

# WHITE PAPER

Managed Network Continuity & Security



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# Introduction

NetWolves combines cost-effective network security technology with an extensive carrier-neutral network communication portfolio. The result? An intelligent network solution customized for your business.

## **Connectivity Services**

NetWolves offers a full range of telecommunications services for data transmission, including: broadband DSL, cable and satellite; 56K to T3 frame relay; 56K to T3 private lines; dial-up and dedicated ISDN; and dial-up and dedicated IP. To ensure availability of coverage, NetWolves is a licensed carrier in all 50 states and has strategic agreements with most of the major telecommunications carriers, including Sprint, MCI, Broadwing, Focal, AGSI, Qwest, Covad, Road Runner, Cox, Charter and Spacenet. Voice transmission services are also available from NetWolves, including switched, dedicated, and voice over IP.

## **Network Security Services**

To protect a business from unauthorized access to its intellectual property, NetWolves offers an extensive array of scalable security services, including our unique performance-based dynamic alternate routing capability, ASURERoute. Other security services include ICSA-certified firewall, intrusion detection, IPSec and SSL VPN, congestion management, advanced routing, quality of service, content filtering, and email virus protection. These services ensure the secure and uninterrupted transmission of confidential information between all office locations.

## **Network Management Services**

Businesses today must confront reduced staff, a confusing telecommunications marketplace, and ongoing pressure to reduce costs. Outsourcing vital IT tasks can greatly relieve the pressure on IT departments, free-up staff resources, remove the barriers to growth, and allow businesses to focus on their own core competencies. NetWolves can help navigate these challenges with our patent-pending Secure Remote Monitoring and Management (SRM<sup>2</sup>) system, as well as our ability to support many popular SNMP-compliant devices. At your disposal is a 24x7 security management center without the cost of staffing or training your own facility. SRM<sup>2</sup> offers high-level service while protecting intellectual property, managing network costs, and providing real-time response to network issues. Monitoring and managing the health and well-being of your network infrastructure is provided around-the-clock by qualified professionals at NetWolves.

### **Support Services**

NetWolves has the right combination of expertise and experience that most businesses come to expect from an organization that is responsible for deploying, integrating, supporting and monitoring their network infrastructure. A dedicated account and support team will conduct a thorough needs assessment to understand your current requirements and ensure that your network will meet future demands. Our support staff is knowledgeable, professional and willing to go to great lengths to help resolve your questions. In partnership with NCR, NetWolves can also provide support services worldwide. NetWolves' custom invoicing enables maximum flexibility, helping you manage network expenses by providing detailed information in a format that meets your requirements.

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# Connectivity Services

NetWolves represents all of the major telecommunications carriers and offers services both for data and voice transmission. Using our consolidated information and invoicing system, all carrier and network related expenses can be invoiced on one bill to meet your business requirements.

## Data Services

NetWolves can keep your business connected with the latest technologies for your primary and backup data network. NetWolves offers a variety of data connectivity services, including frame relay and private lines with transmission speeds ranging from 56K to T3, or cost-effective broadband services like DSL and cable, as well as IP and ISDN services.

Features Summary
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- |   |
|---|
| <ul style="list-style-type: none"><li>• NetWolves is an FCC-licensed and tariffed carrier in all 50 states, offering multiple services on a single invoice.</li><li>• NetWolves has strategic agreements with several leading telecommunications carriers, including Sprint, MCI, Broadwing, Focal, AGSI, WiITel, Qwest, Covad, Road Runner, Cox, Charter, and Spacenet.</li><li>• Network management expertise, including a dedicated account and support team.</li><li>• Thorough needs assessment to understand current network infrastructure and future requirements.</li><li>• Also available is our extensive line of voice services, including voice over IP, switched and dedicated outbound, switched and dedicated toll-free inbound, dedicated T1 access loops, as well as calling and debit cards.</li></ul> |
|---|

## Broadband Services

Broadband delivers reliable and secure connectivity, including support and service options that are custom developed to transform the Internet into an indispensable business tool.

- DSL uses existing phone lines in most metropolitan areas, and offers upload and download speeds of 128 Kbps to 8 Mbps.
- Cable is readily available in most metropolitan areas, and offers download speeds of 200 Kbps to 5 Mbps and upload speeds of 128 Kbps to 5 Mbps.
- Satellite is available virtually anywhere and makes a good choice when considering redundant connectivity to complement an existing land line technology. Satellite offers download speeds of 1 Mbps and upload speeds of 50 to 250 Kbps.

### **Private Line Services**

Private line provides extensive communication between fixed locations.

- 56K/DS0 provides low bandwidth and a constant connection between two locations.
- T1/DS1 provides dedicated, totally digital, end-to-end service with bandwidth of 1.5 Mbps. T1 integrates voice, video and data, accommodating up to 24 equivalent channels.
- DDS provides a single dedicated, totally digital circuit for transmission speeds of 56 Kbps and sub-rate speeds of 2.4 Kbps, 4.8 Kbps, and 9.6 Kbps.
- T3/DS3 provides dedicated, totally digital, end-to-end service with a line rate equivalent to 28 T1 circuits. T3 handles an enormous volume of data communications (45 Mbps), and connects users through point-to-point service.

### **Frame Relay Services**

Frame relay eliminates management of multiple lines by streamlining the traffic on a single access line. Applications include high-speed fax, email, image transfer, database access, time sharing, LAN connections, and mainframe-to-mainframe connections. Frame relay can greatly reduce equipment expenses and management of multiple private lines. Multiple locations can communicate using predetermined permanent virtual circuits. SONET technology is used in the event of a fiber cut and provides uninterrupted service.

- 56K/DS0 provides a single connection for affordable, low bandwidth connectivity.
- T1/DS1 provides a high bandwidth frame relay connection at 1.54 Mbps. T1 offers large scale connectivity to a proven and reliable form of connectivity.
- Fractional T1/DS1 provides a scalable level of connectivity to a frame relay backbone. It is utilized on shared access with voice services, allowing full utilization of the access pipe and cost sharing on voice and data networks.
- T3/DS3 provides a scalable level of connectivity on a private network that is utilized for either high speed frame relay hosting, multiple host connections, or a large singular port at a lead data location.

### **ISDN Services**

ISDN is readily available in most metropolitan areas and provides for a relatively inexpensive backup connection. ISDN offers download and upload speeds of 128 Kbps.

- Basic Rate Interface (BRI) service is coordinated through NetWolves utilizing a local carrier. It is best utilized as a redundant connection to ensure constant up time at a critical business location.

- ❑ Primary Rate Interface (PRI) service is typically utilized in a call center where ANI delivery information is critical. A single D-channel is used for signaling and framing, and 23 B-channels are used for communication.

## IP Services

- ❑ Dialup provides a flexible low bandwidth connection to a public network. It allows local dial-in from many cities throughout the world, and toll-free access when local service is not available.
- ❑ Dedicated provides a 1.54 Mbps connection to the Internet backbone.
- ❑ T3/DS3 provides dedicated, totally digital, end-to-end service and handles a large volume of data communications.

