

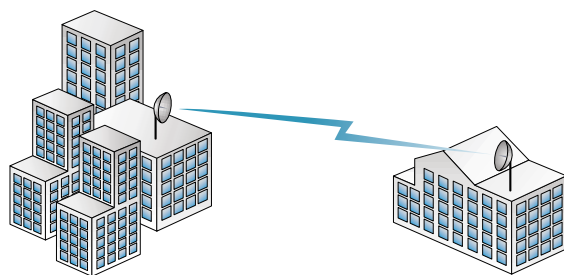
# Note

## Wireless Ethernet Bridges for Enterprise Environments: Higher Capacity and Lower Costs than Leased Lines

Within enterprises and public sector organizations, IT managers are searching for the most cost-effective and rapidly deployable solution for increasing bandwidth and connecting LANs in different buildings or campuses. Historically, there have been primarily two choices: leasing telco lines or provisioning private fiber connections. Both present serious drawbacks in cost, deployment time, reliability, and their dependence on third-party networks.

### More speed, reliability, and cost-savings

Now there is a better solution. Proxim's Tsunami™ family of wireless Ethernet bridges deliver more bandwidth for multi-building and campus environments: quickly, cost effectively, and without the degradation of service associated with leased solutions. Working with any router or switch, Tsunami wireless Ethernet bridges ensure high-capacity LAN-to-LAN connectivity to support today's growing IP needs.

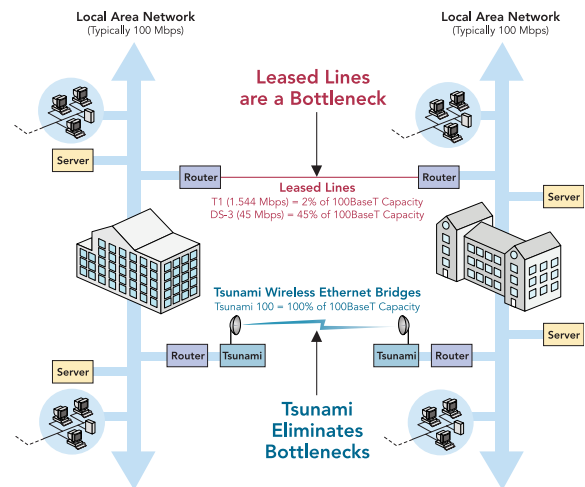


Wireless Ethernet Bridges: A better way to connect your LANs

### Eliminate bandwidth bottlenecks

Leased circuits typically connect buildings at relatively slower speeds than the high-speed LANs that are used within buildings. The low capacity of the leased line can cause bandwidth bottlenecks and a serious degradation in service. Tsunami wireless Ethernet

bridges eliminate these bottlenecks by providing a high capacity link between buildings.



### Achieve wireline networking speeds and 99.999% availability

Tsunami wireless Ethernet bridges enable high-capacity wireless connections, from less than one mile to more than 40 miles, without performance degradation. Tsunami wireless bridges enable carrier-class delivery of IP services with full wire-speed performance and the 99.999% reliability IT professionals demand.

### Gain a rapid return on your investment

With deployment in days, rather than the weeks or months typically needed to install leased lines, Tsunami offers a solution that provides a speedy return on your investment. You no longer need to establish an interface with telco WANs, eliminating the cost of additional "boxes." Since Tsunami preserves native IP throughout the system, you can avoid the cost of T1/E1 or DS-3 cards and their CSU/DSU interfaces in your switches and routers. Because you own the connection—and not lease it—ROI is maximized and you gain the peace of mind of having control over your own infrastructure.

