Step 1 Jenkins Setup for Gmail

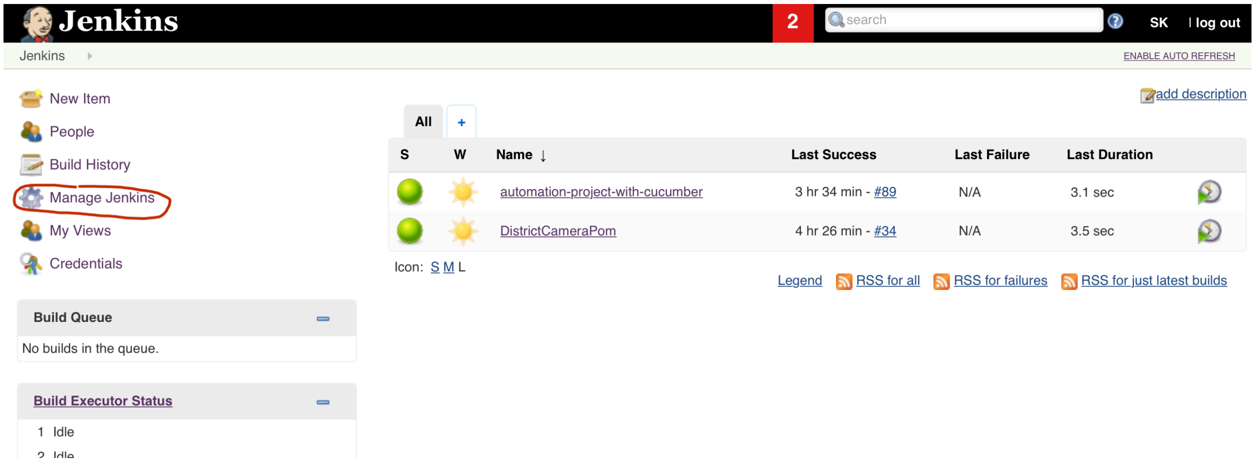
Download & share @ https://github.com/Salihz/Jenkins-Setup-for-Gmail

1. Make sure that the IMAP is turned on for the Gmail address you will use.
   Go to this link for how to: https://support.google.com/mail/answer/7126229?hl=en

2. Allow Access to your same Google account you will use for Jenkins reporting.
   Go to this link and click "Continue" https://accounts.google.com/b/0/DisplayUnlockCaptcha

3. Make sure Email Extension plugin is installed.

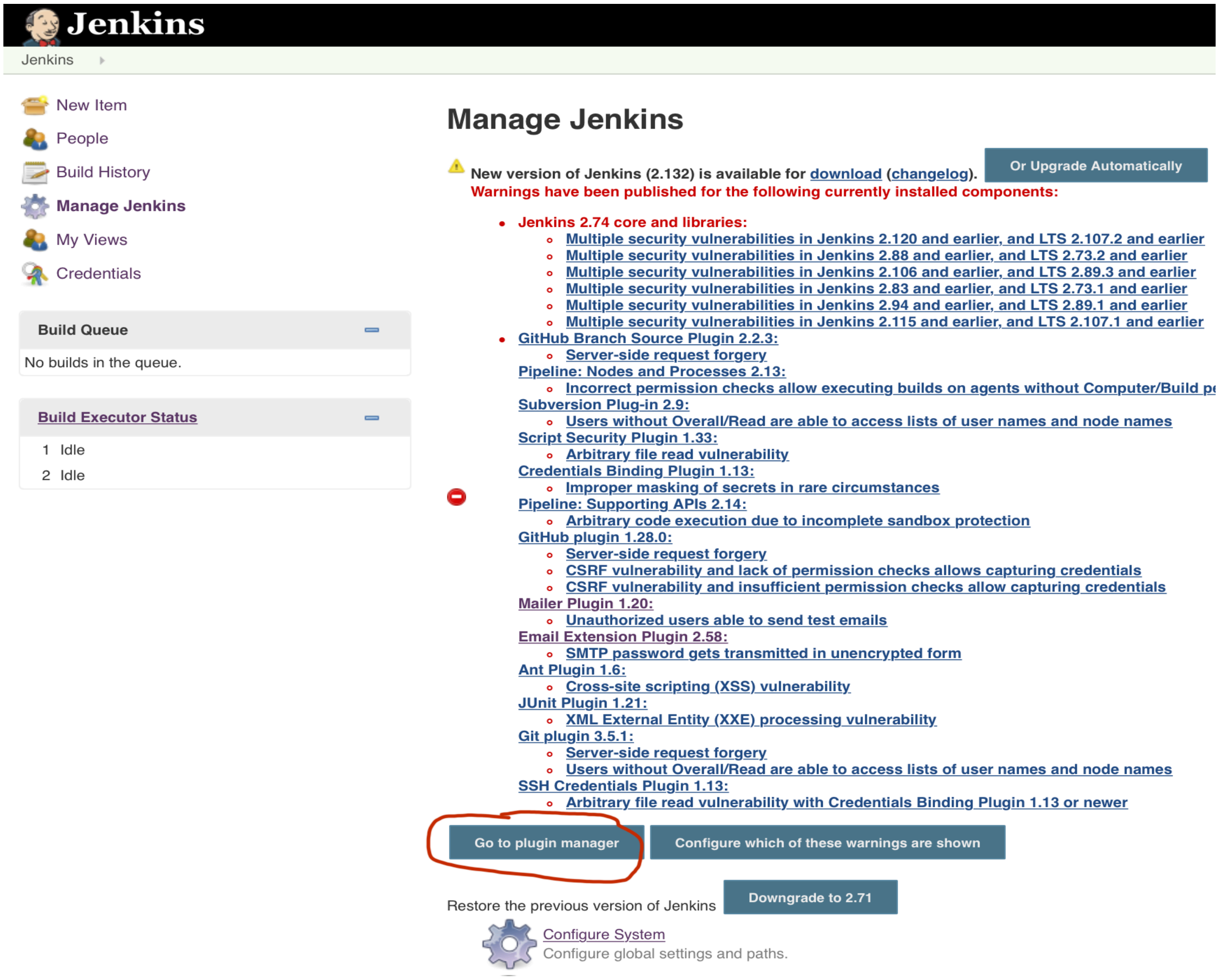
   Go to: Manage Jenkins → Plugin Manager → Installed Tab
   And check if "Email Extension" is installed. If it is not installed, click on "Available Tab" filter the results for "Email Extension" and install it.



S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	automation-project-with-cucumber	3 hr 34 min - #89	N/A	3.1 sec
●	☀	DistrictCameraPom	4 hr 26 min - #34	N/A	3.5 sec

No builds in the queue.

1 Idle
2 Idle



Jenkins

Jenkins ▸

- New Item
- People
- Build History
- Manage Jenkins
- My Views
- Credentials

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

Manage Jenkins

New version of Jenkins (2.132) is available for download (changelog). Or Upgrade Automatically

Warnings have been published for the following currently installed components:

- **Jenkins 2.74 core and libraries:**
  - Multiple security vulnerabilities in Jenkins 2.120 and earlier, and LTS 2.107.2 and earlier
  - Multiple security vulnerabilities in Jenkins 2.88 and earlier, and LTS 2.73.2 and earlier
  - Multiple security vulnerabilities in Jenkins 2.106 and earlier, and LTS 2.89.3 and earlier
  - Multiple security vulnerabilities in Jenkins 2.83 and earlier, and LTS 2.73.1 and earlier
  - Multiple security vulnerabilities in Jenkins 2.94 and earlier, and LTS 2.89.1 and earlier
  - Multiple security vulnerabilities in Jenkins 2.115 and earlier, and LTS 2.107.1 and earlier
- **GitHub Branch Source Plugin 2.2.3:**
  - Server-side request forgery

  Pipeline: Nodes and Processes 2.13:
  - Incorrect permission checks allow executing builds on agents without Computer/Build pe

