

Generic Endpoint - Conference Call Testing

Goal: Perform automated conference call testing

Automate the traffic scenario of running a web browser-based Conference Call session, specifically Zoom in this cookbook, in both the hosting and participating roles via multiple resources and interfaces.

Testing Prerequisites

You must be running at least LANforge version 5.4.9 on Linux and/or Windows resources.

To get any meaningful stats from Zoom, you should have a webcam and/or a microphone attached and detected by the LANforge system.

Linux

Open a terminal run the following command as user `lanforge`:

```
$ pip install selenium
```

or for Debian-based systems (like the `ct521-at7`):

```
$ sudo apt install chromium chromium-driver python3-selenium
```

Windows

You will need to install Chrome and Chromedriver for the Chrome version installed (instructions not provided here).

For the python dependencies needed, run the following command:

```
$ pip install selenium telnetlib
```

Zoom Hosting Settings (as of 02/2025)

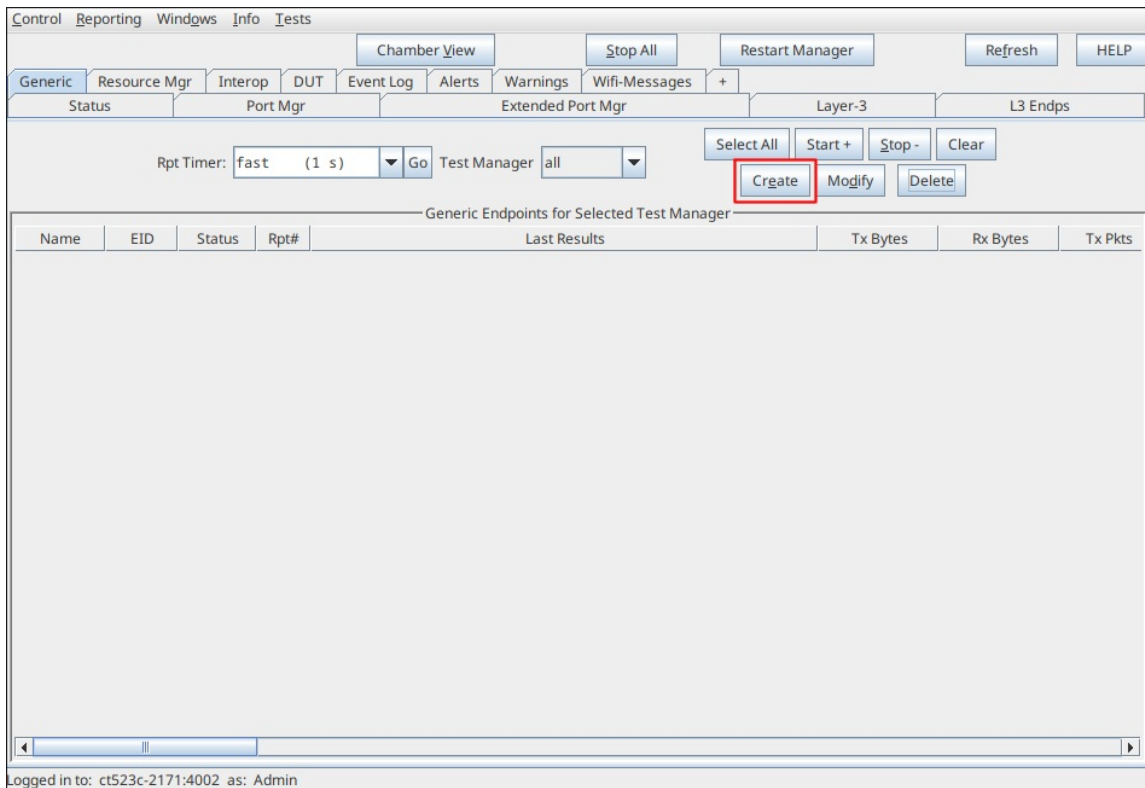
- Go to Account Settings
- Navigate to "Meeting" tab
 - Disable "Waiting Room"
 - Enable "Embed passcode in invite link for one-click join"
 - Disable "Only authenticated users can join meetings from Web client"
 - Disable "Approve or block entry for users from specific countries/regions"

