

# CROSSBOW™ *Secure Access Manager*

CrossBow™ is a proven Secure Access Management solution designed to provide NERC CIP compliant access to Intelligent Electronic Devices. Bow has focused the CrossBow solution on delivering productivity gains for administrators and users while achieving full NERC compliance in managing, securing and reporting on remote access. When used in combination, CrossBow and the new CrossBow Station Access Controller for local substation access, form an integrated, comprehensive solution with a seamless configuration environment.

## Benefits

- User-friendly GUI, granting transparent access to IEDs from virtually any software application
- Global Password Management of all applicable relays and gateway devices
- Preserves investment in legacy gateway devices and communication infrastructure
- Meets NERC standards for cybersecurity
  - Strong (2-factor) authentication
  - Individual user accounts and privileges
  - Audit log of activity
- WAN or Dial-up access
- Administration interface allows management of thousands of IEDs and hundreds of users
- Integration with Active Directory, RSA SecurID and other enterprise authentication solutions
- Complete set of one click NERC CIP compliance reports
- Support for unattended or scheduled application dial out
- Comprehensive management of Garrettcom routers and switches

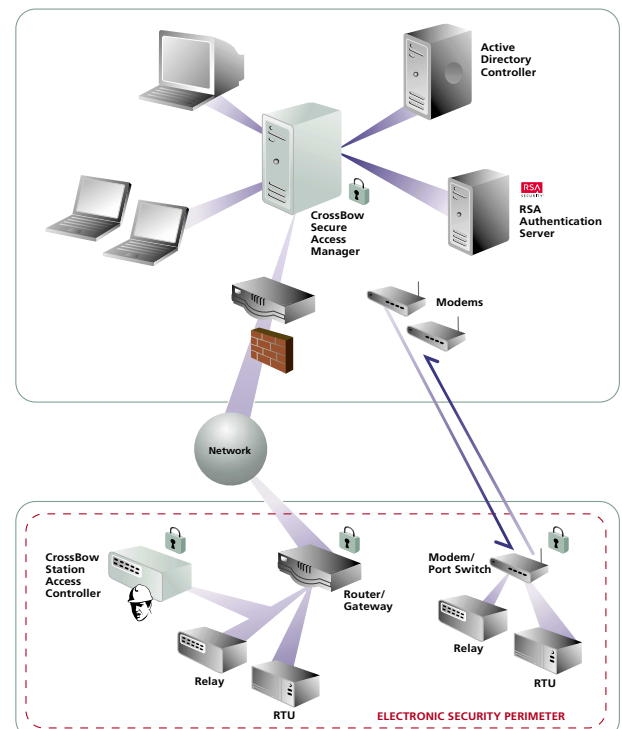


## CrossBow Overview

Bow Networks' CrossBow application addresses the need of utilities to interactively access remote field IEDs, for maintenance, configuration, and data retrieval. CrossBow allows an IED maintenance application to remotely communicate with its associate IEDs, as if the user were directly connected to the IED with a serial cable or network connection. User access is governed by the appropriate authentication model (e.g. RSA) and all user activity is logged and reported per the NERC CIP specification.

## System Architecture

The CrossBow system consists of a central server, and a number of clients. The clients are typically the user's desktop or laptop computers. The server contains the system database, based on Microsoft SQL Server, and manages all connections from the clients to the remote IEDs. The alternative Application Server architecture also allows for the central management of all native IED applications by locating them on a central server, eliminating the need for client software on the user's desktop.



## Features

### Security

- Individual user accounts and permissions
- Two-factor authentication, using RSA SecurID (optional)
- Audit log of all IED accesses and security events
- Support for Active Directory
- Blocking and logging of specified IED commands
- Optional encryption
- Support for scheduled polling by applications
- Designed to NERC CIP-002-1 through CIP-009-1
- Optional CrossBow Station Access Controller extends offering to the substation

### Automation

- Support for IED polling applications (e.g. SEL 5040)
- Scheduling of many activities (e.g. log retrieval, report generation, password changes)

### Ease of administration

- Structured view of IEDs (region/substation/gateway)
- Supports groups of IEDs and users
- Transparent integration with Active Directory
- Database redundancy, including Hot Standby availability

### Supports wide range of remote gateways and servers

- SEL PRTU/2020/2030/2032
- Garrettcom Router family
- Bow Networks eLAN Substation Communications Server
- Novatech Orion
- Telephone port switches
- Teltone Gauntlet Gateway
- Other routers and terminal servers
- Most vendors applications

### WAN or modem access to field

- Integrated modem pool management

## About Bow Networks

Bow Networks was founded in 1986 to provide real-time computing expertise to utilities and electric industry vendors. For more than twenty years, the Company has established its reputation as a leader in applying sophisticated network-based solutions and user applications, expert knowledge of protocol translation, security, enterprise networks, LAN/WAN technology, and communications media. Bow Networks is fully committed to security in the electric utility industry and has invested significantly in what is now the most proven solution for secure remote access management – CrossBow.

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**Bow Networks**  
200, 550-71 Street SE Calgary, AB T2H 0S6 1-403-253-8433  
Email: [info@bownetworks.com](mailto:info@bownetworks.com)  
[www.bownetworks.com](http://www.bownetworks.com)

