Happy Eyeballs for Transport Selection

draft-grinnemo-taps-he-03

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Introduction

• TAPS work item 3
  – “... explain how to select and engage an appropriate protocol and how to discover which protocols are available for the selected service between a given pair of end points”

• Calls for happy eyeballs mechanism for transport protocol selection
  – Try multiple protocols in parallel
Introduction

• Generalizes previous work
• Selection of complete transports, not single protocols
• Dynamic selection on the basis of pre-set policies and estimated network characteristics
Updates to the Draft

• Improved wording in relation to RFC 6555
• Clarified that the HE draft applies to connection-oriented transports
• Clarified that only one transport connection is returned to the client and that other connection attempts are used only to populate the cache (INTENDED)
• Cache lifetime indicated as system dependent
• Changed example to use IPv6
• Various text clarifications and other smaller improvements
Happy Eyeballs Framework

- Application
- TAPS API
- Transport Probing
- Policy Management
Policy Management

• Creates a list of candidate transport solutions
  – ordered by priority
• Created based on application requirements, available information about the network and configured policies
  – should use cached information
  – comply with RFC 6555
Transport Probing

• Initiate connection attempts for each candidate transport solution
  – initiated in priority order
  – difference in priority between two candidates is translated into a delay
  – first connection to be established is returned to the application

• Cache the outcome of the connection attempts
  – allow initiated connection attempts to complete
Discussion Items

• What should the interface between the HE algorithm and the policy management look like
  – More general what do the interfaces between the TAPS components look like?
  – Do we need some form of architecture document?

• What should be detailed in the specification of the HE algorithm and what should be left open for implementation?
  – Cache lifetime, time between connection attempts, candidate list generation