Wireless Ultra-Broadband in a Zettabyte World

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Cisco Visual Networking Index (VNI)
Sharing Global IP Traffic Growth Projections & Analysis

The Cisco VNI Global Forecast methodology is built on independent analyst projections; fixed/mobile usage reports and verified with real network data.

Global Forecast Data
Global Usage Trends

Global, regional, and country-level data modeling of consumer/business usage trends.
Entering the Zettabyte Era
Global IP traffic will increase 4-fold from 2010 to 2015


Global Mobile Data Traffic Growth / Top-Line
Global mobile data traffic will increase 26X from 2010 to 2015

**Global Mobile Data Traffic Growth / Applications**

Video to reach more than 50 percent of mobile data traffic by 2011

- Mobile VoIP: 1.5%
- Mobile Gaming: 6.1%
- Mobile M2M: 4.7%
- Mobile P2P: 21.0%
- Mobile Web/Data: 66.4%
- Mobile Video: 92% CAGR 2010–2015

VoIP traffic forecast to be 0.4% of all mobile data traffic in 2015


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**Global IP Traffic by Local Access Technology**

By 2015, fixed/Wi-fi traffic equals/exceeds fixed/wired traffic

- Mobile Data (92% CAGR): 7.77%
- Fixed/Wired (24% CAGR): 46.1%
- Fixed/Wi-fi (39% CAGR): 46.2%

NA Mobile Data Traffic Growth / Top-Line
NA mobile data traffic will increase 20X from 2010 to 2015


WE Mobile Data Traffic Growth / Top-Line
WE mobile data traffic will increase 25X from 2010 to 2015

**APAC Mobile Data Traffic Growth / Top-Line**

APAC mobile data traffic will increase 33X from 2010 to 2015

- **102% CAGR 2010–2015**
- **1.8 EB per mo**

**Source:** Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2010–2015

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**LATAM Mobile Data Traffic Growth / Top-Line**

LATAM mobile data traffic will increase 42X from 2010 to 2015

- **111% CAGR 2010–2015**
- **488 PB per mo**

**Source:** Cisco Visual Networking Index (VNI) Global Mobile Data Traffic Forecast, 2010–2015
CEE Mobile Data Traffic Growth / Top-Line
CEE mobile data traffic will increase 34X from 2010 to 2015


MEA Mobile Data Traffic Growth / Top-Line
MEA mobile data traffic will increase 63X from 2010 to 2015

NA IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic


WE IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic

APAC IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic

LATAM IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic

CEE IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic


MEA IP Traffic by Local Access Technology
By 2015, fixed/wi-fi traffic surpasses fixed/wired traffic

Summary and Implications

- Broadband demand is exploding driven by video
- Growth in demand in emerging economies will exceed developed countries
- Mobile as well as fixed
- Implications for network investment and deployment
- Need for radio spectrum for wireless broadband
  - Mobile broadband and fixed WiFi
  - Digital TV transition—digital dividend
- Implications for net architecture—fiber for backhaul

Public Cisco VNI Web Site
http://www.cisco.com/go/vni

Thank you.