  Subversion Plug-in 2.9:
  - Users without Overall/Read are able to access lists of user names and node names

  Script Security Plugin 1.33:
  - Arbitrary file read vulnerability

  Credentials Binding Plugin 1.13:
  - Improper masking of secrets in rare circumstances

  Pipeline: Supporting APIs 2.14:
  - Arbitrary code execution due to incomplete sandbox protection

  GitHub plugin 1.28.0:
  - Server-side request forgery
  - CSRF vulnerability and lack of permission checks allows capturing credentials
  - CSRF vulnerability and insufficient permission checks allow capturing credentials

  Mailer Plugin 1.20:
  - Unauthorized users able to send test emails

  Email Extension Plugin 2.58:
  - SMTP password gets transmitted in unencrypted form

  Ant Plugin 1.6:
  - Cross-site scripting (XSS) vulnerability

  JUnit Plugin 1.21:
  - XML External Entity (XXE) processing vulnerability

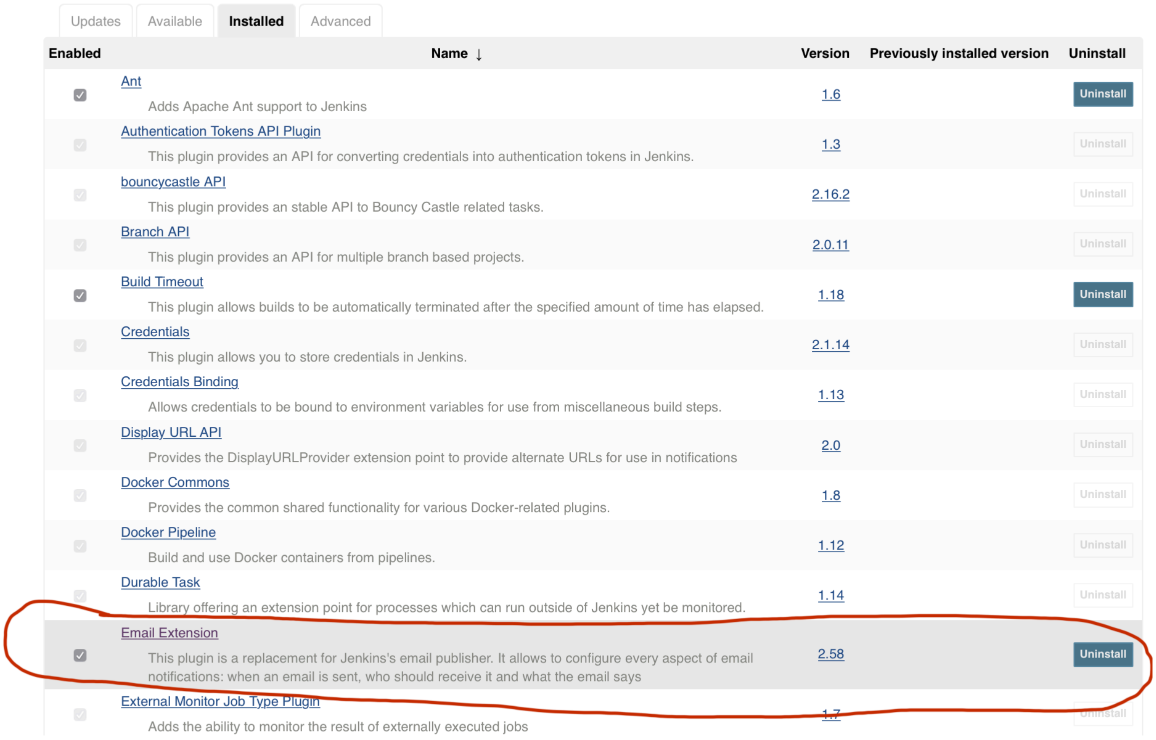
  Git plugin 3.5.1:
  - Server-side request forgery
  - Users without Overall/Read are able to access lists of user names and node names

  SSH Credentials Plugin 1.13:
  - Arbitrary file read vulnerability with Credentials Binding Plugin 1.13 or newer

Go to plugin manager | Configure which of these warnings are shown

Restore the previous version of Jenkins Downgrade to 2.71

Configure System
Configure global settings and paths.

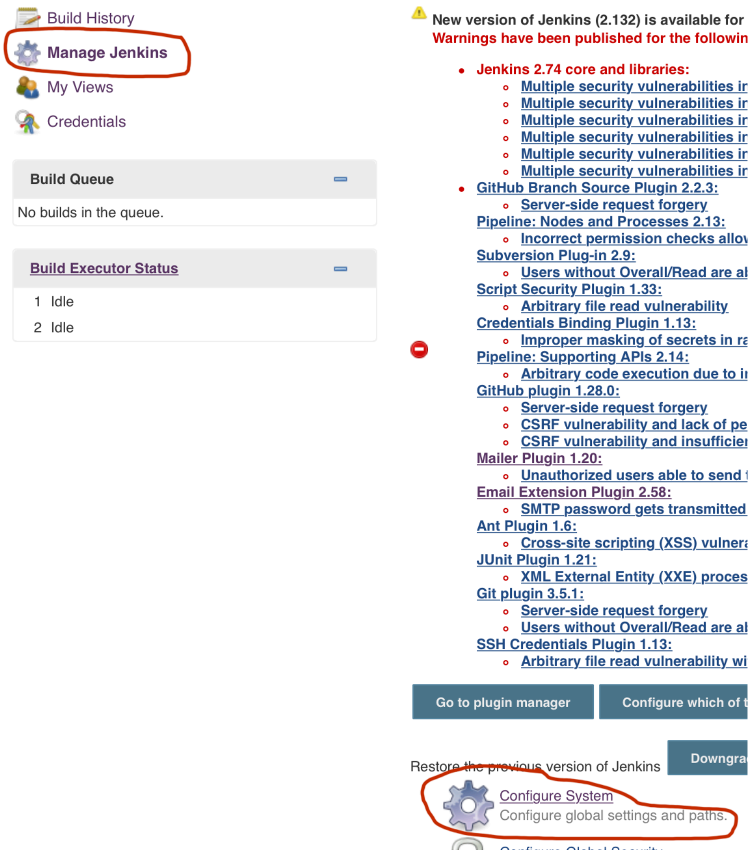


Updates | Available | **Installed** | Advanced

Enabled	Name ↓	Version	Previously installed version	Uninstall
☑	Ant Adds Apache Ant support to Jenkins	1.6		Uninstall
☑	Authentication Tokens API Plugin This plugin provides an API for converting credentials into authentication tokens in Jenkins.	1.3		Uninstall
☑	bouncycastle API This plugin provides an stable API to Bouncy Castle related tasks.	2.16.2		Uninstall
☑	Branch API This plugin provides an API for multiple branch based projects.	2.0.11		Uninstall
☑	Build Timeout This plugin allows builds to be automatically terminated after the specified amount of time has elapsed.	1.18		Uninstall
☑	Credentials This plugin allows you to store credentials in Jenkins.	2.1.14		Uninstall
☑	Credentials Binding Allows credentials to be bound to environment variables for use from miscellaneous build steps.	1.13		Uninstall
☑	Display URL API Provides the DisplayURLProvider extension point to provide alternate URLs for use in notifications	2.0		Uninstall
☑	Docker Commons Provides the common shared functionality for various Docker-related plugins.	1.8		Uninstall
☑	Docker Pipeline Build and use Docker containers from pipelines.	1.12		Uninstall
☑	Durable Task Library offering an extension point for processes which can run outside of Jenkins yet be monitored.	1.14		Uninstall
☑	Email Extension This plugin is a replacement for Jenkins's email publisher. It allows to configure every aspect of email notifications: when an email is sent, who should receive it and what the email says	2.58		Uninstall
☑	External Monitor Job Type Plugin Adds the ability to monitor the result of externally executed jobs	1.7		Uninstall

4. Now we can continue for email set up.

   Go to: "Manage Jenkins" → "Configure System"



