



edcast

A Stanford StartX Company

*Expanding the OpenedX
Ecosystem!*

the opposite of open isn't "closed"



the opposite of open is “broken”

Attribution: John Wilbanks





EdCast Capabilities for OpenedX

SaaS/ Cloud Services

+

App EcoSystem (LTI)

(Mobile First, Social, Ecommerce, etc)

+

Integration to Campus/
Enterprise Systems



EdCast SaaS/ Cloud Services

- 15 mins to get your branded site
- 100% Support (Faculty & Users)-Phone, Chat, email
 - Manage, Update, Monitor– SLA
- Global Merchant Account- Payment processing across 180 countries



Multi-tenant application managing all EdCast Cloud Instances

- Hosted on heroku

- User access through EdCast user identity as well as FB, LinkedIn, G+, and specific SSO implementations (OAuth & OpenID Connect)

- Instance customization of EdCast white label solution

 - Catalog services

 - E-commerce solutions

 - GA tracking

- Complementary LTI addon support and app echo system



Multi-instance OpenEdX deployment for each EdCast cloud instance

Hosted on AWS using various Amazon services

Using course-level functionality for students and faculty.

Deployment models

- Low volume robust template

- Scalable template for high volume instances

- Docker solution for all components (experimental)





OpenedX Scalable Deployment

Separate Amazon servers for web application

Single cluster for data stores

RabbitMQ, Memcache, MySQL, MongoDB

Web app servers expand automatically as request load increases.

Supporting data store components on a single cluster but separated into logical instances per client.

New resources added as content increases





OpenedX Docker Deployment (Experimental)

Separate Amazon servers for

- Web application

- Supporting components for RabbitMQ and Memcache

- MySQL

- MongoDB

Each server is divided into a set number of Linux Containers (LXC)

- More optimal than VMs

Each Knowledge Instance is made of a set of containers across Amazon servers



Automatic provisioning through EdCast platform

Newly instantiated instances on Aspen

Existing instances without advanced customization are upgraded on demand

Backup

- MySQL replication on RDS

- Daily export of all managed courses for backup

Monitoring

- Custom health check and data availability

- Using Zabbix



DEMO's Q&A

