

# TECHNOLOGY OVERVIEW

CORP/U ORGANIZATIONAL LEARNING SYSTEM



## In this document

This document is designed to provide information on Corp/U's infrastructure security, software architecture, minimum system requirements and supported enterprise integrations.

Here's what you can expect to find:

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## About Corp/U

### Our Business

Our mission is to grow leaders, who grow companies which make a difference. Companies spend billions of dollars, devote some of their best talent, and allocate large amounts of scarce bandwidth to developing leaders. The results? Often disappointing. Or unknown.

We are pioneering a disruptive, digital-first SaaS platform to fundamentally alter how the world's best companies develop leaders, and in so doing, shape their cultures and prepare for a rapidly changing future.

### Our Core Principles:



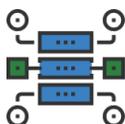
#### PURPOSE-BUILT

We have designed our technology from the ground up to do one thing: enable leaders to learn while tracking and driving their behavior over time in an environment that is easy and fun to be in.



#### CLOUD-BASED

All our production systems are deployed in the cloud, supporting global distribution and real-time redundant failover systems at each tier in separate physical locations. The result: it's never down, and will always be on for you and your company.



#### RAPID-SCALING

We're ready for rapid deployment and easy scaling with a multi-tier architecture. The result: Go to 10, to 1000, to 100,000 employees with ease.



#### EXTREME SECURITY

Our clients ask their leaders to be open and candid in dialogue, and our security is designed to match. We are optimized for enterprise integration and security to the standard of online banks and retailers (256-bit TLS encryption). The result: Your company's dialogue and content stay secure.



#### MODERN TECHNOLOGY

AngularJS, Node.js, MongoDB, MySQL, Micro-services Architecture. We deploy the latest open-sourced technologies. The result: An ever-improving platform that is agile, adaptable and innovative.

# Infrastructure Security

## Overview

Corp/U takes the privacy and security of your company data very seriously. Our software and infrastructure is architected from the ground up with enterprise-grade security in mind in order to meet and exceed the strict security requirements of our customers. We understand that storing your data within a Cloud Infrastructure may be of concern, which is why Corp/U is committed to maintaining transparency and trust with our customers. Many of our customers, including the largest retail, consumer package goods, and financial companies in the world, perform regular and comprehensive information privacy and digital security audits on our process and infrastructure to ensure Corp/U meets the requirements of their most security-sensitive organizations.

## Our Partner

To meet the security, compliance and scale requirements of today's enterprises and government agencies, Corp/U partners with Amazon Web Services (AWS), the most advanced Platform as a Service provider in the world; chosen by the US Department of Defense, leading banks, leading retailers and some of the world's largest consumer-based software companies. Amazon personnel do not have logical access to any Corp/U hosts, applications or databases. Additionally, Corp/U encrypts data in transit (moving across the network) and encrypts all data at rest (sitting on a system or in a database) to prevent unauthorized personnel from gaining access to sensitive customer data. This strategic partnership with AWS allows our customers to benefit from the industry's most comprehensive and innovative security architectures in the world.

## Federal and Industry Controls and Certifications

AWS utilizes third-party certifying bodies and independent auditors to provide customers with information regarding policies, procedures and controls established and operated by AWS. Some of the most stringent audits, controls and certifications include:

- + FBI's Criminal Justice Information Services (CJIS) standard.
- + Cloud Security Alliance (CSA)
- + Cyber Essentials Plus (UK Government-backed, industry-supported certification)
- + Department of Defense (DoD) Cloud Security Models Level 2 and 4
- + Federal Risk and Authorization Management Program (FedRAMP)
- + Federal Information Processing Standard Publication (FIPS)
- + ISO 27001, ISO 27017, and ISO 27018
- + SOC 1/ISAE 3402, SOC2, and SOC3

## Information Security

- + Powerful, standards-based architecture that addresses the common and distinct needs of both large, global and mid-sized organizations
- + Our commitment to security is carried throughout our System Development Life Cycle
- + Protect against any anticipated threats or hazards to the security and integrity of sensitive data
- + Protect against any security incident that creates a substantial risk of identity theft or fraud.