Build History

Manage Jenkins

My Views

Credentials

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

New version of Jenkins (2.132) is available for

Warnings have been published for the followin

- Jenkins 2.74 core and libraries:
  - Multiple security vulnerabilities ir
  - Multiple security vulnerabilities ir
  - Multiple security vulnerabilities ir
  - Multiple security vulnerabilities ir
  - Multiple security vulnerabilities ir
  - Multiple security vulnerabilities ir
- GitHub Branch Source Plugin 2.2.3:
  - Server-side request forgery

  Pipeline: Nodes and Processes 2.13:
  - Incorrect permission checks allov

  Subversion Plug-in 2.9:
  - Users without Overall/Read are al

  Script Security Plugin 1.33:
  - Arbitrary file read vulnerability

  Credentials Binding Plugin 1.13:
  - Improper masking of secrets in ra

  Pipeline: Supporting APIs 2.14:
  - Arbitrary code execution due to ir

  GitHub plugin 1.28.0:
  - Server-side request forgery
  - CSRF vulnerability and lack of pe
  - CSRF vulnerability and insufficier

  Mailer Plugin 1.20:
  - Unauthorized users able to send

  Email Extension Plugin 2.58:
  - SMTP password gets transmitted

  Ant Plugin 1.6:
  - Cross-site scripting (XSS) vulnera

  JUnit Plugin 1.21:
  - XML External Entity (XXE) proces

  Git plugin 3.5.1:
  - Server-side request forgery
  - Users without Overall/Read are al

  SSH Credentials Plugin 1.13:
  - Arbitrary file read vulnerability wi

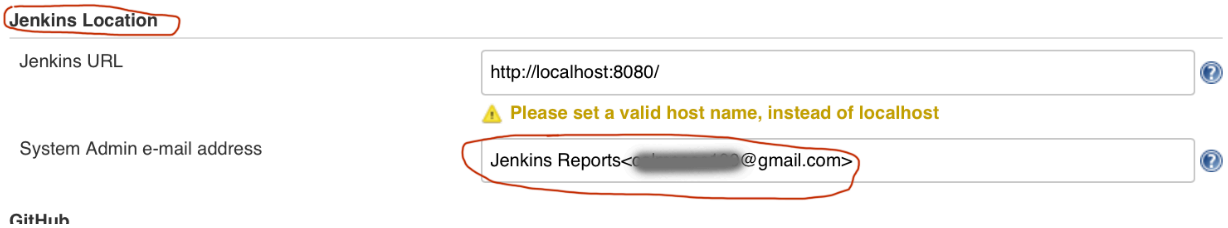
Go to plugin manager | Configure which of t

Restore the previous version of Jenkins | Downgra

Configure System

Configure global settings and paths.

5. In the "Configuration" page, go to "Jenkins Location" and enter your Gmail address as shown below:



Jenkins Location

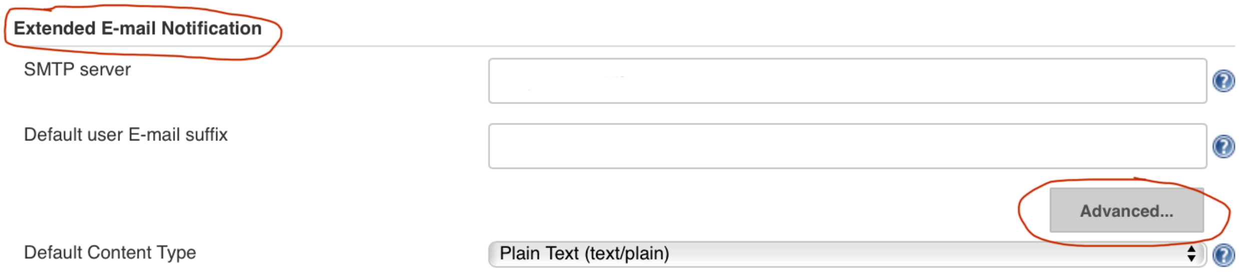
Jenkins URL: http://localhost:8080/

⚠ Please set a valid host name, instead of localhost

System Admin e-mail address: Jenkins Reports<[redacted]@gmail.com>

GitHub

6. At the "Extend E-mail Notification" field, Click on "Advanced" button



Extended E-mail Notification

SMTP server:

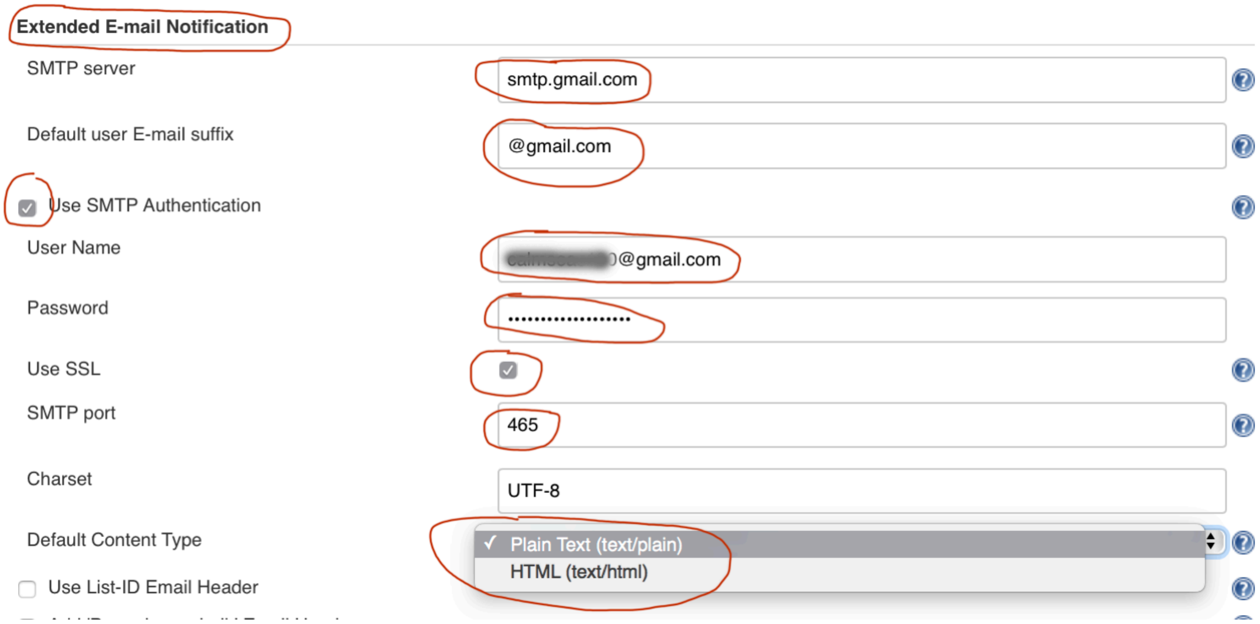
Default user E-mail suffix:

Advanced...

