AEM 6.x on CentOS 7

## Pre-requisites

1. AEM Installed on your server. Copy the path of the install (e.g: /mnt/crx)
2. Start AEM (e.g `java -jar cq-quickstart-author-p4502.jar`) once. This will generate all the necessary folders, especially **/mnt/crx/crx-quickstart/bin** that is required by the scripts.
3. Create a user who will have access to the service. (e.g: aem)

## Step-by-step guide

1. You will need root access
2. Create these 2 files
  - aem

```
#!/bin/bash
#
# /etc/rc.d/init.d/aem6
#
#
# # of the file to the end of the tags section must begin with a #
# character. After the tags section, there should be a blank line.
# This keeps normal comments in the rest of the file from being
# mistaken for tags, should they happen to fit the pattern.>
#
# chkconfig: 35 85 15
# description: This service manages the Adobe Experience Manager java process.
# processname: aem6
# pidfile: /crx-quickstart/conf/cq.pid

# Source function library.
. /etc/rc.d/init.d/functions

SCRIPT_NAME=`basename $0`
AEM_ROOT=/opt/aem6
AEM_USER=aem

#####
BIN=${AEM_ROOT}/crx-quickstart/bin
START=${BIN}/start
STOP=${BIN}/stop
STATUS="${BIN}/status"
```

```

case "$1" in
start)
echo -n "Starting AEM services: "
su - ${AEM_USER} ${START}
touch /var/lock/subsys/${SCRIPT_NAME}
;;
stop)
echo -n "Shutting down AEM services: "
su - ${AEM_USER} ${STOP}
rm -f /var/lock/subsys/${SCRIPT_NAME}
;;
status)
su - ${AEM_USER} ${STATUS}
;;
restart)
su - ${AEM_USER} ${STOP}
su - ${AEM_USER} ${START}
;;
reload)
;;
*)
echo "Usage: $SCRIPT_NAME {start|stop|status|reload}"
exit 1
;;
esac

```

- **aem.service**

```

[Unit]
Description=Adobe Experience Manager

[Service]
Type=simple
ExecStart=/usr/bin/aem start
ExecStop=/usr/bin/aem stop
ExecReload=/usr/bin/aem restart
RemainAfterExit=yes

[Install]
WantedBy=multi-user.target

```

### 3. Open `aem` script file and update the below

- **AEM\_ROOT** (e.g: `/mnt/crx` is the root, where `/mnt/crx/crx-quickstart` is the full path)
- **AEM\_USER** (e.g: `aem`)

### 4. SCP these files to the server

- Copy `aem` to `/usr/bin/aem`
  - Example: From terminal on your desktop `$ scp <filename> user@1.1.1.1:/usr/bin/aem`
- Copy `aem.service` to `/etc/system.d/system/aem.system`
  - Example: From terminal on your desktop `$ scp <filename> user@1.1.1.1:/etc/system.d/system/aem.system`

### 5. SSH to your server

- `ssh user@1.1.1.1`

### 6. Give permissions to the files

- `sudo chmod u+rwx /usr/bin/aem`

- `sudo chmod u+rwx /etc/system.d/system/aem.system`

## 7. Update

- `cd /etc/system.d/system`
- `systemctl enable aem.system`

8. You can restart the server or run the below commands to start AEM. Make sure you run **Pre-requisite Step 2** before running this command.

# Commands to START, RESTART and STOP AEM

1. Start AEM - `sudo service aem start`
2. Restart AEM - `sudo service aem restart`
3. Stop AEM - `sudo service aem stop`

## Notes

1. The example above was tested on CentOS 7
2. AEM 6.3 version was used. Although the above process should work for AEM 6.x

Read **Setting up AEM as a Service** online: <https://riptutorial.com/aem/topic/9998/setting-up-aem-as-a-service>