## Cloud Infrastructure

- + Delivers reliable, scalable, secure, and high-performance infrastructure required for next generation learning.
- + Enables an elastic, scale-out, and scale-down infrastructure

## Data Center Security

- + Physical hosting infrastructure has successfully completed multiple SAS70 Type II audits
- + Achieved ISO 27001 certification
- + Validated as a Level 1 service provider under the Payment Card Industry (PCI) Data Security Standard (DSS)

## Administrative Access Control

- + Access is limited to areas required based on job role
- + All Data transmission to and from systems is encrypted
- + Access to administer servers required an individual key of 2,048 bits or greater length
- + Access to servers is further limited by source IP address through bastion servers

## Platform Application Security

- + Cross-site Scripting (XSS)
- + Cross-site Request Forgery (CSRF)
- + SQL Injection
- + JavaScript Injection
- + Clickjacking
- + Host Header Injection

## Availability and Fault Tolerance

- + Database servers are deployed in a master/slave, real-time replication configuration with the slave in a separate city (same region)
- + Slave automatically becomes master if a failure arises
- + Additional read replicas ensure the durability of slaves
- + Two sets of database backups are performed nightly, encrypted and moved off-site

# Software Architecture

## Overview

### Social



Facilitate disciplined collaboration and structured dialogue across purpose-built, business-oriented social networks of leaders and teams to help them align leadership development and change efforts to strategic initiatives.

### Mobile



Lets busy leaders participate in leadership development and change Management activities from anywhere at any time with ease using mobile phones, tablets, and laptops.

### Analytics



Evaluates data generated by thousands of collaboration activities to detect patterns, and deliver insights that help senior leaders make accurate and quick decisions.

### Cloud



Provides limitless availability through a highly-available, secure, standards-based architecture that scales to a team, a function, or across a global enterprise.

## Supported User Platforms



### DESKTOP

- + Any desktop with a web browser and access to the Internet (https port 443 and TLS 1.2 support)
- + Google Chrome 38+
- + Mozilla Firefox 27.0+
- + Apple Safari 7.0+
- + Internet Explorer 11, 12, Edge



### MOBILE

- + Any mobile device with an HTML5-compliant web browser and access to the Internet (https port 443 and TLS 1.2 support)
- + Apple iOS – Safari 7+
- + Android – Android 5+ or Chrome 38+ browsers
- + Windows Phone 8 – Mobile IE 11

## Technology Partners

Corp/U utilizes and integrates with best-of-breed partners:

<b>Amazon Web Services</b>	Cloud Platform as a Service
<b>Veracode</b>	Security scanning and penetration testing
<b>Mailgun</b>	Email delivery and analytics
<b>Zoom</b>	Live Virtual Meetings
<b>Encoding.com</b>	Video Encoding
<b>SendWithUs</b>	Email Generation
<b>Help Scout</b>	Online Help System

## Modern Application Technology Stack

<b>HAProxy</b>	Load balancing
<b>Gunicorn</b>	Python application server
<b>Django</b>	Python web development framework
<b>Node.js</b>	JavaScript application server
<b>AngularJS</b>	JavaScript MVW framework
<b>React</b>	JavaScript framework
<b>MySQL</b>	Relational DBMS
<b>MongoDB</b>	NoSQL DBMS
<b>Redis</b>	Cache store
<b>Apache Solr</b>	Search Indexing
<b>Apache Kafka</b>	Data Streaming
<b>Apache Spark</b>	Analytics Engine

## Scale and Availability

Corp/U's infrastructure is provisioned via Chef-based automation tools allowing for reliable deployments, agile data center shifts, auto-scaling, and rapid failover.

- + All aspects of the infrastructure stack are deployed redundantly to multiple data centers spanning multiple cities – each with LAN-speed connections between them.
- + In the case of an outage spanning multiple data centers in a region, nodes can be moved to a new region with limited effort.

