

Core Developer Handbook

RCX-CORE

Install git

Ubuntu: `sudo apt install git`

GitHub account

Create an account on GitHub with your official email id. Set the GitHub user name as `<your email id>-loyaltymethods`. Ensure to set up a strong password for your GitHub account.

Example: if your email id is `abcd@loyaltymethods.com`, the GitHub user name must be `abcd-loyaltymethods`

Request access & clone below GitHub repositories

```
1 rcx-activity-history-config
2 rcx-activity-history-rest
3 rcx-activity-history-stream
4 rcx-devops
5 rcx-event-publisher
6 rcx-member-self-service-portal
7 rcx-packages
8 rcx-rest-compatibility
9 rcx-sei-config
10 rcx-sei-dm
11 rcx-sei-membercare-portal
12 rle-api
13 rle-ui
14 rcx-env-mgmt-console
```

Send an email request to rcx-devops-support@loyaltymethods.com with your reporting lead in CC to provide access to the following repositories.

Once you receive access, clone all these repositories into the folder `/home/rcx`. Copy the following multiline command and execute it to clone all repositories at once.

```
1 git clone https://github.com/reactorcx/rcx-activity-history-config.git && \
2 git clone https://github.com/reactorcx/rcx-activity-history-rest.git && \
3 git clone https://github.com/reactorcx/rcx-activity-history-stream.git && \
4 git clone https://github.com/reactorcx/rcx-devops.git && \
5 git clone https://github.com/reactorcx/rcx-event-publisher.git && \
6 git clone https://github.com/reactorcx/rcx-member-self-service-portal.git && \
7 git clone https://github.com/reactorcx/rcx-packages.git && \
8 git clone https://github.com/reactorcx/rcx-rest-compatibility.git && \
9 git clone https://github.com/reactorcx/rcx-sei-config.git && \
10 git clone https://github.com/reactorcx/rcx-sei-dm.git && \
11 git clone https://github.com/reactorcx/rcx-sei-membercare-portal.git && \
12 git clone https://github.com/reactorcx/rle-api.git && \
13 git clone https://github.com/reactorcx/rle-ui.git && \
14 git clone https://github.com/reactorcx/rcx-env-mgmt-console.git
```

Install the following software

- [Visual Studio Code](#)
- Run below commands to install nvm

```
1 sudo apt install curl
2 curl https://raw.githubusercontent.com/creationix/nvm/master/install.sh | bash
3 source ~/.bashrc
```

- Run below command to install node version: 8.11.4

```
1 nvm install 8.11.4
```

- Install robo3t 1.3.1 [for Linux](#) and [for mac](#)
- docker(20.10.16) [follow here](#)
- docker-compose [follow here](#)
- python2.7 `sudo apt-get install python2.7`
 - [Mac package](#)
- Install aws cli `sudo apt-get install awscli`

Verify the installations

Check if the following command is running `docker ps`. If not, run the following command

```
1 sudo usermod -aG docker $USER
2 # restart the system and check again    docker ps
```

AWS CLI configuration

<TBD>: Process to get the AWS configuration details

- Create a folder named `.aws` in your home directory
- Save the following contents into the file `~/.aws/credentials`.

```
1 [default]
2 aws_access_key_id = *****
3 aws_secret_access_key = *****
```

- Save the following contents into the file `~/.aws/config`

```
1 [profile docker-registry]
2 aws_access_key_id =*****
3 aws_secret_access_key =*****
4 region=ap-southeast-1
```

Jenkins/DevOps VPN access

Request DevOps team to get access to `jenkins/devops vpn` by sending an email to `rcx-devops-support@loyaltymethods.com`.

- Get credentials from core team/devops team.

VPN Configuration:

- Download and extract the above file
- Open VPN Settings from network menu
- Add new VPN using (+) top right corner, select **Import from file** option
- Import the config.conf file in above extracted directory

- User key password has to be updated manually(password will be in give vpn configurations or will be shared seperately) in Identity/Authentication

check below link:

<https://jenkins.devops.lmvi.net/>

1.4 bashrc:

[download here](#)

Append lines in following link to ~/.bashrc (you can find in home folder)

****Update WORK_DIR, GIT_USERNAME, GIT_PASSWORD env variables**

1.5 Devops env and volumes:

filename:**local.yml**

 <https://loyaltymethods.sharepoint.com/:u:/s/RCXCore/EfEsC84uSk5DmUXmNDPANPQBjvyjthzgcxg2DfrQ9Ta9Dg?e=QKMiuB> - Connect
to preview

