

# nuBridges Protect™

(Formerly nuBridges Data Secure)

## Product Overview

*“nuBridges offers a complete solution for encryption and key management. We’ve got the security, the audit logs and the peace of mind to prove it.”*

nuBridges Protect™ is an integrated encryption, key management and logging solution that protects data at rest in fields, files, databases and applications. Designed for rapid, audit-ready deployment, nuBridges Protect supports a broad range of enterprise platforms.

As organizations seek to protect sensitive data from malicious and accidental exposure, encryption has become an increasingly important weapon in the security arsenal for data at rest in databases, files and applications.

Encryption is a perfect companion to strong perimeter and firewall protection — even if the bad guys manage to get in, as long as the sensitive data is encrypted no matter where it rests, it will be useless to them. Encryption is also one of the most important ways to protect against internal threats, which some estimates put as high as 73% of all breaches.

What many organizations are finding is that while encryption is not that difficult to achieve, managing the associated encryption keys across their life-cycle quickly becomes a problem that (1) creates a new set of security vulnerabilities and (2) introduces the risk that important data will be inaccessible to those who need it and are authorized to use it.

nuBridges Protect has a powerful key manager that enables you to control and protect access to keys to ensure that (1) keys don’t get into the wrong hands and (2) keys are available when needed to unlock data today and in the future. nuBridges Protect can be implemented quickly and without disruption — whether you’re just beginning your encryption initiatives or replacing home-grown or incomplete solutions.

No matter what drives your encryption requirements — external mandates like PCI DSS, HIPAA or California’s data protection regulations, or internal mandates for best practices in data protection — nuBridges Protect is a complete encryption and key management solution that may be just perfect for you. Today it protects sensitive information for many of the world’s most prominent brands — in fact, we’ll bet it has encrypted some of your personal credit card numbers!

### Unified key management

Key management may be the single most critical component of any company's encryption strategy. nuBridges Protect key management system makes managing keys across your enterprise painless. The nuBridges Protect key manager:

- Generates, distributes, rotates, revokes and deletes keys
- Automatically alerts you of expired keys
- Tracks an infinite amount of keys
- Encrypts fields and/or files before writing to electronic backup media
- Manages keys across disparate platforms and systems from a centralized system

### Rapid, painless implementation

nuBridges Protect can be up and running in no time, so you can meet deadlines for external and internal mandates.

- No file layout or field size changes required; for example, encrypt a 16-digit credit card number without changing your pre-defined file layout
- No database downtime during encryption
- Encryption processes run in the background
- Allows high availability systems to remain active

### Complete logging and auditing

Just as important as the encryption of data itself, proof of encryption and authorized access can make or break an audit. nuBridges Protect reporting interface:

- Records activity, by user and time, each instance credit card information is accessed
- Encrypts, secures, and hides audit logs to prevent tampering
- Dashboard reports a summary of all document activities
- Provides ability to drill-down to session details and file information

### Platforms supported:

HP-UX, HP NonStop  
IBM (z/OS, MVS, OS/390, System i, AIX, 4690, OS/2)  
Linux  
Solaris  
Windows 2000, XP, Advanced Server  
2003, Vista

### Databases supported:

IBM (DB2, IMS, VSAM)  
Oracle Database 9i/10g  
Microsoft SQL Server

In addition to solutions for securing data at rest, nuBridges offers powerful solutions for securing data in transit. Dynamic, on-the-fly data encryption and decryption permit visibility only to the local application, and nuBridges solutions allow you to completely lock down your firewall while simultaneously communicating with your partners.

- Field and file level encryption -- supporting PKI, 3DES, AES 256 encryption and SHA-1 hashing
- Secure File Transport Protocol (FTP) with SSL / TLS (if required)
- Proxy and controller for smart firewall navigation of transactions between business partners

# nuBridges Exchange™

(Formerly nuBridges Secure File Transfer)

## Product Overview

*“nuBridges helped us make file transfers easier and get them secure and under control. Now we are automatically notified of any delivery problems, and we have an audit trail for compliance.”*

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Secure, reliable, auditable file transfer. Any protocol, any volume, any file size – inside or outside your enterprise.

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nuBridges Exchange™ is a software solution to execute, secure, control, manage and view all your file transfer activity through a centralized gateway. nuBridges Exchange streamlines and speeds your ability to respond to escalating file transfer volume, file size and audit/reporting demands.

Today most enterprises use a jumble of file transfer options – FTP servers supporting isolated departmental activities, point-to-point connections such as AS2, email and more. End users struggle with ad hoc large file transfers and clog IT helpdesks. Every trading partner connection is a fire drill. Many transfers are not secure. There is no guarantee of delivery, no consistent way to check the status of a transfer, and no way to see (or audit) consolidated internal or external file transfer activity.

