Upland AWS Cloud Security and Data Center Standards

Upland Software understands that confidentiality, integrity, and availability of our customers' critical data is vital to their business operations. We appreciate and don't take for granted the trust our customers have put in us.

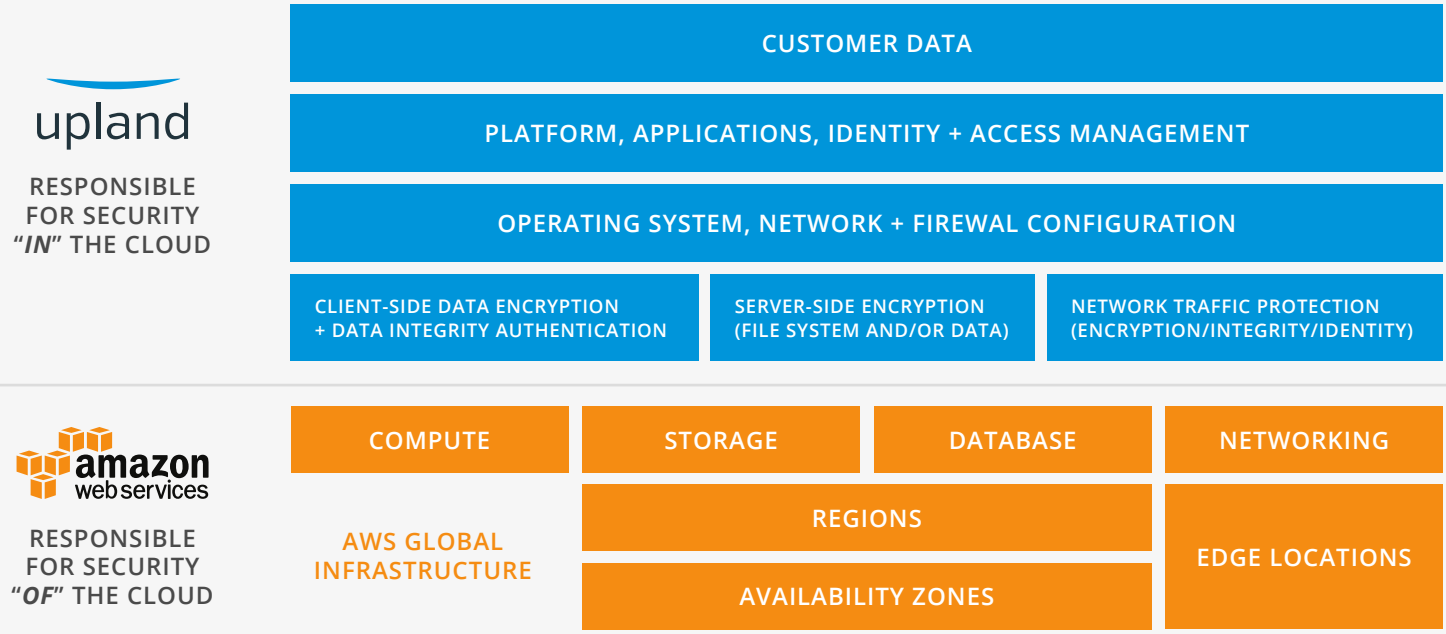
With our Enterprise Grade Cloud Operations, our driving purpose is to ensure we deliver to and exceed your expectations. Because of this commitment to excellence, we take standards and procedures very seriously as a cloud-based Software-as-a-Service (SaaS) provider. Upland's data centers provide best-in-class, cloud-delivered security, with superior infrastructure security speed, and integrity, strict standards, true multi-tenant service, high resiliency, and scalability.

Upland Software partners with Amazon Web Services (AWS), the undisputed Cloud Infrastructure as a Service leader, which provides the ability to scale and innovate with customers as their needs grow and evolve.

