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Redfish Ethernet Switch Proposal Readme

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This document's normative language is English. Translation into other languages is permitted.

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Foreword

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The DMTF released the ["YANG-to-Redfish Mapping Specification"](#) as work-in-progress in October 2016. The document specifies how to convert a YANG model to a Redfish model. This proposal is a product of that mapping for a small set of YANG RFCs.

- RFC7223 (Interfaces)
- RFC7224 (IANA Interface types)
- RFC7277 (IPv4 and IPv6)
- RFC7317 (system, system_state, platform, clock, ntp)

An IETF Internet draft exists which describes the mapping concept ["Redfish for Networking"](#). The document describes the rationale for managing a network device using the Redfish. Redfish is a REST-based manageability interface standard which can currently manage compute and storage platforms within the datacenter.

An IETF Internet draft exists which lists the RFCs that would constitute manageability of a baseline Ethernet switch ["Baseline Switch Model"](#). The industry has been invited to provide feedback and direction on which RFCs should be included.

There are difference in Redfish schema mapped from YANG models. The most salient are:

- The Redfish metadata is placed in folders named after each RFC (e.g. `./metadata/rfc7223`).
- The Redfish metafile name may not be Pascal case. The capitalization from the YANG model statement is used.
- The Redfish metafile name includes the namespace for the metadata.

Redfish Work-in-Progress Schemas

The following new schema files are released as Work In Progress documents.

Schema File	Version	Date	Description
ServiceRoot	1.3.0a	2017-04-14	Add NetworkDevices to service root.
RedfishYangExtensions	1.0.0a	2017-04-14	Initial release. Definitions specific to the schema generated from YANG models.

1. rfc7223

Schema File	Version	Date	Description
ietf_interfaces	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.
ietf_interfaces.interfaces	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.
ietf_interfaces.interfacesCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.
ietf_interfaces.interfaces_state	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.
ietf_interfaces.interfaces_stateCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.
ietf_interfaces.interfaces_state.statistics	1.0.0a	2017-07-31	Initial release. Mapped from rfc7223.

2. rfc7224

Schema File	Version	Date	Description
ietf_if_type	1.0.0a	2017-07-31	Initial release. Mapped from rfc7224.

3. rfc7277

Schema File	Version	Date	Description
ietf_ip	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv4	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv4.address	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv4.addressCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.

Schema File	Version	Date	Description
ietf_ip.ipv4.neighbor	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv4.neighborCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.address	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.addressCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.autoconf	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.autoconfCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.neighbor	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.
ietf_ip.ipv6.neighborCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7277.

4. rfc7317

Schema File	Version	Date	Description
ietf_system	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.clock	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.dns_resolver	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.dns_resolver.server	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.dns_resolver.serverCollection	1.0.0a	2017-07-31	Initial release.

Schema File	Version	Date	Description
			Mapped from rfc7317.
ietf_system.system.dns_resolver.server.udp_and_tcp	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.dns_resolver.options	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.ntp	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.ntp.server	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.ntp.serverCollection	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system.ntp.server.udp	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system_state	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system_state.clock	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.
ietf_system.system_state.platform	1.0.0a	2017-07-31	Initial release. Mapped from rfc7317.