**ROLES AND RESPONSIBILIES IN JENKINS:**

In the JENKINS my roles and responsibility is I can do the administration part like very recently I implemented Jenkins on the different machine end to end administration I can do like installing the GIT,SVN,MAVEN whatever it may be DOCKER everything I can setup own and apart from this I can create the JENKINS JOBS using the version control system I can build the code and also good knowledge in the creating the deployment process and release process I can do monthly releases weekly releases and good knowledge in the also containers also I worked in the docker this kind of activities I performed in the JENKINS.

**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 means 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 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 click on the perform maven release and release the packages this is the way i can do

**HOW MANY DIFFERENT KNIDS OF JOBS WE CAN PERFORM IN DEVOPS (TYPES OF JOBS) :**

automating the Jenkins with the cloud(AWS) using the ECS service I have good knowledge on that and

Basically coming to the types of jobs like FREESTYLE CONFIGURATION we can do and MAVEN jobs we can create and multi job PIPELINE CONFIGURATION we can configure inside the JENKINS so this types of jobs we can configure.

**WHAT IS CONTINUES INTEGRATION :**

Continues integration is like continuesly developing the code continuesly combing the code so that we can fix the bugs as per the time line and also we can reduce the time while we are doing the release in the live.

0011 (pndng)

SVN :

**HOW TO CRAETE A BRANCH :**

How to create a BRANCH is nothing but first we have to create the REPOSITORY inside the REPOSITORY we have to create , before creating the repository you should know that BRANCH you want like inside the branch folder or outside the branch suppose if I want to create outside the branch what I will do “ svn copy (branch URL I will take) ------

**WHICH PROTOCOL YOUR USING IN SVN :**

HTTP Protocol 8080 or 8081 we are using .

**JENKINS :**

**HOW FAMILIER WITH JENKINS :**

I have very good experience in Jenkins from past 3 years I am working

**WE NEED TO SHEDULE FOR EVERY 15 MINUTES JENKINS WHAT IS THE COMMAND FOR THIS :**

For this what we have to do means we have to enable the POLLSCM option in Jenkins whenever my developer wants to checkin source code into Jenkins or repository automatically build needs to trigger we have a crontab format 5 stars we are using so if I want to schedule the every 15 minutes first star I will enable 15 remaining start I will mention as the \* \* \* \* I will give if I save the configuration what it should work is so every 15 minutes I mean whenever my developer check In the source code it will work so this is the POLLSCM schedule format in JENKINS.

0030

**4. what is the difference between SVN AND GIT ?**

**5. WHAT IS THE DIFFERENCE BETWEEN CENTRAILEZED REPOSITORY AND DISTRIBUTED REPOSITORY?**

ANS : distributed repository is nothing distributing the code from one repository to another repository. Example GIT

Centralised repository means directly involving with the central or remote repository. In centralised repository directly we can access REMOTE machine. Example SVN

**6. what is the difference between HARD LINK AND SOFT LINK in linux ..?**

ANS :

**7. what is the difference between GIT and NEXUS repository ?**

**8.what is continues deployment….?**

ANS : continues deployment is nothing but whatever we generated I mean whatever we created package into our environment suppose if I want to continuesly deploy into the each and every environment we can do the review and then we can deploy into the environment.

**0006 :**

**9. what is continues delivery ?**

**10.which continues delivery code will be automatically deploy to the production..?**

ANS : yeah It will deploy into the production safely deploy into the production.

**11. what is the purpose of configuration management ?**

we can do deployment from one server to multiple servers

( or )

ANS : configuration management we can do the deployment on the multiple servers and also we can improve the process of deploying and also each and everything we can automate in Jenkins.

**12.what web application your using ..?**

Jboss web application or to Apache Tomcat web application we are using.

**12.0 . who is maintaining the your JBOSS server application ?**

my client will be take care the jboss application just we are doing deployment

**12.1.what is the sticky bit ?**

**0017**

**13.HOW TO CONFIGURE THE NEXUS WITH JENKINS ?**

First we need to setup the NEXUS configuration “ HOW TO SETUP THE NEXUS CONFIGURATION “ is first we need to install the NEXUS package in the machine after that we need to write settings.xml Basically why settings.xml is required is if I want to integrate any third party related commands into the your MAVEN repository M2 repository you should write the settings.xml in the settings.xml mention the NEXUS url and then nexus user id password I should mention after that in that settings.xml I should put in the /user /.M2 folder we have to put in the settings.xml

COMING TO INTEGRATION PART

HOW TO INTEGRATE NEXUS INTO THE JENKINS is in the MAVEN we are writing the pom.xml where we should mention the group id and artifact id and version where last stage we have a distribution management here we need to mention the NEXUS repository url so what exactly it will do is whenever you trigger the build in Jenkins it will check the version control system where we configure the code and pom.xml it will call the pom.xml and then according to the goals whatever goals your passing from the Jenkins here in goals we have to pass the CLEAN INSTALL DEPLOY we have to pass According to the goals first it will build the code and then create the code and then package will be deploy into your NEXUS repository so once its completed you to login into your NEXUS repository ----

