Exploring Docker Image Layer in Local Cache

1. Before starting httpd container

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html

cat

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html
<html><body><h1>It works!</h1></body></html>

2. After starting httpd container

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html/var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/merged/usr/local/apache2/htdocs/index.html

cat

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html < html><body><h1>It works!</h1></body></html>

cat /var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/merged/usr/local/apache2/htdocs/index.html <math><html><body><h1>It works!</h1></body></html>

3. After updating index.html

 $/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html \\ /var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/merged/usr/local/apache2/htdocs/index.html \\ /var/lib/docker/overlay2/f3f100194f263786f2696f279b366f279$

/var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/diff/usr/local/apache2/htdocs/index.html

cat /var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/diff/usr/local/apache2/htdocs/index.html
hello world !

4. After shutting down httpd container

cat /var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html
<html><body><h1>It works!</h1></body></html>

cat /var/lib/docker/overlay2/f3f100194f2637872bddfd0055681c8dec1566ef8c6b4210307f35af7652b338/diff/usr/local/apache2/htdocs/index.html
hello world !

5. After removing httpd container

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html

cat

/var/lib/docker/overlay2/2de088e9fd32097b7d747d1b009ff596fc79b95b26c4fc1a91701e237ec1e9c8/diff/usr/local/apache2/htdocs/index.html
<html><body><h1>It works!</h1></body></html>