Transition to IPv6 (National Activities)

- Sympathy with universities and getting proposal of universities
- Investigating and analyzing the organization's requirements
- Implementing IPv6 in laboratory, Live Network (LAN, WAN, Native IPv6, Services and …)
- Analyzing The ISP's Networks
- Transition to IPv6 Protocol Project
- Providing Strategy road map

Transition to IPv6 (Project overview)

Transition to IPv6 Protocol Project

- As an R&D project funded by ITO (4 phases, Studying, Producing Solutions, running and Implementing)
- Total budget = 200.000 US$
- Period of the project about 2 years (Feb. 2010 to Oct. 2012)
- Supported by ITO
- Carried out under the coordination AUST University

Transition to IPv6 (Project overview)

Transition to IPv6 Protocol Project

- Project Objectives:
- To draw a road map for the IPv6 transition process in IRAN
- To research security problems that could be faced during & after transition period
- To test applicability of advanced IPv6 services
- To gain & increase IPv6 know-how at national level
- To raise and increase awareness about IPv6

Transition to IPv6 (Project overview)

Transition to IPv6 Protocol Project

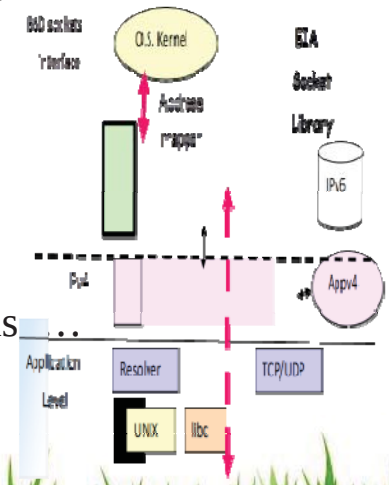
- This Project includes:
- Transition in application program level
- Transition in Service Level
- Transition in Backbone and Infrastructure Level
- Transition in Access Level
- Transition in SOHO and Enterprise Network Level
- Training
- Implementing Pilot

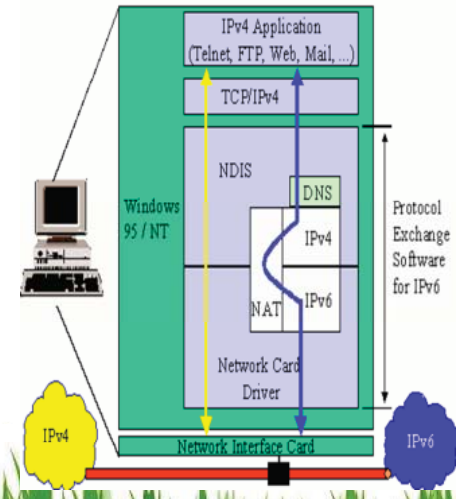
Transition to IPv6 (Project overview)

Transition in application program level

- How we can use the application in IPv6
- Kinds of applications
- Compatibility
- Operating systems:

Windows, Linux, Solaris …





Transition to IPv6 (Project overview)

Transition in Service level

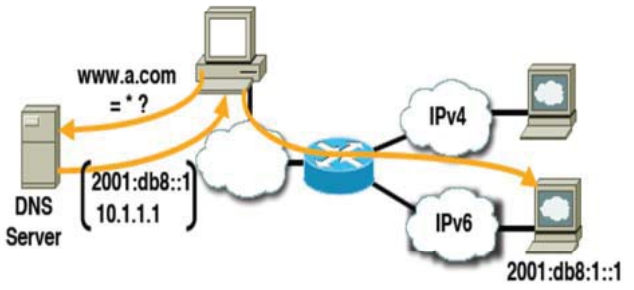
- Services:(Dual Stack):

