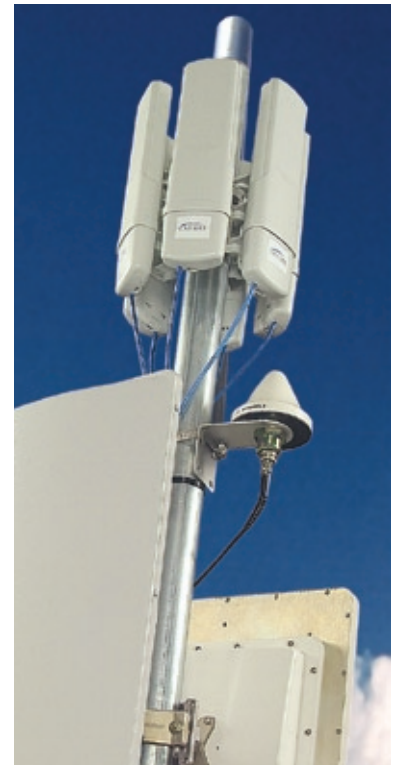


# What Network Management Was Meant to Be



Prizm integrated Element Management System (EMS) empowers operators of both large and small Canopy® wireless networks to gain greater control, enhanced functionality and flexibility, and significantly improved cost-effectiveness. In addition to offering new affordability, the system helps maximize network efficiency, minimize operating costs, reduce risk and deliver increased revenues.



# Prizm is the fast, affordable way to increase the efficiency of any Canopy network.

The Prizm EMS is the optimum management platform for Canopy wireless networks. The system simplifies integration and aggregation of multiple networks with open, industry-standard interfaces, and enhances network value by delivering faster ROI with a payback period of months, not years.

## Large and Small Networks

Whether your Canopy wireless network serves 100, 10,000 or even 100,000 customers, Prizm offers a range of benefits that are too crucial to ignore. Proven worldwide with deployment in networks around the world, Prizm manages not only Canopy technology, but also the MOTOWi4™ wireless IP equipment portfolio which includes Mesh, WiMAX and Broadband Over Power Line (BPL) solutions.

## Integrated Bandwidth and Authentication Functionalities

Prizm simplifies and improves wireless network management by integrating operations tools with Bandwidth and Authentication Management (BAM) in a single-server platform. By combining operations management tools with subscriber authentication and bandwidth management capabilities, the system provides exceptional flexibility in revenue capture and growth. Prizm's bandwidth preservation functionality enables operators to offer tiered services, which increase revenues and reduce churn by offering high-profile, high-return services to your most important, most profitable customers.

## High-Level Benefits

Among the most significant Prizm benefits are:

**Operations Cost Reduction.** Prizm reduces time and dollars spent on network management. The system provides centralized control with full EMS functionality, including provisioning,

fault management, performance monitoring, configuration management and security. Additionally, it helps reduce IT, training, maintenance, repair and security costs.

**Capital Expense Savings.** By integrating EMS and BAM functionality in a single platform, Prizm eliminates the need to have two separate systems residing on two separate servers. In addition, the system's support for optional Canopy radio features with floating software licenses allows you to reduce software costs by keeping an inventory of licenses not tied to specific radios.

**Reduced Churn.** Prizm's support of tiered services and comprehensive bandwidth management and preservation enables network operators to offer the innovative new services premium subscribers are demanding. In addition, faster fault response times help maximize both performance and customer satisfaction. That adds up to less churn.

**Increased Revenues.** The Prizm system's support for tiered services enables you to offer, optimize and manage advanced, high-margin services that increase both revenues and subscriber loyalty.

Are you a large-scale carrier looking for a powerful low-risk solution offering comprehensive management functionality? Are you a smaller ISP or WISP weighing the buy-or-build network management decision? Whichever you are, the Prizm EMS is the integrated network management solution that is both exceptionally efficient and surprisingly affordable.

## The Top Ten Reasons for Managing your Canopy Network with Prizm.

- I need to deploy Canopy Lite SMs or Advantage floating licenses.
- I need to secure my network from rogue users.
- I need to manage my limited bandwidth.
- I need to suspend and re-activate users based on their billing status.
- I need to support multiple tiers of service.
- I need to be notified when my network is experiencing interruptions in service.
- I need to integrate Canopy into my existing network management processes.
- I need to maintain the configuration of my elements from a single point.
- I need to secure access to network management capabilities.
- I need to grow beyond 8-10 Access Points without increasing network management staff.

# Breakthrough Prizm capabilities enhance network performance and customer care.

Prizm provides operators and their customers with a number of unique wireless network management capabilities that help set a new standard for EMS performance. No other system provides these advanced functionalities for the Canopy platform:

## Network Elements Managed Through Prizm

### Subscriber Modules (SMs)

- Canopy Platform
- Canopy Advantage
- Canopy Lite
- PowerLine LV Modem

### Access Point Modules (APs)

- Canopy
- Canopy Advantage
- PowerLine LV Bridge

### PTP Series

- PTP 100 Series (full management)
- PTP 400 & 600 Series (monitoring only)

### Cluster Management Modules (CMMs)

- monitoring only
- 2.2.x (full management)

### Generic Elements

- Via SNMP V1, SNMP V2

### Future Canopy Elements

- Canopy HotZone
- WiMAX (supporting the 802.16e standard)

### Radio-Level Authorization and Authentication.

Prizm streamlines and strengthens the wireless network authentication functionality by providing for authorization at the individual radio level.

