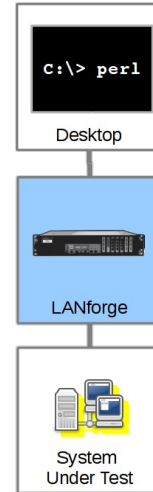


## Creating Endpoint Hunt Scripts with CLI API

**Goal:** Use the the CLI to operate the Endpoint Scripting features of the Layer-3 Endpoints you create.

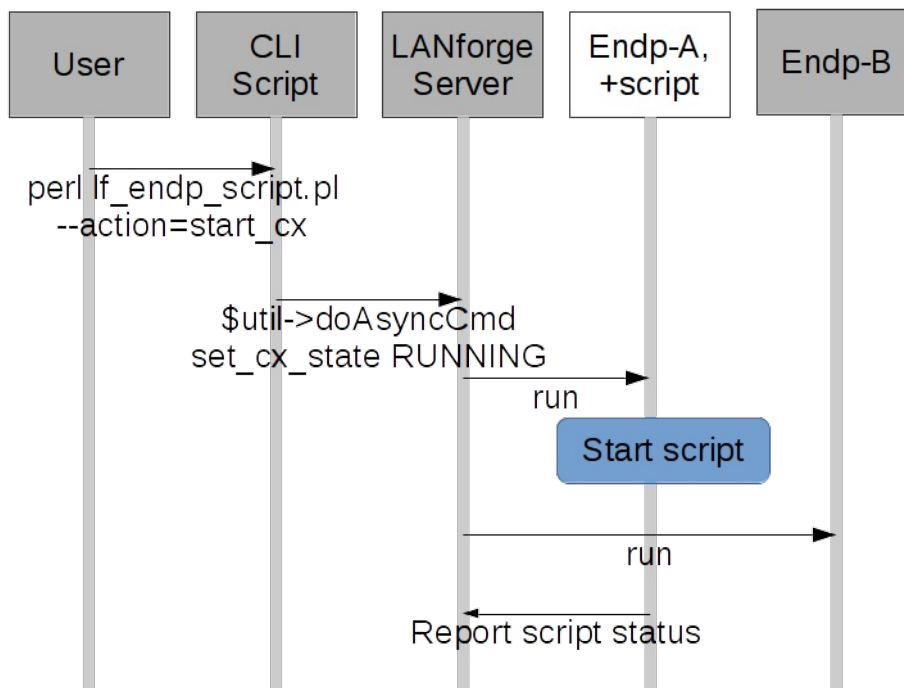
Layer-3 endpoints can manipulate their own transmission parameters using a variety of internal scripts, known as *Endpoint Scripts*. Using the `lf_endp_script.pl` CLI script, you can operate those internal endpoints behaviours.



This cookbook talks about *Endpoint Scripts* and *CLI scripts* at the same time. In this chapter, if the term **script** is used, assume **Endpoint Script**. Additionally, the terms operating and running can also be confusing. To keep the activities distinct, a LANforge user will **operate** a CLI script from a terminal. The LANforge server will **run** the Endpoint Script. A **CLI script** is a user-space perl script that issues CLI commands to a LANforge server. A **CLI command** is an instruction obeyed by the LANforge server.

### The Forces at Play

There are a number of subsystems running while we operate an automated Endpoint Script, so let's review them:



- There will be Layer-3 connect constructed using `lf_firemod.pl`. (Don't forget: create the endpoints before creating the cross connect.)
- A *managed endpoint* of that connection will be configured with an Endpoint Script.
- The attending engineer will operate a CLI script that changes state the Layer-3 connection to Running
- The Layer-3 connection starts both endpoints transmitting, one of them starts running it's Endpoint

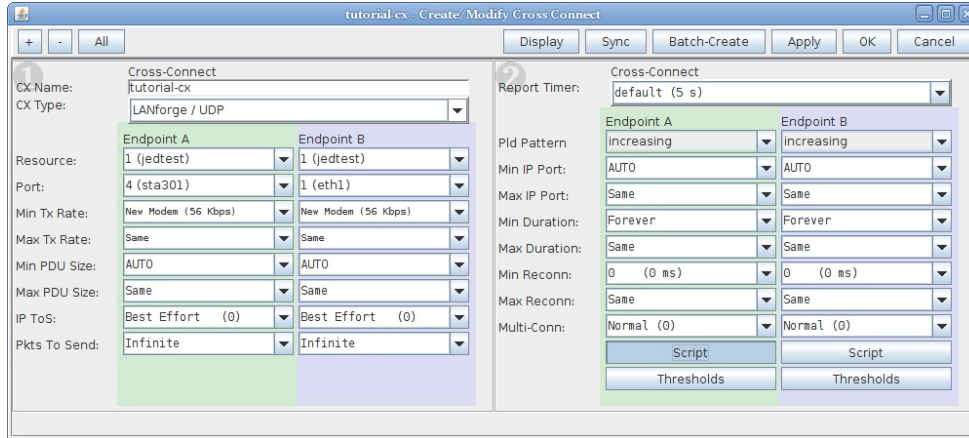
Script that sets its transmit parameters.

