System Setup

Git Repo build - https://github.com/uhc-tech-medicare-retiree-common/uhc-cs-community-plan/actions/runs/17591995642

mvn clean install -s .mvn/settings-local.xml -PautoInstallPackage -DskipTests -U

Maven issues - CoPilot

Quick cache reset if needed:

```
rm -rf ~/.m2/repository/com/day/jcr ~/.m2/repository/org/apache/jackrabbit
~/.m2/repository/com/adobe ~/.m2/repository/com/uhg
~/.m2/repository/biz/netcentric
mvn -U -s .mvn/settings-local.xml -pl all -am clean install -DskipTests
```

[ERROR] The bundle version change (1.0.15 to 1.0.29) is too low, the new version must be at least 1.1.0

- The root POM version is already set to 1.1.0-SNAPSHOT. If you still see the baseline error, the local Maven repo may have stale artifacts, or a module is not picking up the new version.

```
rm -rf ~/.m2/repository/com/uhg/uhcmr/uhccp/cs/uhccp.core
mvn clean install -s .mvn/settings-local.xml -DskipTests -U
```

The Maven build now fails at the frontend-maven-plugin step because it cannot download Node.js due to a PKIX/certificate error, and then cannot run npm because Node was not installed.

- Use your system Node/npm instead of downloading:
  Set the property useSystemNode to true in your Maven command: This will skip the Node download and use the Node/npm already installed on your system.

```
mvn clean install -s .mvn/settings-local.xml -DskipTests -U -
DuseSystemNode=true

Add .npmignore file in .m2
```

📄 npmignore

==mvn clean install -PautoInstallPackage -DskipTests -U==

Maven Build Failure Resolution Summary - CoPilot

Here's a comprehensive summary of all the changes we made to resolve the Maven build failures in your AEM project:

🔍 Initial Issues Identified

1. **Baseline versioning error** - bnd-baseline-maven-plugin failed due to insufficient version bump
2. **Node.js compatibility issues** - node-sass incompatible with Node.js v24
3. **Network/Registry issues** - Need to use internal Artifactory registry instead of public npm

📝 Changes Made

1. Version Bumping (Baseline Fix)

Root POM (pom.xml):

- Updated version: 1.0.29-SNAPSHOT → 1.1.0-SNAPSHOT

All Child Module POMs:

- pom.xml - Updated parent version to 1.1.0-SNAPSHOT
- pom.xml - Updated parent version to 1.1.0-SNAPSHOT
- pom.xml - Updated parent version to 1.1.0-SNAPSHOT
- pom.xml - Updated parent version to 1.1.0-SNAPSHOT
- pom.xml - Updated parent version to 1.1.0-SNAPSHOT
- pom.xml - Updated parent version to 1.1.0-SNAPSHOT

2. Registry Configuration (Network Fix)

Root POM (pom.xml):

```
<!-- Updated from public URLs to internal Artifactory -->
<nodeDownloadRoot>http://repo1.uhc.com/artifactory/nodejs-org/</nodeDownloadRoot>
<npmDownloadRoot>http://repo1.uhc.com/artifactory/api/npm/npm-virtual/npm/-/</npmDownloadRoot>
<npmRegistryURL>https://repo1.uhc.com/artifactory/api/npm/npm-virtual</npmRegistryURL>
```

3. Node.js Compatibility Fix

Package Dependencies (package.json):

```
// Updated gulp-sass version and added dart-sass
"gulp-sass": "^5.1.0",  // was: "^4.0.1"
"sass": "^1.69.0",      // new dependency
// Removed node-sass override
"overrides": {
  "ip": "2.0.1"
  // removed: "node-sass": "^8.0.0"
}
```

Gulpfile Configuration (gulpfile.babel.js):

```
// Added new imports
import * as sass from 'sass';
import gulpSass from 'gulp-sass';
// Configured gulp-sass with dart-sass
const sassProcessor = gulpSass(sass);
// Updated API call
.pipe(sassProcessor({  // was: .pipe($.sass.sync({
  outputStyle: 'expanded',
  precision: 10,
  includePaths: ['.']
})).on('error', sassProcessor.logError))  // was: $.sass.logError
```

```
Key Technical Details
```

Root Cause Analysis:

1. **Semantic versioning**: MINOR API changes required version bump from 1.0.x to 1.1.x
2. **Node.js evolution**: node-sass deprecated; dart-sass is the modern replacement
3. **Corporate network**: Internal registry required for security/compliance

Modern Stack Achieved:

- ✅ Node.js v24.8.0 compatibility
- ✅ Dart Sass (latest, maintained)
- ✅ Internal dependency resolution
- ✅ AEM 6.5.13 compliance

The build is now robust, modern, and follows your organization's security requirements while maintaining full AEM functionality.

