AWS Reference Architectures

Amazon EC2

Amazon EBS

Elastic Load Balancing

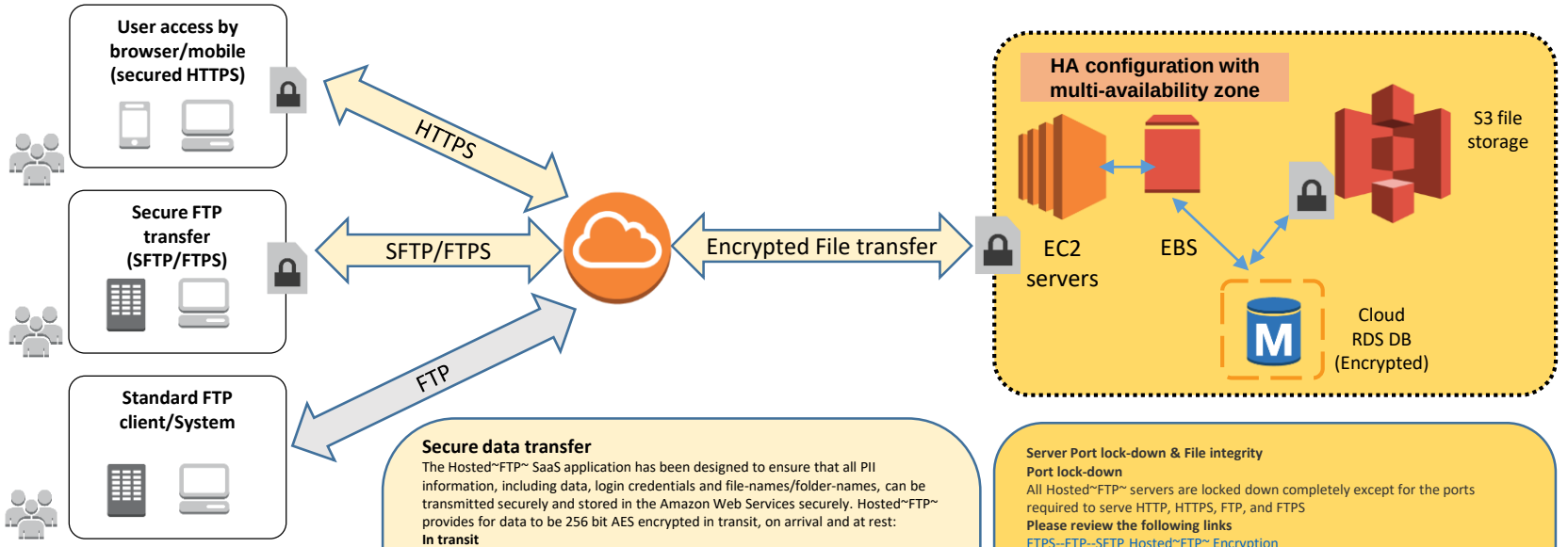
Amazon S3

Hosted~FTP~ Multi-tenant Cloud Service

Hosted~FTP~ SaaS security model

High Speed FTP site infrastructure in secure, reliable Amazon Web Services (AWS) locations only.

The AWS Cloud infrastructure is built around Regions and Availability Zones ("AZs"). A Region is a physical location in the world where we have multiple Availability Zones. Availability Zones consist of one or more discrete data centers, each with redundant power, networking and connectivity, housed in separate facilities. These Availability Zones offer you the ability to operate production applications and databases which are more highly available, fault tolerant and scalable than would be possible from a single data center. The AWS Cloud operates 32 Availability Zones within 12 geographic Regions around the world.



Secure data transfer

The Hosted~FTP~ SaaS application has been designed to ensure that all PII information, including data, login credentials and file-names/folder-names, can be transmitted securely and stored in the Amazon Web Services securely. Hosted~FTP~ provides for data to be 256 bit AES encrypted in transit, on arrival and at rest:

In transit

For transfers by web browsers:

-our website is secured by HTTPS with AES 256 b it encryption (certified by the US government for top secret information)

For transfers by FTP (i.e. FTP client programs, scripts, etc.)

-we support FTPS (FTP over TLS/SSL) with AES 256 bit encryption and SFTP (see this link for further description of the FTPS and SFTP protocols) with PKI or username/password authentication

On Arrival

Hosted~FTP~ encrypts the data as soon as it arrives at the Hosted~FTP~ Amazon cloud location and before any processing takes place to ensure that the data is never unprotected. This includes all data, credentials and file-names and folder names; a process that is unique to Hosted~FTP~.