**HOW I INTIGRATE THE NEXUS INTO JENKINS IS :**

basically how i intigrate the nexus into jenkins is in MAVEN first i need to write settings.xml inside the settings.xml i should mention the username and password of the nexus repository after that, that settings.xml we should pass to .m2 repository under the c:user/m2\_repo so there i should mention the settings.xml so why we are giving the settings.xml inside the m2 folder is nothing but whenever we run the commands related to nexus first our MAVEN will be go to the .m2 folder and then it will check whatever you passed from the settings.xml so that we are configuring,

and how we are integrating jenkins with nexus is nothing but inside the maven pom.xml we need to write the distribution management tab THE MAIN ADVANTAGE OF DISTRIBUTION MANAGEMENT TAB IS there i should mention the nexus url where exactly you have to upload and in pom.xml we writing the group id and artifact id and version that i should mention top in the pom.xml first whenever you run the build here you have to pass one more thing is goals why we are passing the goals from the jenkins is according to the goals only nexus will work so in the goals i will pass the clean install deploy so whenever you trigger the build automatically it will build the code in goals i pass the deploy so it will upload the package into the in the nexus repository once that setup is completed you have to login into the nexus according to the values whatever you passed group id according to that id you have to check under the nexus whether the package is uploaded or no this is the automation process using the nexus.

suppose if i created package already manually suppose you want to take the backup into your nexus repository in that scenario i need to take the group id artifact id and version from the developement team after that, that package i need to get from the developement team after that i need to login the nexus repository and then i will use the group id , artifact id, and version and package i should upload once upload is completed i should provide that package upload backup url to the developement team this purpose we are using the nexus.

**13.1 just want to know what is NEXUS ?**

Basically NEXUS is backup artifactory it’s a repository what is the purpose of repository is to take the Backup of particular versions we are taking so how we are doing the NEXUS configuration into environment is no need to take the backups every time in manually directly you can configure NEXUS in your Jenkins only

How we setup is

Maven having the remote repository

0009 :

None --------

0010 :

**14.HOW TO INSTALL PLUGINS IN JENKINS ?**

Basically whenever I am installing the plugins few things I have to take care

That is one thing is

* First which plugin I want to install in the live our Jenkins first we need to install that plugin into our local machine why because after we cant directly install the plugins into our live environment so first this things I have to take care suppose if the plugin is working fine then I have to create the implementation plan for the client purpose so in implementation parts what and all things I have to mention is the plugin usage and also whatever I tested the document I should attach that things and also once like down time I have to mention inside the implementation plan
* system we automated already suppose if suddenly I restart the Jenkins may be my developers will be facing the issue that is the reason first I will send a outage notice to complete teams like so and so on timing I am doing the deployment so please don’t checkin the code into the VERSION CONTROL system so that developers will stop pushing the code on the particular down time . Once I install the plugin like I have to download the .hpi file for the plugin after that I have to upload that into the Jenkins machine in the manage Jenkins in the manage plugins after that I need to reboot the JENKINS SERVER.
* Suppose once it is completed I need to send a release notification to the all development teams like plugin installation is completed now Jenkins I tested already its working fine you can start the chekins and all so this is the way how I install the plugins in my real time but what and all plugins I installed my experience is GREEBALL PLUGIN, EMBEDABLE BUILD PLUGIN and DOCKER PLUGIN, GIT PLUGIN and ALSO RHN PUSH PLUGIN and M2 RELEASE PLUGIN , PERFORM MAVEN RELEASE PLUGIN and ALSO PIPELINE PLUGIN I install and SONAQUBE PLUGIN I install. This are the plugins methods.

**0014 :**

**15.How can we install SONARQUBE plugin ? how can we configure sonarqube plugin ?**

If I want to configure the SONARQUBE first we need to extract the file what you downloaded the sonarqube package once it is completed later what exactly I have to do is inside the JENKINS we need to install SONARQUBE PLUGIN before we are configuring the SONARQUBE inside the job first we have to locate that into your JENKINS for that reason you have to go to configure system option there we need to set the location of your sonar localhost/localdomain:9000 is the port number and then the ip address of sonarqube username and password we have to set inside that configuration system Once it is completed in the job I need to enable the SONARQUBE there we need to pass the SONARQUBE properties like sonarqube property value and version and then EMAIL notification must and should we need to enable in the job why because if anything build failure inside the job that notification should be get into the development team after that once they get the notification Suppose if any issue happen like major issue or any critical issue so they will come to know and they will check the report. This process we are using to configure.

**15.1)DO YOU KNOW HOW TO CHECK THIS BLOCKER , MINOR , MAJOR BUGS IN SONARQUBE ?**

**BLOCKER**: in sonar according to the issues are first thing is BLOCKER it is bug with the highly probability impact to the behaviour of you application.

