



# Mobile Network IOS Feature

Dan Shell Network Architect

Advanced Technology

CISCO Systems GDSDG



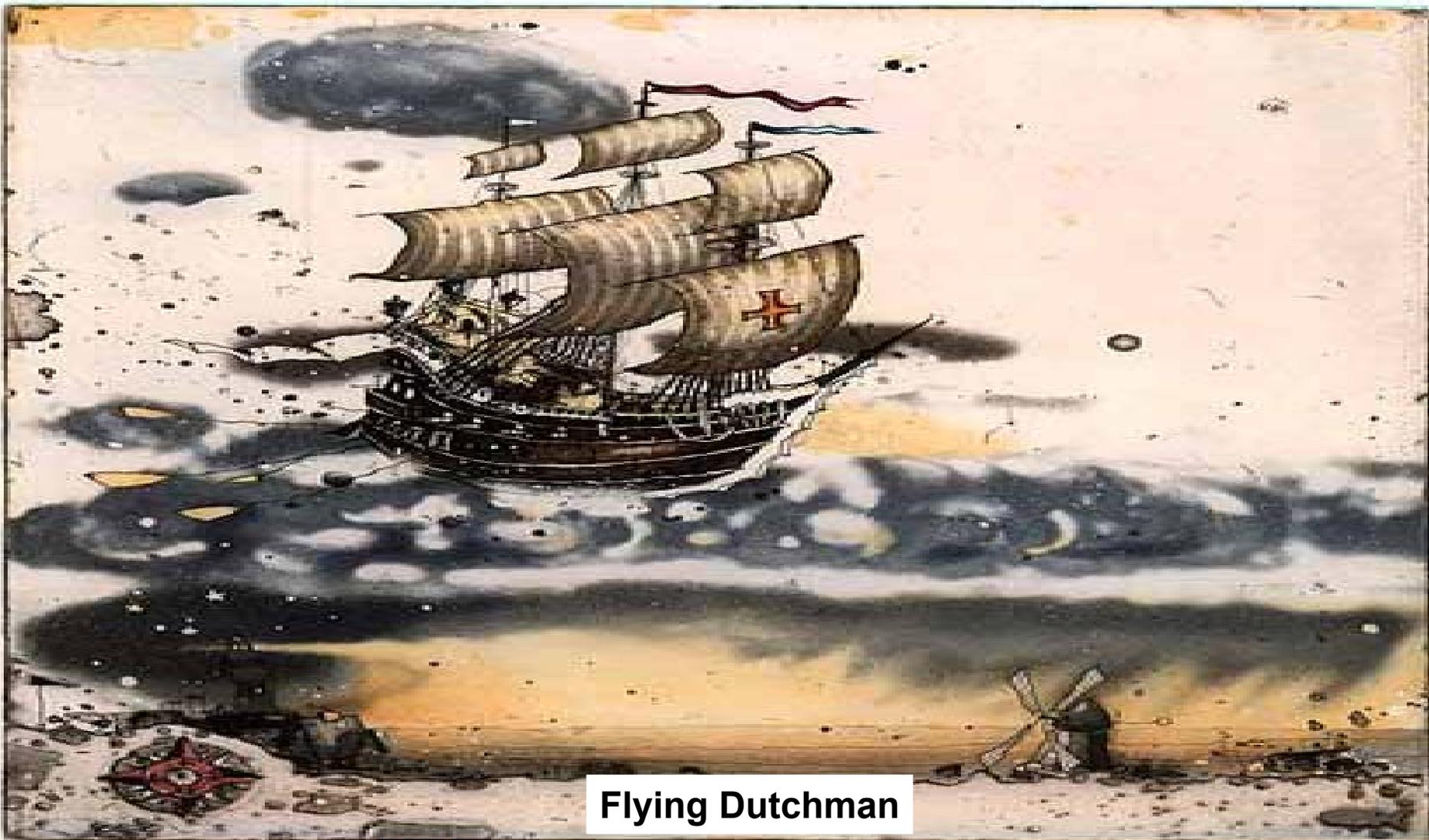
**I just wanted to see what you were doing!!**



# Mobile Network IOS Feature Agenda

- **What is Mobile Network**
- **Mobile Network terminology**
- **Mobile Network Features/Platforms**
- **Mobile Network Uses**
- **Summary**