At rest

The encrypted files are then securely uploaded by HTTPS to Amazon S3 cloud storage, where Amazon encrypts the files a second time before they are stored.

Server Port lock-down & File integrity

Port lock-down

All Hosted~FTP~ servers are locked down completely except for the ports required to serve HTTP, HTTPS, FTP, and FTPS

Please review the following links

FTPS--FTP--SFTP Hosted~FTP~ Encryption

File Integrity (chain of custody)

All files are fingerprinted with an MD5 hash that is stored with reference to the file. When the file(data) is retrieved the MD5 hash is recreated and compared against the original to establish proof that there has been no tampering.

Encrypted DB

All data, file/folder names and metadata is encrypted in the Hosted~FTP~ database; 100% intrusion protected

Amazon Web Services compliance & security standards

The AWS infrastructure is HIPPA & PHI complaint. The AWS cloud infrastructure has been designed and managed in alignment with regulations, standards, and best-practices. Please review the following links

AWS Compliance
HIPAA
SOC 1/SSAE 16/ISAE 3402 (formerly SAS70)
SOC 2
SOC 3
PCI DSS Level 1
ISO 27001

AWS Component SLA standards

Amazon S3 is designed for 99.99% availability and 99.999999999% durability (see this link)

Amazon EBS volume data is replicated across multiple servers in an Availability Zone to prevent the loss of data from the failure of any single component. HFTP configures multi-availability zones for transparent recovery from any failures. (see this link)

Amazon RDS Multi-AZ deployments provide enhanced availability and durability for Database (DB) Instances, as configured by HostedFTP (HFTP) (see this link).

Amazon EC2 Service Level Agreement commitment is 99.95% availability for each Amazon EC2 Region. (see this link)

Reference links

http://aws.amazon.com/security/
http://aws.amazon.com/s3/
http://aws.amazon.com/ec2/
http://aws.amazon.com/rds/

