

## Coupa Security

### A reliable, secure infrastructure built on Amazon Web Services

Coupa is committed to providing customers with a reliable, secure application that allows them to manage the procure-to-pay process from anywhere at anytime. Coupa has partnered with Amazon Web Services to provide the hardware and infrastructure to support Coupa's e-Procurement platform.



Amazon AWS was launched in July 2002 and as of June 2007 claimed more than 330,000 developers. It is the most popular on demand infrastructure for commodity computing and virtual secure storage on the planet. More information about the service can be found on the website: <http://www.amazon.com/aws>.

#### Physical Security

Coupa contracts with Amazon.com to provide its physical hosting infrastructure using Amazon's EC2 service. Amazon enforces physical security through a variety of methods as covered in their [Security Whitepaper](#). The buildings, servers, and infrastructure of Amazon's EC2 service is the same as their multi-billion dollar Amazon.com retail business, so Coupa customers can be assured that their application and data are secure.

#### Transport Security

Coupa encrypts all communications between customers and our data center using high-grade Encryption (AES-256 256 bit). Access to Coupa's on-demand applications and services is only available through secure sessions (https) and only available with an authenticated login and password. Passwords are never transmitted or stored in their original form, so they are never compromised by third parties.

#### Perimeter and Server Security

Coupa protects its application infrastructure by using state-of-the-art firewalls at the hypervisor, kernel, and application levels, as well as intrusion detection systems across all servers. Coupa's anomaly detection system instantly notifies operations staff, 24/7, if anything unusual is detected. In addition, Coupa contracts with third party security firms and consultants to conduct vulnerability threat assessments including penetration tests.

#### Key Features

- Application hosted on Amazon Web Services – the same infrastructure that supports Amazon.com's multi-billion dollar business
- High-grade encryption of passwords and other data offers extra security during transport
- State of the art kernel firewalls and intrusion detection software provide continuous system monitoring
- Multi-layered architecture secures customer sessions and prevents unauthorized data access
- Best-in-class disaster recovery protocols eliminates data loss in the event of system failure



*InfoWorld 2009 Technology of the Year  
Award Winner – Best Cloud Platform*

All front-end servers are behind firewalls and only accessible via https protocol. Database servers inside the perimeter firewalls are protected using proprietary non-routable IP addressing schemes, network address translation and more.

Coupa enforces tight operating system-level security by maintaining a minimal number of access points to all production servers. Operating system accounts are protected using secure public key authentication and only operations personnel has access to the servers. All operating systems are maintained at each vendors recommended patch levels for security and are hardened by disabling or removing any unnecessary users, open ports, and processes. Access to the databases is controlled through limited and separately access-controlled passwords.

Coupa employees do not have direct access to production equipment, databases or customer data, except where necessary for system management, maintenance, and backups. Access to customer data is further restricted to technical and customer support staff on a need-to-know basis. No parties outside Coupa have access to customer data unless required by law. For more information, please refer to [Coupa's Privacy Policy](#).

## Application Security

No customer can see another customer's data. This is enforced on several layers of the architecture, including authenticated sessions, which are required for any page access. Sessions are stored in cookies that do not encode any customer identifiable information. Nor is any customer ID ever transmitted or stored during page access, thus preventing ID spoofing.

## Reliability and Backup

In addition to the physical redundancy (network, power) that Amazon.com provides, Coupa has redundant configurations for each component of its infrastructure. All customer data is stored on redundant database servers with live failover. All customer data is placed on RAID class hardware, replicated in real time to a secondary environment in a different data center, then backed up every ten minutes onto the Amazon.com S3 service. The Amazon.com S3 service is then replicated throughout the Amazon.com data centers globally.

## Disaster Recovery Program

Coupa is able to leverage the Amazon AWS cloud to provide a best in class disaster recovery program. Amazon AWS services for data storage eliminate the risk of customer data loss. In the event that the primary hardware for a customer fails, Coupa can immediately switch over to the secondary hardware, which is running concurrently with the primary. If there is a disaster that fails both the primary and secondary servers, Coupa has the ability to failover to any of a number of Amazon.com data centers in the United States and in Europe, in a matter of minutes.

## Key Benefits

- Highly secure and reliable infrastructure ensures application up time and availability
- 24/7 monitoring and response protects application from unauthorized access
- No costly hardware or infrastructure to support or maintain
- Redundancies and other protections eliminate data loss
- Limited access and encryption provides complete data privacy and security