



# NEMO Experiments

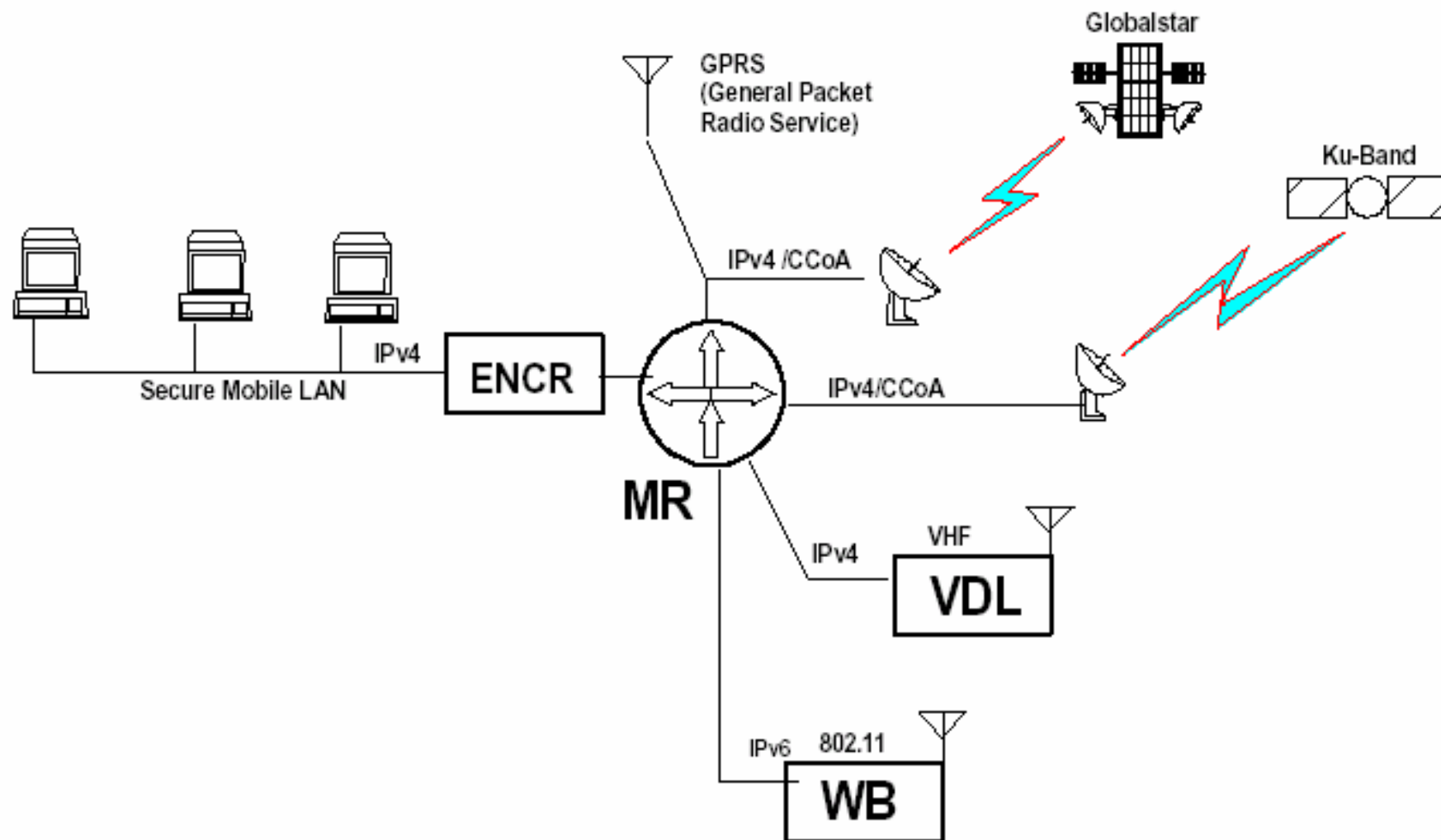
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IPv4 & IPv6

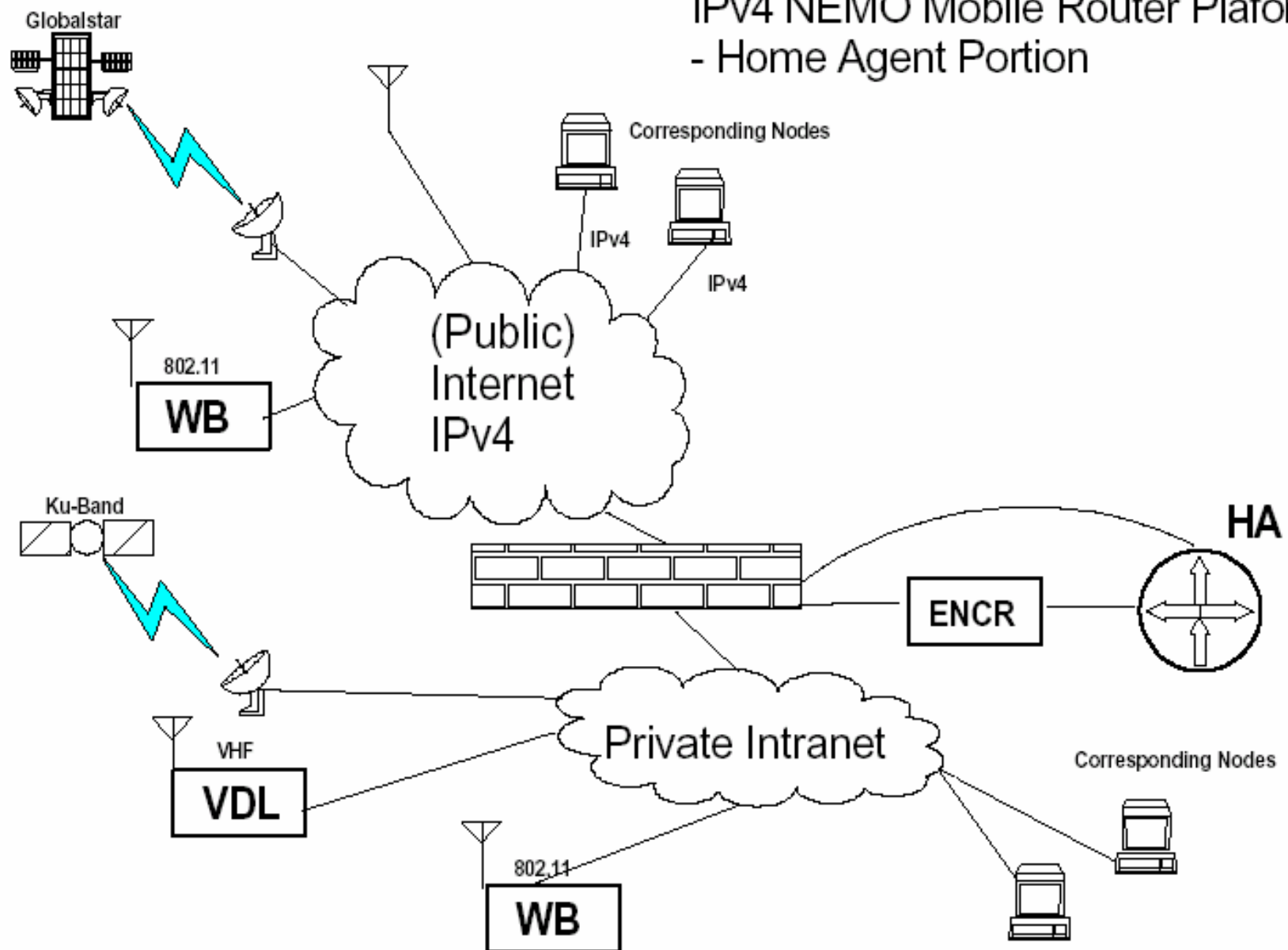
[roland.grc.nasa.gov/~ivancic](http://roland.grc.nasa.gov/~ivancic)