## Voice Services

Save money without sacrificing quality and reliability using NetWolves voice services. NetWolves offers several cost-effective voice services, including switched and dedicated outbound, switched and dedicated toll-free inbound, dedicated T1 access loops, calling and debit cards, and conference calling.

### Features Summary

- NetWolves is an FCC-licensed and tariffed carrier in all 50 states, offering multiple services on a single invoice.
- NetWolves has strategic agreements with several leading telecommunications carriers, including Sprint, MCI, Broadwing, Focal, AGSI, WiITel, Qwest, Covad, Road Runner, Cox, Charter, and Spacenet.
- Network management expertise, including a dedicated account and support team.
- Thorough needs assessment to understand
- current network infrastructure and future requirements.
- Also available is our extensive line of data services using the latest technologies for primary and secondary circuits, including broadband, frame relay and private lines.

## Switched Outbound & Inbound Services

Experience the freedom of NetWolves switched outbound service. Use your existing business lines for outbound long-distance calling services at incredible savings. Place and receive all intrastate, interstate and international service calls over your existing business lines. NetWolves' use of a totally digital, nationwide fiber-optic network makes every call crystal clear. Call from anyplace and at anytime because there are no restrictions on time-of-day calling patterns. With flat rate pricing, you pay the same low price regardless of the actual call distance. Domestic usage is measured accurately in six-second increments, with a 30-second minimum for international calls. Experience low international rates with full coverage to over 180 foreign destinations. Also, there are no installation charges or monthly recurring service fees.

NetWolves offers toll-free inbound service tailored for growing companies looking to promote growth, improve customer relations, and increase profitability. This service makes use of existing business lines, so additional lines and equipment are not required. Installation takes as little as five days, and additional toll-free services can be added quickly and easily as your business needs change.

### **Dedicated Outbound & Inbound Services**

Dedicated outbound service offers competitive rates, plus the premier quality and technological advantages of all-digital, fiber-optic transmission. Your company is charged the lowest rates possible, starting with the very first call. Dedicated outbound service uses six-second domestic billing increments to more accurately reflect real usage. All international calling to more than 180 destinations is billed by the initial 30 seconds and subsequent six-second increments. There are no monthly service charges, order charges, or installation charges (there is an access charge for T1 service).

Dedicated toll-free inbound service offers the crystal clear connection of a fiber-optic network and call routing enhancements for total flexibility between multiple locations. This service provides a means to generate greater responses to advertising and direct mail campaigns, provide highly accessible customer service, reduce the cost of data transmission with dial-up data applications, and offer remote access to voice messaging and pager services. In addition, single-number convenience means interstate, intrastate, and Canadian calls can be received on the same toll-free number. A full range of automatic call-routing enhancements gives your company complete control over this service.

Other available dedicated voice services include:

- Automatic Number Identification (ANI), a service that transmits the billing number and the telephone number of the incoming call. ANI identifies the calling party for toll call billing and enables the call to be routed to the appropriate long distance service provider.
- Dialed Number Identification Service (DNIS), a service that enables a company to direct specific toll-free numbers to their own individual destination.
- Overflow (route advance), a service that permits an incoming call to automatically use another service line when the primary T1 line is busy or equipment fails, ensuring that the call is completed without a busy signal.

### **Calling & Debit Cards**

NetWolves offers a calling card that gives your company instant access to superior quality, service and savings. If you travel and need to maintain frequent contact with clients, employees, and suppliers, use the NetWolves calling card to call from any phone in the country.

NetWolves offers a debit card that is simple and easy to use from any phone, including hotels and pay phones. No monthly invoice or activation fees. Just dial the required toll-free number and enter the authorization code printed on the card to receive instant access. Cards are purchased in increments of minutes or units, with no minimum or maximum amount restrictions. With each call you are informed of the remaining minutes still available.

## Conferencing

Each day thousands of business professionals rely on conferencing solutions to communicate effectively, while reducing the time and expense associated with business travel. NetWolves offers several easy-to-use, reliable, and cost-effective audio and web conferencing solutions. From small, impromptu meetings to large scale events, NetWolves' complete conferencing services are perfectly tailored to meet nearly any business communication need.

### Features Summary

- Reservationless-Plus is a subscription-based service. The leader controls all conference commands, dialing out directly to all participants as necessary. No reservations or operators are required.
- Reservationless-Express offers simple hosting of team meetings, delivering project updates, and communicating with global colleagues.
- Operator Assisted provides expert operators for managing all conference details. Many helpful features are available for recording, broadcasting, scheduling and administering the meetings.
- Direct Event provides passcode expedited call entry, making it easy for participants to join a conference. Many features are available for customizing a conference.
- Conference Place offers powerful tools for presenting proposals to new prospects, maintaining an archive of training sessions for replay anytime, and hosting company-wide events to report on corporate issues.
- MeetingCenter provides services for launching products to the press and clients, and delivering interactive and affordable training.

### Audio Conferencing Solutions

Need to pull everyone together for a conference call? NetWolves is ready with a complete range of audio conferencing solutions to handle nearly any communication requirement.

### Reservationless-Plus<sup>SM</sup>

Imagine if you could have instant access to a conference call whenever you need it, without making a reservation or involving an operator. Reservationless-Plus provides on-demand conferencing, allowing you to initiate a conference call 24 hours a day, 7 days a week. Holding a conference is as simple as dialing a permanent number and entering a conference code. Built-in features like scheduling, polling and slide presentations help allow for better time management and greater control of the conference call.

**Reservationless-Express**

For simple access to a reservationless conference, Reservationless-Express is the solution. It's perfect when you need to host recurring meetings, supply competitive updates, and deliver late breaking news. Standard options include mute/un-mute, conference lock and operator assistance. Whether your business is a large multinational corporation or has one or two domestic sales offices, Reservationless-Express is the perfect conferencing solution to keep your business connected.

**Operator Assisted**

Today's business world demands more time and energy from its professionals than ever before. Imagine having the personal dedication of an expert operator to assist with conference communications. NetWolves' Operator Assisted service combines personal touch with powerful conferencing features to make every call a hassle-free experience. Let NetWolves manage the details of the call so you can focus on delivering your message.

**Direct Event<sup>SM</sup>**

Conference calls are important communications tools for every business. On-demand conference calls provide an easy way to get teams together, disseminate information, and keep the lines of contact open. But as the size of the calls increase, keeping everything running smoothly becomes more of a challenge. With participants to invite, attendee information to manage, and scores of people to connect to the call, wouldn't it be great to retain the convenience of automated conferencing and get the benefits of a full service event call? Direct Event from NetWolves is just the answer. Direct Event conferencing combines professionalism and personalization with automation. Passcode expedited entry into the call integrates seamlessly with the professional service of operator assistance throughout the call. Select from a full range of surround-the-call features to perfectly tailor each conference to your needs.

