



zenika
<animés par la passion>

Jenkins Configuration Details

Version 1.18-SNAPSHOT

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Table 1. History

Date	Author	Detail
2018-09-19	bcouetil	- Sample asciidoctor maven project published on Github - Github & LinkedIn links - Sample project tree - new images + resizing and positioning
2018-08-29	bcouetil	Asciidoc HTML look & feel changes
2018-08-23	bcouetil	Initial commit



1. Server configuration

Connect to Jenkins homepage.

1.1. Plugins installation



This has to be done only for a new Production Line

- Go to **Jenkins** → **Administration Jenkins** → **Gestion des plugins**
- Update all plugins which have an update available
- Select **Disponibles** (=available) and install :
 - Pipeline Maven Integration
 - Throttle Concurrent Builds Plug-in
 - To be able to force non concurrent builds
 - Xvnc
 - To have a virtual screen if needed in tests
 - Naginator
 - For retry on failure
 - Gerrit Trigger
 - To launch job on gerrit update
 - HTML Publisher plugin
 - To have the **Maven Reporting** link when "maven site" is launched
 - Monitoring
 - To see nice health data of Jenkins on <https://bpmfactory.s2-eu.nvx.com/jenkins/monitoring>
 - JUnit Attachments
 - for enhanced job reporting
 - Logstash
 - To send jenkins jobs output to logstash then elastic

- diskcheck
 - Check filesystem space on slave before a build
- disk-usage
 - Show disk usage per build, configuration in **Administrer Jenkins** → [**Configurer le système**] → **Utilisation du disque**
- AnsiColor
 - To allow colors in build logs
- Simple Theme Plugin
 - to change Jenkins basic theme

1.2. Change Theme



This has to be done only for a new Production Line

- Have the Simple Theme Plugin installed
- Navigate **Administrer Jenkins** → [**Configurer le système**] → **Theme** section
 - URL of theme CSS = <https://cdn.rawgit.com/afonsof/jenkins-material-theme/gh-pages/dist/material-cyan.css>
 - see the author's page for other colors : <http://afonsof.com/jenkins-material-theme/>
 - Save

1.3. Gerrit Trigger Configuration



This has to be done only for a new Production Line

On Jenkins :

- Create the console-master job if not already existing

Create a new freestyle job.

Name it console-master

General

- ☒ [**Restreindre où le projet peut être exécuté**]

- master

Put this **Build** → [**Ajouter une étape au build**] → [**Exécuter un script shell**] → paste this and save :

```
ssh-keygen -y -f /root/.ssh/id_rsa > /root/.ssh/id_rsa.pub
ls -lart /root/.ssh/
more /root/.ssh/id_rsa.pub
```

- Add 1 executor on the master node
 - **Home** → [**État du lanceur de compilations**] → [**maître**] → **Configurer**
- Execute the console-master
- Keep track of what the execution gave for later Gerrit configuration, example :

ssh-rsa

```
AAAAB3NzaC1yc2EAAAADAQABAAQDKGER5oLwkNhcCYtTzmUQooA+1mdrjIGi84AVs0HyNpsMqFBhkpxfImvopvKLYiztXUA15dwwDsPWq1tUcy/4N
WqKnMTQA57xxxT2r8suF/DVLH6fNn8T73mGz9+kT77FXHuaMfmDTqrwPngUYQMm2Y9kTjGhIcH/jseq6jCUawITA0s/6EUbs7jtJ/S+jMb6Ed60S7S/n
R3IzQwVrXMiQjDdFsL8RWEBQ54T4cNia/HMI8MK7mEEF5K008g4Ru3Bidk+VSisPUYFPmNc/tE12RyAjkcwWxrYqFEB5h6RLS0yWXAjCUzjv8T0ov4W
us+ZqNgqUMYtBBf+zQvQC1ub
```

- When finished, remove the executor from master node
- Create a local trigger server
 - **Home → Adminstrer Jenkins → Gerrit Trigger → Add New Server**

- **Gerrit Connection Setting**

- Name = local_server
- Hostname = gerrit
- Frontend URL = <http://gerrit/>
- SSH Port = 29418
- Username = svc-fr-bpmfact
- SSH Keyfile = /root/.ssh/id_rsa

