

IPv6 – Adoption

A Transformation Journey

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Agenda

- IPv6 – A Transformation journey not Migration
- Beyond Readiness Assessment
- A few basic needs in our lives – Can IPv6 solve these
- IPv6 Applications

IPv6 Adoption – A transformation journey

IPv6 impacts every aspect of IT infrastructure

- Network
- Application
- Services

IPv6 Adoption a one unique opportunity to – Assess, Understand and Optimise IT Architecture and Infrastructure

- Opportunity to replace and introduce futuristic Architectures and Solutions
- Opportunity to introduce new services and delivery models
- Opportunity to optimize and introduce new Business models

IPv6 adoption – A phased journey

- Prioritization based on business needs
- Prioritization based on budgetary constraints
- Seamless phased approach – IPv4 to IPv6 transition

IPv6 Consultancy

CONSULTING SERVICES



THINK IPV6



PREPARE



PLAN



TEST



DEPLOY

| Service | Activities |
|-----------------------------|--|
| IPv6 Readiness Assessment | IPv6 Readiness Assessment Report – Business, Network, Applications and Services |
| IPv6 Business Strategy | Impact of IPv6 on Business and future IPv6 Business Strategy |
| IPv6 Technical Architecture | IPv6 Adoption Technical Architecture – Network, Data Center, Security, Applications, Services IPv6 Adoption Implementation Guides |
| IPv6 Test and validation | Pilot Projects Proof of concepts |
| IPv6 Program Management | End-to-end Project Management |

Beyond - IPv6 Readiness Assessment

Assess the IPv6 Readiness across

- Network
- Applications
- Services

But - Whatever technology you adopt, what does a customer want

- Same or enhanced internet experience
- Same or enhanced security capabilities

Does your IPv6 adoption planning consider these right from the start

- IT Resilience
- Security Intelligence

Beyond - IPv6 Readiness Assessment



IT Resilience Assessment

- Harden network and data center infrastructures to perform under extreme IPv4/IPv6 load and attack
- Gain IPv4/IPv6 performance insight to enable risk-free deployment of best-of-breed products
- Measuring the IPv4/IPv6 - performance and capacity of SaaS, e-commerce, or other large-scale applications
- Narrow gap between IPv4/IPv6 - IT testing, monitoring, and operations to deliver advance insight and protect highly dynamic converged and mobile networks, virtualized data centers, and applications

Security CyberRange Assessment

- Battle-test network devices for IPv4/IPv6 -using the most current live security attacks
- Create massive-scale IPv4/IPv6 user load along with security attacks to ensure network is performing optimally with business-critical communication
- Institute predictive and repeatable IPv4/IPv6 security processes to ensure systems remain fully resilient even in the face of internal configuration changes

Ensure that Seamless Services are still provided – In spite of IPv6 adoption

IPv6 Cloud



IPv6 Applications

IPv6 and Applications

- IPv6 is not just for internet communication, it is for all industries in general
- IPv6 helps connect the real world to the computing world – Internet of Things
 - Real world features** – Sense, Feel, Touch, Hear
 - IPv6 based Sensors** – Light sensor, Heat sensor, Voice enabled sensors, so forth
 - IPv6LoPAN** – Lightweight Energy efficient IPv6 protocol for sensors
- IPv6 capabilities which help build innovative applications

| Features | Details |
|----------------------------|--|
| Auto-Configuration | Devices on the same link auto-configure their IP addresses and communicate |
| Security | IPSec security is built into the protocol |
| Jumbograms/Flow-Label | Better QoS/Real time communication |
| Peer-to-peer communication | Direct control of devices, remote support for the devices |
| True Mobility | Seamless roaming across zones |
| Increased address space | IPv6 address for each sensor |

A few basic needs of our live

Basic needs

- Electricity
- Water
- Food

Can IPv6 help here

- Electricity – IPv6 based Smart Grids
- Water – IPv6 based Smart Grids for water distribution system diagnostics
- Food – IPv6 based irrigation system

A few more areas where IPv6 can help

- IPv6 based Energy Efficient Data Center
- IPv6 based Smart Building
- IPv6 Rural Emergency Healthcare
- IPv6 based Traffic Management System

IPv6 – Enabling Internet of Things
Think IPv6 – Think new Applications

Thank You