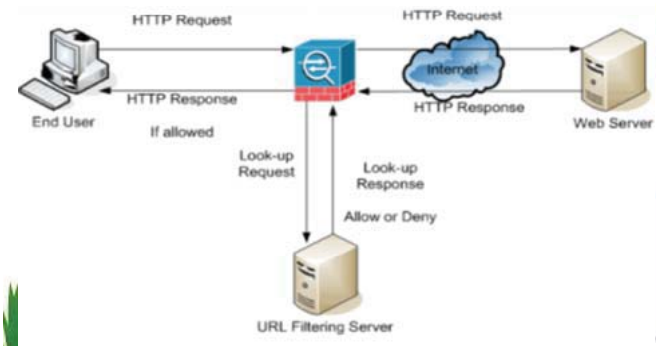
DNS,DHCP, E-mail, Web Telnet,

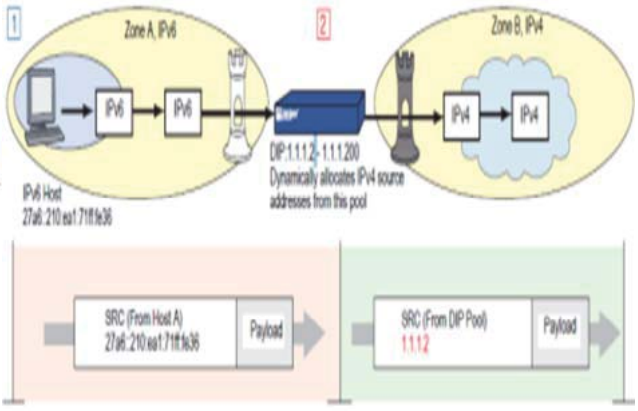
FTP, Multimedia Streaming

Security in general, Filtering,

video on-demand and …



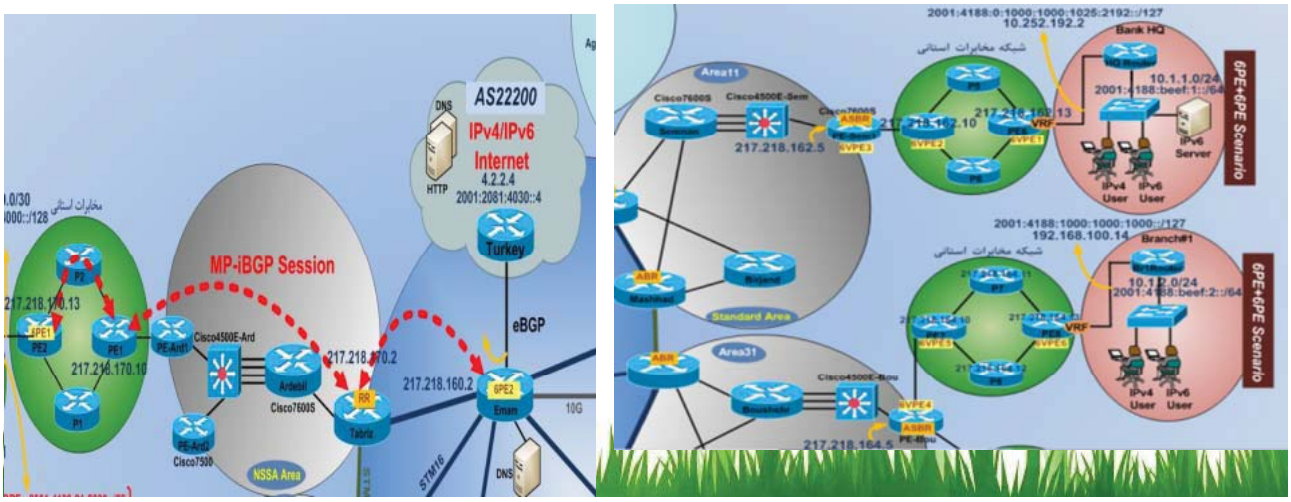




Transition to IPv6 (Project overview)

