

## How to Control Web Applications and Content

The nature of the network has changed. Applications and content have moved to the web, making the Internet a vital component of enterprise infrastructure. From enterprise critical SaaS applications to recreational video traffic, a torrent of data and information comes from a world outside the control of the enterprise.

This poses two challenges: how to manage application performance on a global network where no one is in charge, and how to distinguish valuable content from recreational or malicious content when all web traffic looks the same.

Blue Coat PacketShaper provides the visibility and control you need to gain complete insight into all the traffic on the network, from enterprise applications to Internet applications and web content. This is possible through Blue Coat WebPulse, a real-time URL categorization service that keeps up with the rapidly changing web, constantly creating new classifications without the need for OS updates or plug-ins. PacketShaper is the only solution that controls today's web-heavy network traffic, by the applications that generate it and by the web-based content it may contain. This allows network managers to speed critical SaaS and cloud applications, while throttling undesirable applications and content.

## The Goal

The goal of any network is to reliably deliver the applications and content you deem important. This is easy to say, but increasingly difficult to achieve. As more applications and content move to the web, network managers need tools to ensure the performance of web-based applications they value, such as salesforce.com and WebEx. At the same time, the impact of permissible but less important traffic, such as YouTube, streaming radio, P2P applications and sports, must never compromise more important traffic. And if that doesn't sound difficult enough, remember that tens of thousands of new web pages are created and modified every hour, requiring real-time awareness rather than after-the-fact updates.

## The Challenge

PacketShaper enables network managers to assign bandwidth and priority on an application-by-application basis. In this way, it's simple to guarantee the performance of important applications, even during periods of network contention. The same should be true for web content: with the migration of business-related applications and content to the web, we know that people use the web for both recreational and productive purposes. But with billions of web pages online and more added every day, how can you make sure that your network knows the difference between good content and bad?

One approach to managing web content is to add a security solution such as Blue Coat ProxySG, which you can use to set policies that allow, warn, or deny. This is the best way to block undesirable content categories like Violence/Hate or Illegal Drugs from your network, but what about categories like Entertainment, Social Networking, and News? There are legitimate reasons to allow access to this sort of content, but how do you contain its impact on bandwidth use and productivity?

Consider the US Air Force. The Department of Defense has ordered bases to permit access to social networking sites like Facebook, acknowledging that "Internet-based capabilities are integral to operations across the Department of Defense" (Directive-Type Memorandum 09-026). While not stating it formally, organizations around the world have come to the conclusion that social networking should be allowed on their networks. Marketing uses social networking to reach customers; HR to research candidates; employees to keep connected with colleagues and families. The result: a substantial increase in web traffic.

While many organizations permit access to social networking sites, most would rather not tempt their employees to spend hours playing Facebook games. What's needed is a method that permits reasonable access while containing the impact of bandwidth-heavy content like streaming media and Facebook games. Now that applications and content have merged on the web, you need a traffic management solution that considers both.

## Blue Coat Solution

### Identifying and Measuring All Traffic – Internal and Web Bound

Blue Coat classification technologies provide not only complete views of your internal applications such as Exchange, SAP and Oracle, but also a full range of Internet applications – IM and Skype, P2P and gaming. Plus, with the integration of Blue Coat WebPulse™ web intelligence service, we categorize tens of millions of websites – to make sure you have a complete view of your Internet traffic. Our real-time classification service draws on over 75 million users who generate up to 1 billion ratings a day. Blue Coat is aware of new content and pages as they come on line and adds the results to our classification technologies on a minute-by-minute basis. So when there is the next breaking news, a new site or trendy Facebook game – PacketShaper is already aware of them.

PacketShaper can break down complex sites like Facebook, Gmail and other web applications into sub-classifications, giving you extra granularity. This allows you to separate Facebook wall posts from video and file uploads.

### Protecting Preferred Content

Since PacketShaper knows the content categories of web traffic, you can configure PacketShaper to give preferential treatment to categories of traffic. Preferred categories might include content related to work, such as Online meetings, eLearning, and software downloads, or content for which response time can be important, such as Auctions and Financial Services.

Online\_Meetings All Internet Protocol traffic

Policy Type: Priority

Priority: 5 (High)

DSCP: 4 Assign Name

Partition: 6

Burstable Max:

Apply Revert

### Containing Permissible Content

Many categories of web content are neither good nor bad: instead, they should be managed based on their impact on other network traffic and on behavioral factors such as productivity. Streaming media is a good example. While many organizations use streaming media sites for work-related purposes like product demonstrations and training, there's no question that most of this traffic is generated by individuals sharing links to entertaining videos, or listening to music streams while at work. To contain the impact of streaming media, you can apply a policy that restricts it to a specified amount of bandwidth or to a percentage of the WAN link.

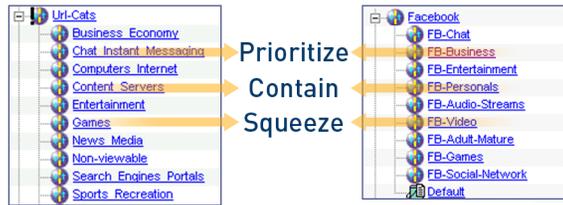
Because PacketShaper gets web content categories from WebPulse in real time, new web content is managed by your existing policies. There's no need to make emergency plans for events like the Olympics or in response to breaking news; PacketShaper and WebPulse effectively manage tomorrow's web content based on the web category policies you have in place today.

### Suppressing Undesirable Content

Unfortunately, the web contains content that may be unsuitable for the workplace, such as gambling and pornography, or that poses threats with legal and financial consequences, such as spyware and phishing. PacketShaper is especially effective as a tool to audit existing security solutions. If your security appliance is configured to block content related to illegal drugs or malware, PacketShaper will also be able to detect these content categories allowing you to validate the effectiveness of your security solution.

## Managing Mixed Content

But what about sites like Facebook, where content such as status updates may be permissible but other content, such as games, should be contained? You can configure PacketShaper to allow Social Networking traffic without restrictions, but squeeze Games to a 10kbps trickle. This sends a subtle message to users about playing games at work, without triggering complaints that “the Internet is down.”



## Summary

Web traffic is diverse, and can't be effectively managed without considering both applications and content. PacketShaper leverages the real-time WebPulse service to classify the tens of millions of websites and billions of URLs into logical categories. This means that you can manage similar content collectively, rather than app- by-app or site-by-site. With PacketShaper's real-time content awareness, policies created today will apply to similar content created tomorrow, with no downloads or updates required. This makes PacketShaper an ideal tool for controlling the performance of web-based applications and content.

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