Default Content Type: Plain Text (text/plain)

7. Complete the "Extend E-mail Notification" as shown below

   Then click on the "Default Content Type", choose "Plain Text" or "HTML"



Extended E-mail Notification

SMTP server: smtp.gmail.com

Default user E-mail suffix: @gmail.com

☑ Use SMTP Authentication

User Name: [redacted]@gmail.com

Password: •••••••••••••••••••

Use SSL: ☑

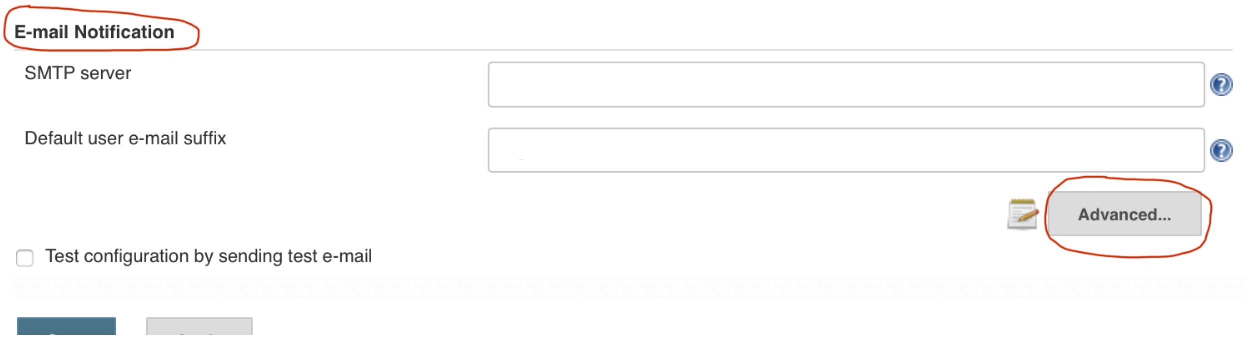
SMTP port: 465

Charset: UTF-8

Default Content Type:
- ✓ Plain Text (text/plain)
- HTML (text/html)

□ Use List-ID Email Header

8. Go to "Email Notification" field and click "Advanced" button



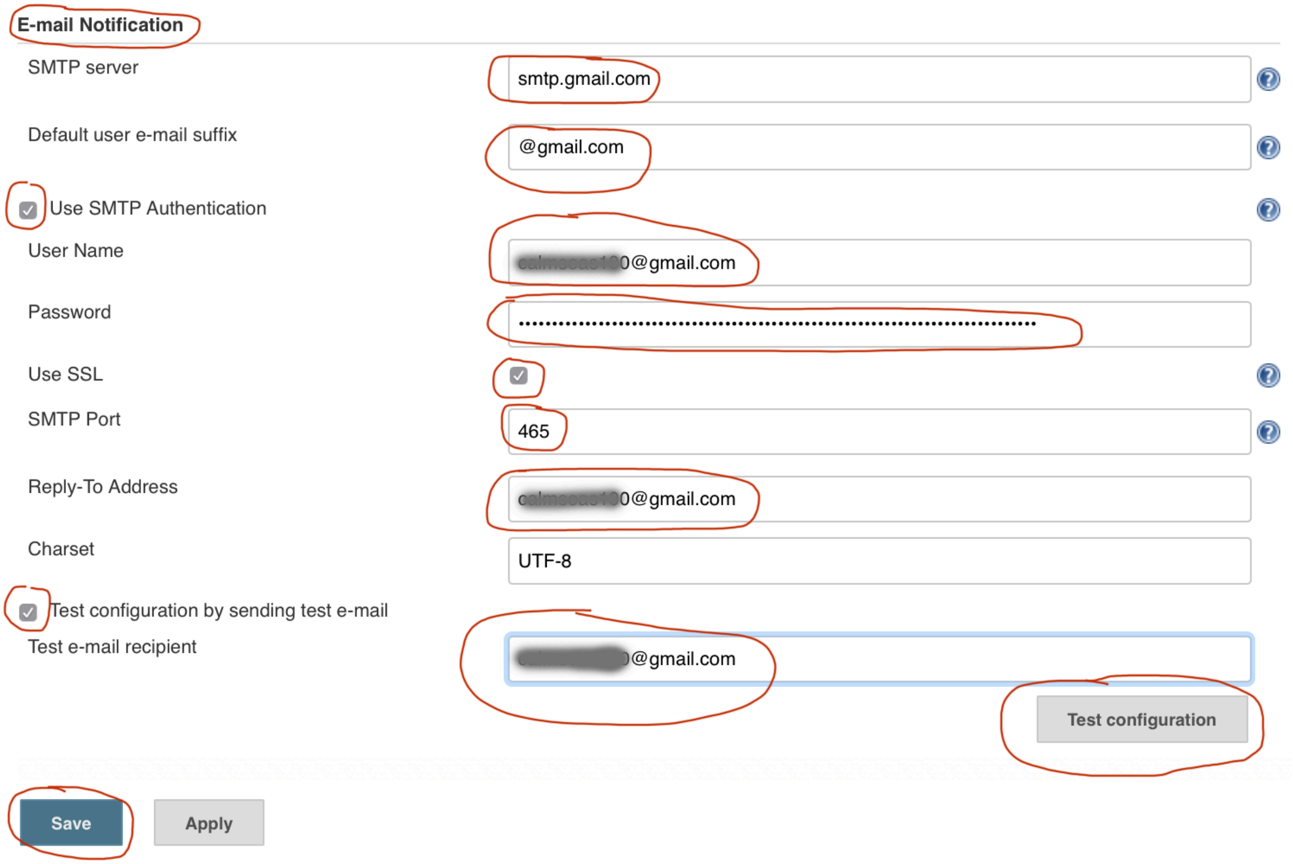
E-mail Notification

SMTP server:

Default user e-mail suffix:

□ Test configuration by sending test e-mail

9. Complete this field as shown below, then click on "Test configuration" button



E-mail Notification

SMTP server: smtp.gmail.com

Default user e-mail suffix: @gmail.com

☑ Use SMTP Authentication

User Name: [redacted]0@gmail.com

Password: ••

Use SSL: ☑

SMTP Port: 465

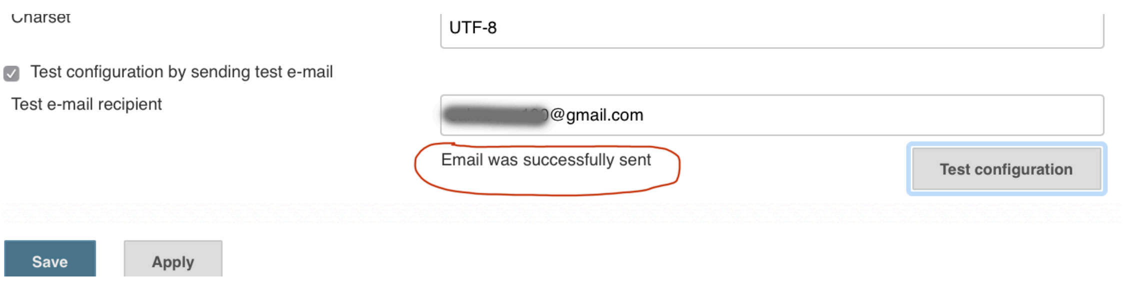
Reply-To Address: [redacted]0@gmail.com

Charset: UTF-8

☑ Test configuration by sending test e-mail

Test e-mail recipient: [redacted]0@gmail.com

10. After clicking the "Test configuration" button you will see "Email was successfully sent" text as seen below picture. And, an e-mail must be received from Jenkins by the e-mail address you used for test.



Charset: UTF-8

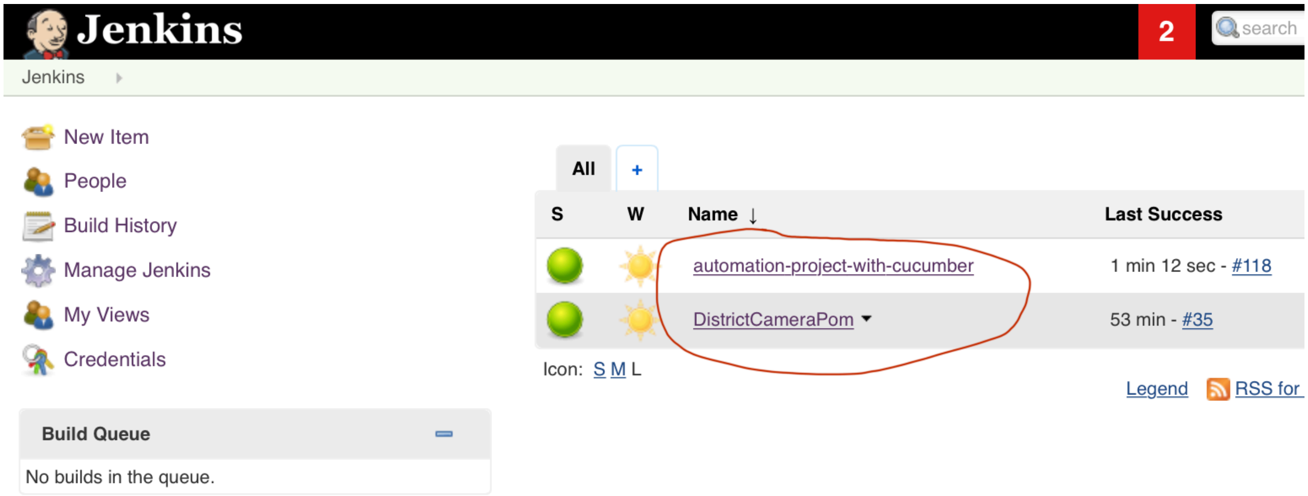
☑ Test configuration by sending test e-mail

