

Load Scenarios And Control Test Groups With Python

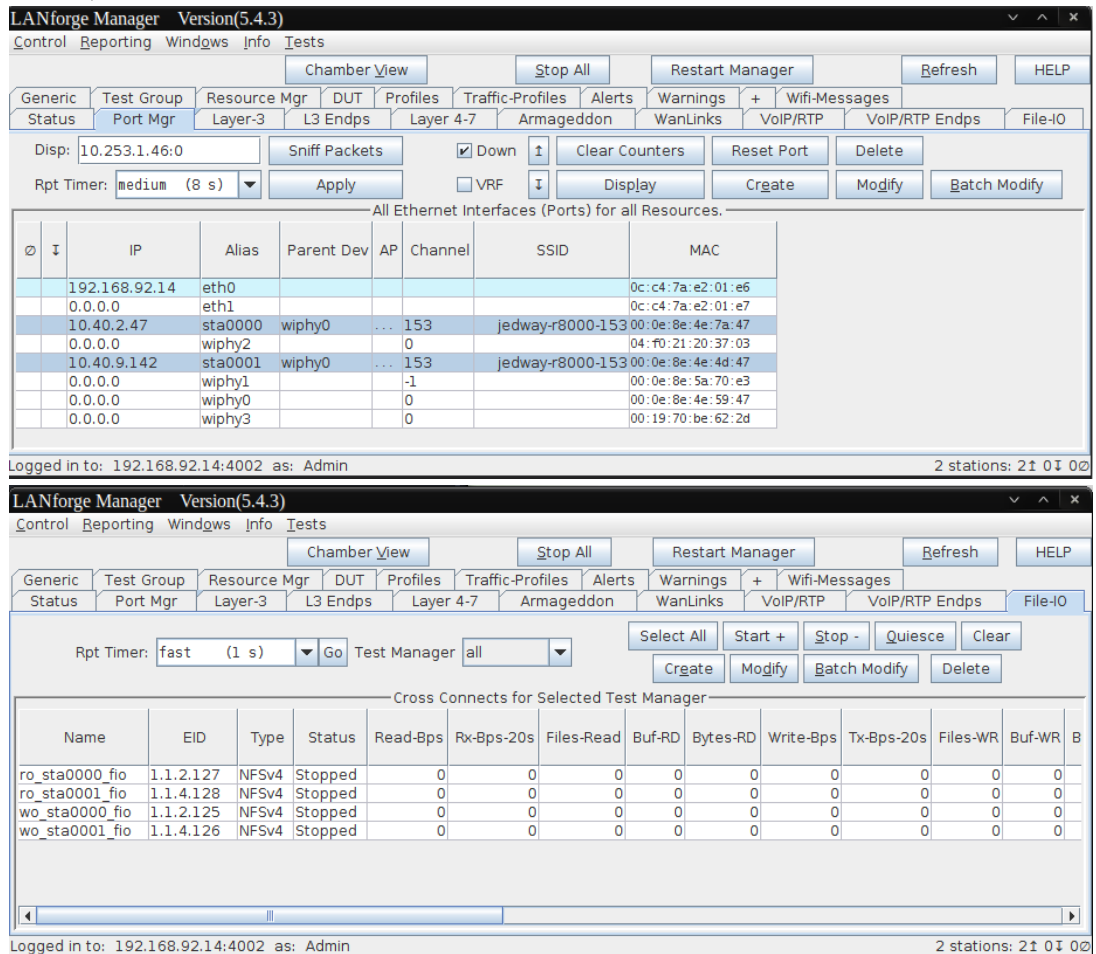
Goal: Using a python script to load scenarios and start, stop, and quiesce test groups
This cookbook will demonstrate how we can use json to load DB scenarios and control test groups using python. We will be referencing the script `scenario.py`. Requires LANforge 5.4.2.

1.

Running The Script

A. Setting up

A. For this example we are using a database called `fio_test_group`. It has two stations that each have a read-only and write-only file-io endpoint attached to them.

