



# Guide: Setting Up Your Edge Node for Holochain Wind Tunnel Testing

Welcome! You are about to set up your Edge Node to participate in **Holochain Wind Tunnel** scenarios.

## What is the Wind Tunnel?

Just as car manufacturers use wind tunnels to test aerodynamics under extreme pressure, Holochain uses "Wind Tunnel" software to stress-test the network. Wind Tunnel is our framework to run test scenarios and collect metrics from clusters of holochain conductors running on multiple computers at scale. This helps development teams understand performance and uncover problems in large deployments. By running this software, your Edge Node becomes a "Wind Tunnel Runner" in the Holochain Foundation's Wind Tunnel cluster, or simply, **a machine that can be used to run test scenarios where real holochain conductors interact together at scale to help developers ensure Holochain is robust, scalable, and ready for real-world usage.**

## Important Prerequisites

- **Operating System:** You should already have **HoIOS or some other Linux distro** installed (Part 1 of the standard Edge Node guide).
- **Dedication:** The Wind Tunnel software requires extensive system permissions. **It is highly recommended that this machine be dedicated solely to Wind Tunnel testing** while this software is running. Do not run this alongside your personal private Moss group data.
- **Hardware:** The minimum requirements for a Wind Tunnel Runner are currently:
  - 10GB Disk
  - 8GB RAM
  - An internet connection

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## Step 1: Prepare Your HoIOS/Linux Machine

If you have already installed HoIOS (following Part 1 of the standard Edge Node guide), you are ready to go.

1. **Boot your machine** into HoIOS (or other linux)
2. **Access the Terminal:**

- If you are physically at the machine, you can type directly into the command line.
  - If you are using a HoloPort or a headless machine, SSH into it (or access the terminal provided in the HoIOS live environment).
3. **Clean Slate (Recommended):** If you were previously running the standard Edge Node software (Moss/hApps), stop it to ensure the Wind Tunnel has full resources.

Bash

None

```
docker stop edgenode
docker rm edgenode
```

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## Step 2: Install the Wind Tunnel Runner

We will use Docker to pull the specific testing software. This allows you to run the test suite without changing your underlying operating system.

None

```
docker pull ghcr.io/holochain/wind-tunnel-runner:latest
```

### 1. Formulate Your Hostname

You need to give your node a unique name so it can be identified by the developers running the tests. The naming convention is `nomad-client-<user>--<index>`.

- **Example:** If your name is `Rob` and this is your first node, your hostname is:  
`nomad-client-rob-01`.

### 2. Run the Container

Run the following command. **Be sure to replace `<MY_HOSTNAME>`** with the name you created in the step above.

Bash

None

```
docker run --hostname <MY_HOSTNAME> --cgroupns=host --net=host  
--privileged -d --rm ghcr.io/holochain/wind-tunnel-runner:latest
```

 **Technical Note:**

- `--privileged`: Grants the container root capabilities (necessary for stress testing).
- `--net=host`: Allows the container to use the host's networking directly.
- `--rm`: Automatically removes the container when it stops.

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## Step 3: Verification

Once the command is running, you need to verify that your node has successfully joined the Wind Tunnel cluster.

### Check Local Status

In your terminal, run:

Bash

None

```
docker ps
```

You should see `ghcr.io/holochain/wind-tunnel-runner:latest` listed as "Up".

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## Step 4: Stopping the Wind Tunnel

When you wish to stop testing and return your Edge Node to normal operation (hosting your Moss apps):

1. **Find the Container ID:**

Bash

None

```
docker ps
```

## 2. Stop the Container:

Bash

None

```
docker stop <container_id>
```

3. *(Because we used the `--rm` flag in Step 2 when running it, the container will delete itself upon stopping.)*
4. **Resume Normal Operations:** You can now restart your standard Edge Node container using the instructions in the original Edge Node guide.

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## ? Support & Roadmap

If you encounter issues or want to track the progress of the testing:

- **Track Roadmap:** [Stay updated on testing milestones.](#)
- **Get in touch:** Join the conversation on Telegram: <https://t.me/+8JV9ibBHBDpmOTg0>