# Availability and Fault Tolerance

## UGS: User Generated Content

- + UGC is stored on auto-replicated network-connected storage that is replicated to multiple geographical regions
- + New files or file updates are auto-replicated to at least three in-region nodes before we indicate to the user that the file has been accepted
- + SAN durability: 99.999999999% (11 9's)

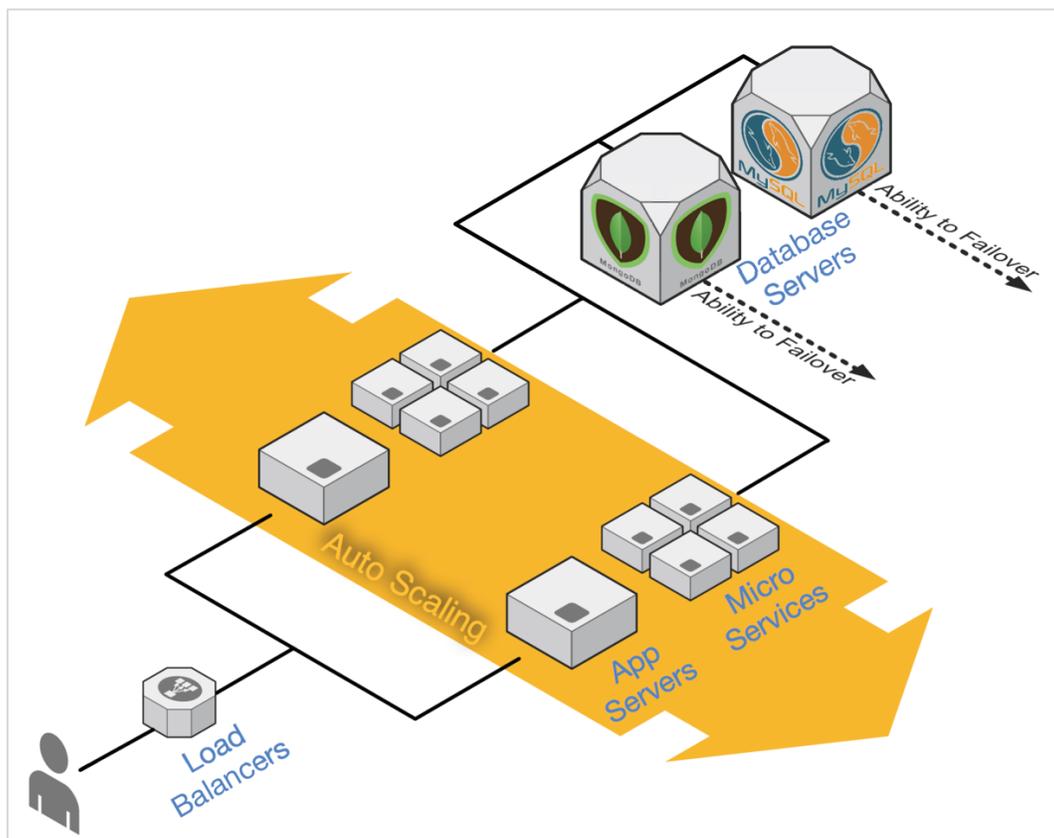
## Relational Database Servers

- + Database servers are deployed in a master/slave, real-time replication configuration with the slave in a separate city (same region).
- + Slave automatically becomes master if a failure happens
- + Additional read replicas ensure the durability of slaves

## NoSQL Database Servers (MongoDB and Redis)

- + All database nodes belong in high-availability clusters
- + All clusters have nodes in at least three data centers

## Application Layers



# Single Sign-On

## Overview

Corp/U supports SAML 2.0 for single sign-on (SSO). Security Assertion Markup Language (SAML) creates endpoints that give an organization's users a single URL to sign in and select the applications they are authorized to use. This provides an additional level of security and simplifies user authentication by eliminating further login prompts when switching applications during a particular session.

Advantages of utilizing SSO include:

- + Improved user experience
- + Reduced internal operational cost
- + Centralized management of users
- + Enhanced security to enterprise systems
- + Adhere to Compliance Regulations (SOX, HIPPA)

## Standards Support

- + Corp/U supports the OASIS Security Assertion Markup Language (SAML) v2.0 standard for single sign-on
- + SAML v2.0 supports allows integration with many common identity providers including Microsoft Active Directory (via ADFS), Tivoli Federated Identity Manager, Okta and other federated authentication platforms

## General Assumptions

- + AWS Corp/U will perform the SP (service provider) role in the SAML v2.0 trust relationship
- + Corp/U requires SAML v2.0 compliant IDP (identity provider) metadata files from the IDP. The IDP metadata file will contain:
  - o The SingleSignOnService endpoint location
  - o X.509 public certificate used for assertion signing (if applicable)
- + Corp/U will provide a SP metadata file that contains the following:
  - o The SP endpoint
  - o The X.509 public certificate used for Authn request signing (if applicable)

