



## Fact Sheet

# Security & Infrastructure



*As an enterprise-class Software-as-a-Service (SaaS) solution, eXpresso understands that business demands enterprise-class data integrity, application reliability, and physical safeguards. Safe collaboration and communication among coworkers, business partners, and customers is crucial.*

*eXpresso has made it a priority to provide its users with a secure application environment that actively protects the privacy and security of its users' data.*

*The purpose of this document is to demonstrate how eXpresso provides business-class security and infrastructure to its clients for safe viewing and editing of shared Microsoft Office® files in the cloud.*

## Infrastructure Security

At the core of the eXpresso commitment to provide superior infrastructure and security for our hosted applications is our selection of OpSource ([www.opsources.net](http://www.opsources.net)) as our managed hosting provider.

OpSource is a premier provider of complete hardware and networking infrastructure required to deliver applications over the Web securely and reliably. We take advantage of OpSource's state-of-the-art equipment and technologies that are managed and monitored around-the-clock by a team of experts and backed by 100% uptime guarantees.

### **Physical Site Security**

The eXpresso on-demand application is hosted in an OpSource facility that offers the highest standards of security. All areas of the data center are monitored and recorded using CCTV, and all access points are controlled. The facility is staffed around-the-clock by security officers. Visitors are screened upon entry and escorted to their locations.



### **Guarding the Network: Firewalls and IDS**

OpSource combines industry-leading firewalls and intrusion detection and prevention systems to ensure the security of the eXpresso application infrastructure. These systems are monitored and managed on a 24x7x365 basis by both OpSource personnel and top-tier third-party service providers.

An essential component of security, firewalls permit or restrict network traffic and safeguard systems and data from unauthorized access. OpSource employs a fully managed, robust firewall solution to ensure that the eXpresso application infrastructure is always protected. On an ongoing basis, OpSource installs patches and upgrades, and monitors the firewall around-the-clock so that their support staff can quickly respond to and resolve any alerts that occur. Regular analysis of firewall logs is preformed to keep abreast of traffic patterns and identify any unusual activity.

The OpSource Intrusion Detection System (IDS) provides in-depth defense by analyzing network traffic and either blocking, replacing, or alerting when suspicious activity is detected. The system utilizes a rules-based language, which combines the benefits of signature, protocol, and anomaly-based inspection methods. Rules are used to examine packets at both the IP protocol level and at the application level and can be set to look for specific occurrences of attacks against a protocol or set to look for the conditions of an attack.

To augment OpSource's capabilities and technologies and to add an additional layer of oversight, a third party managed security services provider is used to monitor the OpSource IDS. This enhances the ability to measure the effectiveness and efficiency of security controls, ensures that business operations are not disrupted by threats, complies with legislation, and reduces organizational risk.

### ***Uptime / High Availability***

It is a high priority for eXpresso to provide an industry-leading service with high availability and uptime.

- Recent measured uptime for eXpresso exceeds 99.99%.
  - *(This is exclusive of scheduled maintenance which includes software updates, hardware and network maintenance.)*
- Maintenance is typically performed in windows between 00:00 am and 02:00 am EST to avoid inconveniencing customers.
  - *Software update procedures typically require the site to be down for less than 10 minutes at a time and are scheduled for Saturday mornings to ensure minimal customer disruption.*
- OpSource employs a variety of monitoring tools (e.g. BMC TM ART, Zenoss) to ensure the availability and performance of the eXpresso hardware and application infrastructure.
- When alerts are raised, OpSource's 24X7 Customer Care Center respond immediately by following Level-1 support procedures defined and tested regularly by eXpresso.
  - *This proactive monitoring provides OpSource and eXpresso with real-time information to verify infrastructure operations, stay apprised of problems, and solve bottlenecks before they become critical.*

### ***Redundancy and Business Continuity***

The eXpresso goal of eliminating all single points of failure is another reason for our investment in an OpSource relationship. OpSource's infrastructure is fully redundant with respect to hardware, power, and Internet connectivity. The type and degree of redundancy varies depending on the type of component, its criticality to the system, and the performance needs of the system.

- Network equipment, including the routers, switches, firewalls, and load-balancers are all redundant.

## **Security & Infrastructure**

Our Trusted Partners:



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- There are multiple load-balanced application servers.
- This multi-server configuration facilitates efficient software upgrades, since individual servers can be taken out of rotation for upgrade without disrupting service.
- The eXpresso back-end database is backed up daily and backups are stored off-site.
- For mission-critical applications of eXpresso disaster recovery plans that are backed by a strong SLA and multiple data centers worldwide are available through OpSource.

