#### **LINUX INTERVIEW QUSTIONS:**

How to break the root password?

What is use of AWK, SED did you ever used this command in your script?

What is the full form **GREP**?

How to write the program to go to the parent directory with out using CD command?

What are the run levels and explain all the run levels?

What is difference between unix and linux?

How to find the last exequted command in linux?

How to define the **aaray** in shell script?

What is use of the **READ** command in shell?

How to insert values in 3rd line of the file using shell script?

What is diff between TOP & PS commands in linux?

How to find the port information in linux? for TCP and UDP protocals?

#### **ANT INTERVIEW QUESTIONS:**

How to generate WAR file in ant?

How you will define class path variable in ant?

What is the command for exegution in ant?

#### **SVN&GIT INTERVIEW QUESTIONS?**

What is diff between SVN & GIT?

What is diff between GIT & GIT HUB?

What is the stashing in GIT?

What is git rebase?

How to resolve merge conficts in svn?

What is clone in git?

#### **JENKINS INTERVIEW QUESTIONS?**

How you will create slave in jenkins?

What is pipeline in jenkins?

How to schedue jobs in jenkins?

How to fine the errors in jenkins?

What is toughest task you have faced in jenkins?

What is diff between schedule jobs & poll scm?

If you have 6 jobs can we run some jobs in window slave and some jobs in linux slave?

What is the use of the jenkins?

# **PUPPET INTERVIEW QUESTIONS?**

What is use of the FACTER tool in puppet?

What is location of SSL puppet?

What is the location of config file in puppet?

What is the use of the puppet?

What is manifest? what is modules?

#### **GENEREL QUESTIONS?**

What is devops? Why devops?

What is agile methodology?

Explain ITIL process?

What is toughest task you have ever faced?

Expalin about any could technology?

Are you using nexus artifactory?

How you will change port information in tomcat server?

Can you depoly multiple services in tomcat?

What is diff between between webserver and application server?

#### Interview questions

#### 1. Tell me about technical background?

#### 2. What is inventory file?

- A) It follows the INI format and tell ansible whether the remote host or host provided by the user are genuine execution or not. Ansible can run its tasks against multiple hosts in parallel. For such parallel execution, ansible allows you to group your hosts in the inventory file the pile passes the group name ansible.
- 3. What is \$# in shell?
- A) \$ we can declare the variable, \$code commenting purpose.
- 4. How to create job?
  - One the Jenkins dashboard, click on mange Jenkins and select manage plugins
  - Click the checkbox and click on the button, download now and install after restart
  - Restart Jenkins
  - Create a new freestyle project
  - Configure git in source code management section.
- 5. Where we can deploy?
- A) Tomcat server
- 6. Which web server your using?
- A) tomcat
- 7. What are all web applications server?
  - Glass fish
  - Jboos Enterprise application platform
  - Wildfly
  - Apache tomcat
  - Apache tome
  - JonAS
  - Resin servlet container (open source)
  - Blazix

#### 8. Which server we can use for web application?

- Jboss Enterprise application platform
- Apache tomcat
- Apache tomEE

#### 9. What is the difference web application and stranded application?

A) On a first hand, a **web server** serves web content (HTML and static content) over the HTTP protocol. On the other hand, an **application server** is a container upon which you can build and expose business logic and processes to client applications through various protocols including HTTP in a n-tier architecture.

#### 10. What is the web server & application server?

#### 11. In application server which application your use static or dynamic?

A) In computer terminology, **dynamic** usually means capable of action and/or change, while **static** means fixed. Both terms can be applied to a number of different types of things, such as programming languages (or components of programming languages), Web pages, and **application** programs.

#### 12. In static application would change URL name?

A) we can't change the URL because of its static and fixed.

# 13. What is the periodical and what poll SCM?

- A) Poll SCM periodically polls the SCM to check whether changes were made (i.e. new commits) and builds the project if new commits where pushed since the last build, whereas build periodically builds the project periodically even if nothing has changed.
- 14. Once build will create which fills are create?
- A) After completion of build .war files will create
- 15. Did you open .war files?
- A) We can't open .war files
- 16. What is the playbook and cookbooks?
- A) One or more plays we can call playbooks, cookbooks is combination of recipes and attribute, file distribution, templates we can called as cookbook
- 17. Who will create source code & pom files?
- **A)** Source code will create by developers and pom files they will create why they create means they know source code workspace and class file and everything
- 18. Why pom file? What is the use of pom file?
- A) Project Object Model or POM is the fundamental unit of work in Maven. It is an XML file that contains information about the project and configuration details used by Maven to build the project. It contains default values for most projects.
- 19. What is docker?
- A) Docker is a tool designed to make it easier to create, deploy, and run application by using containers. Containers allow developer to package up an application with all of the parts in needs, such as libraries and other dependencies, and ship it all out as one package. By doing so thanks to the container, the developer can rest assured that the application will run on any other linux machine regardless of any customized setting that machine might have that cloud differ from the machine used for writing and testing the code.
- 20. What is environment in docker?
- 21. Why docker we can use?
- A) Docker provides this same capability without the overhead of a virtual machine. It lets you put your environment and configuration into code and deploy it. The same Docker configuration can also be used in a variety of environments. This decouples infrastructure requirements from the application environment.
- 22. How would you create environment?
- 23. Jenkins will work on Linux only?
- A) Jenkins will work on linux and window and cloud environment.
- 24. How to create nodes in Jenkins?
- A) Open Jenkins dash board select manage Jenkins under that select manage nodes click on new node after that give the workspace path and node configuration.
- 25. How to create workspace for build files in Jenkins?
- 26. What is the scm tool?
- A) Scm source code management tools it are git, git hub, svn.
- 27. What CI tool?
- A) Jenkins, bamboo, team city.
- 28. What are all build tool?
- A) Ant, maven
- 29. What is yaml file?
- A) YAML stands for "YAML Ain't Markup Language" and it is used extensively in Grav for its configuration files, blueprints, and also in page settings. YAML is to configuration what markdown is to

markup. It's basically a human-readable structured data format. ... At its core, a YAML file is used to describe data.

#### 29) What is merge in git?

- **A)** DESCRIPTION. Incorporates changes from the named commits (since the time their histories diverged from the current branch) into the current branch. This command is used by **git** pull to incorporate changes from another repository and can be used by hand to **merge** changes from one branch into another.
- 30) How to do build?
- A) Go to Jenkins top page, select "New Job", then choose "Build a free-style software project". This job type consists of the following elements: optional SCM, such as CVS or Subversion where your source code resides. optional triggers to control when Jenkins will perform builds
- 31) How to do deploy?
- 32) Variable in chef?
- 33) How to create jar files?
- **A)** Once build will run jar files will create in work space
- 34) How to create build files in maven?
- 35) Deployment tools?
- 36) How to create build configuration for git hub?
- 37) Difference between maven u project and pipeline project?
  - A maven project is a project that will analyze the pom.xml file in greater detail and produce a
    project that's geared towards the targets that are invoked. The maven project is smart enough to
    incorporate build targets like the Javadoc or test targets and automatically setup the reports for
    those targets.
  - A Free-Style project is a project that can incorporate almost any type of build. While a maven
    project you can only build maven projects, the Free-Style project is the more "generic" form of a
    project. You can execute shell/dos scripts, invoke ant, and a lot more. Majority of the plugins are
    written to use the free-style project. The maven module is limited in that it can't invoke a shell
    script, or anything else just the maven targets.

#### What do mean by Build?

Build is nothing but compiling of sources in to distributed artifacts. So developers will be writing the source code...and it needs to be compiled and packaged so then it can be distributed to the customers or users for using it..... So this build might be happening so after development....it can happen during development or it can happen in a periodic basis like every week or every month...

#### What is CI?

CI is nothing but a software development practise where members of each team integrate their work daily....by integrating their work daily, they can test it every day and it reduces the problems and it can identify the problems earlier and they can fix it earlier...then we can make product more stable... That is the main use of CI ....If we start the building at the end of the project we will identify so many issues, those are integration issues because code will be developed by the multiple developers.....if we start integrating them daily so you identify issues earlier and we can fix them earlier....

So that our code quality will get increased and will not see any integration issues during

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release time..... How CI works? How day to day people work? 3 For any CI there will be a-----VCS where it keeps tracking of source code, and Build script where we have give instructions to build, to deploy, and to test and CI server to manage all these things, and developers who is writing/modifying the source code...... Developers do they work and send changes to their VCS repository.....thats their job And CI server will continuously checks is their any change to VCS If their is a change pull that change .....& calls the build script.....build it, deploy it and test it....and gives the feedback Developers will made a change ...... Feedback is generated by CI server about the quality of code change......some thing bad he has done its available for him right away.....that is why continuous integration is so powerful.... It integrates VCS ......It integrates build and deployment systems......and consolidate whole things & give a feedback on the quality of change.....it brings all systems together..... What are the Prerequisites for CI 4 we should have a project with your buildscript it might be written in ant or it can be a maven And we have to maintain a source repository...like svn, git, tfs etc...... Which tool do you use for CI? And how it works? 5 We use Jenkins as a CI tool.....and coming to work process......multiple developers are working on the project.....svn is the source repository which keeps the versioning of our files and maintaining our files data......and jenkins is the CI system which pole the source repository and starts the build...so the build script is provided in AnT....so, it will execute the build script and it will generates the artifact..... Artifact is nothing but the output of our source code... So after compiling and packaging our source code the artifact will be generated... So once the artifact is generated from the given build script.....and we deploy the artifactsin to the tomcat server and then QA guys will go for testing and validate it...and if there are any automated tests they can run and reports will be published from the jenkins dashboard or CI system dashboard......So, this is the process how jenkins works..... What is the difference between SVN and Jenkins? 6 Svn is just keep track of our source code versioning...... But Jenkins will manage the running builds and will manage your builds...so, once we configure the project with jenkins ....it will takecare of building it whenever changes happen in your source code and publish if any build failure or if there are any issues with the test So, as multiple developers working on the same source code better to integrate daily so that we can identify any dependency issues or any issues earliest...... What do you mean by running builds? 7

