

Tsunami MP.11 and Tsunami QuickBridge.11 SW version 2.3, January 2006

INTRODUCTION

Welcome to release 2.3 of the Tsunami MP.11 and Tsunami QuickBridge.11 product family!

This latest software feature release introduces new feature functionality for the Tsunami MP.11 and Tsunami QuickBridge.11 family of products.

The following Tsunami MP.11 and Tsunami QuickBridge.11 products are supported in this release.

Model	2.3
	support
MP.11 5054	Yes
MP.11 5054-R	Yes
MP.11 2454-R	Yes
QuickBridge.11 2454-R	Yes
QuickBridge.11 5054-R	Yes

The following Tsunami MP.11 and Tsunami QuickBridge.11 products are **NOT** supported in this release.

Model	2.3
	support
MP.11 2411	No
QuickBridge.11 2411	No

Upgrading 2411 systems with this release will result in unreliable operation and is therefore not supported.

IN THIS RELEASE

New Features

WiMAX 802.16 QoS with CIR

Release 2.3 will support multiple QoS classes, Service Flows, and Packet Prioritization Rules, based on the 802.16 WiMAX standard.

Up to eight QoS classes, four Service Flow classes per QoS Class, and eight Packet Identification Rules per Service Flow can be defined per BSU, with each SU supporting a single QoS class. Packet Identification Rules are extremely flexible, and provide the ability to prioritize traffic based on the following parameters.

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- IP ToS (Layer 3 QoS identification)
- IP Protocol List containing up to 4 IP protocols
- 802.1p tag (layer 2 QoS identification)
- Source IP address + Mask



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- Destination IP address + Mask
- Source TCP/UDP port ranges
- Destination TCP/UDP port ranges
- Source MAC addresses
- Destination MAC addresses
- VLAN ID
- Ether type (Ethernet protocol identification)

Users will be able to set CIR (Committed Information Rate) for each Subscriber Unit, combined with the already available MIR (Maximum Information Rate) settings.

In addition, MIR functionality has been enhanced to allow service providers to control the availability of service for a particular subscriber without shutting down the wireless interface of the Subscriber Unit.

No Sleep Mode

No Sleep Mode was a feature used to control jitter in Tsunami MP.11 and QuickBridge.11 products running v2.2.6 and earlier software. The introduction of QoS and the new WORP resource scheduling mechanism have eliminated the need for No Sleep Mode. Furthermore, QoS provides better control over jitter and latency than No Sleep Mode for time-sensitive applications. As a result, No Sleep Mode is no longer supported. See the Installation and Management Guide for QoS configuration details.

Note: While the Tsunami MP.11 QoS feature is based on 802.16, it is not interoperable with WiMAX systems.

Enhanced DFS

Numerous enhancements to DFS functionality have been included in this release. An unprecedented level of control and configurability of DFS parameters is available to support installations with challenging interference and RADAR environments. Users will have the ability to define both a preferred channel to force selection and a blacklist of channels to avoid scanning altogether. The system will blacklist channels where RADAR is detected for a period of 30 minutes before they can be re-scanned after a radar detection event.

Fast pre-802.16e Mobility with Auto-Scanning

The Tsunami MP.11 is the leading platform for mobility and roaming applications. This release extends the Tsunami MP.11's leadership by reducing the hand-off times experienced by roaming Subscriber Units. Improving the roaming performance of the SU ensures delay sensitive applications such as video and voice and be successfully deployed in mobile applications at high speeds.

Roaming controls allow certified System Integrators to optimize system performance for all types of challenging RF environments involving transportation systems, including trains, subways, busses, ferries, and people movers. Software release version 2.3 implements a channel priority list that tells the SUs what channels to scan. Each channel in the channel priority list is specified with its corresponding bandwidth and the priority with which it should be scanned, or it may be specified as inactive. Furthermore, Proxim is introducing unprecedented roaming flexibility in release 2.3 by supporting roaming across 5, 10, or 20MHz channel bandwidths.

This unparalleled roaming functionality is a precursor to the WiMAX mobility standard 802.16e.

48 and 54 Mbps Support



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This software release will support 48 and 54 Mbps data rates for the Tsunami MP.11 5054, 5054-R and 2454-R models. These data rates are now selectable via the pull-down menu in the interface configuration screen. For the Tsunami MP.11 5054, the system will automatically enable DDRS when either 48Mbps or 54Mbps rates are selected. For this model, it is required for DDRS to be enabled either manually or automatically for proper operation at 48 and 54 Mbps data rates.

SOFTWARE COMPATIBILITY

The following table indicates the compatibility of software release 2.3 with previous Tsunami MP.11 and Tsunami QuickBridge.11 releases.