**CRITICAL :** critical is nothing but either a bug with a lower probability so imapact to the behaviour of your application and production if you represent a security flow and blocks the sql injection this kind of scenarios.

**MAJOR :** major is nothing but quality i mean few which of can highly impact the developer productivity

**MINOR :**

**15.2)ARE YOU ABLE TO SET THIS MANUALLY OR IT WILL GENERATE AUTOMATICALLY WHENEVER CODE WILL RUN ?**

This will be run automatically but setup we have to do intially manually ,

actually first time we have to do manually and this things and all automatically enable inside the plugin.

**15.3) DID YOU FACE ANY ISSUES IN THE SONARQUBE IN YOUR ORGANIZATION?**

most of the time, here compilation issues and all filters errors sometimes dependency issues will come usually what we will do is that E-MAIL notification we configure inside the JENKINS so according to the issues my developer only take care this issues and all they will fix issues and again they will check code into the sonar after that if anything require configuration setup then only i can share the inside the configuration issues and all they will take care.

**15.4)ADVANTAGES :**

we can come to know the issues and also while using the sonarqube we can reducing the time to fix the bugs under the releasing so this benefits we have.

### 15.5) What is Code coverage in Sonarqube?

### 🡪 In one sentence Sonar is an open source platform that allows you to track and improve the quality of your source code.

### When talking about software quality is the test coverage or code coverage which is

### How much of your source code is tested by Unit tests

### How much of your application code is actually executed during your tests

### Cobertura is an open source code coverage tool that works well with both Maven and Jenkins

**\*\*\*\*\***

**16.can you tell me what is meant by DISTRIBUTED architecture in GIT ? \*\***

**17. can I have branch name it as master ….?**

No not possible to create branch name it as master , we can create the branch name it as any another name except master.

Why ( reason ) : already we are doing under the master only so if I create the master then it will show the error like your already in the same branch something like that ,inside the sub folder we can create but main folder we cant

**18. HOW MERGING WILL HAPPEN?**

Basically merging will happen according to the revision numbers only we can do the merge,

**MAVEN**

**1. how comfortable your with maven ?**

**2. can you tell me that if I am using MAVEN to building the application What is the heart of MAVEN ?**

ANS : maven heart is life cycle using the life cycle only we will build the code

**3. what is I have to compile a code with MAVEN profile what should be must available for you to build ?**

First code we required whenever we want to compile and that machine should be installed in the MAVEN after that we can do the MVN COMPILE

**4. From where exactly your MAVEN build starts from**

It will starts from the main class

**5. how will you get to know that what exactly where it has to start? Where it should get ?**

we write in pom.xml

**6. what is the content is pom.xml ?**

Inside the content we have a group id, artifact id and version and distribution management

management SCM URL we have to pass

**7. Inside the pom we have mentioned the dependency ?**

What exactly dependency will do is suppose if I want to write the parent and child

form in that scenario also we can write the dependency

or

sometimes we if i want to copy the some attributes so that scenario we can write the dependency we

have to write.

**8. your getting an error that unable to found dependency or unable to download**

Dependency ?

Basically why it happens is its main related to like some JDK version may be

Related or maven version may be related such kind of scenario you will get error.

**18. IF I HAVE TO RUN 5 DIFFERENT JOBS PARALLEL USING THE SINGLE JOB CAN POSSIBLE IN JENKINS ?**

ANS : yeah we can possible that pipeline we have to install inside Jenkins that pipeline

we have to give the upstream and down stream conectivity inside the jobs so trigger parameterised build we have to enable and check job location inside the job.

**19. WHAT ARE THE FEATURES IN JENKINS ?**

ANS : yeah many features we have in Jenkins but main feature is WE CAN USE THE COMPLETE PROCESS ,AUTOMATION PROCESS CICD AND PIPELINE PROCESS ALSO WE CAN DO AND ALSO WE CAN DO THE TESTING ALSO WHILE USING THE JENKINS JOB and also we can run the testcases in the Jenkins jobs and also multi job configurations also we can perform in Jenkins operation.

**20. HOW WE ARE ENABLE IN JENKINS ?**

Enable means we need to check the plugin management in the plugin management if anything u don’t have in the plugin machine just install the plugin from the plugin section respect to the version compellability of your Jenkins that plugins should be check and then install once it is completed then you can use that plugin as per your requirements.

* Pull deployment we are using JENKINS only

**21.HOW TO CREATE THE SLAVE LOADS ?**

In the manage Jenkins only I will click on the manage nodes there I will create the node for the requirements slave1 if I require slave1 I will give the name and also remote root FS directory I will pass so PUPOSE OF REMOTE ROOT DIRECTORY is whenever we are doing the Jenkins builds in front end back end the logs will store that thing I will give in the remote FS directory later tools location I will set , tools location is nothing but exactly where you want to suppose java1.7 I want to call in the machine I wil give that particular path and maven path and ant path also I should give so whatever requirements I have that I will set in that tools locations.

