Mobile IP VPN Design Team Update

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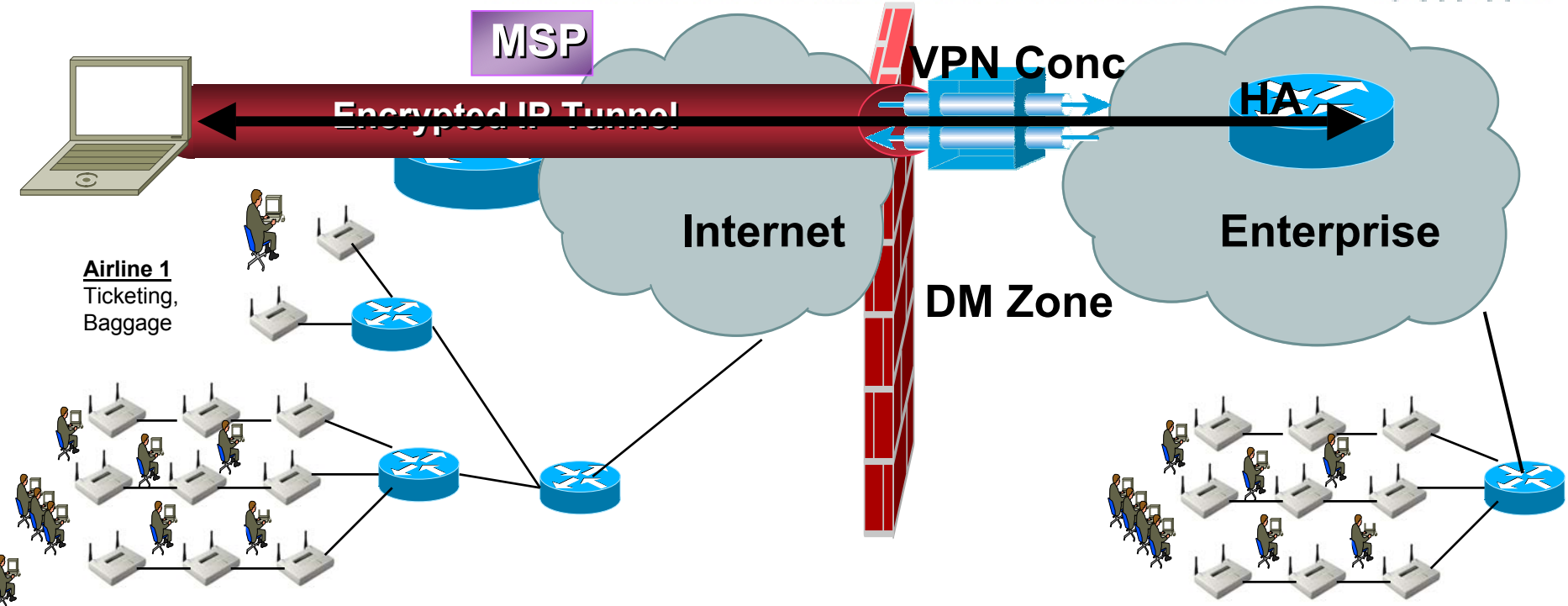**gdommety@cisco.com**

Agenda

- **Problem Statement**

- **Solution Approach and optimizations**

- **Timeline Update**

Problem Statement Draft

- **Draft is published**

  draft-ietf-mobileip-vpn-problem-statement-req-01

- **Focused on IPv4**

- **The Design Teams definition of Problem Statement is finished**

- **Last Call will benefit the rest of the work**

Problem Statement

-Secure and seamless connectivity while out side the VPN domain
-Session Mobility while moving between inside & outside a VPN Domain
-Several other scenarios and how they can be reduced to this scenarios
have been discussed in the draft

Sweepstakes for people who read the draft!!

