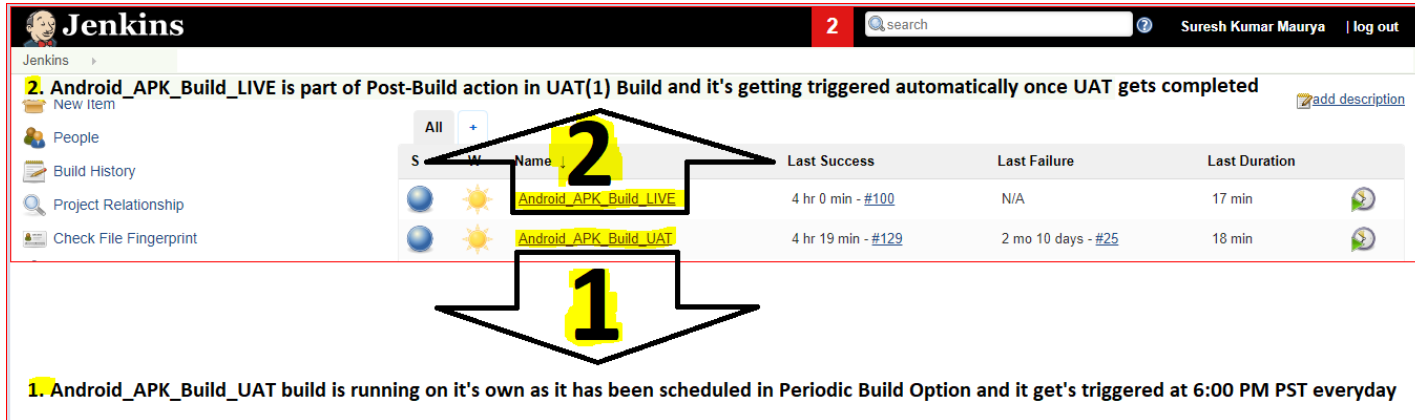


SOP- Android APK Build Automation in Jenkins

Jenkins URL: <http://hme-build.westus.cloudapp.azure.com:8080/>



Jenkins 2 search Suresh Kumar Maurya | log out

Jenkins >

2. **Android_APK_Build_LIVE** is part of Post-Build action in UAT(1) Build and it's getting triggered automatically once UAT gets completed [add description](#)

New Item

People

Build History

Project Relationship

Check File Fingerprint

All	S	W	Name	Last Success	Last Failure	Last Duration
			Android_APK_Build_LIVE	4 hr 0 min - #100	N/A	17 min
			Android_APK_Build_UAT	4 hr 19 min - #129	2 mo 10 days - #25	18 min

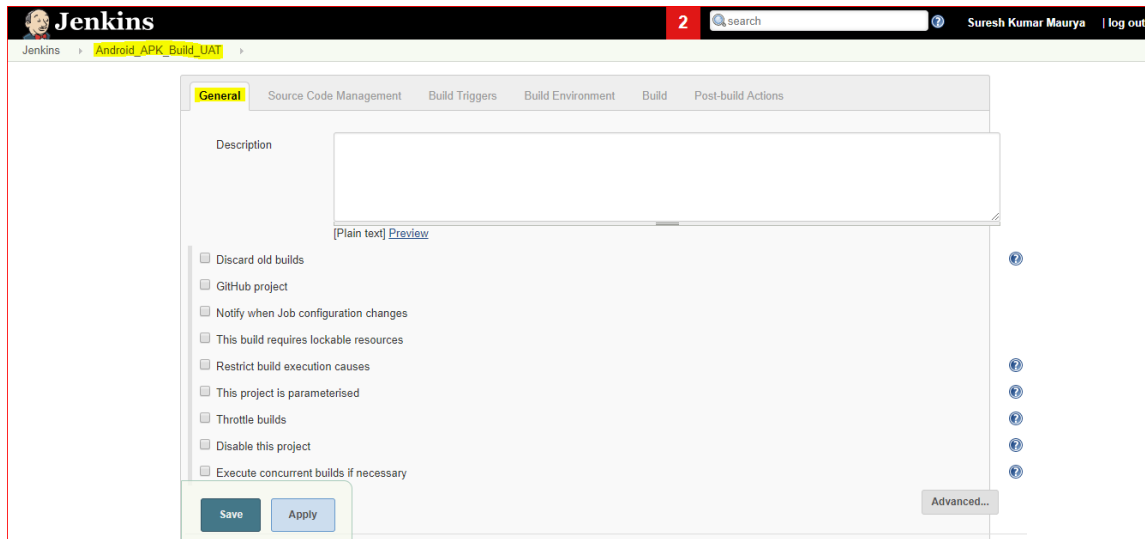
1. **Android_APK_Build_UAT** build is running on it's own as it has been scheduled in Periodic Build Option and it get's triggered at 6:00 PM PST everyday

