YANG Model for Scheduled Attributes

draft-ietf-tvr-schedule-yang

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Changes since IETF 119

• draft-ietf-netmod-schedule-yang-02 - A Common YANG Data Model for Scheduling
  This document defines a common schedule YANG module, ietf-schedule.yang, which is designed to be applicable for scheduling information such as event, policy, services, or resources based on date and time.
  The groupings were updated based on feedback from IETF 119. For example, timezone configuration was removed, now it’s UTC only.

• Moved link attributes into a single schedule.
• Moved link destination into schedule.
• Adjusted some types to be more generic.
Design of the Model

• TVR schedule grouping
  o Module ietf-tvr-schedule uses groupings from ietf-schedule draft

• TVR Node YANG Module
  o Module ietf-tvr-node.yang is a device model and designed to manage a single node with scheduled attributes.

• TVR Topology YANG Module
  o Module ietf-tvr-topology.yang describes a network topology with a time-variant availability schedule.
Module ietf-tvr-schedule.yang – grouping tvr-schedule

A list of schedules identified by a "schedule-id"

A series of periods

Schedule with recurrence. UTC only.
Module ietf-tvr-node.yang

```yang
module: ietf-tvr-node
  +++rw node-schedule
    +++rw node-id?  yang:dotted-quad
    +++rw node-power-schedule
      |   +++rw power-default?  boolean
      |   +++rw schedules* [schedule-id]
      |     +++rw schedule-id     uint32
      |     |   ...
      |     +++rw attr-value
      |     +++rw power-state?   boolean
    +++rw interface-schedule
      +++rw interfaces* [name]
        +++rw name           union
        +++rw default-available?  boolean
        +++rw default-bandwidth?  yang:gauge64
      +++rw attribute-schedule
        +++rw schedules* [schedule-id]
        |   ...
        +++rw attr-value
        +++rw available?   boolean
        +++rw bandwidth?  yang:gauge64
        +++rw neighbor?  yang:dotted-quad
```

Dotted-quad?

Gauge64? use te-types?
Module ietf-tvr-topology.yang

module: ietf-tvr-topology
  +++rw topology-schedule
  |   +++rw nodes* [node-id]
  |     |   +++rw node-id inet:uri
  |     |   +++rw available
  |       |   +++rw attr-value
  |       |     |   +++rw node-available? boolean
  |       |     |   +++rw schedules* [schedule-id]
  |       |     |       |   ... 
  |       |     |   +++rw attr-value
  |       |     |       |   +++rw node-available? boolean
  |   +++rw links* [source-node source-link-id]
  |     |   +++rw source-node inet:uri
  |     |   +++rw source-link-id string
  |   +++rw available
  |     |   +++rw schedules* [schedule-id]
  |     |     |   +++rw schedule-id uint32
  |     |     |   ... 
  |     |     |   +++rw attr-value
  |     |     |       |   +++rw link-available? boolean
  |     |     |       |   +++rw bandwidth? yang:gauge64
  |     |     |       |   +++rw delay? uint32
  |     |     |       |   +++rw destination-node? inet:uri
  |     |   +++rw default-link-available? boolean
  |     |   +++rw default-bandwidth? yang:gauge64
  |     |   +++rw default-delay? uint32

Compatibility with RFC 8345?
Next Steps

• Reviews and comments are welcome
• Editorial changes
• Additional attributes?

THANKS!