# What is Mobile Network IOS?

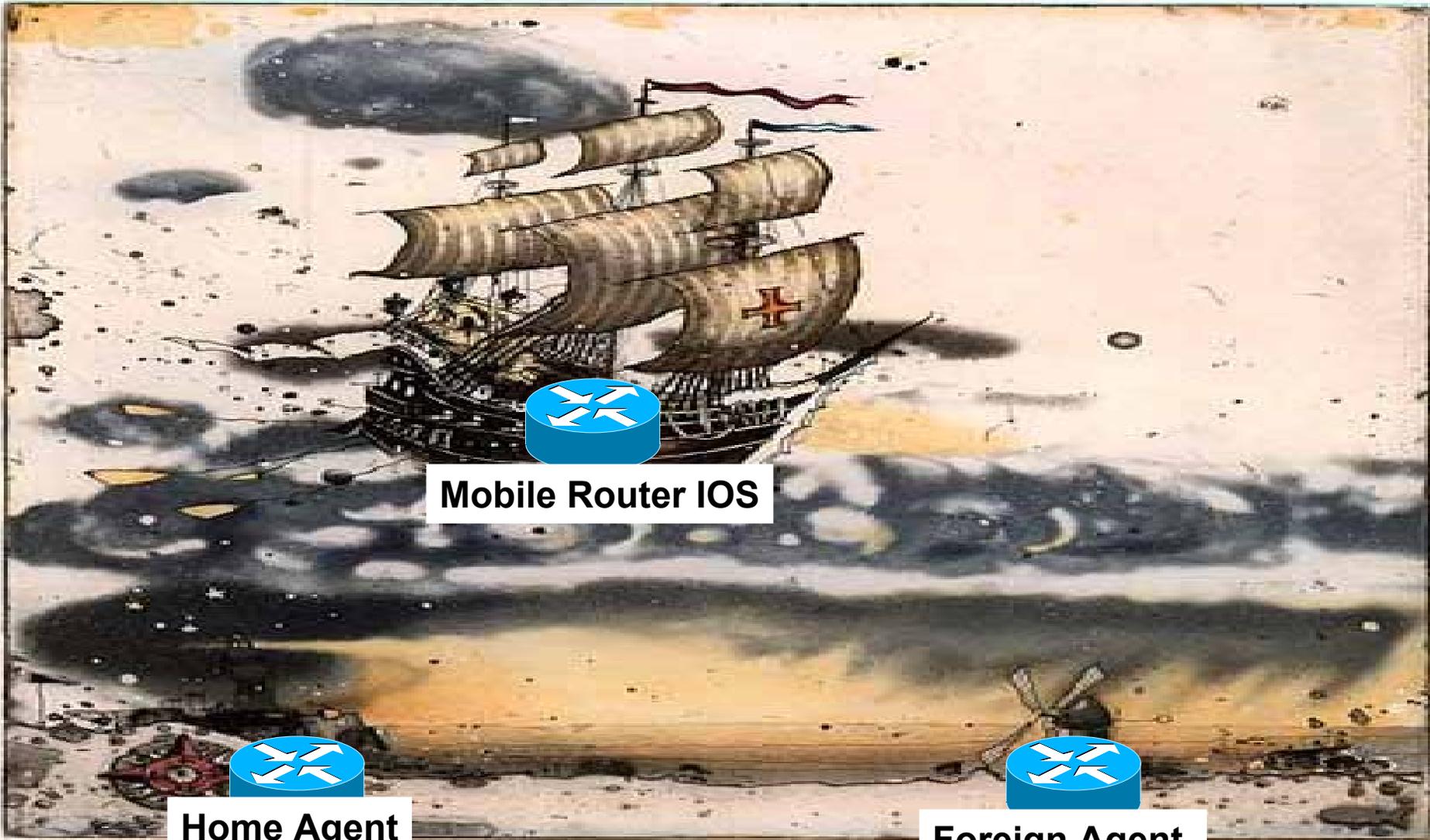


**Flying Dutchman**

# Networks in Motion



# What is Mobile Network IOS Terminology

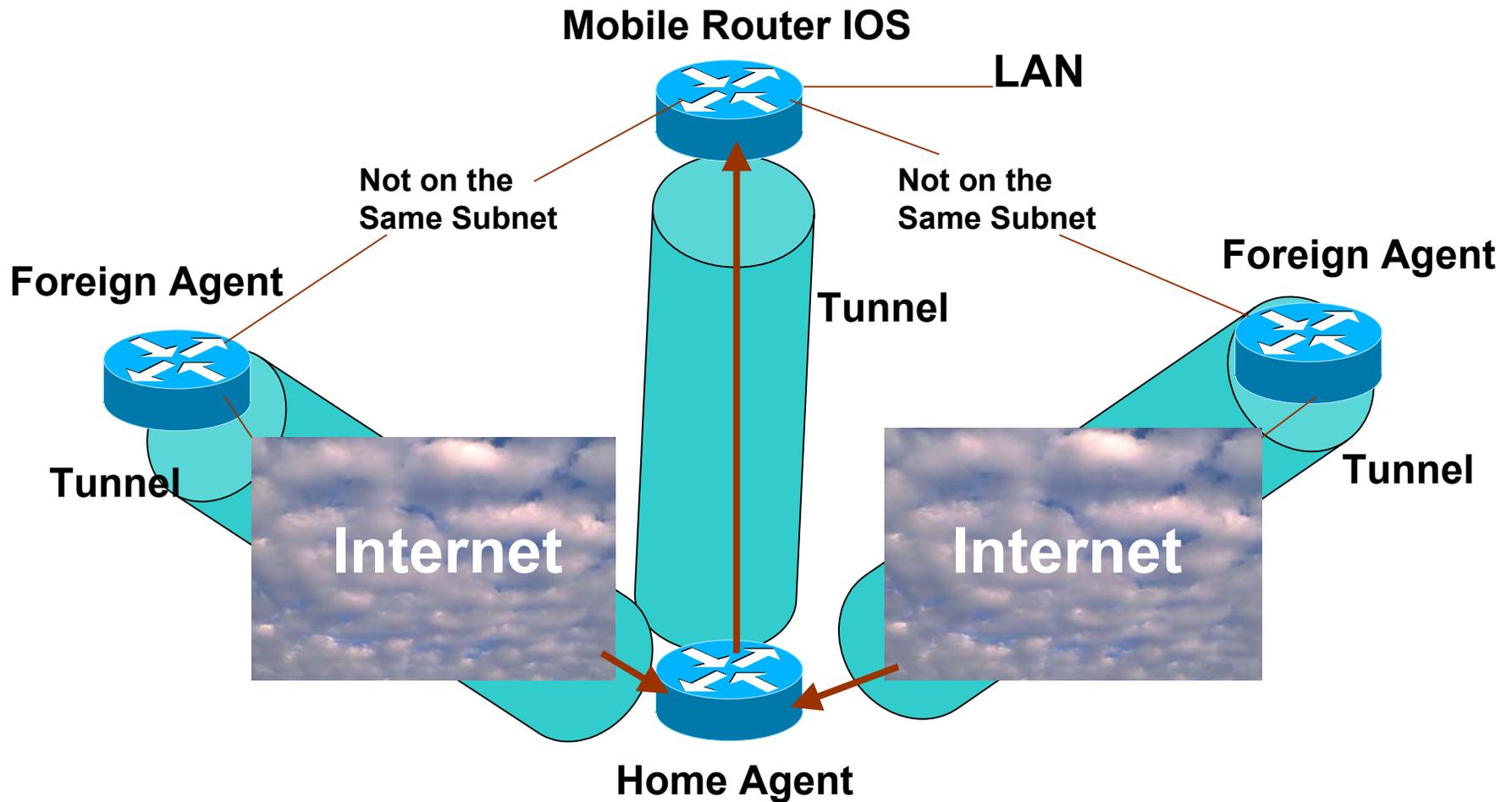


**Mobile Router IOS**

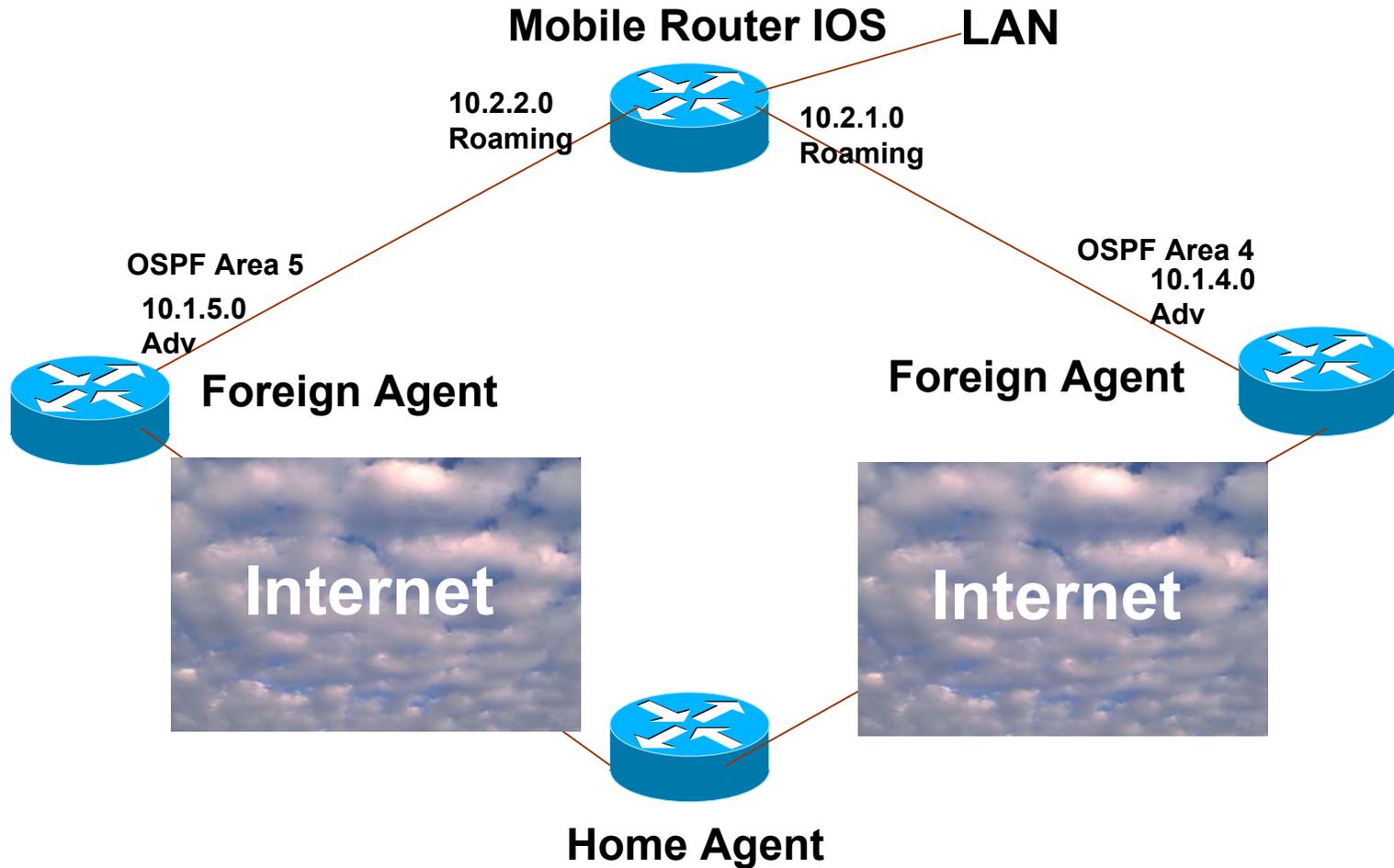
**Home Agent**

**Foreign Agent**

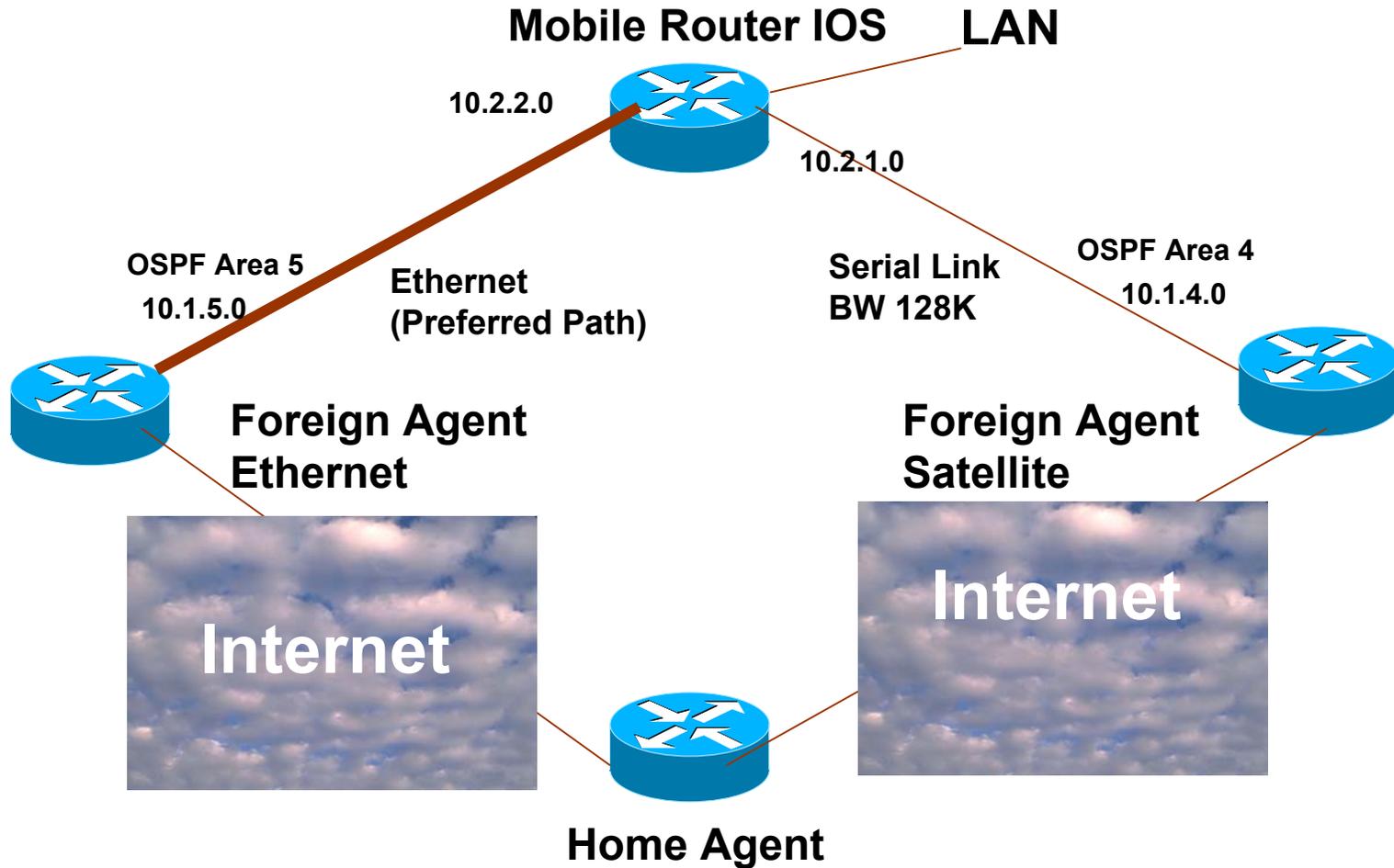
# Mobile Network IOS Terminology



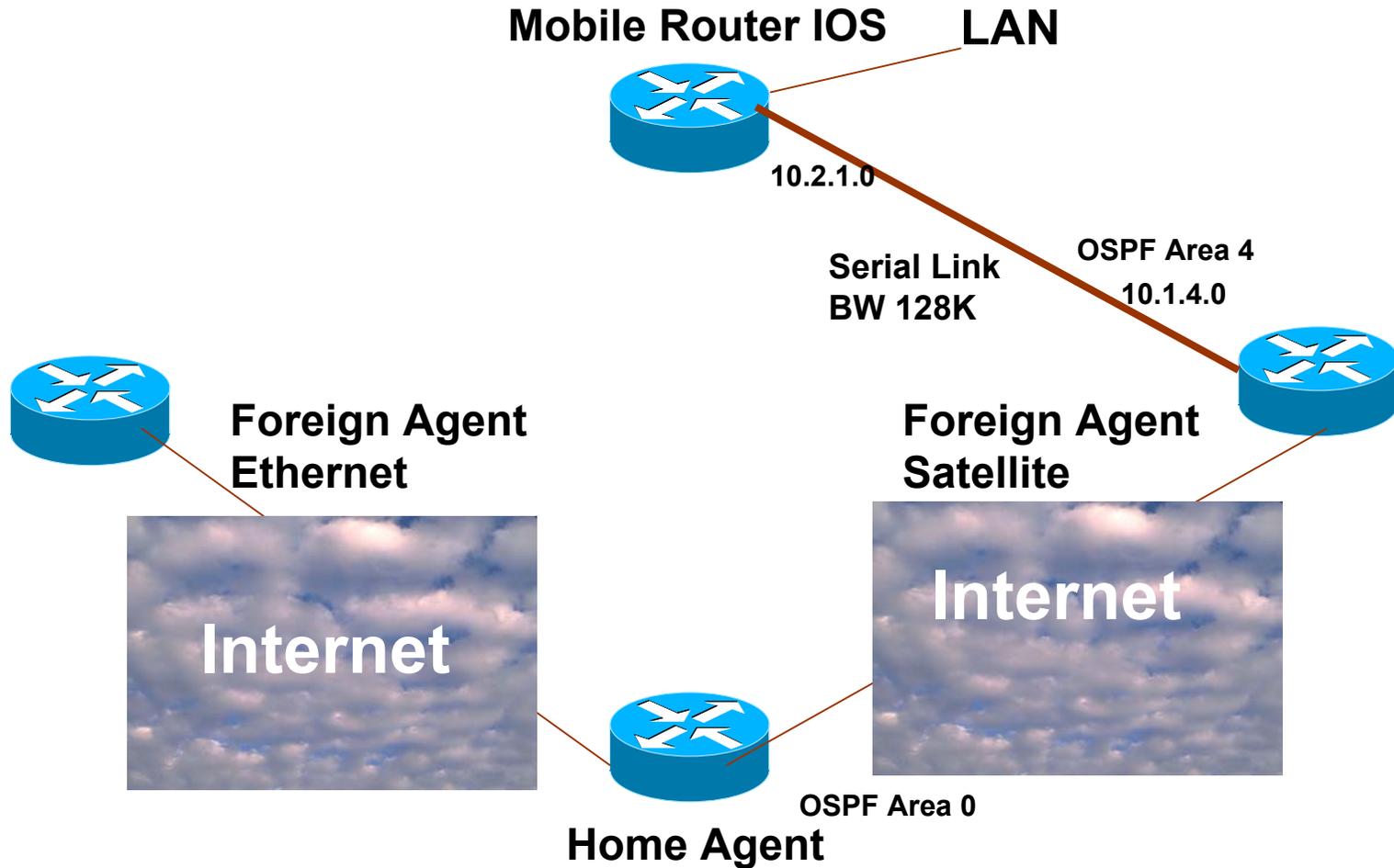