Shared Security Responsibility: Infrastructure Standards and Procedures

Upland Software maintains the following standards and undertakes the following procedures in relation to the infrastructure that provides its services:

- **Central code repository with automated code quality scoring**
- **Segmented and secure virtual private cloud (VPC) networks**
- **Highly restricted, role-based access to production EC2 environments governed by the least privilege principle**
- **Hardened EC2 instance images**
- **Two-factor authentication requirements for server and console access**
- **Redundancy servers for critical systems**
- **Software-based firewalls configured to "default deny"**
- **High availability built-in via virtual load balancers**
- **Unlimited, secure storage capacity with S3**
- **Continuous monitoring of all components, sub-components, and internal/external/front-end/back-end applications to assist infrastructure and service integrity**



Infrastructure Redundancy

Upland's AWS primary data centers provide global average uptime of >99.9999%. That means each of the data centers typically experience outages totaling less than 5 minutes and 15 seconds over the course of a year.

To ensure availability, all Upland infrastructures deploy a minimum of N+1 redundancy, meaning every mission-critical component has at least one backup.

AWS/Data Center Network Security

At Upland Software, we are firm believers in the defense in depth strategy. Our Amazon infrastructure is protected by several layers of network-based security controls including host-based firewalls, intrusion detection systems, F5 load balancers, and virtual firewall technology such as AWS Security Groups.

Encryption is utilized to protect data in transit, including SSL (TLS 1.0, 1.1, 1.2) encryption over HTTPS connections utilized for secure communications between Upland and customer end users. Authorized IT engineers access production network equipment and data stored remotely, via secure two-factor authentication enabled SSL VPN tunnels.