Whether you need managed file transfer to get control of internal exchanges throughout the enterprise or a complete B2B gateway for standards – based document exchanges with business partners, nuBridges Exchange is ready to meet your requirements.

And because many file transfers are mission-critical – particularly the automated, scheduled transfers between systems – the architecture is built to support high availability and redundancy.

### Features:

- Multi-protocol managed file transfer
- High-availability architecture
- Handles both automated (“lights-out”) and ad hoc (human-initiated) file transfers
- Browser-based Business Activity Monitoring dashboard for IT
- Browser-based interface for internal and external end users
- Multi-level security
- Firewall-savvy – no open ports to internal systems
- Secure data streaming means no sensitive data stored in DMZ
- Comprehensive logging for auditability

### Any File Type

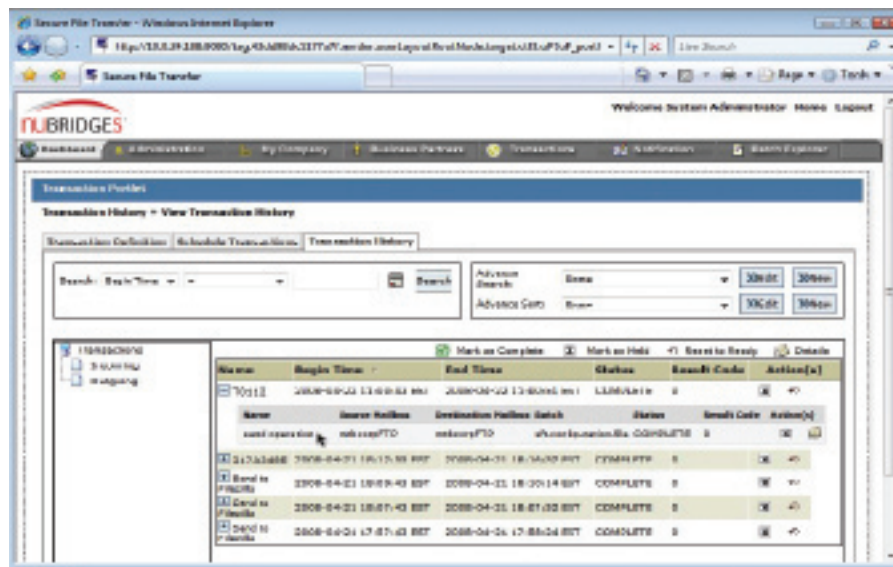
In today's digital economy, electronic file transfers are proliferating. Some are automated and scheduled, and some are initiated ad hoc by employees or partners. Sample use cases include:

- Automatic — Transfer orders from an ERP system to a manufacturing system
- Automatic — Report regulatory data to government agencies
- Automatic — Exchange EDI documents with members of your supply chain
- Automatic — Push and pull transaction data between credit card company and banks
- Ad Hoc — Submit payroll data to your HR department or 3rd party processor
- Ad Hoc — Provide confidential PowerPoint presentations to your board of directors
- Ad Hoc — Exchange proprietary source code among software development labs
- Ad Hoc — Receive ZIP files containing large CAD drawings from your architecture firm

nuBridges Exchange makes it easy to perform any of these automated or ad hoc transfers, no matter what the file type, file size or frequency.

### Browser-Based for IT and for End Users

nuBridges Exchange has a browser-based interface for anytime, anywhere access. For the IT user, configuring information exchanges, protocols, profiles, authorizations and certificates for individuals, groups, departments and companies is fast and accurate – for both internal and external file transfers.



Once authorized, end users can control the flow, timing and business rules for document transfers. Authorized trading partners can go to a URL to configure, test and transfer without IT support, and can maintain their own profile information.

Scheduling allows users to define transfers on a recurring or one-time basis with custom sequencing parameters. For example, you can ensure that documents are delivered within specific timeframes to meet formal service level agreements.

It's easy to configure automatic events such as:

- Pulling files from remote internal or external locations
- Pushing files to a network location or external server
- Monitoring particular locations and taking specified actions when new files appear
- Executing rules on a specified schedule
- Emailing notifications to individuals or groups based on file transfer events

### Easy Trading Partner and End User Management

Trading partner management is always an issue for eBusiness. How do you keep track of each business partner's latest contact information, as well as the details about how they want to interact with you? What communications protocols do they accept? What security mechanisms do they utilize? Do they have specific requirements for documents?



nuBridges Exchange provides a central portal for managing this important information and for creating role-based access profiles for both internal and external users and groups. The contact list feature provides configurable distribution lists for alerts and notifications. And of course the browser interface means that no software needs to be installed locally on any desktops.

