



Introducing Cisco ASR 9000: Carrier Ethernet Foundation for the Zettabyte Era



Embargo until November 11, 2008

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What's New? Introducing Cisco ASR 9000

Engineered for What Lies Ahead



6-Slot

10-Slot

**Unsurpassed
Scale**

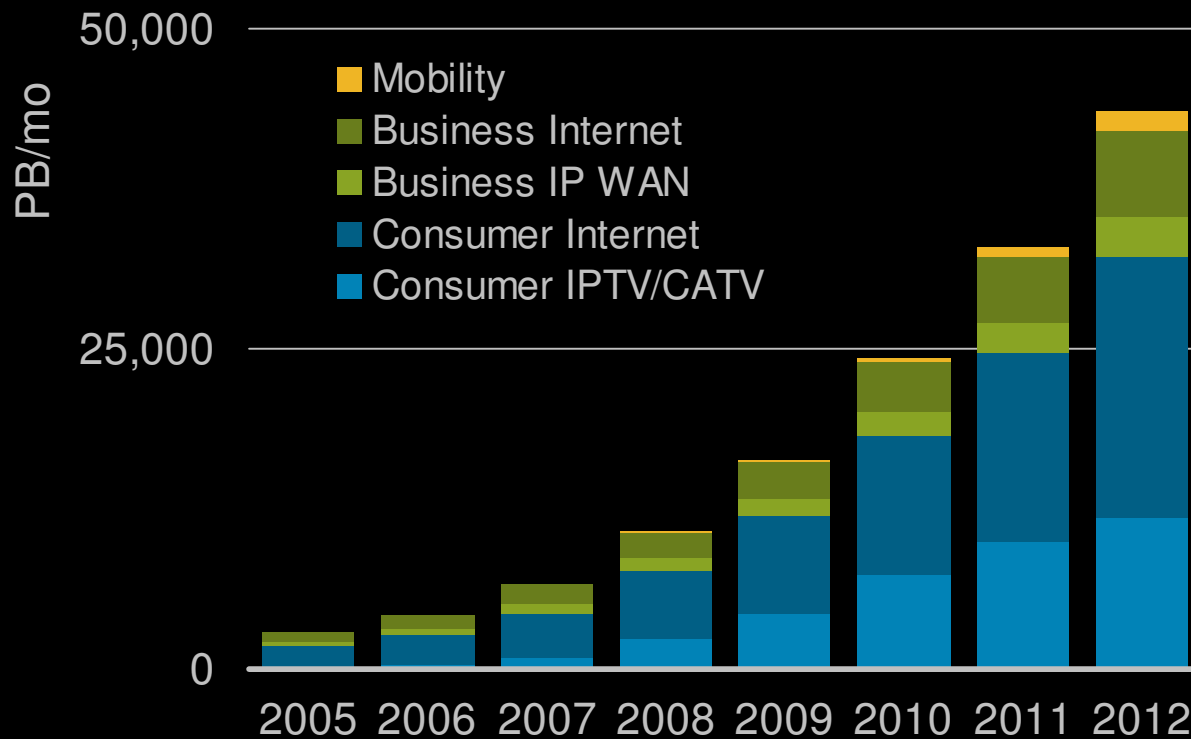
**Non-Stop
Video
Experience**

**Reduced
Carbon
Footprint**

Powered by IOS-XR and QuantumFlow

Global IP Traffic Growth

