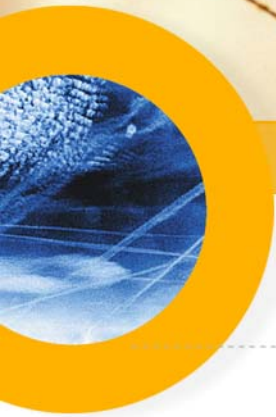


Global Mobile Broadband Traffic Report, Q2/2009

Allot Communications
July 2009



Executive Overview

The Allot Global Mobile Broadband Traffic Report is an ongoing initiative to track global IP application and bandwidth usage and growth in mobile broadband networks. The anonymous data in this report was collected over the second quarter of 2009, from leading mobile operators worldwide with a combined user base of more than 150 million subscribers. This paper presents some of Allot's key findings.

Findings

Global mobile data bandwidth usage increased significantly over the second quarter of 2009, with a jump of approximately 30%. The APAC region had the highest individual growth rate with 36%; EMEA followed with 28%, the Americas with 25%.

HTTP browsing is the #1 application both globally and in each of the individual regions, although its growth rate is slower than that of streaming and HTTP downloads.

HTTP streaming (including sites such as YouTube, Hulu, MySpace, MSN Spaces etc.) **is the fastest growing application** with a rise of 58%.

HTTP downloads (including one-click hosting sites such as RapidShare and Megaupload) **are fast gaining popularity with a growth rate more than double that of P2P file sharing.** HTTP downloads currently generate 19% of mobile broadband traffic worldwide and in EMEA, HTTP downloads are already more popular than P2P file-sharing.

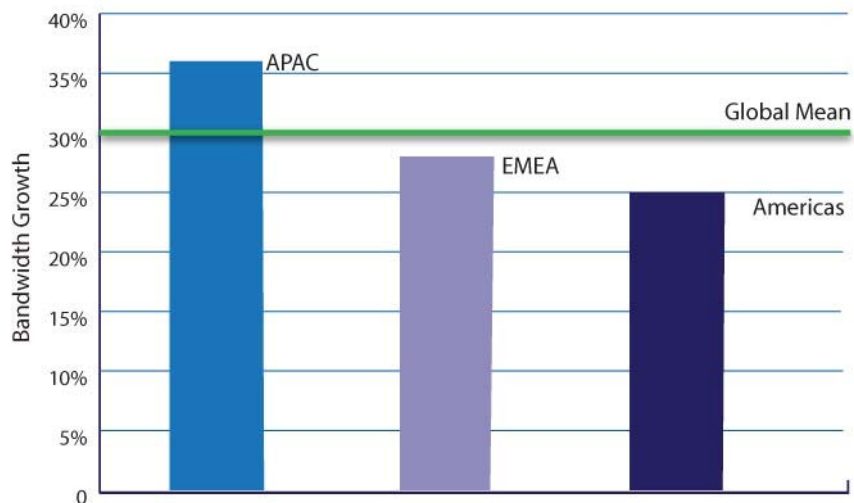
The single largest factor leading to cell congestion is P2P which accounts for 42% of bandwidth utilization in the top 5% of cells. This is double P2P's bandwidth utilization in the average cell which is 21%.

Conclusions

What is most noticeable from the data gathered in this report is that subscribers are treating their mobile networks much the same as they treat their fixed networks. This is particularly true for heavy data users who seem to expect the same service from the Internet, irrespective of their access method.

Mobile broadband networks face the same challenges as fixed networks – increasing bandwidth demands and subsequent congestion, bandwidth hungry applications negatively impacting subscriber quality of experience (QoE), and the ability of a few subscribers to monopolize bandwidth resources. In the mobile network, these problems are exacerbated by the network infrastructure where the cells themselves can become bandwidth bottlenecks.