Test e-mail recipient: [redacted]@gmail.com

Email was successfully sent

Step 2 Jenkins Setup for Gmail

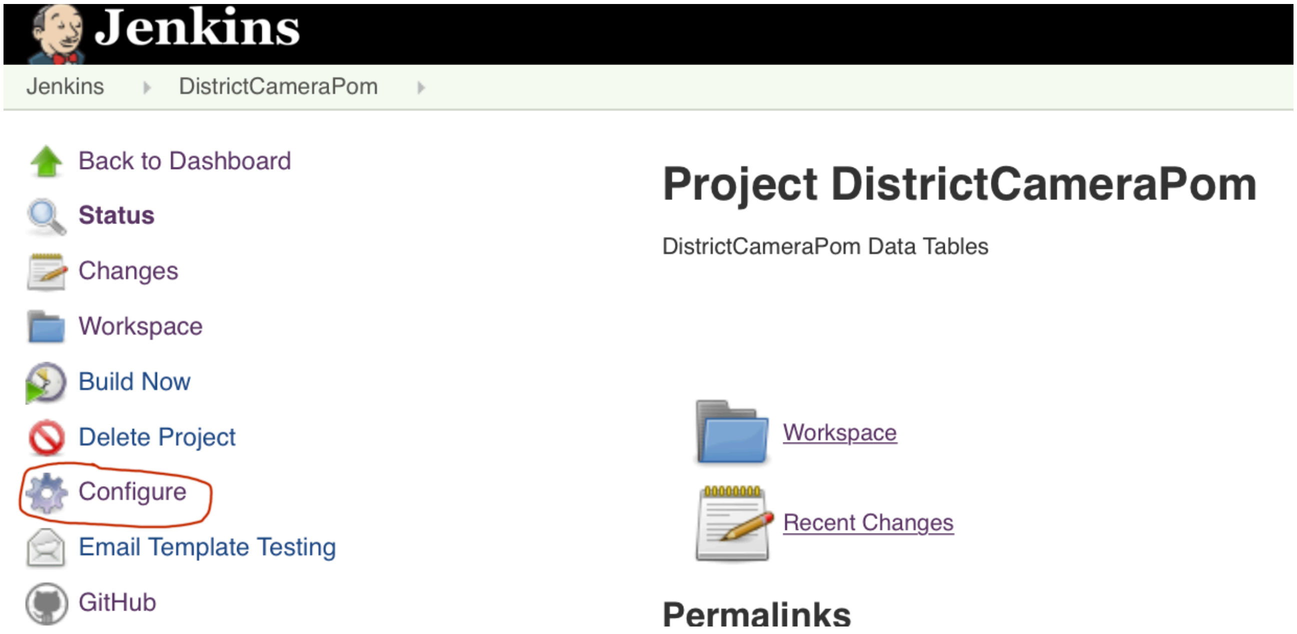
1. Go to your builds and click the one you prefer to receive an email report from



S	W	Name ↓	Last Success
●	☀	automation-project-with-cucumber	1 min 12 sec - #118
●	☀	DistrictCameraPom	53 min - #35

No builds in the queue.

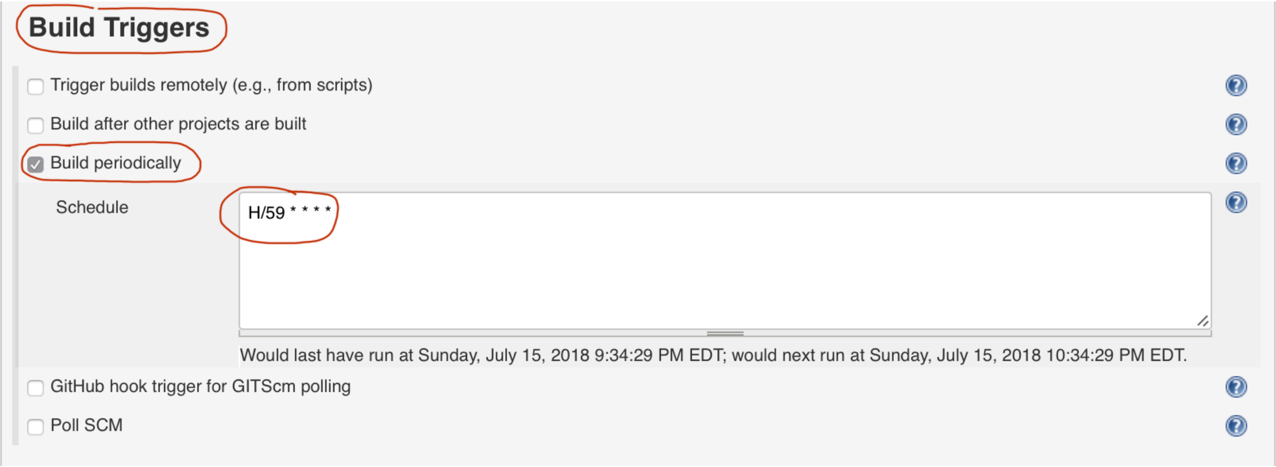
2. Click on "Configure"



Project DistrictCameraPom

DistrictCameraPom Data Tables

3. At "Build Triggers" field, check "Build periodically" box and enter "Schedule"
   In this example Jenkins will build every other 59 minutes (H/59****)



Build Triggers

□ Trigger builds remotely (e.g., from scripts)

□ Build after other projects are built

☑ Build periodically

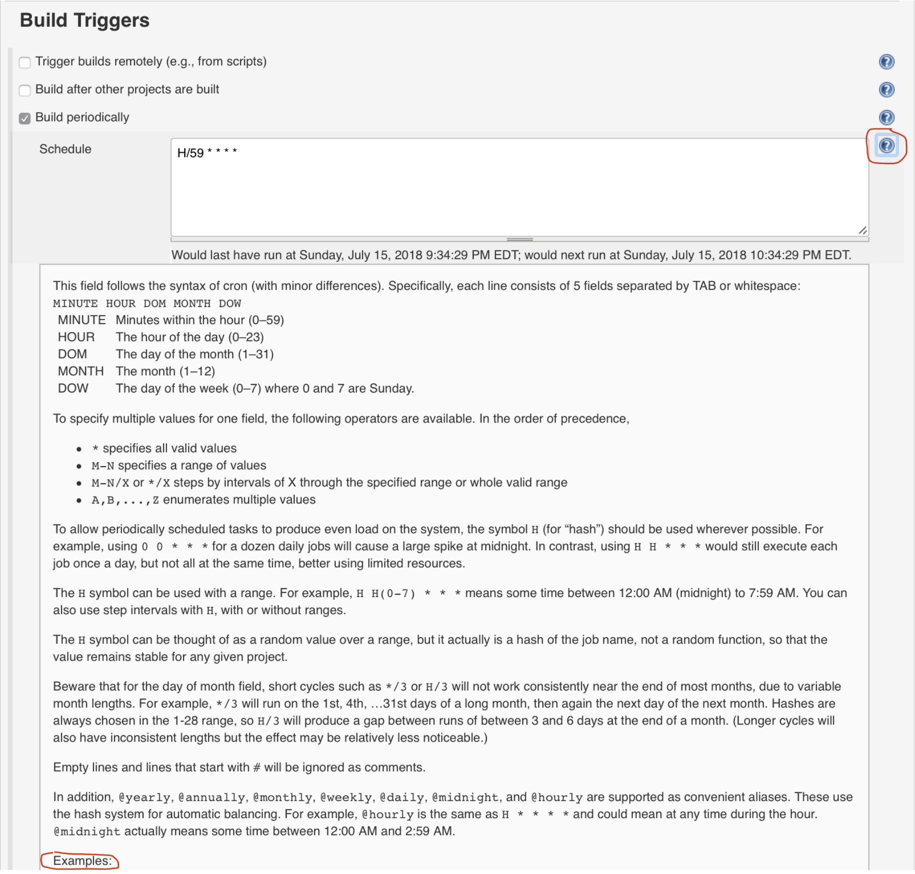
Schedule: H/59 * * * *

Would last have run at Sunday, July 15, 2018 9:34:29 PM EDT; would next run at Sunday, July 15, 2018 10:34:29 PM EDT.

