



Heavy User Management

Significantly improve the customer experience your network delivers

HEAVY USER MANAGEMENT BENEFITS

Managing the few for the benefit of the many

Deliver a measurably better customer experience

Allocate more bandwidth to a much broader set of your customers and increase the overall quality of services delivered

Get more from your existing network

Intelligent traffic management allows operators to deliver more services to more customers without additional network spend

Better insight for better decisions

Deep traffic visibility and rich subscriber context allow for better resource decisions and service outcomes

Network bandwidth is a scarce resource. There never seems to be enough network to support the demands of subscribers. This is especially true in this time of exploding video traffic demand. Operators simply cannot profitably build out their networks fast enough, nor should they. The answer is to work smarter, applying other, less costly means for allocating bandwidth and for stretching network assets to deliver more with existing resources.

Heavy user management is a highly effective approach for freeing sizeable amounts of bandwidth during times of congestion. Taking into account that a small percentage of subscribers invariably consume a disproportionate amount of overall network bandwidth, heavy user management moderates the amount of resources consumed by the small heavy user minority during peak times. By reclaiming this often-considerable capacity, operators can free these resources to be shared by the much larger majority of subscribers – who would then benefit from a better customer experience during peak times.

USE CASE TECHNOLOGY OVERVIEW

For many years the term “heavy user” was synonymous with P2P usage, but times have changed. Today’s heavy users may be high-powered gamers broadcasting over Twitch, individuals that regularly stream 4K videos, or breached home networks with hijacked devices that are inadvertently generating ongoing streams of traffic. There are multiple characteristics that could be used to determine who heavy users are and the behaviors that they have that need to be managed.

Accurately identifying these users requires granular traffic and subscriber insight – namely categorizing those subscribers that consume the most traffic and then the associating those subscribers with their specific bandwidth hungry behaviors. Specifically, the operator must first collect statistics on all network traffic consumed by all subscribers to understand the percentage of bandwidth consumed on a per subscriber basis.

Figure 1

Unmanaged, heavy users can overwhelm your network’s ability to deliver a consistent, high quality experience

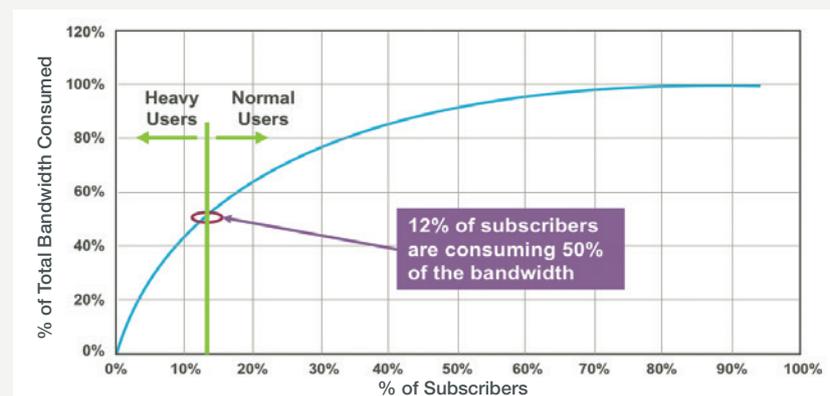




Figure 1 shows a typical distribution of numbers of subscribers to their corresponding percentages of bandwidth consumed, with heavier users consuming a far greater proportion of traffic than comparable numbers of lighter users. Managing even a portion of these heavier users during peak times would free significant resources for the benefit of many other subscribers.

Once each subscriber is identified and ranked by bandwidth consumed, the operator can then select their heavy user population and begin to identify those behaviors that will be used for detection and enforcement of traffic management rules. For example, these behaviors could be P2P application usage or continuous and extensive amounts of high resolution video traffic.

SANDVINE'S UNIQUE BENEFITS FOR HEAVY USER MANAGEMENT

Subscriber & Context Awareness

Multiple industry-standard interfaces enable gathering of rich subscriber and session information from the network.

Advanced Traffic Management

Powerful and flexible shaping engine with advanced queue management algorithms including fairness with weighted fair queuing, connection fairness and normal or tiered subscriber fairness.

Flexible Traffic Policy and Control Logic

Agile policy engine with multiple inputs from different sources enables real-time policy control and traffic accounting on a per-subscriber basis across multiple service dimensions.

Analytics and Network Visibility

Detailed real-time and historical visibility provides strong basis for effective decision making. Flexible channels and data export options.

Conclusion

Sandvine's Heavy User Management solution enables operators to automatically manage the traffic of their heaviest users during times of congestion. The solution allows for a reallocation of some of the excessive bandwidth consumed by the heaviest users to meet the needs of the broader customer base, and to deliver a markedly better quality of experience.

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ABOUT SANDVINE

Sandvine helps organizations run world-class networks with Active Network Intelligence, leveraging machine learning analytics and closed-loop automation to identify and adapt to network behavior in real-time. With Sandvine, organizations have the power of a highly automated platform from a single vendor that delivers a deep understanding of their network data to drive faster, better decisions. For more information, visit sandvine.com or follow Sandvine on Twitter at [@Sandvine](https://twitter.com/Sandvine).



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