A Yang Data Model for WSON Tunnel

draft-ietf-ccamp-wson-tunnel-model-00.txt

Abstract

This document provides a YANG data model for WSON TE tunnel.

Status of this Memo

This Internet-Draft is submitted to IETF in full conformance with the provisions of BCP 78 and BCP 79.

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This Internet-Draft will expire on August 8, 2018.
1. Introduction

This document provides a YANG data model for WSON tunnel model. The YANG model described in this document is a WSON technology-specific Yang Tunnel model based on the information model developed in [RFC7446] and the two encoding documents [RFC7581] and [RFC7579] that developed protocol independent encodings based on [RFC7446].

This document augments the generic TE tunnel model [TE-Tunnel].

2. YANG Model (Tree Structure)

module: ietf-wson-tunnel
augment /te:te/te:tunnels/te:tunnel:
    +--rw src-client-signal? identityref
    +--rw dst-client-signal? identityref
augment /te:te/te:tunnels/te:tunnel/te:state:
    +--ro src-client-signal? identityref
    +--ro dst-client-signal? identityref
augment /te:te/te:globals/te:named-path-constraints/te:named-path-constraint:
    +--rw wavelength-assignment? identityref
augment /te:tunnels-rpc/te:input/te:tunnel-info/tepc:request-list:
    +---- src-client-signal? identityref
    +---- dst-client-signal? identityref
    +---- wavelength-assignment? identityref

3. TE Tunnel Model for WSON

<CODE BEGINS> file "ietf-wson-tunnel@2018-02-08.yang"

module ietf-wson-tunnel {
    //TODO: FIXME
    //yang-version 1.1;
    namespace "urn:ietf:params:xml:ns:yang:ietf-wson-tunnel";
    prefix "wson-tunnel";

    import ietf-te { prefix "te"; }
    import ietf-otn-types { prefix "otn-types"; }
    import ietf-te-wson-types { prefix "wson-types"; }
    import ietf-te-path-computation { prefix "tepc"; }

    organization
        "IETF CCAMP Working Group";

    contact
        "WG Web: <http://tools.ietf.org/wg/ccamp/>
        WG List: <mailto:ccamp@ietf.org>

        WG Chair: Daniele Ceccarelli
            <mailto:daniele.ceccarelli@ericsson.com>

        WG Chair: Fatai Zhang
            <mailto:zhangfatai@huawei.com>
This module defines a model for WSON Tunnel Services.

revision "2018-02-08" {
    description
        "Updates to version 0";
    reference "version 0";
}

grouping wson-tunnel-endpoint {
    description "Parameters for OTN tunnel."
        leaf src-client-signal {
            type identityref {
                base otn-types:client-signal;
            }
            description
                "Client signal at the source endpoint of the tunnel."
        }
        leaf dst-client-signal {
            type identityref {
                base otn-types:client-signal;
            }
            description
                "Client signal at the destination endpoint of the tunnel."
        }
}

grouping wson-path-constraints {
    description
        "Global named path constraints configuration grouping for WSON tunnel"
        leaf wavelength-assignment {
            type identityref {
                base wson-types:wavelength-assignment;
            }
        }
}
description "Wavelength Allocation Method";
}
}

augment "/te:te/te:tunnels/te:tunnel" {
    description
        "Augment with additional parameters required for WSON tunnel."
    uses wson-tunnel-endpoint;
}

augment "/te:te/te:tunnels/te:tunnel/te:state" {
    description
        "Augment with additional parameters required for WSON tunnel."
    uses wson-tunnel-endpoint;
}

augment "/te:te/te:globals/te:named-path-constraints/
+ "te:named-path-constraint" {
    description
        "Augment with additional constraints WSON tunnel."
    uses wson-path-constraints;
}

augment "/te:tunnels-rpc/te:input/te:tunnel-info/
+ "tepc:request-list" {
    description
        "Augment with additional constraints WSON tunnel."
    uses wson-tunnel-endpoint;
    uses wson-path-constraints;
}
}
4. Security Considerations

The configuration, state, and action data defined in this document are designed to be accessed via a management protocol with a secure transport layer, such as NETCONF [RFC6241]. The NETCONF access control model [RFC6536] provides the means to restrict access for particular NETCONF users to a preconfigured subset of all available NETCONF protocol operations and content.

A number of configuration data nodes defined in this document are writable/deletable (i.e., "config true") These data nodes may be considered sensitive or vulnerable in some network environments.

5. IANA Considerations

This document registers the following namespace URIs in the IETF XML registry [RFC3688]:

```
Registrant Contact: The IESG.
XML: N/A, the requested URI is an XML namespace.
```

This document registers the following YANG modules in the YANG Module Names registry [RFC7950]:

```
name:         ietf-wson-tunnel
reference:    RFC XXXX (TDB)
```

6. Acknowledgments

This document was prepared using 2-Word-v2.0.template.dot.
7. References

7.1. Normative References


7.2. Informative References


8. Contributors

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