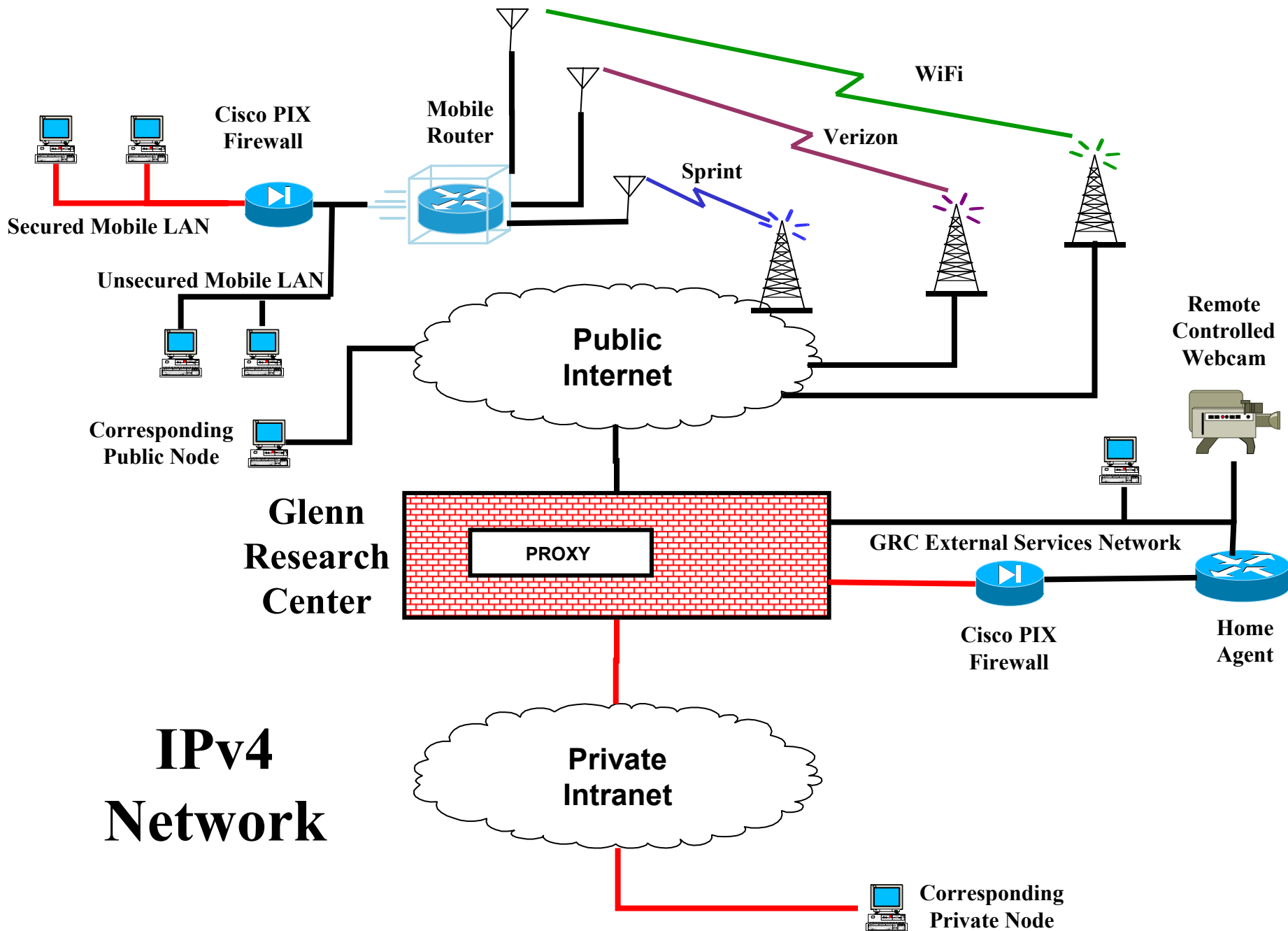
Pick ICNS Demonstration

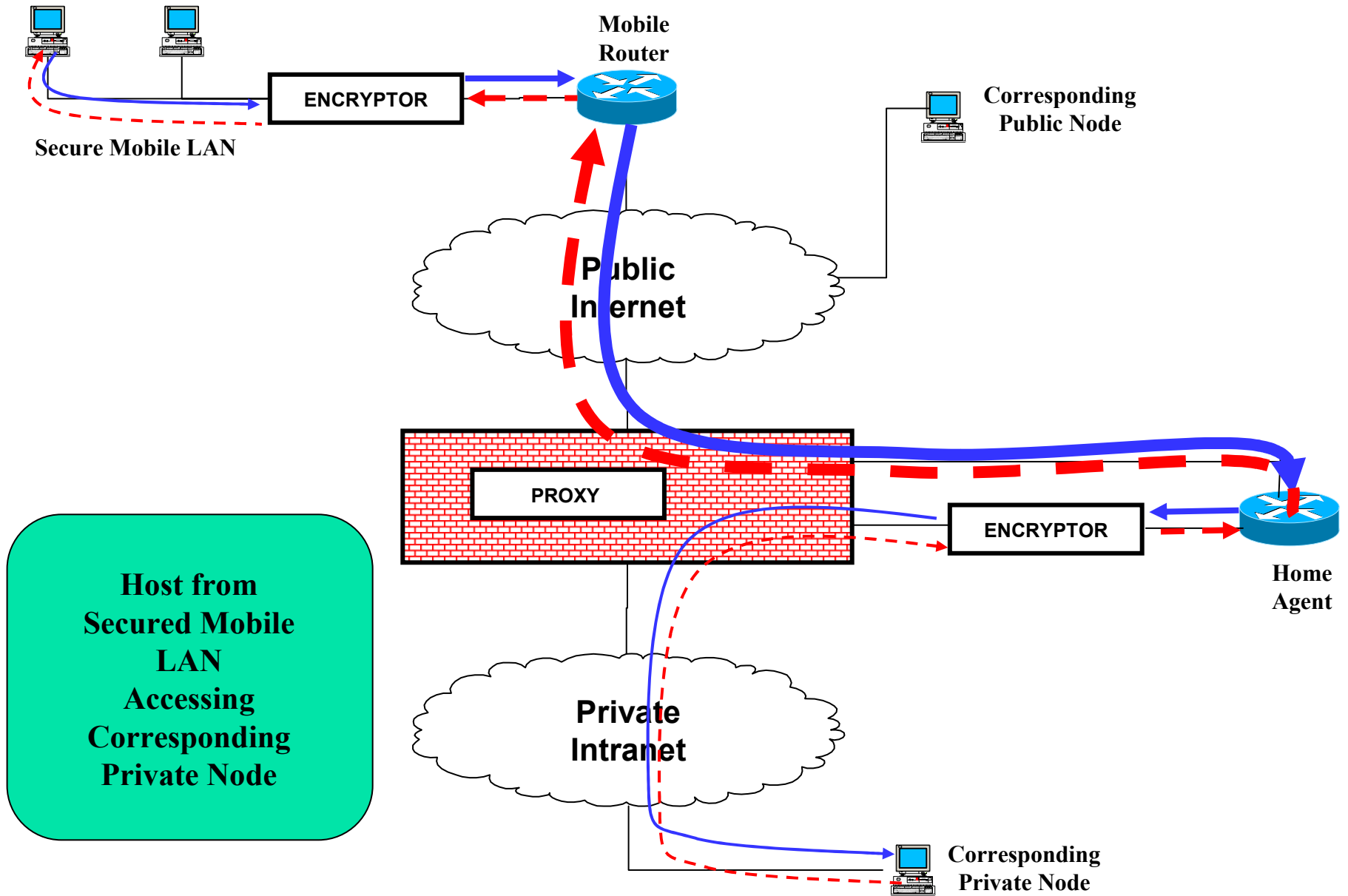
# Aeronautical IPv4 NEMO Mobile Router Platform - Mobile Router Portion

