SLI – *Environment Specification*

Release 6.5

December 6, 2012

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# Purpose

This document is intended to provide a minimum specification guideline for the deployment of Release 6.5 into Production and Sandbox environments, while also setting the expectation for what a environments components are expected to be in existence for the 6.5 Release.

# Summary

This document provides minimum deployment footprints for Release 6.5, as well as an estimated footprint necessary for 5M students, and the Sandbox developer environment.

Due to the expectation of a continued deployment within an Amazon AWS environment, this document has been geared as such.

# Infrastructure Configuration

## MongoDB (Datastore Layer, SLI database)

Notice: Ingestion also requires separate MongoDB servers for staging purposes, which are covered within the Ingestion section of this document.

* Minimum Requirements
  + Three MongoDB Servers in a replica set (one shard)  
    This means that there is one master server and two replicated backups.
    - Recommended AWS Instance Class: High-Memory Quadruple Extra Large (m2.4xlarge) 68.4GB
    - Recommended storage: RAID10 EBS with PIOPS
  + Three MongoDB configuration servers  
    MongoDB specifies using exactly 3 config servers
    - Recommended AWS Instance Class: Large (m1.large) 7.5GB
    - Recommended storage: ephemeral
* The Datastore layer is scaled by adding replica sets (shards) where each replica set consists of 3 MongoDB servers as described above
* Requirements for 5M students  
  nine MongoDB replica sets (shards), for a total of twenty seven MongoDB servers.
* Recommendations for Sandbox  
  four MongoDB replica sets (shards), for a total of twelve MongoDB servers.

### Mongo 2.0 to 2.2 Upgrade

Wireless Generation has upgraded MongoDB in our test environments numerous times and found it to be a relatively pain-free process. According to 10gen at <http://docs.mongodb.org/manual/release-notes/2.2/#upgrading> “MongoDB 2.2 is a standard, incremental production release and works as a drop-in replacement for MongoDB 2.0.” Follow the order of operations in the included link. It’s crucially important to upgrade in the right order!

### Transition from Sharding to Pre-Splitting, and Database per Tenant

Starting with Release 6.3, Mongo Database configuration has changed from using the Mongo Sharding and Balancer to utilizing Pre-Splitting with the balancer disabled. The core SLI database no longer needs to be split across multiple replica sets as it no longer contains tenant data. It is still required for the SLI database indexes to be manually applied.

Tenant databases are created when the Landing Zone is provisioned via the Admin Interface. Index and Sharding configuration is applied at that time.

#### Disabling Balancer

In order to disable the balancer, open a mongo command line to a mongos service and execute the following commands.

use config

db.settings.update( { \_id: "balancer" }, { $set : { stopped: true } } , true );

You can then verify the state of the balancer by executing the commands below in a mongo command line while connected to a mongos service.:

use config

db.settings.find({\_id: "balancer"})

Moving forward individual database shards will need to be monitored to ensure that they do not become unbalanced. Should they become unbalanced, the operator will need to temporarily re-enable the balancer to spread the databases out.

### Transforming the Database for 1.0.65

**Note**: The 61to63DBMigration.sh script is coded to operate only on a database named “sli”. Deviation from this name in an environment requires modification of the script.  
  
The end result is that the core “sli” database contains only key collections with metadata for the SLI application stack to operate, while the newly created tenant databases house the required key records.  
  
All ingested data is purged by this process and will need to be re-ingested by the tenant or Sandbox user, while preserving key tenant or Sandbox user configuration post re-ingestion.  
The following actions are performed by this process:

* Addition of a hashed dbName field to each tenant collection entry.
* Migration of the tenant’s customRole, custom\_entitites, applicationAuthorization, and adminDelegation collection entries from the sli database to the new tenant database.
* Deletion of all collections that contain tenant data from the sli database.

The application.sh script updates the application collection to make use of an updated ID format that was changed between release 6.1 and release 6.5.

#### Executing the Database Transformation

These steps are the upgrade sequence of events in which the 61to63DBMigration.sh script is executed. Since exact operator processes, data volumes, and environmental differences can vary, the software operator should be consulted to identify an appropriate overall downtime estimation.