**IP Traffic will Increase 6X from 2007 to 2012
In 2012, Half a Zettabyte will Cross the Global Network**

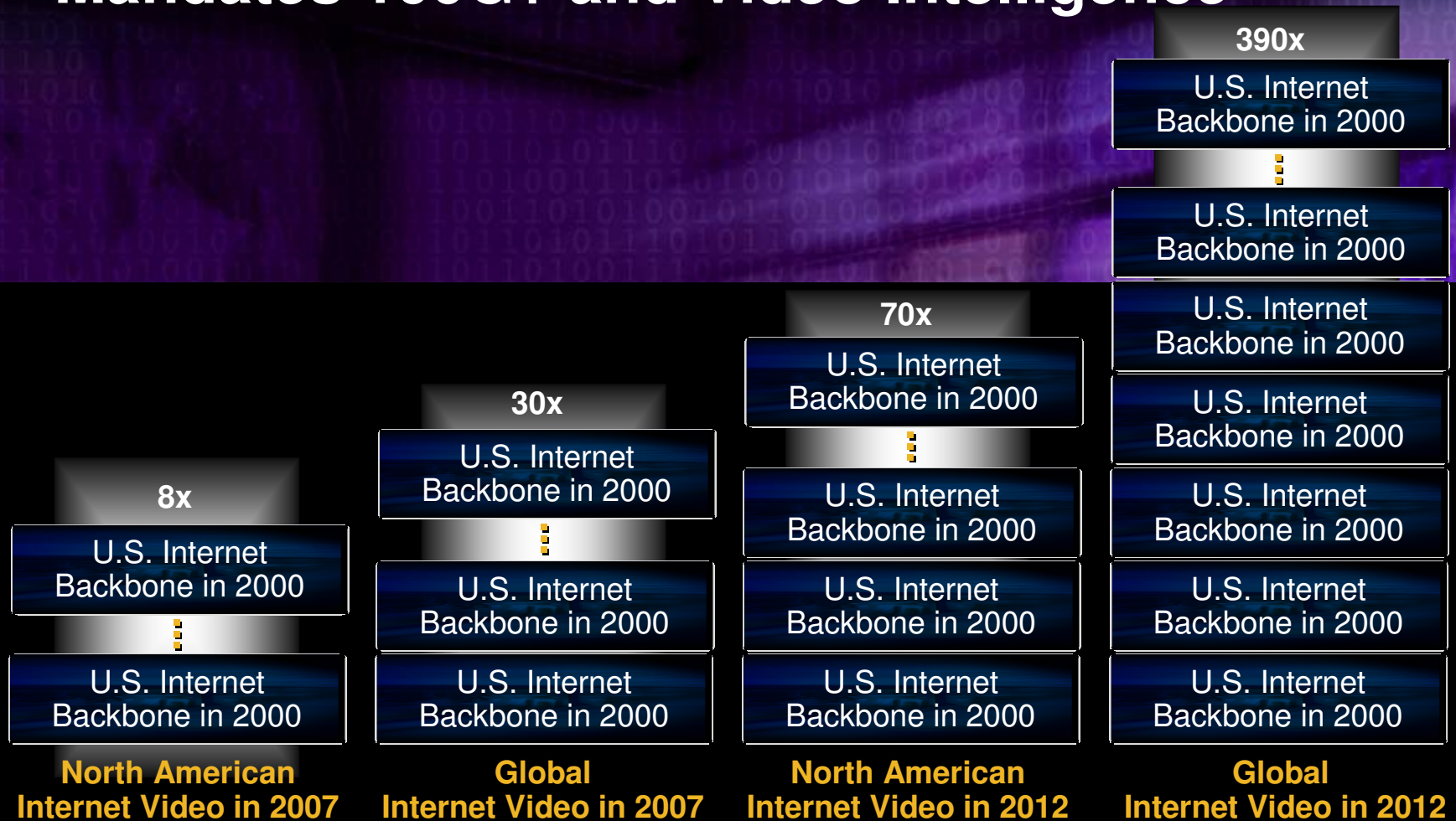


**Mobile Data to
Grow at 125%
CAGR 2007–2012**

**With Video,
Consumer IP
Quadruples
by 2012**

Source: Cisco Visual Networking Index—Forecast, 2007–2012

The Scale of Video Growth Mandates 100G+ and Video Intelligence



By 2012 Video will Be Nearly 50% of All Traffic on the Net

Source: Cisco Visual Networking Index—Forecast, 2007–2012

IP NGN Carrier Ethernet Design

Key Attributes



Scalable

