



YANG Model for Scheduled Attributes

[draft-ietf-tvr-schedule-yang](#)

Yingzhen Qu, Acee Lindem, Eric Kinzie, Don Fedyk, Marc Blanchet

YANG Data Model for Scheduled Attributes – draft-ietf-tvr-schedule-yang

Three modules in the draft

- Dependency on draft-ietf-netmod-schedule-yang, which has been submitted to IESG for publication.
- Wait for the requirement document?
- Finished one-round YANG Doctor review
- WGLC ready

TVR Schedule YANG Module	TVR Node YANG Module	TVR Topology YANG Module
Module ietf-tvr-schedule uses the groupings defined in the ietf-schedule.yang and contains common YANG definitions for time-variant schedule.	Module ietf-tvr-node.yang is a device model and designed to manage a single node with scheduled attributes.	Module ietf-tvr-topology.yang describes a network topology with a time-variant availability schedule.

Changes ietf-tvr-schedule.yang

- Removed container attr-value in the module, instead this is done now through augmentation.

```
- container attr-value {  
-   description  
-     "Attribute value(s). This container should be used  
-     with attributes that apply to the current configuration."  
- }
```

```
- augment "schedules/attr-value" {  
+ augment "schedules" {  
    description  
      "Augment scheduled interface state."  
-   leaf available {  
-     type boolean;  
-     description  
-       "Scheduled interface power state. This is to  
-       work with the leaf 'enabled' for the configured  
-       state of the interface."  
+   container scheduled-attributes {  
+     description "Augmentation container for links."  
+     leaf available {  
+       type boolean;  
+       description  
+         "Scheduled interface power state. This is to  
+         work with the leaf 'enabled' for the configured  
+         state of the interface."  
+   }
```

TVR Schedule Node Configuration Example -XML

Interface, "eth 1", has a recurrent schedule to be "not available (off)" which starts from 2025-07-20T23:00:00Z, lasts for 7200 seconds (2 hours) each time for 10 times every 2 days.

```
<interface-schedule>
  <interface>
    <name>eth 1</name>
    <attribute-schedule>
      <schedule>
        <schedule-id>100</schedule-id>
        <recurrence-first>
          <start-time-utc>2025-07-20T23:00:00Z</start-time-utc>
          <duration>7200</duration>
        </recurrence-first>
        <count>10</count>
        <recurrence-description>daily off</recurrence-description>
        <frequency xmlns:schedule="urn:ietf:params:xml:ns:yang:\
          ietf-schedule">schedule:daily</frequency>
        <interval>2</interval>
        <scheduled-attributes>
          <available>false</available>
        </scheduled-attributes>
      </schedule>
    </attribute-schedule>
  </interface>
</interface-schedule>
```

TVR Network Topology Configuration Example - JSON

Node, "node:2", is scheduled to be off starts from 2025-07-20T23:00:00Z, lasts for 7200 seconds (2 hours) each time until 2025-08-20T23:00:00Z every 2 days.

```
{
  "node-id": "node:2",
  "available": {
    "default-node-available": "true",
    "schedule": {
      "schedule-id": "201",
      "recurrence-first": {
        "start-time-utc": "2025-07-20T23:00:00Z",
        "duration": "7200"
      },
      "utc-until": "2025-08-20T23:00:00Z",
      "recurrence-description": "daily off",
      "frequency": {
        "-xmlns:schedule": "urn:ietf:params:\
xml:ns:yang:ietf-schedule",
        "#text": "schedule:daily"
      },
      "interval": "2",
      "node-available": "false"
    }
  }
}
```

Next Steps

- Wait for the requirement document?
- Reviews and comments are welcome
- Ready for WGLC?

THANKS!