□ GitHub hook trigger for GITScm polling

□ Poll SCM

If you click on ? mark next to "Schedule" field you can access the syntax and examples.



Build Triggers

□ Trigger builds remotely (e.g., from scripts)

□ Build after other projects are built

☑ Build periodically

Schedule: H/59 * * * *

Would last have run at Sunday, July 15, 2018 9:34:29 PM EDT; would next run at Sunday, July 15, 2018 10:34:29 PM EDT.

This field follows the syntax of cron (with minor differences). Specifically, each line consists of 5 fields separated by TAB or whitespace:

`MINUTE HOUR DOM MONTH DOW`

MINUTE	Minutes within the hour (0–59)
HOUR	The hour of the day (0–23)
DOM	The day of the month (1–31)
MONTH	The month (1–12)
DOW	The day of the week (0–7) where 0 and 7 are Sunday.

To specify multiple values for one field, the following operators are available. In the order of precedence,

- `*` specifies all valid values
- `M-N` specifies a range of values
- `M-N/X` or `*/X` steps by intervals of X through the specified range or whole valid range
- `A,B,...,Z` enumerates multiple values

To allow periodically scheduled tasks to produce even load on the system, the symbol `H` (for "hash") should be used wherever possible. For example, using `0 0 * * *` for a dozen daily jobs will cause a large spike at midnight. In contrast, using `H H * * *` would still execute each job once a day, but not all at the same time, better using limited resources.

The `H` symbol can be used with a range. For example, `H H(0-7) * * *` means some time between 12:00 AM (midnight) to 7:59 AM. You can also use step intervals with `H`, with or without ranges.

The `H` symbol can be thought of as a random value over a range, but it actually is a hash of the job name, not a random function, so that the value remains stable for any given project.

Beware that for the day of month field, short cycles such as `*/3` or `H/3` will not work consistently near the end of most months, due to variable month lengths. For example, `*/3` will run on the 1st, 4th, …31st days of a long month, then again the next day of the next month. Hashes are always chosen in the 1-28 range, so `H/3` will produce a gap between runs of between 3 and 6 days at the end of a month. (Longer cycles will also have inconsistent lengths but the effect may be relatively less noticeable.)

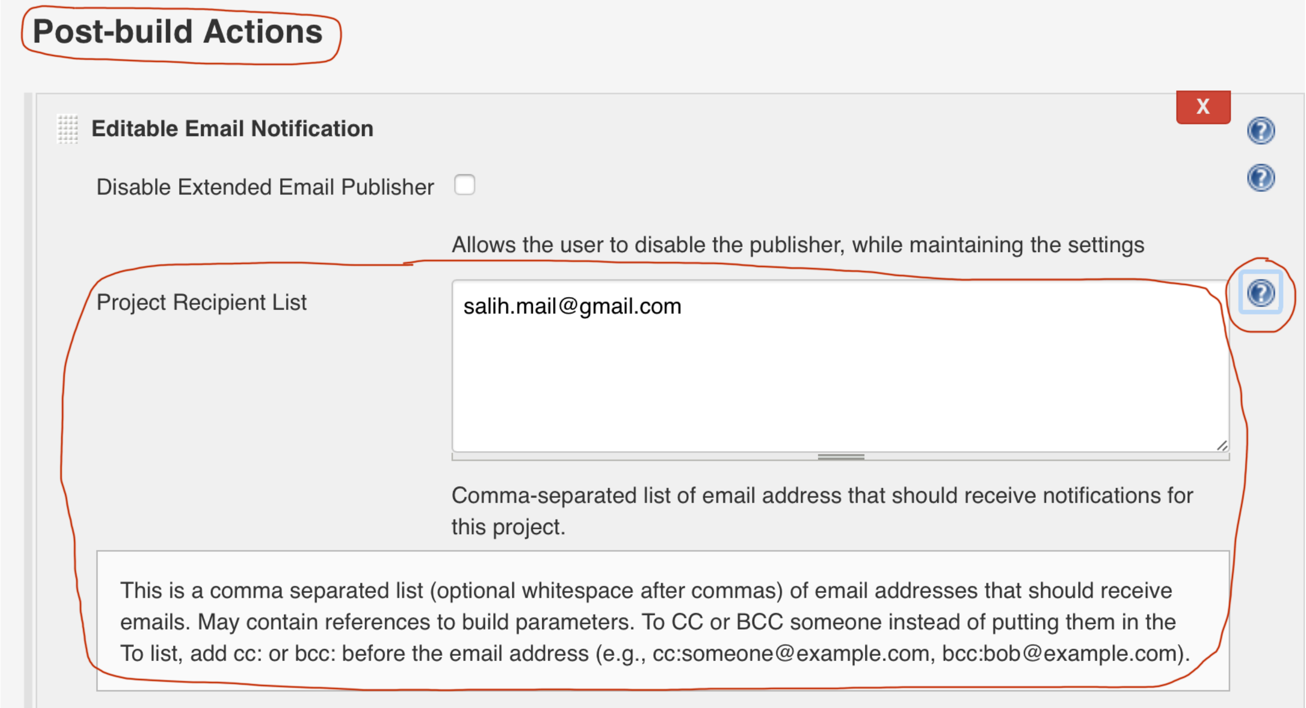
Empty lines and lines that start with # will be ignored as comments.

In addition, `@yearly`, `@annually`, `@monthly`, `@weekly`, `@daily`, `@midnight`, and `@hourly` are supported as convenient aliases. These use the hash system for automatic balancing. For example, `@hourly` is the same as `H * * * *` and could mean at any time during the hour. `@midnight` actually means some time between 12:00 AM and 2:59 AM.

Examples:

External sources for Schedule:
https://en.wikipedia.org/wiki/Cron
https://www.lenar.io/jenkins-schedule-build-periodically/

4. Go to "Post-build Actions" field and enter the "Project Recipient List" can be multiple recipient (click on question button to see how)



Post-build Actions

Editable Email Notification

Disable Extended Email Publisher ☐

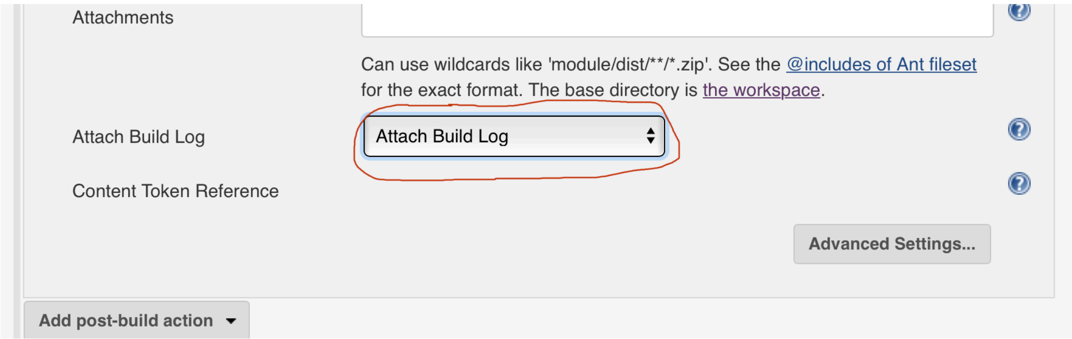
Allows the user to disable the publisher, while maintaining the settings

Project Recipient List: salih.mail@gmail.com

Comma-separated list of email address that should receive notifications for this project.