- Remember: Endpoint Scripts run inside the LANforge server process. CLI scripts run from the client side.

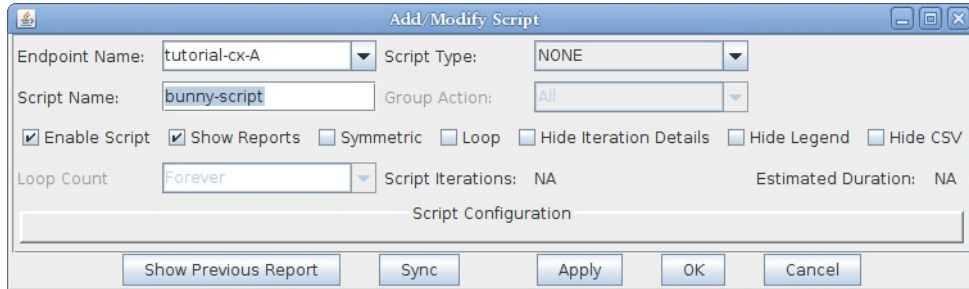
## Let's Walk Thru Putting One Together

We recommend starting your first script off by the LANforge GUI to save an endpoint with an Endpoint Script. Next, inspect the LANforge database on the server for the script parameters. Take those parameters and adapt them to the operator's CLI script.

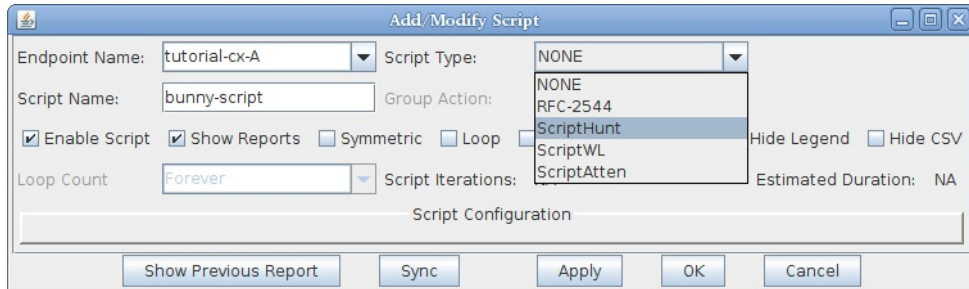
- From the *Layer-3* tab, open a connection **tutorial-cx**, and navigate to **box 2**. Click on the **Script** button.



