product information

# Ascend

# Access Control

Remote Access ▾ Internet/Intranet Access ▾ Corporate LAN

Managing thousands of users can be a burden on you and your network resources. Take command of your remote network with Ascend Access Control.

Ascend Access Control™ is a comprehensive network-wide security management system that lets corporations and service providers manage, control and secure analog as well as digital remote access connections. Using Access Control, administrators can identify legitimate callers, perform authentication and authorization, monitor access to network resources and compile extensive billing and accounting details. It works with any RADIUS-compliant network access server such as Ascend's MAX™ product family, and it supports all of the popular platforms, protocols, authentication methods, token cards and database servers.

Access Control is the ideal solution for handling the dial-up traffic on corporate intranets and Virtual Private Networks (VPNs). Administrators can supervise the network activities of thousands of remote callers using Access Control Manager—a Java-based application with a point-and-click interface. When used in conjunction with Ascend's Secure Access™ products, Access Control delivers a surefire, single-vendor solution for protecting the entire network.

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# Networking Solutions with Built-in Security Management

## Identification and authentication permit legitimate callers while restricting unauthorized access

Access Control's identification and authentication functions analyze and validate all users dialing into the network. Features such as Calling Line ID (CLID) eliminate the possibility that a hacker gains access simply by guessing the password. Authentication capabilities then confirm a user's identity through a series of first tier password checks as well as analog and digital authentication protocols.

- Calling Line ID (CLID)
- Callback
- PAP and CHAP
- UNIX passwords
- TACACS, TACACS+ and Kerberos
- Third-party token cards: Security Dynamics' ACE/Server, Enigma Logic's SafeWord Server, AssureNet Pathways' Defender, Bellcore's S/Key, Cryptocard
- Analog and digital user authentication: SLIP, PPP, Multilink PPP (MP), Multilink Protocol Plus™ (MP+), terminal server and login user

## Adaptable authorization rules regulate user access to network resources

Access Control offers a comprehensive yet flexible authentication mechanism that lets administrators customize user access rules. They can write rules to permit, limit or deny end user access based on source and destination IP addresses, type of protocol or type of application. Call filters help administrators maintain the connections that have legitimate data traffic and drop other calls after a predetermined period of inactivity.

- Data filters to limit access to specific hosts/networks
- Call filters to determine legitimate traffic
- UDP, TCP and ICMP protocols define authorization
- Applications using source/destination ports such as FTP, TFTP, PING, WWW control access
- Generic filters control non-IP protocols (IPX, NetBios)
- Custom firewalls loaded with Secure Access

## Advanced resource management features deliver large-scale control over network infrastructure

Access Control gives network managers the tools to safely and completely manage the system resources on their network. They can assign additional bandwidth, pool IP addresses and send messages on user connections.

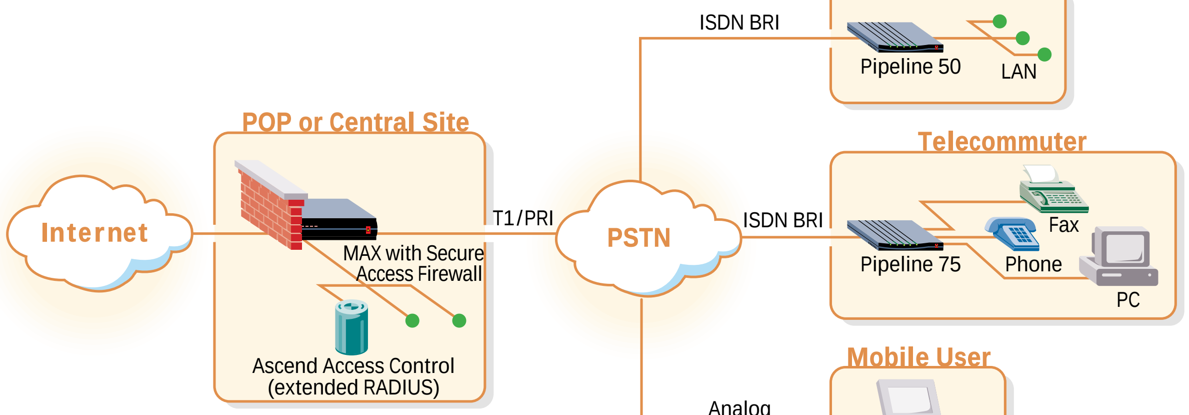
- Dynamic IP address assignment from an IP pool
- Static route assignment
- Banner messages for terminal server sessions
- Assignment of Frame Relay DLCIs
- Support for switched data services
- Password expiry
- Idle timeout