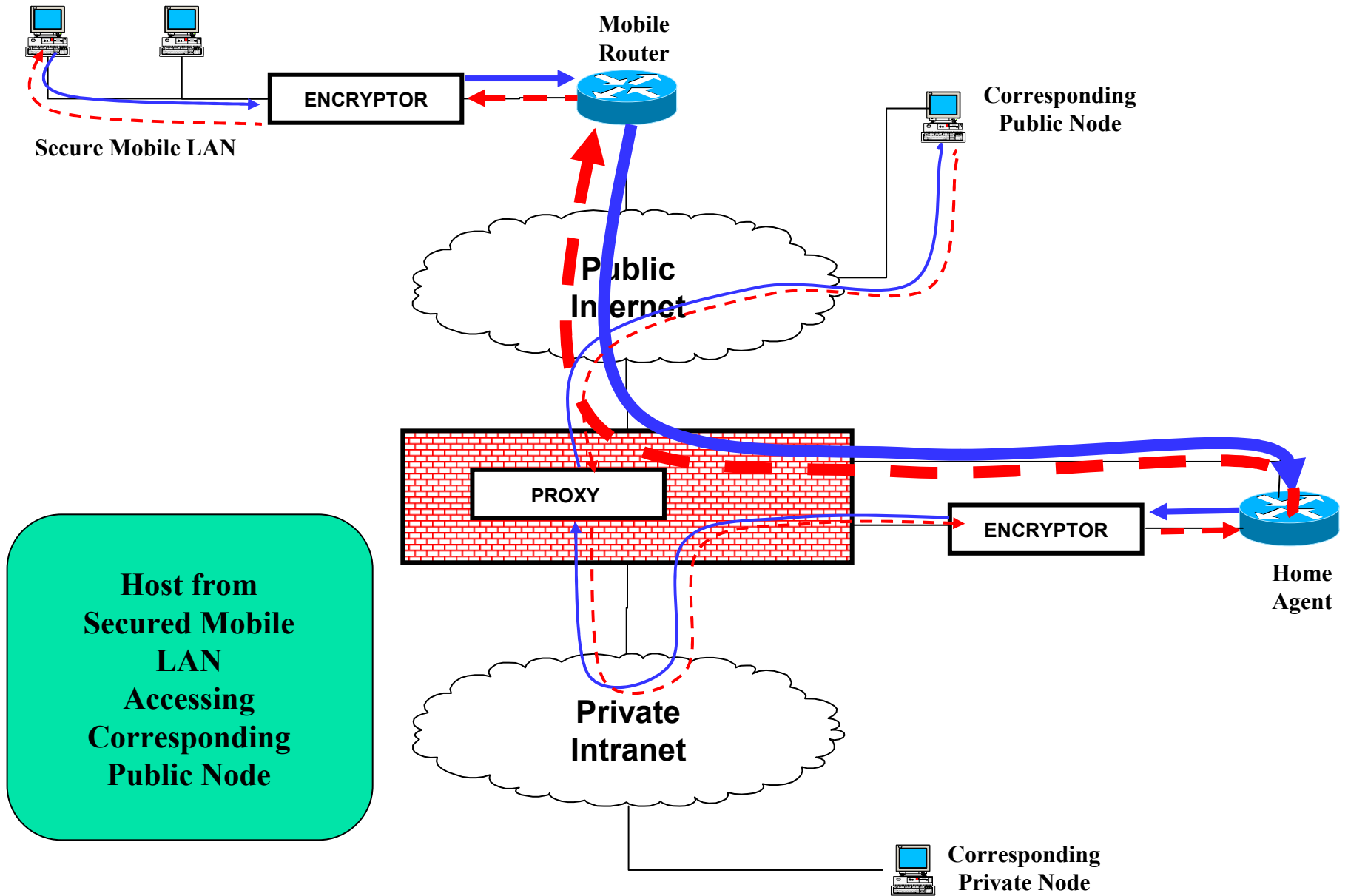


# Aeronautical IPv4 NEMO Mobile Router Platform - Home Agent Portion

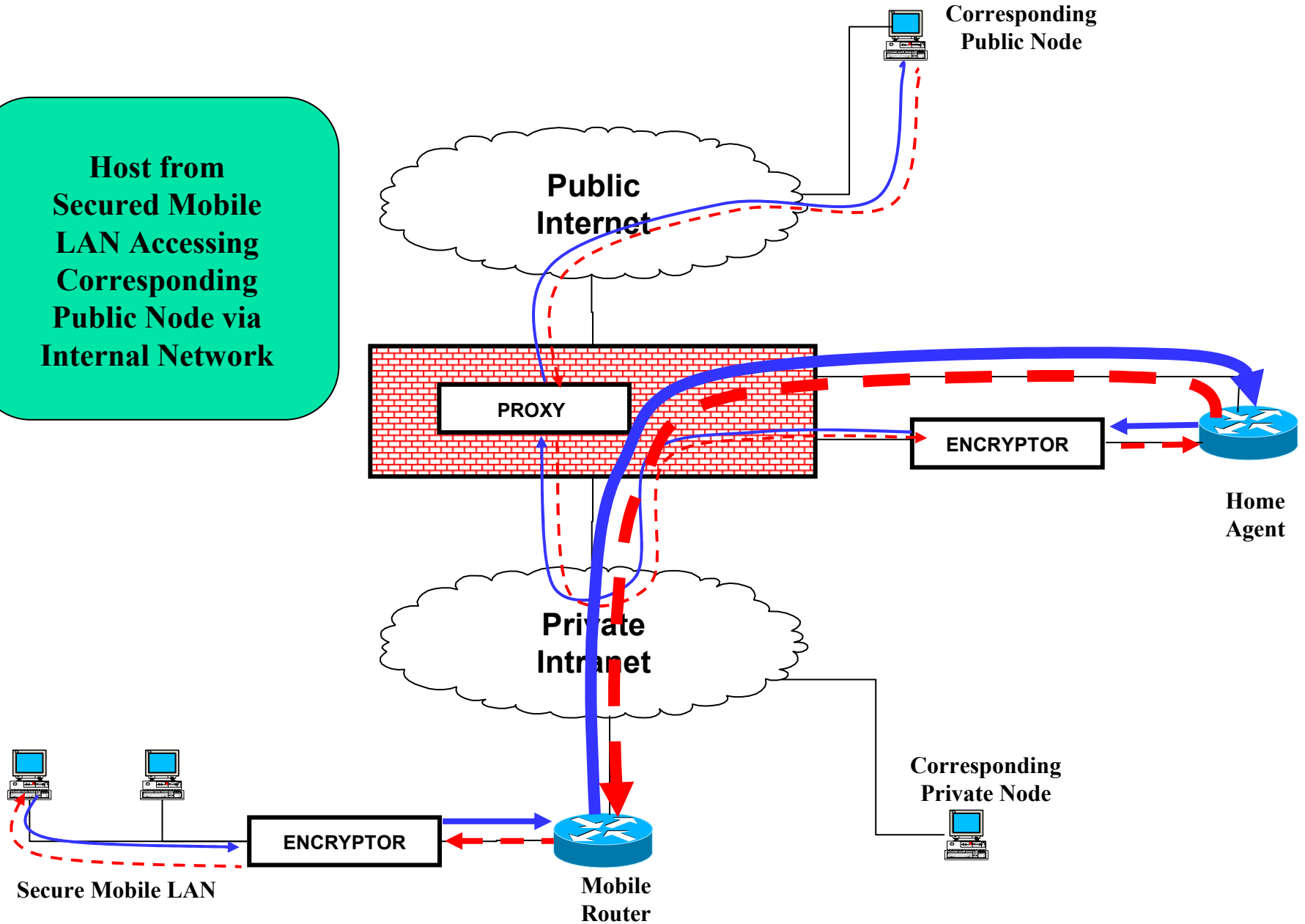




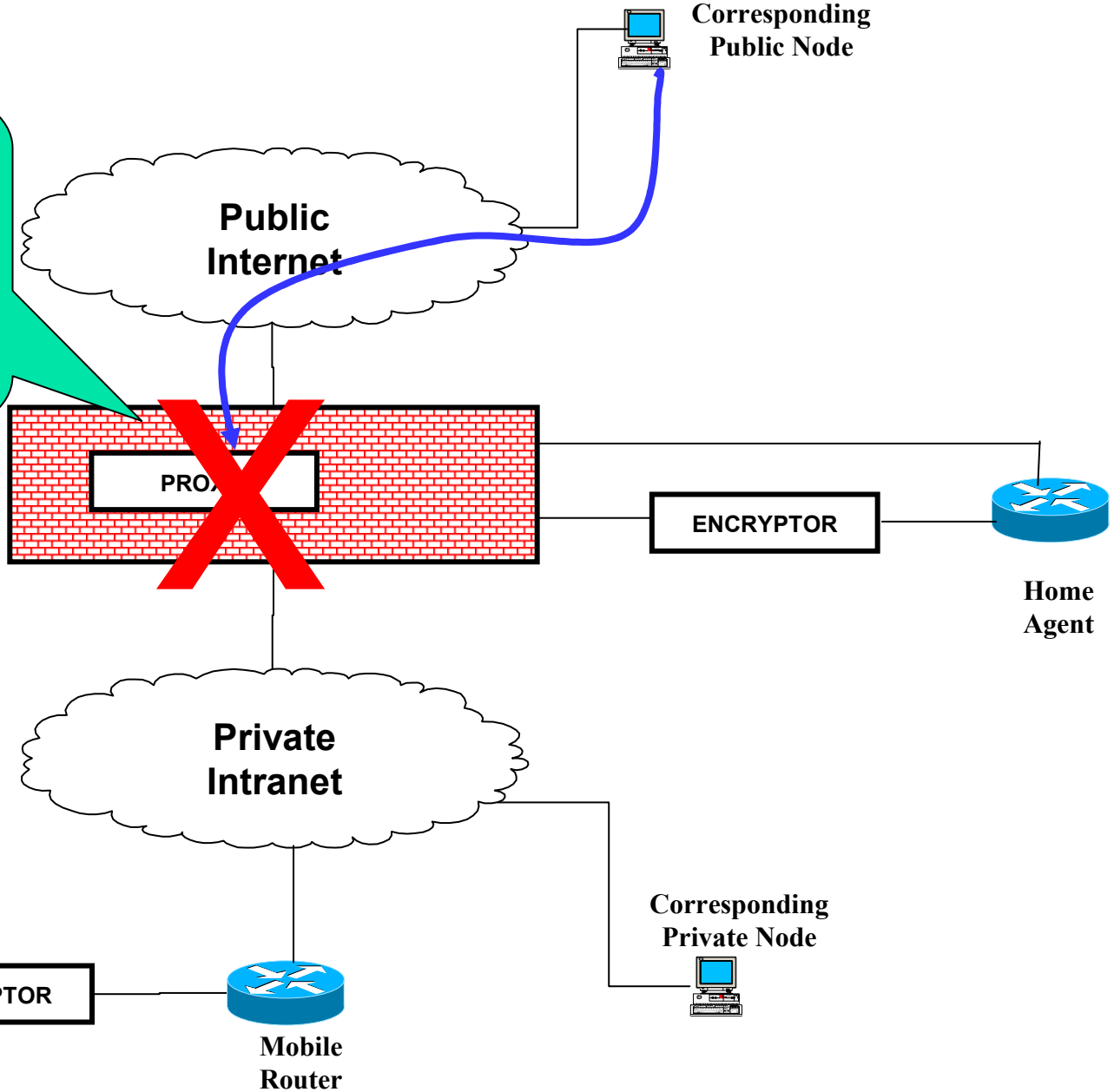




**Host from  
Secured Mobile  