**Bandwidth Management.** Through a proprietary protocol, the Prizm system provides for changing broadband settings on the fly, without having to reboot. You can also set defined broadband service plans, and associate individual Subscriber Modules (SMs) with a specific service level.

**Tiered Services.** Prizm's leading-edge broadband preservation and management capabilities allow any size network to offer and seamlessly manage a variety of service levels from a single, centralized point. The ability to provide tiered services allows you to increase customer satisfaction, and gain new revenues by offering today's most in-demand new services for which many customers are willing to pay substantial premiums.

**Floating Licenses.** With Prizm, you gain the ability to upgrade to Canopy Lite and Canopy Advantage with floating licenses. No longer must a license be permanently fixed to a specific device. Now, as customers change locations or service level preferences, you won't need to buy new licenses. You can simply pull in the licenses and place them in a pool of resources that can be re-deployed to other radios as needed. The result is substantial savings in license cost.

**Standards Based System Integration.** Prizm offers Northbound interfaces that allow simple integration with other Operations Support Systems (OSS), including network management systems (NMS), billing, provisioning and Customer Relationship Management (CRM). Open industry standards assure easy integration with SNMP and XML based systems.

Only Prizm automatically integrates new Canopy and MOTOWi4 equipment and features into your network as they become available. Current BAM and Prizm users will find a simple upgrade path to Prizm. In addition, Prizm and the entire MOTOWi4 portfolio are backed by Motorola's industry-leading technical expertise and global support network.

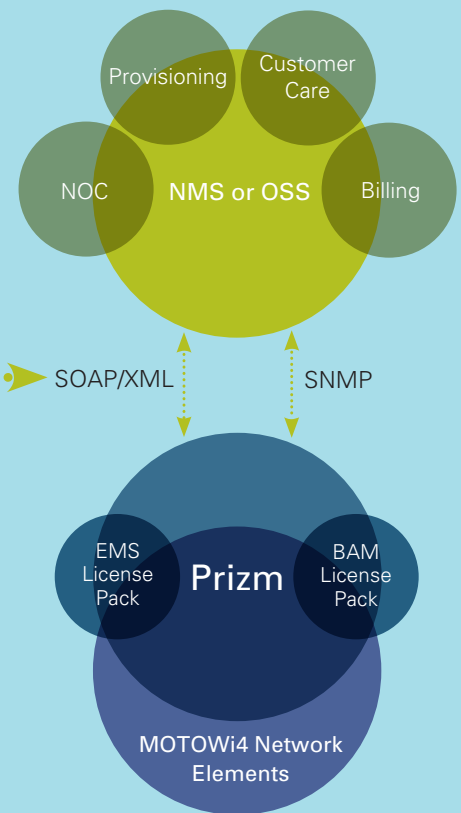
## How Prizm Reduces Risk for Telcos and Carriers

Large telephony (wired/wireless) networks depend heavily on leading-edge network management capabilities. For telcos and other large carriers, Prizm offers an integrated platform that delivers highly advanced functionality for day-to-day operations, security, fault response, and authentication as well as bandwidth management. Open industry standards assure that Prizm can easily be integrated using SNMP and XML into networks and legacy OSS systems.

## How Prizm Empowers ISPs and WISPs

As ISP and WISP Canopy networks grow, operators must decide when to move from manual to automated network management. The fact is, even if you have a 100-SM network, to make a software change you'd have to "touch" all 100 devices, taking hours to do what an automated system can do in minutes. Once you've decided to move to automated management, you have to decide between buying a system or trying to cobble together your own system. In the long run, considering that do-it-yourself systems consume extraordinary amounts of IT time and must be re-built with every device or software change, it is almost always more cost effective to purchase Prizm. The system's new affordability makes the decision all that much easier.

- Integrate with independent OSS systems
  - Billing
  - Provisioning
  - CRM
- Open Interface
- Ease of Integration
  - SNMP
  - XML
  - HTTP
- SDK Available



The Northbound interface allows other computer systems to 'talk' to Prizm and make requests for transactions or data. This is in contrast with the Web-based graphical user interface that allows humans to 'talk' to Prizm.

## Connecting the Unconnected: The MOTOWi4™ Portfolio

Motorola has been a global leader and innovator in wireless technology for over 75 years. Our expertise at "connecting the unconnected" has literally been proven all around the world. MOTOWi4 is a portfolio of Motorola's next generation IP solutions for fixed and portable broadband access that is making the Internet and information more accessible in communities in more than 100 countries. Products include: Canopy wireless broadband access platform, Mesh, WiMAX and BPL solutions.

For more information about how the Prizm Element Management System can optimize your Canopy network's performance, call us at 1.800.795.1530 or 1.866.515.5825 or visit us on the Web at [www.motorola.com/canopy](http://www.motorola.com/canopy).

**MOTOWi4**

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**CANOPY**  
Motorola Wireless Broadband Platform