Android APK Build Jobs

1. **Android_APK_Build_UAT** (*This build is scheduled as **Cronjob** and it runs first, *as soon as UAT gets completed LIVE gets triggered automatically* so we don't need to run LIVE manually, means both the job are getting triggered here in Jenkins automatically at 6:00 PM PST)
2. **Android_APK_Build_LIVE** (*This Build is under *post-build action in UAT build Job* so we don't need to trigger this build neither manually nor automatically)

Step 1:

Android Automation Build Job Name: **Android_APK_Build_UAT**



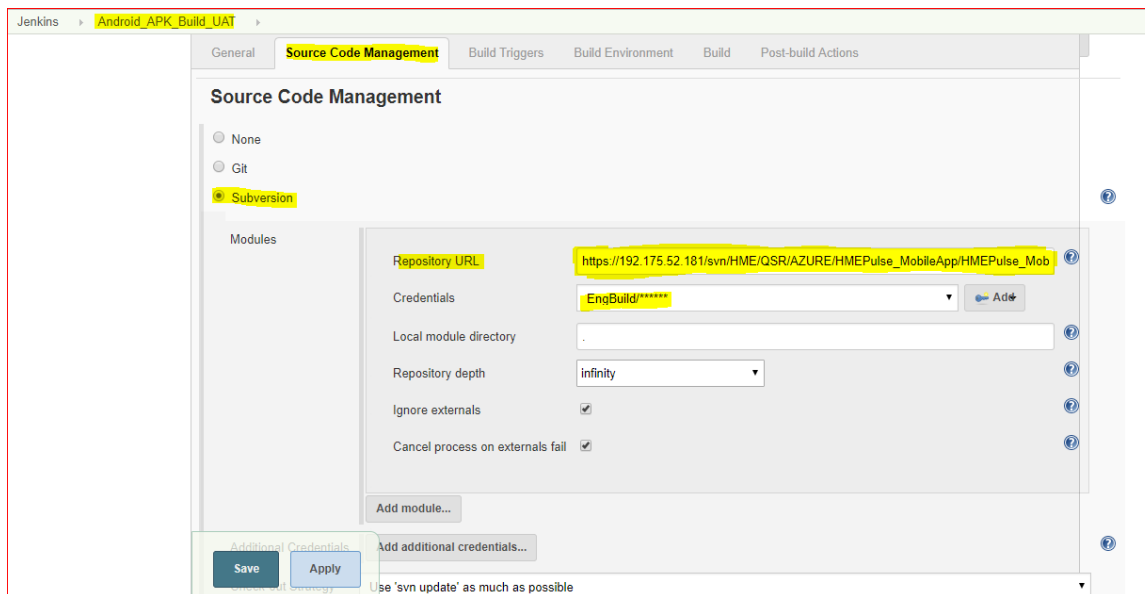
The screenshot shows the Jenkins 'General' configuration page for a job named 'Android_APK_Build_UAT'. The 'General' tab is selected, showing options like 'Discard old builds', 'GitHub project', and 'Notify when Job configuration changes'. The 'Description' field is empty. The 'Save' and 'Apply' buttons are at the bottom left.

