Car Application Build Process

mnv clean install ekk gahuwama build eka wela car file eka athulata aetifact tika yana hati

- You can see the root pom when you open corners-to-nedonesafeEmployee project
- when we type mvn clean install we are saing that buil the following modules
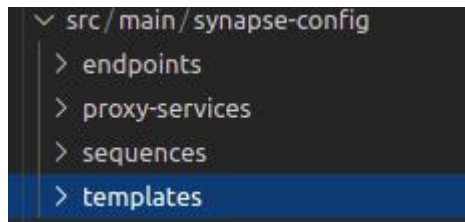
```
<modules>
<module>ConerstoneSyncDonsafeEmployeeDSS</module>
<module>ConerstoneSyncDonesafeEmployeesESB</module>
<module>ConerstoneSyncDonesafeEmployeeCAR</module>
</modules>
```

- Pahala kalllen thamai api project eka build karawanne

```
<!-- maven release plugin -->
<plugin>
<artifactId>maven-release-plugin</artifactId>
<version>2.5.3</version>
<configuration>
<preparationGoals>clean install</preparationGoals>
<tagNameFormat>@{project.artifactId}-@{project.version}</tagNameFormat>
</configuration>
</plugin>
```
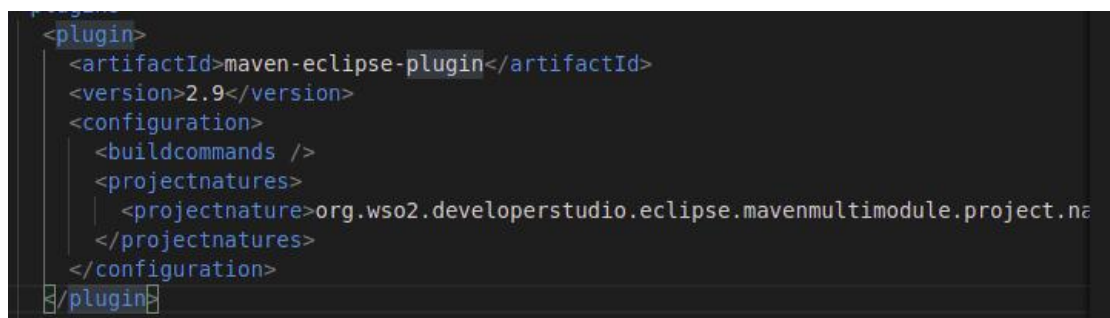
- onama pom ekakata mvn kiyla gahala command ekk dunnama eya gihin e pom eke balanawa define karala thiyenawada e command eka kiyala(Above look at preperartion goal tag, ethakota eya eken aran wade karagannawa)

- Root directry eke pom eken karanne eya inna thana idala athule thiyena pom walata gihin balanawa me nama thiyena pom ekk thiyenawada kiyala. Thiyenawa nm eka build karanawa.(As eg: ESB

eka build wenawa. That means ESB eka athule thiyena artifacts tika build wenawa. Look at below)

- But in Maven api wena wenama define karala na mkkda sequence ekkk kiyanne mokkda template ekk kiyane etc. But ekata WSO2 lage wenama plugging ekk thiyenawa ewa wena wenama identify karaganna.

Eg: ESB template eka buid karana oni me pluggin eka use karala
Proxy eka build karanna oni me plugin eka use karala.
Like that WSO2 la mevenlata plugin set ekk liyala thiyenawa
Because swquences template kiyana ewa wso2 related ewa. Meven danne na e mnada kiyala
So, e wage eka eka pluggins liyala plug karagnna puluwan apita meven wala. Its a advantage of meven.

- Maven wala adala okkoma dependencies tika download karaganne ape m2 repo ekata. Then after that only he built the car file
- when we did build a project all the artifacts in that , will be go to m2 repo

- Now building part is ok. Now we have to create a car file buybuinding all these files. That thing is done by this CAR's pom. For more reffer the above picture.There we can see DSS ekai ESB ekai build karala thamai car eka build karanne.That means me deke thiyena dependencies tika m2 ekata dala thamai car eka build karanne

- When we are considereing the CAR's pom ; every thing is athere as other poms but there is a additional feature called, <properties>.