- **Gerrit Reporting Values**

- Verify = <vide>, 1, -1, -1, -1
- Code Review = <vide>, 1, -1, -1, -1

- **Gerrit Verified Commandes**

- Started = vide
- Successful =

```
gerrit review <CHANGE>,<PATCHSET> --message 'Build Successful (      ) <BUILDS_STATS>' --verified
<VERIFIED>
```

- **Failed =**

```
gerrit review <CHANGE>,<PATCHSET> --message 'Build Failed ( _ ) <BUILDS_STATS>' --verified
<VERIFIED>
```

- **Unstable =**

```
gerrit review <CHANGE>,<PATCHSET> --message 'Build Unstable ( ° °) <BUILDS_STATS>' --verified
<VERIFIED>
```

- **Not Built =**

```
gerrit review <CHANGE>,<PATCHSET> --message 'No Builds Executed (      ,) <BUILDS_STATS>' --verified
<VERIFIED>
```

- **Save**

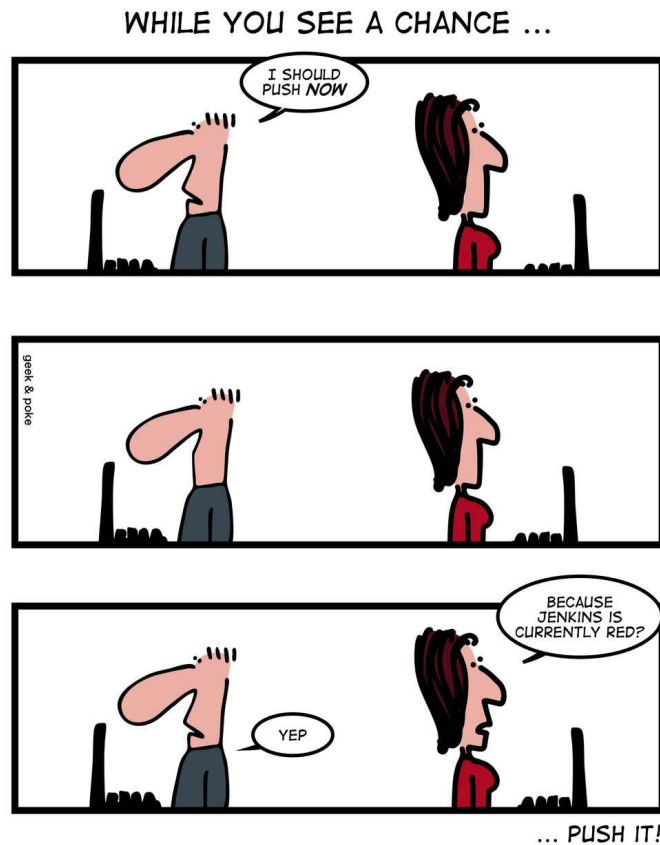
On Gerrit :

- Connect with the technical user (svc-fr-bpmfact / Bpm-fact0ry)

- You may have to use a secondary browser, since authentication is very persistent on Gerrit
- Click on the user top right → **Settings** → **SSH Public Keys** → [**Add Key...**]
- Add the public key content from Jenkins server (the one asked to be kept track earlier), starting with **ssh-rsa**

On Jenkins :

- Test the earlier configured connection of the trigger with **Test Connection** while editing local_server
- Restart jenkins with : <https://bpmfactory.s2-eu.nvx.com/jenkins/safeRestart>
- The Gerrit trigger should be up and running



1.4. Administration



This has to be done only for a new Production Line

1.4.1. Overall configuration

Connect to Jenkins configuration page : <https://bpmfactory.s2-eu.nvx.com/jenkins/configure>

Propriétés globales

- JAVA_HOME = /usr/

Jenkins Location

- Adresse email de l'administrateur système = xxxxx@nvx.com

Extended E-mail Notification

- SMTP server = smtp.nvx.fr

- Default user E-mail suffix = @nvx.com

Notification par email

- Serveur SMTP = smtp.nvx.fr
- Suffixe par défaut des emails des utilisateurs = @nvx.com

Save.

1.4.2. Tools configuration

Connect to Jenkins tools configuration page : <https://bpmfactory.s2-eu.nvx.com/jenkins/configureTools/>

Maven

- Nom = Maven 3.5
- Version = 3.5.2

Logstash Plugin

- Indexer type = ELASTICSEARCH
- Host name = <http://frpardge.corp.nvx.com>
- Port = 9200
- Key = /jenkins/builds

Save.