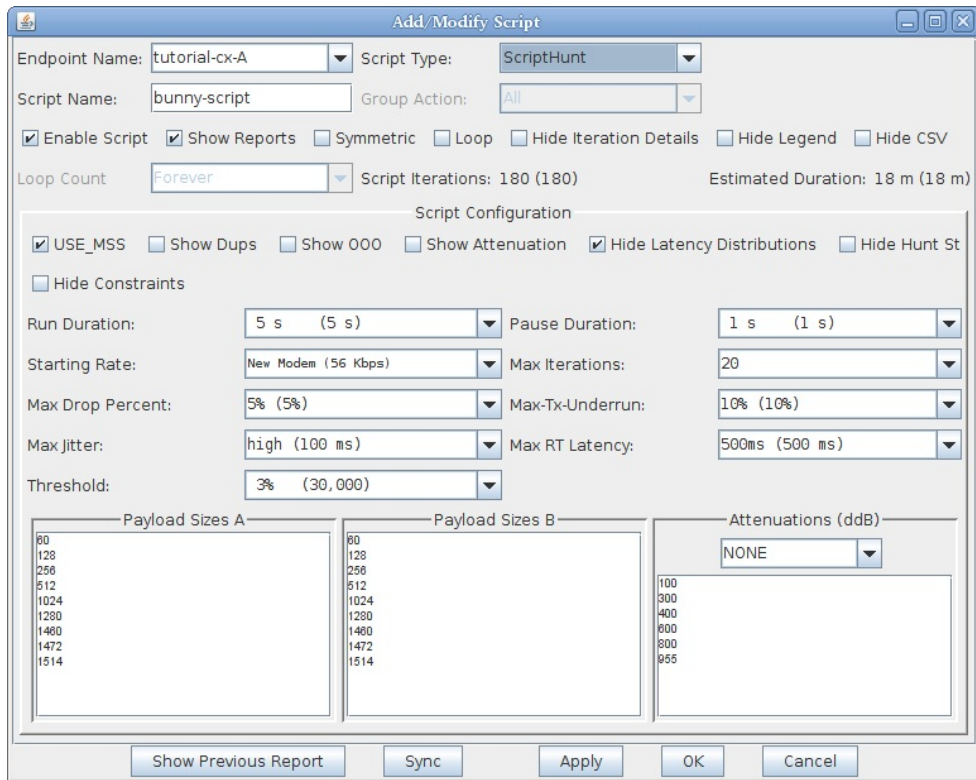
- Name your script



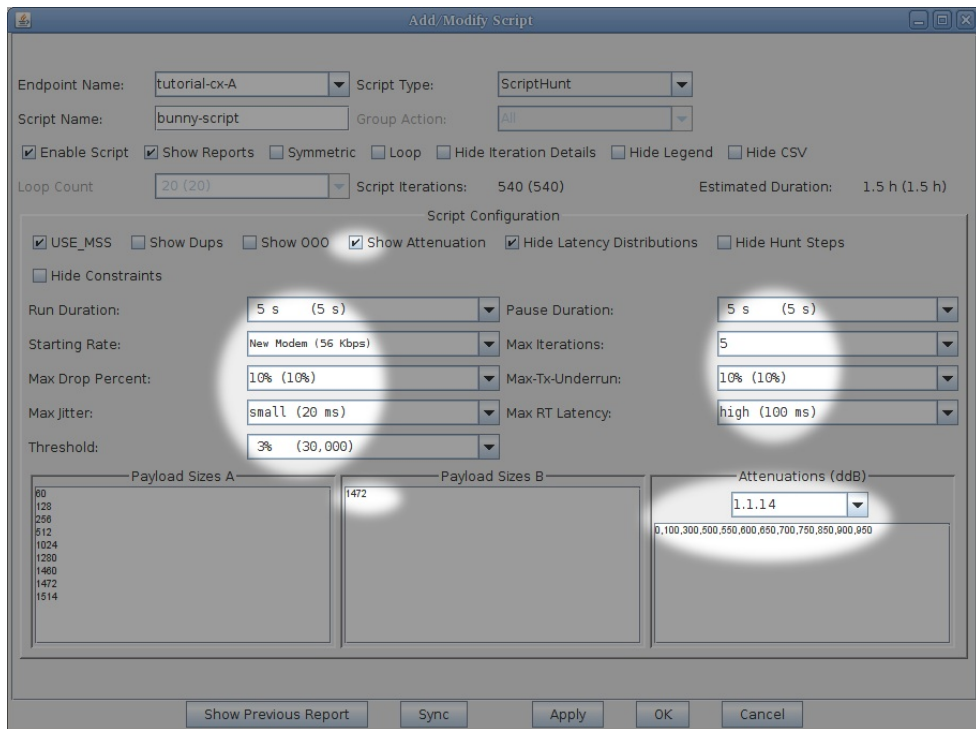
- Select your Script type, here we choose **ScriptHunt**



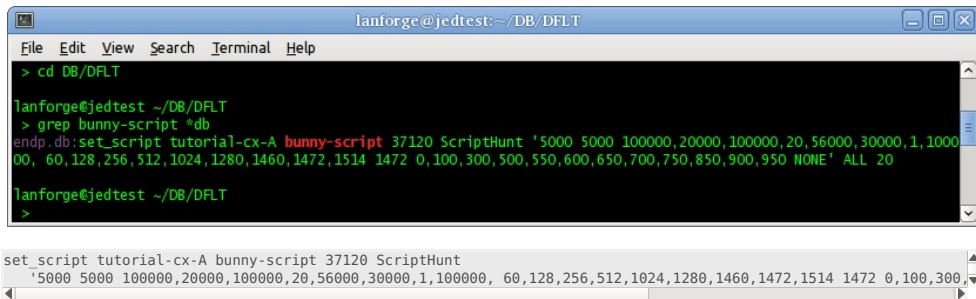
- We immediately see the parameters for the script:



5. Let's modify the parameters to match our CLI command example below:



6. In a LANforge terminal, let's look at `/home/lanforge/DB/DFLT/endps.db`. We will search for `bunny-script` and we'll inspect the resulting CLI command.



7. Now we can craft this command into a CLI script. In a CMD window, we can write the formatted CLI script arguments:

