

How to Discover Probes

When you have a large network with many Qosium Probes installed, keeping track of each Probe and their IP addresses can become cumbersome. Qosium comes with a feature that allows you to find all your Qosium Probes in the network.

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1. Concept

Qosium comes with a feature to find your Qosium Probes in the network and take them into a measurement. The *Probe Discovery* feature overcomes the difficulty of recalling IP addresses and device reachability issues with dynamic IP addresses. Instead of IP addresses, Qosium Probes are identified based on their unique ID given by you. Probes in the network periodically register their existence to a selected *Central Probe*.

Using Probe discovery is useful when:

- You are monitoring a wide network with dozens of Probes.
- Remembering the IP addresses/hostnames of Qosium Probes is difficult.
- The IP addresses/hostnames of Qosium Probes are dynamic.
- Devices in which Qosium Probes run are not meant to be connected at all times, or the devices change.
- You want to monitor the overall availability of network devices (i.e., Ping like testing that a device is up and connected)



The Probe Discovery feature can also be used as a network health inspection tool. If a Qosium Probe you have set to register to a Central Probe has not done that, the device is either disconnected or powered off. You also see the time for how long the device has been connected.

2. Configure Qosium Probes

2.1. Central Probe

Choose the Qosium Probe that acts as the Central Probe to which other Probes register.

Any Probe can act as the Central Probe. Thus, choose the Probe, e.g., based on availability: the Probe is always on and accessible by other Probes in the monitored system.

2.2. Registering Probes

- Open the QosiumProbe.ini file.
- Find the *Server connectivity parameters* section, which is up in the config file.
- Set a unique *Service ID* for the Probe.
- Scroll down to the *Central server registration* section .
- Therein give the IP address of the Central Probe (**central_server_address**), modify **central_server_port** according to Central Probe, and set the interval for how often the Probe registers to the Central Probe in seconds.
- After modifying QosiumProbe.ini file, restart Qosium Probe to activate the new configuration.

See [Qosium Probe's parameters](#) for a detailed description of the key parameters related to this.

3. Utilizing Probe Discovery

The Probe Discovery functionality is implemented to Qosium Scope, Qosium Scope Lite, and can also be used by your own software, which implements that feature from the QMCP API.

3.1. Discover Probes with Qosium Scope

Follow these instructions if you have the Central Probe configured.

- Open Qosium Scope
- In the top menu bar, select **Control > Discover Probes...**
- Set your Central Probe address and port and press **Update**
- After a few seconds, a list of available Qosium Probes should appear. Select a Probe from the list to be used as the Primary Probe. Then press the button **Use as Primary Probe**
 - If a two-point measurement: select another Qosium Probe from the list to be used as the Secondary Probe. Then press the button **Use as Secondary Probe**
- Close the **Discover Probes** dialog

Now Probes have been selected, and the measurement setup proceeds as usual.

3.2. Discover Probes with Qosium Scope Lite

The registered Qosium Probes can be checked with a command `getservices` when in a subscribed state.

Qosium Scope Lite does not integrate an automated functionality to select the Probes for a measurement. Therefore, you need to type the IP addresses of the desired Probes to be included in the measurement manually in the Scope Lite's configuration file.