1.5. Allow CSS on published HTML



This has to be done only for a new Production Line

- Create a pipeline "css-support"
- Build Triggers
 - Construire périodiquement
 - Planning = 0 10,15,20 * * *
- Pipeline

```
println(System.getProperty("hudson.model.DirectoryBrowserSupport.CSP"))
System.setProperty("hudson.model.DirectoryBrowserSupport.CSP", "")
println(System.getProperty("hudson.model.DirectoryBrowserSupport.CSP"))
```

- Uncheck **Use Groovy Sandbox** and save

1.6. SonarQube token

To be able to upload quality results to SonarQube, you have to create a token.

Go to SonarQube application on the PL → **YourName** → **My Account** → **Security** → Name = Jenkins → **Generate**

Now maven can upload results to SonarQube with something like :

1.7. ssh key on remote server



This has to be done only for a new remote server

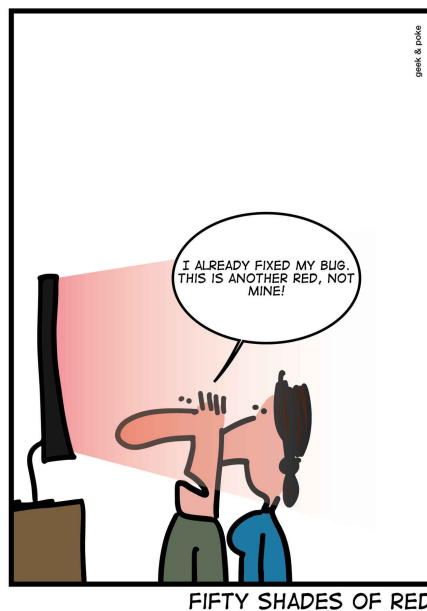
If you have a remote server where you deploy your artifacts for further developments or tests : * note the result of the slavePrep.sh script under **Here is this server's ssh public key**. Here is an example

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQDZRLfTsI+cTRjbhYhnDvIOI3LsexMiJpwcBmeuJrISnEdh1LRPlviQjtI1h7NCihejVIPgvzyMVn3tMLsvABBXLtbV
FIetOudpJn+8isnYAWWaaqX2fce/BqjLC26ygR4n25sqT0/GE9AhV5uBPbYTr4HCrH9Wzd8nU13DXm8C0hxUKh1+Uwm47KB11fVH/boIUygocIRu1FXS9TJy
MU0qFf3GGmDXs56VTe4ZQtPBHJ1k1RXQQc6UIhTbdLpedo4Khvzr7TpdVZg13qXZt35/t7Gu41bImHS1N64TKhaxAYgCPjYKgl9tAWJpEkk3WzXghohLivIQ
PInu5h3uvckH jenkins@b43496a2520e
```

- Connect on the remote server via SSH
- add the key to ~/.ssh/authorized_keys file

1.8. Pipelines creations

1.8.1. The Review pipeline



This will be the review pipeline with steps from checkout to quality check. This pipeline is a "pipeline as code".

Go to Jenkins home page :

<https://bpmfactory.s2-eu.nvx.com/jenkins>

- Click **New Item**
- Choose a name : CG-WM_P1_Review
- Choose Pipeline type

General

- Description = This is the review pipeline fired by Gerrit on non yet validated push
- Check **Supprimer les anciens builds**
 - Strategy = Log Rotation
 - Nombre de builds à conserver = 10

Build Triggers



In the field **Choose a Server**, **Any Server** won't work

- Choose **Gerrit event**

Gerrit Trigger

- Choose a Server = local_server
- Trigger on = Patchset Created
- Gerrit Project
 - Type = Plain
 - Pattern = cg-wm
 - Branches
 - Type = Plain
 - Pattern = master

Advanced Project Options

None.

Pipeline

- Definition = Pipeline script

Pipeline content to copy/paste