# Mobile Network IOS Feature



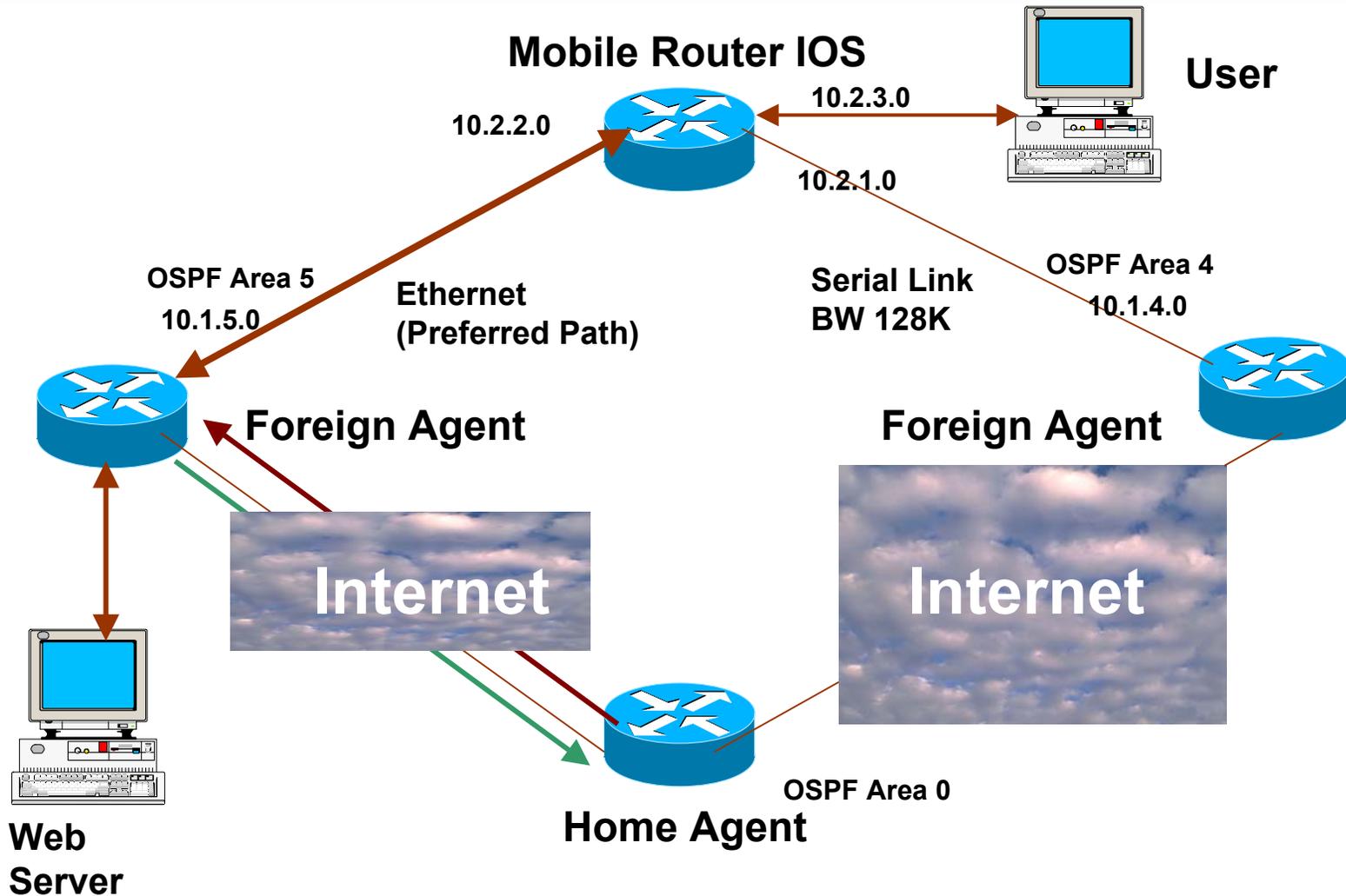
# Mobile Net IOS Feature Preferred Path



# Mobile Net IOS Feature Preferred Path

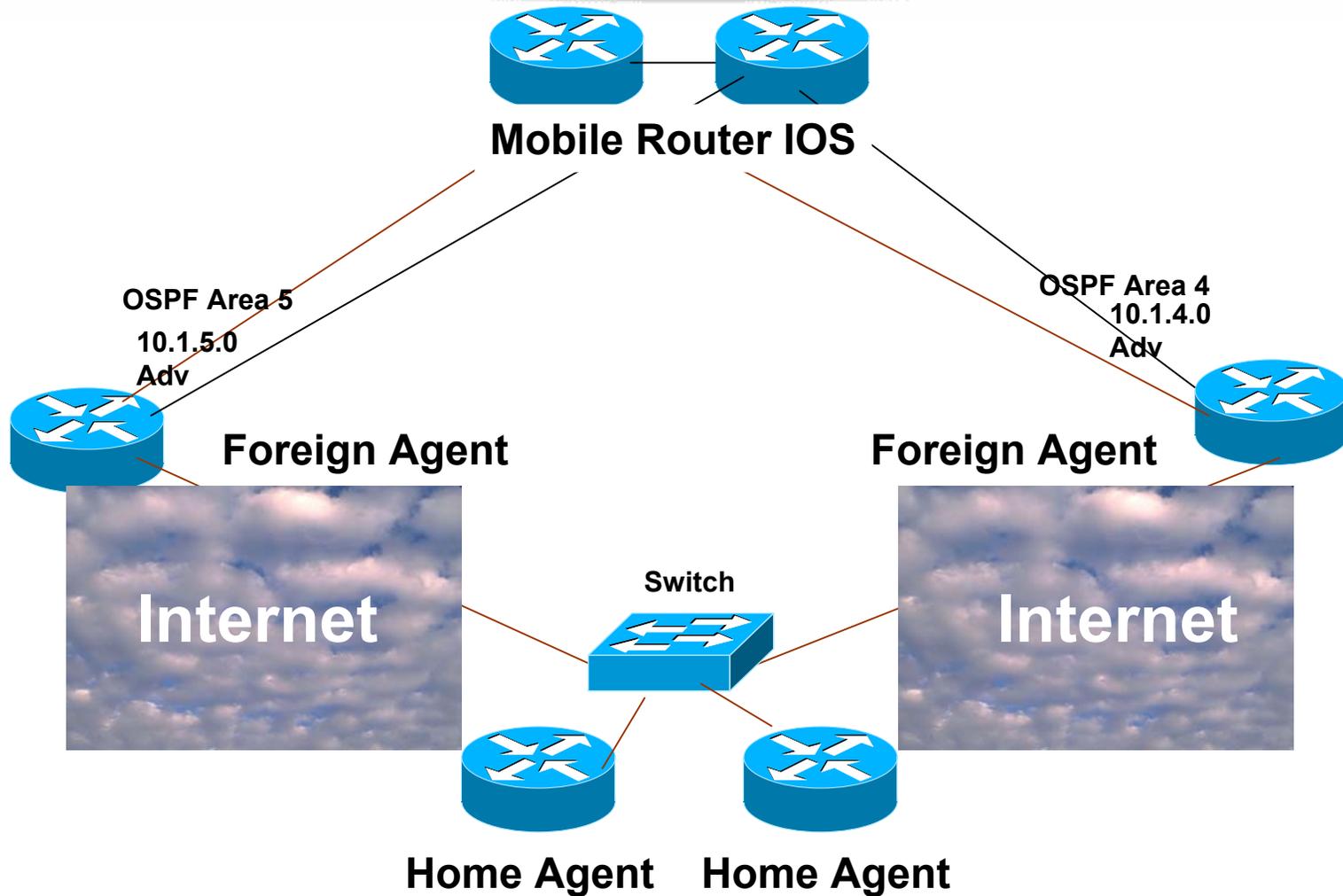


# Mobile Net IOS Feature Data Path



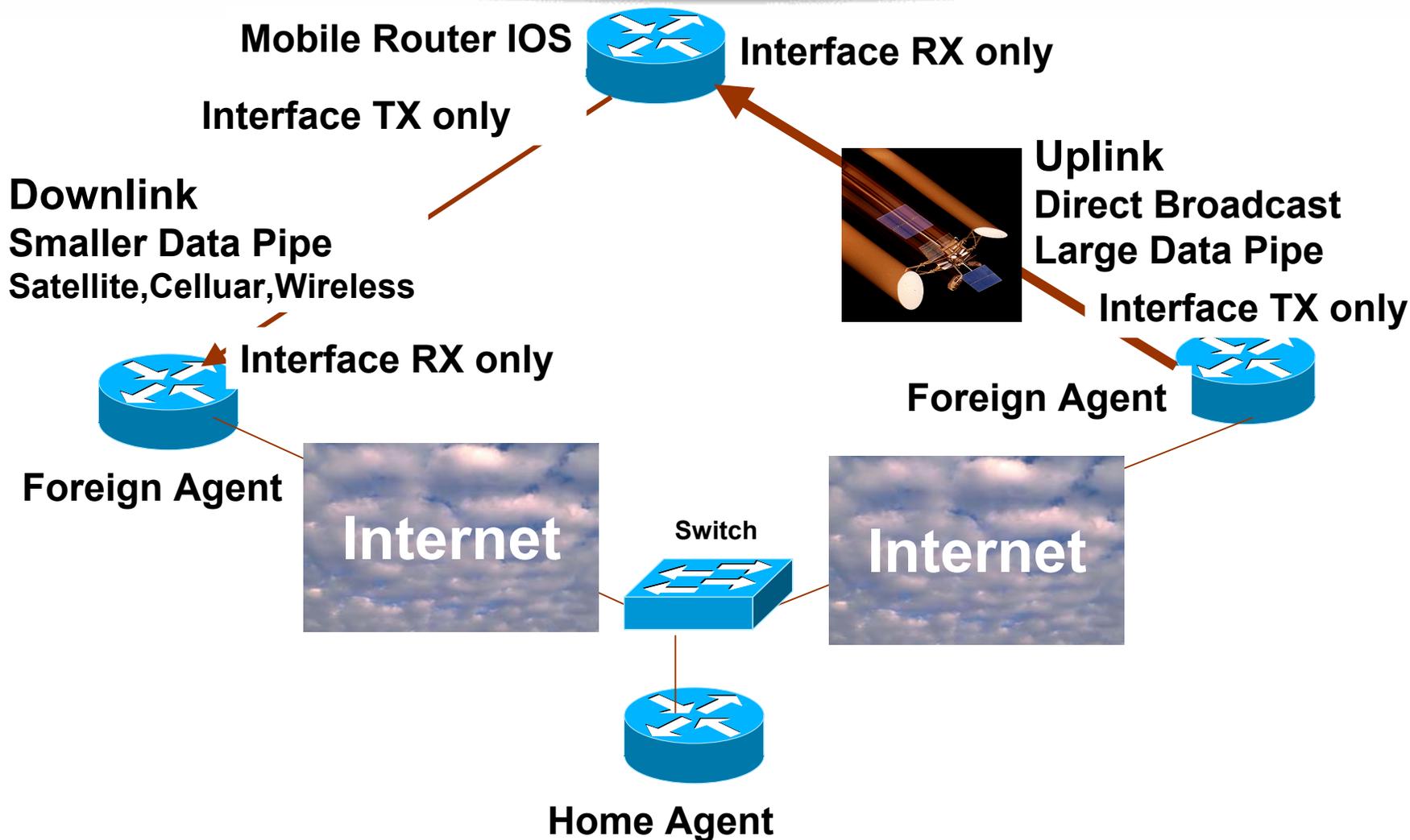
# Mobile Net IOS Feature

## Redundant Home Agents/Mobile Routers

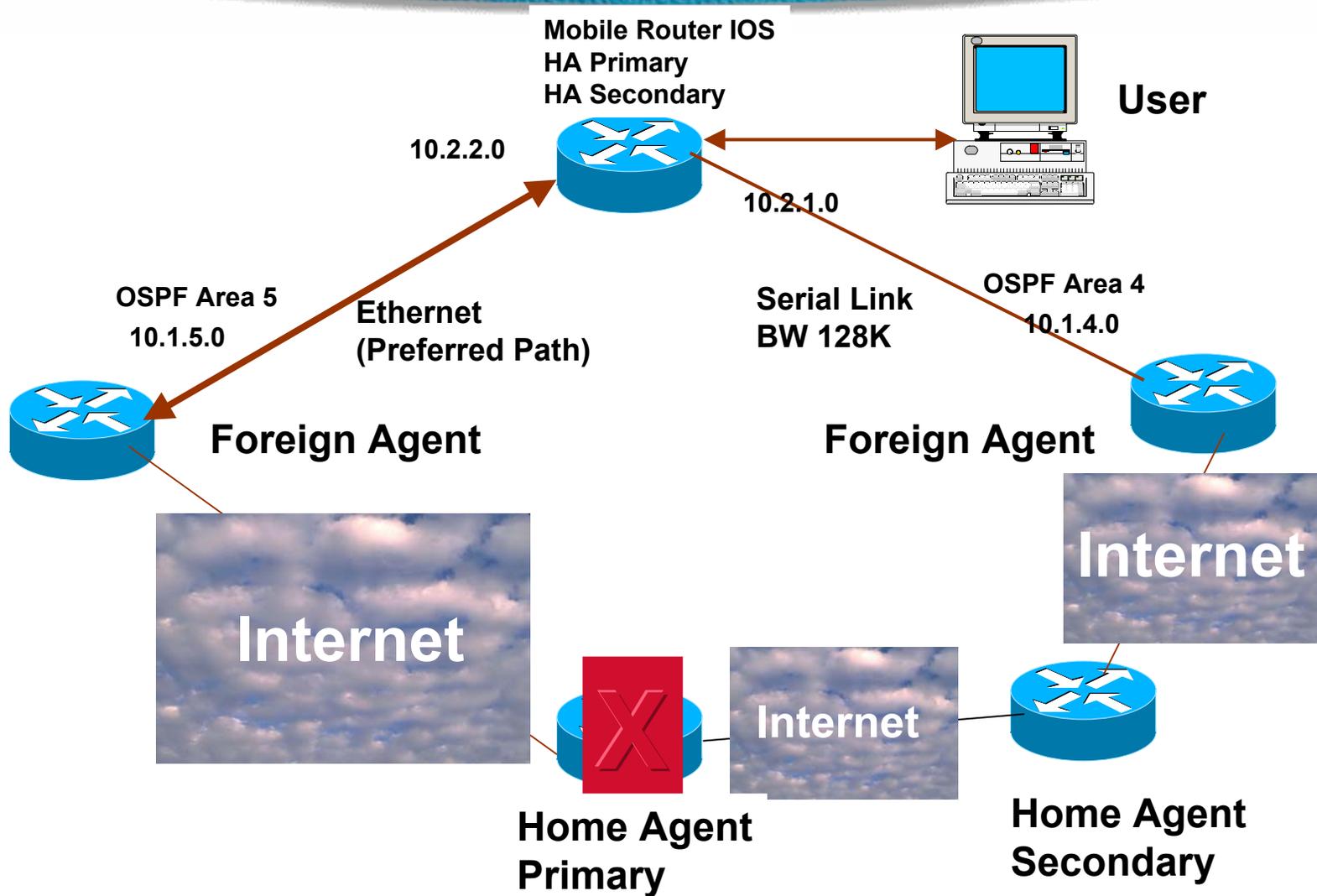


