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
Why Standardise Property Names and Format?

“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: \[<namespace>(.|_)]<property name>

• Namespace 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

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<th>String</th>
<th>Description</th>
<th>Reference</th>
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<td>X</td>
<td>Experimental and Private use</td>
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• Assignment policy: IESG approval

• Reference must point to list of properties in this namespace and assignment policy (external to IETF for vendors and non-IETF protocols)
Proposal: Registries

- Well-Known Generic Transport Properties
  
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- Assignment policy: RFC required

- Experimental and Private Use Transport Properties
  
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- Assignment policy: Specification Required