This is a comma separated list (optional whitespace after commas) of email addresses that should receive emails. May contain references to build parameters. To CC or BCC someone instead of putting them in the To list, add cc: or bcc: before the email address (e.g., cc:someone@example.com, bcc:bob@example.com).

5. If you like to attach the "Build Log" to the email click on "Attach Build Log" button and choose from drop down (see next two pictures)

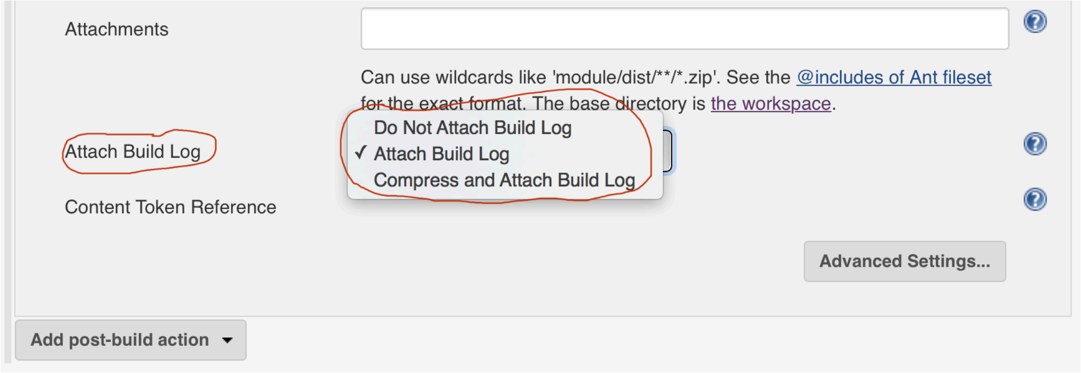


Attachments

Can use wildcards like 'module/dist/**/*.zip'. See the @includes of Ant fileset for the exact format. The base directory is the workspace.

Attach Build Log: Attach Build Log

Content Token Reference



Attachments

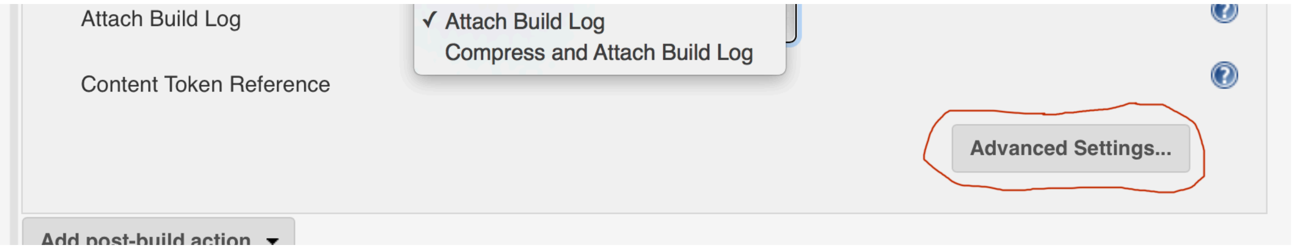
Can use wildcards like 'module/dist/**/*.zip'. See the @includes of Ant fileset for the exact format. The base directory is the workspace.

Attach Build Log

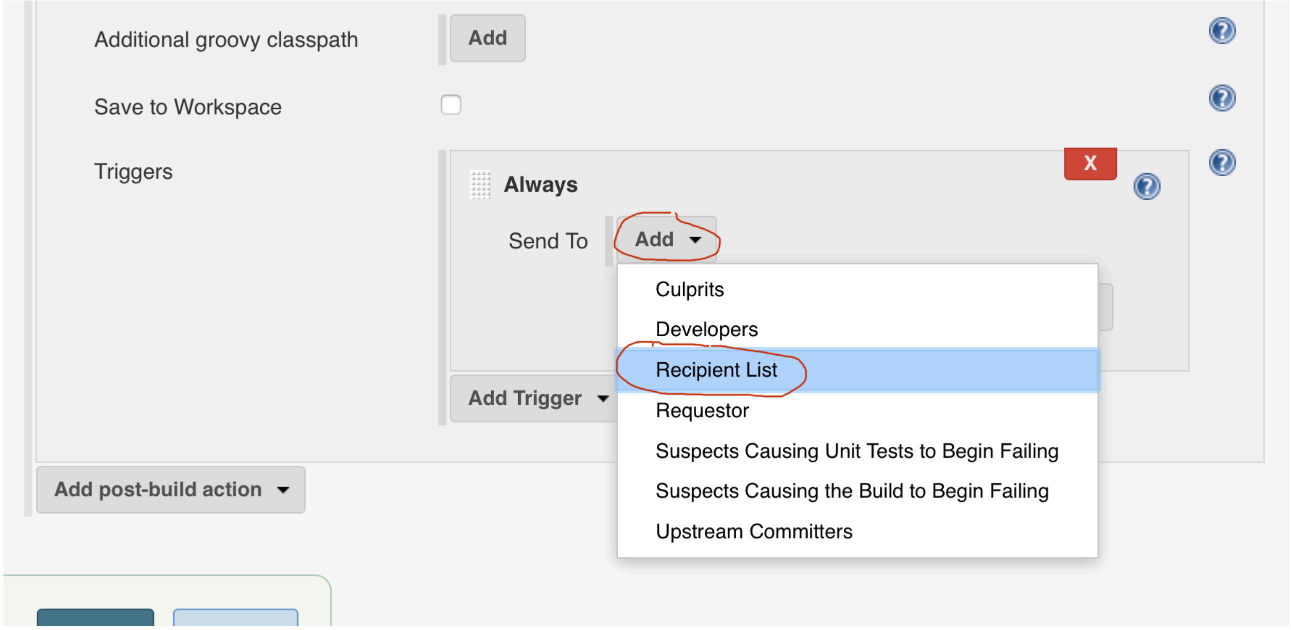
Do Not Attach Build Log
✓ Attach Build Log
Compress and Attach Build Log

Content Token Reference

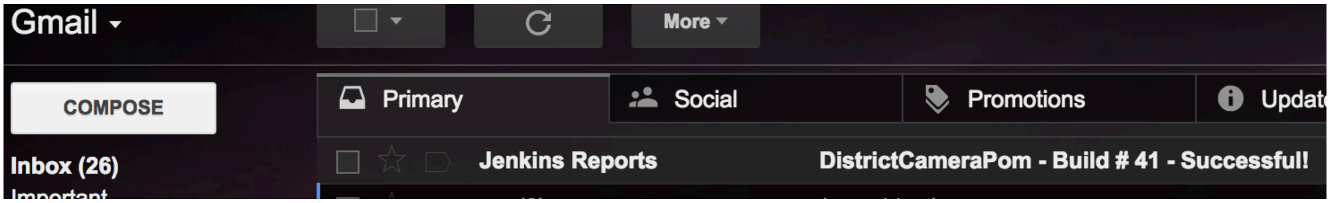
6. After done with attachment click on "Advanced Settings" button



7. Click on "Add" and select "Recipient List" (because we set "Recipient List" in the step 4 above) and click on "Apply" and/or "Save" button(s)