### Business Activity Monitoring

With nuBridges Exchange, business activity monitoring for both IT and end users is just a click away. You have dashboard visibility into all transfer activity for monitoring, advanced search, end-to-end tracking of every data transfer and auditing. Graphs and report views are easy to understand, and ideal for compliance reporting.

### Benefits:

- Reduces file transfer complexity
- Increases performance and reliability
- Helps meet SLAs and improve end user satisfaction
- Eliminates security risks
- Provides consolidated visibility and audit trails



At the transactional level, all transfer events are recorded – who/what sent and received the transfers, the batches in which they were exchanged and any scheduled activities which were executed. You can also search event logs by attributes such as date, priority, category and description.

### Guaranteed File Delivery and Store-and-Forward

nuBridges Exchange features automatic session retry – if a transaction fails for any reason, delivery is retried based on your configuration specifications. It also offers store-and-forward mailboxing that holds files in a mailbox until the next time the recipient connects – whether the recipient is an application or a person.

### Security

Security has been built into nuBridges Exchange from the ground up. nuBridges Exchange provides document-level encryption and decryption regardless of whether the document is at rest or in transport. All keys are centrally managed for all protocols.

An underlying design principle is that no data in motion should ever exist in clear text, so all communication channels are encrypted. And if you are exchanging information across the firewall outside your network, secure streaming means that no data ever touches the iron in the DMZ.

Enabling intrusion detection and limiting the number of openings in firewalls is important from a security perspective as well. nuBridges Exchange allows no inbound firewalls to be open at anytime – this is the ultimate in security when dealing with external partners. Many enterprises want nuBridges Exchange to act as a proxy in the DMZ for file transfers so they don't have to open any ports to the Internet.

Security profiles can be specifically configured and associated to a user, group or business partner.

Security features include:

- PGP support - encrypt prior to transport or decrypt at the destination
- Key and certificate management
- Encryption for all communication channels
- DMZ proxy—no inbound firewall openings
- Intrusion detection
- User name and password authentication
- No data stored in temporary storage

### High Availability and Scalability

Whether your file transfer volumes are high or low, they are typically mission-critical. That's why nuBridges Exchange supports highly redundant, clustered configurations for 100% availability. Its modular architecture automates dynamic scaling and fail-over capabilities and eliminates single points of failure. For failover you can implement self-promoting servers with notification of system failure. For load balancing you can add servers where needed and run multiple instances on a server to leverage multi-core CPUs.

Other scalability features include:

- Ultra-fast performance for high-transaction volumes
- Supports data compression for much faster transfer times
- Handles any file size – 3 GB clinical trial data? 5 GB CAD/CAM file? No problem!
- Handles unlimited file transfer volumes
- Handles unlimited trading partners – from five to five thousand

### Strike the Perfect Balance of Convenience and Control

With nuBridges Exchange, you can make file transfer easier to perform, manage and support while simultaneously increasing security, visibility and auditability – that's the perfect balance of convenience and control.

### nuBridges Exchange Runs On:

- HP/UX
- IBM i
- Linux
- Solaris
- Windows XP Professional
- Windows 2003 Server

### Communication Protocols

nuBridges Exchange can exchange files among any platforms and endpoints that support any of the following protocols:

- AS2 Client and Server
- FTP Client and Server with optional SSH and SSL for security (FTPs and sFTP)
- FTP Client Proxy
- HTTP Client and Server with optional SSL for security (HTTP/S)
- HTTP Client Proxy
- SSH
- SSL2 and SSL3/TLS1

### Encryption & Compression

- PGP
- SSH
- SSL
- ZIP Standard & AES Encryption
- GZIP

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### About nuBridges

nuBridges is a leading provider of software and managed services to protect sensitive data at rest and in transit, and to transfer data internally or externally with end-to-end security, control and visibility. nuBridges encryption, key management, managed file transfer and B2B integration solutions are used to comply with security mandates and to digitally integrate business processes among enterprises, systems, applications and people. Over 3,000 customers depend on nuBridges secure eBusiness solutions to encrypt millions of credit cards, exchange billions of dollars in B2B transactions and enable countless business-critical file transfers, including Wal-Mart, Amazon.com, Timberland, American Eagle Outfitters, Belk, Bon Ton, John Deere, Wachovia, Sun Trust, AIG, CheckFree, Bank of America and Verizon. nuBridges is headquartered in Atlanta, Georgia, USA. More information is available at [www.nubridges.com](http://www.nubridges.com).