

DOTS data channel

draft-reddy-dots-data-channel-04

Feb 22nd 2017

Interim Meeting

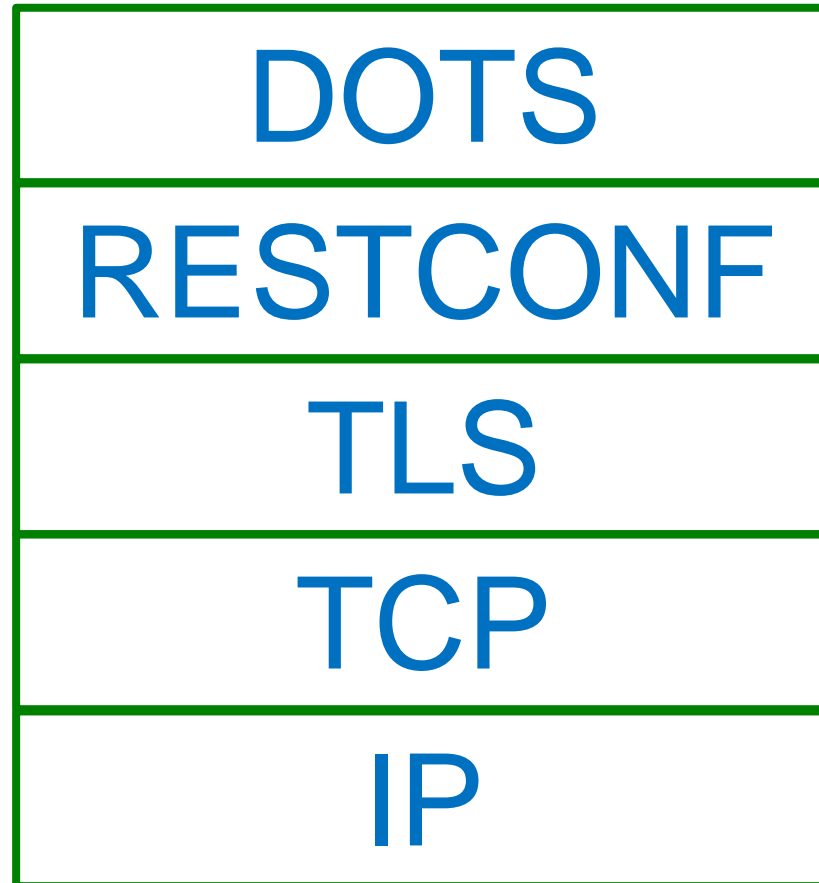
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Presenter : Tirumaleswar Reddy

Highlights

- DOTS data channel uses RESTCONF (RFC8040)
- Added YANG models
- Updated the draft to meet all data channel requirements discussed in draft-ietf-dots-requirements-02

DOTS data channel: Layering



DOTS YANG Data Models

- DOTS Identifier Model
- DOTS Filter Model

DOTS Identifier Model: Tree Structure

```
module: ietf-dots-data-channel-identifier
  +--rw identifier
    +--rw alias* [alias-name]
      +--rw alias-name          string
      +--rw ip*                 inet:ip-address
      +--rw prefix*            inet:ip-prefix
      +--rw port-range* [lower-port upper-port]
        | +--rw lower-port      inet:port-number
        | +--rw upper-port      inet:port-number
      +--rw traffic-protocol*   uint8
      +--rw FQDN*               inet:domain-name
      +--rw URI*                inet:uri
      +--rw E.164*             string
```

DOTS Filter Model

- Relies on the existing Access Control List (ACL) YANG data model [[I-D.ietf-netmod-acl-model](#)] for the configuration of filtering rules
 - Authors to be contacted to add an action leaf for “rate-limit”

RESTCONF

- POST, PUT and DELETE
- GET to retrieve config data, non-config data or both
- TLS heartbeat for liveness
- Retrieval of supported YANG models
 - Vendor-specific YANG models

Some Tools

- Pyang (<https://github.com/mbj4668/pyang>) for validating the Yang model
- Conversion to XML and JSON parameters
- Encoding rules defined in [RFC7951](#) for JSON encoding of data models with YANG

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- Comments and questions are welcome
- Consider adoption of this document as a WG item