### Web/Application Servers

The Web/Application server layer runs 64-bit Windows Server 2003 R2 clusters using Apache as the Web server and Tomcat as the application server.

- Apache and Tomcat are configured and optimized to run the eXpresso application layer.
- Application servers are configured to process HTTPS requests only. Other Internet protocols are disabled.
- All servers have been hardened at the operating system and directory levels.
- Non-essential ports and services have been disabled.

### Application Security

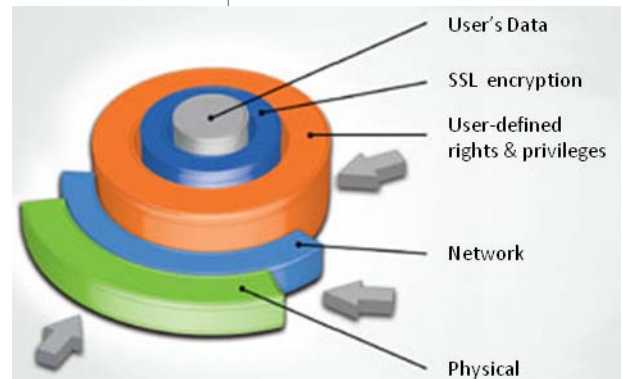
#### Privacy and Protection

eXpresso keeps user personal information and data safe with highly secure user authentication, end-to-end encryption, and URL and content filters. To ensure the highest levels of privacy, eXpresso incorporates:

- **GeoTrust** 128-bit signed SSL v3 certificates to secure Web site authentication and data encryption.
- **Globalsign** Object Signing Certificates to guarantee authentic eXpresso software on users' desktops and in their browsers.
- **Oracle's** implementation of the Data Encryption Standard (DES) to obfuscate data that is stored in the database.

#### Authentication



eXpresso is designed so that each user controls access to his or her own files. As the *Owner* of files, a user decides which other users (*Collaborators*) have access to which files, and what type of access is allowed. To gain access to any file stored in eXpresso, file owners or collaborators need to be authenticated by eXpresso first. All user credentials are encrypted during transmission to the eXpresso servers and securely stored in our enterprise-class Oracle relational database.



- Every eXpresso user has a unique login/password combination that is created and verified at the time of registration and again whenever the user chooses to modify these credentials.
- Commencing with the login, user identity is authenticated by eXpresso software on every user request.
  - *This is all transparent to the user and does not slow down his/her use of the system.*
- All subsequent requests are re-verified, and if the user cannot be authenticated or the user's status on the site has changed (e.g., the user has logged in elsewhere or the user's session has timed out), the user is forced back to the login screen.

### **Rights and Privileges**








eXpresso uses a patent pending invitation mechanism that combines with a granular rights and privileges system to give file owners complete control over who gets to access their files. Once access to eXpresso has been established, collaborators still need permission to perform certain actions like viewing and editing documents online or offline. The eXpresso rights and privileges system is flexible enough to handle different access levels for distinct file & user combinations, yet it is easy to use for all file owners. The rights and privileges system applies to the eXpresso Web Application, as well as the eXpresso Add-In for Microsoft Office®.

File Name	Upload Date	Shared with	Remove
 New-File-Test.xls	07/30/08 12:04:34 PM	3 user(s)	

**Approved User List:**

Select from: My Contacts

LarryJohnson@expressocorp.com [Larry Johnson] Add to List

User	Name	Assign Rights	Email Alerts
 JohnDoe@expressocorp.com	John Doe	View Only	Off
 JaneSmith@expressocorp.com	Jane Smith	Limited Editing	On
 BobJones@expressocorp.com	Bob Jones	Limited Editing	On
 YenShin@expressocorp.com	Yen Shin	Full Editing	On
 GuidoFeliz@expressocorp.com	Guido Feliz	<b>Assign to User</b>	Off
 SergeiChechikov@expressocorp.com	Sergei Chechikov	View Only	On
 JimNewbee@expressocorp.com	--	Limited Editing (Online Only)	On
		Full Editing (Online/Off-line)	On

### **About eXpresso**

eXpresso is a business-class solution to view or edit shared Microsoft Office® files in the cloud. And because files are shared in the cloud, invited collaborators will always be accessing the latest "living version" of the file. No more wondering if a person is looking at the latest draft. With eXpresso, files are delivered with our proprietary Always Live™ technology.

The unique capabilities in the eXpresso service leverage its proprietary Always Live™ technologies, enabling users to access, share, compare and collaborate on business information from any location.

eXpresso is a trademark of eXpresso Corporation. Microsoft Excel is a registered trademark of Microsoft Corporation in the United States and/or other countries.