# Mobile Net IOS Feature

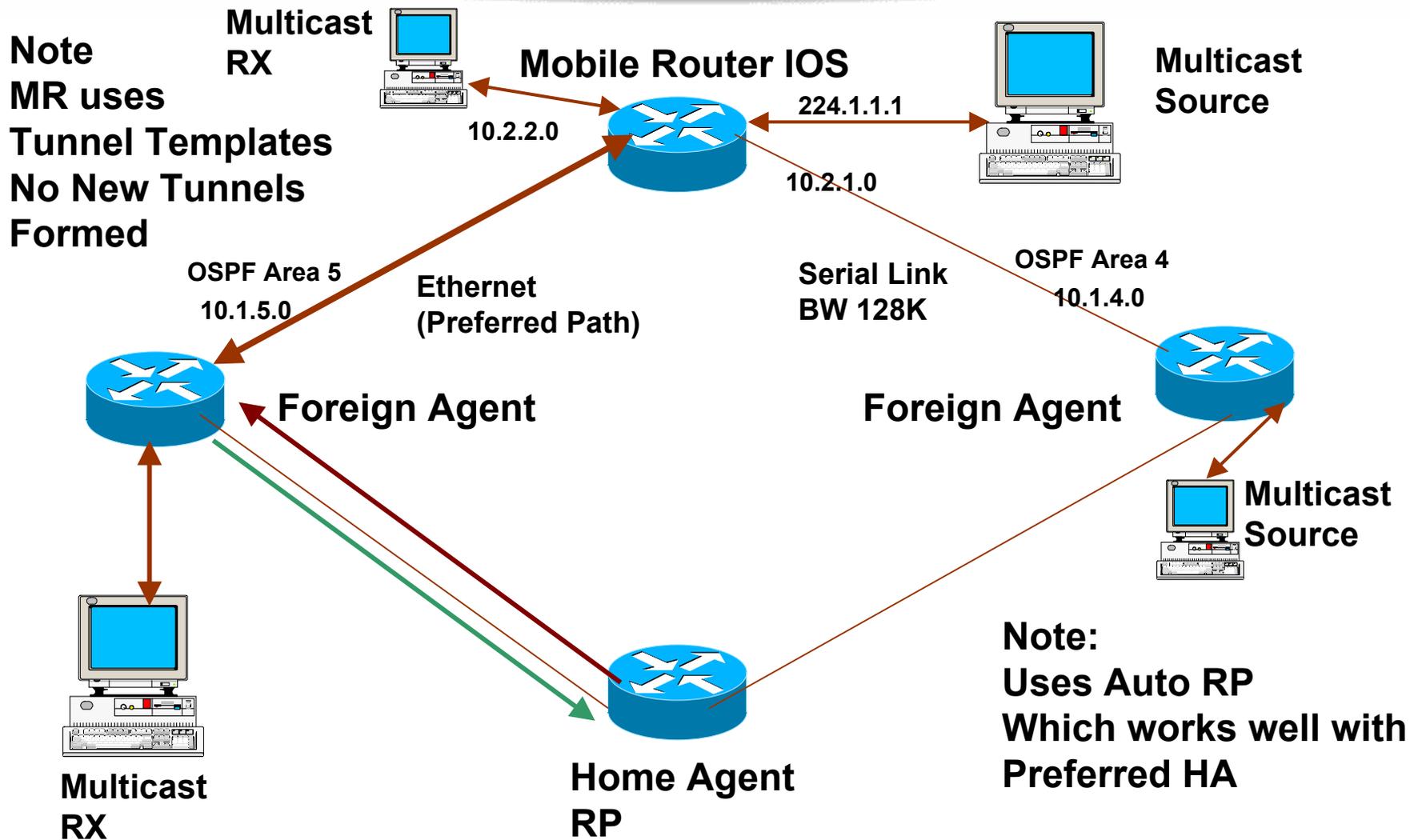
## Asymmetrical Path



# Mobile Net IOS Feature Preferred Home Agent

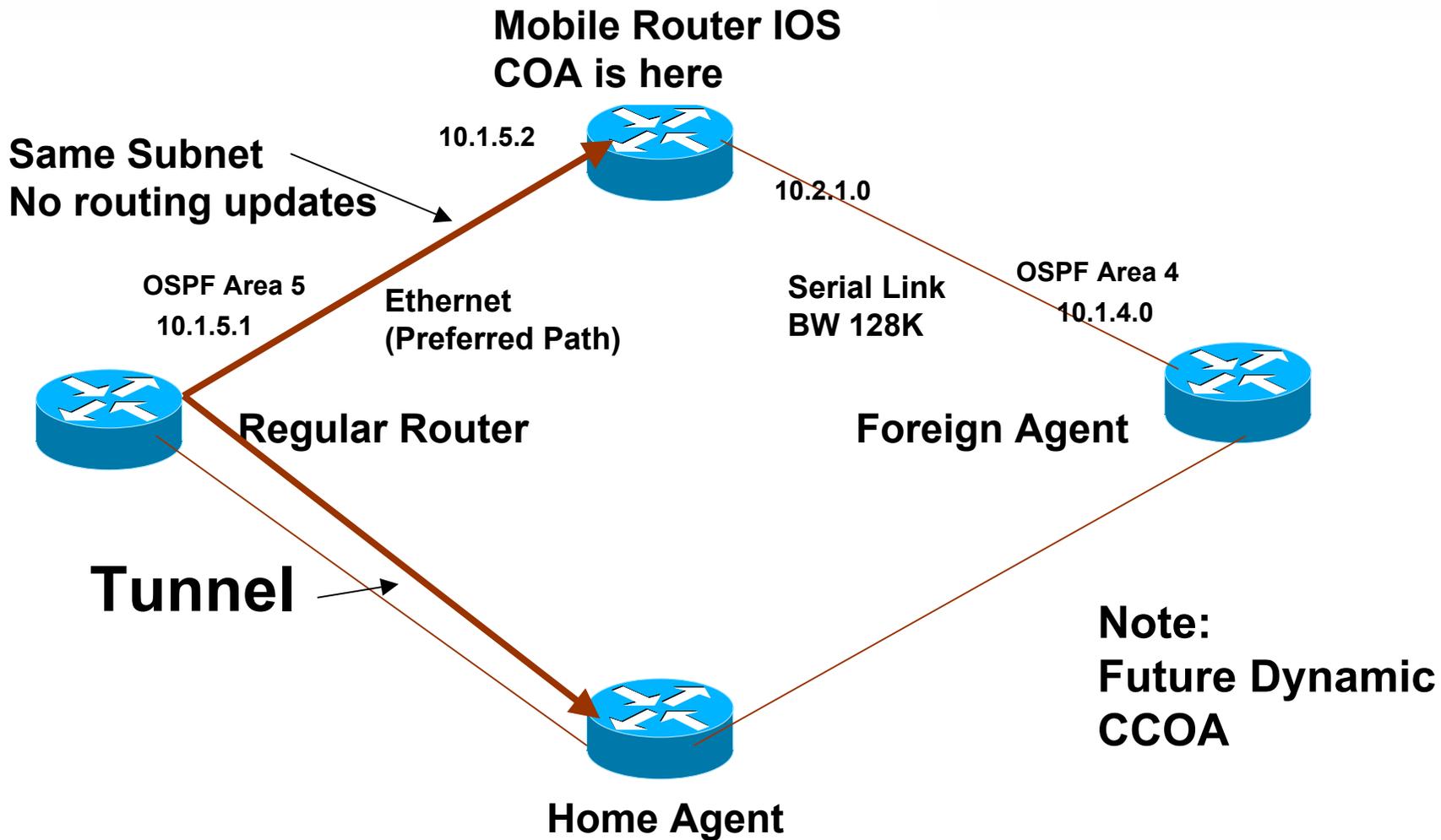


# Mobile Net IOS Feature Sparse Mode PIM

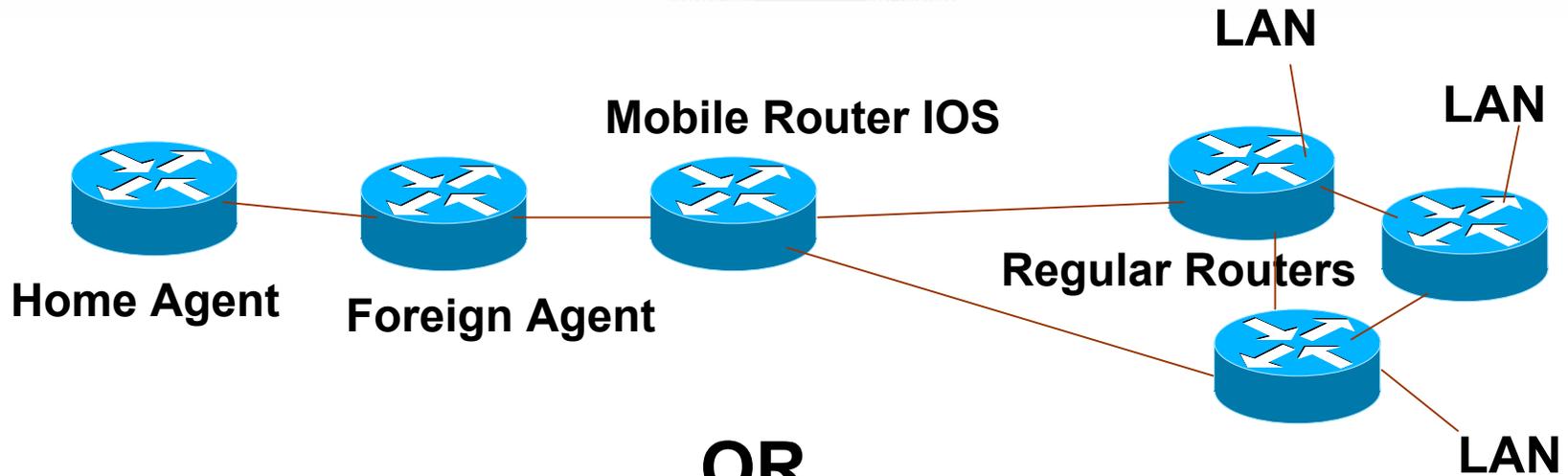


# Mobile Net IOS Feature

## Static Co Located Care of Address

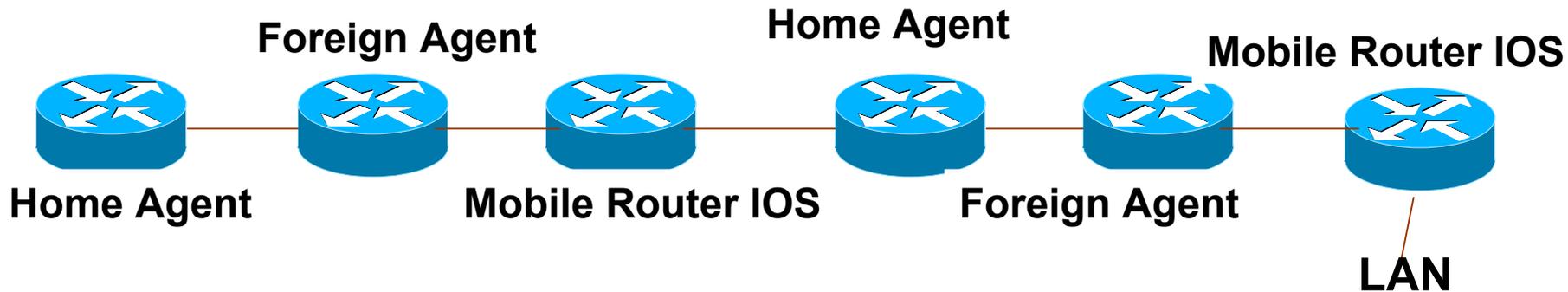


# Mobile Net IOS Feature Networks Behind Mobile Router

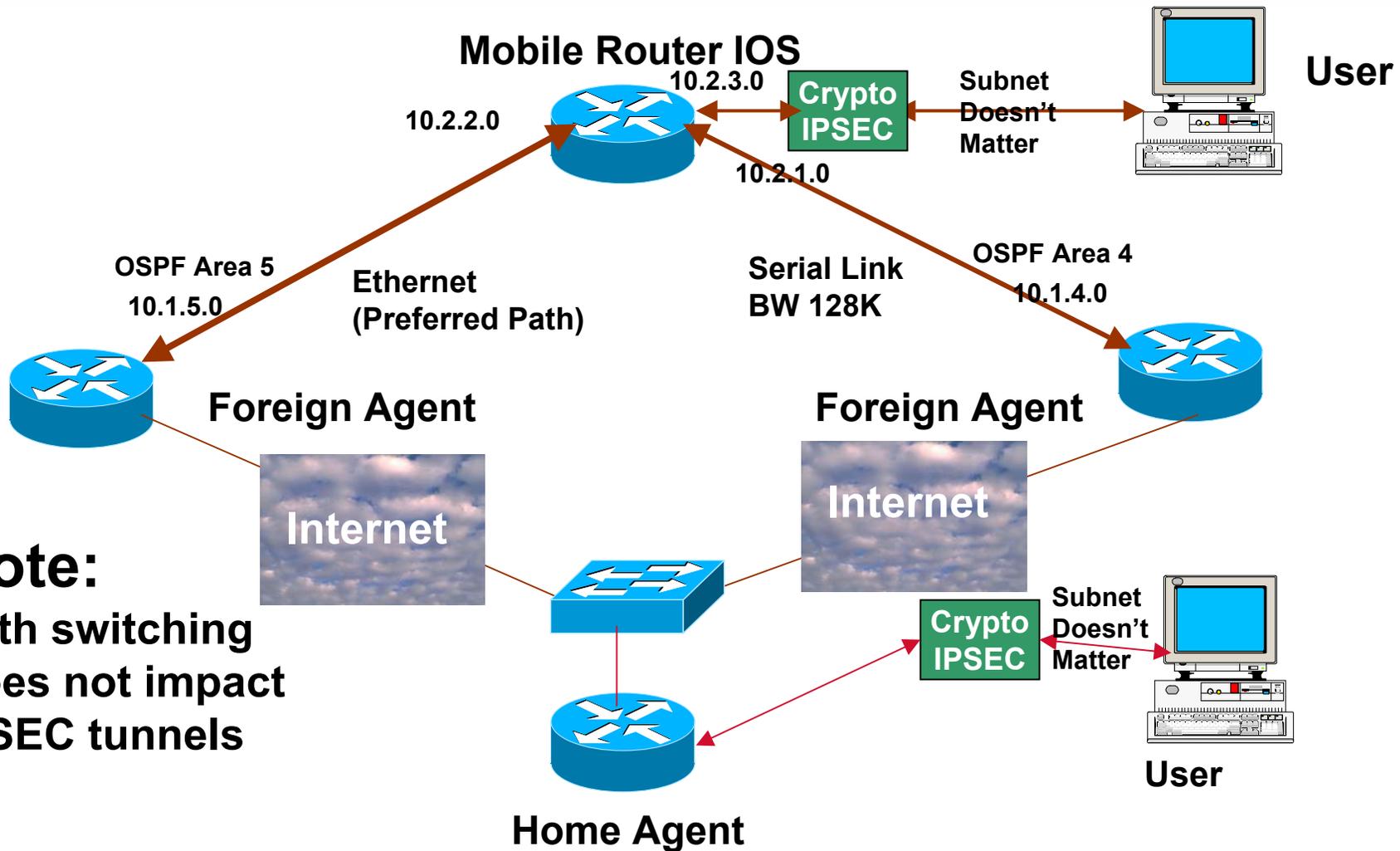