**22.without using continues integration what will happen….? What are the drawbacks without Jenkins?**

Without continues integration what we will do is from day1 to till near to release date you will develop the source code what we will do is before release time two days or three days back you will start compiling the source code I mean you will do the merging and everything you have to test so may be if you have different different types of errors into your code it will take time to compile the code create the packages after that deploying the packages into test server it will take time suppose if you like that what happen is you cant release product as much of you expected delivery date so such kind of error I will find without continues integration and also without continues integration I cant find the day to day isuues in my code so these are the drawbacks without CI.

**23.Difference between ANT AND MAVEN …?**

**24.how to create the VGI server setup ?\*\*\*\*\*\***

VGI ( VIRTUAL GRAPHICS INTERFACE ) server setup is nothing but we have to create the separate environment for that so we can use the either RHEV we can use or in that RHEV we have to setup the particular IP address for that particular server what we exactly require so once it is done we have to setup the RAM MEMORY details everything we have to provide in the particular server later we have to set the hostname in IGW we have to set once it is done after that we have to test the whether service is running I mean what and all services you want to install that complete services you have to install that particular machine like JAVA , after that you can proceed with the requirement.

**25.what is the bar repository in GIT ?**

Basically the bar repository the purpose is suppose I have the one remote server like from that if I want to migrate the Jenkins from one server to another server what exactly I am doing is from remote server I just cloning the data into one empty server that means it accept the bar repository this is just for temporary purpose just we will clone the data here from here actual repository we will create in the new server just we will push that code into the new server so once our work is completed I will delete the bar repository just it will act as the temporary storage repository kind of role.

**26.what is the difference between pull and fetch ?**

Fetch is nothing but suppose we are two developers working suppose one developer check in the changes into the repository so just it will reflects into the central repository suppose if I want to reflects that changes into the new person that time if I run the git pull it will fetch that new changes into another developer so this is the difference.

**27. Do you come across with any errors while doing the build or deployment ?**

Many kind of issues we found in the doing the build and all while doing the build will get issues like compilation issues will get and syntax errors we will get and sometimes dependency issues we will get and also snapshot version if you mention the rom in the pom.xml will get a error and also suppose you already created release tag when you trying to create again release tag with the same version we will get error like unable to tag scm we will get , apart from this we will get while using the deployment also sometimes will get so before we are deploying the any package we need to check the server which server are we deploying and also whether it should be online or not we need to check. If you did not check this thing if you directly deploy a package if the services are not running on the particular server your deployment got fail it will show some errors like unable to deploy the package into destination server and sometimes whenever we are configuring the RUNDECK inside the Jenkins instance so if I mention the rom IP to perform the deployment also it will fail and also sometimes any dependency issues happen in the MAVEN building so it will stop the building only it wont go to the next level so for that reason we are using the SONARQUEBE to check the code quality ,

So issues based on the SONARQUEBE what kind of issues will find is sometimes we find the critical issues ,and also we will get errors between releases.

**28.when we are having like trunk many branches , bring the branch changes t0o the trunk how will you do that ?**

So If we want like just we will copy from branch to trunk we will do so we have a strategy like we are using the TRUNK for maintaining the source code for particular release version, BRANCHES is nothing but according to the developer requirements we will create the multiple branches like standard branch, bugfix branch , hotfix branch and future branches and all we will create so complete development we will do in the branching only in the branching only we will create the multiple branches after that we will merge that things into trunk folder like that we will follow

**29.what are the different standards in versioning ?**

We are following the standards like trunk branch and tag , in the trunk we are maintaining the original source code for particular release version, that means once testing is completed the code will go to the production environment after that once my production team release the code into the client after that I will take the backup that thing into trunk folder we will maintaining we never do the modification in the trunk always whenever we refer the modification we need to go to branch folder there only we can create the separate branches depends on the requirement suppose if its like anything related to bugfix branch so what I need to do is I need to create the bugfix branch for particular version or else if it standards branch I can use dev1 or dev2 we will create so if it is like hotfix branch so basically whenever we require temporary branches I will use only for temporary purpose.

Coming to tag folder in tag we are maintaining the for future purpose we are taking the backup I mean to reference if I want to do modification if anything happen in the particular code so I will take code from the particular tag folder and I will fix the issue.

**30.WHAT IS THE PARAMETERISED BUILD IN JENKINS ?**

Parameterised build is a like whenever we are going to deploy the packages from the Jenkins we are using this parameterised option basically we will pass the parameters in the parameterised build so whatever environment we are going to deploy the packages that particular IP address you should mention in the particular parameter or else if you want to pass the any test cases and all you can use that option in that only we have a different different options like STRING PARAMETER , TEST PARAMETER this kind of information you will get from that option.

