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Configuration Clarified

Removing roadblocks to getting started with OpenEdX

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Outline

- Intro
- What is Configuration?
- How Settings work today
- What's Changing
- How does it impact you
- Recap
- Questions



What is Configuration?



Ansible Code that builds OpenEdX

How Edx.org configures OpenEdX

Tooling that builds, installs, and configures services

 Takes 45 minutes to build edx-platform from base Ubuntu.

Needs to be run to change any settings



How does it work Today?



github.com/edx/configuration

- playbooks/roles/edxapp/defaults/main.yml



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 - Create a default variable named EDXAPP_MY_NEW_SETTING



- playbooks/roles/edxapp/defaults/main.yml
 - Create a default variable named EDXAPP_MY_NEW_SETTING
 - Assign it to an app variable named MY NEW SETTING



- playbooks/roles/edxapp/defaults/main.yml
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 - Nest your setting under lms env config



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 generic env config



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 - Nest your setting under lms_env_config
 generic_env_config
 generic auth config



So how does the app know about it?



edx-platform

- aws.py
 - load common.py
 - load two json files that you wrote with ansible
 - arbitrarily choose which file overrides which setting
 - `JWT_AUTH`
 - env.json
 - `SESSION_INACTIVITY_TIMEOUT_IN_SECONDS`
 - auth.json



This is *really* annoying.

Footprint of a setting

• Levels of Indirection: 4

• Number of Repos Touch: 3

• Number of defaults: 3



Things need to change.

What's Done?

Move edx-platform config to YAML

- Ansible generates a single YAML file per service
 - Ims.yml
 - studio.yml

Edx-platform reads yaml with production.py

Now edx-platform matches other services



What's Next?

Move App defaults into Django

- One place for defaults.
 - In the application repo
- Everything is overridable with your YAML file
- Your YAML override values directly correspond to entries in the django settings dictionary



Impact

New Settings File

- aws.py => production.py
- Plugins
 - See DEPR-14 for migration path
 - We've already migrated all default plugins



Move from JSON to YAML

In Juniper

- Ansible will stop generating your app config file
- We will provide migration documentation



App is Built Using Make Targets

- Single workflow for
 - Ansible
 - Dockerfiles
 - manual installs



Recap



One Story

The apps read config from a yaml file and override any defaults set in your app code.

App Configuration

- No ansible in your app config.
- Edx-platform and IDAs load settings the same way

Enable better choices up and down the entire ecosystem

Ansible, Dockerfile, Salt, Garfl, etc.

Thank You

Questions?



How can you help?

INCR-25