Bandwidth Growth – Global & Regional

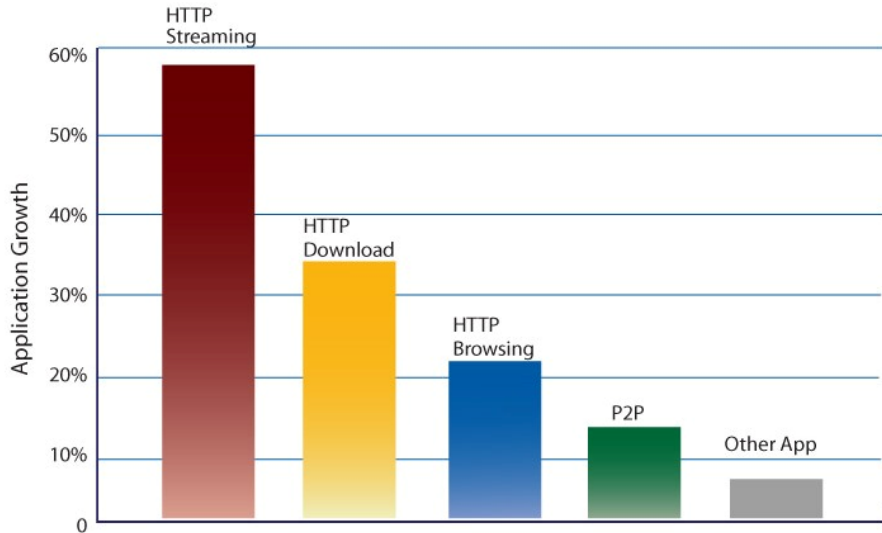


Quarterly growth (Q2/09) in mobile data both globally and regionally

Findings

Global Mobile Data bandwidth usage increased significantly in Q2/2009 by approximately 30%. This represents a CAGR of 180%. The APAC region, which is most consistently at the forefront of technological innovations, achieved the highest growth rate with 36%, while EMEA achieved 28% and the Americas 25%.

Application Growth – Global

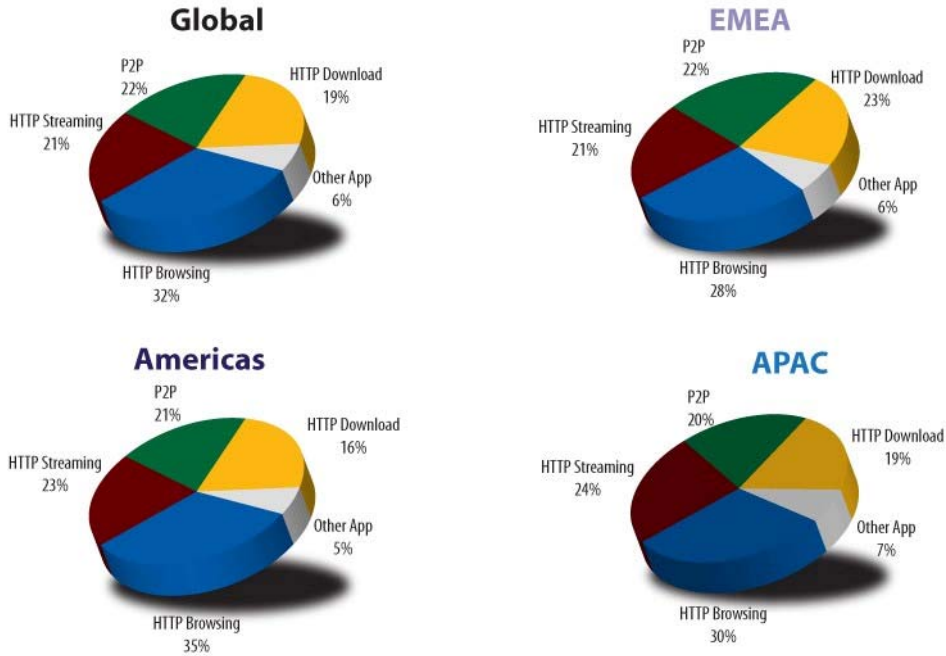


Quarterly growth (Q2/09) in mobile data globally broken down by main applications

Findings

There was a dramatic increase of nearly 60% in the global growth rate of HTTP streaming applications. This is likely due to the increased variety and availability of HTTP streaming video and subscribers' subsequent familiarity with them. The use of HTTP downloads grew by 34% - more than double the quarterly growth rate of P2P file sharing applications which grew by 14%.

Application Breakdown – Global & Regional



Mobile data usage breakdown by top applications (Q2/09) – displayed globally and for each individual region

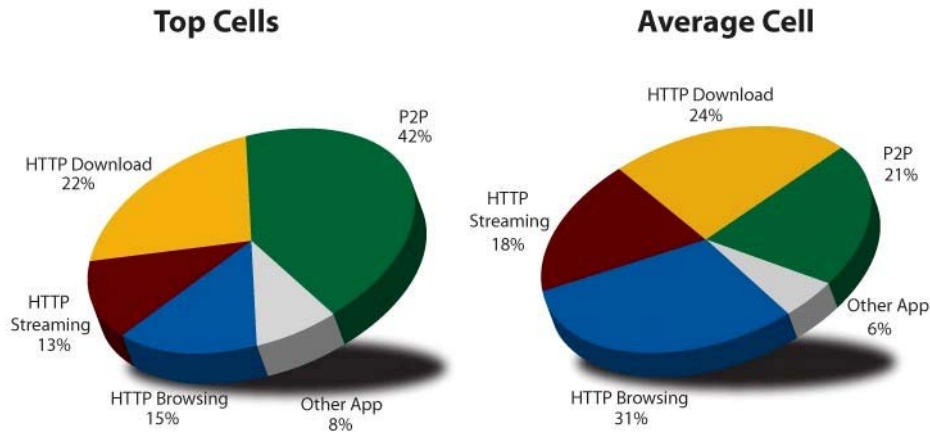
Findings

It is noteworthy that with the high growth rate that we saw in the previous graph, HTTP downloads have now achieved almost the same levels of popularity as P2P file sharing, and in EMEA have even overtaken P2P.