What kind of plugins you have installed and used? Ans :subversion/git , cobetura, clone, email, shelve, junit, thin backupthese are the plugins I have installed	8
In the jenkins Dashboard left side panel there is option manage jenkins> click on manage plugin> go to available option> We can search for the plugin what we have to integrate with jenkins for ex: git we just type the git plugin in the filter option and it produce the git related plugins then we have to select it click on Install with or without restart	S
Basically Git plugin have the dependencies also one is git client plugin and scm API plugin	
After installation it changes pending state to success state	
And then once restart the jenkins and now we can configure the job	
Have u create jenkins job from the scratch YesBefore creating a job i will do some system configuration bcz i have to configure the jdk subversion ant version details and path of that tools in the related sessions and i also configured the E-mail notification session and so onand i will also install if any new plugins needed and after that i will create the job and i configured that job session and i trigger a build and i view console output and i send the status of the builds to the dev team	9
All the configurations of jenkins server will store in config.xml file	
Have u setup jenkins? How did you install jenkins?  First install jenkins and go to jenkins installed folder and copy jenkins war file and paste it in tomcat webapps	10
Next type : \$ Java -jar jenkins.war \$ Jenkins.rpm	
And now go to tomcat path>ls \$ cd bin \$ chmod 777 catalina.sh \$ sh startup.sh	
Now open browser type the default <a href="http://localhost:8080">http://localhost:8080</a> : then it will shows tomcat homepage If we want to open jenkins homepage: type <a href="http://localhost:8080/jenkins">http://localhost:8080/jenkins</a> Thats it	
How do you start jenkins as a service? Install yum>install jenkins.war	11
How do you start / stop /restart a jenkins	12

First we have go tomcat installed path> bin> To start jenkins type: \$ sh startup.sh To stop jenkins type: \$ sh shutdown.sh And to restart type: stop the server and then start again If we want to know whether jenkins server is in on or not: just type: ps -ef   grep tomcat	
How do you change your port no for your jenkins and what is the default port?  Ans: go to the tomcat installation folder and from there go to conf folder and open service.xml there change the port (connector) to 8081 or any other port no from 8080and go to bin and double click on service.bat and click on sh startup.sh/ startup.bat and run jenkins on new port number	13
Where do you find default jenkins logs?  Ans: system log will captures the output from java.util.logging output related to jenkins select the "system log" from the "Manage Jenkins" page:  From there, you can create a custom log recorder, which helps you group relevant logs together while filtering out the noise.  A screen will open like log recorders> All jenkins logs>click on add new recorder> we have to choose/enter the name that makes sense to us>click on ok> and then we have to configure the logger details ex:hudson.plugin.disk_usage and select the log level to find and click on addand click on save  Once the set up is complete, Jenkins will start collecting data. The collected logs are available from the web UI.  From <a href="https://wiki.jenkins-ci.org/display/JENKINS/Logging">https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging"&gt;https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;"https://wiki.jenkins-ci.org/display/JENKINS/Logging&gt;</a>	14
What are the chanllenges who have faced when setting up jenkins	15
How do find jenkins server is running or not?  Ans: go to console>ps -ef   grep tomcat>  then it will shows like: [geetha@localhost Desktop]\$ ps -ef   grep tomcat geetha 3075 1 0 Jul09? 00:01:48 /home/geetha/softwares/ant_jdk/jdk1.7.0_51/bin/java -	16

Djava.io.tmpdir=/home/geetha/softwares/apache-tomcat-8.0.20/temp org.apache.catalina.startup.Bootstrap start geetha 3816 3780 0 05:04 pts/7 00:00:00 grep tomcat [geetha@localhost Desktop]\$		
How do you stop jenkins when some build jobs are in progress	17	
To restart Jenkins manually, you can use either of the following commands:  There is one option in jenkins; i.e., "preparing for shutdown" if any jobs are running in jenkins first it will complete the process and then it will shutdownjenkins  (Or)  (jenkins_url)/safeRestart - Allows all running jobs to complete. New jobs will remain in the queue to run after the restart is complete.		
<pre>(jenkins_url)/restart - Forces a restart without waiting for builds to complete.</pre>		
How do you migrate jenkins from one machine to anotherú  1. Install the fresh jenkins in the new server  2. Be sure old and new jenkins are stopped  3. Archeive all the content of the jenkins_home(.jenkins) of the old jenkins instance  4. Extract the old jenkins in to the new jenkins_home directory  5. Launch the new jenkins  6. Do not forget to change documentation / links to your instance of your new jenkins	18	
Where does jenkins store its configuration data  Ans: On jenkins home directory and there are some common folders we found like .jenkins, jobs and plugins folders etc . In jobs folder we found all the configuration data will be storedand in jobs folder the 3 important subfolders are builds, workspace folders and config .xml file	19	
What is the default jenkins home directory? How do you change it?  Dot jenkins is the default home directory To change the jenkins home directory go to i:  vi.bashrc export jenkins_home=path	20	
Where does jenkins store global configuration and job related configuration  Jenkins stores the configuration for each job within an enonymous directory in jobs/. The job configuration file is config.xml, the builds are stored in builds/, and the working directory is workspace/.	21	
Or		

The JENKINS HOME directory is laid out like this:

- 1. \$JENKINS HOME contains system level configuration files such as the Jenkins master config.xml and the credentials.xml
- 2. \$JENKINS HOME/jobs contains all the individual job configuration and build data in a separate subdirectory for each job, e.g. for the job "myjob" you'll have \$JENKINS\_HOME/jobs/myjob/config.xml plus other files that store the data for individual builds.

Or

Job related configuration will be stored in .jenkins---->jobs Global configurations will store in .jenkins---->config.xml

# How do you restore the system configuration and all the jobs?

---->So if you want to restore the system configuration and all the jobs without the build history, you'll need to copy:

\$JENKINS HOME/.xml \$JENKINS HOME/jobs/\*/config.xml (using Antglob notation, \*\* denotes all subdirectories under \$JENKINS HOME/jobs)

---->You'll also need \$JENKINS HOME/plugins/\* if you installed any extra plugins. If you want to restore all the build history, copy \$JENKINS\_HOME/jobs/\* instead of just the config.xml files.

# If you want to change jdk for all your 1000 jenkins jobs or any other configurations? How do you do it?

Go to masters nodes and change theirs lables

#### How many jobs files in jenkins

There are four types of jobs we can create....

- 1. Free style project
- 2. Maven project
- 3. Build multi configuration project
- 4. External jobs

Mostly we will create a job iin free style projects....bcz it support all kinds of tools..

# How do you create jenkins job ii) How did you setup build and deployment using jenkins for your project?

Ans: i) in jenkins dashboard---> in left side panel ----> there will be an option called "new job" click on it and create the job.....

li) go to manage jenkins ----> configure system----> there we have to configure svn path

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23

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dHow do you or how many builds u store for your project	25
Ans : It depends But max 10builds	
What is parameterised builds Go to project> go to configure page> there we will see the option "this build is parameterised" check it that box> we have to click on dropdown list "add parameter" here we have different modulesbased on our need we will select onei.e., boolean, c parameter etc	
How do you run different jenkins jobs with different jdk's? We will give different jdk versions in system configuration page and then we run jobs for different versions	27
What is cron tab and cronscm In jenkins> go to project configuration page and there the option "Build periodically" th is the chrone tabwhether there is change in scm or not it will go and build periodically	
Poll scm: If there is any change in svn it will automatically buildif there is no changes d in vcs then it will remains constant without doing any kind of build	one
Can u use jenkins for non java applications Ans: Yes, but jenkins is mostly used for java applications	29
How do you configure security user data base for your jenkins  Go to the Configure Global Security screen	30
and choose "enable security"  Select "Jenkins's own user database" as the security realm  Place a check mark next to "Allow users to sign up"  Select "Matrix-based security" as the authorization  Give anonymous user the read access  In the text box below the table, type in your user name (you'd be creating this later) and click "add"  Give yourself a full access by checking the entire row for your user name  Scroll all the way to the bottom, click "save"  At this point, you'll be taken back to the top page, and Jenkins is successfully secured.	i
and choose "enable security"  Select "Jenkins's own user database" as the security realm  Place a check mark next to "Allow users to sign up"  Select "Matrix-based security" as the authorization  Give anonymous user the read access  In the text box below the table, type in your user name (you'd be creating this later) and click "add"  Give yourself a full access by checking the entire row for your user name  Scroll all the way to the bottom, click "save"	1

If Jenkins is running on a Windows server then it is better to install the Active Directory plugin.

On a Linux host you have an option to either use the <u>Active Directory plugin</u> or an LDAP based authentication. To configure the LDAP to work with Active Directory, provide the following:

Server	mydomaincontroller.mycompnay.com:389
Root DN	dc= <i>mycompnay</i> ,dc=com
User Search Filter	sAMAccountName={0}
Manager DN	cn= <i>mymanageruser</i> ,ou=users,ou=na,ou= <i>mycompany</i> ,dc= <i>mycompany</i> ,dc=com
Manager Password	****

Note that the correct Manager DN value can vary greatly depending on your Active Directory set up.