LAN Accessing  
Corresponding  
Public Node via  
Internal Network**

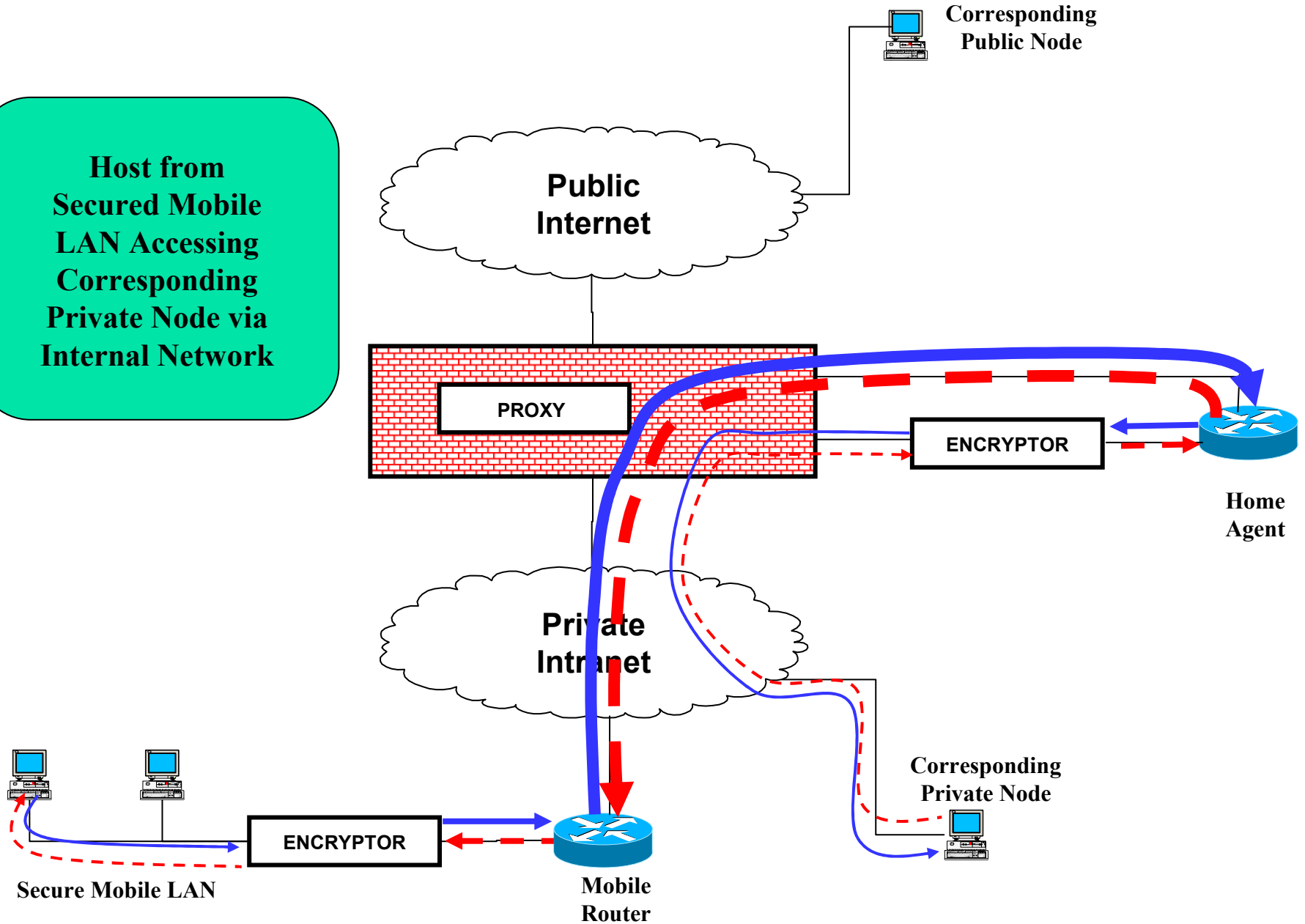


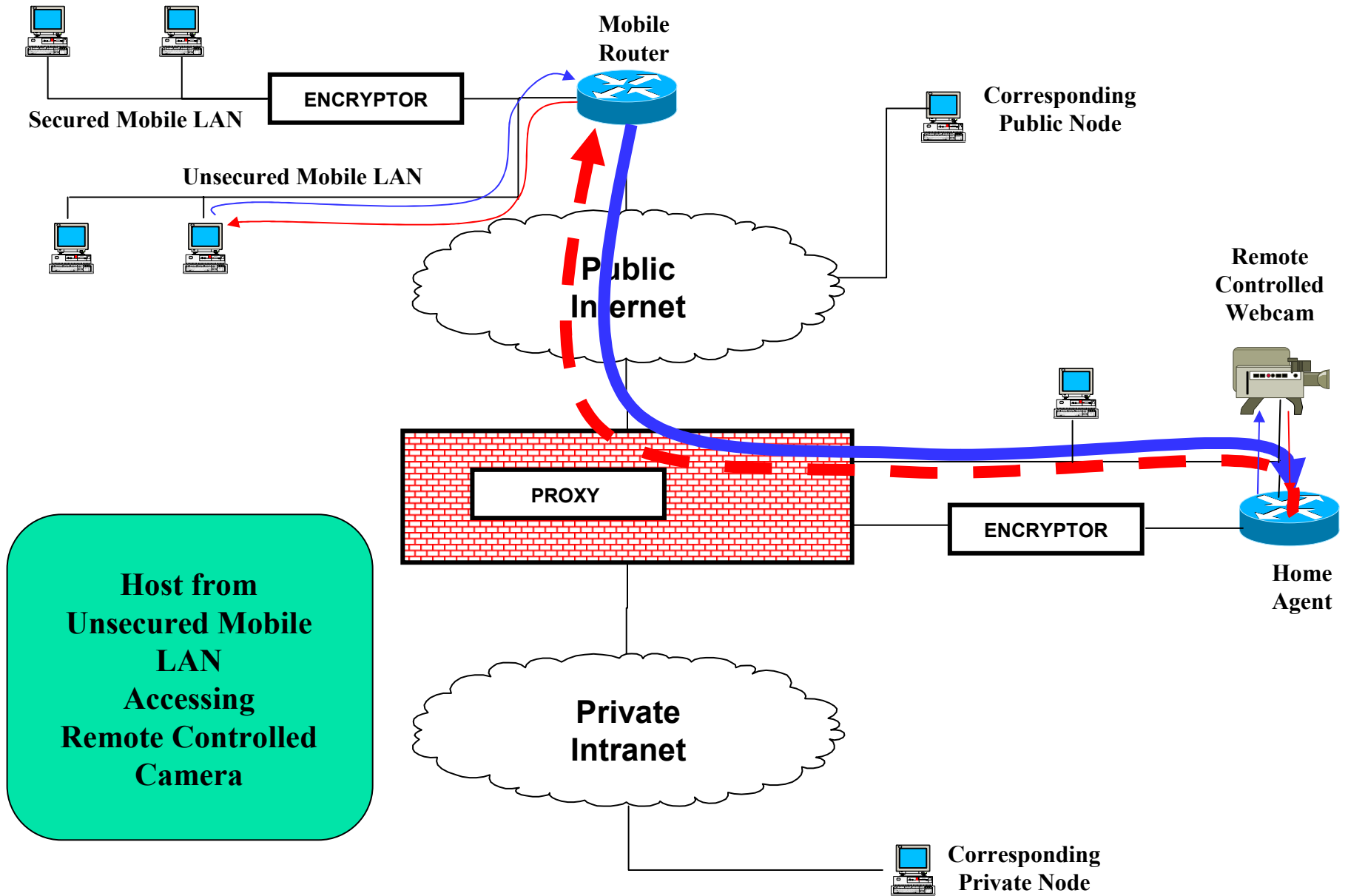
**Proxy blocks  
Communication  
Initiated outside  
the Firewall**

