Ascend

Ascend Access Control Overview

Ascend Access Control Key Competitive Advantages

- · Comprehensive network-wide security solution
- Complies fully with the IETF ratified RADIUS specification
- Includes Java-based, point-and-click interface
- Supports ODBC-compliant databases such as Oracle, Sybase, Informix and IBM DB2 for authentication and accounting
- Identifies, authenticates and authorizes both analog and digital users. Includes extensive accounting information for billing
- Supports Proxy-RADIUS and Ascend Intranet Authentication for Intranet and VPN services
- Token card security support includes Security Dynamics, AssureNet Pathways, Enigma Logic, Bellcore and Cryptocard
- Supports the Ascend Dictionary of attributes. Runs on UNIX (SunOS, Solaris, HP UX and AIX)
- · Windows NT support planned by the end of 1996
- Access Control includes the client library for the token card security

Pricing

Unlimited number of users (includes accounting)\$3,000

Planned

Windows NT support available at the end of 1996



CISCO SYSTEMS

CiscoSecure

CiscoSecure is an authentication system that is based on TACACS+, a proprietary protocol from Cisco. It offers PPP, SLIP and Appletalk authentication and is designed mainly for analog dial-up authentication. TCP is used for transport protocol and all data transactions are encrypted between the NAS and the CiscoSecure. It also includes a GUI for configuration and supports token card security.

Pricing

| CiscoSecure Unix Sever Base Unit - 16 Ports/Sessions | \$4,200 |
|--|-----------|
| CiscoSecure Unix Sever Base Unit - 48 Ports/Sessions | \$9,500 |
| CiscoSecure Unix Sever Base Unit - 192 Ports/Sessions | .\$19,200 |
| CiscoSecure Unix Sever Base Unit - 1024 Ports/Sessions | .\$39,900 |

Weaknesses

- Not compliant with any standard; proprietary protocol
- Very expensive system
- · Increased delay when hundreds of users need to be authenticated due to encryption of all data
- Limited ISDN support (straight PPP only); no Bandwidth On Demand authentication
- Lacks direct support for frame relay
- Limited platform support; runs only on SunOS (customers have to perform their own porting to other platforms)
- No Proxy-RADIUS support

SHIVA

Universal AccessManager

This is the same shareware program that was available from a Web site in Hong Kong until late August. It only runs on MS Windows platforms and not on UNIX. It acts as both a RADIUS as well as TACACS, XTACACS and TACACS+ server (customers must pay extra for TACACS modules). It supports NT domains authentication.

Pricing (just RADIUS without TACACS and accounting modules)

| 500 Users:\$4, | ,000 |
|-----------------------------------|------|
| 2,500 Users\$5, | ,000 |
| 5,000 Users:\$7, | ,000 |
| 7,500 Users\$9, | ,000 |
| 10,000 Users\$12, | ,500 |
| Unlimited\$15 | ,000 |
| Accounting module (additional)\$4 | ,000 |

Weaknesses

- Formerly a shareware program
- Not available on UNIX platforms
- Expensive
- Does not support important features for ISDN such as MPP and MP+
- Does not have features that are comparable to Ascend Intranet Authentication

- No support for Kerberos, Bellcore S/Key or Cryptocard
- Supports only the basic RADIUS attributes; does not support the popular Ascend RADIUS dictionary
- No Proxy-RADIUS support
- · No token card support (announced for end of 1996)
- No ODBC support external databases (announced for end of 1996)

US ROBOTICS

RADIUS

Currently does not offer a commercial RADIUS package yet; relies fully on the freeware offered by Livingston and Merit that includes the basic RADIUS attributes.

Pricing

Not applicable.

Weaknesses

- · No GUI for configuration and management of the freely available RADIUS
- · Does not offer a commercial authentication server
- Supports only the basic RADIUS attributes from Livingston, which is mainly focused on analog dial-up users and has very limited ISDN support
- No Proxy-RADIUS support

LIVINGSTON

RADIUS

Livingston was the first to develop the RADIUS protocol and make it available to the public free of charge. It supports basic RADIUS attributes, which is mainly focused on analog dial-up users and has very limited ISDN support.

Pricing

Free from the Livingston FTP site.

Weaknesses

- No GUI for configuration and management
- No ODBC database support; not scalable for a large number of users
- Basic attributes/feature support; very limited ISDN support
- Requires complex procedures to build the RADIUS program
- No Proxy-RADIUS support



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