**OR**

## Cascaded Mobile Nets

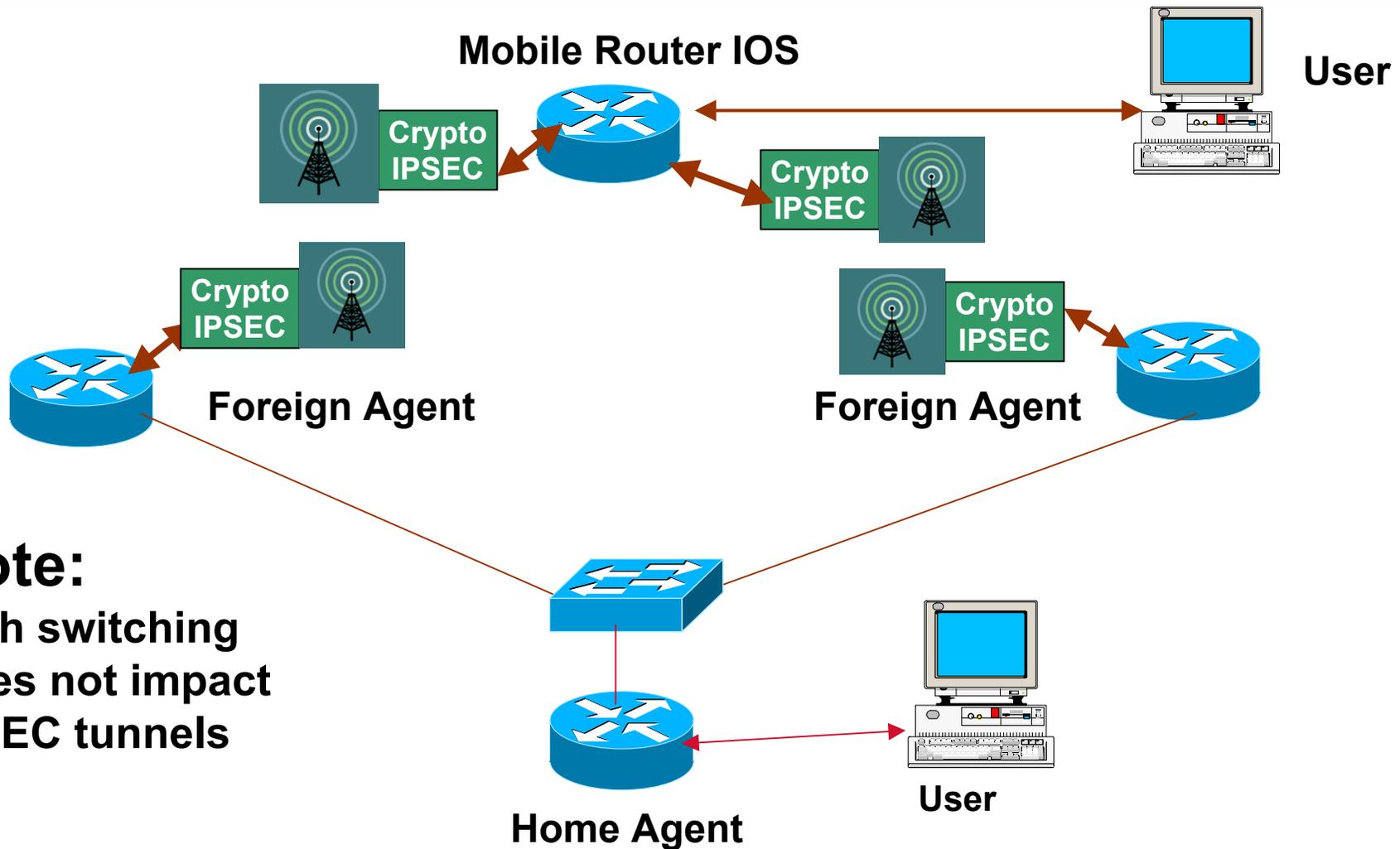


# Mobile Net IOS Feature Crypto Device Behind MR



**Note:**  
Path switching  
Does not impact  
IPSEC tunnels

# Mobile Net IOS Feature Crypto Device in Front of MR

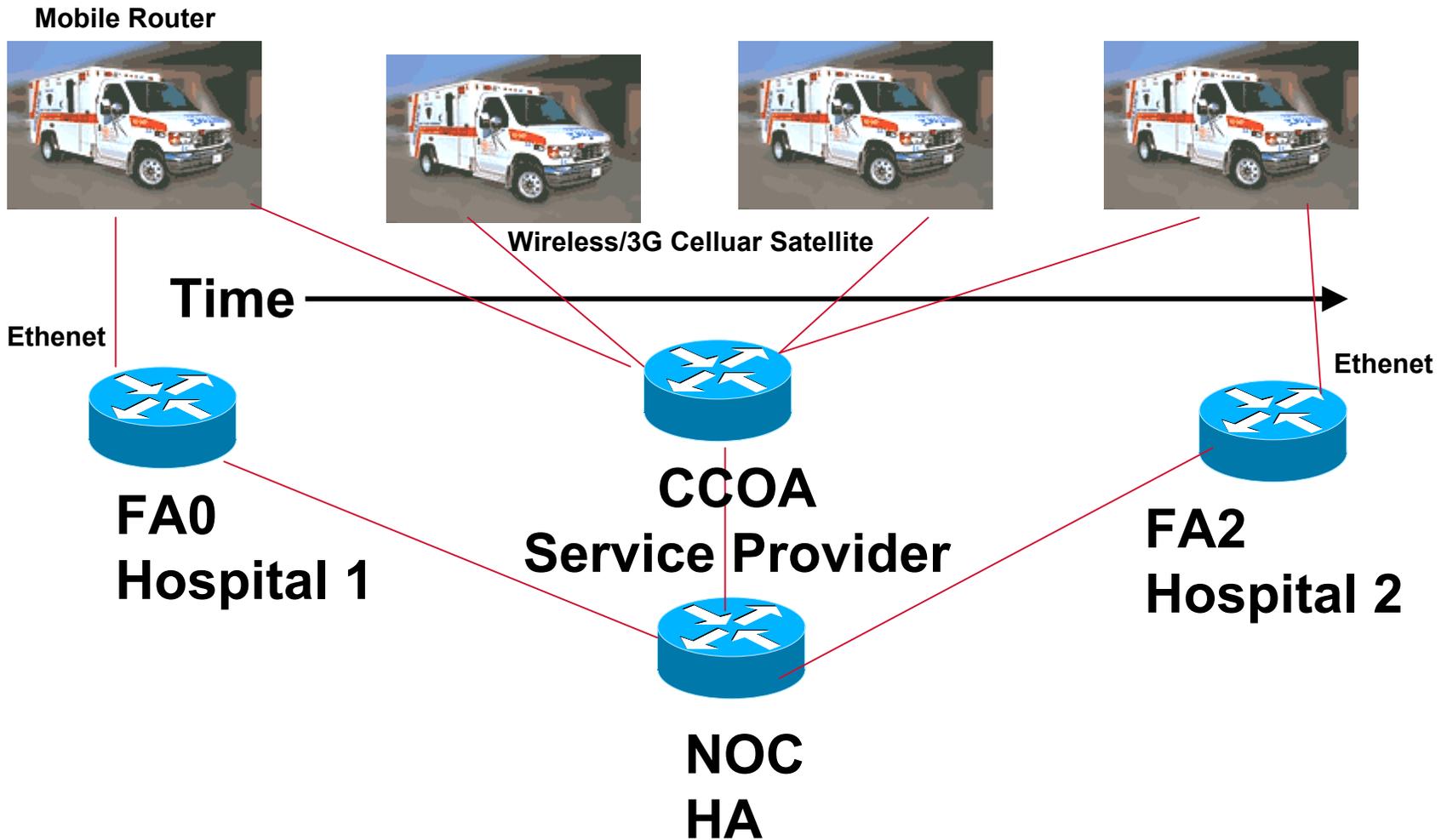


**Note:**  
Path switching  
Does not impact  
IPSEC tunnels