Step 2:

We are using SVN (Subversion) to Download the Android Code:

URL :

https://192.175.52.181/svn/HME/QSR/AZURE/HMEPulse_MobileApp/HMEPulse_MobileApp_Client/trunk



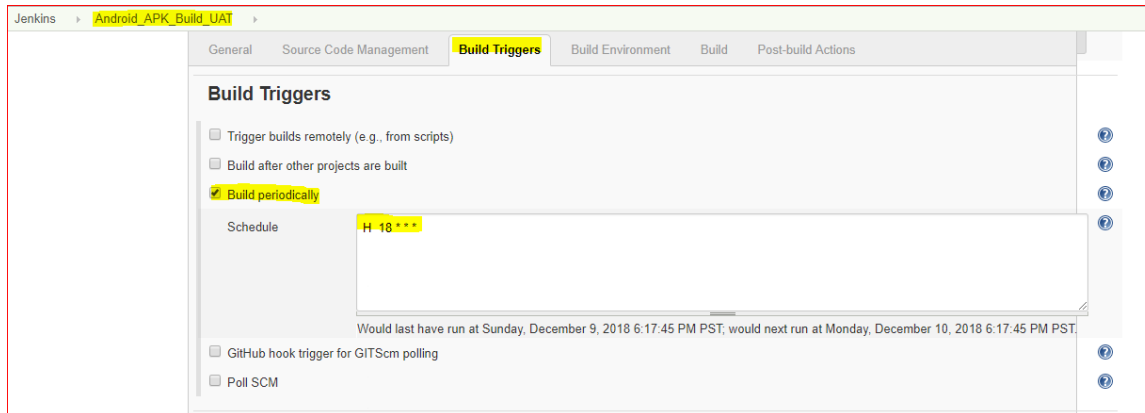
The screenshot shows the Jenkins 'Source Code Management' configuration page for the same job. The 'Subversion' option is selected under 'Source Code Management'. The 'Repository URL' is set to 'https://192.175.52.181/svn/HME/QSR/AZURE/HMEPulse_MobileApp/HMEPulse_Mob'. The 'Credentials' dropdown is set to 'EngBuild/*****'. The 'Repository depth' is set to 'infinity'. The 'Ignore externals' and 'Cancel process on externals fail' checkboxes are checked. The 'Save' and 'Apply' buttons are at the bottom left.

Step 3:

Android Build is scheduled at 6:PM PST which runs automatically every day.



H 18 * * *



Step 4:

All the android build's batch commands and steps are mentioned here in the Build Environment Field:

```
cd android
gradlew clean && gradlew assembleRelease --console plain
```