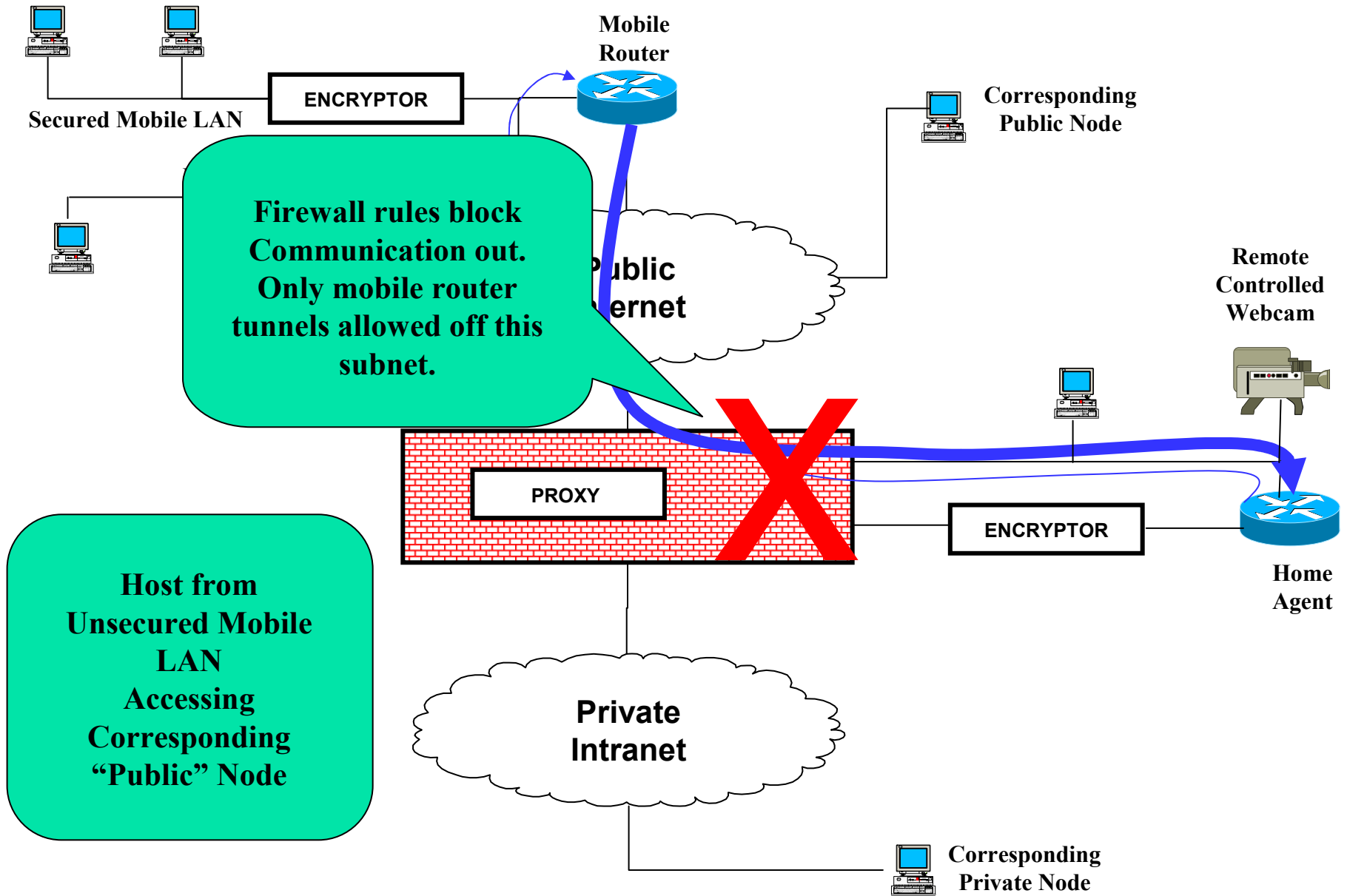


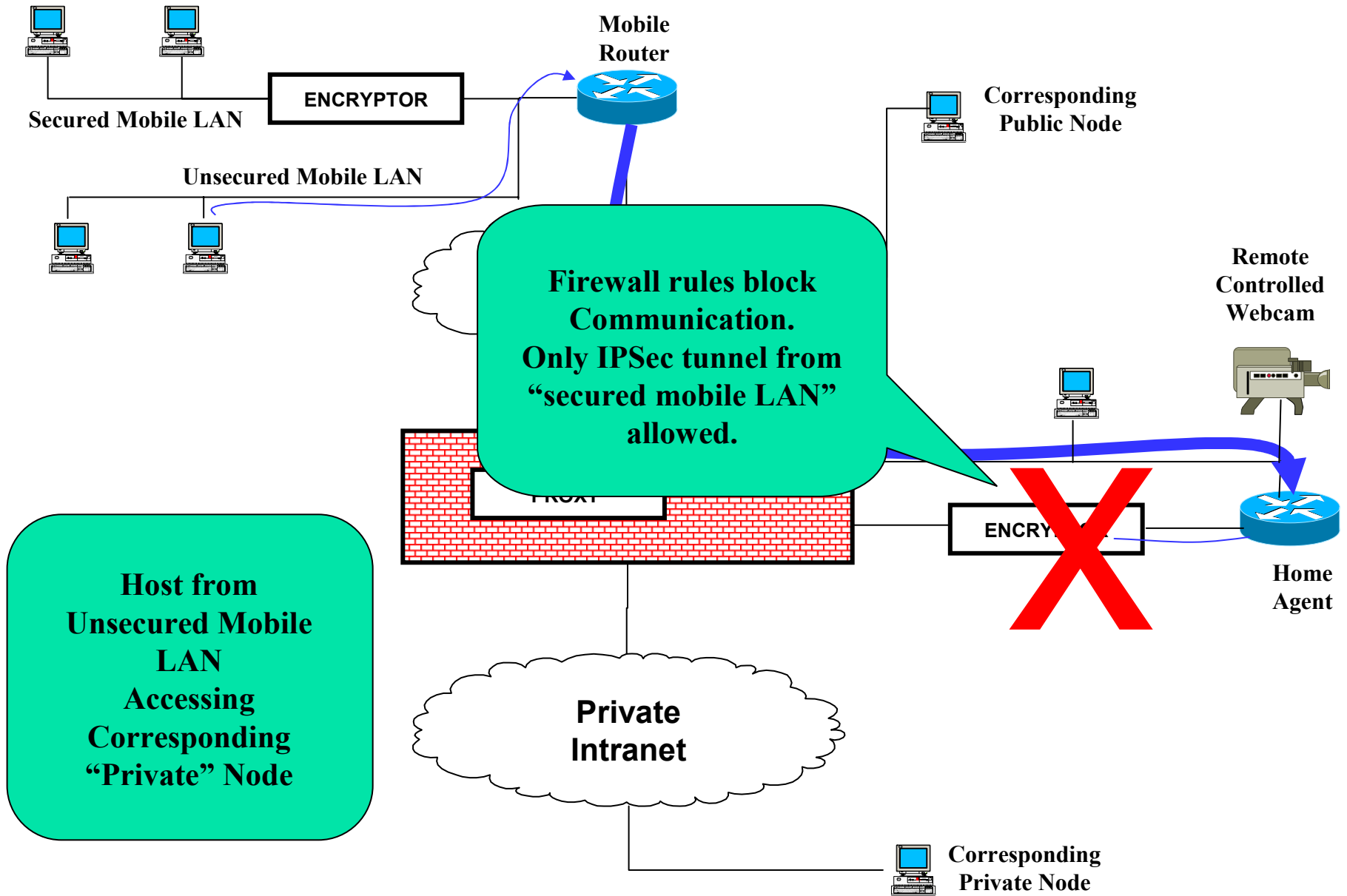


**Host from  
Secured Mobile  
LAN Accessing  
Corresponding  
Private Node via  
Internal Network**

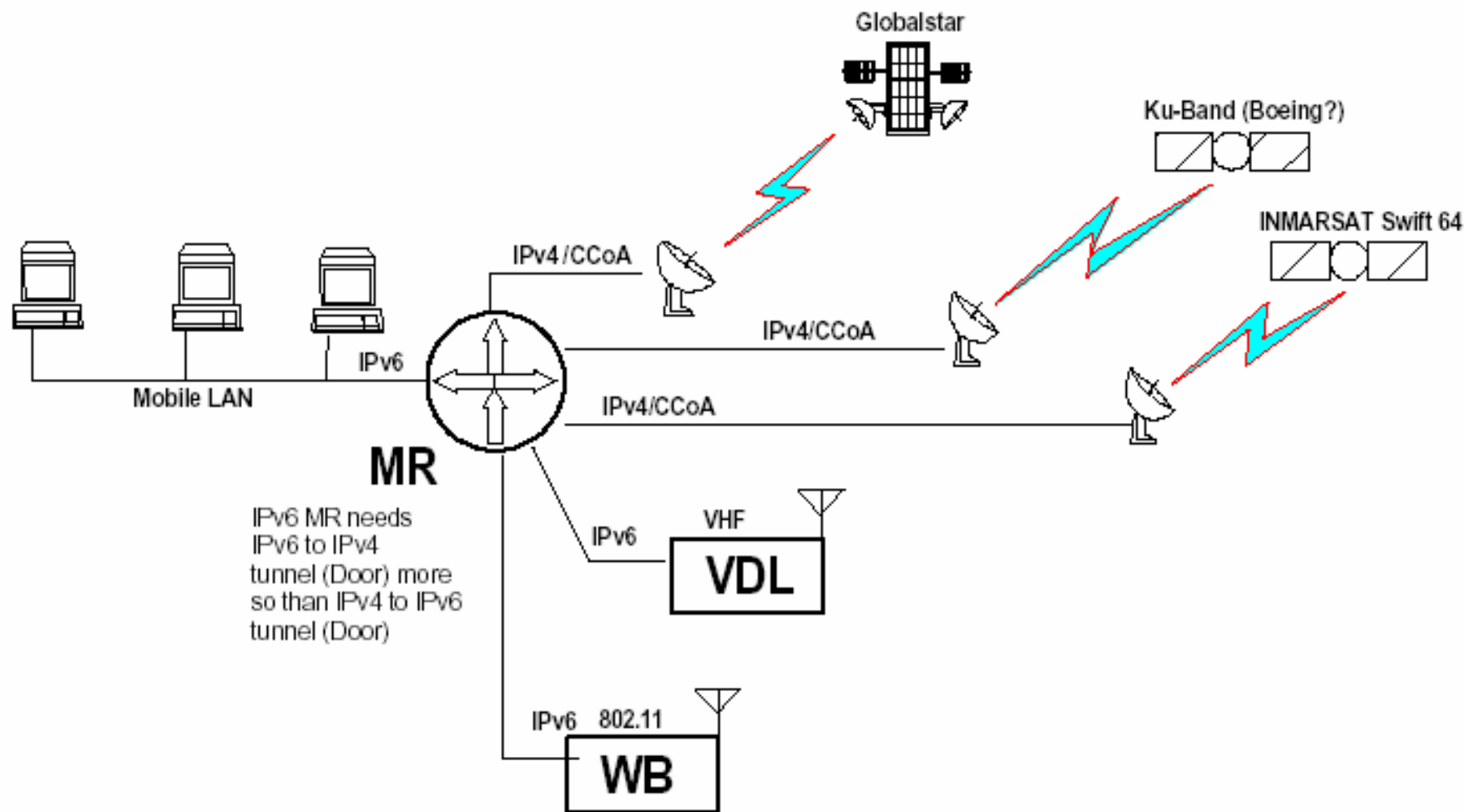




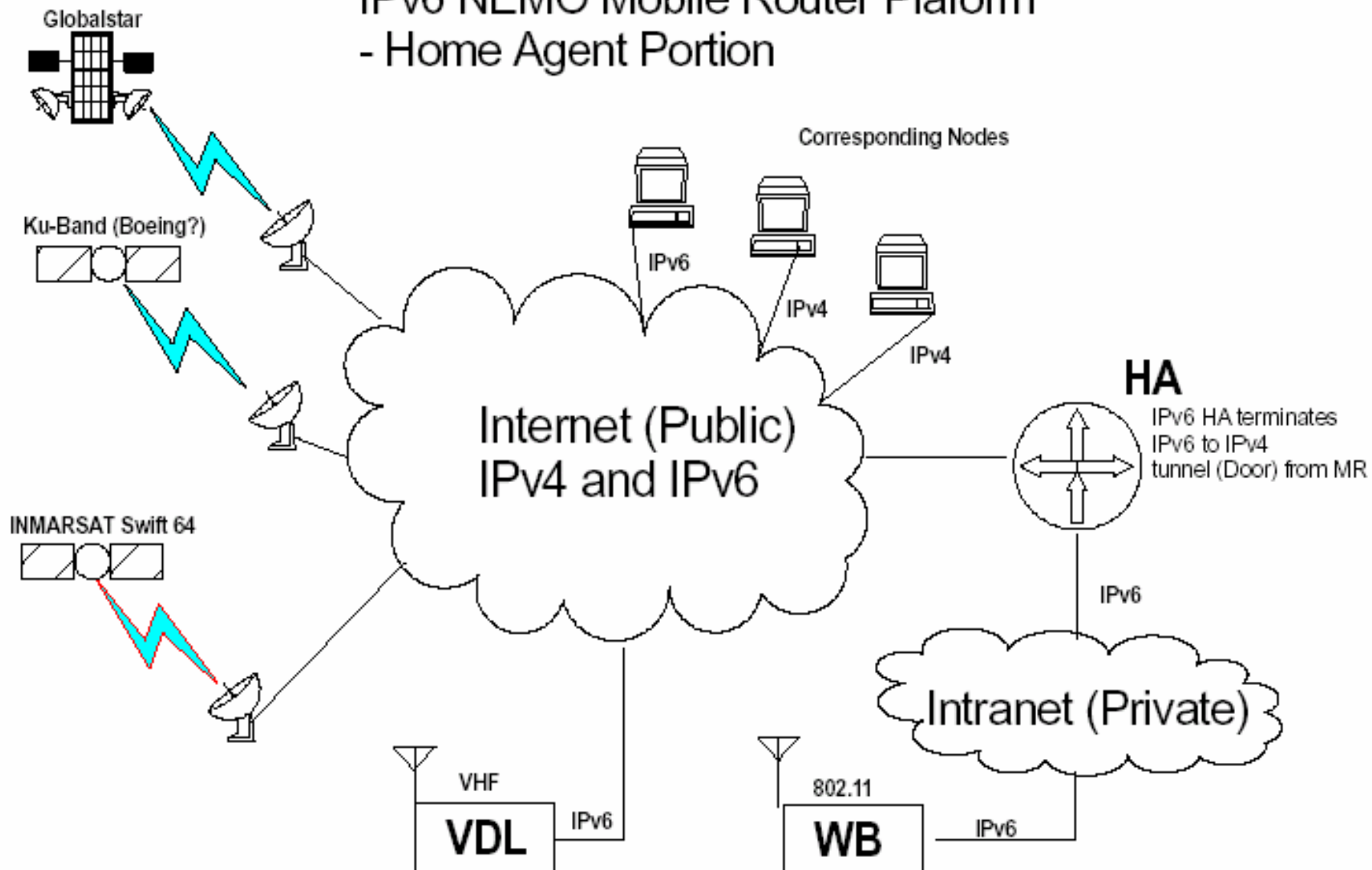


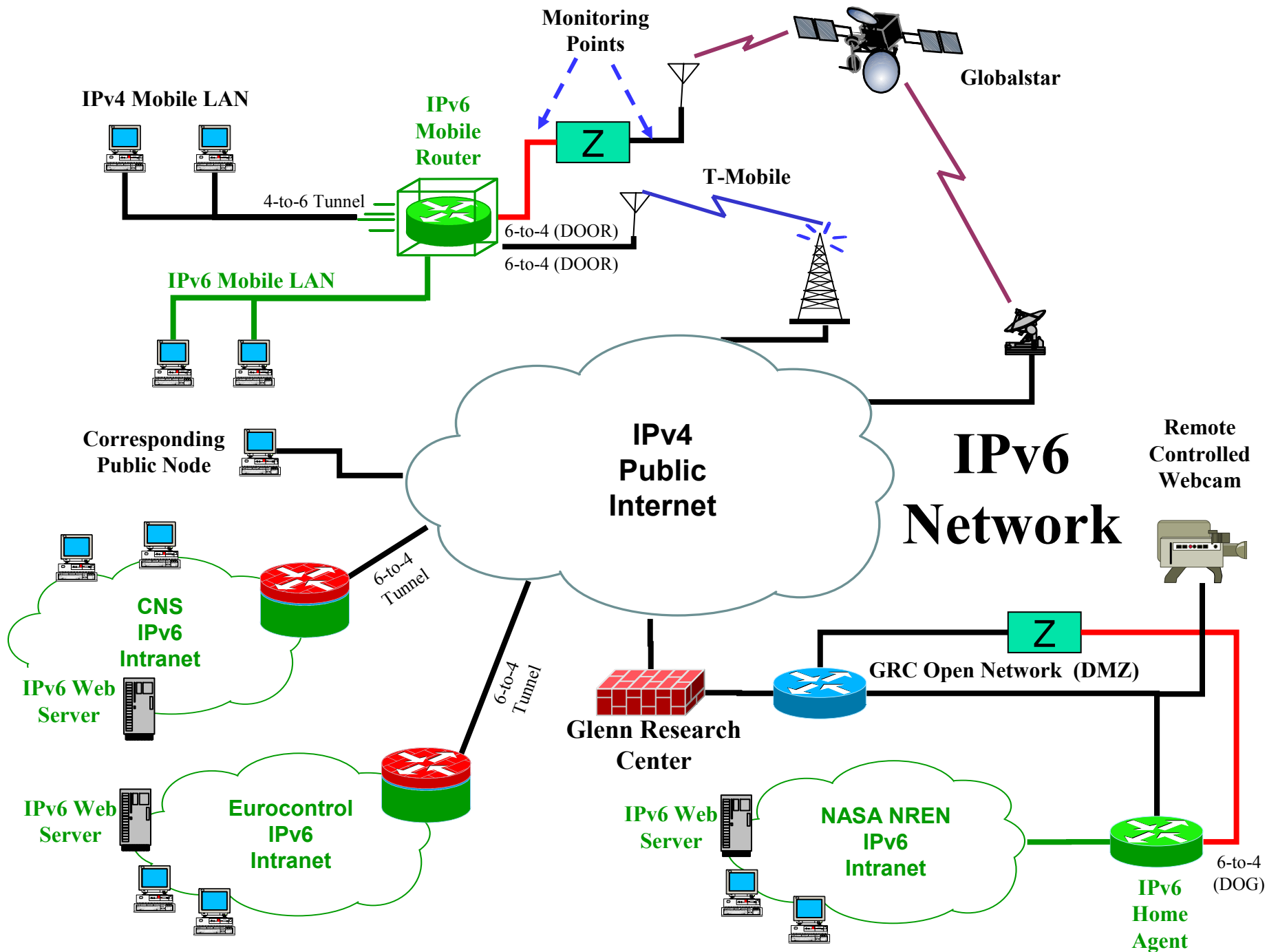