- Me kalledi wenne CAR file ekata dannoni artifacts tika define karaganimak wage deyk wenne.Eg: Me artifact eka ESB artifact ekk etc(Mona wage ewada data sservice widiyata deployy wennoni, mona wage ewada esb widiyata deploy wennoni. etc. we have to tell the esb that car app eke ena me set eka data service ekk, me set eka esb eke artifact)

```xml
<dependencies>
  <dependency>
    <groupId>com.novigi.pac.conerstonetodonesafe.employee.dataservice</groupId>
    <artifactId>ConerstoneSyncDonesafe_Employee_Dataservice</artifactId>
    <version>1.0.0</version>
    <type>dbs</type>
  </dependency>
```

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com-> novigi->pac->conerstoDonesafe_>Employee-> dataservise m2 eka kiyana repo eka athulata gihin asasata assata hoyan gihin e artifact eka hambunu gmn meya eka car file ekat daa gannawa

Api car ekedi esb eka build karanna yanne na. Build karala thiyena dependency tika aran car eka athulata daaganna eka witharai karanne

So mokk hari end point ekk api add karanawanm eka properties athule thiyennath oni, dependency athule thiyennath oni

```
<plugin>
  <groupId>org.wso2.maven</groupId>
  <artifactId>maven-car-plugin</artifactId>
  <version>2.1.1</version>
  <extensions>true</extensions>
  <executions>
    <execution>
      <id>car</id>
      <phase>package</phase>
      <goals>
        <goal>car</goal>
      </goals>
    </execution>
  </executions>
  <configuration />
</plugin>
```

oya udin thiyena plugin eken thamai car file eka hadanne.

oke thamai liyala thiyenne deela thiyena properties and dependencies anuwa e adala files tika hoyala aragena m2 repositery eke car file eka dala car file eka build karanna kiyala.

- Eta passe car eke pom eke hadagatta sequence ekath propertiyak widiyata add karannoni
- Passe dipendency ekk widiyatath eka add karagnnoni
- Eta passe car file eka build karoth car file eka build wela hadapu sequence kath ekkama watenawa
- (If you need to remove a particular dependency, mu;inma artifact eken ain kara. eta passe car eke pom eke properties walinui dependencies walinui ain karanawa)
- Maven eka godak welawata radapawathinne pom eka matha. Eke thamai api define karanne mokkda kohomada wade wennoni kiyala
- Meka buid wena widiya kiyanna apita oni nm apema plugin ekk liyagannath puluwan
- Now you have to add some artifacts as Sequence and build the car file.

m2 repo

Mokk hari project ekk aragena build karanne api Maven kiyana build tool eken. Eken wenne. So in a build tooo they have created a repo and they have put common libraries in to it. So no need to download those libraries since all the needfull libraries are in the repo.

Maven eken karannne, api project ekk haduwama api ara pom kiyana file eke liyanawa apita oni dependency mewa kiyala. ethakota e projrct eka build karanakota eya e oni dependency tika ara repo eken download karagena aran project ekata dagannawa automatically.

Me dependency manage karana seen eketa thamai api meka use karanne. Ekatai project eka build karannai. Api manually java c gahala project eka build karoth apita tikakin error enawa meka na araka na kiyala. But when we using maven eya api illala thiyena dependency tika balala e adala dependency tika   download karagannawa. e down load karagatta file tika thiyagnna cache eka thamai m2 repo eka. Eya download karana file tika aran awith e spesific poject eka athulata obanne na. Eya e tiks wenama ekata adala version ekata hariyana hiddden folder ekk hadala m2 kiyala eke thiyagannawa. Api eka location ekaka idala clean install ekk gahuwoth download wenawane set ekk. Api wena location ekakata gihin aye ekama download karoth aye ekin eka download wenne na. Ara cache eken thamai gnne. So m2 is a cache thiyagnna folder ekk.