```
#!/groovy

properties([
  buildDiscarder(logRotator(artifactDaysToKeepStr: '', artifactNumToKeepStr: '', daysToKeepStr: '', numToKeepStr: '7')),
  [$class: 'ThrottleJobProperty',
   categories: [],
   limitOneJobWithMatchingParams: false,
   maxConcurrentPerNode: 0,
   maxConcurrentTotal: 0,
   paramsToUseForLimit: '',
   throttleEnabled: false,
   throttleOption: 'project'],
  pipelineTriggers([
    gerrit(customUrl: '',
           gerritProjects: [[branches: [[compareType: 'PLAIN', pattern: 'master']],
                                compareType: 'PLAIN', disableStrictForbiddenFileVerification: false, pattern: 'cg-wm']],
           serverName: 'local_server',
           triggerOnEvents: [patchsetCreated(excludeDrafts: false, excludeNoCodeChange: false, excludeTrivialRebase: false)])
  ])
])
```

```

node {
  timeout(30) {
    try {
      stage('Checkout') {
        cleanWs() // requires workspace cleanup plugin to be installed
        echo "**** Starting checkout of patchset ${GERRIT_PATCHSET_NUMBER} on change number ${GERRIT_CHANGE_NUMBER}"
        git username: 'svc-fr-cric', password: '****', url: 'https://cric.pl.s2-eu.nvx.com/gerrit/cg-wm.git'
        def changeBranch = "change-${GERRIT_CHANGE_NUMBER}-${GERRIT_PATCHSET_NUMBER}"
        sh "git fetch origin ${GERRIT_REFSPEC}:${changeBranch}"
        sh "git checkout ${changeBranch}"

        def v = version(readFile('pom.xml'))
        echo "Building version ${v}"
      }
      stage('Compilation') {
        //slaves are wiped out randomly, so we prepare them on each execution
        sh '$WORKSPACE/src/scripts/slavePrep.sh'

        withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
          //clean to deploy libs to local maven repository
          sh "mvn clean dependency:purge-local-repository"
          //The assembly is postponed : it needs some further generated PDF
          sh "mvn install verify -DskipTests -Dassembly.skipAssembly=true"
        }
      }
      stage('Verification'){
        parallel (
          "Unit Tests" : {
            wrap([$class: 'Xvnc', takeScreenshot: false, useXauthority: true]) {
              withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
                sh "mvn test -s cg-settings.xml -Dcheckstyle.skip=true"
                //Maven auto reports JUnit surefire results
              }
            }
          },
          "Documentation" : {
            sh '$WORKSPACE/src/scripts/asciidocOnlyModified.sh'
            //get history from git to asciidoc documentation
            sh '$WORKSPACE/src/scripts/asciidocHistory.sh $WORKSPACE'
            withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
              //validate produces the date for PDF
              sh "mvn validate asciidoctor:process-asciidoc antrun:run@pdfsAddVersion -s cg-settings.xml
-Dcheckstyle.skip=true"
            }
            archiveArtifacts artifacts: '**/*.pdf', excludes: '**/test*.pdf', allowEmptyArchive: true
          }
        )
      }
      stage('Integration Tests'){
        //integration tests have to be after documentation for the tracker zip to include the user manual
        wrap([$class: 'Xvnc', takeScreenshot: false, useXauthority: true]) {
          withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
            try{
              //we do not install, since these suspicious jars could be misused by other projects
              sh "mvn verify failsafe:verify -Dcg.ut.skip=true -Dcheckstyle.skip=true"
            } finally {
              //Maven does not auto report JUnit failsafe results
              junit '**/target/failsafe-reports/*.xml'
            }
          }
        }
      }
      stage('Quality Gate') {
        withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
          sh "mvn sonar:sonar -Dsonar.login=0d1356516289799b179c6c7f851c9d4464ab04e2
-Dsonar.host.url=http://sonarqube:9000/sonarqube"
        }
        sh '$WORKSPACE/src/scripts/sonarStatus.sh'
      }
    }
  }
}

```

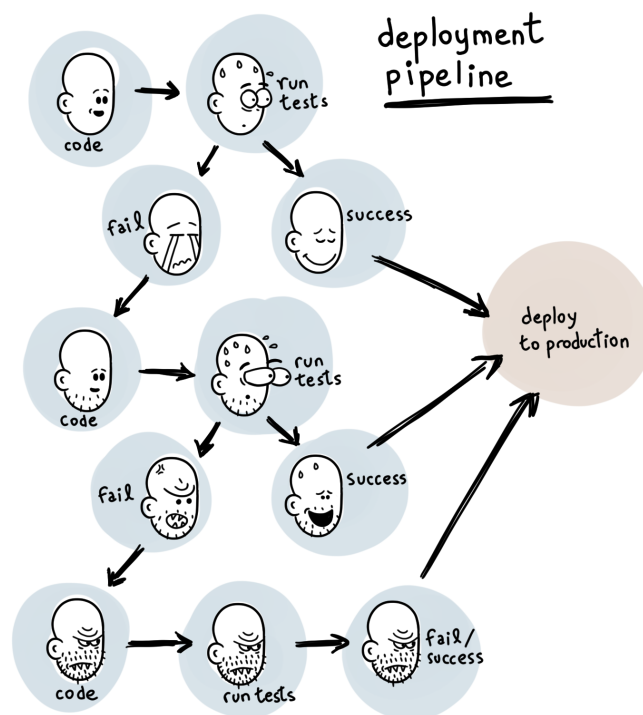
```

