

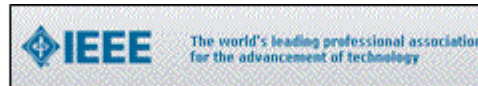
Realizing IPv6 Benefits

presented by

*Hsiaosu Hsiung
Senior Fellow
Noblis*

IPv6 Transition: Stretch Run to Success and Beyond

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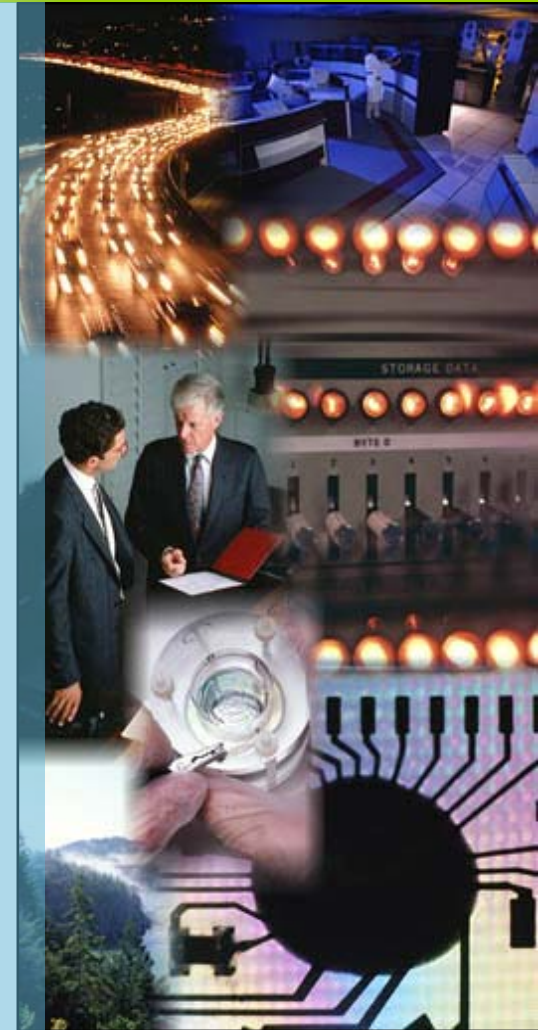
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IPv6 Technical Benefits Summary

- Auto-configure
 - Improve the network administration and management
- Large addressing space
 - Improve the scalability
 - Better support—always connected and always online
 - Facilitate the development of end-to-end (E2E) applications (e.g., Voice over Internet Protocol [VoIP])
 - Augment mobile services
 - Multi-homing
- Mandatory use of IPsec
- Embedded quality of service (QoS) feature
 - Better support the real services (e.g., IP video, VoIP)





Summary of NTIA and NIST IPv6 Inquiry

Objective: To identify—

- Appropriate role of government
- International interoperability
- Security in transition
- Costs and benefits

Findings—

- Economic growth and competitive impacts
 - The vast majority of network equipment will be sold with IPv6 capabilities in the next four or five years
 - Applications are the key driver
- Costs
 - Labor cost will constitute the majority of the costs
 - Incurred unevenly across the industries and user groups
- Benefits
 - Vast increase in available addresses
 - Remotely access and control
 - Network efficiency
- Security implications
 - May produce long-term security benefits
 - In the short term, IPv6 will likely increase security threats
 - Require careful testing and evaluation
- Deployment strategies/options
 - Monitor and analyze technological and market trends
 - Research on IPv6 infra-technologies and facilitates industry standardization processes



Realizing IPv6 Benefits

Approach —

- New equipment and services should be IPv6-capable
- Enterprise terminal and switching equipment should be upgraded through the technology refresh with minimum cost
- Design your IPv6 system architecture
 - Addressing and routing plan
 - Security plan
 - Transition methods
 - Management and operation plan
- Interoperability is less of an issue because almost all new equipment runs in both IPv4 and IPv6

Make sure you are ready when 'killer' applications are here



For the best of reasons

Hsiaosu Hsiung, Senior Fellow

hsiaosu.hsiung@noblis.org

Tel: 703.610.2934

Fax: 703.610.2399

Noblis

3150 Fairview Park Drive South

Falls Church, VA 22042-4519