Transition in application Backbone level

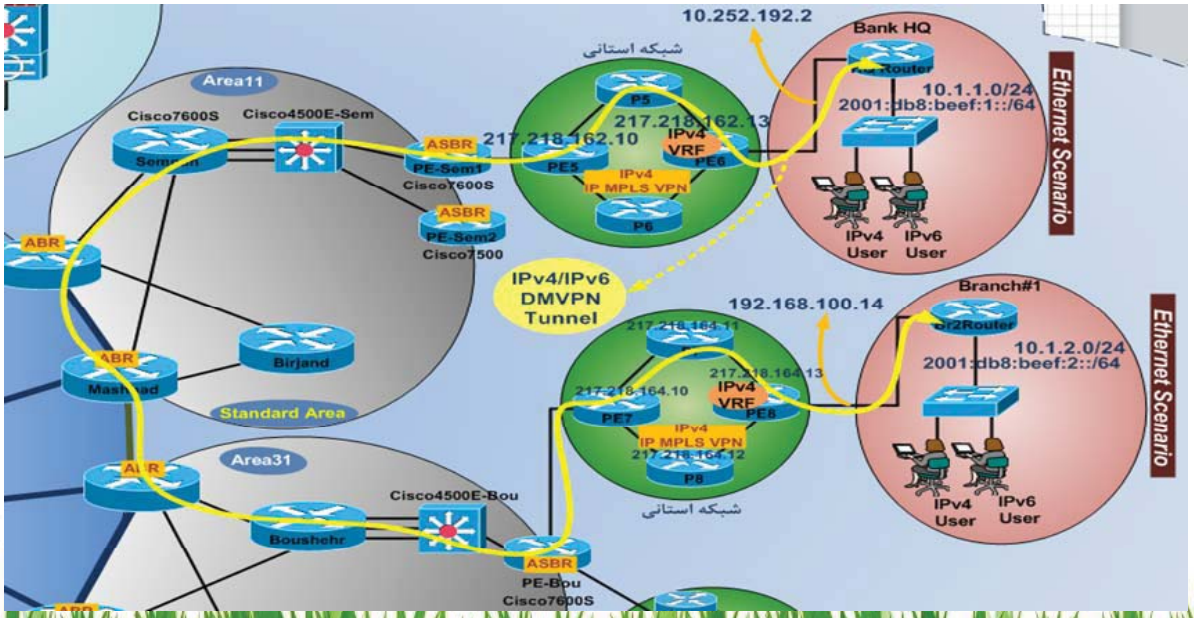
- Implementing IPv6 over MPLS Backbone(Different Scenarios)
- Routing protocols(BGP, OSPF, EIGRP, …)
- Transition mechanisms(Dual Stack, Tunneling, Translation,…)
- End to End total Scenario



Transition to IPv6 (Project overview)

Transition in application Backbone level

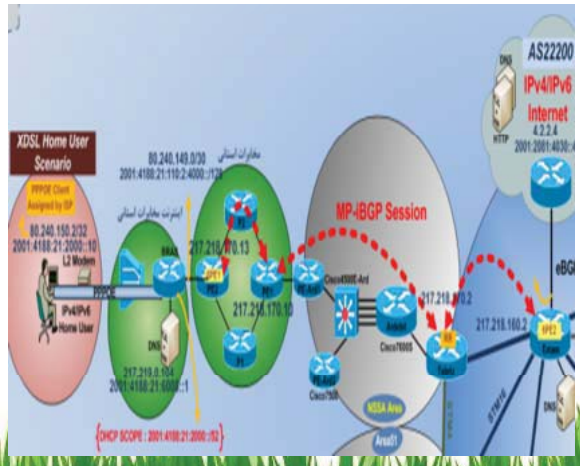
- An End to End total Scenario



Transition to IPv6 (Project overview)