stage('Assembly') {
    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
        sh "mvn install -DskipTests -Dcheckstyle.skip=true"
        sh "mvn dependency:purge-local-repository"
    }
    archiveArtifacts artifacts: '**/target/*.zip'
}
} catch (any) {
    step([
        $class: 'Mailer', notifyEveryUnstableBuild: true,
        recipients: emailxrecipients([[ $class: 'CulpritsRecipientProvider'],
        [ $class: 'RequesterRecipientProvider' ]])
    ])
    currentBuild.result = 'FAILURE'
}
} //timeout
logstashSend failBuild: false, maxLines: 1000
} //node

@NonCPS
def version(text) {
    def matcher = text =~ '<version>(.)</version>'
    matcher ? matcher[0][1] : null
}

```

1.8.2. The Deploy pipeline



This will be the main pipeline with everything from checkout to deployment. This pipeline is a “pipeline as code”.

Go to Jenkins home page :

<https://bpmfactory.s2-eu.nvx.com/jenkins>

- Click **New Item**
- Choose a name : CG-WM_P2_Deploy
- Choose **Pipeline** type

General

- Check **Supprimer les anciens builds**
 - Strategy = Log Rotation
 - Nombre de builds à conserver = 10

Build Triggers

- Choose « Scrutation de l'outil de gestion de version »
- Planning = H * * * *

Advanced Project Options

None.

Pipeline

Definition = Pipeline script from SCM

SCM = Git

- Repositories
 - Repository URL = <http://bpmfactory.s2-eu.nvx.com/gerrit/p/cg-wm.git>
 - Credentials = svc-fr-bpmfact / Bpm-factOry
- Branches to build : */master

Script Path = Jenkinsfile-2-deploy-to-dev

☒ Lightweight checkout

Pipeline content (for information)

```
#!/groovy
node {
    timeout(60) {
        try {
            stage('Checkout') {
                cleanWs() // requires workspace cleanup plugin to be installed
                retry(3) {
                    checkout scm
                }
                def v = version(readFile('pom.xml'))
                echo "Building version ${v}"
            }
            stage('Compilation') {
                //slaves are wiped out randomly, so we prepare them on each execution
                sh '$WORKSPACE/src/scripts/slavePrep.sh'
                withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
                    //used to deploy libs to local maven repository
                    sh "mvn clean"
                    //The assembly is postponed : it needs some further generated PDF
                    sh "mvn install -DskipTests -Dassembly.skipAssembly=true"
                }
            }
            stage('Unit Tests') {
                wrap([class: 'Xvnc', takeScreenshot: false, useXauthority: true]) {
                    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
                        sh "mvn test -Dcheckstyle.skip=true"
                        //Maven auto reports JUnit surefire results
                    }
                }
            }
        }
    }
}
```