#### What is matrix based security

Ans: Actually this comes under security purpose means granting access permissions to specific users and groups for specific sections before that we also have to provide authentication access also for that we will go for

managejenkins---and go for configure global security page----and there will be option called enable security Once we check it ..it will show us page like security realm and authorization section...in security realm we will give the authentication permissions like ---hudson own user data base...and

Allow users to sign up options....

view(create/delete/ configure /read), scm(tag)

#### How do you trigger jenkins build as soon as there is a change in vcs?

Through poll scm

#### How do you install plugins?

The simplest way is by going to manage jenkins screen and clicking *Manage Plugins* and go to the *Available* tab. You'll find the plugin you'd like to install, select the checkbox, and then either attempt to *Install without restart* or *Download now and install after restart*. The web interface will then download \*.hpi files from here. If you *Install without restart* the interface will show you progress and provide the results of the install.

Sometimes when you install, you will notice that the list of available plugins is empty. If that is

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the case, from <i>Advanced</i> tab on the <i>Manage Plugins</i> page, click on <i>Check now</i> (button available in the bottom right of the page) to forcefully check for new updates. Once that is done, you should see the list of plugins.	
Do you take backup of jenkins if yes how? Yes we take backup of jenkins dailyfor that we have to copy .jenkins folder to backupthis we will set in crone tab	35
Do you take backup only job related configurations other than workspace  Ans: In jenkins home> .jenkins> jobs> builds and config.xml	36
We will configure this like: \$ cd .jenkins \$ ls \$ cd jobs \$ ls \$ builds config.xml	
How do you manually start the build / trigger the build?  Ans: In project dashboard>leftpanel> we want to click on the option called "build now"	37
What is reload configuration in your disk Discard all the loaded data in memory and reload everything from the file system	38
How do you install jenkinpluggin manually? Save the downloaded *.hpi/*.jpi file into the \$JENKINS_HOME/plugins directory. You will then need to restart Jenkins (many containers let you do this without restarting the container)	39
How do start the jenkins in command line interface?  Jenkins has a built-in command line client that allows you to access Jenkins from a script or from your shell. This is convenient for automation of routine tasks, bulk updates, trouble diagnosis, and so on.	40
Obtaining CLI	
Jenkins CLI is distributed inside jenkins.war as a jar file. See <a href="http://yourserver.com/cli">http://yourserver.com/cli</a> for where to download the CLI jar file. In theory, the CLI jar is dependent on the version of Jenkins, but in practice, we expect to be able to retain compatibility between different versions of Jenkins.	
Running CLI	
The general syntax is as follows (the design is similar to tools like svn/git): java -jar jenkins-cli.jar	
How do you setup distributed builds	41

Jenkins supports the "master/slave" mode, where the workload of building projects are delegated to multiple "slave" nodes, allowing a single Jenkins installation to host a large number of projects, or to provide different environments needed for builds/tests. This document describes this mode and how to use it.	
How do you add a node to your master or how to create nodes?  Ans: go to jenkinsdashboard>managejenkins>and then click on nodes> and now we can add a new node.	42
What r the different ways to shutdown your jenkins  Ans: one is: sh shutdown.sh  Another is: go to manage jenkins there we find one option called "preparing for shutdown"	43
Have you ever configure junit, cobertura, sonar for your builds?  Ans: Based on plugins we will configure thisfirst we have to install plugin and then we configure in manage jenkins>system configureand we it in our project	44
Do you know how to integrate jeera with your jenkins Yes,	45
What is pipeline? Calling a different jobs based on request	46
What kind of issues you have faced with your jenkins so far?	47
How much u rate in jenkins? Ans: 4 out of 5	48
What are the other ci tools you have to used? Hudsonbut both jenkins and hudsonis samei worked on jenkins	49
What is CI and CD	50
How do you setup email go to jenkins dashboard> in the left panel click on manage jenkins> configure system> there we will configure the email notification details like smtp server/ username/pswd/ etcand then click on save	51
Have you used advanced email pluggin? No, I worked on editable email plugin	52
How do you configure your jenkins server?	53
What do you know about advanced builds and distributed builds	54
How do you maintain jenkins	55
If jenkins becomes slow what actions do you take? How do you approach we have to check memory and add more ram if required and we check for any unused jobs we will take backup and delete that job and we cleanup an un-used plugginswheather memory is over then it will shows out of memory error	56

How do you trigger builds on remote servers [ master-slave concept]	57		
what is unit tests and what is code-coverage	58		
Where do you give Installation details in Jenkins  Ans: go to jenkins dashboard> in the left panel click on manage jenkins> configure system> there we will configure ther installation details of ant, svn, in related sessions	59		
How do you change base directory of checkout in Jenkins	60		
How do run Jenkins as a service ? [ Windows and Linux ]	63		
What is Scrum way of working or what is the development methodology you use	62		
We use Agile methodology in my current organisation			
There will be product backlog> pull some requirements/stories in to a sprint backlog			
and we will plan and divide the requirements Now Every one have there ownresponsibiltyby the end of the day there will be a standup meeting there we will tell the status of job donefurture what jobs we have to dobefore demo/review session there will be a restrospective meeting with our scrum master /project manager personally reg the status of requirements And then at the end of the sprint they have the review / demo session(its very imp qa will tests and produces demo in front of po if he approves ok finethis process will be iterated till we reach the goal of project			
How do you do troubleshooting of build failures ? Ans : common issues i faced was:	63		
<ol> <li>When we didnot install dependency plugin then it will show the error: Build failed :Required goal not found TS: install the dependency plugin and configure it and then we trigger a build then build will be successful.</li> <li>Missing artifact: build failedit will show the error like failed to resolve artifactone required artifact is missing</li> <li>such type of issue will come while we removed artifact from the cache(it happens every few months)&gt;</li> <li>TS: rebuild that versiion of that module to get it reinstalled.</li> <li>it's not a file: The error shows like: build error: failed to create assembly It happens when the when a module is build but one of its dependencies is built at the same time (so its jar is already 'deleted') -&gt; waiting until the dependency build had finished, then retriggering the module build fixed it</li> <li>Invalid java version: It happens when we didnt configure correct version we are usually using then this</li> </ol>			
error willl occur TS: Each hudson job has a jdk to be used - if this is e.g. set to 1.5 but the build would actually require 1.6 you'll see the above error -> get the job properly configured			

5. Mail notification failure: if any password changes this type of issue will come.... If the issue is related to me ....i will resolve it by my side and if not i will send mail attaching the printscreen to perticular team / person..... How have you used Jenkins in your current environment? 64 I have used jenkins from the scratch....installing and configuring jenkins and creating and configuring new jobs....trigger a build automaticcalyy....installing plugins....providing accesss permissions to the users and groups.....taking backup.....moving jenkins job from one server to anotherr ....and many more i have used jenkins in our current environment..... How do you manage builds 65 Bv ----- Running builds Viewing changes Download artifacts from dash board • Build trends---(means what are the builds failed / succedded) Tagging builds --(it is the build ready to release...we will create the tag) 66 How do you manage plugins? By----- Installing plugins Updating plugins Uninstalling plugins How do you manage USER authentication and authorization? 67 By----- Creating users Authenticating users with LDAP Setting permissions to user actions Enabling project level security Authentication is nothing but providing access to the users and setting permissions to the user actions......It has a project level security also....means you can do certain actions on project or u can not do certain actions....so we can configure a project level authorization.... How do u assign permissions to users injenkins? 68 Once authentication provides to users we also provide some authorization permissions...it is in manage jenkins---and go for configure global security page----and there will be option called enable security Once we check it ..it will show us page like security realm and authorization section...in security realm we will give the authentication permissions like --hudson own user data base...and Allow users to sign up options......and in authorization section we always use matrix based

security....bcz it allows you to grant only specific permissions to specific users and groups....i mean specific permissions means like there will be a overall permissions like( admin/read/runscripts/upload plugins/configure update sites and proxy settiings) and some more permissions like slave(configure to existing slaves/delete /create new slaves/Disconnect slaves/connect slaves), job(create/workspace/build/delete/configure/read/cancel/, run(delete/update), view(create/delete/configure/read), scm(tag) How do you see the process id and wheatherjenkins server is running or not 69 ps -ef | grepjenkins sudo kill -kill <pid> What are the bestpractise do u follow in jenkins 70 Always secure Jenkins. This best practice is around authenticating users and enforcing access control on a Jenkins instance In the default configuration, Jenkins doeîs not perform any security checks. This means any person accessing the website can configure Jenkins and jobs, and perform builds. While this configuration is normally acceptable for intranet use and quick setup, it introduces high security risks, like someone accidentally deleting your build jobs, reconfiguring your job to run every minute, kicking off too many builds at the same time, reconfiguring your build instance, etc. Backup Jenkins Home regularly. 'Nuff said. Use "file fingerprinting" to manage dependencies. When you have interdependent projects on Jenkins, it often becomes hard to keep track of which version of this is used by which version of that. Jenkins supports "file fingerprinting" to simplify this, so make best use of it. The most reliable builds will be **clean builds**, which are built fully from Source Code Control. To ensure a build can be reproducible, the build must be a clean build, which is built fully from Source Code Control. This practice also implies that all code including thirdparty jars, build scripts, release notes, etc. must be checked into Source Code Control. Integrate tightly with your issue tracking system, like JIRA or bugzilla, to reduce the need for maintaining a Change Log The integration helps to track changes as they are made, including build status, what build has been performed for this requirement or defects, and the link to the actual build

results and artifacts.

Integrate tightly with a repository browsing tool like FishEye if you are using Subversion as source code management tool

Repository browsing provides a quick update on what happens on a Subversion repository. It also provides a graphical diff on what changes have been made from the previous build.

Always configure your job to generate trend reports and automated testing when running a Java build

Trends helps project managers and developers quickly visualize current project progress status. Moreover, unit testing is often not enough to provide confidence that the delivered software complies to the desired quality. The more you test the software, the better the delivered software complies to the desired quality.