Solution Approach

- **Several approaches have been described in the solution draft**

  draft-ietf-mobileip-vpn-problem-solution-00

- **Base Approach :** draft-ietf-mobileip-vpn-problem-solution-01

  Mobile inside: MIPv4

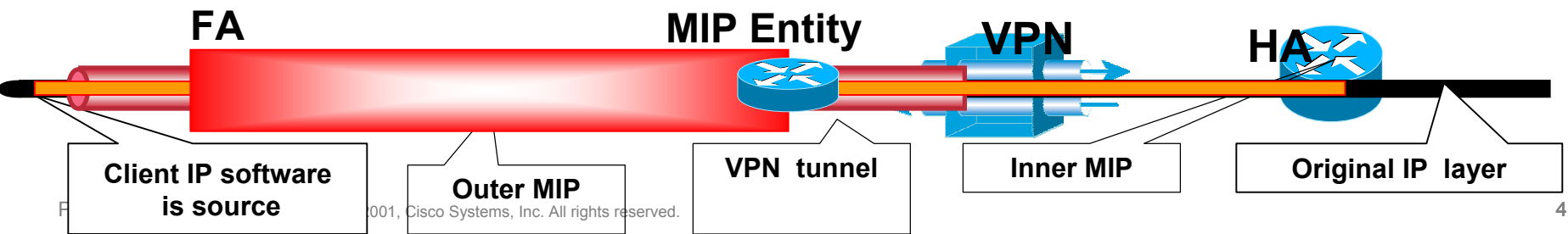 **Mobile Outside:**

  External MIPv4 layer for mobility*

 **Inner MIP Registration CoA: VPN assigned address**

  +No Protocol Changes

  Secure Inside-outside detection and movement: Under Discussion

FA   **MIP Entity**   **VPN**   **HA**

| Client IP software is source | Outer MIP | VPN tunnel | Inner MIP | Original IP layer |

Solution Approach

- **Optional Optimizing Mechanisms: Under Discussion**

  - **Avoiding External MIP Entity**

    - **Ability for VPN to accept IP address changes for IPsec connection: Need to get Security Review**

  - **Avoiding External MIP layer over the Air with out IP Sec changes**

    - **Zero overhead External MIP tunneling**

  - **Avoiding Internal MIP layer over the Air**

    - **Inner Tunnel Termination at the VPN device**

VPN

MIP Entity

HA

Client IP software is source

VPN tunnel

Inner MIP

Original IP layer
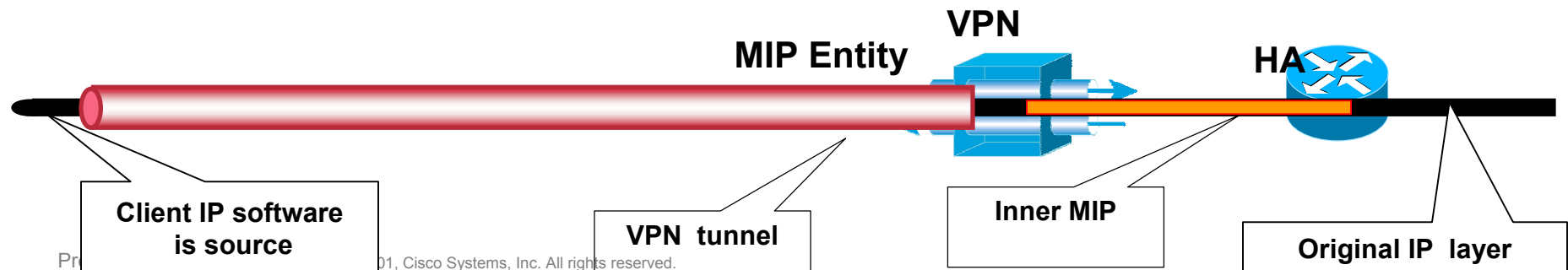
Inside-outside detection Problem

- To detect the location of the mobile with respect to the VPN Domain

- Possible Approaches

    Registration Based Approaches

    Alternatives with less assumptions

Status Update and Goals

- **Problem Statement**

  Completed from DT perspective

  Last Call for Problem Statement

  Security Review

- **Solution**

  Draft outlining the solution approaches (00.txt)

  Draft with the chosen Approach (01.txt)

  Need the Problem Statement to go through last call

  Need security input on optimizations

  Stretch Goal: Next IETF finish the basic solution