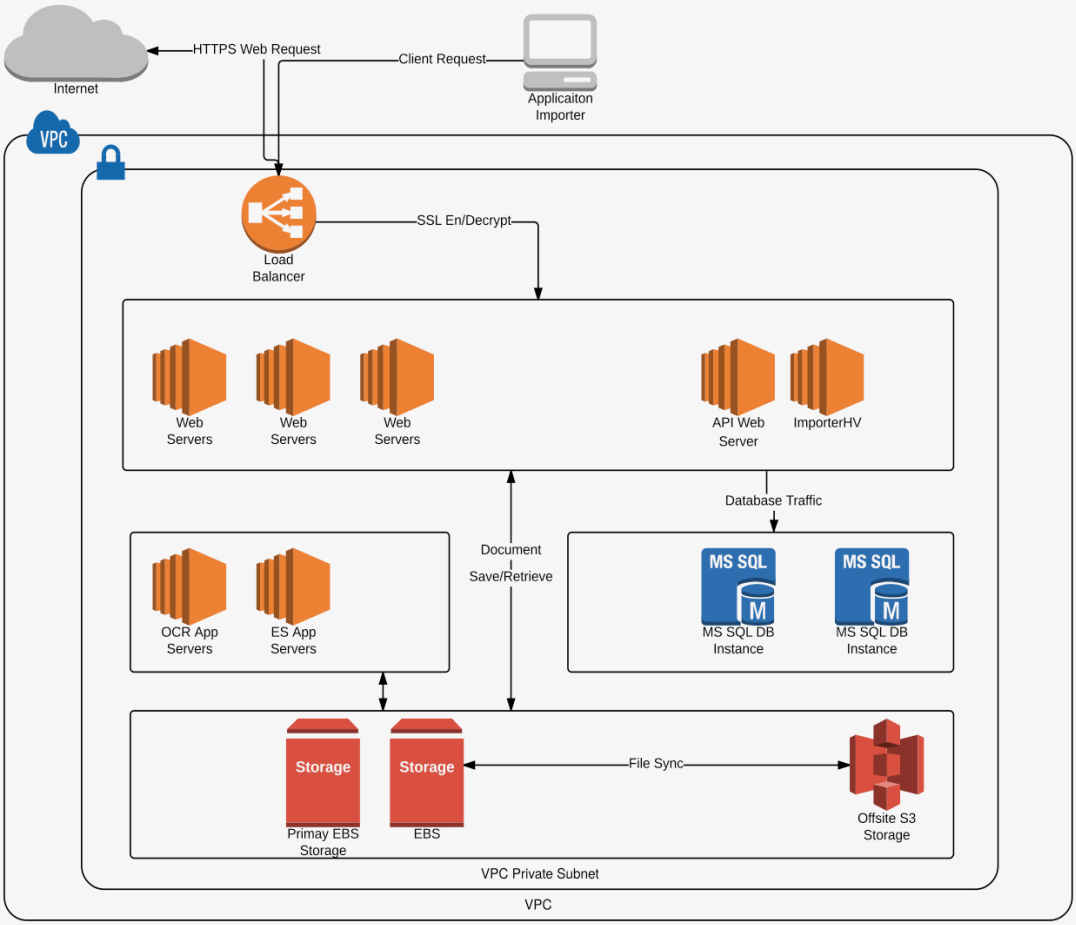
AWS Security Groups

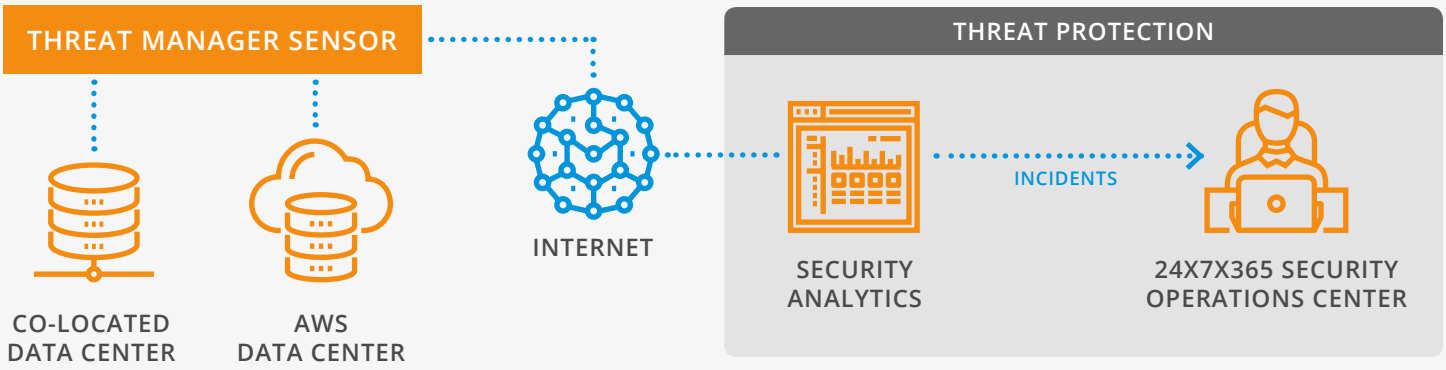
Security Groups are best conceptualized as a distributed, stateful virtual firewall that sits "in-front" of each EC2 Instance. More specifically, this function resides within the Virtual Device Driver layer on the hypervisor.

Some key properties of Security Groups are:

- **Both ingress and egress packet flows are filtered.**
- **Rules are ALLOW only.**
- **By default, security groups DENY ALL ingress traffic until allow rules are created.**
- **Security group objects themselves can be referenced as source/destination in rules.**

This distributed approach to packet filtering is more secure than relying on a single perimeter device, since in effect every single EC2 instance is protected by its own virtual firewall. Amazon security groups are administered by our dedicated Cloud Operations team in tandem with the Security department.





Risk Assessment

Upland's Security Organization is responsible for identifying risks that threaten services and systems. We have implemented a process for identifying relevant risks, which includes estimating the significance of identified risks, assessing the likelihood of their occurrence, and deciding about actions to address them. We have established strategic, operations, reporting, and compliance objectives to identify potential risk events, and we consider external and internal factors so our risk assessments' efforts can adequately support business decisions and responding to potential threats.