Set up Jenkins on the partition that has the most free disk-space

Jenkins needs some disk space to perform builds and keep archives. All the settings, build logs, artifact archives are stored under the JENKINS\_HOME directory. Simply archive this directory to make a back up. Similarly, restoring the data is just replacing the contents of the JENKINS\_HOME directory from a back up.

Archive unused jobs before removing them.

All unused jobs should be archived so they can be resurrected if the need arises. See <u>Administering Jenkins</u> for ways to do this.

Setup a different job/project for each maintenance or development branch you create

One of advantages of using CI tools is to detect problems early in the development lifecycle. Setting up a different job/project for each branch you create will help to maximize the benefit of detecting problems early as part of supporting parallel development efforts and reducing risk.

Allocate a different port for parallel project builds and avoid scheduling all jobs to start at the same time

Multiple jobs running at the same time often cause collisions. Try to avoid scheduling all jobs to start at the same time. Allocate a different port for parallel project builds to avoid build collisions.

Set up email notifications mapping to ALL developers in the project, so that everyone on the team has his pulse on the project's current status.

Configure each person on the people list with his or her correct email address and what role he or she is currently playing.

Take steps to ensure failures are reported as soon as possible.

For example, it may be appropriate to run a limited set of "sniff tests" before the full

	suite.					
		Write jobs for your maintenance tasks, such as cleanup operations to avoid full disk problems.				
		Tag, label, or baseline the codebase after the successful build.				
		Configure Jenkins bootstrapper to update your working copy prior to running the build goal/target				
		In larger systems, don't build on the master.				
	You can do this by setting the executor count to zero. Instead, make sure all jobs run on slaves. This ensures that the jenkins master can scale to support many more jobs, and it also protects builds from modifying potentially sensitive data on \$JENKINS_HOME accidentally/maliciously.					
How do you clone a job in jenkins						
Clone is one type of pluginit is used like recycle binwhen our jenkins is slow we will keep our old builds in clonewhenever we want again means we will take from there						

1.flow oall the tools - CI\CD complete flow

Code in git -> Jenkins Jobs ( maven for compiling and Ansible to push the code)

2.For java app what are the best tools which is used for CI and CD tools.----

Jenkins + Ansible

3.Advantage of puppet ---

**Configuration Management** 

4.High level arch of chef -----

chef workstation -> Chef server -> Chef Node

5.Default name given to the repository (origin is the default name given to any repository) ----

6.Cloud based deployment experience -----

#### **AWS**

7.My contribution in the recent project and day to day activity ----

Writing puppet modules

8. Various plugin used in ur project ----

Backup, git, Delivery pipeline, Build pipeline, Cucumber, dashboard, Build graph etc.

9.How do u do roll back deployment, for eg- installed an app with version 6 and for some reason ----

By using git tags.

- 10.I have to roll back to version 5.9, how to roll back to version 5.9. ----
- 11. What is the achievement you have done in ur exp of devops ----
- 12. Automation done using puppet, chef and ansible ----
- 13. What problem CI solves, advantage of CI. ----

What code is updated, It gets compiled automatically.

- 14.Different scripts used in ur project and what is the purpose of the scripts ----
- 15. How u have implemented devops in ur project ----

started writing puppet modules for infrastucture.

#### Ansible

16.Y do u use ansible for automation deployment, jenkins can also do the auto deployment, then y ansible is used y not jenkins. - Jenkins is a CI tool and ansible is very easy for pushing code to multiple systems.

17.different types of inventories in ansible - /etc/ansible/hosts, group\_vars and host\_vars.

**18.Diff bet ansible and chef** - ansible is agent less ans works on push method and chef works on pull method and has server-client.

19.in which language we write playbooks in ansible -

**YAML** 

20.if we want system information of machine how we will get the data with ansible like we use facter in puppet - using module setup.

- 21. Activity that we use with ansibles or advantage Functionality or purpose of ansible using in your project idempotency, simple because of modules.
- 22. Ansible Configuration files and process required to take control of other 3 machines controller and entried in /etc/ansible/hosts.
- 23. Functionality use with ansible in ur project and what is the adv of having ansible in ur project---

For deployments and provisioning resources on AWS.

24.Activity we can do using ansible like main advantage of using ansible --- idempotency.

25.How to launch an LDAP server using ansible ---

Used LDAP module from galaxy as a reference and modified it according to our environment.

26.How ansible works.. and what are the playbook written other than the basic playbooks --- we are using even to provision AWS resources.

27.For example there are 4 aps server running and 4 websers running and we have a new code change and this change should automatically copy to these different servers using ansible, how I will come to know new code is generated. --- use Jenkins with POLL SCM option and after artifact is generated using ansible to push suing copy module. ( make sure serial: 1).

28.Have u done any automation like app goes down then for self healing of the app kind of the thing. Have u written any playbook. (make sure serial: 1). We have written for Tomcat.

**Maven and Ant** 

29.what is maven from where we get the pom.xml for the jobs.—

Mayen is a build tool.

mvn archetype:generate

30.what is pom.xml ---

Any Maven project must have a pom.xml file. POM is the Maven project descriptor just like the web.xml file in your Java EE web application, or the build.xml file in your Ant project.

31.mayen and ant difference and what are the different scenario where it is used----

Difference between Ant and Maven. Ant and Maven both are build tools provided by Apache. The main purpose of these technologies is to ease the build process of a project. Ant doesn't has formal conventions, so we need to provide information of the project structure in build.xml file.

32.what is ant and from where we get the build.xml for the jobs.---

33.how pom.xml will read the variables which we use in the jenkin like version.----

By invoking maven

34.what is dependency in pom.xml---

**POM** inheritance

35.Invoke maven task is there in post build option.

**Jenkins** 

36.are we in admin part of jenkins like installation of jenkins ---- yes

37different ways to install a plugin's in jenkins - using manage plugins.----

38.how you created jobs in jenkins other than the GUI like new item option.. other option is job dsl. ---- using Jenkins API

39. Why jenkin is required if we can do the same thing with script like automatic. - Continous Integration and its plugin feature.

40.How many jobs are there in jenkins (for eg-ant, maven) - ant is default Maven vou have to install, , Gradle.---

41.steps for the installation of jenkins tomcat server ( for tomcat server install command is different ) - see our copy.yml.

42.yum install Jenkins will run on which server? - Master server.

43.how do you do a deployemnt. - using shell scripts

44.are you doing the deployment in an application server - ves.

45. What is sonar qube and How to Integrate sonar qube with jenkins - code metrics.

46.Main reason of using jenkins - CI.

47.Commands to start jenkin manually through command prompts like how to up the server - service jenkins start.

48. How to Safe restart the jenkins - Restart when no jobs are running.

49. How to create a backup in jenkins, what is the plug in name complete process. From which directory it will take the back up (jenkin\_home) directory. - Backup Plugin.

50.Step to setup a jenkins and how to create a new job - New item-> Frees style.

51. How to deploy a Custom build in jenkins - usinfg build tools such as ant and maven.

52. Where we store the artifacts which gets generated from jenkins - local and nexus

53. How to bypass the github like directly using the code and put it in jenkins--- t

54.Jenkins used a entriprised or a open source u used - --- open source.

55.Different Pluging used in jenkins --- build pipeline, Backup, git.

Git

56.pull request in git hub - --- git pull

57.fork a repository in git hub----

#### **Forking Projects**

If you want to contribute to an existing project to which you don't have push access, GitHub

encourages forking the project. When you land on a project page that looks interesting and you want to hack on it a bit, you can click the "fork" button in the project header to have GitHub copy that project to your user so you can push to it.

This way, projects don't have to worry about adding users as collaborators to give them push access. People can fork a project and push to it, and the main project maintainer can pull

in those changes by adding them as remotes and merging in their work.

**58.Diff between svn and git ---svn** is centralized version control and git is Distributed Version Control.

#### Linux

59. How to delete different lines in a file in linux eg:- line 1,4,6,10. ---

Sed '1d;4d;6d;10d' filename

#### 60.difference between soft link and hard link in linux---

Hard Link acts like a mirror copy of the original file. These links share the same inodes. Changes made to the original or hard linked file will reflect in the other. When you delete Hard Link nothing will happen to the other file. Hard links can't cross file systems.

Soft Link is actual link to the original file. These Links will have a different Inodes value. Soft link points to the original file so if original file is deleted then the soft link fails. If you delete the Soft Link, nothing will happen to file. The reason for this is, the actual file or directory's inode is different from the "soft link" created file's inodes. Soft links can cross file systems

61.can we create a soft link and hard link for file and dir---

Hard linkink of directorties is not possible

**62.need** to create a user and dont want the user to get the shell access--- put shell as /bin/false

**63.**Top command in linux--- top ( to check memory, process usage)

63. How to check dynamic log files in linux--- tail -f filename

#### Shell

## 64.Define a shell script---

A shell script is a text file that contains a sequence of commands for a UNIX-based operating system. It's called a shell script because it combines into a "script" in a single file a sequence of commands that would otherwise have to be presented to the system from a keyboard one at a time.

65. What are the shell script written in ur projects---

66.How to execute a shell file in debug mode---

Set +x

67.File contains my name 10 times we have to write the script where I have to count the number of times my name appears in the file. ---

vi abc.txt

#! /bin/bash

grep \$1 | wc -l

#### # sh abc.sh filename

## **Nagios**

68. What types of monitoring and what are the monitoring u have done on daily basis - Responding to the alerts. Adding new nodes and services on those nodes. ---

I have written puppet nrpe module.

69. How nagios works or how u monitor the servers - --- NRPE.

70.written any pliugin in nagios ---- I have plugins genereated from Nagios plugin installation and plugins from exchange.nagios.com.

# **Puppet:**

## 71. What is puppet?---

Puppet is a configuration management tool though it can be used fr orchestration also.