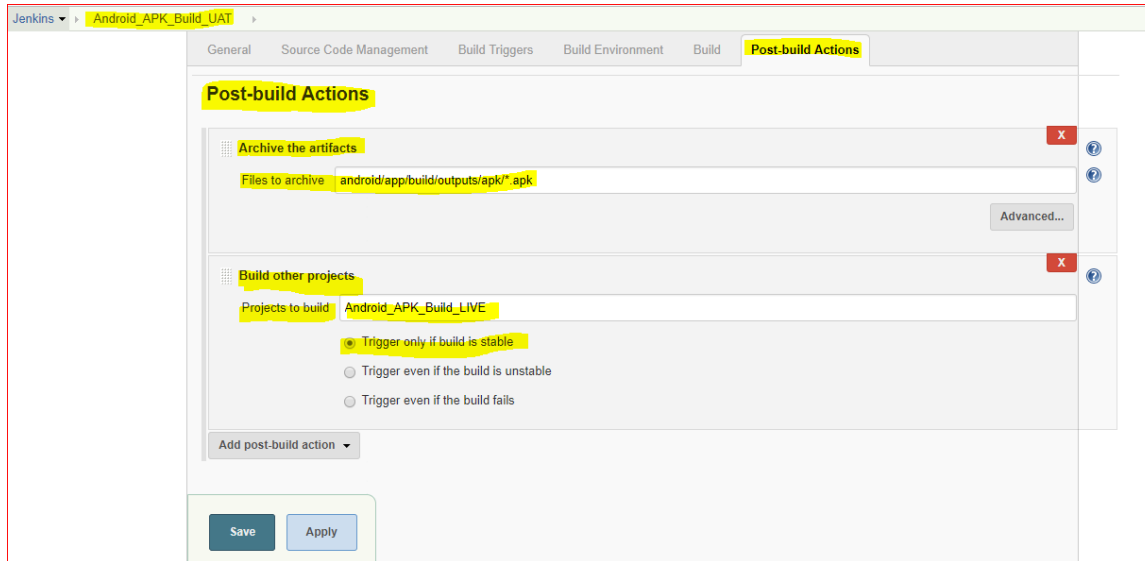


Step 5:

Post-build Actions:

Archive the Artifacts:

Files to Archive: android/app/build/outputs/apk/*.apk



Commands for Android APK Build LIVE:

Files which have been edited before build command are being executed in Android_APK_Build_LIVE:

```
cd src/services/
```

```
(Get-Content ".\webServices.js") |
```

1)

```
Foreach-Object {$_replace("https://hme-uat2-  
leaderboard.azurewebsites.net", "https://hme-live2-  
leaderboard.azurewebsites.net")}
```

```
| Foreach-Object {$_replace("kZMb80K91$Q1", "Kfd149M$19*1")}
```

```
| Foreach-Object {$_replace("Basic aG1lX3RIYW06a1pNYjgwSzkxJFEx", "Basic  
aG1lX3RIYW06S2ZkMTQ5TSQxOSox")}
```



Foreach-Object

```
{$_replace("https://registerpushnotification.azurewebsites.net/api/hme/store/aggregate/registernotification", "https://hme-live-registerpushnotification.azurewebsites.net/api/hme/store/aggregate/registernotification")}
```

```
Foreach-Object {$_replace("971161549671", "860124029336")}
```

```
Set-Content ".\webServices.js"
```

2)

```
cd android/app/src/main/java/com/hm/
```

```
(Get-Content .\NotificationSettings.java) |
```

```
Foreach-Object {$_replace("971161549671", "860124029336")}
```

```
Foreach-Object {$_replace("hme-uat-notificationhub", "hme-live-notificationhub")}
```

```
Foreach-Object {$_replace("Endpoint=sb://hme-pulse-notif-  
uat.servicebus.windows.net/;SharedAccessKeyName=DefaultListenSharedAc  
cessSignature;SharedAccessKey=Ui+HpTNvTzGsyxeQoO+xhfcF/tkoD46eNu  
MjHjnPGJk=", "Endpoint=sb://hme-live-notificationhub-  
namespace.servicebus.windows.net/;SharedAccessKeyName=DefaultListenS  
haredAccessSignature;SharedAccessKey=YhyjJo2cw6sQ9cTgxlG0VZN86yk6E  
L5Qu5X3LmdkHyc=")}
```

```
Foreach-Object {$_replace("Endpoint=sb://hme-pulse-notif-  
dev.servicebus.windows.net/;SharedAccessKeyName=DefaultFullSharedAcce  
ssSignature;SharedAccessKey=BnWWlwN+lz+Ebs2OVFPEJoWJNwtJkF6Aq2  
oOxKXWHmI=", "Endpoint=sb://hme-live-notificationhub-  
namespace.servicebus.windows.net/;SharedAccessKeyName=DefaultFullShar  
edAccessSignature;SharedAccessKey=Az73/k+aq2cW2ADjkeIANZoej9IJXfw  
EZ5woKNz90os=")}
```

```
Set-Content ".\NotificationSettings.java"
```

Command which have been used for LIVE:

```
cd android
```





gradlew clean && gradlew assembleRelease
cd android/app/build/outputs/apk/
ren app-release.apk live-app-release.apk

Monitoring Android_APK_Build_UAT and LIVE both:

To check console log:

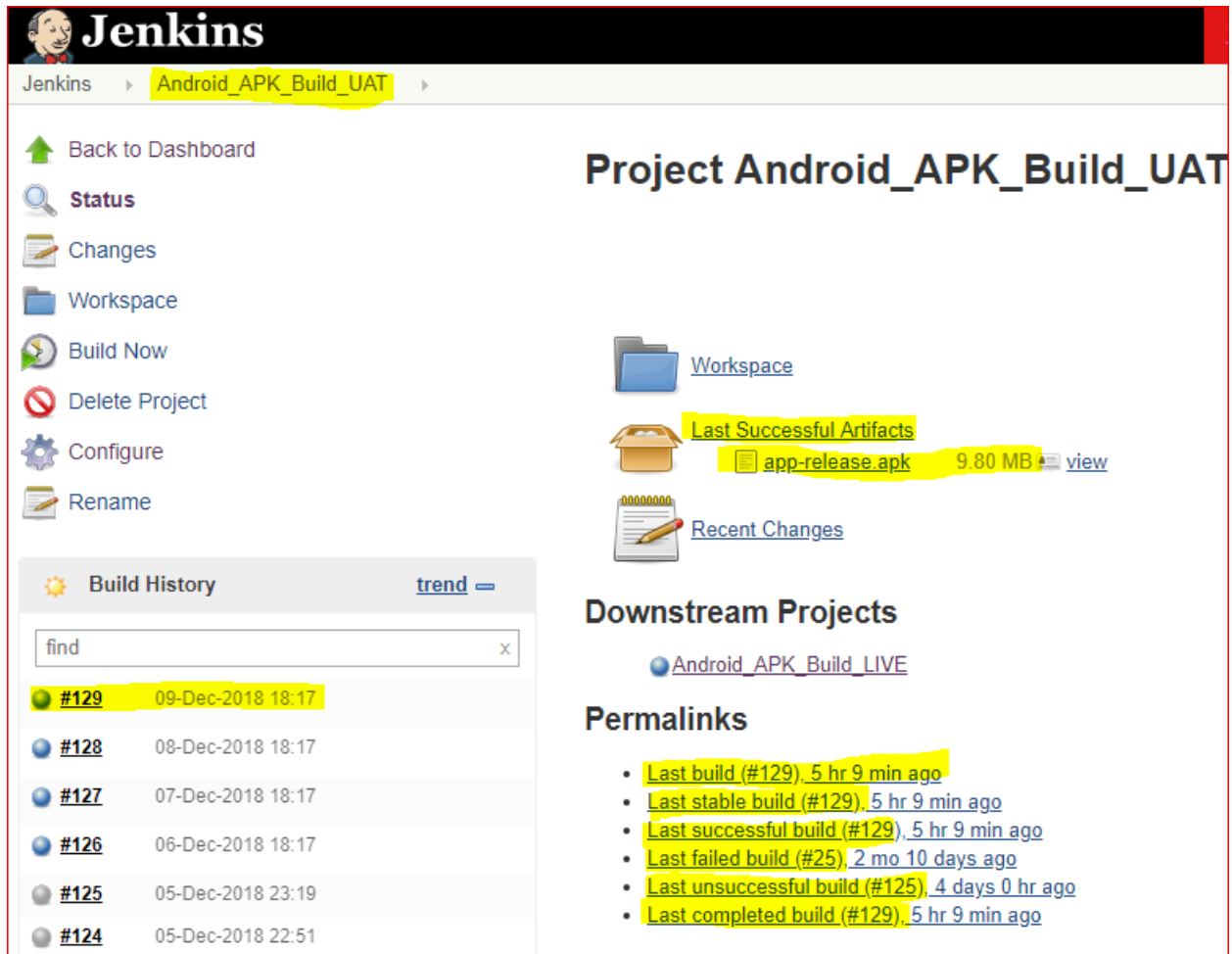
Here you can easily see Last Successful Build Details:

#129 is successful build has been completed.

Last Successful Artifacts 9.80 MB which can be downloaded.

