

## Dyband Case Study: ClipperNet Corporation

**ClipperNet Corporation is one of the fastest growing Internet service providers in North America. Founded in 1994, ClipperNet today offers multi-access broadband services to businesses and residential customers throughout the Pacific Northwest via 40 high-speed points of presence and 60 Megabytes of leased bandwidth. Internet connectivity services include standard dial-up packages as well as high-speed options such as Frame Relay, ISDN, xDSL and microwave wireless.**

Microwave wireless is a key market differentiator for ClipperNet. Since 1997, the broadband access provider has expanded their wireless business throughout Oregon, and is now beginning to experience strong market acceptance for the service in Washington, Idaho and Northern California. Designed around a shared network topology, the bandwidth capacity typically ranges from 1.54 Mb/s to 3 Mb/s for each wireless circuit. Customers can choose from bandwidth options ranging from 128 Kb/s to 768 Kb/s. xDSL services also form an important component of ClipperNet's business with bandwidth options in "loop qualified" areas ranging from 256 Kb/s to 712 Kb/s.

### Bandwidth Allocation

The use of wireless and xDSL broadband access technologies provides ClipperNet's customers with a wide selection of high-speed service options that can be tailored to meet individual needs and budgets. Yet neither technology has an inherent way to ensure that customers receive the bandwidth they pay for. Traditional bandwidth management solutions to rectify this problem range from Telnet applications for adjusting controls on wireless antennas, to expensive router equipment and DSLAM hardware. Most suffer from complex architectures and difficult configuration issues. None offer a single management solution that effectively works across all broadband access technologies.

### Managing Customer Expectations

ClipperNet wanted a solution that would control bandwidth use across all technologies

from a single interface. Most important was the need to ensure that customer service expectations were easily met without the need for substantial investments in additional hardware or personnel resources. "That's a very big deal because it allows us to manage customer expectation levels as well as control the amount of bandwidth we need to purchase for our disparate networks," says Ransom Southerland, president of ClipperNet Corporation in Eugene, Oregon. "All these networks are typically oversold or oversubscribed because that's the business model, and so having the ability to determine bandwidth down to the customer level for us is extremely important.

### The Solution for ClipperNet

ClipperNet installed the Dyband software suite near the end of 1999 to better monitor traffic patterns as well as bandwidth usage trends across all its networks, while ensuring that users receive the service they pay for. "What's happened as a result of moving the product on line is that broadband networks are much more stable and that certainly leads to fewer service truck rolls and customer support issues.

Southerland adds. "When the network is more stable and people are getting what they pay for, they're much more likely to continue to buy services and that reduces customer churn while improving the overall customer relations environment. The Dyband solution will occupy an extremely important place in our network topology-second only to our core router".