To manage massive video growth



Resilient

To ensure non-stop video experience



Intelligent

To support current and future emerging services



Converged

For CapEx and OpEx Efficiencies

Deployed in Service Provider Networks Worldwide

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Unsurpassed Scale

Up to 400Gbp/Slot
Up to 6.4Tbps Capacity
IPoDWDM

Non-Stop Video Experience

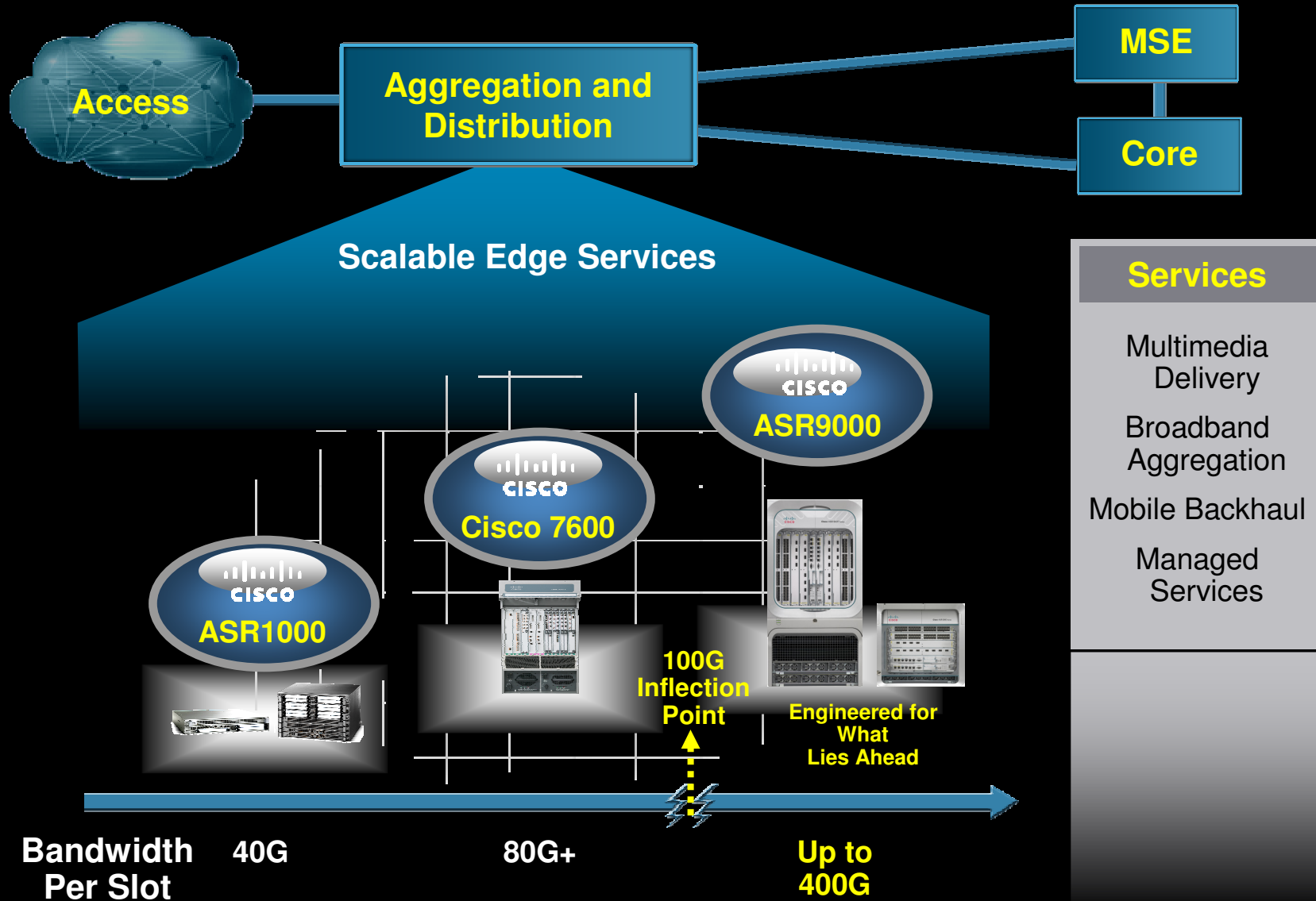
Content Streaming
Visual Quality Experience
Error Correction
IP RAN