**Web Conferencing Solutions**

If a picture is worth a thousand words, just imagine what NetWolves' web conferencing solutions can bring to a conference call. NetWolves web solutions add visuals, collaboration and interaction to any type of audio conference. They are powerful tools to communicate with the board of directors, direct reports, clients - anyone who needs to see and hear your message. Web conferencing requires minimal effort. You control the presentation from a desktop while the audience accesses it via the web. You can present a slide show, collaborate on documents, share applications, and poll your audience.

**Conference Place<sup>SM</sup>**

Are you looking for a tool that will make conference calls more interactive and engaging? Need a way to bring the power of graphic presentations delivered via the Internet to any size meeting you may host? Conference Place from NetWolves is the answer. Conference Place provides a flexible web conferencing platform that can be optimized with the features that best fit the type of meeting you're conducting. From small, collaborative working sessions to large online presentations, Conference Place makes it easy to present, and participants can benefit from the web conference no matter what size the group.

**MeetingCenter**

In today's fast-paced business environment, making decisions quickly and efficiently is critical to maintaining a competitive advantage. Time wasted on scheduling in-person meetings, making travel arrangements, and bringing together a globally dispersed team can mean lost revenue and increased operating costs. Every minute counts. With MeetingCenter web conferencing from NetWolves, you can increase effectiveness and productivity - across your entire company - and make faster, more accurate business decisions every day. Collaborate with employees, customers, and business partners - anytime, anywhere. MeetingCenter integrates data, voice and video content within a standard web browser, so you can conduct real-time meetings over the Internet - simply and quickly.

**Mobile Office**

How do you increase your control and reduce the complexity of delivering a remote access solution for all your connections originating outside the corporate firewall? More and more companies are struggling to provide secure, reliable remote access solutions to a growing population of mobile office workers. Current solutions fail to provide IT professionals with the visibility and control they require to confidently and effectively deliver these services. As remote access methods expand from just dial-up to include broadband wireless (Wi-Fi), cable and DSL, and as the number of devices and the number of service providers increase, managing these solutions becomes even more troublesome.

NetWolves' Mobile Office solution increases the productivity of business travelers that depend on frequent Internet access to keep them connected while they are on the road.

NetWolves' Mobile Office makes it easy for frequent travelers like salespeople and business executives to access the Internet quickly, easily and reliably. Using a single, consistent interface, users can connect via WiFi, hotel Ethernet, dial-up, ISDN, PHS, or GSM/GPRS, regardless of type of access available in their remote location.

In just seconds, mobile professionals can connect from a hotel room, café, airport, customer location or from any one of more than 40,000 wired and wireless access points worldwide, including more than 10,000 Wi-Fi hotspots. By providing just one user-friendly interface and a single-monthly invoice for remote connectivity, NetWolves' Mobile Office eliminates the complex security settings, connectivity hassles and multiple invoices associated with accessing the Internet through a myriad of different providers.

With a complete, integrated remote access solution from NetWolves, you can cut complexity and cost while minimizing risk and maximizing your employees' productivity. You'll also reduce the cost of your communications services and the headaches associated with administrative and support burdens.

<b>Features Summary</b>
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- Automatic service detection. Detects and displays available Wi-Fi and Ethernet services for easy user selection.
  - Zero-click Wi-Fi access. Speeds connection to preferred Wi-Fi services.
  - Connection profiles and bookmarks. Saves connection and security parameters for quick connection to frequently used access points.
  - Custom access directory. Lists nearby dial-up numbers for any location.
  - GPRS/SMS support. Access corporate networks and send/receive SMS messages via independent GPRS services.
  - Contextual controls. User interface removes complexity by adjusting automatically to access technology.
  - VPN auto-launch. Client closes security gap by launching NetWolves VPN software automatically.
  - Hosted service. Server hosting frees enterprise from cost and effort of self-hosting.
  - Total security protection. Policy-driven personal firewall and intrusion prevention protect against theft and disruption.
  - Universal remote control. Web-based console gives IT managers simple, complete control over the end-user experience.
-

# Network Security Services

NetWolves network security services reduce the time and resources a business enterprise requires to maintain a protected network. Unlike other network security products on the market that can be difficult to install and configure, NetWolves offers a comprehensive all-in-one solution with a common web-based interface that bridges the gap between protection and ease-of-use. Depending on your company's particular network security policies, you may decide to implement some or all of the security services offered by NetWolves. All services are fully compatible, so you can decide to upgrade at any time to take advantage of additional features. These security services can also be managed from a central location using NetWolves' Secure Remote Monitoring & Management (SRM<sup>2</sup>) system.

## Firewall

Attacks on network systems have become more prevalent in recent years. Businesses are experiencing different types of losses, ranging from service interruptions to alterations and theft of vital data. Any business with a connection to the Internet requires firewall protection. Many companies unknowingly increase their network vulnerability by adding insecure Internet access points. Making matters worse, network security policies can be difficult to enforce without the implementation of a proven security platform.

NetWolves can protect a company's private network infrastructure from intruders with its high performance firewall technology. Valuable company information is protected from malicious persons who use their skills to perpetrate attacks against corporate networks and inflict costly damage. With NetWolves' proven firewall standing watch, businesses can implement and strictly enforce their network security policies to thwart would-be network predators.

NetWolves' firewall technology uses a combination of advanced security features for protecting systems on a company's network, while simultaneously allowing users to easily exchange information with others on the Internet. The firewall and network address translation (NAT) services offer total control over the creation of custom rules used to meet the stringent demands of nearly any IT security policy. Both the firewall and NAT also offer pre-defined rule sets, which provide for immediate security between your protected network systems and the Internet. A secure web-based administrative interface provides a familiar environment from which all NetWolves security services can be configured to meet the network requirements of today's global business community.

<b>Features Summary</b>
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- Packet filters ensure that all IP packets coming from the Internet have been requested by an authorized user on the protected network.
  - Proxies prevent unauthorized Internet connections, or have been permitted by the security policy from accessing the protected LAN.
  - NAT makes the protected network invisible to outside Internet users by hiding the IP address.
  - NetWolves' firewall technology is standard on all WolfPac security platforms. It can also be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
  - ICSA, an independent standards organization that promotes continuous improvement of commercial Internet security, has awarded Firewall Certification to NetWolves. ICSA-certified firewall products are tested to protect against a standardized and evolving suite of attacks, while allowing business functions to be accomplished.
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## Host-To-Host VPN

Businesses can significantly reduce communication costs and maintain security by adopting VPN technology for data transmission. NetWolves' VPN technology provides a company with the same capability to securely connect separate business locations as private leased lines. NetWolves' VPN offers a wide range of standard features through which companies can reduce equipment costs, network expenses, and service and licensing fees. In addition, this VPN technology can be managed from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.

Data privacy is maintained through the use of tunneling protocols and security procedures sending encrypted data over the Internet. By adopting the standard practices of the Internet Engineering Task Force, NetWolves has developed a secure VPN solution using the latest encryption and authentication technologies. NetWolves' VPN is based on the industry standard IPSec(urity) protocol driven by a customized, fault tolerant UNIX-based operating system.

