**1) HOW DO YOU SETUP A JOB IN JENKINS :**

in the jenkins job creation what we have to do is we have to check the CI job name first from the developer once we will give the branch name we have the format like (continues integration) CI-jobname-branch name and also what we have to do is we have to click on the free style build or copy existing job so if you have already reference job we can copy existing job we can use or first time you want to do create the job you have to click on the free style build and then there you have to select the each and every details you have to provide like first creadentials you pass like if you want to give the that particular job access to the developer just take the developer id and secure metrix where you will provide the name of the your developer and give the read permission and build permission if you want you can give workspace also and then coming to next stage we have to give the RESTRICT WHERE THIS PROJECT CAN RUN it means where that particular you want to run in the jenkins i mean nodes that node name you provide in that option and then if you want to perform deployment process also in that particular job so i that scenario what you have to do is you have to give the build is parameterised option there you have to provide text environment wherever you want to deploy so for that you have to select few things only string parameter and text parameter you have to select in the build is parameterised option and coming to version control system(SCM) there we are using the SVN so whatever svn url developer checked in the source to the particular repository url that url you have to get from the developer so that url you have to give there and once it is done REDHAT SATELITE SERVER we are using for pushing the packages from the jenkins to server so for that RHS push plugin we are using for that so in that what you have to do is you have to give the channel names where exactly you want to push the rpm so in the job configuration only we have to give after that we save the configuration then click on the build now if you want to perform the release also for that particular job you have to install the plugin like m2 release plugin already we have so using the m2 release plugin we have to click on the perform maven release and release the packages this is the way i can do

**2) WHAT IS THE WORK FLOW OF JENKINS ?**

the workflow in jenkins we are following like totally seven stages we configure inside the job first is code commit is completed second stage is build phase third phase is code quality and fourth phase is release phase and fifth phase is uploading packages into the server (RHS) and sixth one is deployment and seventh one is testing these are stages

1.code commit

2.build phase

3.code quality

4.release phase

5.uploading packages into server(RHS)

6.testing phase and

7.Deployment

these seven stages we automated within the single job how to automate is so for this things we enable the pollscm inside the job what exactly pollscm will do is whenever you checked in the code into the version controlling system automatically my poll always check the code like whenever changes happen or not in version controlling it will pull the changes and it will create the packages whenever its start the building my sonarqube will enable and it will check the code quality basically we are using the code quality purpose sonarqube here we have a different different stages critical, minor , major , blocker, basically whenever that critical issue is happen it will stop the build process it will not allow to next level suppose if there is no issues on the code then it will go to release phase once it is completed packages will be upload into the redhat satelite server (RHS) finally rundeck we are using for the deploying the packages into the different different environments staging and also UAT and QA so that ip address we are passing from the jenkins job only THE BUILD IS PARAMETERISED there we are passing the text parameters of the ip address where you want to deploy your package so once it is completed the configuration part after that i will check in the code after that step by step it will execute in the jenkins job finally i need to login to the particular server whether the deployment happened or not so this work flow we are following

**3)WHAT KIND OF APPLICATIONS YOUR USING FOR JENKINS ?**

we are using java applications

**WHAT IS THE REQUIREMENT FOR THAT ?**

MAVEN build tool we require to java application and version control is require and CI tool is require and deployment tool is require.

**4) HAVE YOU AUTOMATED ANY OF THE TASK USING THE SHELL SCRIPT WHAT ARE TASK ?**

so in my project two tasks we automated very recently that is one thing is doing the deployment using the RUNDECK basically RUNDECK is the deployment tool here it will work as the using the shell script only ------( explain about Rundeck )

**5)WHAT IS THE DIFFERENCE BETWEEN DEVOPS ENGINEER AND BUILD AND RELEASE ENGINEER ?**

i started career as build engineer ,

when i am working as a build engineer that time we are using just manual deployment and we are not using monitoring tools to monitor our application so this difference i found and also the way process also speed compare to the normal types of build and at a time i can deploy the package into the multiple systems and i can save my time and i can fix the bugs as soon as possible so this are the differences i found using the devops

**6)IN JENKINS HOW DO YOU INVOKE ANT JOB IN JENKINS OR HOW DO YOU START A JENKINS JOB ?**

first we need to create a job first thing after that we have to locate that the checkout path where exactly you want to get that particular location version controlling we have to set after that we have to invoke that particular build tool either MAVEN OR ANT we have to invoke once it is done then we have to trigger the build.

**HOW MANY WAYS YOU CAN INVOKE A JENKINS JOBS ?**

manually we can build and pollscm we can build and build periodically we can give and also we can pass the post commit hooks also we can give

**7) I WANT TO TRIGGER A BUILD DAILY AT 4 AM HOW SHOULD YOU DO THAT ?**

we can pass the first \* \* \* \* and last star enable the 04 we can give , first star is the minutes.

**8) WHAT TYPE OF ARTIFACTS IN YOUR PROJECT ?**

we have rpm and jar

**9)WHAT IS THE MIDDLE WEAR , WHERE IS THE APPLICATION BEING HOSTED ?**

application is hosted in RHGV

**10) can you briefly tell me steps and configuration when your install SVN in your linux ?**

here subversion you need to install and subversion bitnami package we need to install in the CentOS so basically that package once we install subversion which version we want we can install after that once we setup the client then we will create the repository in linux machine where apache running inside that server after that we can add the repositories one by one in the configuration file whenever we require that CentOS is repositories we will check out the code from the SVN repository and then we can do the modification and check in into the repository

**11) IS THERE ANY ENVIRONMENT VARIABLES YOU SET ?**

yeah we will set the environment variables in bashrc in linux and in window i will go program files86 will get the subversion location and i will set into the advanced setting environment variables.