Place the above file in **docker/** directory in **rcx-devops** repo

Do not append, modify existing lines

Devops Changes:

| File | Changes |
|--|---|
| rcx-devops/docker/build/api/entry.sh | 79: cd/home/rcx/rle-api ; npm start \$START_FROM 78: # cd /home/rcx/rle-api ; node bin/profile |
| rcx-devops/docker/build/java-ahs/Dockerfile | 34: # RUN mvn -s settings.xml clean package -DskipTests 1. FROM 254847454774.dkr.ecr.us-west-2.amazonaws.com/rcx-java-build:17-maven |
| rcx-devops/docker/build/java-ahr/Dockerfile | 35: # RUN mvn clean package -s settings.xml -DskipTests 1. FROM 254847454774.dkr.ecr.us-west-2.amazonaws.com/rcx-java-build:17-maven |
| rcx-devops/docker/build/java-mep/Dockerfile | 34: # RUN mvn -s settings.xml clean package -DskipTests |
| rcx-devops/docker/build/mcp/entry.sh | 27: . /home/rcx/.nvm/nvm.sh && nvm use 12.14.0 && npm start 23: cd/home/rcx/mcp && npm install 15: cd/home/rcx/mcp |
| rcx-devops/docker/build/node-rest-compatibility/entry.sh | 81: cd/home/rcx/rcx-rest-compatibility ; npm start \$START_FROM 80: # cd /home/rcx/rcx-rest-compatibility ; node bin/profile |
| rcx-devops/docker/build/nifi/Dockerfile | 21: COPY lib/nifi-*.nar/opt/nifi/nifi-current/lib/ 18: RUN pip3 install--upgrade pip 19: RUN pip3 install boto3 botocore requests pyopenssl nipyapi wheel |
| rcx-devops/docker/dev.yml | comment lines from 54 line to 60 line |

1.6 awscli:

Create or update `~/.aws/config`

```
1 [profile docker-registry]
2 aws_access_key_id= *****
3 aws_secret_access_key= *****
4 region= *****
```

****Get keys from Devops**

1.7 Docker Build:

Note: setup the volumes path for required services in `docker/dev.yml` file in devops repo.

Open a new terminal tab. Run following commands

```
1 regloginnew
2 rcxcompose build mongors1n1 mongors2n1 crud mcp l1xform l2xform l2handler mahandler memberdata
3 rcxcompose build jmep ahs ahr
```

1.8 /etc/hosts:

append following lines to `/etc/hosts` file (use sudo)

```
1 0.0.0.0 crud
2 0.0.0.0 rcxdev.nifi
3 0.0.0.0 rcx-mongo
4 0.0.0.0 kafka
5 0.0.0.0 mongors1n1
6 0.0.0.0 mongors2n1
```

run the following commands

```
1 rcxrs crud #if module not found error. run: git clean -fdx then again run rcxrs crud
2 go crud
3 npm i
4 # once these are done, need to restore db, please change the path to correct dump path
5 /usr/bin/mongorestore --ssl --sslPEMKeyFile=/certs/mongodb-client-LocalDev.pem --sslCAFile=/certs/mongodb-ca.pem
6 **After this, revert the above changes in this file rcx-devops/docker/build/api/Dockerfile
```

1.9 Build Java Services:

```
1 sudo apt install openjdk-11-jdk # for ep
2 sudo apt install openjdk-17-jdk # for ahs & ahr
3 ls /usr/lib/jvm/ # to see installed java versions
4 sudo update-alternatives --config java # allows to change java version
```

need to change mvn version as well, download the latest mvn and extract it to /opt [follow here](#)

following command will install alternate link to mvn.

```
1 sudo update-alternatives --install /usr/bin/mvn mvn /opt/apache-maven-3.8.6/bin/mvn 1200
```

```
1 you can use following command to change mvn version
2 sudo update-alternatives --config mvn
```

Run following command in following repos

- rcx-activity-history-stream
- rcx-activity-history-rest
- rcx-event-publisher

You might need to set JAVA_HOME in .bashrc as well (for event-publisher JAVA_HOME should point to 11, remaining should point to 17)

Note: Connect to jenkins before running this command

```
1 java11 # for ep
2 java17 # for ahs & ahr
3 rm -rf target/ && mvn clean install -s settings.xml -DskipTests
```

2.1 How to start RCX locally:

- rcxrs crud
- rcxrs ui

for buildcode (path: ~/rcx/rle-ui): ./node_modules/gulp/bin/gulp.js buildEN

For mcp:

- rcxrs mcp

for buildcode(path: ~/rcx/rcx-sei-membercare-portal): npm run build-local, npm run build-prod, ng serve

****node version: 12.14.0**

install cors in mcp repo: `npm install cors`

| | |
|---|---|
| rcx-sei-membercare-portal/app.js | add these lines after line number 17 1. var cors = require('cors'); 2. app.use(cors()); |
| rcx-sei-membercare-portal/src/environments/environment.ts | update line number 7 1. REST_URL: 'http://localhost:8080' |

For logs:

For all logs: rcxlogs

For specific logs: rcxlogs crud, rcxlogs mcp, rcxlogs ui

For containers: rcxps