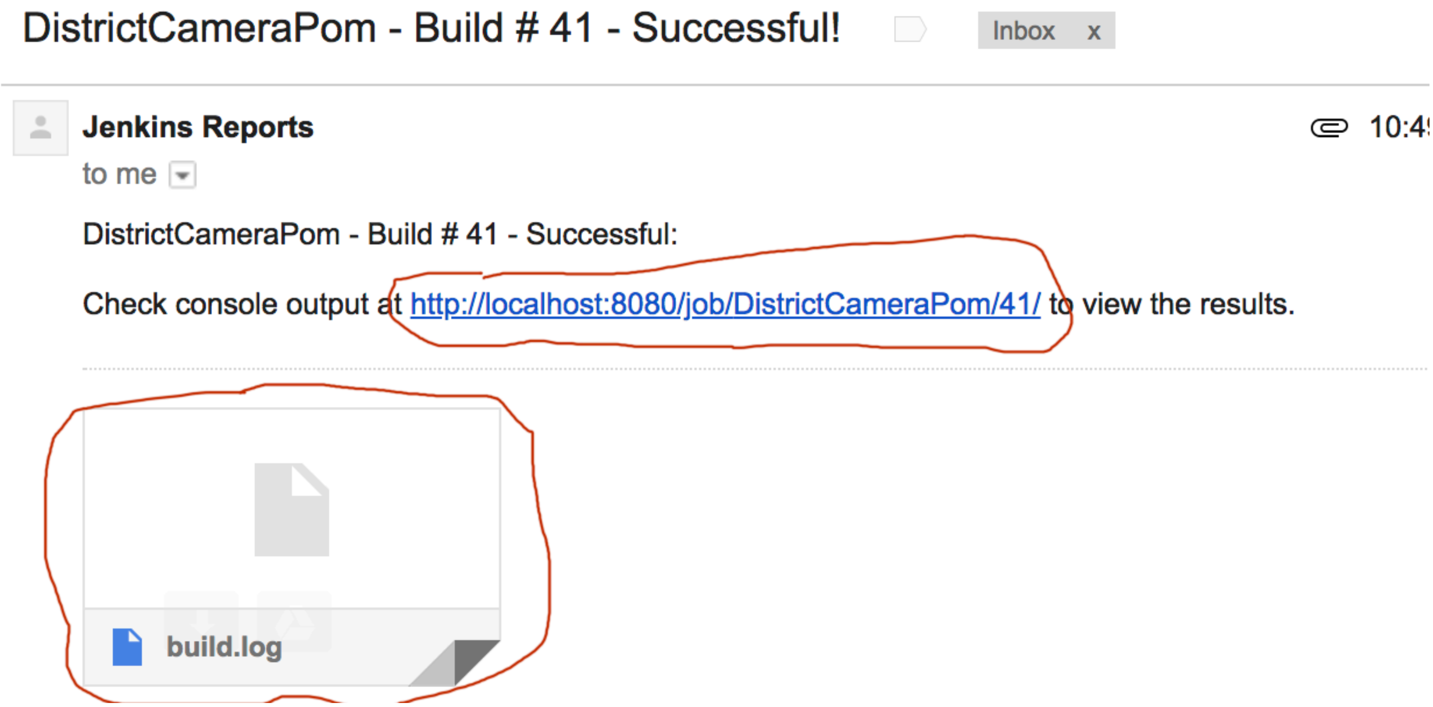
8. After first triggered or manually build you should receive an email report. Open the email.



Jenkins Reports DistrictCameraPom - Build # 41 - Successful!

9. To view the console output results, click on the link (see console Output pic below)

To view the build log, click on the attachment or go to above mentioned link.

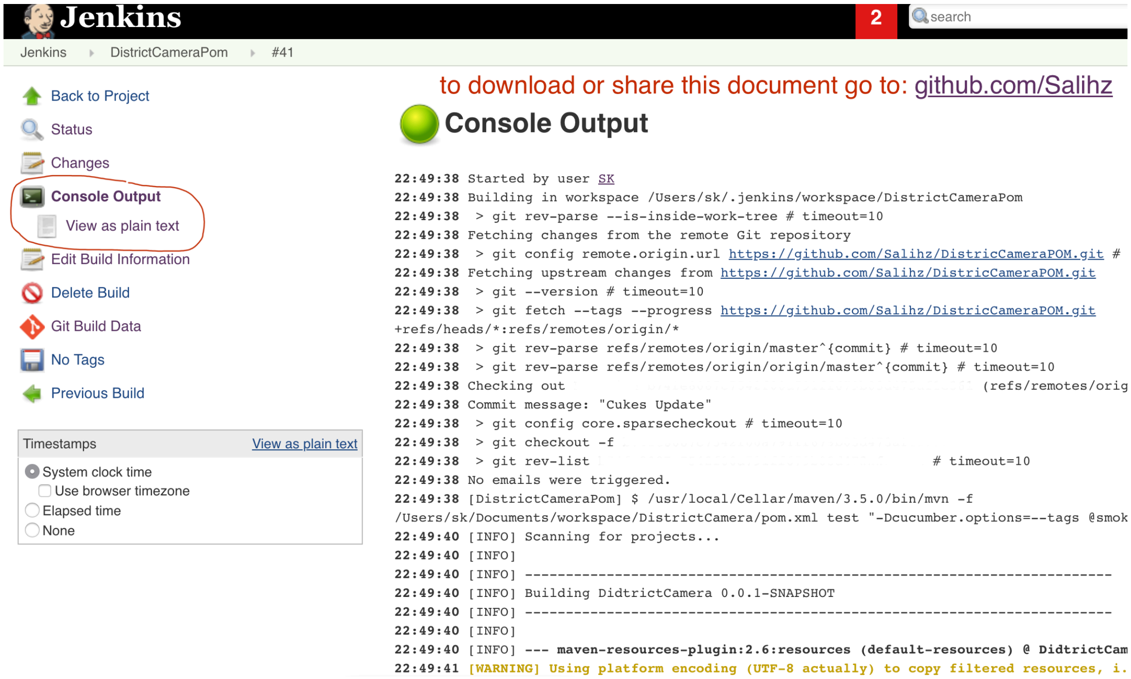


DistrictCameraPom - Build # 41 - Successful!

DistrictCameraPom - Build # 41 - Successful:

Check console output at http://localhost:8080/job/DistrictCameraPom/41/ to view the results.

Click on console output then click on "View as plain text" to see build log



Console Output

```
22:49:38 Started by user SK
22:49:38 Building in workspace /Users/sk/.jenkins/workspace/DistrictCameraPom
22:49:38  > git rev-parse --is-inside-work-tree # timeout=10
22:49:38 Fetching changes from the remote Git repository
22:49:38  > git config remote.origin.url https://github.com/Salihz/DistricCameraPOM.git #
22:49:38 Fetching upstream changes from https://github.com/Salihz/DistricCameraPOM.git
22:49:38  > git --version # timeout=10
22:49:38  > git fetch --tags --progress https://github.com/Salihz/DistricCameraPOM.git
+refs/heads/*:refs/remotes/origin/*
22:49:38  > git rev-parse refs/remotes/origin/master^{commit} # timeout=10
22:49:38  > git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
22:49:38 Checking out [redacted] (refs/remotes/orig
22:49:38 Commit message: "Cukes Update"
22:49:38  > git config core.sparsecheckout # timeout=10
22:49:38  > git checkout -f [redacted]
22:49:38  > git rev-list [redacted] # timeout=10
22:49:38 No emails were triggered.
22:49:38 [DistrictCameraPom] $ /usr/local/Cellar/maven/3.5.0/bin/mvn -f
/Users/sk/Documents/workspace/DistrictCamera/pom.xml test "-Dcucumber.options=--tags @smok
22:49:40 [INFO] Scanning for projects...
22:49:40 [INFO]
22:49:40 [INFO] ------------------------------------------------------------------------
22:49:40 [INFO] Building DidtrictCamera 0.0.1-SNAPSHOT
22:49:40 [INFO] ------------------------------------------------------------------------
22:49:40 [INFO]
22:49:40 [INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ DidtrictCam
22:49:41 [WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.
```

Links:

https://jenkins.io

https://wiki.jenkins.io/display/JENKINS/Home

https://issues.jenkins-ci.org/secure/Dashboard.jspa