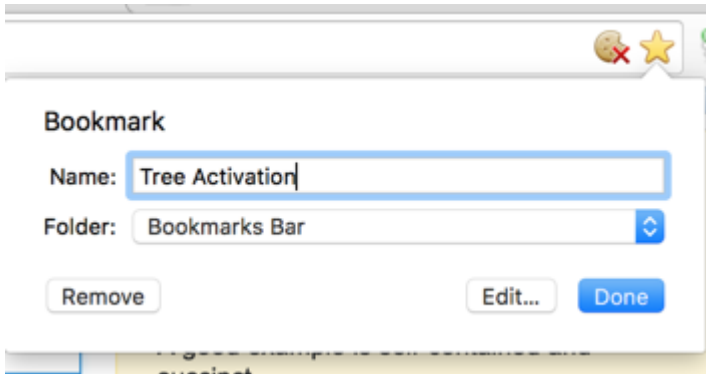


# Chapter 3: Tree Activation Bookmarklet

## Examples

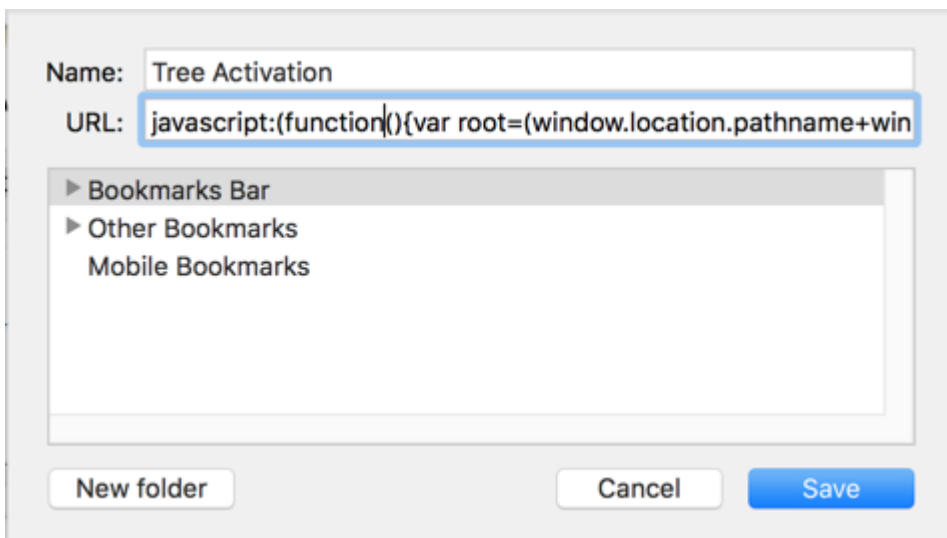
### Activate all pages in the JCR starting with the currently opened page

Create a new browser bookmark, for example, in Chrome click the star icon at the right in the address bar, make sure the **Folder** is *Bookmarks Bar*, and then click the **Edit...** button:



In the edit box that opens paste the following code as the URL:

```
javascript:(function(){var root=(window.location.pathname+window.location.hash).replace(/.html.*$/, '').replace('cf#/', '').replace(name="ta" target="_blank" action="/etc/replication/treereactivation.html" method="POST"><input type="hidden" name="_charset_" value="UTF-8"><input type="hidden" id="path" name="path" value="'+root+' "></form>');}document.forms.ta.submit();})();
```



## Usage

Make sure the bookmarks bar is visible: Settings > Bookmarks > Show Bookmarks Bar (or **Cmd+Shift+B** / **Ctrl+Shift+B**).

1. Open an AEM page.
2. Click the bookmarklet. The tree activation progress will be displayed in a new window.

You can also call tree activation directly from the siteadmin while the required parent page is selected in the navigation tree, and the displayed URL is e.g.

<http://localhost:4502/siteadmin#/content/geometrix-outdoors/en>

PS: If you want to fix/update the bookmarklet code then paste it into the form at <http://subsimple.com/bookmarklets/jsbuilder.htm> and click **Format**.

Read **Tree Activation Bookmarklet** online: <https://riptutorial.com/aem/topic/6105/tree-activation-bookmarklet>

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# Credits

| S. No | Chapters                    | Contributors  |
|-------|-----------------------------|---|
| 1     | Getting started with aem    | <a href="#">Community</a> , <a href="#">DFenstermacher</a> , <a href="#">khakiout</a> , <a href="#">santiagozky</a> |
| 2     | Setting up AEM as a Service | <a href="#">Suren Konathala</a>   |
| 3     | Tree Activation Bookmarklet | <a href="#">ccpizza</a>   |