Write a shell script to delete todays files from the last few days?

find ./my_dir -mtime +10 -type f -delete

Difference between Persistent volume and Persistent volume claim?

persistent volume (PV) is the "physical" volume on the host machine that stores your persistent data. A persistent volume claim (PVC) is a request for the platform to create a PV for you, and you attach PVs to your pods via a PVC**.**

How to remove dependency from Artifactory?

How to add Artifact from artifactory to Jenkins?

install Artifactory plugin

How we can select slave machine from Docker image while running Jenkins pipeline?

Which Git parameter you are using while creating Jenkin cicd pipeline?

What kind of storage you are using for the Private Docker registry to store Docker images?

Dockerhub

What is the difference between C-Group and Namespace?

Cgroups = limits how much you can use;

namespaces = limits what you can see (and therefore use)

If you are using an ec2 instance with load balancer and both were in private subnet but you able to access port 80 but health is failing (health check is configured on port 80) what is the reason?

How to pull private images from Kubernetes and write a syntax for that?

kubectl create secret docker-registry regcred --docker-server=https://index.docker.io/v1/ --docker-username=kammana --docker-password=<your-password> --docker-email=hari.kammana@gmail.com

kubectl get secret

```yaml
apiVersion: v1
kind: Pod
metadata:
  name: private-reg
spec:
  containers:
  - name: privateapp
    image: kammana/privateapp:0.0.1
  imagePullSecrets:
  - name: regcred
```

can we assign public ip to docker container

Yes we can by creating our own bridge network by specifying public ip

```
$ docker network create \
    --ipv6 \
    --driver='bridge' \
    --subnet=82.103.188.0/29 \
    --gateway=82.103.188.1 \
    --subnet=2a00:9080:9:69::/64 \
    --gateway=2a00:9080:9:69::1 \
    my-net
```

1. How to reduce the size of Docker Images?

Ans:- 1. Use a Smaller Image Base (Alpine)

To create a Docker image, you need a base on which you can install and add components, as needed. You can download an existing parent image and use it as the base of your own image or build one from scratch.

You install a variation of an operating system as the base of an image. The OS base can drastically impact the size of your final Docker image, which is why deciding on the right one plays a significant role.

Linux created a helpful alternative that is lightweight and has a minimal POSIX environment – Alpine. This Linux distribution image base is only 5 MB, built around musl libc and BusyBox.

Compared to other OS images, Alpine is much smaller in size. The most downloaded OS image, Ubuntu, is 188 MB, while Alpine is only 5 MB.

2. Use a .dockerignore File

Excluding certain files that aren't necessary for your image can help you reduce the image size. That is where the .dockerignore file comes in.

When building an image, you write a Dockerfile with specifications of what that image should look like.

When outlining the build context, it is important also to include a .dockerignore file and store it in the same folder as the Dockerfile.

This Docker feature is initiated with docker run. The system checks whether there is such a file and applies its exceptions and ignore rules. That way, you remove any irrelevant content from the built context.

3. Utilize the Multi-Stage Builds Feature in Docker

Docker introduced the multi-stage feature in its 17.05 version. It allows users to divide the Dockerfile into multiple stages.

Each stage begins with a FROM instruction. The required artifact passes to the following stage,

leaving behind content that you won't need in the final image artifact.

Since the process only transfers the necessary components of the artifact, you don't have to clean up manually after every instruction.

With the multi-stage feature, you avoid adding unnecessary layers, which has a considerable impact on the overall image size.

4. Avoid Adding Unnecessary Layers to Reduce Docker Image Size.

A Docker image takes up more space with every layer you add to it. Therefore, the more layers you have, the more space the image requires.

Each RUN instruction in a Dockerfile adds a new layer to your image. That is why you should try to do file manipulation inside a single RUN command. Also, combine different commands into one instruction using the && option.

For instance, you can update the repository and install multiple packages in a single RUN instruction. To get a clear, comprehensive line, use the backslash (\) to type out the command in multiple lines.

Apart from updating and installing the packages, you should also clean up apt cache with && rm

-rf /var/lib/apt/lists/* to save up some more space.

RUN apt-get update && apt-get install -y\

[package-one] \

[package-two]

&& rm -rf /var/lib/apt/lists/*

2. Difference between Persistent volume and Persistent volume claim?

A PersistentVolume (PV) is a piece of storage in the cluster that has been provisioned by an administrator or dynamically provisioned using Storage Classes. It is a resource in the cluster just like a node is a cluster resource. PVs are volume plugins like Volumes, but have a lifecycle independent of any individual Pod that uses the PV. This API object captures the details of the implementation of the storage, be that NFS, iSCSI, or a cloud-provider-specific storage system.

A PersistentVolumeClaim (PVC) is a request for storage by a user. It is similar to a Pod. Pods consume node resources and PVCs consume PV resources. Pods can request specific levels of resources (CPU and Memory). Claims can request specific size and access modes (e.g., they can

be mounted ReadWriteOnce, ReadOnlyMany or ReadWriteMany.

3.How to add Artifact from artifactory to Jenkins?

Copy Artifact