Enhanced mobility anchoring wt

draft-ietf-dmm-distributed-mobility-anchoring-03
H. A. Chan, J. Lee, S. Jeon, A. Petrescu, X. Wei, F. Templin
Changes in 03 from 02

♦ Comment on nemo from Alex in the mailing list.
♦ draft-ietf-dmm-distributed-mobility-anchoring-03
  ➢ Added section 5.5 Network Mobility
  ➢ Consequently revised the rest of the draft:
    • Abstract – expanded somewhat
    • Introduction – also explained where to use this draft
    • Section 3 – elaborated functions to support nemo
    • Section 4 – some corrections
Describe Distributed Mobility Anchoring

3. Distributed Mobility Anchoring

3.1. Configurations for different networks or network slices
  • 3.1.1. Network-based Mobility Support for a Flat Network
  • 3.1.2. Network-based Mobility Support for a Hierarchical Network
  • 3.1.3. Host-based Mobility Support
  • 3.1.4. Network Mobility (NEMO) Basic Support

3.2. Operations and Parameters
  • 3.2.1. Location Management
  • 3.2.2. Forwarding Management
IP Mobility Handling in Distributed Anchoring Environments

♦ 4. Mobility Support Only When Needed
  ➢ 4.1. No Need of IP Mobility: Changing to New IP Prefix/Address  25
    • 4.1.1. Guidelines for IPv6 Nodes
  ➢ 4.2. Need of IP Mobility
    • 4.2.1. Guidelines for IPv6 Nodes
IP Mobility Handling in Distributed Anchoring Environments

♦ 5. Anchor Switching to the New Network
   ➢ 5.1. IP Prefix/Address Anchor Switching for Flat Network
      • 5.1.1. Guidelines for IPv6 Nodes
   ➢ 5.2. IP Prefix/Address Anchor Switching for Flat Network with Centralized Control Plane
      • 5.2.1. Additional Guidelines for IPv6 Nodes
   ➢ 5.3. IP Prefix/Address Anchor Switching for a Hierarchical Network
      • 5.3.1. Additional Guidelines for IPv6 Nodes
   ➢ 5.4. IP Prefix/Address Anchor Switching for a Hierarchical Network
      • 5.4.1. Additional Guidelines for IPv6 Nodes
   ➢ 5.5 Network Mobility
      • 5.5.1. Additional Guidelines for IPv6 Nodes
Changes in 01 from 00

- draft-ietf-dmm-distributed-mobility-anchoring-01
  - Elaborate on the operations and parameters of enhanced mobility anchoring functions
  - Elaborate on the description of different mobility scenarios, and added guidelines in each scenario.
Changes in 02 from 01

- draft-ietf-dmm-distributed-mobility-anchoring-02
  - Revised security descriptions
  - Added configuration of mobile node being a mobile router
  - Checked and cleaned up descriptions
Mobility support not needed: change to anchor in new network

Mobility controller

<table>
<thead>
<tr>
<th>LMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA</td>
</tr>
<tr>
<td>FM-CP</td>
</tr>
<tr>
<td>CPA</td>
</tr>
<tr>
<td>FM-CP</td>
</tr>
</tbody>
</table>

DPA(IPa1)

FM-DP

IP1

Flow(IP1,...)

MN(IP1)

move

DPA(IPa2)

FM-DP

IP2

Flow(IP2,...)

MN(IP2)

from ietf 97 presentation
IP mobility support needed: move IP anchoring to new network

Mobility controller

CPA
FM-CP
LMc

DPA(IPa1)
FM-DP
IP1

CPA
FM-CP
LMc

DPA(IPa2)
FM-DP
IP1,IP2

MN(IP1)
Flow(IP1,...)

MN(IP1,IP2)
Flow(IP1,...)

move
Move IP anchoring to new network with hierarchy

Mobility controller

CPA
FM-CP LMc

CPN
FM-CP LMc

DPA(IPa1)
FM-DP IP1

DPN(IPn1)
FM-DP

MN(IP1)
Flow(IP1,...)

move

DPA(IPa2)
FM-DP IP1,IP2

DPN(IPn2)
FM-DP

MN(IP1,IP2)
Flow(IP1,...)
Host-based mobility

Mobility controller

CPA
FM-CP LMc

CPA
FM-CP LMc

IPa1

IP1

IPcn

Move

DPA(IPa1)

FM-DP

MN(IP1)

Flow(IP1,...)

DPA(IPa2)

FM-DP

MN(IP1,IP2)

Flow(IP1,...)
Network mobility

Mobility controller

LMs

CPA
FM-CP  LMc

DPA(IPa1)
FM-DP  IP1

MR(IP1)
FM,LMc  IPn1

MNN(IPn1)
Flow(IPn1,..)

IPcn

IPa1  IP1

move

CPA
FM-CP  LMc

DPA(IPa2)
FM-DP  IPn1,IP2

MR(IP1,IP2)
FM,LMc  IPn1

MNN(IPn1)
Flow(IPn1,..)

move

from ietf 97 presentation