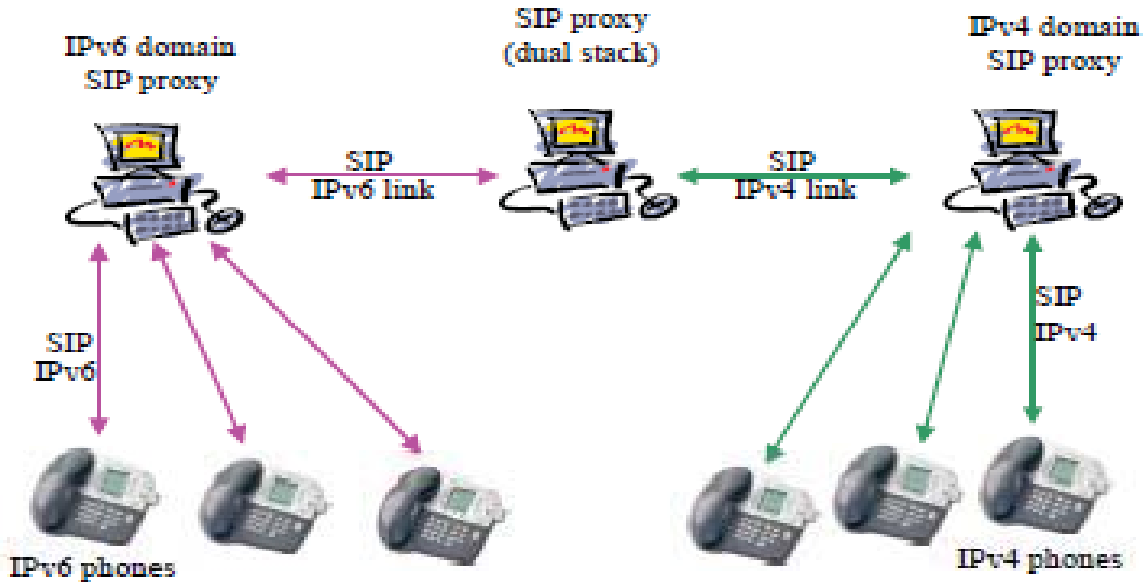
Transition in application Access level

- DSL Technology
- FTTX
- Wimax
- …



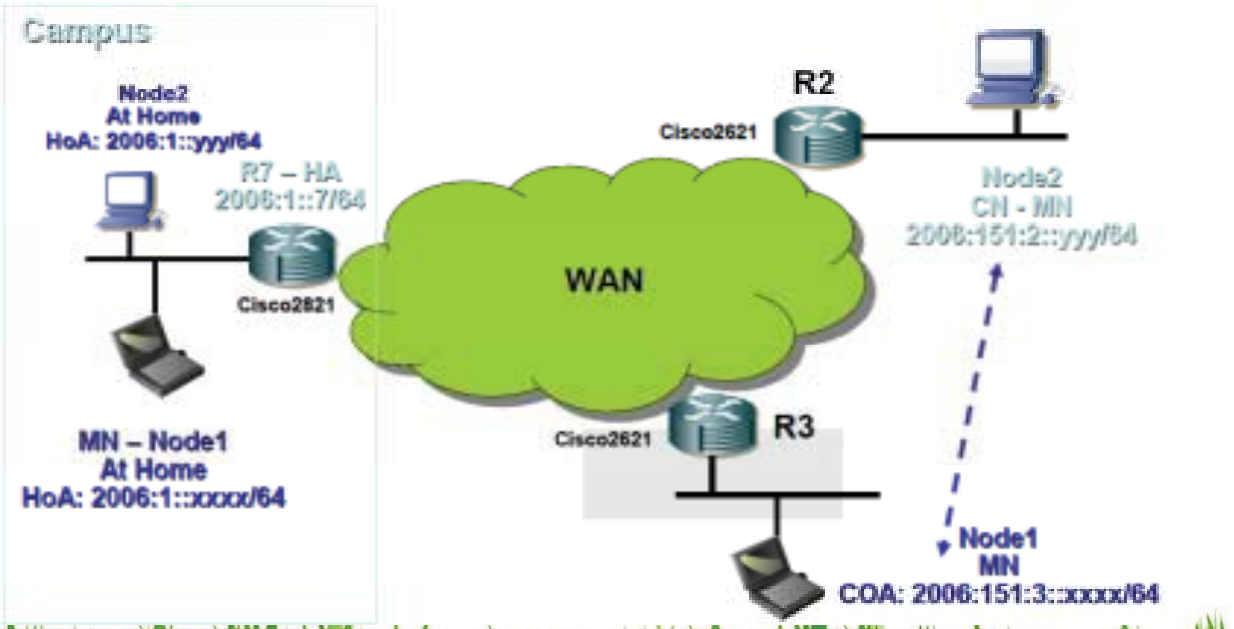
Some other related works

VoIP(H323v6 SIPv6)