## Development Process

Corp/U currently has two environments for SSO integration: TEST and PRODUCTION. Corp/U recommends that development and testing of SSO integrations happens on a TEST site provided for this purpose. A typical integration workflow is as follows:

- + Scoping call to connect your SSO team with CorpU's SSO team. This call is to agree on process steps, use of TEST environment and which configuration options will be used
- + You provide the IDP metadata file for the TEST environment
- + Corp/U builds the TEST environment and provides a SP metadata file. If Authn request signing is enabled, Corp/U will provision a separate X.509 certificate for the TEST environment.
- + Integration testing and remediation occurs until the appointed stakeholders sign off that the integration is successful. Both IDP-initiated and SP-initiated types of access should be tested. At this point, a production window is agreed upon.
- + You provide the IDP metadata for the PRODUCTION environment.
- + Corp/U pre-configures the production environment and provides the SP metadata file for the PRODUCTION environment.

## Supported Configurations

Corp/U currently supports the following SAML configurations:

- + Single logout (SLO)
  - o Disabled – Corp/U does not currently support SLO
- + NameID format
  - o urn:oasis:names:tc:SAML:1.1:nameid-format:emailAddress (DEFAULT)
  - o urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified
  - o urn:oasis:names:tc:SAML:2.0:nameid-format:encrypted
  - o urn:oasis:names:tc:SAML:2.0:nameid-format:persistent
  - o urn:oasis:names:tc:SAML:2.0:nameid-format:transient
  - o urn:oasis:names:tc:SAML:2.0:nameid-format:entity
- + Assertions are signed
  - o No / Yes (DEFAULT)
- + Authn requests are signed
  - o No (DEFAULT) / Yes
- + Provision new users
  - o Disabled (DEFAULT) / Enabled
- + Updated existing user attributes
  - o Disabled (DEFAULT) / Enabled
- + Preferred Authn request binding:
  - o Post (DEFAULT) / Redirec

# Automated Data Exchanges

## Overview

Automated Data Exchanges enable the syncing and securing of data between enterprise business systems. Corp/U supports the importing and exporting of data from one business system to another through the use of these automated data interchanges. Typical data feeds include importing Human Resource Information System (HRIS) data into the Corp/U Platform, or exporting completion data from the Corp/U Platform into a Learning Management System (LMS) such as Cornerstone, Saba, SumTotal and many others.

Corp/U exposes these asynchronous data exchange services in the form of automated or manual batch import and batch export operations. For business situations that require advanced business logic, Corp/U can work with our customers and partners to build custom pre- or post-processor programs that can access the business logic tier directly.

Batch import and export files are UTF-8 encoded, CSV-based flat files that are transferred via our secure FTP gate (SFTP) to ensure encryption while in transit.

## Capabilities Included

IMPORT CAPABILITY	EXPORT CAPABILITY
<ul style="list-style-type: none"><li>+ Adding</li><li>+ Updating</li><li>+ De-activating users</li><li>+ Assigning users to organizations</li><li>+ Adding cohorts</li><li>+ Adding communities</li><li>+ Assigning users to cohorts</li><li>+ Assigning users to communities</li></ul>	<ul style="list-style-type: none"><li>+ Click-stream data</li><li>+ Community discussion activity</li><li>+ Community articles, documents and video utilization</li><li>+ User audits</li><li>+ Course activities</li></ul>

Corp/U will work with our customers and partners to create custom exports to retrieve data that is essential to their specific business requirements.