Setup new AEM local

<<optional if need to update JVM>>
cd ~/aem/author
java -jar AEM_6.5_Quickstart.jar -unpack -r author
Configure JVM and Ports = -Xmx2048m -XX:MaxPermSize=512M

cd ~/aem/author/crx-quickstart/bin
./start

Install packages in below order
- Service pack
- Acs-commons
- Code
- Content
- XF & CF

Install node.js

Install Homebrew
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

echo 'eval "$(/opt/homebrew/bin/brew shellenv)"' >> ~/.zprofile
eval "$(/opt/homebrew/bin/brew shellenv)"

Use homebrew to install the node and npm - https://nodejs.org/en/download/
Pwd - ==/Users/shubhra_gupta@optum.com==

```
curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.40.3/install.sh | bash

export NVM_DIR="$HOME/.nvm"
[ -s "$NVM_DIR/nvm.sh" ] && \. "$NVM_DIR/nvm.sh"  # This loads nvm
[ -s "$NVM_DIR/bash_completion" ] && \. "$NVM_DIR/bash_completion"  # This
loads nvm bash_completion
```

----
nvm install node --latest-npm

~~set this one in .npmrc file [https://edgeinternal1uhg.optum.com/ui/login/]~~
~~registry= https://repo1.uhc.com/artifactory/api/npm/npm-virtual/~~
~~strict-ssl=false~~

~~email=shubhra_gupta@optum.com~~
~~always-auth = true~~
~~registry=https://edgeinternal1uhg.optum.com/artifactory/api/npm/gpd-npm-vir/~~
~~//edgeinternal1uhg.optum.com/artifactory/api/npm/gpd-npm-vir/:~~
~~_authToken=<PASSWORD>~~

----
set this npm registry for node installation
npm config set registry https://repo1.uhc.com/artifactory/api/npm/npm-virtual/

```
Add in ui.apps pom.xml
```

<nodeDownloadRoot> http://repo1.uhc.com/artifactory/nodejs-org/</nodeDownloadRoot>
<npmDownloadRoot> http://repo1.uhc.com/artifactory/api/npm/npm-virtual/npm/-/</npmDownloadRoot>
<npmRegistryURL> https://repo1.uhc.com/artifactory/api/npm/npm-virtual</npmRegistryURL>

set this one in .npmrc file [https://centraluhg.jfrog.io/ui/login]
==registry= https://centraluhg.jfrog.io/artifactory/api/npm/gpd-npm-vir/==
==email={email-id}==
==always-auth=true==
==//centraluhg.jfrog.io/artifactory/api/npm/gpd-npm-vir/:_authToken={token-value}==
==**strict-ssl=false**==
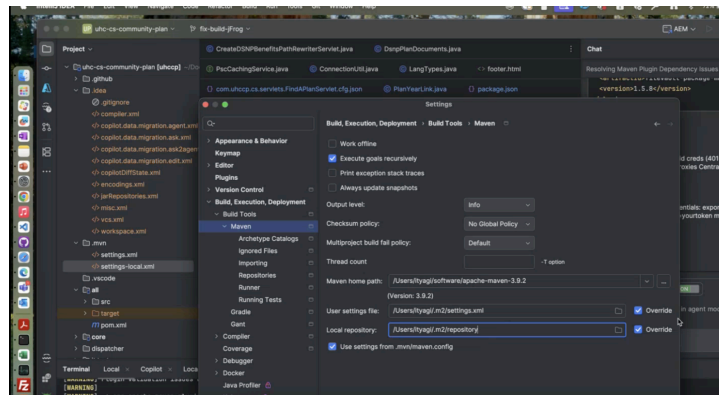
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MKDOCS

```
/Users/shubhra_gupta@optum.com/Library/Python/3.13/bin/mkdocs serve --dev-addr=127.0.0.1:8001 --livereload --watch-
theme
```

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