

# Issue

When a container is connected to an overlay network, ICMP ping will fail.

## Prerequisites

Steps below helps you verify that you are affected by this issue:

1. Host OS can ping public website

```
PS C:\Users\docker> ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=2ms TTL=115
...
```

2. Doing the same from a container not connected to overlay works

```
PS C:\Users\docker> docker service create --name overlay_no microsoft/iis:windowsservercore-1803
PS C:\Users\docker> docker exec $(docker ps -q --filter name=overlay_no) ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=2ms TTL=114
...
```

3. Same command fails when connected to overlay network

```
PS C:\Users\docker> docker network create -d overlay --attachable testnetwork
PS C:\Users\docker> docker service create --name overlay_yes --network testnetwork
microsoft/iis:windowsservercore-1803
PS C:\Users\docker> docker exec $(docker ps -q --filter name=overlay_yes) ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Request timed out.
```

## Root Cause

The issue is still under investigation as of October 2018.

## Workaround

This issue affects ICMP ping only; other protocols should function normally. For the purposes of troubleshooting container connectivity and performing health-checks, consider using layer 7 protocols such as HTTP or HTTPS via `Invoke-WebRequest`.