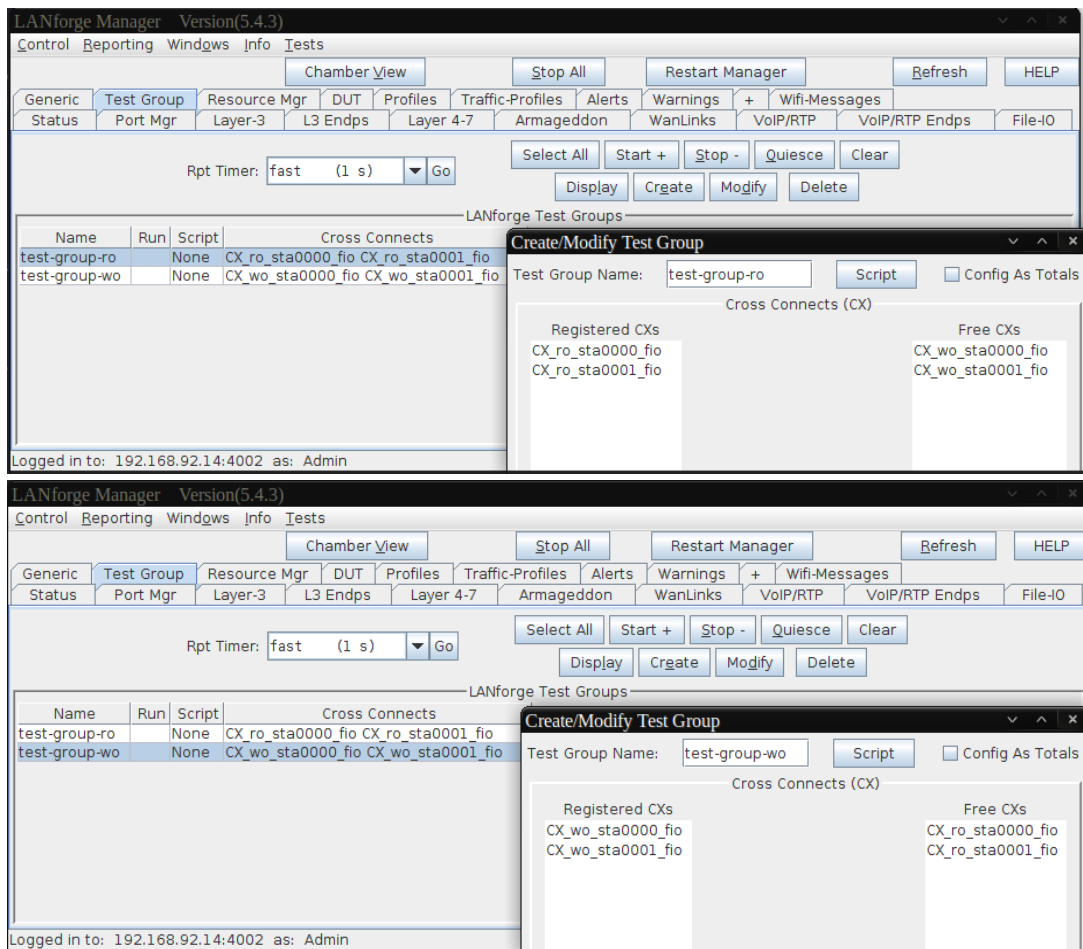


The screenshot shows the LANforge Manager interface. The top window displays 'All Ethernet Interfaces (Ports) for all Resources.' with a table of network configurations. The bottom window displays 'Cross Connects for Selected Test Manager' with a table of file-io endpoints.

| IP | Alias | Parent Dev | AP | Channel | SSID | MAC |
|---------------|---------|------------|-----|---------|------------------|-------------------|
| 192.168.92.14 | eth0 | | | | | 0c:c4:7a:e2:01:e6 |
| 0.0.0.0 | eth1 | | | | | 0c:c4:7a:e2:01:e7 |
| 10.40.2.47 | sta0000 | wiphy0 | ... | 153 | jedway-r8000-153 | 00:0e:8e:4e:7a:47 |
| 0.0.0.0 | wiphy2 | | | 0 | | 04:f0:21:20:37:03 |
| 10.40.9.142 | sta0001 | wiphy0 | ... | 153 | jedway-r8000-153 | 00:0e:8e:4e:4d:47 |
| 0.0.0.0 | wiphy1 | | | -1 | | 00:0e:8e:5a:70:e3 |
| 0.0.0.0 | wiphy0 | | | 0 | | 00:0e:8e:4e:59:47 |
| 0.0.0.0 | wiphy3 | | | 0 | | 00:19:70:be:62:2d |

| Name | EID | Type | Status | Read-Bps | Rx-Bps-20s | Files-Read | Buf-RD | Bytes-RD | Write-Bps | Tx-Bps-20s | Files-WR | Buf-WR | B |
|----------------|-----------|-------|---------|----------|------------|------------|--------|----------|-----------|------------|----------|--------|---|
| ro_sta0000_fio | 1.1.2.127 | NFSv4 | Stopped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ro_sta0001_fio | 1.1.4.128 | NFSv4 | Stopped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| wo_sta0000_fio | 1.1.2.125 | NFSv4 | Stopped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| wo_sta0001_fio | 1.1.4.126 | NFSv4 | Stopped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Each pair of file-io endpoints are in a group. One group is named `test-group-ro` and the other is `test-group-wo`.



2.