**31.WHAT IS THE DIFFERENCE BETWEEN GIT AND SUBVERSION ?**

Basic difference is,

\*. In subversion(SVN) we don’t have specific feature like reviewing the changes whenever you commit code from the local machine to SVN server, here there is no staging area it is like reviewing stage while compile

going to GIT , we have a staging area so in the staging area only whenever we check in the code from locally to git server first we will do the review after that we will push the code into git server

COMING TO BRANCHING STRATEGY, we don’t have separate branching strategy using the git but while using the SVN we have separate branching strategy like TRUNK, BRANCH AND TAG we will use in the branching strategy

\*. But in GIT there is such kind of things we have a only default master branch only in git so that’s why i compare to SVN very easy in git branching and also merging process also comparing to SVN like git is little bit easy

**32. In GIT how to delete the remote branch ?**

Whenever trying to delete remote branch in two ways we can do if it is girit I will go in front end only I can delete the branch so coming to git hub what I will do is first I will checkout the code I mean checkout the branch from the github then I will delete the branch in the locally then I will push changes into my remote machine in two ways I can do

**32. how to configure nighlty build ?**

Coming to nightly build whenever I want to I mean everyday my application needs to be on the particular duration in the days I will use the BUILD PERIODICALLY option so in BUILD PERIODICALLY main difference between POLLSCM AND BUILD PERIODICALLY is nothing but POLLSCM will work only whenever changes are happen in particular scenario in SVN build needs to trigger ,

While going to build periodically no need to do any changes in the SUBVERSION automatically build needs to trigger

If going to nightly build what I will do is if I want to schedule my application daily needs to be run in nightly what I will do is I will go with build periodically and then I will specify the timings when I want to run my application and then I will save the configuration like that I automated.

**32.how many nodes you have in Jenkins or how many nodes you are using ?**

We have nearly 25 nodes we are using and 1 master basic master we have .

We have nearly 25 nodes or slaves we are using in my current project so we have separate node for only releasing the packages that node we are using for only releasing.

**33.do you know that what is the important of pom.xml ?can you explain ?**

Basically coming to the pom.xml structure few things we have to mention that is group id , artifact id and version we need to mention and package type we need to mention what kind of package it is after that next thing is we have to set the scm url that means where exactly you want to checkout the source code and also we need to give the distributed management tab that is the last tab what is the usage of distribution management is if you want to integrate with third party artifactory nexus you can give the distribution management there you need to pass the nexus url you have to pass apart from this we have inside that pom.xml some plugins also we can write sometimes whenever we require and dependencys also we can mention based on the code we can write the dependency inside the maven pom.xml

sometimes we write the settings.xml also the usage of settings.xml is if i want to integrate any third party related commands into your maven we can write the settings.xml and then we can copy the settings.xml and we will keep inside the 'c' location user/.m2 folder ( c/users/.m2 folder ) why we are keeping inside.xml folder is that is the your central repository whenever we are running the maven related commands it will call from the default location.so if you keep the inside that m2 folder whenever you run the pom.xml it will pick the values from the settings.xml so this is the reason we writing settings.xml so this the reason we write settings.xml inside the maven

later you can configure your pom.xml into you jenkins but onething very carefully we have to configure that is SNAPSHOT VERSION because each and every releases our developer will be maintaining the standard versioning by mistakely if you release the some different release version then it will escalate in the production environment so whenever we are releasing we have to carefully check the SNAPSHOT version of the pom.xml and then perform the release.

**34.WHAT IS THE GOAL OF DEVOPS ?**

Basically the main thing is main our work is AUTOMATION PART , automation part is nothing but completely build environment whenever my developer checked in the code it should be create a package once you create the package you need to release that into the environment after that you can deploy the package into the different different environments that means this complete whole idea is i want to do within one shot apart from this i need to monitor my application also for monitoring we are using the HEALTH CHECK monitoring tool basically why it is requireed is before we are doing the deployment we check status of our application i mean what and all servers running currently suppose without this monitoring so if you perform the deployment you dont know may be server will be offline so that time your deployment will be fail so that is the reason we are monitoring the code by using the monitoring tool like HEALTH CHECK and also here no need to do the anything in manually within one jenkins configuration only everything we can configure so whenver we require build release and deployment within one shot only we can perform the environment so this benefits we have apart from this we can use the pipeline process also at a time multiple jobs also we can do the build release and deployment in the diffrent environment and apart from this we can do testing also using the devops like selenium plugin we have to install and we can do the testing also using the DEVOPS so this benifits we have.

we impelemented selenium and testcases will be written by developement team so are configuring that into the my configuration.

