docker inspect is a read-only command used to display detailed information about Docker objects such as containers and images. This information includes configuration details like IP address, hostname, environment variables, and more. However, you cannot directly edit this information using docker inspect. Instead, you must modify the configuration when creating the container or modify the container's settings using other Docker commands.

Here's how to change the IP address and hostname of a Docker container:

**1. Change IP Address**

To set a specific IP address for a Docker container, you need to create a custom Docker network and then start the container within that network with the desired IP.

**Step 1: Create a Custom Network**

You can create a custom bridge network and specify the subnet and gateway:

bash

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docker network create --subnet=192.168.1.0/24 my\_custom\_network

This command creates a custom network called my\_custom\_network with the subnet 192.168.1.0/24.

**Step 2: Run a Container with a Specific IP Address**

When starting a container, you can specify the IP address within the custom network:

bash

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docker run -d --name my\_container --network my\_custom\_network --ip 192.168.1.100 my\_image

* -d runs the container in detached mode.
* --name specifies the container name.
* --network specifies the network to connect to.
* --ip specifies the IP address to assign to the container.
* my\_image is the name of the Docker image.

**2. Change Hostname**

You can set the hostname of a Docker container at creation using the --hostname flag.

**Step 1: Run a Container with a Custom Hostname**

bash

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docker run -d --name my\_container --hostname my\_custom\_hostname my\_image

* --hostname specifies the hostname for the container.

**Example: Setting Both IP Address and Hostname**

To set both a custom IP address and hostname, you combine the options as follows:

bash

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docker run -d --name my\_container --network my\_custom\_network --ip 192.168.1.100 --hostname my\_custom\_hostname my\_image

**3. Modifying Existing Containers**

To change the network settings of an existing container, you'll need to:

1. Stop the container.
2. Remove the container.
3. Recreate the container with the desired settings.

**Stop and Remove the Container**

bash

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docker stop my\_container

docker rm my\_container

**Recreate the Container**

Recreate the container with the desired network settings and hostname, as shown in the previous examples.

**Additional Tips**

* **Inspect the Container**: You can use docker inspect to verify the container's settings.

bash

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docker inspect my\_container

* **Using Docker Compose**: If you're using Docker Compose, you can specify the network and hostname settings in the docker-compose.yml file.

**Summary**

To change a Docker container's IP address and hostname, you must set these configurations when creating the container. You cannot modify them after the container is running without recreating it. Always ensure that the custom network settings do not conflict with your existing network infrastructure.