Risk analysis is an essential process to an organization's success. Upland's methodology for analyzing risks varies, largely because many risks are difficult to quantify. Nonetheless, the process includes:

- **Estimating the significance or impact of threats that face Upland assets**
- **Assessing the likelihood (or frequency) of threat occurring**
- **Considering how the risk should be managed, including an assessment of what actions need to be taken**

Monitoring

Upland's Security Organization performs monitoring activities to continuously assess the quality of internal controls and security posture of our environment over time. The continuous monitoring activities are:

- **Real-time scanning of all web traffic for intrusions and anomalies**
- **Recurring internal vulnerability scans of hosts in the environment**
- **Recurring external vulnerability scans of external IP addresses and ranges of the environment**
- **Continuous, real-time monitoring of all security logs generated on all servers in the environment**

The results of all of these activities are made available to our security analysts, operational teams, and management so analysis and remediation can be performed. Security staff is on hand 24x7x365 to perform this analysis and remediation.

These activities are used to initiate corrective action through department meetings, client conference calls, and informal notifications. Management performs monitoring activities on a continuous basis, and necessary corrective actions are taken as required to correct deviations from company policy and procedures.

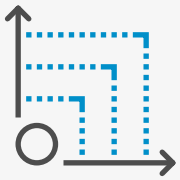
Reporting

Upland Software manages incidents by identifying and responding to them quickly, notifying key support and management personnel in a timely manner, restoring service as soon as possible, determining the cause of the incident, and taking appropriate steps to prevent future incidents. Our incident management process also allows us to quickly notify external organizations that may have been affected by an incident, including customers and partners. We employ both internal and external monitoring systems that periodically verify the state of each Upland cloud-based software product.

Along with incident handling, Upland understands the importance of having a security incident response process in place. As such, we ensure that any instance of suspected disclosure of sensitive information is reported immediately and escalated appropriately to Upland's Information Security Representative and Legal Counsel. The Security Team handles initial responses and assumes leadership and direction for the Security Incident Response Team (SIRT). Together, these teams — Legal, Security, and SIRT — effectively coordinate, collect, respond, and report security events.

UNIVERSAL ACCESSIBILITY

INCREASED VISIBILITY



COMPLETE SCALABILITY

BEST-IN-CLASS SECURITY

Benefits of Amazon Web Services (AWS)

Upland Software maintains the following standards and undertakes the following procedures in relation to the infrastructure that provides its services:

Broad & Deep Platform

AWS has more than 70 services and is continually launching new features and functionality.

Pace of Innovation

The AWS Cloud platform expands daily.

Global Infrastructure

42 availability zones in 16 geographic regions worldwide.

Secure

Comprehensive capabilities for the most demanding information security requirements.

Compliant

Rich controls, auditing, and broad security accreditations.

Trusted

Supports virtually any workload for over a million active customers in 190 countries. Cloud Infrastructure leader according to Gartner.

Upland Amazon Web Services Migration FAQ for Clients

1. How will this affect me?

In general, website URLs will not change, but IP addresses will. An IP address change can affect firewall whitelisting, custom VPN connections, and specific integrations that use said IP address.

2. Will I need to do anything?

Daily interaction with Upland Software's products will not change.

3. How about performance?

Service levels will be maintained and, in some cases, may be improved through more reliable and robust Amazon infrastructure.

4. How will security and compliance be affected?

There is no impact to Upland's security and compliance efforts. You can request our SSAE 16 for our operations and from AWS; however, nothing is changing from a control perspective.

About Upland Software

Upland Software (NASDAQ: UPLD) is a leading provider of cloud-based Enterprise Work Management software. Our family of applications enables users to manage their projects, professional workforce and IT investments; automate document-intensive business processes; and effectively engage with their customers, prospects and community via the web and mobile technologies. With more than 2,500 customers and over 250,000 users around the world, Upland Software solutions help customers run their operations smoothly, adapt to change quickly, and achieve better results every day.

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