

# Juniper Networks EAP EM

## EAP Expansion Module for Juniper Steel-Belted Radius SP

Juniper Networks EAP Expansion Module is an add-on to Juniper Networks Steel-Belted Radius Service Provider Edition RADIUS/AAA server that lets operators offer secure 802.11 wireless LAN-based services to their customers. Juniper's EAP EM is based on the IEEE

security standard 802.1x, and supports the strong wireless LAN (WLAN) security protocols EAP-TTLS and EAP-TLS. By adding EAP EM to your existing SBR SP deployment, you can offer subscribers the secure access from public venues they've been demanding.

Juniper's EAP EM enables you to target new subscribers who require secure Internet access, plus offer enterprise customers public access which is as secure as their WLAN access at work. Enterprise users have the added convenience of being able to use the same client software and credentials, whether they're connecting at work or at a hotspot. Finally, Juniper's SBR SP and EAP EM fully support the roaming environment you've already put in place. When your subscribers connect over other providers' networks, the use of EAP EM and its supported strong security protocols lets you rest assured that your customers' names and credentials will remain private. EAP EM puts you on the cutting edge of access technology, and positions you well to tap into these lucrative new revenue opportunities.

### Strong WLAN Security

The joint SBR SP and EAP EM solution provides all you need to support secure 802.1X-based access on your network. SBR SP enables you to provide wireless subscriber access control by authenticating users against a back-end database of user credentials, and granting access only to those users who are in your or one of your customer's database. The WLAN security protocols supported in EAP EM include EAP-TTLS, EAP-PEAP, and EAP-TLS for additional layers of security to fully protect your customers' access. These protocols offer strong security over a wireless link and across untrusted networks, fully protecting credential and data security.

### Numerous Service and Deployment Options

Juniper's SBR SP and EAP EM offer you the flexibility you need to set up hotspot access services any way you wish, and accommodate the requirements of all your customers. For the subscriber relationships you manage directly, if you deploy EAP-TTLS or EAP-PEAP, you can set up user names and passwords in your SQL, LDAP, Solaris NIS, or other back-end database. What's more, when you offer existing subscribers secure WLAN access, there are no changes required to their credentials or configuration. This allows you to fully integrate your secure WLAN users with other users you may be offering other types of services to, such as VPN or dial access.

If you're deploying EAP-TLS, you can set up user certificates in any Certificate Authority. And, for your enterprise customers, you can elect to authenticate subscribers against the authentication database and scheme already in place on their network. This can be accomplished via a standard proxy RADIUS request to the enterprise RADIUS server.

### Related Solutions

Odyssey Access Client, our multiplatform 802.1X access client, is an ideal solution for your customers. It's easy to deploy and use, supports all WLAN protocols, and runs with equivalent functionality on Windows XP, 2000, 98, Me, and Windows Mobile 2003.

### System Requirements

Together with SBR SP, EAP EM runs on Solaris 7 and 8 running SPARC or UltraSPARC and Windows Server 2003, XP, 2000, and NT.

Features	Benefits
Offer secure public WLAN access based on 802.1X	Tap into new revenue opportunities Provides tools for carrier-hosted secure enterprise services, allowing you to target new services to the enterprise Flexibly set up secure access services to meet your business model
Integrates easily into existing authentication and billing system	Authenticate secure hotspot users against your existing credentials database, or the enterprise database Supports your existing business and roaming relationships
Strong WLAN security	Fully protects login credentials and data on the wireless link and across untrusted networks Flexibly handle any security requirements, including user name/password or certificate-based logins Compatible with Juniper Networks Odyssey Access Client, a secure, easily deployed 802.1X client