## APPLICATION NOTE

### Tsunami 100BaseT/F vs. DS-3 Leased Line (45 Mbps)

	DS-3 Leased Line <sup>1</sup>	Tsunami 100BaseT/F	Tsunami Advantage
Acquisition Cost	\$19,000 <sup>2</sup>	\$31,500 <sup>3</sup>	1.5 month payback
Monthly Cost	\$9,000	\$0	No monthly recurring costs
Deployment Time	Up to 4 months	Today	No wait

(1) Leased line prices vary according to distance and geographic location.  
(2) Includes installation and 2 DS-3 router cards. New routers may be required.  
(3) Includes Tsunami 100BaseT/F 45 Mbps 5.8 GHz Link, cable kit, 2 antennas, 2 Ethernet router cards and installation.

### Tsunami 10BaseT vs. 6 T1 Leased Lines (10 Mbps)

	6 T1 Leased Lines <sup>1</sup>	Tsunami 10BaseT	Tsunami Advantage
Acquisition Cost	\$30,600 <sup>2</sup>	\$23,500 <sup>3</sup>	20% savings up front
Monthly Cost	\$3,000	\$0	No monthly recurring costs
Deployment Time	Up to 4 months	Today	No wait

(1) Leased line prices vary according to distance and geographic location.  
(2) Includes installation and 12 T1 router cards. New routers may be required.  
(3) Includes Tsunami 10BaseT 10 Mbps 5.8 GHz Link, cable kit, 2 antennas, 2 Ethernet router cards and installation.

### Stop waiting for the telephone company

Tsunami provides a true plug-and-play solution which can be deployed within days. License-exempt wireless technology can be deployed much more rapidly than leased line alternatives. Without regulatory delays, radio spectrum ownership issues or waiting for trenching or other telco provisioning, it is possible to create wireless LAN-to-LAN links in just a day or two.

### Accomplish your objectives

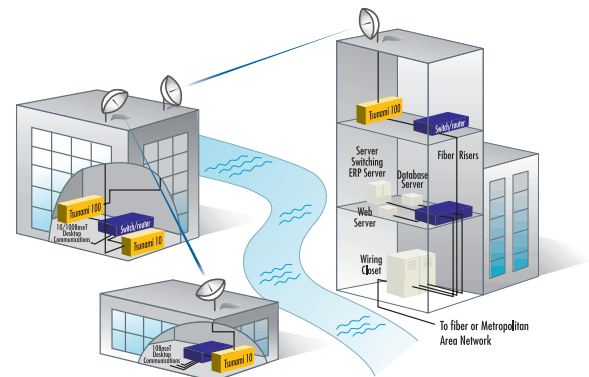
Because of the speed and ease of deployment, Tsunami is ideal for applications including:

- building-to-building connectivity (LAN to LAN)
- campus-to-campus connectivity (WAN)
- fiber redundancy and media diversity to enhance reliability and uptime

### Network Overview

Tsunami wireless Ethernet bridges provide a portfolio of distance and capacity points using either Tsunami 10BaseT, 100BaseT/F or 1000BaseSX products. For example, a pair of Tsunami 100BaseT/F wireless Ethernet bridges provide a Fast Ethernet connection between any two routers or switches. Rooftop mounted antennas are cabled to the indoor mounted Tsunami bridges. The bridges interface directly to the 100BaseTX or 100BaseFX ports on the switches or routers. Tsunami bridges provide seamless data link

layer (Layer 2) connectivity, transparent to the ports on the switch or router. This configuration preserves native IP throughout the connection, eliminating conversion between interfaces.



### Tsunami: A Broad Solution Offering

The Tsunami family of wireless Ethernet bridges provides a wide range of distance and capacity solutions to meet your connectivity needs. The family consists of three product lines: the Tsunami 1000BaseSX, the Tsunami 100BaseT/F and the Tsunami 10BaseT. Products within each product line vary in capacity and frequency (see table below).

	Tsunami 1000BaseSX	Tsunami 100BaseT/F	Tsunami 10BaseT
Aggregate Capacity	> 840 Mbps	206 Mbps, 93 Mbps	24 Mbps, 16 Mbps
Frequency	5.3, 5.8 GHz	5.3, 5.8, 23 GHz	2.4, 5.8 GHz