NetWolves' VPN complies with IPSec standards so that changes and enhancements can be quickly developed to provide customers with the latest security innovations in response to changing threats and market demands. In addition, NetWolves' VPN technology is interoperable with many other VPN vendors including Cisco and Check Point.

Mobile workforces require the ability to communicate with their company's network at any time. Using a laptop, client VPN software, and the Internet, this cost-effective model promotes productivity by giving remote users ready access to vital data resources. To meet this demand, businesses require a far greater number of secure connections to reduce leased private line communication costs through utilization of the Internet for data transmission. NetWolves' VPN technology provides a reliable, secure and cost-effective method to connect corporate networks and remote users together via the Internet.

#### Features Summary

- Interoperability with major VPN vendors.
- IPSec provides for access control, connectionless integrity, data origin authentication, encryption, protection from replays and traffic flow confidentiality.
- Internet Key Exchange enhances IPSec by providing additional features, flexibility, and ease of configuration.
- Authentication Header & Encapsulated Security Payload provide authentication, integrity and confidential security services.
- Point-to-Point Tunneling Protocol allows remote users to securely access data on the corporate network.
- Dynamic VPN routing allows two simultaneous tunnels to be established from a WolfPac security platform to distinct hub sites. Both VPN tunnels are monitored for loss of connectivity and congestion. Network traffic is routed to the secondary tunnel if the primary tunnel fails or congestion exceeds user-defined limits. If both tunnels lose connectivity, traffic will fail over to the secondary WAN interface if NetWolves' optional ASURERoute is in place.

## Client VPN

In today's corporate environment, it is imperative that businesses have options to protect their assets and information through high assurance security technology and follow guidelines for homeland security directives. Remote access security and security within an enterprise are at higher risks now, more than ever. Organizations must address these threats and worries with a higher grade of communications security. The security experts at SafeNet have continually evolved SafeNet's security technology to meet the growing and changing needs of mainstream businesses worldwide.

NetWolves is pleased to offer HighAssurance™ Remote, based on SafeNet's de facto standard VPN software product, SoftRemote®. HighAssurance Remote, which includes FIPS technology, device authentication, and the Advanced Encryption Standard (AES) algorithm, is a ground breaking stride towards security aimed at supporting the nation's homeland security efforts, containing numerous high-level security features not currently found in any VPN software product on the market. HighAssurance Remote is fully interoperable with NetWolves' full complement of Managed Security Services, including ICSA-certified firewall, IPSec-compliant VPN technology, and patent-pending Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.

With pending FIPS 140-2 Level 2 certified technology and the foundation of the industry's clear standard for VPN software, the HighAssurance Remote client is VPN software that provides secure client-to-client and client-to-gateway communications over wireless LANs, TCP/IP networks, and dial-up connections. FIPS 140-2 Level 1 and 2 certification is of particular importance since Level 1 allows the software and firmware components of a cryptographic module to be executed on a general purpose computing system using an unevaluated operating system. Security Level 2 requires, at a minimum, role-based authentication in which a cryptographic module authenticates the authorization of an operator to assume a specific role and perform a corresponding set of services. And with device authentication, HighAssurance Remote strengthens network access password security by ensuring that all computers that attempt to log on have a second form of identification a device identifier.

Providing high assurance VPN capabilities to desktops and portable computers for all versions of Microsoft Windows including XP, HighAssurance Remote offers unparalleled extended features to remote access users connecting to the corporate VPN, protecting the user from growing hazards posed by hackers wielding tools like Trojan horses, spyware, and other malicious code. Covering both direct and remote access to the corporate network, as well as Internet access, HighAssurance Remote is an "always on" application, protecting the user's PC even when not connected to the corporate VPN. HighAssurance Remote is built with SafeNet SecureIP Technology®, which provides the building blocks for security implementations that enable organizations to use the Internet and other shared networks for private communications. Other high assurance features include AES algorithm, MD-5 and SHA-1 hashing algorithms, and compliance with current IPSec RFC standards.

HighAssurance Remote includes full compatibility with Microsoft® Windows® XP, support for NAT Traversal, device authentication, support for browser certificates, Section 508 Compliance, and policy protection.

<b>Features Summary</b>
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- Gateway Hostname Resolution provides the ability to resolve the name of the Secure Gateway Tunnel entry using DNS, WINS, and LMHOST.
  - Automatic certificate selection. HighAssurance™ Remote automatically sends its own certificate based on the request of the peer instead of requiring it to be locally configured; and allows the client (based on configuration) to accept any ID from the peer as long as the accompanying certificate is issued by a "trusted" CA.
  - Virtual Adapter support, which allows an IPSec gateway to assign network settings for improved network functionality with other applications.
  - HighAssurance Remote is built on SafeNet's CGX Library. A comprehensive library of encryption features, the CGX Library and HighAssurance Remote are currently being tested and validated for FIPS-140-2 Level 2 certification.
  - HighAssurance Remote also includes several best-in-class features including a Certificate Manager, a Security Policy Editor, a Log Viewer that lists IKE negotiations, and a connection monitor displaying statistical and diagnostic information.
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## SSL VPN

Companies are being challenged to provide secure and efficient means of accessing critical resource applications residing on protected networks. NetWolves' SSL VPN enables customers to provide business partners and mobile office workers with convenient and secure access to shared network resources. While IPSec VPN and private line solutions are ideal when a secure site-to-site method of transferring large applications is required, NetWolves' SSL VPN may be a smarter choice to implement for supporting business travelers and partners who require access only to email and small files. NetWolves' SSL VPN is also less expensive than IPSec VPN and private line solutions because there is no client software to install and maintain on remote PCs, which can be a real issue for firms with limited IT resources.

NetWolves' SSL VPN service leverages the power and protection afforded by the Secure Socket Layer protocol, standard with today's popular web browsers, to access vital web-enabled resource applications on a company's protected network, including common email and file-share utilities. With NetWolves' SSL VPN, customers can provide authorized users with a simple key chain USB device and unique login password. The combination of these two security features provides formidable protection against unauthorized use resulting from password theft through such means as key logging or theft of the USB device itself.

For maximum flexibility and security, this two-factor authentication also ensures that no trace is left on the remote computer once the USB device is removed. Mobile workers and partners can safely access shared resources from home, the office, and less secure public Internet cafes. NetWolves' SSL VPN provides convenient and secure access to the tools necessary to succeed.

Features Summary
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- No client software to install on remote PCs, and vital resource applications are easily maintained in a central location.
  - Secure end-to-end authentication and encryption exists from the client PC directly to resource applications.
  - Authentication via SSL proxy ensures that a trusted source is accessing the protected network.
  - Supports World Wide Web Consortium (W3C) compliant HTML, including many popular email and file sharing applications.
  - Provides event logging and reporting capabilities.
  - Scalable with other NetWolves security services, including ICSA-certified firewall, IPSec VPN, ASURERoute, intrusion detection, congestion management, advanced routing, quality of service, content filtering, and email virus protection.
  - SSL VPN can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
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## ASURERoute

The new millennium has brought us geopolitical threats and natural disasters. These events have taught us all a valuable lesson - prepare for the unexpected.