Major features & options

amazon web services

AWS Reference Architectures

Amazon EC2

Amazon EBS

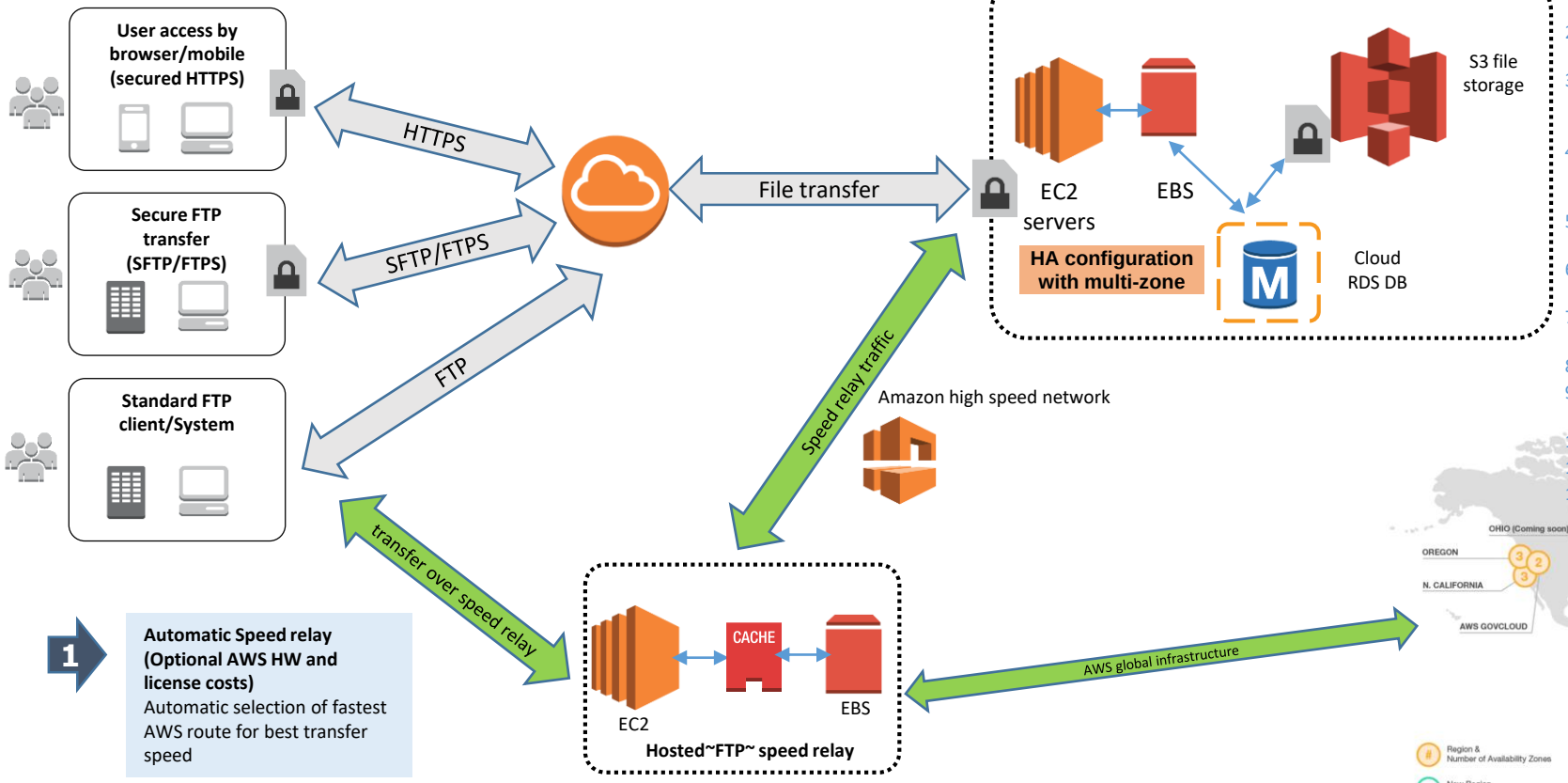
Elastic Load Balancing

Amazon S3

Hosted~FTP~ Multi-tenant Cloud Service

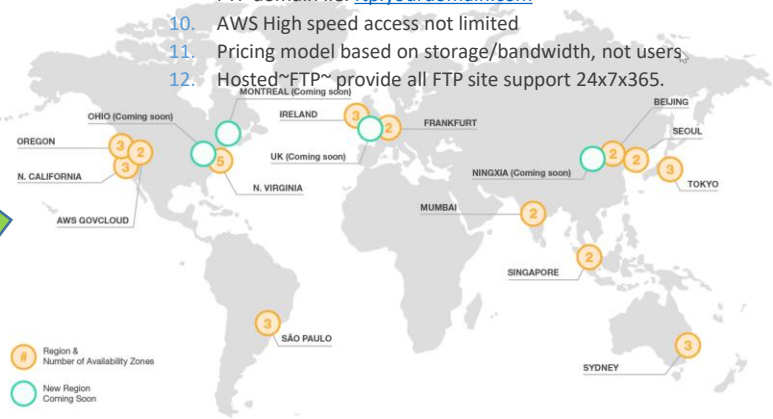
Hosted~FTP~ SaaS configuration

High Speed FTP site infrastructure in secure, reliable Amazon Web Services (AWS) locations only.



Major benefits of FTP in the Cloud services

1. All infrastructure is in the Cloud; removes exposure to internal networks
2. Hosted~FTP~ speed relays located in 8 AWS availability zones and expanding to provide fastest transfer speeds
3. Hosted~FTP~ SaaS deployed and securely manages all FTP data traffic to FTP site RDS database. All data is stored on S3 and accessed from this site.
4. *Data encrypted in transit, on arrival and at rest in AWS S3 storage (256 bit AES). Includes files, credentials, file-names/folder-names*
5. Eliminates impact of FTP file transfers from clogging up the corporate intranet.
6. Support for FTP, SFTP, FTPS protocols and FTP client/FTP script access
7. Supports HTTPS browser access, including most mobile devices
8. Highly reliable and available (SLA > 99.99%)
9. Fully branded account including browser look/feel and FTP domain i.e. ftp.yourdomain.com
10. AWS High speed access not limited
11. Pricing model based on storage/bandwidth, not users
12. Hosted~FTP~ provide all FTP site support 24x7x365.



Major features & options

1 **FTP Speed relay performance (optional):** our unique speed relay infrastructure automatically selects the closest entry point for maximum speed/transfer performance

amazon web services