**35.why we need devops what is the use ?**

the main need is the devops , we can deliver the code as for the timeline,

while using the devops here day to day i can fix the bugs whenever my code is development phase and then i can completely monitoring my application and then i can deploy the packages into the diffrent diffrent environments at a time and completely within one single shot only we can activate every tool and then we can deliever the code and also ,

one more benifit is while using the devops within single shot only we can do from build to deployment.

main thing is no need to depend on other team members , team members is nothing but some times developer may be busy in their activities so for small activities we can not go and everytime we can not ask to the development team

**36. DO YOU KNOW CHANGE MANAGEMENT ? WHAT IS CHANGE MANAGEMENT ?**

ITSM change management is nothing but instance management and change management whenever we are doing the activities on the server we need to raise a change request (CR) that we need to get the approvel from the client and then we have to write the implementation plan inside the that i need to showed into the client what exactly i am doing in the activity and i should mention the downtime inside the implementation plan so that pupose we are using change management tool .

as per my knowledge we are using the ITSM tool for production release management

**37.what is the port number of DNS ? linux**

port number 53

**38.MAVEN LIFE CYCLE ?**

once our developer develop the source code the maven check the step by step like first stage it will validate the code once validation is done then it will go to compile stage it will compile the code then it will go to test phase so here once compilation is done it will test the code of your frame work whatever it may be it will check once it is done then it will go to package phase in package phase complete compilation code , class files converting into packages after that in verify stage it will verify the all packages after that if i want to install we can install or deploy the packages these are the different stages in MAVEN LYFECYCLE.

**39.what are the commands you use to build manually in MAVEN** ?

mvn compile, mvn install

mvn package

**40.how do you do the jenkins upgradation ?**

when we are doing the upgradation first we are going to take the complete jobs backup actually so that we go for var/lib/jenkins/jobs all jobs we can take that in particular server after that we are going to upgrade the latest version whatever we are going to use and after that we will restore the jobs and then we will check the slaves working fine or not after upgrading and will check the one or two jobs whether the jobs running fine or not after completion of this activity we will send release noted to the complete environment teams how many people are working for the jenkins

**41.how do you check exit status code of previous command?**

**(linux part )**

we can use $ question mark whether existing file is true or false

**42.what is the command for list a state of a teraform file? or how do you apply teraform ?**

teraform apply will give in the command prompt where your script is exist

**43.what are the resources are available in teraform ? can you list some of the resources in teraforms ?**

instance name resource will provide and tag resource will provide and security resource will provide and lamda function resource will provide

for creating the instance and like resource AWS teraform and also AWS\_INSTANCE if it is web we can give, and also if it is tag we can give AWS\_RESOURCE TAG ,and if it is web then AWS\_INSTANCE WEB we will give

**44.HOW JENKINS HELP YOU ?**

jenkins will work as the continues integration and continues deployment will perform basically whenever developers will be devope the source code once they finished developing the code they will check in into the version control system automatically my jenkins will pick the changes then it will perform the building and it will create the packages after that it deploying the packages into the different different environments and also jenkins will test the code quality also we will integrate with different different tools for code quality sonar qube we will automate and nexus also we enable for the taking the backup of the each and every version and also we are deploying the package using jenkins also into the different different environment like QA , UAT ,and also DEMO and also STAGING and also production we are using deployment tool as the continues integration only and apart from this we can do multiple plugins we can install inside the jenkins and also we can perform the testing also using jenkins continues integration and we have the master slave configuration also we can share load into the different different restrictions build into the environment and also we can mygrate the jenkins into the cloud also we can deploy the artifacts into the contiainers

**HOW DO YOU DEPLOY THE JENKINS IN CLOUD ?**

i deploy using the elastic container service in cloud

**which cloud your using ?**

AMAZING WEB SERVICE is we are using

**are you use amazon console ?**

yes amazon console we are using and we can write the script for creating intance and all using the terraforms.

**45.what kind of automation scripts that you wrote ?**

i written the scripts for the deploying the package into the different different environments and deploying the package into the cloud also

**46.what is the most complex in devops ?**

most complex in devops like a automation part doing the complete architecture within one tool we have to integrate no that thing is complex

**47.you have loaded data in s3 and ec2 ?**

thats what i am telling this kind things i didnot do in my experience so thats why i am planning to switch the company

**48.what is the most interest thing you like in devops ?**

most interesting part is like only one button you can do complete end to end process like once development is completed upto deployment into the server it will take very few minutes only but without devops what it will do is each and every step we have to manually i mean and also we cant release the particular version in the dead line time so if you go with without devops what will happen is so each and every step you have to do manually and also you to fix the bugs end of the release period and if you sit with errors you cant release the product at the end of the dead line.

( OR )

one of the most interest thing in devops is within single shot only i can do build package and deployment from build to deployment i can do within single shot only.