Your network infrastructure is no exception. Safeguard your investment from costly service delays and disruptions with ASURERoute from NetWolves. ASURERoute is a unique dynamic alternate routing technology, delivered on NetWolves' proven WolfPac Security Platform, that determines when the required network service levels are not being met on your primary circuit. ASURERoute can determine, on a per application basis, if performance problems exist, and route traffic to an available secondary circuit that provides uninterrupted service, again on a per application basis. ASURERoute will continue to monitor network conditions, and when service levels can be met, it will permit traffic once again to utilize the primary circuit.

ASURERoute can support any circuit technology serving as the primary and secondary means of network connectivity, including DSL, cable modem, satellite, frame relay, private line, ISDN, and IP. ASURERoute can also be monitored and configured remotely from a central location using NetWolves' patent-pending Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.

Features Summary
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- Supports any circuit technology, including DSL, cable, satellite, frame relay, private line, ISDN and IP.
  - NetWolves is a licensed carrier in all 50 states and has strategic agreements with most of the major telecommunications carriers, including Sprint, MCI, Broadwing, Focal, AGSI, Qwest, Covad, Road Runner, Cox, Charter and Spacenet.
  - Performance criteria is fully configurable via a web-based administrative interface.
  - Scalable with other NetWolves security services, including ICSA-certified firewall, IPSec and SSL VPN, intrusion detection, congestion management, advanced routing, quality of service, content filtering, and email virus protection.
  - ASUREroute and ASUREroute+ can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
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### **ASUREroute Protects Against Hardware Failure**

NetWolves' ASUREroute solution can provide high availability by adding a secondary WolfPac Security Platform that behaves like the primary WolfPac, also offering two means of connectivity. The primary WolfPac broadcasts "heartbeat" messages to the secondary WolfPac using the VRRP protocol. If the primary WolfPac cannot function due to hardware failure, the secondary WolfPac will assume all responsibility for data transmission, ensuring that your critical business applications reach their intended destination.

### **Net Metrics**

Performance measurements allow a network administrator to make intelligent decisions toward improving the efficiency of a network. Network administrators can use data collected by NetWolves' Net Metrics technology as an effective means for measuring two separate and distinct performance parameters. The first measurement determines the time required to load a single web page from the Internet. The second measurement determines the time required to send an email to a specified account and receive a reply from that same account.

The results of page retrieval times and email cycle times are written to a file and sent to the FTP server on a periodic basis. Page retrieval times are calculated by defining the time it requires to fully load a specified web page directly from the Internet. Net Metrics clears the web cache automatically before performing the test to ensure that the actual load time of the page is calculated. Net Metrics is also designed to properly route URL redirects. Email cycle times are calculated by defining the time required to send and then receive a reply email from a specified mail account. The cycle time is calculated using the sent and received time stamps on the message.

Features Summary
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- Performance results can be stored locally or reported to a designated database. Multiple web page and email retrieval addresses can be designated.
  - Net Metrics provides tools that integrate with all NetWolves network security services, including ICASA-certified firewall, IPSec and SSL VPN, intrusion detection, ASURERoute, congestion management, advanced routing, quality of service, email virus protection, and content filtering.
  - All Net Metrics parameters are configurable from a web-based administrative interface.
  - Net Metrics can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
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## Quality of Service

Network administrators are quite familiar with the prohibitive effects of latency and queuing on corporate networks. Those familiar with low speed Internet connectivity have probably witnessed at one time the effect a large file transfer has on interactive traffic over the connection. The file transfer can easily consume most of the available bandwidth, causing all other data to be held up until the file transfer is completed. The problem occurs because the file transfer is given the same priority for transmission as other data transfers. There is no consideration given to the type of data contained within each packet when queued for transmission.

NetWolves can help to address this problem with our Quality of Service application, a secure and reliable means of controlling network traffic. Queuing is performed on a first in, first out basis, while data packets are scheduled for transmission on a first come, first served basis. Any new data packet is added to the end of all queued packets and, as a result, it is transmitted last. When the necessary bandwidth becomes available, the first data packet in the queue is transmitted, followed by the second packet, and so on until the last packet is sent.

With NetWolves' QoS technology, consideration can also be given to the type of data contained within a data packet when queuing it for transmission. QoS uses NetWolves' ICASA-certified firewall to categorize data packets and divide them into classifications using any matching pattern permitted by the firewall rules. Depending on a company's security policies, such a classification may contain data packets for a single TCP connection, from/to a given host, an entire sub-network, or even a protocol type. Packets belonging to the same classification are then passed to either of two objects, known as *pipes* and *queues*, which are responsible for implementing traffic regulation. In practice, pipes establish firm limits for how much bandwidth a classification may use, whereas queues determine how different classifications can share the available bandwidth.

Features Summary
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- QoS allows for the shaping the general intensity, direction and breakup of network traffic using various methods such as bandwidth capping, delays, flow queues, and other techniques.
  - QoS ensures toll-quality voice over IP communications and high levels of network performance. Because VoIP transmits voice over data circuits, the QoS application is critical to controlling and shaping the packetized voice traffic over the network for uninterrupted toll-quality voice communications.
  - QoS is scalable with other NetWolves security services, including ICSA-certified firewall, IPSec and SSL VPN, ASURERoute, intrusion detection, congestion management, advanced routing, content filtering, and email virus protection.
  - QoS can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
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## Virus Protection

Tens of thousands of known viruses are being transmitted on the Internet today, with hundreds of new viruses detected each month. A business is particularly susceptible to virus attacks due to the large amount of email traffic it receives from other networks, including the Internet. To combat this potentially expensive problem, NetWolves offers virus protection as part of a comprehensive managed security services strategy for protecting your enterprise.

Email virus programs are transmitted via an email message. Sometimes the virus program is embedded within the text, while other viruses often appear simply as attachments. The virus is activated when an unsuspecting user opens the infected email message, or selects the email attachment. The virus then attaches copies of itself to other programs in the system, which are copied to other programs.

NetWolves' Anti-Virus system automatically scans inbound (POP3) and outbound (SMTP) email and attachments for most of today's popular email clients, including Microsoft Outlook, Outlook Express, Netscape Mail, Eudora, Pegasus, and many others. Email scanning provides a first line of defense from inbound threats before they arrive in the email inbox of your PC, and from outbound virus proliferation. Email scanning ensures that your computer's inbox remains virus-free.

The NetWolves Anti-Virus application is designed to work seamlessly with PC-based anti-virus applications, such as McAfee's VirusScan®, to provide a complete virus protection solution. The Anti-Virus system protects your network infrastructure from destructive viruses, worms and trojans such as Nimda, Melissa, Love Letter, and 911.

NetWolves' Anti-Virus system can be configured to automatically check for virus signature update files to ensure that your business is protected from the latest malicious threats.