## 72. How to install puppetserver?---

Puppet is available in both open source and Enterprise edition.

Open source is available in EPEL.

Enterprise has to be downloaded for puppetlabs site.

# 73. How to setup enviornment in puppet?----

By setting Modulepath and Manifest destinations in puppet.conf.

# 74. What is puppet.conf/ what is puppet configuration file name? ---

Puppet.conf is main configuration file in Puppet.

# 75.Sections in puppet.conf file? ---

main, master and agent

#### 76. How to setup agent in puppet? ----

By installing puppet rpm.

# 77. Where do we mention puppet server information in puppet agent? ---

In puppet.conf under agent section.

```
78. What port puppetmaster listens? ---
see below notes
79. What port puppet agent listens? ---
see below notes
80. Where do we set puppet agent node definition in puppetmaster? ----
in site.pp file.
81.Default & enviornment both? ---
 production
82. What are puppet manifests? ---
file should have and extension of .pp file and inside this file we will define resources
using puppet DSL.
83.Location of puppet manifests, default and environment both? ---
Are mentioned in puppet.conf
84.Name 10 puppet resources? ----
check your cheat sheet.
85.What are selectors? ---
condition in puppet can be set using if/else, case and selectors.
86. What are classes in puppet and how to define it? ---
class is a collection of resources. is specified inside manifest file.
87.Installing multiple packages in by using variables? ---
variables can be defined using $variablename.
ex: $name1 = 'httpd'
class httpd {
    package {'httpd':
       package_name => $name1,
               }
}
89. What modules in puppet and how to create it? ----
Modules is collection of the files, templates, manifests required to implement a
```

scenario.

**Example: Setting up Web server** 

90. How to use puppetforge modules? ---

To download puppet modules using puppet module install.

91.Conditional statements in puppet? ---

if/else, case and selectors/

92. How to finetune or customize puppetforge modules? ---

Download the module from puppetlabs and modify it according to our environment.

Chef:

93.what is chef work flow----

**Workstation -> Server -> Nodes** 

94.how we get the properites of node----

Ohai

Tool used to detect a\_ributes on a node and then provide attributes to chef-client at the start of every chef-client run

95.what is resourse ----

**Resources:** 

A statement of configura>on policy within a recipe Describes the desired state of an element in the infrastructure and steps needed to configure

96.what is diff b/w chef server and chef client----

**Chef--Client:** 

Agent that runs locally on the node that is registered with the chef server

**Chef Server:** 

Chef server is the hub for all configura>on data, stores cookbooks, and the policies applied to the node

#### 97.what is run list----

Nodes receive their policy based off of roles and individual node configura>ons A run list defines the order in which you want your recipes to run during convergence

98.what is diff b/w cookbook and recipe----

Recipes are made up of a collection of resources Cookbooks are made up of a collection of recipes

99.how bootstrap will work & what is process----

Nodes should be bootstrapped and managed from the workstation

Nodes should be assigned roles and environments

A ributes specific to roles/environments should be configured accordingly

100.which language chef deploy?

ruby

#### What is Puppet?

Infrastructure automation and configuration management tool

**Enforces the defined state of the infrastructure** 

Puppet can automate tasks on thousands of machines.

Puppet enables infrastructure as code

Puppet allows configuration consistency across nodes

Puppet enables quick provisioning of new machines in an environment

Puppet allows DevOps admins to write declarative instrucions using the Puppet language

DevOps admins write code using the Puppet DSL to express the desired state of a node

Code is written inside of classes and classes are assigned to node

Node classifica0on is the process of assigning a class to a node for processing

# **Puppet Ports**

- 3000 Web-based installer of puppet master
- 8140 puppet requests
- 61613 orchestration requests
- 443 for console managemet

# **Example:**

Puppet language DSL

# **Puppet Master**

Compile and serve configura0on catalogs to agent nodes

Issue orchestration commands via MCollec0ve

Availability of puppet enterprise web interface console

Collect data and compile reports from agent nodes

# What is a catalog?

The catalog is a document downloaded from the puppet master to the agent that describes the desired state for each resource that should be managed. It may also specify dependency information for the resources that should be managed in a certain order. This is essentially a compiled version of the

DSL and is compiled on the Puppet master and stored in PuppetDB if PuppetDB is used.

Puppet enterprise includes MCollective which is an orchestration system that allows the admin to invoke different commands in parallel across a select group of nodes.

# **Puppet Process**

Install Puppet master and Puppet agents Create configurations (modules/classes) that declare a resources desired state Assign configurations to nodes

# Puppet nodes (agent)

Nodes are any virtual or physical system that is able to run Puppet Agent and is specifically supported by puppet agent.

# **Required Ports:**

8140 for puppet requests

61613 for orchestra0on requests

# **Puppet.conf**

Puppet Enterprise: /etc/puppetlabs/puppet/puppet.conf

Puppet OpenSource /etc/puppet/puppet.conf

# **Config Sections:**

[main] – Global section used by all services/servers

[master] – Use by Puppet master and puppet cert command

[agent] – Used by the Puppet agent service (even if the agent runs on the master)

[user] – Used most commonly by the Puppet apply command

## **Resource Abstraction Layer**

A system configuration is a collection of resources that make up the state of your system

Users
Cronjobs
Packages installed
Services
Etc.

#### Resources

When building modules we are using the puppet DSL to declare the desired state of resources on a node .Fundamentally all we are doing with Puppet is managing resources on a large and automated scale.

In Puppet we are using resource types to define instances of a resource on a node

#### Chef

# **Common Chef Terminology**

#### **Recipes:**

Fundamental configura>on element within an organiza>on

#### Cookbook:

Defines a scenario and is the fundamental unit of configura>on and policy distribu>on Chef--Client:

Agent that runs locally on the node that is registered with the chef server

## **Convergence:**

Occurs when chef--client configures the system/node based off the information collected from chef--

server

# **Configuration Drift:**

Occurs when the node state does not reflect the updated state of polices/configura>ons on the chef

server

#### **Resources:**

A statement of configura>on policy within a recipe

Describes the desired state of an element in the infrastructure and steps needed to configure

#### Provider:

Defines the steps that are needed to bring the piece of the system from its current state to the

desired state

#### **Attributes:**

Specific details about the node, used by chef--client to understand current state of the node, the state of the

node on the previous chef--client run, and the state of the node at the end of the client run Data--bags:

A global variables stored as JSON data and is accessible from the Chef server

#### **Workstation:**

A computer configured with Knife and used to synchronize with chef--repo and interact with chef server

#### Chef Server:

Chef server is the hub for all configura>on data, stores cookbooks, and the policies applied to the node

#### Knife:

Command line tool which provides an interface between the local chef--repo and chef-server

client.rb

Configuration file for chef--client located at /etc/chef/client.rb on each node

## Ohai:

Tool used to detect a\_ributes on a node and then provide a\_ributes to chef--client at the start of

every chef--client run

# Node Object:

Consists of run--list and node attributes that describe states of the node

#### Chef--Repo:

Located on the workstation and installed with the starter kit, should be synchronized with a version

control system and stores Cookbooks, roles, data bags, environments, and configuration files

#### Organization:

Used in chef enterprise server to restrict access to objects, nodes environments, roles, databags

#### **Environments:**

Used to organize environments (Prod/Staging/Dev/QA) generally used with cookbook versions

# Idempotence

Means a recipe can run multiple times on the same system and the results will always be identical

# **Synopsys Interview Question's:**

#### 1.what is diff b/w Ant and Maven?

**Ant:** ant is test for java project, here there is no formal convention and no life cycle so entire project structure we mention in Build.xml file

Maven: maven is unit-test for java project, here there is formal convention and life cycle

# 2. How dependency management in different Ant and Maven? How do you handle dependency management?

extremely important use case of "dependencyManagement" is the **control of versions of artifacts used in transitive dependencies.** 

Generally dependency scope 6 types:

a)compile

b)provided

c)runtime

d)test

e)system

f)import

# 3. How do you write customize targets in Ant and Maven?

<target> and </target>

# 4. How can you setup proxy repository in Ant & Maven?

Maven----/conf/settings.xml

# 5.can you different between "install and deploy" in Maven?

install - install the package into the local repository, for use as a dependency in other projects locally.

deploy - done in the build environment, copies the final package to the remote repository for sharing with other developers and projects.

# 6. Where is Maven Central, Local and Remote Repositories?

**Maven local repository:** reside in the developer's machine. Whenever you **run maven goals** which require these dependencies, maven will download the dependencies from remote servers and store them into developer's machine.

By default, Maven create the local repository inside user home directory i.e. C:/Users/superdev/.m2 directory. You can change the location of the local repository in setting.xml file using localRepository tag.

Maven central repository: is located at http://repo.maven.apache.org/maven2/. Whenever you run build job, maven first try to find dependency from local repository. If it is not there, then, by default, maven will trigger the download from this central repository location.

**maven remote repository:** work exactly same way as maven's central repository. Whenever an artifact is needed from these repositories, it is first downloaded to developer's local repository and then it is used. You can configure a remote repository in the POM file or super POM file in remote repository itself.

# 7. where do you deploy artifacts in tomcat server? And where do you get the artifacts?

Tomcat configuration is in the different folder. in **windows 7**. C:\Users\User\.**IntelliJIdea10**\system\tomcat\YourApplicationName

# 8. if i want re-deploy artifact(.war) without deleting/undeploy what you done/thing in tomcat?(content in module is different)?