**49. change management tool and instance management tool ?**

change management tool and instance management tool is ITSM

**50.DAILY ACTIVITIES OR DAILY ROLES AND RESPONSIBILITIES OR DAY TO DAY ACTIVITIES ?**

coming to my daily roles and responsibilities is what i will follow is we are using the ticketing system tool like service now we are using so basically my developers will raise the request in the service now so once they raise the request we will get the mail like tickets depeds on the requirements how it is like in SVN we are using version control system so sometimes we are getting the request like creating the repositories and creating the branches and giving the permision to the newly joined developers and also sometimes we are maintaining the release stucture in the jenkins so every day we will follow the release structutre like daily releases we have and weekly releases we have and monthly releases we have so according to the requirement what i will do is so we are maintaing the release maintaining structure sheet every month production release will happen for that what i need to do is actually we are supporting the app support engineer so our application what we will do is everytime whenever we are doing the production release we will do the upgradation of my system so that time what i need to do is sometimes i will do the smoke test also in that particular application apart from this activities basically we are doing the CI job creation jenkins job creation and doing the build and release process and doing the deployment and also we will create the environments also for the developer requirement and also sometimes i will get the requirement from the developer like they will give the jar file or war file or zip file just uploading that into the using group id ,artifact id , version uploading that package into the your nexus repository this kind of activities i will do daily.

**51.where exactly you will configure slave in jenkins ?**

where i will configure slave in jenkins is , in jenkins jobs i will configure in the restrict where the project can be run i will specify the node exactly into that location so according to the requirement i will give the slave

Basically we will use the release management for separate slave machine why we will use the release management for separate slave machine is whenever your doing the release activity it will take sometime suppose if i want to i mean your developer require urgent builds and all you cant do you cant cancel that previous requirement and also you cant do so thats why we are maintaining the slave machine for the release and also we will maintaining the separate slave machine for daily activities.

**52.how do you check whether tomcat process is running or not in linux machine?**

**service tomcat status** by using this command we can check whether service running or not if anything goes wrong i will restart the service machine.

**echo:** whatever we will pass that will print the code or to print the code we will use echo

**53.how do you check any process ?**

top command i will use what and all process running in backend

**54. HOW DO YOU DO THE DEPLOYMENT ?**

basically we are doing two ways deployment one is chef we are using and one RUNDECK we are integrating via JENKINS only so recently we implemented devops architecture in my project so complete till version control whenever developer checked code into the svn till deployment phase it will go and it will do the installing the package into the test server so total seven steps it will perform like code commit is completed next it will go to build phase next it will go to code quality and next it will go to release phase after release uploading the package into the red hat satelite server (RHS) after that it will go to deployment phase so complete architecture we implemented

**55.do you have knowledge on production environment ?**

production environment will be taking care by client side people only i have basic knowledge on production environment but i didnot get chance to work on it.

we are supporting for only test environment

**56.SERVICE NOW :**

Service now we are basically using for only putting the commands and settupping request only and instance also we will follow from there only so from developement side and all we never worked in service now

**57.what about sonarqube do you know how to generate reports to sonar ?**

we have to login into our sonarqube machine and then that configuration we should pass from the jenkins after that once whenever your developer put the code into the sonarqube it will check the code quality what kind of issues exactly happen in that code like major or minor

that we have to configure the build blocker plugin inside the sonarqube scanner only so when you login into sonarqube there left side you will get the option that reports and all that you can generate the reports to sonarqube

**do u know how to check that code coverge :**

to check that code coverage we require one plugin cobertura to check the how much code is covered for the particuar application

**58.how do you configure a slave to jenkins master ?**

basically slave is located in the different machine so what exactly will do is whatever requirements we have we will install there like svn and git and maven and docker whatever, that environment we have to set after that we have to give the connectivity between slave to master so in the master machine there we have to set the environment variable that you have to copy that your slave machine environment variable and pass in master machine that we have to copy and run in the command prompt of your slave machine so that we can give the communication between the master and slave machine and inside the job we have to restrict particular slave machine.

**59. how do you check the difference between two versions of a git files ?**

**git diff** we can use

**60.what is the difference between application server and web server ?**

**61.what is $? ( dollor question mark ) in shell scripting ?**

in shell scripting dollor question mark ($?) is like if i want to execute the before line whether it is true or false value it will give

**62.what is $$? ( dollor dollor question mark ) in shell scripting ?**

**63.can you explain how DNS works ?**

**64.if you want to push an artifact where do you mention ?**

**or**

**if i want to push an artifact to nexus where do i mention ?**

under the pom.xml distribution management tab we have to mention the url's of snapshot and release management

**65.how do you excludes the dependencies of a java application ?**

excluding means just in the pom.xml , under the plugin section dependencies we have to mention

**65.how do you diasble the anonyms login in the nexus ?**

in the settings.xml we can disable that

**66.what types of repositories are available in nexus ?**

snapshot and release

**67.if your repository is full how do you delete the artifacts or repositories ?**

in the front end only which one you want to delete select that one right click and delete we can perform

**68.i have thousands of artifacts in nexus repository how do you handle this ?**

we have to write the script in the settings.xml then when we are executing the script we can delete all artifacts list we have to perform in the script so that we can delete

**69.what is an artifact ?**

artifact is like a bundle of code , package and package name we consider the artifacts

**70.life cycle of version control system ?**

when we will get the question of SCM lifecycle then we need to explain like first we need to create repository and we have branching strategy in svn like trunk branch tag , we have to give all information about this....