**12) WHAT AND ALL DEFINE IN BUILD.XML file ?**

in the build.xml file first we will start from the project name and default value , that default value which one we have the stages i mean compile package run so which target you want to run that you should mention from the default location accordingly first we should mention compiling that means target name = compile there i give the java src location and destination location once compilation is done where its store that location i should pass coming to the next level is package so here i will write the dependency target name = package depend on the compile so anyway after compilation only it will go to package it will read the package there jar files destination i will pass and then .class files location i will share because once compilation is completed .class files will be generated and .class files will be converted as the package so i will pass the location of .class files after that last stage is run whatever files we created i will run that jar file so this is the steps we are writing in the build.xml

**13) DO YOU INCLUDE YOUR DEPLOYMENT IN YOUR BUILD.XML FILE ?**

no that we are doing from outside which are running from shell script will write that

**14)WHAT IS THE WORK FLOW OF JENKINS ?**

the workflow in jenkins we are following like totally seven stages we configure inside the job first is code commit is completed second stage is build phase third phase is code quality and fourth phase is release phase and fifth phase is uploading packages into the server (RHS) and sixth one is deployment and seventh one is testing these are stages

1.code commit

2.build phase

3.code quality

4.release phase

5.uploading packages into server(RHS)

6.testing phase and

7.Deployment

these seven stages we automated within the single job how to automate is so for this things we enable the pollscm inside the job what exactly pollscm will do is whenever you checked in the code into the version controlling system automatically my poll always check the code like whenever changes happen or not in version controlling it will pull the changes and it will create the packages whenever its start the building my sonarqube will enable and it will check the code quality basically we are using the code quality purpose sonarqube here we have a different different stages critical, minor , major , blocker, basically whenever that critical issue is happen it will stop the build process it will not allow to next level suppose if there is no issues on the code then it will go to release phase once it is completed packages will be upload into the redhat satelite server (RHS) then

it will go to last phase that is deployment phase so in the deployment phase i will pass the RUNDECK ueid code and then i will write the shell script small script to copy and deploy that into the destination server here where i will pass the deployment servers is in the jenkins we have the option like this build is parameterized there i will pass the environment ips which environment i am doing the deployment either STAGING UAT QA that ip adress i should pass from jenkins after that once that configuration is completed first when i checkin the code i already enable the pollscm for the automation build so when i check in the code by that what jenkins will do is pollscm always it will going to check the polls whenver new changes happen on the code automatically my jenkins will started checkouting the code once checkout is completed it will check the code quality in code quality sonar having the different stages that is CRITICAL MAJOR MINOR BLOCKER AND INFO so each and every phase it will check suppose if the issue is very critical issue it will reflects into the your application it will stop the building there only that is called as critical issue if it is the blocker that will block environment so that time it will stop the building if it is minor issue then only it will go to the building phase if there is no issue package getting created after creating this package then it will go to the uploading the package into the nexus artifactory and then redhat satelite server finally it will read the environment ip address and it will perform the deployment using the shell script gthis is the end to end process.

**that final deployment is in production or**

no , first testing that is the stage environment here we will struck in the production environment because after UAT deployment we need to take the approval from the client for the production deployment so that only we can start proceeding with the production there we will struck for the requirement of the approval.

**16)HOW YOUR COMFORTABLE IN LINUX AND SHELL SCRIPTING ?**

yeah i have good knowledge in LINUX like creating the environment and from scratch linux environments and also good knowledge on installing the new packages new vm creation this kind of things i am good in linux environment.

**SHELL SCRIPTING ,**

yes i have good knowledge we are using main purpose deployment and upgradation of server and also we are using the ruby also for the cookbook writing in the chef deployment and shell we are using for the rundeck .

**17) TOMCAT DEPLOYMENT USING SCRIPT ?**

actually tomcat we are doing the deployment so here totally four stages we will add in the script first stages i will explain after that script will explain so stages is ,

first it will stop the tomcat server and then it will copy the war file or jar file from the location of your jenkins workspace to your webapps folder that is the tomcat location that is secod stage and third point is after that it will extract that zip file into that application that is third point after that fourth point is it will restart the tomcat server

here i will write the script , as usual we will start bin.sh and second line cp command i will do that is the cp location of the workspace to your tomcat webapps location and then once we copy then stop the tomcat that is service **tomcat stop command** i will write and next command is after copying the tomcat there it should be deploy that means the location of the package i will and then unzip space that package name (unzip packagename) after that next line i will end the task next task i will write service tomcat restart after that finally notify i will give email id i will give after deployment it should be like echo success or echo failure

**18) can you briefly explain about lifecycle after release ?**

basically release management we have the monthly production release for that we are writing the implementation plan for that we are using the CHANGE MANAGEMENT TOOL ITSM basically here before we are going to deploy the packages into the production environment we will write change request in the ITSM in the change request i should mention the approval details that means who is taking care the production approvals that leads email id i should configure after that i will write the release nodes in the release nodes i will mention the what and all packages going to install what and all environments i am going to install and also one more document i need to prepare what and all environment you tested that is tested environment details either QA STAGING UAT that details we should mention after that production implementation plan there i should mention the ip address and current release version and next development version this details i should mention in that sheet after that i should send this into the client and then i need to setup the meeting i will explain client in the bridge call developer me and tester and production team guy four people will attend that meeting and first developer will be explain to the client next i will explain about my roles like where i want to deploy to the environment this details i will share to the client after that tester will explain thier work finally client will give the approval then we will proceed into the production release which is monthly release we are going to use after bridge call we will setup for that so infront of client only we are doing this production releases monthly and if any issue happen we have to fix on the bridge call only after completion after the release then we are going to start the next development and then same plan again we will edit the implementation plan and then what and all environment suppose if worstcases anything issue happen we will rollback that into the previous version this structure we are using.