

Middlebox Traversal Issues of HIP Communication

IETF 62 – March 2005

draft-stiernerling-hip-nat-03

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Changes to -02

- Focus now on all middleboxes
 - NAT is handled
 - Firewall is handled
 - Others to be investigated
- Adapted document to new focus
- Lars jumped onboard
- Diff between -02 and -03 is available here
 - <http://www.stiemerling.org/ietf/hip/draft-stiemerling-hip-nat-03-diff-02.html>

I-D Content

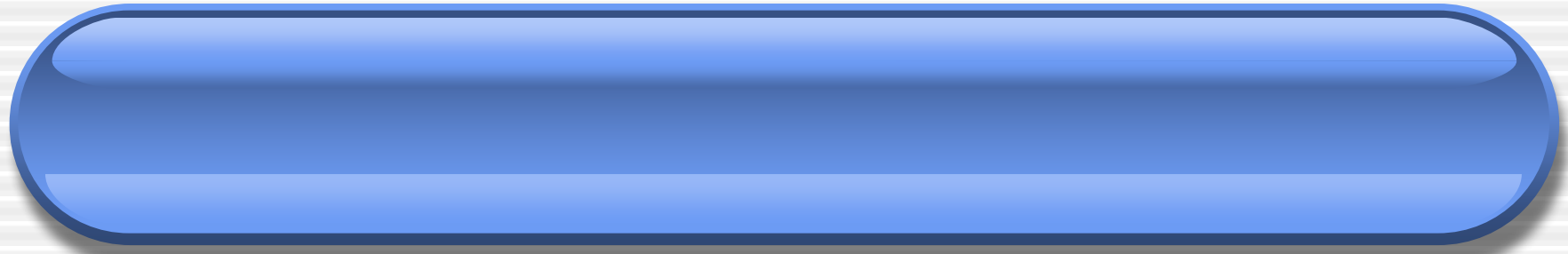
- Document is still a problem statement
 - Does analysis of middlebox traversal of HIP
 - Gives some recommendations
- Does NOT provide a solution
- But gives many details HIP does encounter when traversing middleboxes
 - HIP's base exchange problems
 - HIP's IPsec data exchange problems

Recommendations

- Always use UDP as base exchange encapsulation
 - Brings base exchange through NATs
 - Brings base exchange through Firewalls
- Consider IPsec's NAT-T extensions
 - Ability to send ESP UDP encapsulated
- Do not require changes to Middleboxes
 - Especially HIP specific changes
- Rely on standardized Middlebox configuration protocols
 - MIDCOM
 - NSIS
 - SOCKS?

What's next?

- Document needs another revision to get implications of all middleboxes
- Sort out non interesting middleboxes
- Document is basis for further work
 - HIP MB traversal requirement
 - HIP MB traversal protocol
- What to do with this document?
 - RG draft?
 - Integrated into HIP traversal document?



Thank you!

Questions?