Reduced Carbon Footprint

Power and
Airflow
Maximization

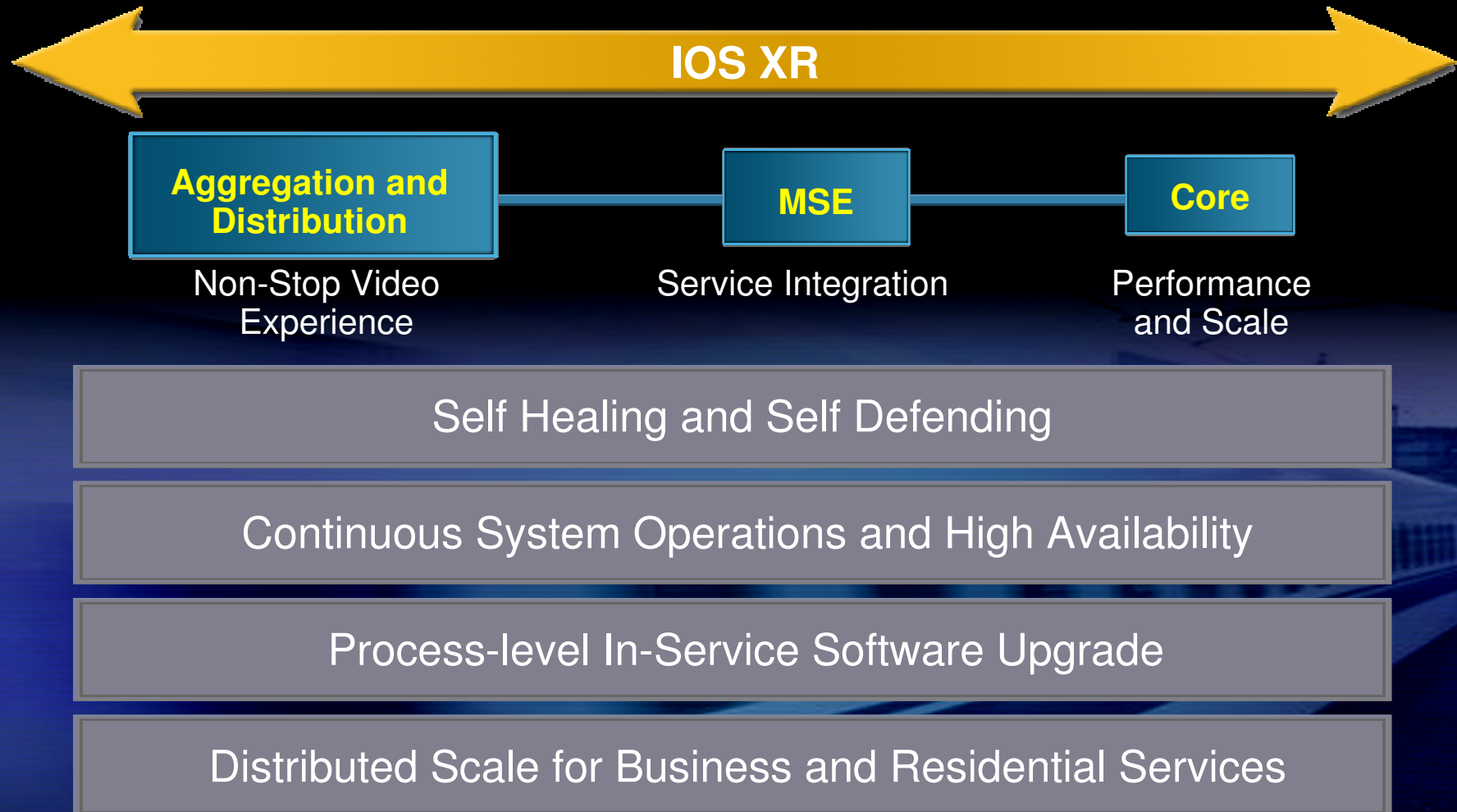
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Extending the Market's Leading Edge Portfolio