# Aeronautical IPv6 NEMO Mobile Router Platform - Mobile Router Portion



# Aeronautical IPv6 NEMO Mobile Router Platform - Home Agent Portion

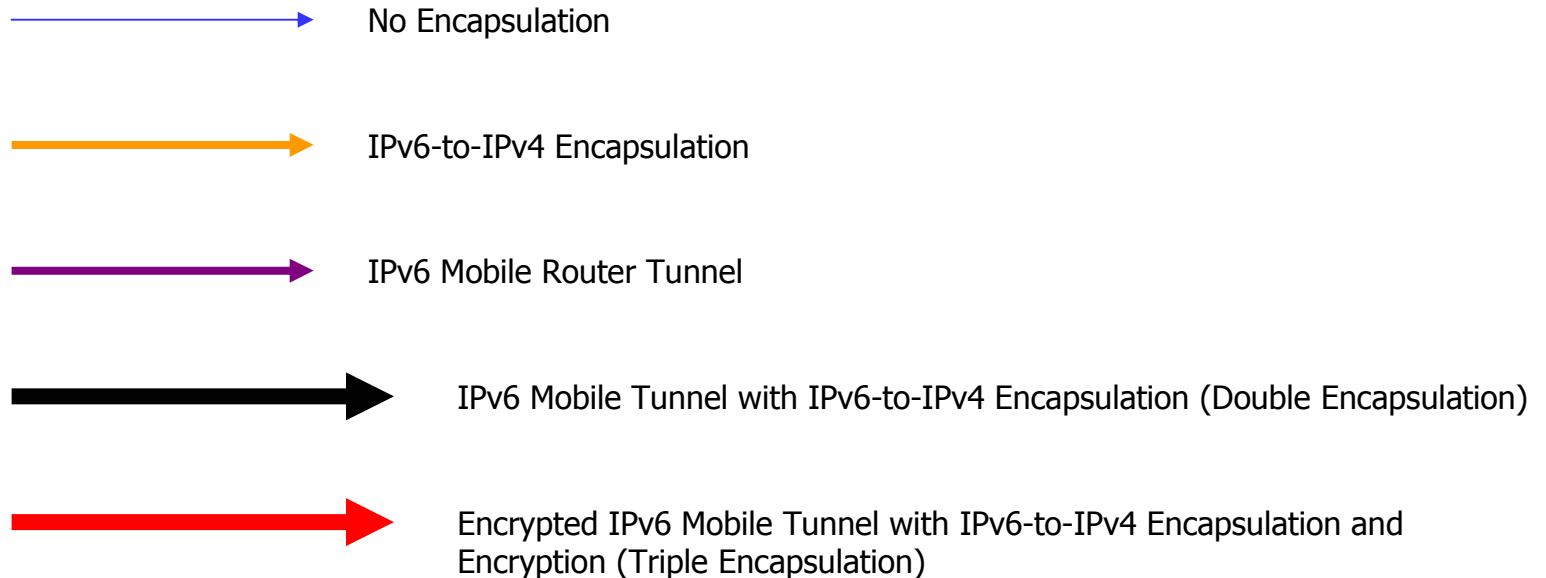






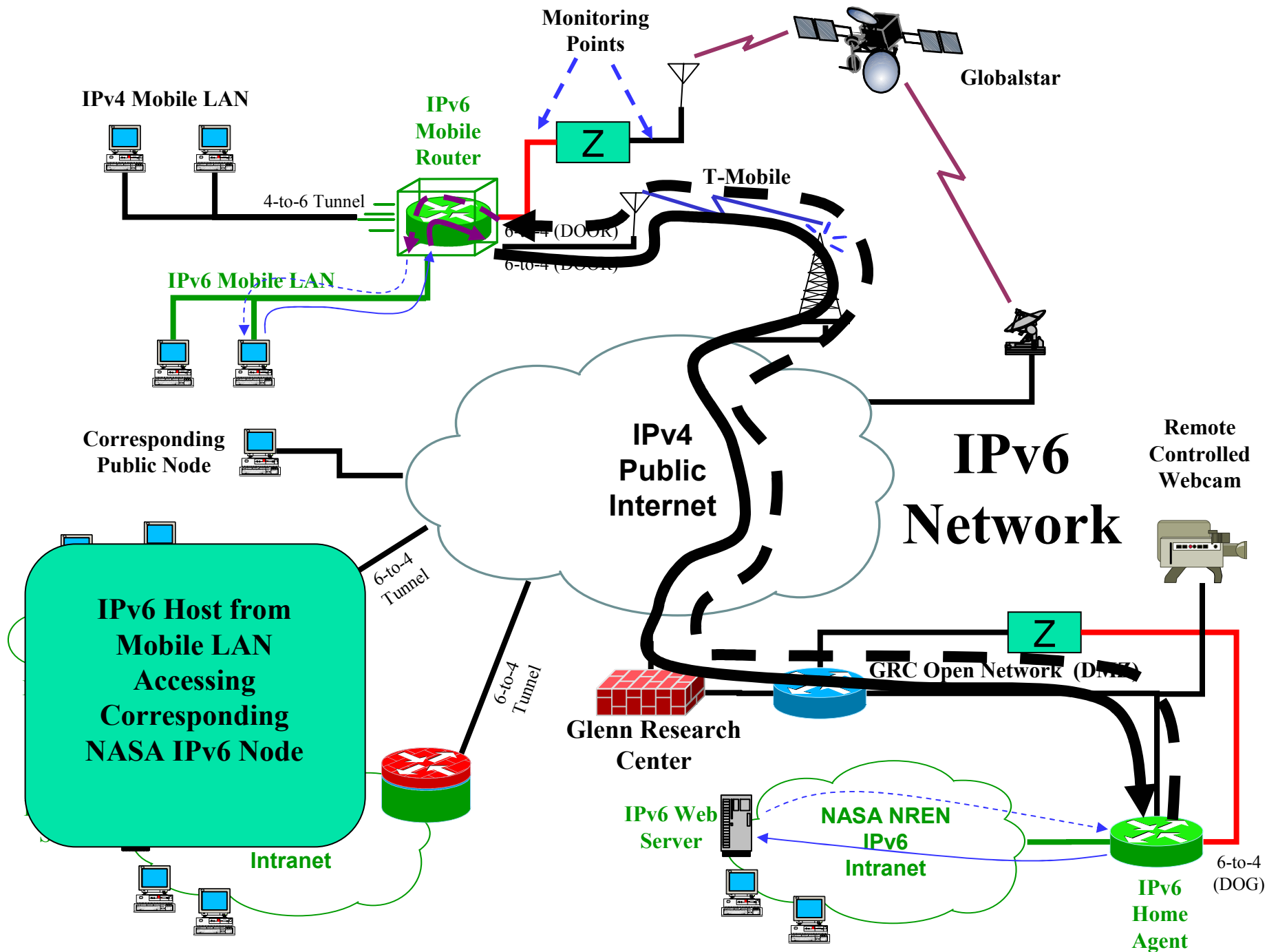
# Data Flow Key

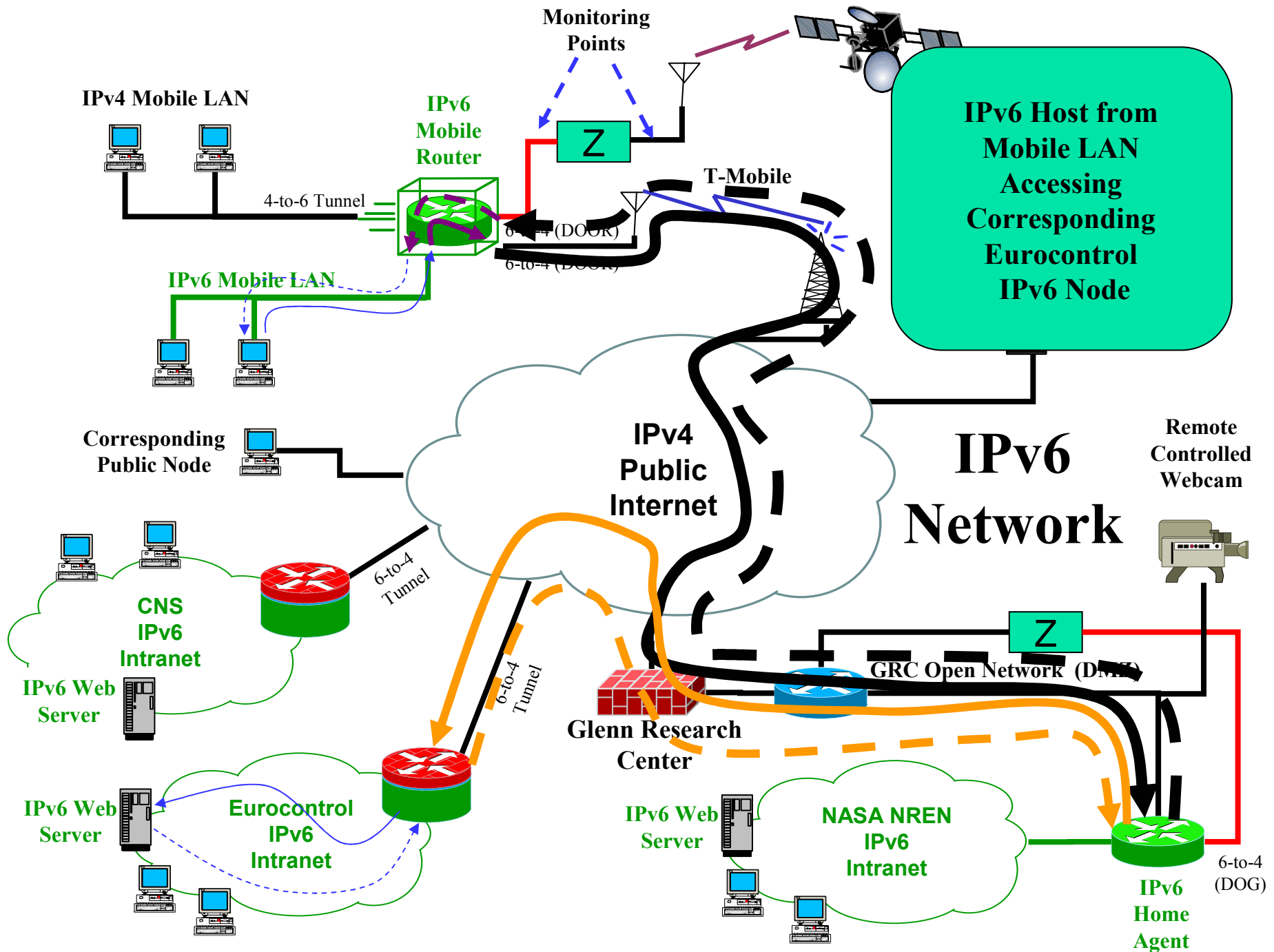
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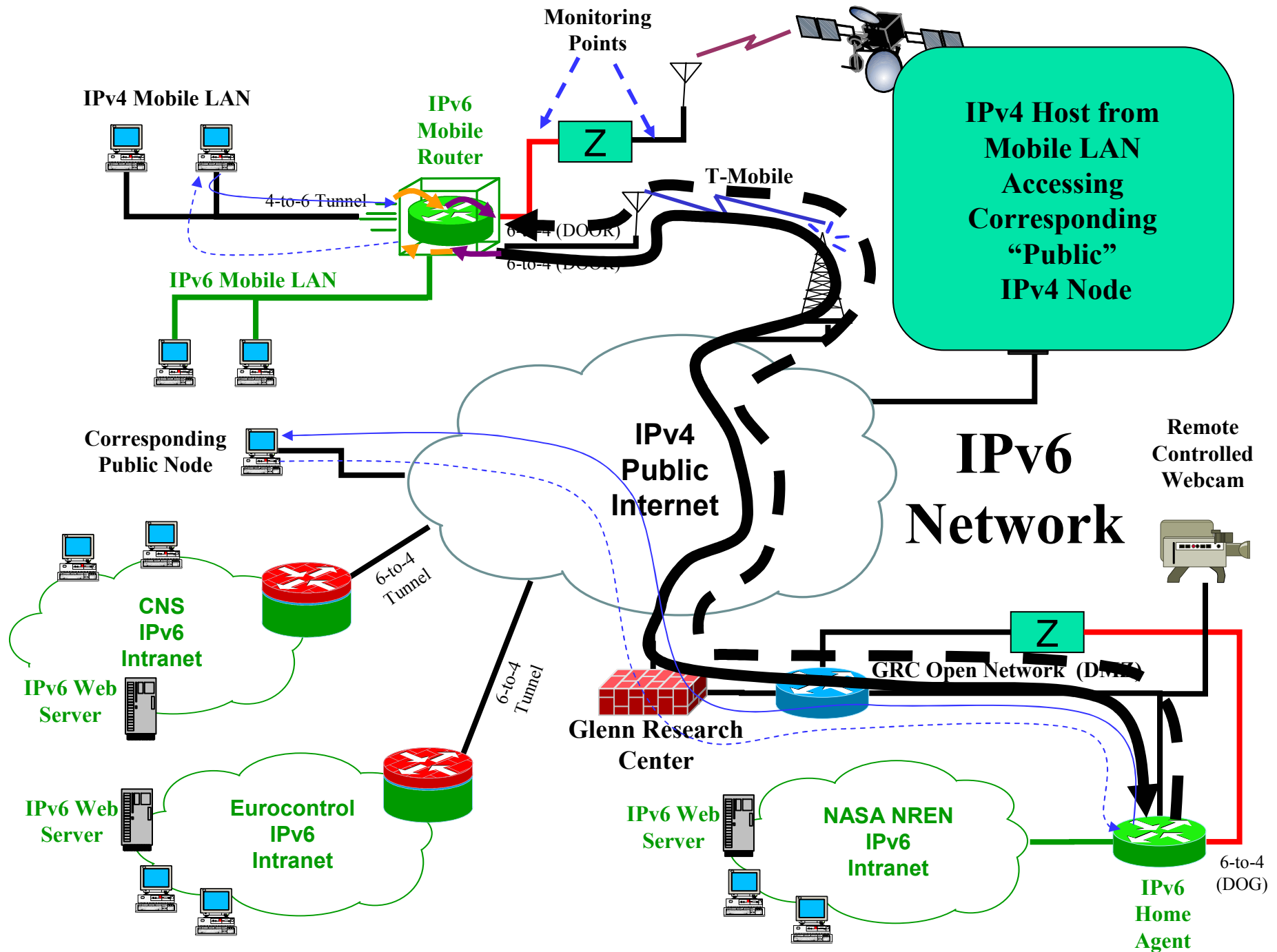