Test Setup

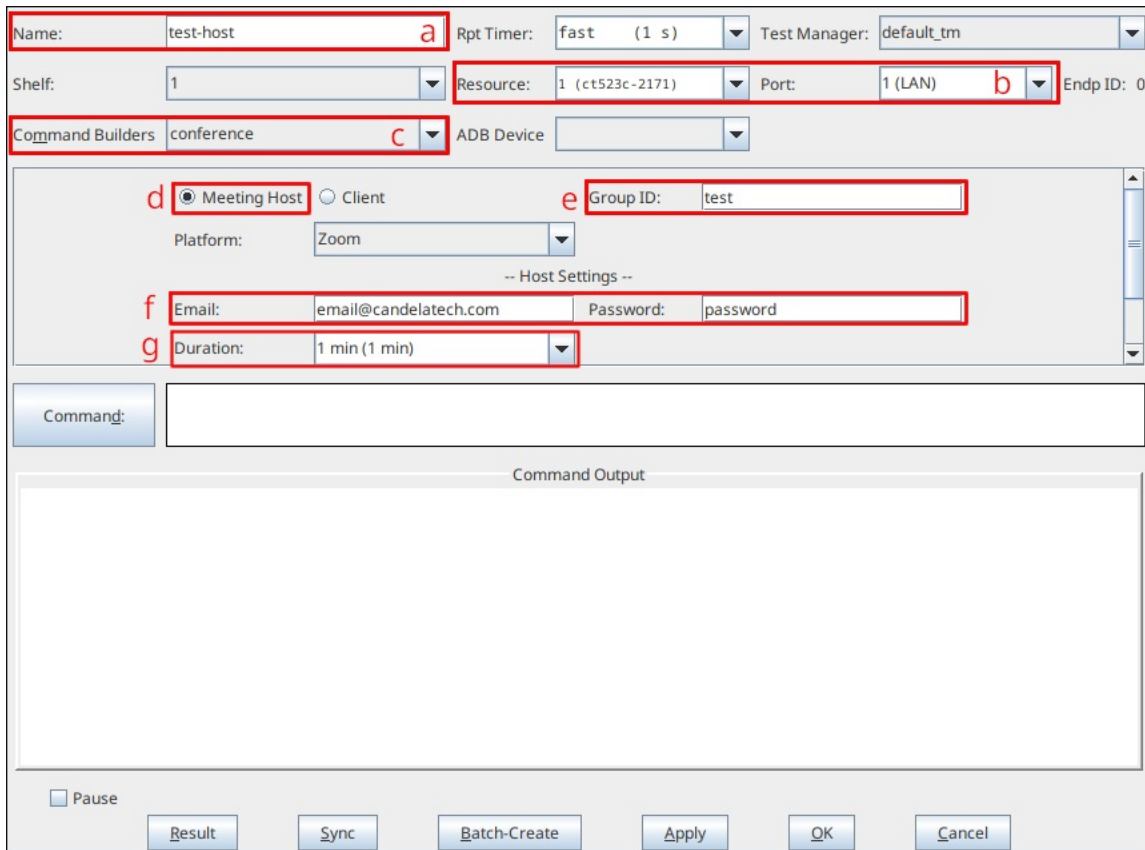
Creating a Host Endpoint

1. Navigate to the "Generic" tab in the LANforge.

2. Click the "Create" button.



3. A new window should pop-up.

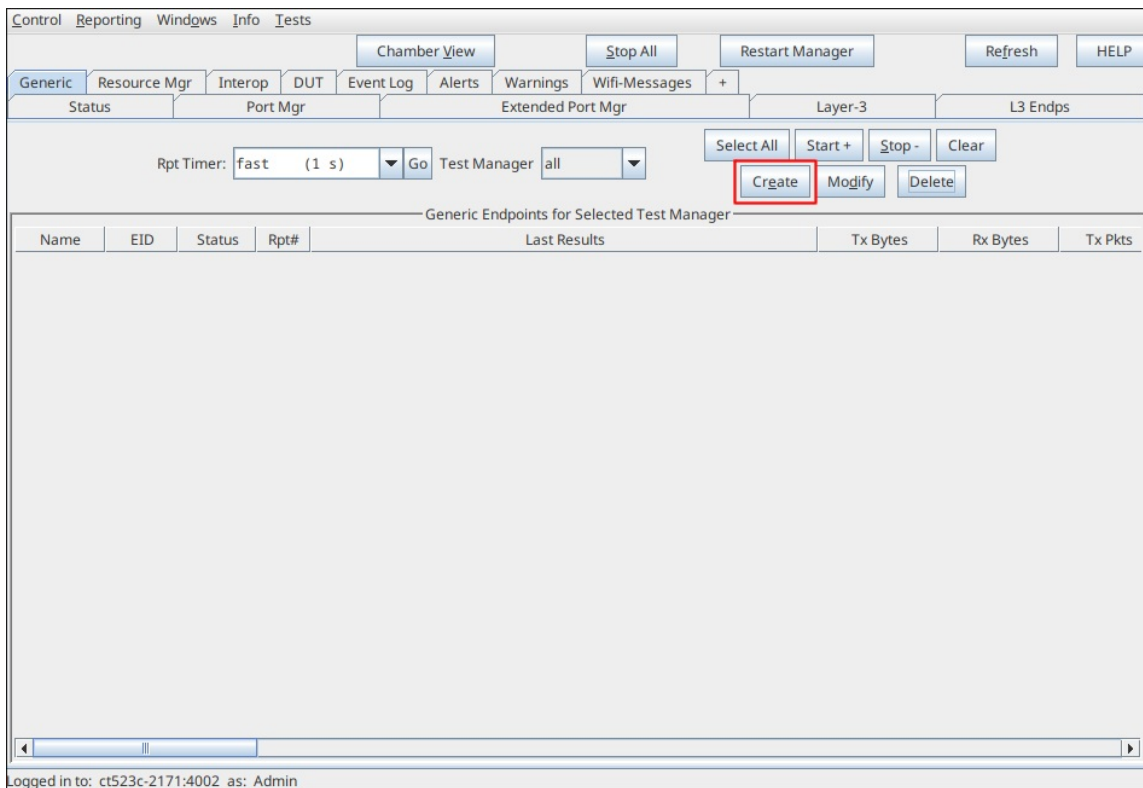


1. [a] Provide a name for the Host Endpoint.
2. [b] Select the LANforge resource and port to run Zoom through.
3. [c] Select the "conference" Command Builder option.
4. [d] To create a Host, select the "Meeting Host" radio button.
5. [e] Enter an identifier.
 - This identifier is arbitrary, but will be used to tell LANforge which Conference Call endpoints belong together.

6. [f] Enter your Zoom email and password.
 - **NOTE:** Do not use a personal account. The safety of your password is **NOT** guaranteed
 7. [g] Type or select a duration for which the test will approximately run.
 - Due to the nature of connecting to a third party website, actually test times on Conference Call endpoints can vary.
4. Click the "Apply" button in the Creation Window. You can close the window now.

Creating Client Endpoints

1. Navigate to the "Generic" tab in LANforge.
2. Click the "Create" button.



3. A new window should pop-up.

The screenshot shows a configuration window for creating a Client Endpoint. The fields are as follows:

- Name: test-client1 (labeled 'a')
- Rpt Timer: fast (1 s)
- Test Manager: default_tm
- Shelf: 1
- Resource: 1 (ct523c-2171)
- Port: 1 (LAN) (labeled 'b')
- Endp ID: 0
- Command Builders: conference (labeled 'c')
- ADB Device: (empty)
- Meeting Host: (unselected)
- Client: (selected, labeled 'd')
- Group ID: test (labeled 'e')
- Platform: Zoom