Features Summary
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- The NetWolves Anti-Virus application is provided as a 30-day evaluation copy from McAfee. A valid license key must be purchased directly from Network Associates or one of their licensed suppliers. It can be easily uploaded to the WolfPac.
  - Configured as an email server and relay agent, email messages are scanned by the anti-virus application residing on the WolfPac before reaching the intended destination.
  - New virus signatures can be uploaded to the WolfPac automatically.
  - If a virus is detected, an email alert is sent to a specified email address notifying your administrator and the sender of the condition.
  - Anti-Virus can be configured to file via a schedule.
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## Intrusion Detection

Businesses are concerned with protecting their intellectual property, especially when it is located on publicly accessible network systems. Networks are vulnerable to attacks against which a firewall alone may not offer enough protection. An Intrusion Detection System provides an additional layer of security over and above a firewall.

NetWolves' IDS monitors the network's local host devices and network traffic for signs of attempted attacks and network security breaches. It is designed to detect and report unauthorized activity throughout a network, including port scans, network mapping, unauthorized access, failed access attempts, and abnormal network traffic patterns. NetWolves utilizes well-tested and proven network IDS technologies to accomplish its regimen. These technologies perform real-time traffic analysis and packet logging on IP networks, as well as host-based protection for the WolfPac security platform.

Integration with other NetWolves security services places the IDS functionality in an ideal position between the internal protected network and the unsecured external world.

<b>Features Summary</b>
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- IDS protects the integrity of the WolfPac, including the operating system, firewall, mail server, file sharing server, and other resident security services.
  - NetWolves' network IDS resides on the WolfPac between the protected and unprotected sides of the Internet connection. This provides an ideal vantage point for detecting unauthorized network traffic.
  - NetWolves' web-based administrative interface allows for easy access to IDS logs. Highly functional sorting and searching capabilities allow the logs to be easily analyzed by authorized users.
  - NetWolves' IDS can be configured to send alerts to designated contacts based on detection of various potential attacks.
  - NetWolves' IDS technology can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
  - File system binary checking with file digest data compiled into a database, which is monitored daily for a change to the MD5 digest.
  - Uwatch (user watch) for logging user logins and associated time stamps. User activities are also reported.
  - Log watch & log surfer for monitoring system logs for key words like warnings and emergencies. Reports are sent to a specified email address.
  - Snort for network IDS, providing key command line variables for managing facilities.
  - IP trap to monitor and record all communication with outside services and locations.
  - Remote logging to maintain system log files.
  - System snapshot utility, including the current dmsg, IP configuration, firewall rule sets and logs, and database.
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## Content Filtering

Control what web sites are accessed from your business computers with easy-to-use web filtering from Cerberian™. NetWolves offers this advanced technology to protect your business from the threat of objectionable content. Cerberian Web Filter provides a value-added service that integrates with NetWolves' managed security services, including the WolfPac security platform and patent-pending Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.

Cerberian hosts and manages URL categorization, policy management, and reporting application services in geographically distributed data centers. The WolfPac intercepts user requests for web pages and uses the Cerberian service to determine whether or not to allow the user to view the page. Not only does the Cerberian Web Filter maintain a database of several million categorized URLs, but it also uses proprietary Dynamic Real-Time Rating technology with content vectoring to categorize new web pages. Content vectoring not only looks at the meaning of words, but also looks at the words in context and the formatting applied to the words to determine the category that applies to the page.

This delivery model speeds implementation, minimizes expenses and risks incurred across the application life cycle and reduces the need for in-house technical support. Because of its unique architecture, Cerberian Web Filter provides the most effective and efficient content filtering solution available.

<b>Features Summary</b>
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- **Database Accuracy.** Cerberian maintains one of the largest databases of categorized URLs in the industry.
  - **Reliability.** Cerberian strives to maintain a 99.5% server uptime.
  - **Scalability.** Organizations with multiple locations can install a WolfPac at each location and then centrally manage and monitor the Internet usage at each location.
  - **Latency.** End users will not notice the difference between a request directly to an Internet site and a request processed through the Cerberian Web Filter.
  - **Security.** Cerberian never sells URL ratings requests or publishes usage statistics related to your organization's traffic patterns. This information belongs to you, and no one else has access to it.
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## **Lookup Appliance**

Any one of the many geographically distributed Lookup Appliances can process messages from the WolfPac. The Lookup Appliance looks up URLs in the ratings database. If the page doesn't have a rating, it will forward a request to the Cerberian Data Center to have the URL rated by the Dynamic Real-Time Rating service. The Lookup Appliance then compares the rating with either the list of categories supplied by the WolfPac or with the categories described in the policy in effect for the user who made the request. The Lookup Appliance then returns a permit or block message to the WolfPac.

The Lookup Appliance also has processes that manage its local databases. On a periodic basis, typically every five minutes, the Lookup Appliance requests updates to its policy, ratings, and administrative databases from the Cerberian Data Center. It also stores logging information and periodically forwards that data to the Cerberian Data Center.

**Dynamic Real-Time Rating**

The Internet changes constantly. No ratings service can ever hope to categorize every web page. When users request a new URL that has not been rated in the Cerberian ratings database, the Cerberian service uses its unique Dynamic Real-Time Rating (DRTR) service to retrieve the page from its host server and analyze its content. The DRTR service looks at the words used, the context for each word and the formatting used on the page and responds immediately to pages with objectionable content by categorizing the page for instant action of either block or allow. DRTR then moves the remaining new pages into Cerberian's holding file for human review, which upon completion get assigned to one of Cerberian's content categories within days of its finding.

**Data Center**

The Cerberian Data Center houses all the master databases and the administrative web server. Each of the Lookup Appliances stores a quick access version of the master databases. For example, the master ratings database stores all known information about requested URLs and the associated ratings. The Lookup Appliance only needs enough of this information to quickly assign the correct rating to a page. Thus, the Lookup Appliance receives a smaller, quick access version of the master ratings database. The Cerberian Data Center also stores all the logging information used to generate the real-time reports available through the administration web site, also housed in the Cerberian Data Center.

**Policy Management**

To manage company Internet policies, end user administrators use a web browser to log into their administration account that resides in the Cerberian Data Center. Through the web interface, administrators create groups, users and policies. Through the policies, the administrators assign which of the 55 available categories of web sites the users may or may not view. Policies can apply to one or more groups, and administrators can choose to have different policies in effect during different times of the day.

**Report Services**

Administrators also view reports from the Cerberian Reports Service through the same web interface. The administrator can view real-time reports presented in both graphic and tabular formats about the sites visited, attempts to view prohibited categories, top users, individual users and so forth.

## Network Security Platforms

The WolfPac Series provides a secure and reliable foundation from which to connect to the Internet.

### WolfPac SG Platform

The WolfPac SG comes equipped with three PCI slots for WAN, LAN and DMZ connections. Offered with a 1.6 GHz or 2.8 GHz processor, a 40 GB hard drive and 128 MB or 512 MB of RAM, the WolfPac SG premium performance options complement an extensive list of network security features and services. Encased in a tamper-resistant, rack-mountable steel case with standard 2U footprint, the WolfPac SG represents a smart solution for big and small businesses alike. In addition, the WolfPac SG can be monitored and configured remotely using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system. The WolfPac SG Series comes standard with ICSA-certified firewall technology as well as extensive local logging and reporting functions.