Create a temporary folder anywhere on the server lets say "/var/tmp/war\_images". This will be used to temporarily store uploaded images when deploying a new war

- 1. Create a folder to put new WAR file. lets say "/var/tmp/war"
- 2. Create a shell script that do these things:
  - Copy all images from folder where user upload their images to the temp folder above
  - Delete application folder in tomcat
  - Delete WAR file in tomcat
  - Copy new WAR file from point 2 to tomcat8 folder
  - Restart tomcat (to trigger the deployment)

• Copy back all images from point no.1 back to app folder newly created by the deployment process

# 9. i want deploy one artifacts in tomcat? And without using jenkins how to deploy the artifacts in tomcat sever?

# 10.how can you create docker image?

Docker build -t <image\_name>

# 11.how you create docker container?

Docker run -ti -name <container\_name> container\_name> <storage location>

# 12.how to convert project Ant to Maven?

Create a pom with groupId, artifactId and version (packaging: war)

- 1. Add the required dependencies to the pom.xml
- 2. move the
  - java sources to src/main/java,
  - **resources** to src/main/resources,
  - webapp content to src/main/webapp,
  - test content to src/test/java and src/test/resources
- 3. set the compiler compliance version using the maven compiler-plugin

# 13. what is the advatages of Ant and Maven?

Maven	Ant
Description of project	Development of a build script per project
Invocation of defined goals (targets)	Invocation of project specific targets
Project knowledge	"Just" the build process
build lifecycle, standard project layout	too complex scripts
reusable plugins, repositories	scripts are not reusable
moving fast forward	development are slowed down

# 14. what is adayantage of devops team in oraganization?

Time taken very less

# 15.have you worked on any other VCS?

no

# 16.tell me difference b/w git and other vcs?

Git is distributed version control system

cvs/svn is central version control system

# 17. what is git branching strategies in your organization?

Suppose we have two branches first branch you add the Project1.0 and in same Projects done some modification/updates that is Project2.0 add to Branch2, if do this thing merge the two branch we will not get the conflict so we can easy to implement the updated versions very easy.

# 18.what is git stash?

Your are working on one branch you have urgent requirement to another project you don't save the data by using git stash we can save the data temparory.

# 19.how do you retrieve the content in git stash?

"git stash apply - -index"

# 20.if you useing git stash where will it save data? what is diff b/w index and staging area?

"Index area" save the data & essentially a "holding area" for changes

Staging is a step before the commit process in git.

# 21. what is best resolve in conflit in merge git?

Sometimes you get merge conflicts when merging or pulling from a branch. Git will then tell you something like CONFLICT (content): Merge conflict in Fakefile. It also tells you to fix the conflicts and then to commit the

git config --global merge.conflictstyle diff3

# 22.where is Testing Picture is comming in DevOps?

By using build-tools like maven, ms-build unit test come to picture

# 23.what is docker compose?

To run the containers at a time & connection b/w multiple application server link with on DB docker-compose.yaml

docker-compose.up -d

#### 24.what type of projects your working?

Telecom

#### 25.what are the different types of HTTP request methods?

GET, PUT, HEAD, DELETE, OPTIONS

GET is usually intended to retrieve some data, and is expected to be idempotent

**PUT** 

**HEAD** 

DELETE

#### 26.how do you generate the own SSL-Certifacts?

Install mod-ssl

openssl genersa 2048 > <ssss.pem>

give certificate validation 365 days or 730 days

edit lisiner in load balancer

paste in private key

#### 27.how to nginx as a proxy?is it possible?

**NGINX** is a free, open-source, high-performance HTTP **server** and reverse proxy, as well as an IMAP/POP3 proxy **server**.

We can configure nginx as a proxy

NodeBB by default runs on port 4567, meaning that builds are usually accessed using a port number in addition to their hostname (e.g. http://example.org:4567)

In order to allow NodeBB to be served without a port, nginx can be set up to proxy all requests to a particular hostname (or subdomain) to an upstream NodeBB build running on any port.

#### 28.what is your frant-end and back-end services?

Front-end: LoadBalancer like Nginx and Apache.

Back-end: DataBase like MySql-DB, Oracle-DB.

# 29. suppose your domain srinivasarao.com by default it will go http//srinivasarao.com, how do you redirect the http//srinivasarao.com?

HTTP allows servers to redirect a client request to a different location. Although, this will usually result in another network round trip, it has some useful applications.

#### 30. generally Http file is there i want to change Https how to change and where it change?

If you have a secure certificate (**SSL**) on your website, you can automatically redirect visitors to the secured (HTTPS) version of your website to make sure their information is protected.

#### Linux

31. how do you find out list of all process in linux?

Ps -aux

32. how do you find out specific process in linux?

Ps -aux | grep process id

33. how do you connect remote machine to machine? (aws to localsystem "how can you login to ipaddress")

ssh -i "pem-key" ubuntu/centos@ipaddress

34.how do you find out which port do you working?

Netstat -tap

35. can you explain CHMOD command?

36. have you worked with AWS?
Yes
37. what port for http & https?
http:80
https: 443
38. how can you kill the process? & tell me another way?
Kill process
39. what is diff b/w "KILL and KILL -9?
kill: normally
kill -9: forcefully
40. how can copy the file one machine to another machine?
Scp <filename> host@ipaddress:<absolute path=""></absolute></filename>
41. i have a one file in that file one word repeate n-nuber of time, i want that word how many time repeted, i want total count of repeated word in linux?
Grep o $\Leftrightarrow$   wc -l
42.how do you find our system which configuration i mean 32-bit (or) 64-bit?
Uname -na (or) hostname
43.how do you trigger-out/find out my remote machine is alive (or) not in linux?
Ping -c4
44.how can get process background to foreground? (background process running i want move to foreground

# 45.how do you find out the total space in whole system in linux system? And directory space also find out?

Fdisk -l-----find-out total system space du -sh-----find-out the directory space

46.i want go home directory, in that my home directory is full how do you trigger-out which directory take more space?

Ls -ltr

47.if i give ipaddress in your network how do you find out what are the associate hosts in that ip?

Netstat -t <ipaddress>

48.how to install package without internet using ansible?

49.AWS Beamstalk default environments?

50.what is sticky-bits in linux?

#### 51.what is the different between ELB & AUTOSCALING?

#### **Auto scaling(AS):-**

- -> It scales your infrastructure whenever needed.
- ->Automatically increase and decrease the size of auto scaling group (mainly EC2 instances).
- ->Adds and removes EC2 instances and traffic for application is distributed across EC2 instance.
- ->Adds new instances when load reaches a certain level and spin down instances when no longer needed.

#### Elastic Load Balancer(ELB):-

->It automatically routes incoming application traffic across dynamically changing number of multiple EC2 instances.

- ->It acts as a single point of contact for all incoming traffic to the instances in your auto scaling group.
- ->It used to monitor the health of the registered instances so that the load balancer send the requested traffic to healthy instance.
- ->Elastic Load Balancing scales your load balancer as traffic to your application changes over time, and can scale to the vast majority of workloads automatically.

#### 52.if java file size is full then what will you do?

/etc/defaults/

#jenkins=arc=xmx=8000MB (by default)

uncommant jenkins=arc=xmx=16000MB

#### 53.how to give dynamic ip in vagrant?

Private network=192.168.1.1

#### 54.how do you find-out it is DEV/QA/UAT/PROD environment?

55.how do you findout the total java application take memory?

55.in vpc under private subnet we have database and unber public subnet we have application, how to communicate the both?

#### 56.what are the maven setting?

Maven settings can be specified in 2 files.

- 1. User settings file \${user.home}/.m2/settings.xml
- 2. Maven global settings file \${maven.home}/conf/settings.
- a).repository path

Default repository path is ~/.m2/repository

But you can change is using below tag in settings.xml

<localRepository>local\_repository\_path</localRepository>

- b).interactive mode
- c).offline mode
- d).proxy setting
- e).server authentication setting
- f).mirror setting
- g)profile setting

#### 57. standard directory structure in maven?

Here is the standard directory structure that every maven project follows.

- 1. Source Code directory \${basedir}/src/main/java
- 2. Resources directory \${basedir}/src/main/resources
- 3. Tests directory \${basedir}/src/test/java
- 4. Tests Resources directory \${basedir}/src/test/resources
- 5. Output directory \${basedir}/target

Due to the standard directory structure, developers find it very easy to work on any maven project.

#### **58.**Maven archetypes?

Here are the most popular archetypes in Maven

- 1. Quick Start
- 2. Web app

Below command will create a sample project using quick start archetype. Note that double quotes around the parameter values are required if you are executing below command using window command prompt or windows Powershell.

mvn archetype:generate -DgroupId="org.softpost" -DartifactId="MyStandardApp" - DarchetypeArtifactId="maven-archetype-quickstart" -DinteractiveMode="false"

Below command will create a sample project using web app archetype.

mvn archetype:generate -DgroupId="org.softpost" -DartifactId="MyWebApp" - DarchetypeArtifactId="maven-archetype-webapp" -DinteractiveMode="false"

#### 59. Declear Maven Dependancy?

For example – if you **want to run JUnit tests**, you will have to define below JUnit dependency in your POM.xml

```
<dependency>
<groupId>junit</groupId>
<artifactId>junit</artifactId>
<version>4.12</version>
</dependency>
```

All right – so we declared the dependency in POM.xml now what next?

You don't need to do anything apart from declaring the dependency. Maven will take control from there and get the JUnit artifact for you.

If you are not sure which version of JUnit to use, you can visit http://mvnrepository.com/ and find out the group name, artifact name and version for Junit.

#### 60. Adding in .jar/.war/.ear file in dependancy maven?

#### 61. Maven plug-ins?

Maven plug-ins can be divided into 2 types.

- 1. **build** Build plugins should be included in <build> tag. Build plugins are executed during build process.
- 2. **reporting** Reporting plugins should be included in <reporting> tag. Reporting plugins are executed during site generation once the build process is complete. For example javadoc and surefire-report are reporting plugins.

Plug-ins can also be categorized in below way.