IOS XR—Continuous Operation Worldwide

Bringing SP Reliability and Performance to the Edge



IOS-XR Deployed at over 200 Customers Worldwide

Unsurpassed Scale for the Zettabyte Era

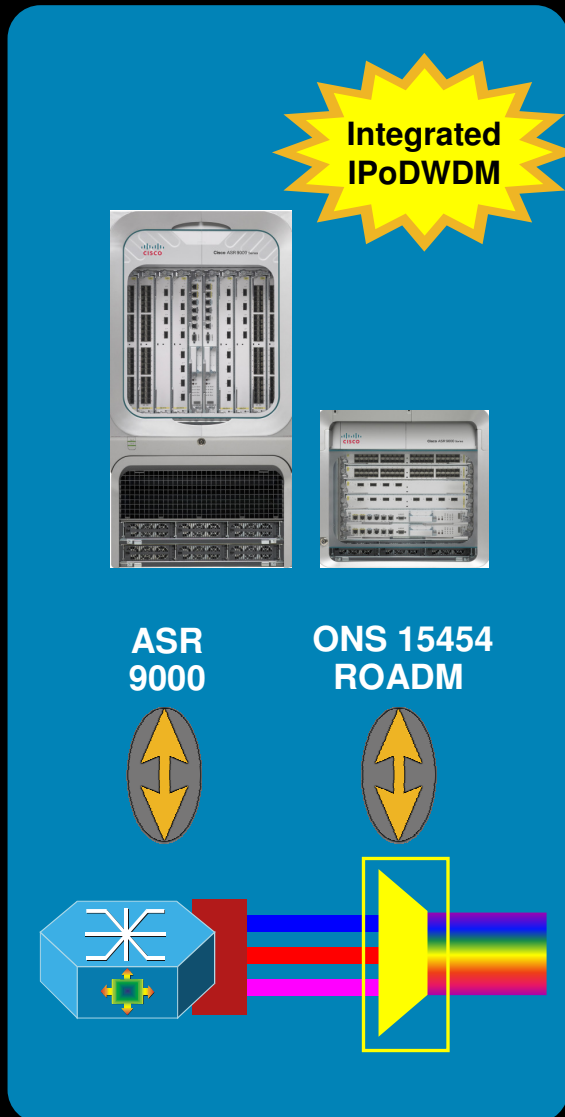
- Up to 6.4T Capacity
- Up to 400G per slot capacity
- Integrated IPoDWDM
- Advanced Subscriber Management
- Engineered for QuantumFlow-enabled silicon services



ASR 9000

**Changing the Profit Equation with
New Levels of Scale and Efficiency**

Extending IPoDWDM into Aggregation



From the Core to the Edge

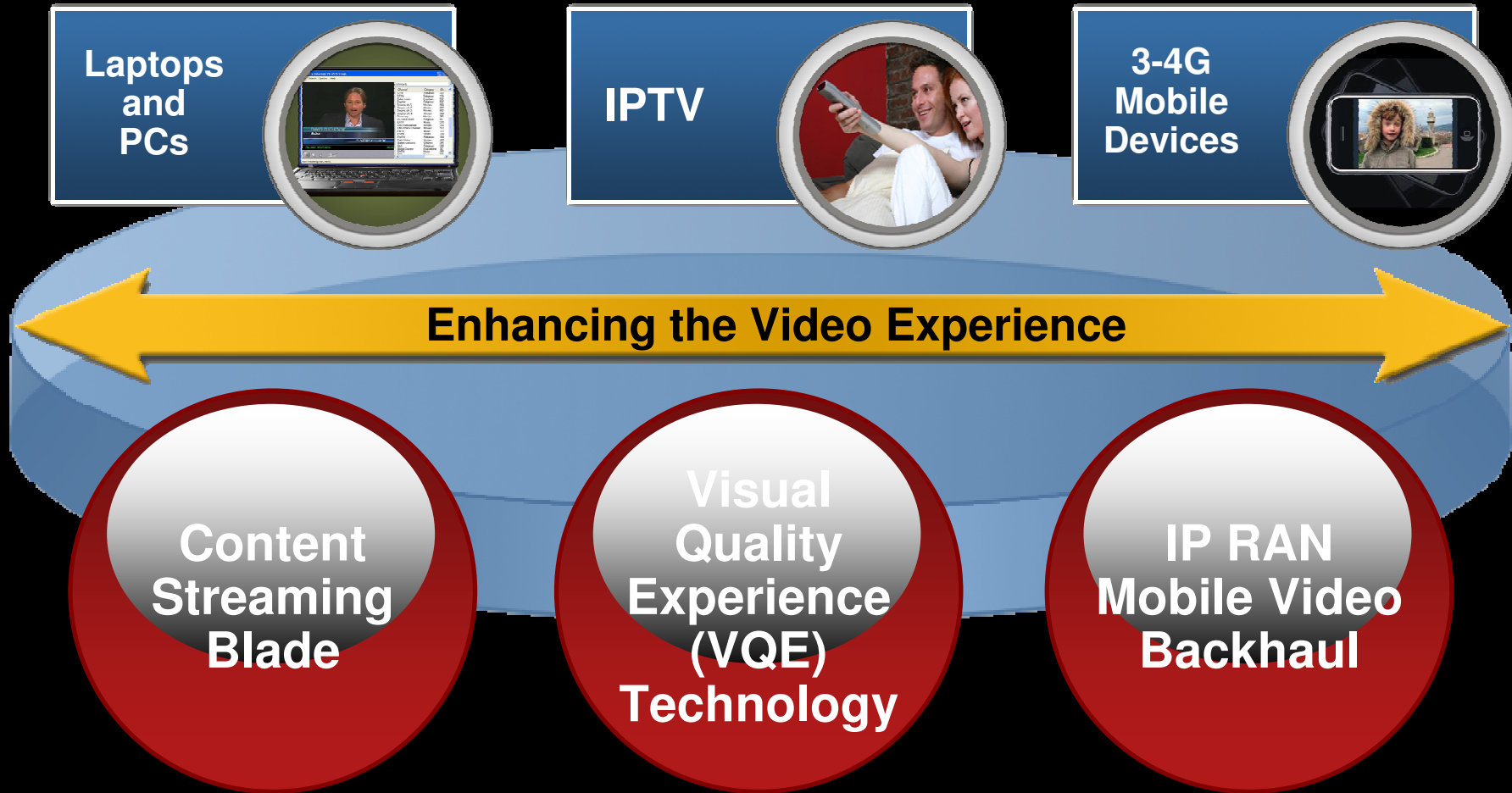
IPoDWDM with Ethernet Services:

- Transponder integrated into ASR 9000
- Reduces network complexity and costs
- Environmentally friendly

Complements CRS-1 and XR12K/12K

Non-Stop Video Experience to Any Screen

Foundation for Visual Networking



Blade-Based Content Delivery Solution

Optimizing Network Insertion Point

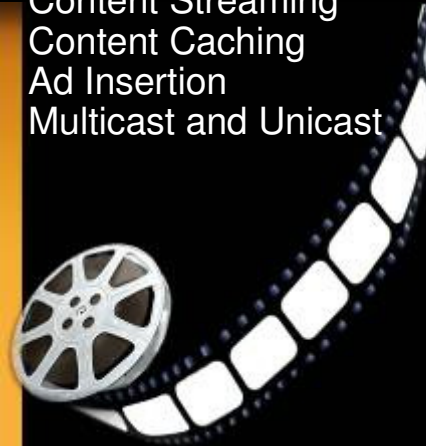
**Unlimited
Content Choice**

YouTube
VoD Libraries
Time-Shifted
Broadcast



**Consumer's
Pull-Down
Effect**

Content Streaming
Content Caching
Ad Insertion
Multicast and Unicast



**Advanced Video
Service Module**
Terabytes of Content Capacity

**Moving Content
Delivery to the Edge**



ASR 9000

Simplifying the Network

Enhancing the User Experience



Faster Response

Content cached closer to consumer



Ensured Experience

Integration of VQE - error repair at edge



Personalized Experience

Virtual personal channels
Personalized ads



Content Choices

VoD, Online, User generated content

Non-Stop Video Experience for the 3G/4G 400G — A New Metric for Efficient Backhaul



4G Traffic Drivers: WiMax and LTE

Six Times the Capacity of Competitive Routers

Reduced Carbon Footprint

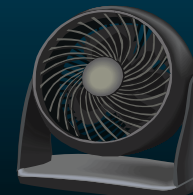
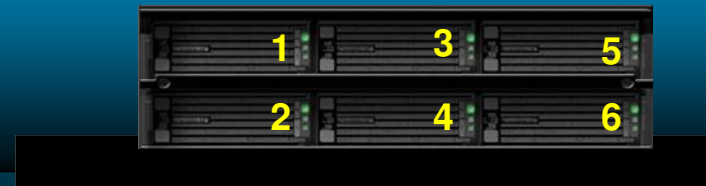
Engineered for Whatever May Lie Ahead

- Power Consumption only “as needed”
- Chassis Cools and Backplane Powers
 - Up to 400G per slot
- More Capacity in Less Space
 - Side-to-back Airflow

Modular Power Blocks



Pay for What You Need



Environmental Impact and Savings

A single Cisco ASR 9000 with 6.4Tbps capacity deployed against a comparable competitive solution offers the following annual environmental savings:



* Replaced by compact fluorescent bulbs (CFB)
Note: Calculations based on US metrics for CO₂ emissions

Softbank Testimonial



SoftBank

In Network Trials at Tier 1 Service Providers in US and Europe

Customer Testimonial from Softbank Corporation

ASR 9000 – In a Class by Itself



- Up to 6.4T of capacity
- Pay-for-What You Need Power Minimization
- Router-based Video Delivery
- New Efficiencies for Mobile Backhaul
- Silicon-based Service Delivery

Engineered for What Lies Ahead

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