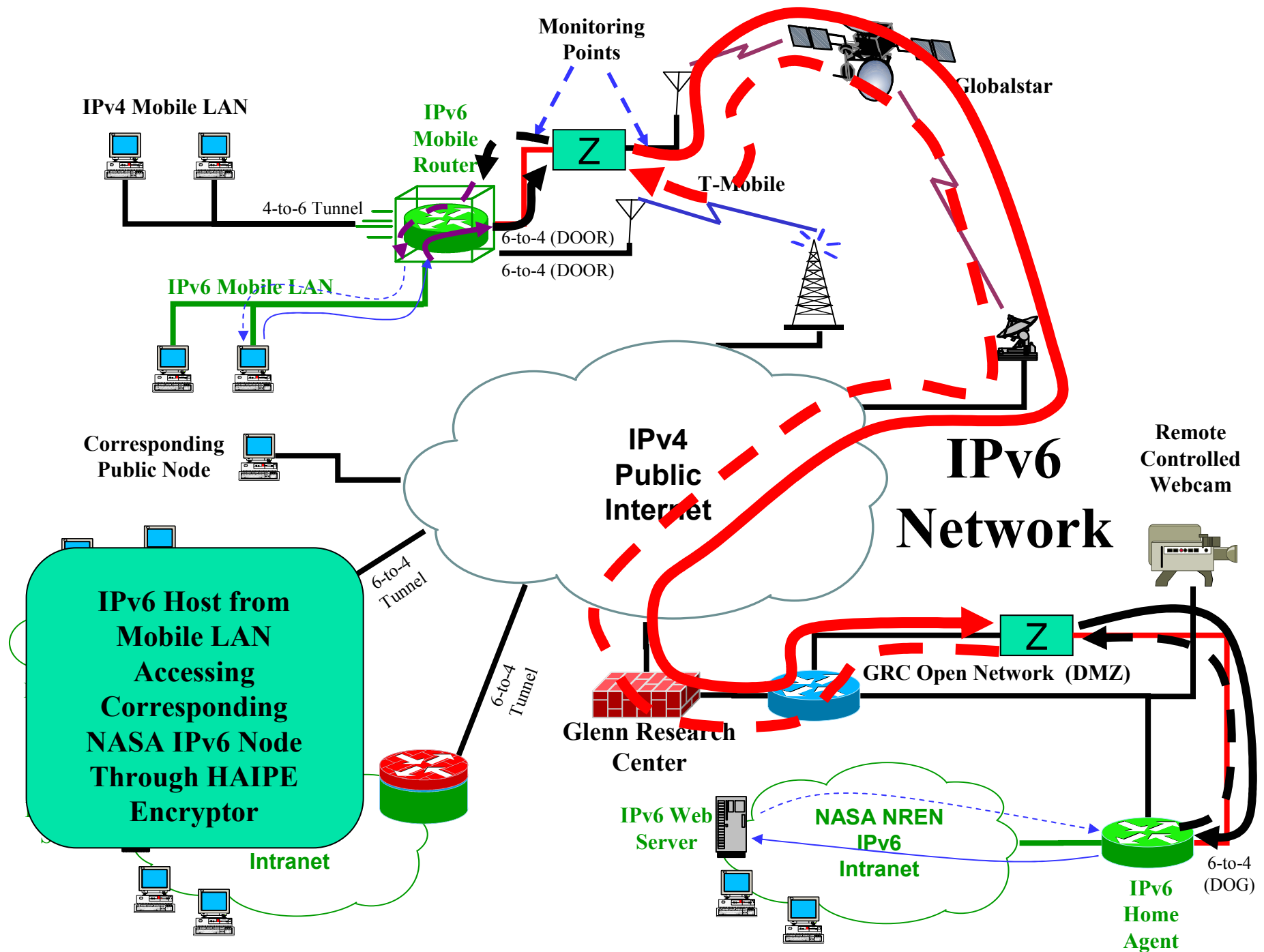
Note, the Secured IPv4 mobile network data passing through the Globalstar network actually experiences five layers of encapsulation: 1) IPv4-to-IPv6; 2) IPv6 Mobile Tunnel; 3) IPv6-to-IPv4 "Door" tunnel; 4) HAIPE encapsulation for encryption; 5) an additional tunnel between the Globalstar Smiths Falls ground station and the Qualcomm facility in San Diego, CA unencapsulated and reencapsulated for transmission to Glenn Research Center through the NAT at Qualcomm.













# Papers and Presentations

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“Papers and Presentations”