



ICLogistics: Maintaining the Security of Your Data

The integrity of computer systems, and thereby all corporate information, is a critical business issue in leveraging the benefits of the Internet for e-Commerce. Trading partners channel business information through integrated processes, which allows for efficient inventory tracking and optimization, bottleneck identification, unnecessary cost elimination, loss minimization, freight cost optimization and efficiency, and forecast accuracy. As a result, top-line revenue increases, more working capital becomes available, costs decline, and gross margins are maximized. It is no wonder that large corporations want to ensure that their trading partners are protecting the integrity of their business data. Data security is a vital issue for a company of any size, but smaller companies have fewer resources to address security issues. Responding to this key need, ICLogistics has built security protocols into each of its products to mitigate key risk factors.

BUILDING A COMPREHENSIVE SOLUTION

Because threats to supply chain management systems have come from many sources, ICLogistics has incorporated the following forms of security:

- **Encryption:** Protecting transactions, electronic messages, and information access. SF Client, SF Server and Ringmaster can use either HTTP or HTTPS for communications. When HTTPS is enabled, all communications are handled via HTTP and Secure Socket Layer (SSL).
- **Secure Log-On:** Requires persons who access the system to identify themselves. SF Client stores the Company ID, User ID and user password that enables the SF Client to be registered with Ringmaster. The password is encrypted with 128-bit encryption. All user and company information is in a 128-bit encrypted format. The SF Server can utilize any relational database to store the supply chain data made available to trading partners. The SF Server utilizes the native database security features, encryption and password authentication, in its database operations. The standard database utilized by SF Server is MySQL.
- **Remote Network Access Control:** Limits off-site access to the system. Comprised of both software and hardware, *Carnival* is a secure communications platform. The system provides centralized authentication, access control, secure file sharing, reverse proxy capabilities to disparate data servers, and a range of collaboration tools. Traffic is over HTTPS, using SSL strong encryption. The system has been operational since 1993 and passed an initial Department of Defense security audit upon installation at Boeing.
- **Hosting:** ICHosting is operated from a National Operations Center in Fayetteville, NC. ICHosting blocks access to non-standard ports and services like remote desktop, inbound SNMP, and NetBIOS at its main router. It also has a bridge base firewall / Intrusion Detection System (IDS) which runs a real time protocol analyzer and logs all suspicious activities. All of the Linux servers are running iptables, which are used to block specific IP/Network traffic that may be abusing customer sites. ICHosting responds immediately to all certified advisories, and there are checks in place to ensure that servers are all at the latest patch levels.
- **Physical Security:** The Data Center is protected by an automatic, continuously armed environmental detection system, and an extensive method of fire suppression is in place that incorporates redundancy. Generic and customized security solutions for OSI layers 2-7 are offered. Infrastructure security includes cages and cabinets for equipment. Cisco, Linux, and internally developed custom firewalls providing packet and/or data filtering and monitoring are used. Firewall policies are implemented throughout the network to provide adequate protection without adverse impact to customers. Changes are implemented whenever conditions warrant and as often as needed. Three major backbone vendors provide bandwidth to protect against outages and loss. Providers include Time Warner Telecom, MCI / Worldcom, and Qwest. There are also the capabilities and the equipment infrastructure to provision additional DS-3 and OC-3 data through 3 different local exchange carriers (LECs).

SECURE ANYTIME, ANYWHERE ACCESS

ICLogistics' virtual private network (VPN) is based on SSL technology for deploying security for core applications being accessed over the Internet. ICLogistics' SSL provides the server authentication, data encryption and message integrity over TCP/IP connections, providing numerous advantages to supply chain management systems. It uses a 40-bit key size for the RC4 stream encryption algorithm, considered an adequate degree of encryption for commercial exchange. The HTTPS communications support the use of digital certificates. Because SSL is a component of the Web browser, it easily interfaces with ICLogistics' client software. Remote users can access ICLogistics' server applications securely from any Web browser without impacting existing infrastructure, web servers, firewalls or client environments. Partners can access their extended supply chain via the Internet securely, using only a Web browser.

ICLogistics has incorporated a number of additional security elements, such as stronger access control and two-factor authentication for added protection. User permissions are set to limit access to specific applications for specified users as needed. Once users are authenticated, they are authorized to have access to certain applications and privileges based on their profile. This is added reassurance that partners or suppliers only view the information they are entitled to see. Utilizing the two-factor authentication solution of our client USB token solution is an additional option providing the highest amount of security needed to protect critical supply chain information.

ICLOGISTICS: YOUR PARTNER TODAY AND TOMORROW

ICLogistics has the capabilities and features necessary to achieve the appropriate level of security for trading partners. These cost-effective solutions meet today's needs and also have the scalability and flexibility to grow with your company.

As organizations increasingly turn to the Web to access their supply chain, security is even more crucial. ICLogistics is your partner in implementing a fully integrated supply chain management solution that ensures your system is secure and accessible - no matter what your specific requirements.