## Access Control Manager simplifies configuration and management

Access Control Manager is an intuitive, user-friendly interface. With this Java-based application, network administrators have enterprise-wide control over the security and administrative functions of the network. Access Control Manager lists the attributes that can be added to a user profile on an individual basis.

- GUI with point-and-click configurator
- User profile templates simplify adding new users
- User-configurable templates simplify managing user files
- User Account Wizard—Windows application which allows for simple user adds and deletes

## Security Management for Remote Access



Access Control identifies, authenticates, authorizes and provides accounting information for all remote users dialing into a central site or POP.

## Detailed accounting functions facilitate billing and analysis of user activity

Access Control collects and organizes information about dial-up sessions to bill customers, analyze resource utilization patterns and charge back departments or projects. The accounting feature collects detailed session information that is used to manage user access and activity.

- Day/time stamped information
- Duration of call and network usage
- Type of connection (analog/digital) and data rate
- Extensive call diagnostics (call termination codes)
- Realtime call tracking
- User profile information

## Support for standard database servers and operating systems protects investments and ensures interoperability

Support for a wide range of operating systems means that Access Control can be integrated into a network without making an additional investment in infrastructure. Because Access Control is ODBC-compliant, administrators can rapidly retrieve data for authentication from a centralized user management system using databases such as Sybase or Oracle. Statistics can be collected and forwarded to the ODBC-compliant database for easy report generation.

- Operating systems: SunOS 4.1.4 (Solaris 1.1.2), IBM AIX 4.1, Solaris 2.5.1 (Intel/Sparc), Windows NT, HP UX 9, 10 (PA RISC)
- Support for ODBC-compliant databases: Oracle 7, Sybase System 11, IBM DB2, Informix

## Proxy-RADIUS establishes secure connections for VPNs and corporate intranets

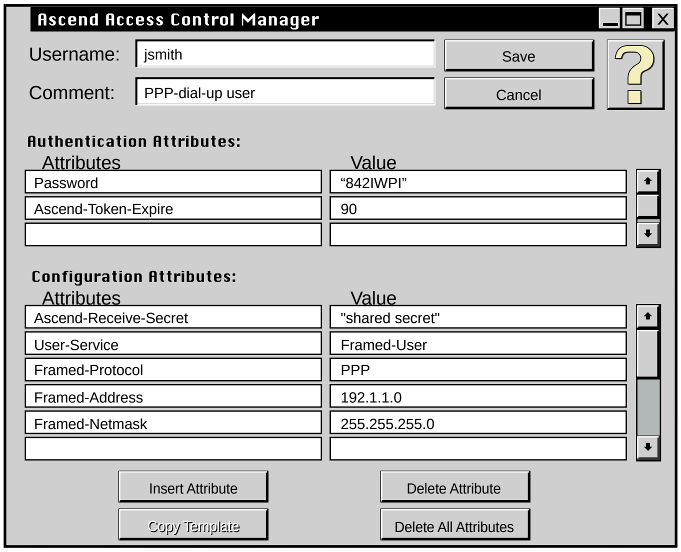
The Proxy-RADIUS functionality within Access Control facilitates the setup and management of VPNs by corporations and ISPs. It typically resides at the central site of a network service provider while another authentication server such as Access Control resides at the corporate network. Together, they authenticate users. After successful authentication, Access Control facilitates establishing a tunnel to the corporate network for Virtual Private Networking.