Compatibility With	Release 2.3 (no Encryption)	Release 2.3 (WEP Encryption)	Release 2.3 (AES OCB Encryption)	Release 2.3 (AES CCM Encryption)
Release 1.1	No	No	No	No
Release 1.2	Yes	Yes	Yes	No
Release 2.0	Yes	Yes	No	No
Release 2.0.1	Yes	Yes	Yes	No
Release 2.1	Yes	Yes	Yes	No
Release 2.2	Yes	Yes	Yes	Yes
Release 2.2.5	Yes	Yes	Yes	Yes
Release 2.2.6	Yes	Yes	Yes	Yes

UPGRADE/DOWNGRADE TO/FROM RELEASE 2.3 SOFTWARE

The Tsunami MP.11 Release 2.3 software can be downloaded to the Tsunami MP.11 5054, MP.11 2454-R, MP.11 5054-R, QuickBridge.11 2454-R, and QuickBridge.11 5054-R using TFTP per the table below. *Upgrading 2411 systems with this release will result in unreliable operation and is therefore not supported.*

NOTE: To achieve 48 and 54 Mbps data rates, it is required to reset to factory defaults on the BSU after upgrading to 2.3

Tsunami Model	Upgrade from Release	TO Release 2.3	FROM Release 2.3
MP.11 5054	1.2	No	No
MP.11 5054	2.0	No	No
MP.11 5054	2.0.1	No	No
MP.11 5054 MP.11 5054-R	2.1	No	No



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MP.11 5054 MP.11 5054-R MP.11 2454-R QuickBridge.11 5054-R QuickBridge.11 2454-R	2.2	Yes	Yes
Tsunami Model	Upgrade from Release	TO Release 2.3	FROM Release 2.3
MP.11 5054 MP.11 5054-R MP.11 2454-R QuickBridge.11 5054-R QuickBridge.11 2454-R	2.2.5	Yes	Yes
MP.11 5054 MP.11 5054-R MP.11 2454-R QuickBridge.11 5054-R QuickBridge.11 2454-R	2.2.6	Yes	Yes

Issues Fixed in release 2.3

	Tsunami MP.11 and QuickBridge.11 Model		
Description	2454-R	5054	5054-R
Occasionally, three or more co-located BSUs may select the same channel upon simultaneous reboot. This only applies to DFS.	N/A	Yes	Yes
Address pools larger than 100 IP addresses are not supported in the DHCP server. 250 IP addresses are now supported.	Yes	Yes	Yes
VLAN feature does not allow management of untagged VLAN frames. Untagged management frames are now supported.	Yes	Yes	Yes
Scan Tool not usable when filtering broadcast traffic	Yes	Yes	Yes
DHCP Relay function limited to less than 590 bytes	Yes	Yes	Yes



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	Tsunami MP.11 and QuickBridge.11 Model		
Description	2454-R	5054	5054-R
No information provided when SU does not register on BSU. Information now provided in event log.	Yes	Yes	Yes
Log dump could cause Telnet session to abort	Yes	Yes	Yes
When the temperature is too low, a temperature trap is incorrectly generated	Yes	N/A	Yes
IP-Access table does not working properly	Yes	Yes	Yes
"Vlanmode" command not operational	Yes	Yes	Yes
False DFS alarm generated between radar detection and reboot	N/A	Yes	Yes
TPC setting not reflected in event log	Yes	Yes	Yes
Management traffic will freeze while accessing a large temp log or event log	Yes	Yes	Yes
Multicast Ethernet frames are sent to Ethernet port from Mgmt VLAN ID instead of Access VLAN ID	Yes	Yes	Yes
CLI templog reset command returns incorrect message	Yes	N/A	Yes
Event log contains HTML tags	Yes	Yes	Yes

Known limitations in release 2.3

	Tsunami MP.11 and QuickBridge.11 Model		
Limitation	2454-R	5054	5054-R
In a system with a v2.3 BSU, one or more v2.3 SUs, and one or more v2.2.x SUs, it is possible that management to the v2.3 SUs will become intermittent. Data flow through the devices will persist. However, management capabilities could be intermittent. Therefore, it is recommended that all	Yes	Yes	Yes



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	Tsunami MP.11 and QuickBridge.11 Model		
Limitation	2454-R	5054	5054-R
SUs are upgraded to v2.3 before the BSU is upgraded.			
It is critical to upgrade all SUs of the system to v2.3 prior to upgrading the BSU.			
Tsunami MP.11 2411 and QuickBridge.11 2411 do not work properly after upgrading to 2.3.	N/A	N/A	N/A
MP.11 and QuickBridge.11 2411 ARE NOT SUPPORTED IN RELEASE V 2.3.			
After upgrade from 2.2.x to 2.3 and changing the data rate to 54Mbps on both BSU and SU, the BSU data rate is incorrectly set to 36Mbps. It is required to reset to factory defaults on the BSU after upgrade to achieve 48 and 54 Mbps data rates.	Yes	N/A	Yes
Currently, QoS doesn't support fragmented traffic	Yes	Yes	Yes
CLI experiences intermittent delay in response after CLI command is used to update QoS-SU Table with different or same QoSc-Index.	Yes	Yes	Yes
Cannot manage BSU from behind SU when VLAN mode is set to trunk and when BSU Mgmt VLAN is set to untagged.	Yes	Yes	Yes
Serial interface may not work properly when baud rate is set to values other than 9600.	Yes	Yes	Yes
Setting Radius Authorize Lifetime out of range does not cause error	Yes	Yes	Yes
VLAN learn table is not displaying VLAN ID	Yes	Yes	Yes

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For the latest software and documentation go to: http://support.proxim.com

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