VPN Discovery

Design Team Discussions and Options

draft-squire-ppvpn-discovery-reqts-00.txt

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Discovery Definition

- What is VPN discovery?
  - Determination of apriori knowledge required to signal other endpoint(s) within a VPN.
- What knowledge is required?
  - Endpoints (obvious)
  - Signaling method
  - Anything else?

Necessity

- Is a (new) solution required?
  - Methods currently in RFC status include muticast (RFC 2917) and BGP (RFC 2547)
  - *Significant majority of design team felt additional solution necessary, in particular for L2 VPNs.*
  - *Some firmly opposed to additional mechanisms.*
- Some I-Ds out already trying to address the perceived need
  - draft-luciani-ppvpn-vpn-discovery-01.txt

Requirements

- MUST support inter-provider VPNs
- MUST have capability for authentication and access control
- MUST respond to changes in *timely fashion*
- SHOULD limit VPN information to only those PEs that are involved in the VPN
- MUST provide IP addr of endpoints; *MAY provide additional data*

Timely Fashion

- How quickly must PEs know of VPN membership changes?
  - Seconds?
  - Minutes?
  - Epochs?

Extended Discovery

- What needs to be discovered?
  - IP Address (yes!)
  - Little bit o’ other
  - Anything and everything
- Where does discovery end and signaling begin?

Short Version

- Strong majority see need for solutions beyond those defined in current RFCs – minority firmly against new stuff
- Need to understand requirements with respect to timeliness
- Need to determine extensibility requirements
- Need to merge requirements with PPVPN requirements draft