Downstream Project Detail is also mention in this window which you can see easily



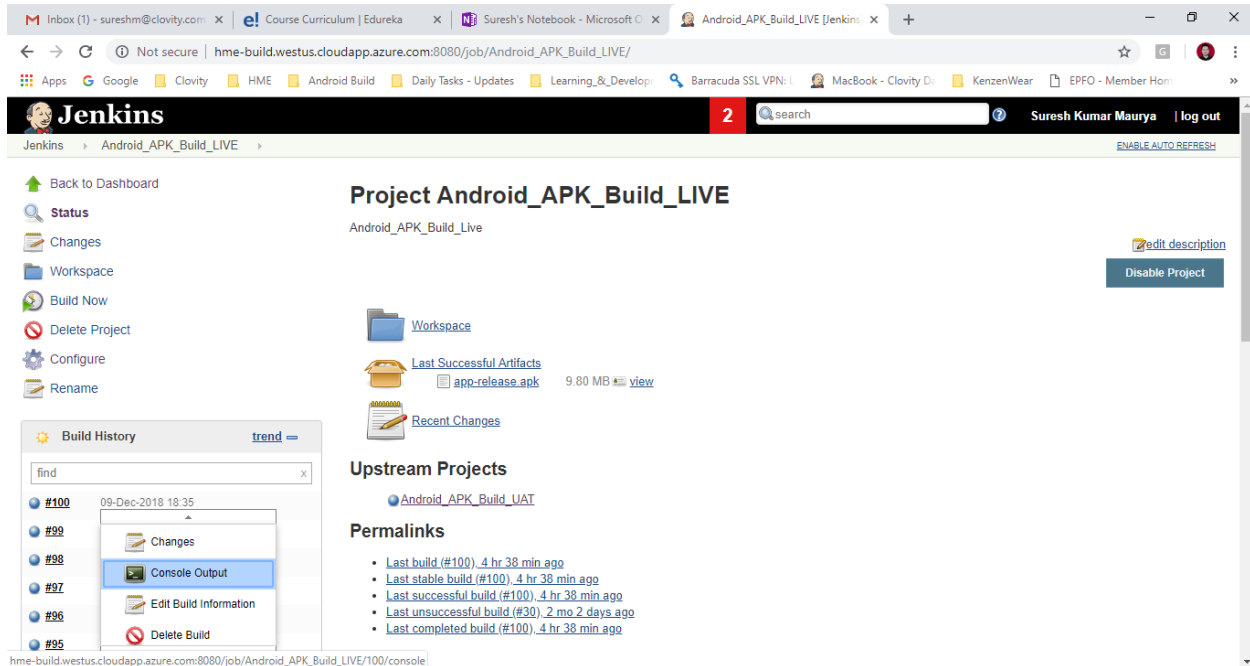


The screenshot shows the Jenkins web interface for the project 'Android_APK_Build_UAT'. The left sidebar contains navigation links: Back to Dashboard, Status, Changes, Workspace, Build Now, Delete Project, Configure, and Rename. The main content area displays the project name 'Project Android_APK_Build_UAT' and several sections: 'Workspace' with a folder icon, 'Last Successful Artifacts' showing 'app-release.apk' (9.80 MB) with a 'view' link, 'Recent Changes' with a document icon, 'Downstream Projects' listing 'Android_APK_Build_LIVE', and 'Permalinks' with a list of build links. The 'Build History' section on the left shows a table of builds with columns for build number, date, and time.

Build Number	Date	Time
#129	09-Dec-2018	18:17
#128	08-Dec-2018	18:17
#127	07-Dec-2018	18:17
#126	06-Dec-2018	18:17
#125	05-Dec-2018	23:19
#124	05-Dec-2018	22:51