# Mobile Net Supported Platforms

- **CISCO 2600**
- **CISCO 3251**
- **CISCO 3600**
- **CISCO 3700**
- **CISCO 7200**
- **CISCO 7500**

# Mobile Network in Time



# Mobile Network uses



**Foreign Agent**

**Carrier Battle Group  
Home Agent Primary**

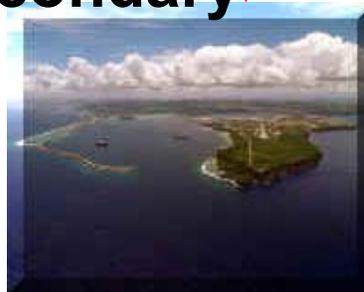


**CCOA**



**Mobile Router**

**Home Network  
Secondary**



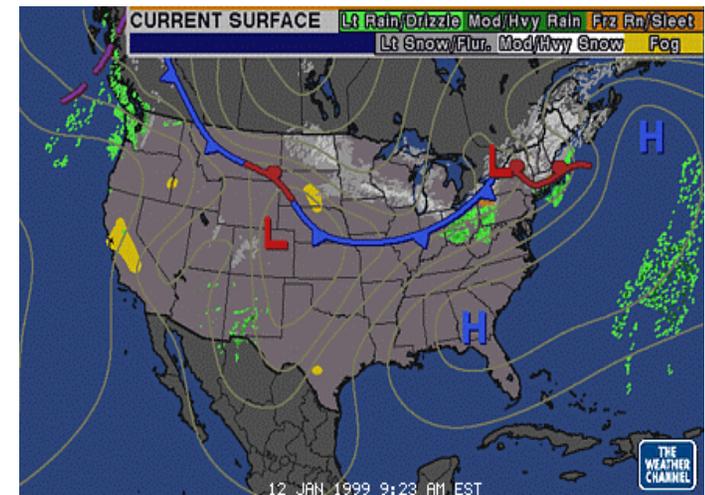
