


EthoStream Bandwidth Management System

Overview

EthoStream's Bandwidth Management System is designed to provide complete control of bandwidth allocation across a hotel's network. Its advanced functions enable hotel management to control and manage bandwidth use to maximize efficiency. The system provides full visibility of bandwidth consumption, as well as the ability to dynamically or manually limit bandwidth access, to ensure that all guests enjoy the same smooth, high performance. EthoStream's Bandwidth Management System is enhanced with an intuitive remote management console, backed by a full-time support center, so that hotel management can offer their guests the most sophisticated Internet service available. The scope of EthoStream's Bandwidth Management System reinforces EthoStream's commitment to servicing the hospitality industry with leading-edge broadband solutions.



Hotel management can up-sell bandwidth to guests for bandwidth-intensive applications, such as online video gaming.

ETHOSTREAM  Credit Card Help

Purchase ETHOSTREAM[®] Service

Please enter your credit card information below. Submission will provide you with **higher priority bandwidth service** for the duration of your session.

Contact Info		Billing Info	
First Name <input type="text"/>	Amount \$2.99 : Guaranteed 25% of total bandwidth, up to 100% (if available)	Card Type <input type="text" value="Visa"/>	Exp. <input type="text" value="01"/> <input type="text" value="2007"/>
Last Name <input type="text"/>	-- 1 day(s), 12 hour(s), 32 min(s) remaining --	Card Number <input type="text"/>	Card CID <input type="text"/> *What is this?
Email <input type="text"/>		Submit	
Address 1 <input type="text"/>			
Address 2 <input type="text"/>			
City <input type="text"/>			
State <input type="text"/>	Zip <input type="text"/>		

[Privacy Agreement](#) | [Terms of Usage](#)

The payment screen enables users to purchase the bandwidth upgrade directly on-line.

A New Revenue-Generating Service

A key feature of EthoStream's system is to provide hotels with new value-added and revenue generating elements. For example, hotel management can up-sell bandwidth to data-hungry travelers, prepared to pay a premium for additional services that demand superior performance. The bandwidth up-sell will satisfy the demand for bandwidth-intensive applications, such as online video gaming, online sports

events, downloading music, streaming videos, file sharing and guest applications like Slingbox and Skype, without impacting the network for other users. EthoStream's staff and support center can track which users have purchased bandwidth up-sell and monitor their traffic and consumption, ensuring that they enjoy the best Internet experience.

Dynamic Bandwidth Control

Any Internet abuse may automatically be detected and policed through the use of EthoStream's Bandwidth Management System. For example, if a user starts peer-to-peer (P2P) file-sharing, or downloads thousands of music tracks, the system will automatically reduce the amount of bandwidth they receive. Users are dynamically penalized for generating large volumes of network traffic on an incremental basis. As they generate more traffic, it is progressively tagged with a lower priority, resulting in slower speeds and fewer Internet requests successfully completed for that user. As soon as the user stops abusing the network, they will begin to earn back their bandwidth, with their Internet access gradually returning back to their original agreed level.

Manual Bandwidth Control

In addition to the dynamic control function, EthoStream's Bandwidth Management System also provides the ability to manually control bandwidth for users who abuse the network. This places the user in a bandwidth queue with very strict limitations on usage and Internet connectivity. This may be performed by the EthoStream Support staff manually, although it is rarely needed thanks to the dynamic penalization facilities.

Bandwidth Up-Sell

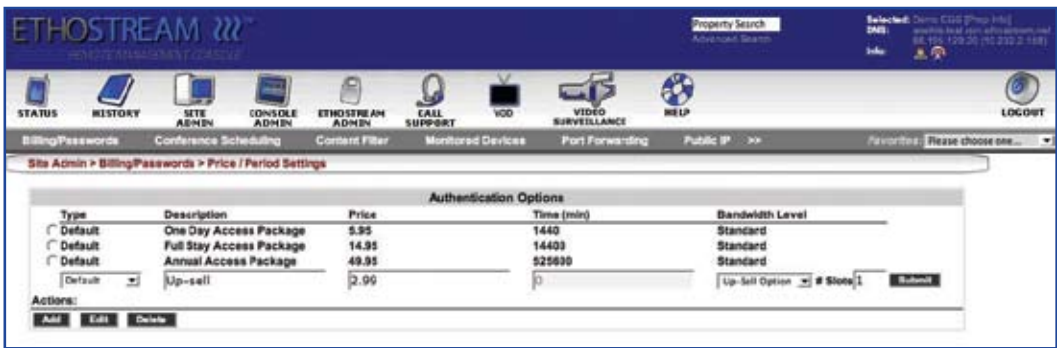
For users requiring higher-speed services for specific applications, a "priority service" option ensures that they can easily receive more bandwidth and faster Internet connectivity. To purchase additional bandwidth, a user simply clicks on the 'Speed' button on the EthoStream Toolbar. Once they have completed the purchase information, they will then be dynamically provided with enhanced bandwidth, instantaneously, for the remainder of their session. This service places them in a separate bandwidth class that does not perform dynamic penalization and guarantees a minimum amount of bandwidth and speed, regardless of network saturation.

Users who have purchased this service will appear in the EthoStream RMC > Current Users screen with a red up-arrow next to their name, and their payment transactions will appear along with the standard payments in the RMC.

Configuration for these options is under the Firewall > QoS Config screen on the EthoStream Gateway Server (EGS), as well as the Billing/Auth Duration page in EthoStream's Remote Management Console (RMC). There is also a small application that shows real-time bandwidth usage in each of these classes (penalty, standard, and up-sell).



A "Speed" button at the top of the toolbar enables users to upgrade their bandwidth.



This screen shows where owners can configure bandwidth up-sell, without requiring EthoStream's assistance.



This screen shows when guests purchase high-speed Internet access and bandwidth up-sell.

www.ethostream.com

EthoStream, LLC
10200 Innovation Dr, Suite 300
Milwaukee, WI 53226

Toll Free: 877.536.2984
Milwaukee: 414.223.0473
Fax: 414.258.8307