

Transport Properties

To registry, or not to registry?

Transport Properties

- Central concept to configure the transport system
- Classified by object / connection phase they affect:
 - Selection Properties (Preconnection)
 - Connection Properties (Connection)
 - Message Properties (Message Context)but can be specified in earlier phases
- Different data types:
 - ◉ Boolean, Integer, Enumeration, Preference
- ▶ **Individual Properties are only referenced by section title**

Property Names – Why?

“Interoperability” between TAPS implementations

- Different implementation should use the same names for well-know properties.
- Developers can will find the same properties with the same names on most platforms (without loosing the ability to tailor the TAPS implementation to fit the platform).
- ▶ Key reason for using TAPS instead of inventing something propriety.

Property Registry – Why?

- WG discussions suggest generic transport properties specified in draft-ietf-taps-interface are not complete
 - Properties in Sections 5.2, 7.3, and 9.1 should be mandatory to implement
 - Properties in Appendix A are optional/experimental
- We need to add protocol-specific properties e.g. for configuring TCP...
- We need extensibility for new transport features, protocols, and vendors

Questions

- Should we Standardise Property Format?
- Should we request a registry for Transport Property names?
- What should go into the Registry?
- What assignment policy to use?

Proposal: Property Format

- Transport Property names are CamelCased strings
- Format: [<domain> .] <property name>
- Domain distinguishes generic/well-known properties from protocol/vendor specific/experimental properties

Examples:

- ReliableDataTransfer (generic well known property)
- TCP.CongestionControl (protocol specific property)
- Linux.NoRecvMMAP (vendor specific property)

Proposal: Registries

- Transport Property Namespaces

String	Description	Reference
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X	Experimental and Private use	
TCP	TCP specific properties	

- Assignment policy: RFC or IESG approval required for IETF protocol names, First Come First Served otherwise
- Reference must point to list of properties in this namespace and assignment policy (can be external to IANA / IETF for vendors and non-IETF protocols)

Proposal: Registries

- Well-Known Generic Transport Properties

String	Type	Scope	Description	Reference
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- Assignment policy: RFC required or IESG approval

Transport Property Registry

Further discussion on the mailing list or in
<https://github.com/taps-api/drafts/pull/276>