- 1. Core (Most frequently used ones) clean, compiler, surefire, deploy, install, resources, site.
- 2. Packaging (Used for packaging the project artifacts)—jar, war, ear
- 3. Reporting javadoc
- 4. Tools (used for performing tasks other than build process) ant, archetype, help, release

Here is the list of some of the most popular plug-ins and their associated goals in maven.

- 1. compiler:compile compiles project
- 2. archetype:generate creates new project
- 3. surefire:test
- 4. clean:clean
- 5. deploy
- 6. install
- 7. resources
- 8. site

- 9. verifier
- 10.jar
- 11.war
- 12.javadoc
- 13.surefire-report

#### **62.** maven Surefire plug-in configuration?

#### **Configuration of surefire plugin**

- 1. suiteXmlFile specify the xml file containing tests to be executed
- 2. **groups** specify the group names to be included. Tests belonging to those groups will be executed.
- 3. **Excludedgroups** specify the group names to be excluded. Tests belonging to those groups will not be executed.
- 4. **parallel** If you want to execute tests in parallel, use this tag. Possible values for this tag can be methods, classes
- 5. **threadCount** How many threads should be created at a time to execute tests?

Here is the sample configuration of surefire plugin

```
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-surefire-plugin</artifactId>
<version>2.19.1</version>
<configuration>
<suiteXmlFiles>
<suiteXmlFile>testng.xml</suiteXmlFile>
</suiteXmlFiles>
<groups>sanity, regression</groups>
<excludedgroups>smoke</excludedgroups>
<parallel>methods</parallel>
<threadCount>3</threadCount>
</configuration>
</plugin>
```

#### 63. where is Ansible Log files are stored?

/etc/ansible/ansible.cfg

- 64. where is jenkins log files stored?
- 65. where is linux log files are stored?

/var/log

66. where mayen build artifacts stored?

.m2 folder

67. how to run maven ofline packages?

Maven o package.

o=ofline

#### 68. what is diff b/w version and snapshot?

Snapshot: it will take latest version

version: what you mensations it will take only that version

#### 67. what are the maven plug-ins?

Repository plug-ins: size related plug-in

build plug-in: execute during build

report plug-in

#### 68. what is "External Dependancy" concept in maven?

There is no/not dependancy in maven repository (local/central/remote repository) use external dependancy.

#### 67. is ansible parallel execution (or) sequential execution?

Ansible is a by default parallel execution, ansible nting but control machine it can execute N-number of nodes, when ever you mensation serial=1 mensation in playbook it will act as sequential execution.

Ansible playbook is sequential execution we give install sevice, start the application....these are sequential execution

#### 68. Ansible is orchestration tool, how do you jestify? What about puppet?

Service are orchestrated...

puppet is not orchestration, but puppet enterprice is orchestration.

#### 69. how to check the o/p execute (or) not in ansible and puppet?

```
When you run the playbook, lastly show Ping Pong (j-son format) state are chaged---o/p come state is not chage----o/p not come
```

#### 70. i want run ec2 instance other then GUI?

```
Aws cli
teraform
jenkins ----- amazon ec2 plug-ins
through ansible (by using playbook)
through python script
```

## **DOCKER**

In previous days we used physical servers to deploy applications

#### Drawbacks:-

- 1. Unused resources(ram, cpu, hdd)
- 2. Costly to buy servers
- 3. Space consuming

Later came virtual technology which saved money and optimized, resources

## Drawbacks:-

- 1. Each vm will have copy of o.s files which makes booting slow
- 2. vm hard disk size is too large and difficult to move between environments
- 3. Performance down
- 4. We need to provide virtual motherboard, cpu, ram etc...
- 5. Every app rely soon guest o.s not on host o.s

Now came container technology where containers share host o.s kernel

vm means virtual machine which has o.s, bin/lib files and on top we install applications just like that container is a machine/box where there will be bin/lib files and applications

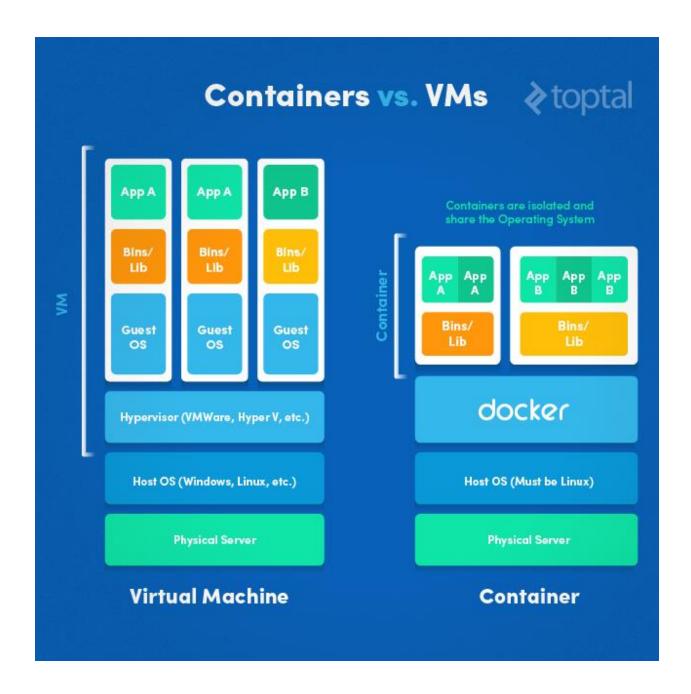
in VMware we can create 15-20 vms just like that in docker we can create as many as containers we need

In bare metal installation we install host o.s (W/L) on top we install virtual machine software (Hypr/Esxi) and we create vm's in each we install guest o.s and on top we install apps

In a server we install host o.s (Linux) and docker engine is installed now we can create as many containers as possible. In each container we have apps, bins, libs. All the apps/containers share kernel o.s

#### Benefits:-

- 1. Portability
- 2. Stability
- 3. Boot time is fast
- 4. Isolation = every app works in its own container n don't interfere other aps



Sometimes application runs on developer system, but don't run on testing/production/staging environment and docker avoids this problem

We have development lifecycle as

1. Plan

- 2. Develop
- 3. Deploy
- 4. Test

Docker is mainly used at deployment stage

Docker is a tool designed to build/create, deploy and run applications anywhere using containers

Developer will package application and its components into a box called containers. Now docker will take responsibility of shipping these containers to all other platforms

Using docker we can download and install any software in less than 2 minutes on n number of systems

Docker runs only on Linux o.s

Docker is a client server architecture where client is docker client and docker server has docker daemon

## Advantages:-

- 1. Using docker we can run application on any platform
- 2. Portability
- 3. It avoids you to configure application multiple times on different environment
- 4. Isolation=every app work in their own container and don't interfere other apps

#### DOCKER TERMINOLOGY:-

Docker image=it is an executable software. This executable software consists of libraries, application, binaries, combination of filesysytem and parameters other dependencies such as deployment descriptor. This docker image has only read permission. Ex:- (iso image only you can run cant modify)

Docker hub= public registry to store and fetch docker images

Docker file=a text document contains list of commands.

Docker engine=the system which create and run docker container

Docker client=command line interface (cli) is docker client

Docker server=docker running in daemon mode on Linux server

Build=process of creating container image from docker file

Pull=downloading container image from registry to local cache

Node=a server (V/P) where docker is installed

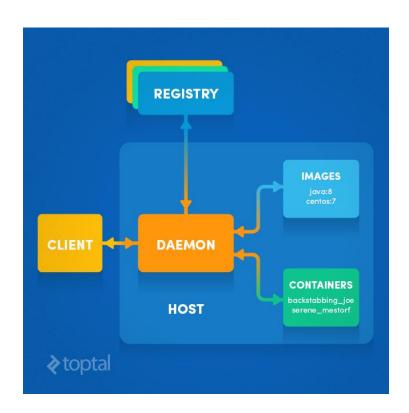
Container=snapshot of docker image that you can start stop modify and publish another image. When you run image you get container that means container is instance of docker image (container is copy of application)

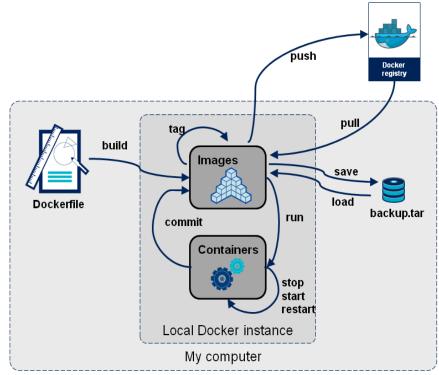
Micro-services=numerous smaller code bases managed by small teams

Registry= (private) a place where container images can be pulled/pushed

#### DOCKER WORKFLOW:-

**Dockerfile** > (Build) > **Image** > (Run) > **Container**.





## **DOCKER INSTALLATION:-**

- 1. Can be installed on windows/linux o.s
- 2. o.s must be 64 bit

- 3. connect to linux system
- 4. install docker software
- 5. start docker service
- 6. stop docker service(if required)
- 7. uninstall docker(if required)

## **DOCKER COMMANDS:-**

## **JENKINS**

## Waterfall Methodology:

Here development takes first, during this phase developers writes code, merge code, and change code.

During this time, testing team was engaged in other project. Later when they test the source code and intimate them, by that time developers were in another project or need to go through entire source code for small bug.

#### Drawbacks:

- 1. Time consuming
- 2. Slow delivery
- 3. No integration

## Agile Methodology:

During agile methodology, developers have some daily tasks after they finish off. They just give to testing team.

Now developers need not to wait for weeks/months

#### **Drawbacks**:

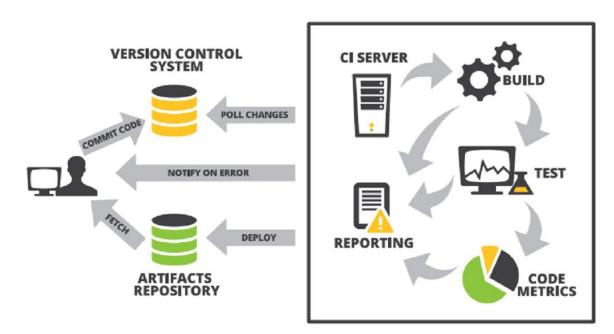
1. No integration

## Product release lifecycle:

- 1. Developer develops the code
- 2. Commits the code into source code repository(Git/Svn)
- 3. Source code is built(maven)
- 4. Build application will be deployed on test servers
- 5. Tester test the application and notifies if any bug exists
- 6. Else will be deployed in production servers

### Drawbacks:

- 1. Developers has to wait for testers result
- 2. Developers has to go through entire source code
- 3. Software delivery is slow
- 4. No continuous feedback from testing team



## Continuous Integration (C.I):

It is a practice where developers are required to push their code into source code repositories several times a day. C.I server will pull that code and does build, test and deploy and trigger issues to developer

#### C.I servers does

- a. checking new version code
- b. build new version code
- c. running tests
- d. deploying application

C.I speeds development process and minimizes the risk of critical issues in production server

#### C.I Tools:

- 1. Jenkins
- 2. Hudson
- 3. Bamboo
- 4. Buildbot

#### JENKINS:

- Jenkins downloads the code from repository, resolve dependencies, builds the code and then deploys it.
- Jenkins is an open source tool written in java with lot of plugins built for continuous integration
- Jenkins merges all code continually in a central build. Jenkins can merge, monitor, regulate, compare and maintain your project aspect
- 1.Linux kauditd process;Linux Audit performance impact;Linux Audit process;Configuring and Auditing Linux Systems with with Audit Daemon
- 2.Build Procedure
- 3.Post Build Procedure
- 4.Work order tracking
- Please check if the SAN Task which is just the storage task ...Look at server(name) to see why we
  cant communicate on the network?check if someone (name) has a SAN Task and SRF in the
  build Work order...I don't even see a build Work Order in the factory record so we might need
  one opened ASAP and progress...
- Wo1177... is the work order that has been created for a server(name)since the server has
  network issue, I have not advanced the tasks ...please send your other email to (name)
  regarding the network issue on the server

- Email: Hi (name), This server is not coming on the network...looks like eth2 and eht3 are cabled but we are unable to ping the default gateway,can you please have the switch post configuration checked
- 5.NAS storage request created
- Summary:Implementation #WIP Storage over 500 GB
- CUS\_NAS\_Request Form\_servername.xls is the form attached ,server and storage(2 types...SAN,NAS) required
- 4TB of SAN ...File System created
- 6.High space used for a)/var file system b)/tmp file system c)/root file system
- 6.We will be doing a world writable scan next week end and need to have all Linux/HP-UX /AIX Agents online HP-UX And Aix are well maintained .Linux requires some cleanup
- Basic...Linux OS Support
- Description: I am particularly concerned about the agents that have been offline for more than a
  week ,but we need the Linux Agents to be online as we are required to have world writable files
  checked on 100 % of servers .If they are decommissioned.they need to be cleared or I need a
  list.So I can account for why there are no results for that server.Please see attachment for more
  detail(start a particular service (online agent) that is not running
- Computer name last report time
- .....
- Note:DES Agent is a service to determine world(others ..i.e anybody can have access to this box)
   writable files
- 7.Rhel 6 to Rhel 7 upgrade...i.e upgrade a box from Rhel 6 To Rhel7
- 8.Server build request (To Install OS on a new Box).
- This particular request (RFS).
- Information given is ....New Host to install;IP Address of that host;ILO IP Address;Every machine will have id no.(serial no.);Asset tag...not related to OS/box itself.
- 9.Genesys servers...NTP offsets
- 10.Linux Server Patching:List of servers(GBD servers) to do patching(patched) and rebooted.
- Subject:put change ticket no. for patching
- Eg:Hi Name,
- The following servers will be patched(connect to servers) and patched.
- Recipient Subject
- Name Re:Patch Contenders received so far for CR CHG 0111173(PROD servers ...hence onlypatch the ones in Green)
- After completion of patching, give an email saying that server patching is complete and servers are back up and running...so please validate. What do you mean by validate
- 11.Description: I am particularly concerned about the agents that have been offline for more
  than a week, but we need all Linux agents to be online, we are required to have world writable
  files checked on 100 % of the servers, if they are decommissioned they need to be cleared or I
  need a list so that can account for why there are no results for that server. Please see
  attachment for more detail.
- Summary: We will be doing a world writable scan next weekend and need to have for all Linux/HP-UX/Aix Agents online. Hp-Ux and Aix are well maintained. Linux requires some clean up.

- IEM (product)TEM besclient reinstall
- Besagent(package installed) is a service to find world writable files...write permissions are given to owner and to group....still you wont be able to edit it.
- 12.steps:
- 1.stop application and shut down the database
- OS Patching/reboot(Linux)
- Relink Oracle Library(DBA)
- Reset Library Permisions(Linux)
- Start up Database(DBA)
- Start application(EMT)
- Find out what will get updated on the boxes and print those packages that will get updated.
- 13.Issue for account lockout for enetlby because of failed buildforge jobs...therefore please update the password in Buildforge.
- 14.server name...Src:ITMG Process missing:init
- Server name:Src:ITMG Process missing auditd
- 15.How do I disable kaudit.d on Fe....It wont allow to start the service or stop.
- 16.On each of 2 servers I need a /axway file system of size 4 TB and exported as NFS .Create a 4 TB on NAS device
- Change Ticket: As per the requested NAS task. I have mounted temporarily on below mentioned servers . Please mount permanently and close the change ticket task .
- Kindly mount the Linux servers for the below share and complete the respective task in the change CHG009677
- Ma18....(servername) /vol\_Axway ..share is the NFS share that was created on NAS device /appliance for a size of 4 TB
- 17.Performing a change request :
- Kernel parameter,,,,fs.aio\_max.nr needs to be set to 3145726 as per Oracle Recommendation.Execute sysctl\_p to force a reload of the configuration.This needs to be done on servername1 and servername2.
- 18.Patching:Time to time servers will get updated and you have to schedule an export and since these servers are db servers ,they have to coordinate with DBA who will stop the database ...Linux people will do patching, report the box once the server is up and running .
- Issue:We have to identify in a preview mode if I run the Yum Command ,what will get updated on these boxes(servers) just tell us and not print...pass the list ,he will look at what all packages are getting updated on these boxes(servers) and he will decide whether it updates his db/not.
- Issue:Please provide the details of OS Patching (RPM LA ,anything else)so that I can open an Oracle SR to check the impact /compatibility of the DB version
- 19.Maintenance steps:
- STOP THE APPLICATION (EMT)
- SHUT DOWN(DBA)OS PATCHING/REBOOT(LINUX)
- RELINK ORACLE LIBRARY(DBA)
- RESET LIBRARY PERMISSIONS(LINUX)
- STARTING DB(DBA)
- START APPLICATION(EMT)
- Please find the list of packages that get updated for the respective servers...server1,server2.....

- Please be aware that we are still missing 2 mef3 files from 2 Linux servers to supply with the
  customer files that is done by EOB on ...(date).A Cirate will be opened if the files are not
  received by EOB tomorrow
- 20.Need to mount the NAS server name/vol\_wcc\_test to the Linux servers with mount point name vol\_wcc\_test\_....I have created user .......and group....... on these servers
- 21.Network file systems:
- Change ticket:Install software then deploy application /making changes on the production box;create a change and then renew by change management team what the change is about ...all information is entered in the change ticket
- 22.service request:Can you mount NAS shares ...i.e sharing the NAS drives to the PROD Servers
- NAS Guys will export a file system for all Linux Servers
- Request:Export NAS volume onto which server
- I tried a couple of servers and got permission denied while trying to mount /stellent content.It looks like it's the permission issues on the storage side .Can you please make sure that the NAS Team has processed the request for these servers
- 23.Please go and create an "name1" folder under /name2 for the remaining server(creating a directory on these servers earlier it gave permission denied but now I have to retry)
- 24.In a server I requested a service .How to change the log level in a centrify dc .conf file to WARN.It was set to 'DEBUG'.Not that this should affect Centrify should work but would cause increase logging for centrify and later on create space issues,once done centrify Dc service service will be restarted
- Issue: I wanted to bounce Centrify DC service but before that I changed the Log in Centrify dc.conf file to WARN .it was not set to DEBUG
- 25.How to remove the old kernel?What do you mean by Vulnerability list?
- 26Change Task:Linux Jar Migration changes.Xpression.Jarfile needs to be updated to Production Jar server Library,also properties files needs to be updated as per new Xpression webservice URL
- 27.We are unable to use sudo su wsadmin command in server (name )due to the network errors ;software caused connection abort ;please check this and let us know once it is fixed.
- 28.New batch server setup in PERF and PROD Discussions.
- 29.How to restart agents on server(name)?How to do agents installing on server(names)?
- How to unlock and reset password on server(names)?
- 30.Change tasks for non production servers; Remediation of offline Tivoli Monotoring agents; For
  each of the hosts he wants me to start and stop the agent (Tivoli Monitoring Service)
- 31.Please initiate Verification Post Implementation Process
- RE: New Batch Server setup in PERF and Prod Discussions
- Notes: Setting up space in Batch Server
- Control M Agent Installation
- Oracle and Java setup
- Action items:
- Space----Need to submit SR,Refer Request IT from the category in which request has to be submitted
- Control Agent Installation

•	Oracle and Java setup: Need to get the details from mid range techsupport on servername1 and servername2 and share it with Linux team so that it can be setup the same way