# Minimum System Requirements

## ***General System Requirements***

- + Broadband connection with 1+Mbps
- + Internet Explorer 11.0+, Google Chrome 38+, Apple Safari 7.0+, Mozilla Firefox 27.0+
- + Access to HTTPS port 443
- + TLS 1.2 support
- + Access to view HLS and RTMP video streams of H.264 video
- + Adobe Flash Player plug-in version 11.4 or higher (only necessary if content embeds Flash objects)

## ***Computer Supported Hardware - Desktop***

- + Processor: 1.83GHz Intel Core Duo or faster
- + RAM: 512MB or more
- + Audio capability with speakers or headphones

## ***Computer / Mobile Device Supported Operating Systems***

- + Windows 7, Windows 8.x, and Windows 10
- + Apple Mac OS X 10.10 or higher
- + Apple iOS 7+ for iPad and iPhone
- + Google Android 5.0+ for tablets and phones

# Supported Languages

## Overview

Corp/U provides support in 13 different languages. This includes translation of the entire platform interface including field labels, buttons and prompts. Supported languages include:

- + Chinese (Simplified)
- + English
- + French
- + French Canadian
- + German
- + Italian
- + Japanese
- + Polish
- + Portuguese
- + Romanian
- + Russian
- + Spanish (Latin America)
- + Turkish

Additional languages will be added based on customer demand.

**Note: Supported languages do not include course or sprint content translations.**

# Corp/U Video Specifications

## Overview

Corp/U can ingest and transcode virtually any video codec container combination. This section will outline the specific video formats and codecs supported by the Corp/U Video upload capability.

## Supported Output Formats

### Video Formats

- + MP4 (mp4, m4a, m4v, f4v, f4a, m4b, m4r, f4b, mov)
- + 3GP (3gp, 3gp2, 3g2, 3gpp, 3gpp2)
- + OGG (ogg, oga, ogv, ogx)
- + WMV (wmv, wma, asf\*)
- + WEBM (webm)
- + FLV (flv)
- + AVI\*
- + QuickTime\*
- + HDV\*
- + MXF (OP1a, OP-Atom)\*
- + MPEG-TS (ts)
- + MPEG-2 PS, MPEG-2 TS\*
- + WAV, Broadcast WAV\*
- + LXF, GXF\*
- + VOB\*

### Video Codecs

- + H.263
- + H.264
- + MPEG4
- + Theora
- + 3GP
- + Windows Media 8
- + Quicktime
- + MPEG-4
- + VP8
- + VP6
- + MPEG1
- + MPEG2 (CableLabs)
- + MPEG-TS
- + MPEG-4\*
- + DNXHD
- + ProRes
- + XDCAM
- + DV, DVCPRO, DVCPRO\*, DVCPROHD
- + IMX, XDCAM HD, XDCAM HD422, XDCAM EX\*
- + JPEG 2000\*
- + DivX\*

\*Harmonic ProMedia Carbon format.

## Video File Size Limitations

Corp/U does not currently have a video file size upload limitation. Corp/U has successfully tested video files up to 5GB in size (the average size of a full-length HD Hollywood feature film).

# General Data Protection Regulation (GDPR) Compliance

Corp/U's GDPR pathway and current positions, of which, many are already achieved as part of CorpU's best practices and due diligence as data processors:

- + Corp/U's current Information Security Officer (ISO) is the acting Data Protection Officer (DPO) until it is determined that a dedicated one is required. The current role as ISO is fitting to the DPO role as main concerns focus on the protection of all data.
- + Corp/U holds limited amount of Personally Identifiable Information (PII) and regards processing of that data with the highest importance for integrity and confidentiality.
- + Corp/U only uses the data to process transactions requested on behalf of the customer.
- + Corp/U is part of the Deep Web; only authorized users are permitted to access the data.
- + Corp/U already contracts to hold the data only as long as authorized by the customer.
- + Any 'Right to be Forgotten' requests will be reviewed with the customer before remove.
- + Corp/U encrypts all data at rest stored within the Amazon Web Services (AWS) private cloud.
- + Corp/U is engaging in annual Data Protection training.
- + Corp/U annually reviews our Data Protection Policy to ensure compliance with GDPR.

## ***Online***

[www.corpu.com](http://www.corpu.com)

## ***About Corp/U***

Corp/U grows leaders, who grow companies which make a difference.

## ***For More Information***

To learn more about Corp/U, contact [sales@corpu.com](mailto:sales@corpu.com).

## ***Product Overview***

[www.corpu.com/technology](http://www.corpu.com/technology)

## ***Privacy Policy***

<https://www.corpu.com/privacy-policy>

## ***Terms of Service***

<https://www.corpu.com/terms-of-service>

## ***Contact Corp/U***

[www.corpu.com/contact](http://www.corpu.com/contact)

## ***Client Support***

[support@corpu.com](mailto:support@corpu.com)