Features Summary
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- WolfPac SG2020 includes a 1.6 GHz CPU, 128 MB RAM and 40 GB hard drive.
- WolfPac SG3020 includes a 2.8 GHz CPU, 512 MB RAM and a 40 GB hard drive.
- Both models include three 10/100 Ethernet interfaces.
- Both models are enclosed in a 2U powder-coated rack-mountable steel case.

### WolfPac GRE Server

The WolfPac GRE Server combines superior performance with NetWolves' congestion management technology. Large global enterprises that use a public infrastructure, such as banks and other financial institutions, use the WolfPac GRE Server as a secure and reliable means of ensuring that critical business applications meet service level agreements. The WolfPac GRE Server fully supports GRE protocol standards, and is designed to work in conjunction with NetWolves' ICSA-certified firewall, ASURERoute dynamic alternate routing technology, and IPSec-compliant VPN tunneling services.

Two simultaneous VPN tunnels are established between the WolfPac security platform located at a remote branch office and main office locations, each configured with redundant WolfPac GRE Servers. The WolfPac configured with the congestion management utility can monitor performance levels across each GRE tunnel. Network connectivity, application performance, latency, and bandwidth availability levels are all monitored on each GRE tunnel using scheduled interval tests. If these performance levels do not meet the acceptable predetermined criteria, the WolfPac will redirect network traffic using the appropriate, non-congested route.

<b>Features Summary</b>
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- The WolfPac GRE Server supports up to 1,000 concurrent GRE tunnels.
  - Network traffic is routed to a secondary VPN tunnel if the primary VPN tunnel fails or congestion exceeds user-defined limits.
  - Network traffic fails over to a secondary WAN connection if the primary WAN interface is disrupted, or if performance criteria for the GRE tunnel, which passes through the primary VPN tunnel, does not meet certain requirements.
  - A redundant, high availability WolfPac GRE Server can assume Internet connectivity duties if the primary WolfPac GRE Server experiences hardware failure.
  - GRE tunnels can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
  - Performance criteria and interval parameters are fully configurable via a web-based administrative interface.
  - The WolfPac GRE Server includes a 1 GHz CPU, 1 GB RAM and 20 GB hard drive. The primary and secondary WAN interfaces support T1/E1, PPPoE, DSL, cable, ISDN (BRI/PRI) and dial-up services.
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# Network Management Services

NetWolves is redefining managed network security with our Secure Remote Monitoring and Management (SRM<sup>2</sup>) system, providing an affordable solution for network security needs of businesses worldwide. At your disposal is a 24x7 security management center without the cost of staffing or training your own network operations center. NetWolves' SRM<sup>2</sup> managed network security services are the answer to your requirements.

As Internet connectivity and its attendant business uses become more critical and complex, the need for expensive, scarce expertise and resources continues to grow. Outsourcing vital IT tasks can greatly relieve the pressure on IT departments, free up staff resources, remove the barriers to growth and allow businesses to focus on their own core competencies.

Monitoring and managing the primary network security systems of a business is an around-the-clock job. Companies that require this level of security are interested in economy, efficiency and reliability. NetWolves' SRM<sup>2</sup> monitoring and management services answer these requirements by providing high-level services while protecting intellectual property, managing costs, and providing real-time response to network issues.

<b>Features Summary</b>
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- SRM<sup>2</sup> provides comprehensive monitoring and management of all WolfPac security platforms.
  - WolfPac security platforms act as network gatekeepers, effectively controlling access into and out of a company's network.
  - Scalable security services that include ICSA-certified firewall, IPSec and SSL VPN, intrusion detection, ASURERoute, congestion management, advanced routing, quality of service, email virus protection, and content filtering.
  - Businesses may choose to monitor their own network. NetWolves can provide 24x7 backup of customer's network operations center.
  - Businesses can tailor their monitoring services based on service levels, alerting, escalation and reporting, all viewable through the SRM<sup>2</sup> monitoring console.
  - Delivery of updates to all remote sites having little or no IT staff, ensuring that a company's network is wholly prepared and capable of repelling virtually all intruders.
  - SRM<sup>2</sup> is designed to make effective use of industry standard multi-processor server configurations and databases contained on RAID 1/5 storage subsystems. No additional third party software licenses are required.
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## Monitoring & Notification Services

SRM<sup>2</sup> monitoring and notification services protect the security of a business by alerting you to any unauthorized activities that may compromise a network. This service extends the ability to maintain an updated security policy across the entire network, including the remote offices.

- ❑ Provides notification of network connectivity outages and any changes in health of WolfPac platforms. Additional security protection is afforded through monitoring of each platform for any changes made to it through its web-based administrative interface. These changes may include unauthorized activities that can disable or weaken the security posture of the network, or inadvertently violate a company's security policies.
- ❑ Permits authorized users to observe all areas of the platform and any changes or modifications made to its current configuration. This allows a company to audit services at anytime from any point in the network.

## Configuration & Management Services

WolfPac platforms are configured using a three-tier approach (company, group or individually), including complete operating system upgrades. WolfPac platforms are capable of failing over to an alternate SRM<sup>2</sup> platform in the event that the primary system is inaccessible. This service also allows user access to specific information about remote WolfPac platforms via the SRM<sup>2</sup> monitoring console. For example, firewall status, the number of active VPN connections, traffic statistics, intrusion detection data, activity logs, and configuration data.

The SRM<sup>2</sup> administrative interface permits a user with proper user level access to add, edit or delete administrative, configuration, or contact information for a specified company, group or unit. In addition, upgrades can be obtained and system parameters can be effectively viewed and or managed according to user level access. The configuration area of the SRM<sup>2</sup> system also allows a user with full operator access privileges to input, edit or delete a specified user or assigned user level access.

The SRM<sup>2</sup> system is capable of generating reports for each monitored WolfPac platform on a regularly scheduled basis. These reports are generated from log files which are sent to the SRM<sup>2</sup> system from the individual WolfPac units, as well as the event logs generated by the SRM<sup>2</sup> monitoring console. The frequency in which reports are generated is configured through the SRM<sup>2</sup> administrative interface, thus allowing an administrator to generate reports for any period of time in which there are logs stored in the SRM<sup>2</sup> database.

## MyVCO Security Monitoring

NetWolves provides a secure web-based window to the SRM<sup>2</sup> system. Authorized users have immediate access to reports, alerts, and configuration data pertaining directly to the security services used to connect and protect your offices.

## Support Services

NetWolves can provide your business with a fully integrated, best-of-breed solution to help meet your service level agreements. Together with our strategic partners, NetWolves has the expertise and experience necessary to assess, design, manage and support a cost-effective and scalable solution that meets the network communication needs of your growing business.