HTTP browsing is the single most popular application on broadband mobile networks both globally and in each of the individual regions, and is responsible for 32% of global mobile bandwidth.

In the Americas, the use of HTTP browsing is far above the global mean with 37%. A possible explanation for this increased use of HTTP browsing is due to the relatively higher penetration of smart phones.

Application Breakdown in Average Cell vs. Top 5% of Cells (per bandwidth utilization)



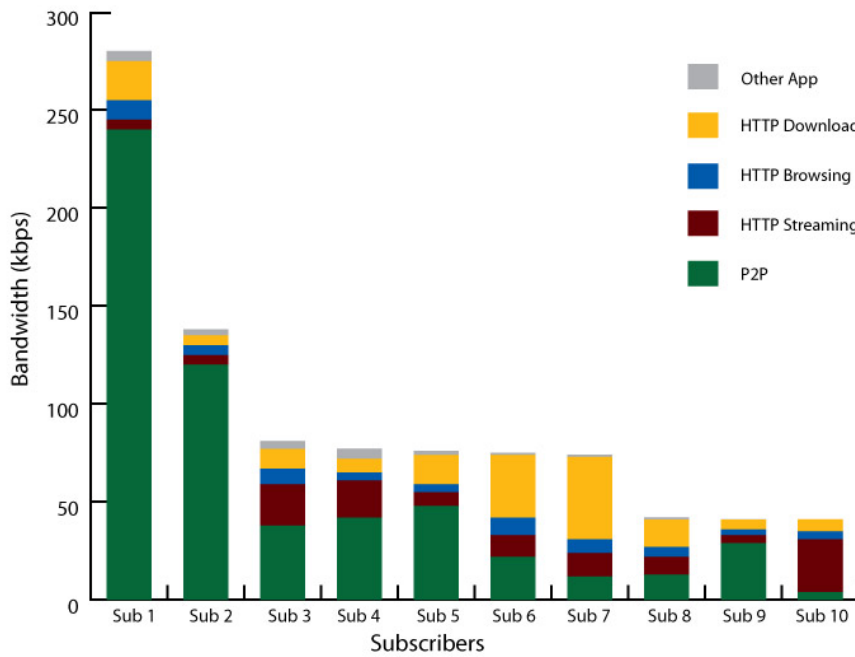
Mobile data usage broken down by most popular applications for an average cell on the mobile network, and the top 5% of utilized cells

Findings

The view of an average cell on the network shows that HTTP browsing is the leading application of choice, which mirrors the findings for global mobile traffic.

It is particularly interesting that the top 5% of cells show a significantly different picture to that of the average cell. P2P is the overwhelmingly dominant application and is responsible for 42% of the traffic, followed by HTTP downloads with 22%. This means that file download and sharing bandwidth consumption in the top 5% of utilized cells stands at 66%, causing severe congestion in the cell and creating an adverse affect on the smooth running of other applications.

Application Breakdown of Most Active Subscribers in Top 5% of Cells



Composite subscriber profile of ten most active users in the top 5% of cells per bandwidth utilization

Findings

The application breakdown of the average top ten subscribers in the top 5% of cells clearly shows that heavy usage of P2P file sharing by even a few subscribers can cause acute congestion on the cell, negatively impacting the subscriber experience.

Glossary

Cell Congestion

Occurs as bandwidth utilization in a given cell significantly increases to reach near capacity, causing slower speeds and lower subscriber quality of experience (QoE) in the congested cell.

HTTP Browsing

Refers to HTTP traffic associated with website browsing or other HTTP traffic which is not downloading or streaming.

HTTP Download

Refers to direct download services from the internet, in particular from One-Click hosting sites such as RapidShare, Megaupload and so on.

HTTP Streaming

Refers to communication directed through video sites including either user generated content (UGC) such as YouTube or professional content services such as Hulu.

P2P

Refers to file sharing applications based on protocols such as BitTorrent, eDonkey and Gnutella.

The Allot Global Mobile Broadband Traffic Report Methodology

The Allot Global Mobile Broadband Traffic Report is based on statistics collected from mobile networks around the world, representing more than 150 million subscribers. The detailed information was gathered using the long term reporting capabilities of Allot NetXplorer, Allot's centralized management & reporting system. The length of the collection period allows accurate identification of usage trends and patterns, reducing the influence of any temporary events in the monitored networks.

It is important to note that the data collected for this report was totally subscriber-anonymous. Subscriber identifying information such as IP addresses, usernames or MSISDN were not retained in the data gathered from the mobile networks.