1 Click on the Build Job – Android_APK_Build_UAT or LIVE

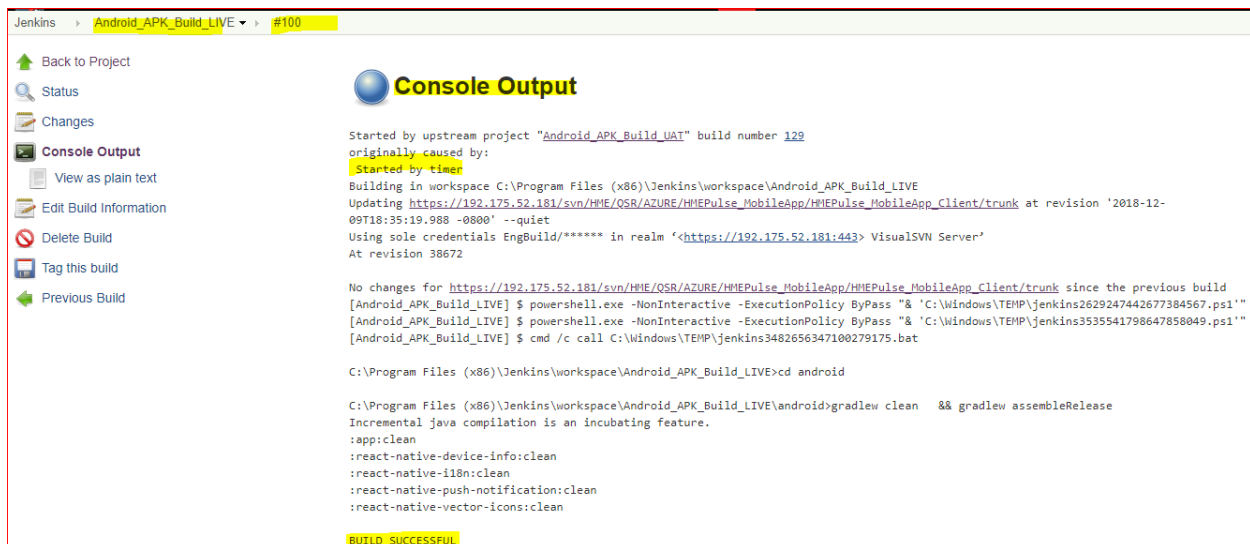
2 Go to Build History and find out the Build No. starting with #100 and Click drop-down on Console Output



The screenshot shows the Jenkins dashboard for the project 'Android_APK_Build_LIVE'. The left sidebar contains navigation links: Back to Dashboard, Status, Changes, Workspace, Build Now, Delete Project, Configure, and Rename. The main content area displays the project name, a 'Workspace' section with a 'Last Successful Artifacts' link showing 'app-release.apk' (9.80 MB), and a 'Recent Changes' section. Below these are 'Upstream Projects' (Android_APK_Build_UAT) and 'Permalinks' for various build types. A 'Build History' table is visible on the left, showing a list of builds with a dropdown menu open for build #100, highlighting 'Console Output'.

You can easily see and identify that the build has been started by timer, BUILD SUCCESSFUL

*If Build has been completed successfully you will see a message: **BUILD SUCCESSFUL**



The screenshot shows the 'Console Output' for build #100. The output text includes: 'Started by upstream project "Android_APK_Build_UAT" build number 129', 'originally caused by: Started by timer', and 'Building in workspace C:\Program Files (x86)\Jenkins\workspace\Android_APK_Build_LIVE'. It also shows the update of a repository and the execution of 'gradlew clean' and 'gradlew assembleRelease'. The output concludes with 'BUILD SUCCESSFUL'.

*If Build has been completed as Failed you will see a message: **BUILD FAILED**



```
at java.lang.Thread.run(Thread.java:746)

FAILURE: Build failed with an exception.

* Where:
Build file 'C:\Program Files (x86)\Jenkins\workspace\Android_APK_Build_UAT\android\app\build.gradle' line: 6

* What went wrong:
A problem occurred evaluating project ':app'.
> Could not read script 'C:\Program Files (x86)\Jenkins\workspace\Android_APK_Build_UAT\node_modules\react-native\react.gradle' as it
does not exist.

* Try:
Run with --stacktrace option to get the stack trace. Run with --info or --debug option to get more log output.

BUILD FAILED
```