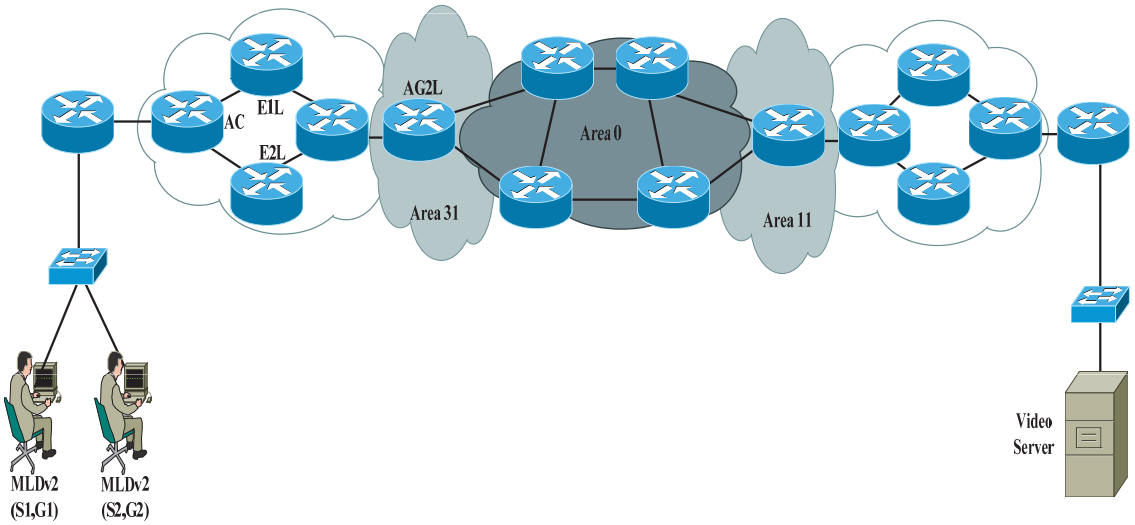
Some other related works

Mobility



Some other related works

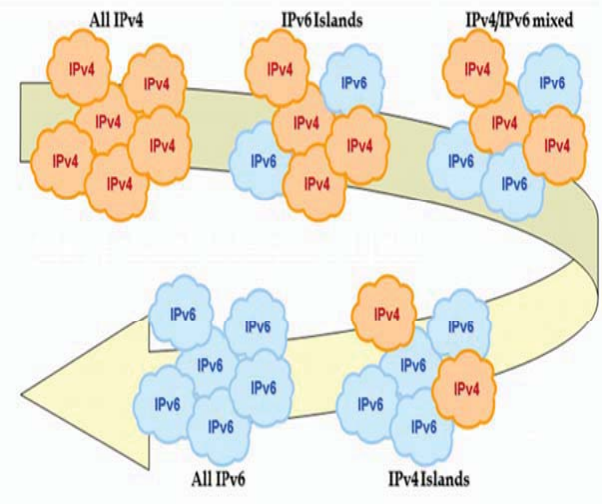
Multicast



Transition to IPv6 (Strategy road map)

We have broken Transition in 4 phases:

- Preparation(max 6 month)
- Initial Deployment(1 year)
- Co-existence (2 years)
-Dominance (4 years or more)



Transition to IPv6 (What is Next?)

- Implementing IPv6 in ISP's Network(As soon as possible).
- Tests will be completed and more services will be implemented.
- All services available for public access are to be IPv6-enabled.
- Training will be continued.(Seminars and classes, TV programs, publishing books , etc)
- More cooperating with international institutes.

Transition to IPv6 (Questions)

Thank you

Any question

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