**Foreign Agent**

# Mobile Netowrk uses



## Mobile Router

## Graphical Weather



# Mobile Network uses



**Mobile Router**



**Mobile Router**

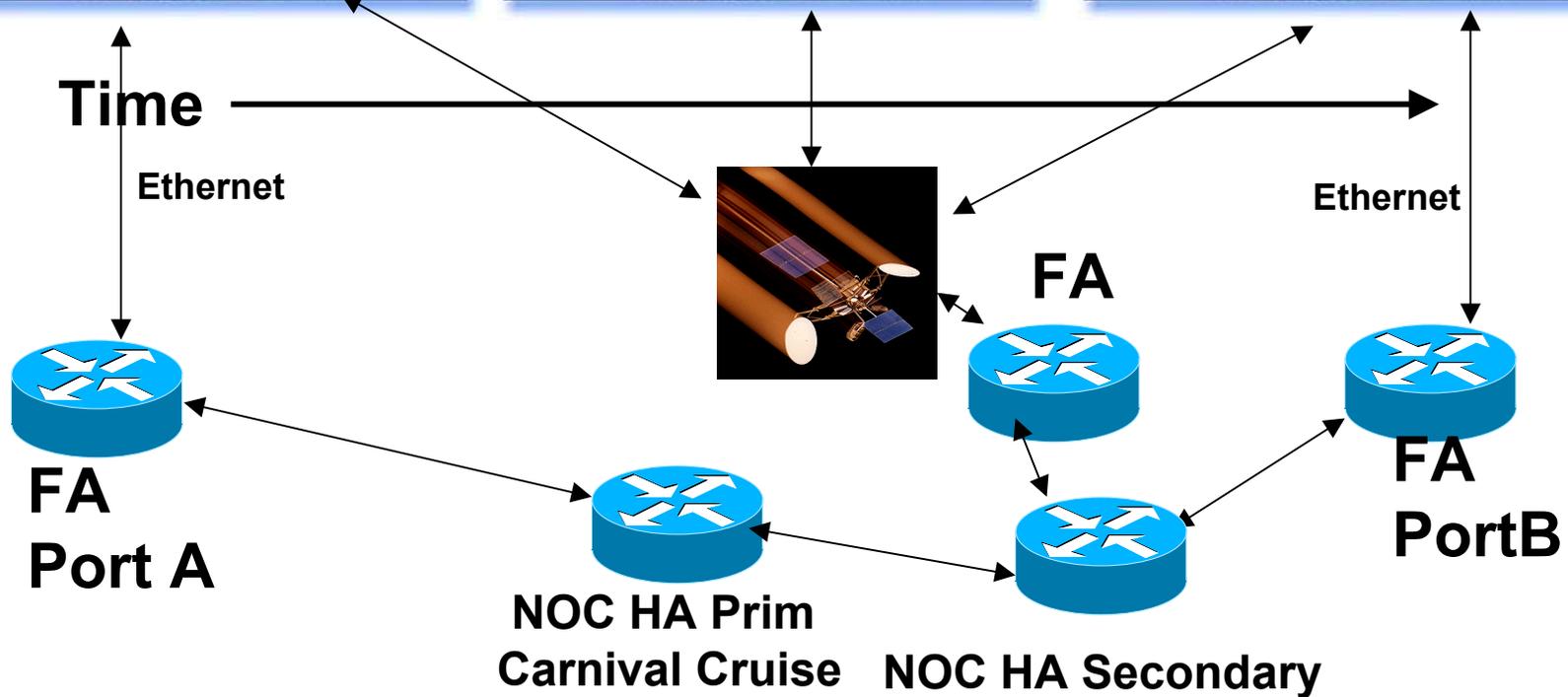


**Home Network  
with FA Routers**



**Mobile Router**

# Mobile Network uses



Carnival Cruise NOC HA Secondary  
www.cisco.com Carnival Cruise

# Summary

- **Mobile Network allows for *Networks in Motion***
- **Mobile Network is IOS software**
- **MR (Mobile Router), FA (Foreign Agent), HA (Home Agent)**
- **Mobile Net is set and forget**
- **Preferred path can be set by bandwidth or priority**
- **Supports many CISCO Routers**
- **Supports Multicasting, CCOA, Preferred HA and other IOS features**
- **Mobile Network enables internet connections from many types of mobile platforms.**

# CISCO SYSTEMS



EMPOWERING THE  
INTERNET GENERATION<sup>SM</sup>