Script Examples

A. The Command and Available Options

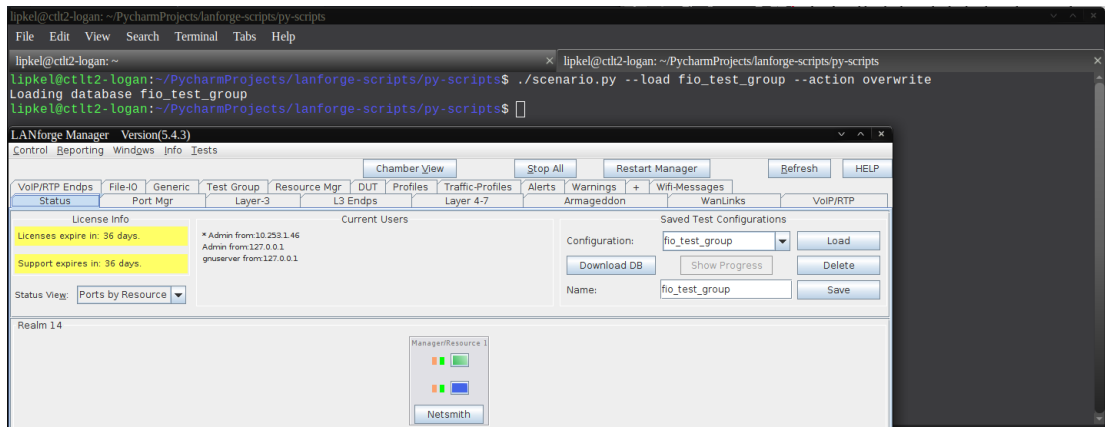
A. The script is located in `lanforge-scripts/py-scripts/`. From that directory we can use `./scenario.py` to run the script.

B. The available options are:

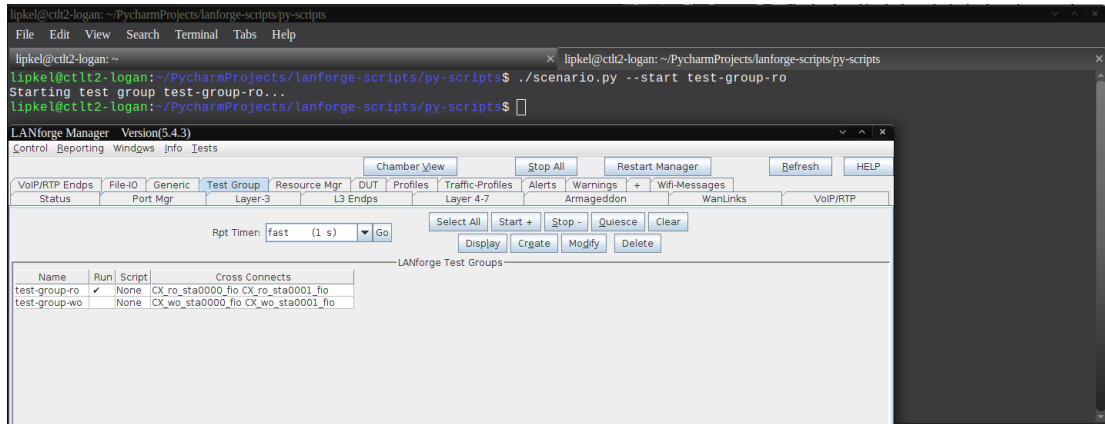
1. `--load db_name` | This will load the database named `db_name`
2. `--action (overwrite, append)` | Optional argument to be used with `--load`, will specify an action to take when loading the database. The default action is to overwrite. The append option is more difficult to use and its use is discouraged. See [here](#) for more info.
3. `--clean_dut` | Optional argument to be used with `--load`, will cleanup DUTs on load. See [here](#) for more info.
4. `--clean_chambers` | Optional argument to be used with `--load`, will cleanup Chambers on load. See [here](#) for more info.
5. `--start group_name` | This will start the cross-connects in the specified group
6. `--stop group_name` | This will stop the cross-connects in the specified group
7. `--quiesce group_name` | This will quiesce the cross-connects in the specified group

B. Examples of Running the Script

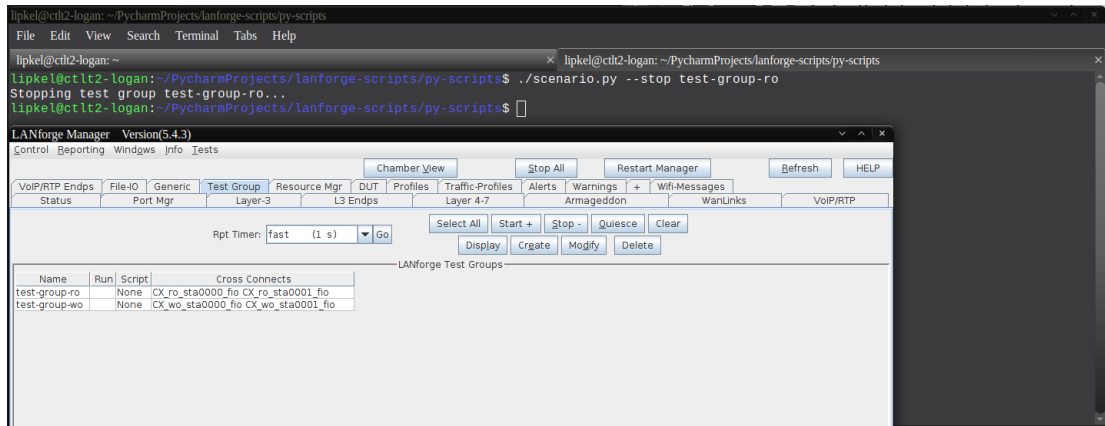
- Loading `fio_test_group` with overwrite



■ Starting **test-group-ro**



■ Stopping **test-group-ro**



■ Quiescing **test-group-wo**

