Bind Mount and tmpfs mount

File or Directory of the host machine is mounted into the container. The path of file or directory can be a relative or an absolute path. Unlike volumes for bind mount it is necessary for the directory or file structures to be present on the host. Same live volume mount bind mount also make use of – v or –mount flags. Refe to volume flags –v or –mount for futher details.

Example

docker container run –d –it –name devtest –mount type=bind,src-“${pwd}”/target , target=/app nginx:latest

Hence for bind mount src is usuakky the path of file or directory present on the host.

Use dockerinspect <container name> to check if mount was proper or not .

If you make a bind mount with non empty directory its contains are obscured by the bind mout.

Example

To relace /user container directory eith /tmp host directory

Docker container run –d –it --name devtest –mount type=bind,src=/udr/ , target=/tmp, nginx:latest

Bind propogation

By default propogation for the bind mount and volumes is rprivate. The propogation is only configurable for bind mounts on linux system only. Propogation refers to mount created ind mount, can it propogate through replicas or not. Each propogation type is recursice by default.

Propogation type

Shared : the sub mounts of original mounts are exposed to the replica mounts, suther b mounts of replica alos propogate to original mount.

Slave: it support only one way propogation , sub mount of original are exposed to replica but to the other way round.

Private The sub mount of original and replicas are not exposed to each other

Rshared , rslave and rprivate are same as above but in that propogation also extends to and from the nested point.

The host file sstem should support the propogation before it is set

Tmpfs mount

When tmpfs mount is create containers can create file outside the containers writable layer.

As opposite to volume and bind mount tmpfs mount is tempprary and exist as long as the container is running. When a container is stopped tmfs mount would be removed and files present there wont exist. This is used for temporay files that you don’t want to persist for either host or containers witable layer.

Tmpfs mount is only available for linux containers. And you cant share data between tmpfs mounts.It is mounted using –tmpfs or –mount flags.

Example

Docker container run –d –it –name devtest –mount type=tmpfs,destination=/app nginx: latest

When you remove the container the mount disappears.

Tmpfs mount has two configuration option, both the options are optional

Tmpfs-size : size of tmfs mount in bytes unlimited by default.

Tmpfs mode : file mode in octal