```

}
stage('Documentation') {
    //get history from git to asciidoc documentation
    sh '$WORKSPACE/src/scripts/asciidocHistory.sh $WORKSPACE'
    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
        //validate produces the date for PDF
        //javadoc:aggregate is CPU intensive, we don't parallelize for now
        sh "mvn validate asciidoctor:process-asciidoc antrun:run@pdfsAddVersion javadoc:aggregate
-Dcheckstyle.skip=true"
        sh "mvn javadoc:jar -pl cg-utils -Dcheckstyle.skip=true"
    }
    step([$class: 'JavadocArchiver', javadocDir: 'target/site/javadoc', keepAll: true])
    archiveArtifacts artifacts: '**/*.pdf,**/*-javadoc.jar', excludes: '**/test*.pdf'
}
stage('Integration Tests') {
    wrap([$class: 'Xvnc', takeScreenshot: false, useXauthority: true]) {
        withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
            try {
                sh "mvn verify failsafe:verify -Dcg.ut.skip=true -Dcheckstyle.skip=true"
            } finally {
                //Maven does not auto report JUnit failsafe results
                junit '**/target/failsafe-reports/*.xml'
            }
        }
    }
}
stage('Quality Check') {
    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
        sh "mvn sonar:sonar -Dsonar.login=0d1356516289799b179c6c7f851c9d4464ab04e2
-Dsonar.host.url=http://sonarqube:9000/sonarqube"
    }
    sh '$WORKSPACE/src/scripts/sonarStatus.sh'
}
stage('Assembly') {
    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: false)]) {
        sh "mvn install -DskipTests -Dcheckstyle.skip=true"
    }
    //archiveArtifacts is now in "Deployment" phase since we download packages
}
stage('Publication'){
    parallel (
        "Deployment to Nexus and IS": {
            withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
                //sh 'mvn wagon:update-maven-3'
                sh 'mvn deploy -DskipTests -Dassembly.skipAssembly=true -Dcheckstyle.skip=true -s cg-settings.xml'
            }
            sh "ssh devops@frpardge.corp.nvx.com 'cd /opt/sagis/profiles/IS_default/bin;./restart.sh'"
            sh '$WORKSPACE/src/scripts/deployJavadoc.sh'
            sh '$WORKSPACE/src/scripts/getPackages.sh'

            //SchemaSpy must not fail the deployment so we put it after deployment
            sh '$WORKSPACE/src/scripts/schemaspy.sh'
            publishHTML([
                allowMissing      : false,
                alwaysLinkToLastBuild: false,
                keepAll           : true,
                reportDir         : 'target/schemaspy',
                reportFiles        : 'index.html',
                reportName         : 'DB Schema'])

            archiveArtifacts artifacts: '**/target/*.zip'
        },
        "Reporting" : {

            //Git Inspector
            sh 'mkdir target/gitinspector'
            sh 'export PYTHONIOENCODING=utf-8 ; gitinspector --format=html -rTw > target/gitinspector/index.html'
            publishHTML([
                allowMissing      : false,
                alwaysLinkToLastBuild: false,

```

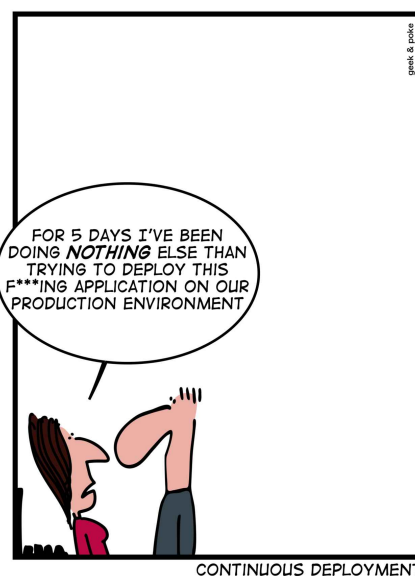
```

        keepAll      : true,
        reportDir    : 'target/gitinspector',
        reportFiles   : 'index.html',
        reportName    : 'Git Inspector'])

//Maven Site
withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
    sh 'mvn site site:stage -DskipTests -Dcheckstyle.skip=true -s cg-settings.xml'
}
publishHTML([
    allowMissing      : false,
    alwaysLinkToLastBuild: false,
    keepAll           : true,
    reportDir          : 'target/staging',
    reportFiles        : 'index.html',
    reportName         : 'Maven Reporting'])
}
)
}
} catch (any) {
    step([
        $class: 'Mailer', notifyEveryUnstableBuild: true,
        recipients: emailxtrrecipients([[ $class: 'CulpritsRecipientProvider'],
        [ $class: 'RequesterRecipientProvider']])
    ])
    currentBuild.result = 'FAILURE'
}
} //timeout
logstashSend failBuild: false, maxLines: 1000
} //node