**71.how you configure build job in jenkins ?**

build jobs we are configuring pom.xml and source code we have to checked into the version control system and jenkins job we need to create in the jenkins job automatically it will pick the changes once you checked in that automatic process we are enable the pollscm in jenkins so according to that it will activate and it will check the changes in the version controlling and once it is done in the jenkins we are passing the goals i mean maven goals we are passing the package so according to that goals it will pick the changes and then it will create a package so once package is created then we can deploy the package into the respective servers

**72.HOW DO YOU USE JENKINS IN AWS :**

Jenkins we are using for the deploy the images to the ELASTIC CONTAINER SERVICE we need to create a image first in the jenkins machine after that we need to intigrate that AWS into jenkins machine using the elastic container service (ECS) so for that we need to write the shell script so first we need to create a job and also mean while once you checked in the code into git repository that code in the docker file we need to check whether the package converted into image or not after converting to image then using the shell script we have to call aws account using the (" ' export aws secure key ' and access key and availability zone and also repository" ) where you want to push the package that respective repository we created in the availability zone in the aws so that we can deploy the package into image format into the aws account and also we are using the aws with s3 buckets we are using just pushing the packages and taking the backups in the aws s3 buckets so this process we are using and also we are writing the terraforms also to create the complete infrastructures in the aws

**72. HOW DO YOU TROUBLESHOOT WHEN SERVER IS UP OR DOWN (OR) HEALTHCHECK MONITORING TOOL ?**

before we are doing the deployment we are using the healthcheck monitoring tool for the server monitoring so in that tool what exactly we will do is we will monitor the server before we do the deployment whether the server is down or up suppose if i do the deployment it will go and fail the deployment in particular server so what exactly i will trouble is i will login into that particular server then i will check whether the server is running or not then i will check the CPU utilization how much memory it is currently so it is done suppose the server is like related to CPU utilization what exactly i will do is i will take the backup of the old files in particular location then i will remove the files from the that particular server after that i will start the deployment like that i can troubleshoot

**73.IF YOU GET ANY KIND OF NULL POINT EXCEPTION OR SYNTAX ERROR IN LOGS ?**

if i get anything NULLPOINT exception or syntax error i will sit with my developer then only i will resolve that issue after that do the again build and release and then do the deployment if it is like related to my configuration side issues whether the jenkins issue or something like configuration issue i will only take

**74.how do you call the docker container into jenkins ?**

we will create the images in the docker so that container just we will pull from the dockerhub to jenkins for that we install the plugin docker that docker build and docker publish there i will pass the exact container id and that repository url i will pass and repository name i should provide so like that i will call the container into my jenkins job

**75.HOW DO YOU RESTART DOCKER AND DOCKERHUB :**

restart and all i will login into docker machine only there only i can restart the docker container

what is command ;

command is i have to login to root user

sudo su

docker run - dit --restart ---------------------- restart command

**76.how your doing the performance monitoring ?**

we are using for the performance to check in

**77.do you have knowledge on shell scripting ?**

i have knowledge on shell scripting like how to deploy the packages into i integrated things in jenkins

**78.how to add a administrator user in linux ? in centos , ubuntu**

i will use the command is

**adduser username** i will give and then password

**79.suppose if any issue comes up that first level debugging comes to you** or **its directly goes to developement team** ?

it will come to me so its related to testing if anything goals to wrong my package issue i will take care

**post deployment :**

post deployment it will come to the developement team only

**80.what is the log used for managering reporting ?**

yes we have to use for managering reporting

**what kind of metrix are performed on that ?**

metrix we are doing basically CPU utilization logs s3 logs also sometimes will take care.

**SHELL SCRPTING**

**81.suppose your able to change the drive or excute option for the file what user you would be ?**

root user

**82.suppose you have the user credientials but your not able to move a particular file to another directory what command you will use to make it happen directly ?**

mv -f filename -------------------- i will use this command

**83.In linux how will merge multiple files into single file ? or you have mutliple text files and you have to make it into single text file ?**

for merging we are using

cat file.textfile2.textfile3>./mergedfile.txtfile

**84.how do use CRONTAB to create nightly builds ?**

crontab-e i will create first i will create that crontab after that using the crontab format in the daily night means \* \* \* \* \* five starts in the first star i will specify the minutes

**85. What is grep and sed and awk commands ?**

**grep :**

grep command is nothing but if i want to search any file in the script then i will use grep command

**sed :**

sed command used for if i want to replace any word or value in the script then i will use sed command

**awk :**

awk command operates on rows and columns .