Features Summary
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- NetWolves is an FCC-licensed and tariffed carrier in all 50 states, offering multiple services on a single invoice.
  - NetWolves has strategic agreements with several leading telecommunications carriers, including Sprint, MCI, Broadwing, Focal, AGSI, WiITel, Qwest, Covad, Road Runner, Cox, Charter, and Spacenet.
  - Voice services that include voice over IP, switched and dedicated outbound, switched and dedicated toll-free inbound, dedicated T1 access loops, calling and debit cards, and conference calling.
  - Data services using the latest technologies for primary and backup circuits, including broadband, private lines, frame relay, ISDN and IP.
  - Security services that include ICSA-certified firewall, IPSec and SSL VPN, ASUREroute, intrusion detection, congestion management, advanced routing, quality of service, content filtering, and email virus protection. These services can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM<sup>2</sup>) system.
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## Network Services

Virtual office solutions are tailored and packaged to satisfy the needs of today's mobile workforce. Audio and video conferencing, Internet and intranet services, custom billing and reporting, travel and debit cards, as well as residential networking solutions are available.

Mission critical solutions protect the integrity of valuable systems and information through careful design and implementation, network redundancy and failover capabilities, as well as remote monitoring and management services.

Multi-location solutions provide the latest in data networking, private networks, custom billing, and voice and data integration between locations.

Integrated solutions include bundled equipment and redundant network packages, project management, as well as integration of multiple services from multiple vendors to provide true one-stop shopping.

Managed solutions include on-site design and project management, remote network management, and custom outsourced solutions.

**Product Training**

NetWolves prides itself on providing the finest technical training programs for its products and services. Training classes are developed and structured by qualified in-house experts with your systems engineers and network administrators in mind using the latest training aids and techniques. Student feedback also plays an important role in class structure. The end result is a continuous process of improving the training program based on the needs of our customers. Your NetWolves sales representative will be glad to discuss available courses, locations, schedules, and any associated costs with you.

**Technical Support**

NetWolves stands behind all of its products and is strongly committed to providing the best technical support possible whenever our customers need help. NetWolves Technical Support is available to answer your questions. Our support staff is knowledgeable, professional and willing to go to great lengths to help resolve your questions.

**Product Documentation**

NetWolves provides comprehensive technical documentation for all its security services with each product release. Each document describes the individual features and how to use the functionality. The documentation is readily available as part of NetWolves' web-based administrative interface for configuring the features.

**Partnerships**

NetWolves has strategic agreements with all the major telecommunications carriers to provide voice and data provisioning services, including Sprint, Qwest, MCI, WiITel, Broadwing, Covad, AGSI, Road Runner, Cox, Charter, and Spacenet. In addition, NetWolves has an agreement with NCR to provide deployment, integration, maintenance and support services worldwide.

**Product Warranty and Registration**

All NetWolves security products and services carry a 90-day warranty with full technical support. Customers must register their purchases within thirty days of purchase to be eligible. To receive additional support, NetWolves recommends that you purchase a separate NetWolves Enhanced Technical Support (NETS) agreement. NetWolves provides the following basic support services with NETS:

- 24x7 technical support for each major release for a period of 24 months.
- Work-around solutions to reported problems.
- Updates to products supported under NETS.
- Shipment of all support materials via express transportation.
- Advance replacement products for sites within the continental U.S. are shipped to arrive the next business day if the request is made before 3:00 p.m., EST.

- ❑ On-site maintenance is optional, including 8x5 coverage with 4-hours response time, 8x5 coverage with next business day response time, or 7x24 coverage with 4-hours response time.

## Invoicing

Billing complexity costs businesses money. Carrier invoices are difficult to understand and dispute. NetWolves offers custom billing and consolidated information services that were developed to meet the needs of businesses, both today and tomorrow. Through the power of NetWolves' Enterprise Management Information System, all carrier and network related expenses can be invoiced to meet business requirements. Cost control is achieved through billing verification and inventory audits, and the application of NetWolves' extensive knowledge of federal and state tariffs.

Features Summary
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- Detailed reports provide information on every telephone call, including date, time, destination, duration, applicable rates, and other pertinent information.
  - Summary reports provide a list of individual callers, services and locations.
  - Management reports provide a list of monthly telecommunications data, which can be adapted to meet specific company requirements. These custom-tailored documents are valuable tools when performing network management functions such as reconfiguration, abuse control and cost management/allocation.
  - NetWolves Customer Care. Call on NetWolves to receive superior service and answers to any questions about your account, including invoice balance, confirm the receipt of a payment, update or order account codes, update or order travel cards, order invoice reports or CDROM invoicing, make payments by credit card, make invoice changes and adjustments, and any other general invoice inquiries.
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## NetWolves Consolidated Invoicing

NetWolves offers businesses maximum flexibility in managing their own networks by providing the required information in one easy-to-read invoice that streamlines all telecommunication expenses. Consolidated invoicing is designed to handle large transaction volumes. It may include local and long distance services, cellular services, pagers, hardware, and managed security services. Consolidated invoicing begins with an audit and inventory of all telecommunications related invoices, and continues with a scope of work detailing to our customer the expectations and requirements. Finally, invoices are reconciled and originals are returned to the customer.

**NetWolves  
Custom  
Invoicing**

NetWolves offers maximum flexibility to help your company to manage its network expenses by providing detailed information in a useful format. NetWolves offers a wide variety of custom reports and formats to assist with managing your business expenses. For instance, one report indicates the busiest times of the day and month, while another report pinpoints potential abuses and shows international traffic. Individuals and locations are identified by name rather than account numbers, resulting in easier invoice interpretation and processing.

## Summary

Selecting NetWolves to support your managed network continuity and security requirements can provide numerous operational and financial benefits, including:

- ❑ NetWolves enables you to reduce expenses by converting variable costs such as equipment and in-house management to a fixed service cost, resulting in significant tax advantages and a more accurate IT budget.
- ❑ By relying on NetWolves' seasoned security professionals to monitor and maintain your network, your company can reduce expenses related to hiring and training in-house IT staff.
- ❑ NetWolves takes the hassle out of managing multiple service level agreements because it provides a single-source solution with one contact for account management and service.
- ❑ Security solutions and technologies such as intrusion detection, virtual private networks, and firewalls are much more effective when monitored by NetWolves' highly skilled security professionals.
- ❑ While most customers operate primarily during normal business hours, NetWolves provides 24x7 monitoring and management with a guaranteed response time.
- ❑ NetWolves' proprietary technology prevents one of the most common network vulnerabilities - opening an inbound port to retrieve network monitoring data.
- ❑ NetWolves proactively monitors your network using ASURERoute and Quality of Service to prevent bottlenecks, service interruptions and circuit degradation, which can hinder the performance of mission-critical applications.
- ❑ NetWolves offers 100 percent geographic coverage and circuit redundancy on just one invoice, eliminating the need to contract with several separate carriers.
- ❑ Adding security features and management services is as simple as picking up the phone. NetWolves eliminates costly hardware upgrades and the associated interoperability challenges.
- ❑ NetWolves provides services from security-hardened sites in multiple locations around the country, reducing your vulnerability to local security and environmental threats.