@NonCPS
def version(text) {
    def matcher = text =~ '<version>(.)</version>'
    matcher ? matcher[0][1] : null
}

```



1.8.3. The Release pipeline

This is the release pipeline launched manually at will when an external release is needed. This pipeline is a "pipeline as code".

Go to Jenkins home page :

<https://bpmfactory.s2-eu.nvx.com/jenkins>

- Click **New Item**
- Choose a name : CG-WM_P3_Release
- Choose **Pipeline** type

General

- Check **Ce build a des paramètres**
 - Paramètre texte
 - RELEASE_VERSION
 - the release version, with pattern 1.YY.MM[.increment] (ex : 1.17.5.9)
- Check **Supprimer les anciens builds**
 - Strategy = Log Rotation
 - Nombre de builds à conserver = 10

Build Triggers

No trigger (manual launch).

Advanced Project Options

None.

Pipeline

Definition = Pipeline script from SCM

SCM = Git

- Repositories
 - Repository URL = <http://bpmfactory.s2-eu.nvx.com/gerrit/p/cg-wm.git>
 - Credentials = svc-fr-bpmfact / Bpm-factOry
- Branches to build : */master

Script Path = Jenkinsfile-4-release

☒ Lightweight checkout

Pipeline content (for information)

```
#!/groovy

//Release is a manual firing (and should always be)
//No need to do the whole process, trunk is always trustworthy with our setup
//Just check that the merge pipeline (DeployToDev) is successful

node {
    timeout(30) {
        try {
            stage('Checkout') {
                cleanWs() // requires workspace cleanup plugin to be installed
                retry(3) {
                    checkout scm
                }
                echo "Releasing version $RELEASE_VERSION"
            }
            stage('Documentation') {
```



```

//get history from git to asciidoc documentation
sh '$WORKSPACE/src/scripts/asciidocHistory.sh $WORKSPACE'

withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
    //to put jars in local maven repository if needed
    sh "mvn clean"
    sh "mvn versions:set -DnewVersion=$RELEASE_VERSION"
    //without this local installation, modules are searched on internet on mvn validate
    sh "mvn install -DskipTests -Dassembly.skipAssembly=true"
    //we launch some (quick) tests that contains the generation of service list for the cg-utils doc
    sh "mvn test -pl cg-utils"
    //time to launch the actual doc generation
    //validate produces the date for PDF
    sh "mvn validate asciidoctor:process-asciidoc antrun:run@pdfsAddVersion javadoc:aggregate
-Dcheckstyle.skip=true"
    sh "mvn javadoc:jar -pl cg-utils -Dcheckstyle.skip=true"
}

step([$class: 'JavadocArchiver', javadocDir: 'target/site/javadoc', keepAll: true])
archiveArtifacts artifacts: '**/*.pdf,**/*-javadoc.jar', excludes: '**/test*.pdf'
}
stage('Deployment') {
    //Deployment is after documentation because a pdf must be in the zip

    //Delete tag if this is a replayed-on-error build...

    //...locally
    sh "git tag -d cg-wm-$RELEASE_VERSION || true"

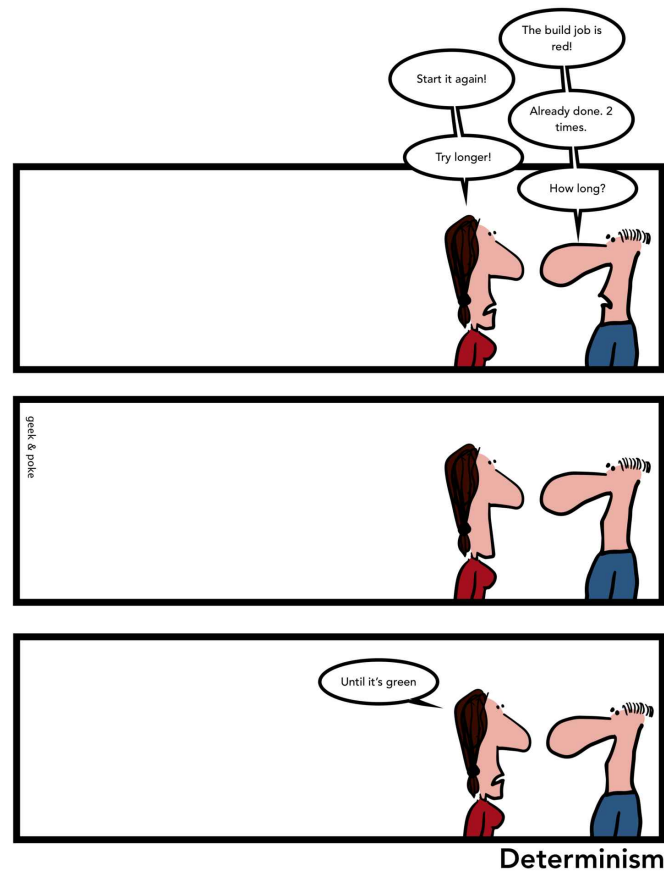
    //...remotely
    //Special characters have to be URL encoded : https://stackoverflow.com/questions/6172719/escape-character-in-
git-proxy-password
    sh "git push --force --delete https://svc-fr-cric:****@cric.pl.s2-eu.nvx.com/gerrit/p/cg-wm.git cg-wm-
$RELEASE_VERSION || true"