- Proxy-RADIUS in conjunction with Point to Point Tunneling Protocol (PPTP) and Ascend Tunneling Management Protocol (ATMP) establishes a tunnel
- Access Control is compatible with a wide range of authentication servers such as RADIUS, TACACS, TACACS+ and Kerberos
- Realm-based (domain name) authentication
- DNIS-based realms—Proxy calls based upon called number

## Ascend Intranet Authentication consolidates security management for intranets

When the Ascend Intranet Authentication feature within Access Control is used in VPN/intranet applications, the need for a separate authentication server at the corporate site is eliminated. Corporations can use the authentication server located at their service provider's central office while still managing and maintaining their own user information.

- Eliminates the need for multiple authentication servers
- Enables companies to manage their own user information on the service provider's database
- Username
- Password
- User profile



Username: jsmith

Comment: PPP-dial-up user

Authentication Attributes:

| Attributes | Value |
|---|---|
| Password | "842IWPI" |
| Ascend-Token-Expire | 90 |
| | |

Configuration Attributes:

| Attributes | Value |
|---|---|
| Ascend-Receive-Secret | "shared secret" |
| User-Service | Framed-User |
| Framed-Protocol | PPP |
| Framed-Address | 192.1.1.0 |
| Framed-Netmask | 255.255.255.0 |
| | |

## Access Control Manager

Access Control Manager gives administrators enterprise-wide control over the security and administrative functions of the network.

## Specifications

| | |
|---|---|
| Analog and Digital User Authentication | SLIP, PPP, Multilink PPP (MP), Multilink Protocol Plus (MP+), login user, PAP, CHAP |
| User Identification | Calling Line ID (CLID), Callback security |
| User Authentication | User name, password, UNIX password, Kerberos |
| Token Card Security | Security Dynamics, AssureNet Pathways, Enigma Logic, Bellcore S/Key, Cryptocard |
| Per User Authorization | Data filters, call filters, generic filters, immediate telnet, realms |
| Accounting | Username, NAS-identifier, NAS-port, IP address, authenticating server, session-ID, DNIS, framed protocol, connection date/time, duration of connection, start/stop, input/output octets, input/output packets, data rate |
| Resource Management | Dynamic IP address assignment, static route, DNIS authorization, banner messages, assignment of Frame Relay DLCI, routing or bridging, extensive switched data services, password expiry, idle timeout, global IP pools |
| Intranet/VPN features | Proxy RADIUS, the Ascend dictionary |
| ODBC-compliant Database Support | Sybase, Oracle, Informix, centralized management of user and accounting information |
| Access Control Compatibility | Ascend's MAX product family, any RADIUS-compliant network access server |
| Supported Platforms | Sun OS 4.1.4, Solaris 2.5.1, HP UX 10.x, IBM AIX 4.1, Windows NT |

## Ascend Communications, Inc.

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Ascend Communications, Inc. is a leading, worldwide provider of remote networking solutions for corporate central sites, Internet Service Providers' points of presence, remote offices, mobile workers, and telecommuters. Ascend develops, manufactures, markets, sells and supports products which utilize bandwidth on demand to extend existing corporate networks for applications such as remote LAN access, Internet access, telecommuting, SOHO connectivity and videoconferencing/multimedia access. Detailed information on Ascend products, news announcements, seminars, service and support is available on Ascend's home page at the World Wide Web site: http://www.ascend.com.

Ascend markets the GRF, MAX, Multiband, MultiDSL, Network Management, Pipeline and Security families of products. Ascend products are available in more than 30 countries worldwide.

Specifications are subject to change without notice.

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Remote Networking Solutions That Work.™

ISO 9001 REGISTERED