- Command: (empty)
- Command Output: (empty)
- Buttons: Pause, Result, Sync, Batch-Create, Apply, OK, Cancel

1. [a] Provide a name for the Client Endpoint.
 2. [b] Select the LANforge resource and port to run Zoom through.
 3. [c] Select the "conference" Command Builder option.
 4. [d] To create a Client, select the "Client" radio button
 5. [e] Enter a group identifier which **MATCHES** the group identifier of a Host Endpoint.
 - This will allow the Host Endpoint to communicate meeting credential information and how long client endpoints are supposed to run.
4. Click "Apply" in the Creation Window. You can close the window now.
 5. Repeat this process for as many clients as desired.

Running the Conference Call Test:

Select the desired Conference Call endpoints sharing a group identifier, ensuring one of them is a Host endpoint, and click "Start + ". When this happens, the Host endpoint status should be "Running" while the Client endpoints' status should be "Waiting" (as the Client endpoints are waiting for meeting credentials to be communicated to them).

If viewing VNC on the Host resource, there should be a Chrome browser window open to the Zoom log-in page.

After a certain point, the Host resource should have sent the meeting credentials up to LANforge, and the Client endpoint status should now say "Running". If viewing VNC on the Client resources, there should be a Chrome browser window open to the Zoom "Join Meeting" page.

As the testing runs, the correlating Generic Endpoint columns with "Audio" or "Video" in the title should update with the stats collected from Zoom.