    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
        sh "mvn deploy scm:tag -s cg-settings.xml -DskipTests -Dcheckstyle.skip=true"
    }
    sh "$WORKSPACE/src/scripts/deployJavadoc.sh"
    sh "$WORKSPACE/src/scripts/getPackages.sh"
    archiveArtifacts artifacts: '**/target/*.zip'
}
stage('Reporting') {
    withMaven(maven: 'Maven 3.5', mavenOpts: '-Xmx1024M', options: [artifactsPublisher(disabled: true)]) {
        sh "mvn site site:stage -DskipTests -Dcheckstyle.skip=true -s cg-settings.xml"
    }
    publishHTML([
        allowMissing      : false,
        alwaysLinkToLastBuild: false,
        keepAll           : true,
        reportDir         : 'target/staging',
        reportFiles        : 'index.html',
        reportName         : 'Maven Reporting'])
}
} catch (any) {
    step([
        $class: 'Mailer', notifyEveryUnstableBuild: true,
        recipients: emailxtrrecipients([[ $class: 'CulpritsRecipientProvider'],
        [ $class: 'RequesterRecipientProvider']])
    ])
    currentBuild.result = 'FAILURE'
}
} //timeout
logstashSend failBuild: false, maxLines: 1000
} //node

@NonCPS
def version(text) {
    def matcher = text =~ '<version>(.)</version>'
    matcher ? matcher[0][1] : null
}

```

1.9. Troobleshooting



1.9.1. Disk space usage > 90 %

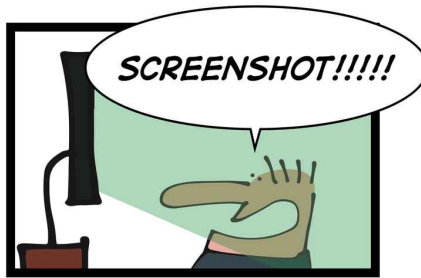
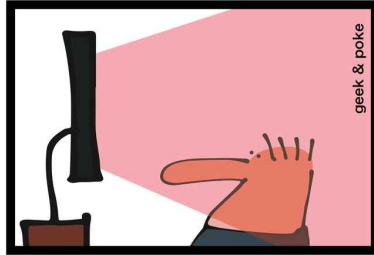
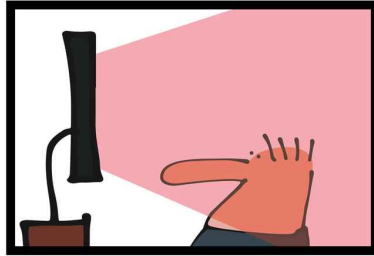
If the disk space usage is too high and your build fails at the start for this reason, you can purge some folders with the below actions.

- Edit the **console** job.
- Put these lines and save :

```
du --max-depth=1 /home/jenkins/workspace/ | sort -n -r | head -n 30  
find /home/jenkins/workspace/ -maxdepth 1 -mtime +90 -type d -depth -print
```

- Launch the job
- Following the results, do the necessary deletions
- If there are some ws-cleanup directory, you can delete them safely :

```
rm -rf /home/jenkins/workspace/*ws-cleanup*/ ???
```



'Ah, stay a while! You are so lovely!'

2. Appendix

2.1. Revision marks

Differences since last tag