1. Stop all API, Ingestion, and SimpleIDP services.
2. Complete a backup of the:
   * SLI database
   * LDAP
   * sli.properties configuration file
   * in order to ensure that there is a point in time snapshot of the configuration, and data that can be restored should an issue be encountered and environment rollback is deemed necessary.
3. Complete an upgrade to Mongo 2.2, if not already completed, to ensure that all running mongo databases and mongos services are 2.2.0.
4. Run the following command from the appropriate directory, currently opstools/migration/app\_auth.
   * The database is the mongo database (likely "sli").
   * The HOST is the mongo server
   * PORT is mongo's port on HOST
   * DEBUG\_LOG is the path to a log file where debug output will be redirected (appending to avoid overwrites).
   * Command:

ruby application.rb <HOST>:<PORT> <DATABASE> >> <DEBUG\_LOG> 2>&1

* + Example:

ruby application.rb localhost:27017 sli >> /var/tmp/application\_migration.log 2>&1

1. Execute the 61to63DBMigration.sh script from an instance with a running mongos service.
   * **Note**  
     In the WGen test environment, with an sli database size of approximately 2GB, execution of this script took less than one minute.
2. Execute sli/opstools/migration/customRolesMigration.rb from an instance with a running mongos service.
3. Disable the mongo balancer. Open the mongo command line while connected to a mongos service, and execute the following commands on the mongos command line:
4. use config
5. db.settings.update( { \_id: "balancer" }, { $set : { stopped: true } } , true );
   * **Note**  
     Additional information on this step is covered in the Environment Specification for Release 6.3 document.
6. Restart all mongos services.
7. Deploy Release 6.3 software in accordance with the Environment Specification for Release 6.3 document and Release Notes.
8. Restart API, Ingestion, and Simple IDP services.

#### End User Post Transformation Process

Once the data transformation is completed, the Tenant/Sandbox/Developer Administrative users must do the following:

1. Re-provision the Landing Zone utilized by visiting “Provision Landing Zone” in the Admin interface.
2. Re-Ingest the desired data set.
3. Once ingestion is finished, developers need to re-approve the ingested Educational Organizations to utilize the registered applications.  
   **Note**: In a production environment, this item is performed only by Developers.

## Ingestion

### Landing Zones

* Two Landing Zone Servers
  + Amazon Large (m1.large) instance providing SFTP services for Ingestion Users via ProFTPD (per Runbook).
  + Mount GlusterFS (per Runbook).

### GlusterFS

* Two GlusterFS instances providing scalable replicated distributed storage services to the Landing Zone servers and the ingestion servers.
* Minimum Requirements
  + Amazon m1.large instances
  + Gluster volume configured with a replica count of two, matching the number of initial storage bricks.
  + PIOPS EBS volume, 500GB size, 2000 IOPS, to be used as GlusterFS storage brick.
    - The storage size amount is purely an estimate based on existing testing in release candidate environments. It must be understood that this must be monitored, and potentially adjusted by the operator. It is very straightforward to add bricks to GlusterFS without incurring any downtime.
* Requirements for 5M  
  Amazon High I/O Quadruple Extra Large (hi1.4xlarge) instances
* Recommendations for Sandbox  
  Minimum requirements as described above

### ActiveMQ

* Two ActiveMQ Servers  
  One active, one secondary
  + Configuration details for ActiveMQ Clustering Configuration can be found at http://activemq.apache.org/networks-of-brokers.html.
  + Recommended AWS Instance Class: Large (m1.large) 7.5GB

Recommended storage: ephemeral

### Staging DB

* Three MongoDB Servers  
  One master and two replicated backups.
  + Recommended AWS Instance Class: High-Memory Quadruple Extra Large (m2.4xlarge) 68.4GB

Recommended storage: EBS with PIOPS

### Ingestion servers

* This is considered ingestion “standalone” mode as opposed to Maestro/Pit mode which will be merged in the future releases.
* Minimum Requirements: two servers
  + Recommended AWS Instance Class: High-Memory Quadruple Extra Large (m2.4xlarge) 68.4GB
  + Recommended storage: ephemeral
  + Tomcat service should run as root user.
* Requirements for 5M  
  Four standalone ingestion servers
* Recommendations for 5M students  
  Seven standalone ingestion servers

## Portal

* Recommended Configuration
  + Utilize Amazon Elastic Load Balancer.
  + Two Tomcat web servers running the LifeRay product
    - Recommended AWS Instance Class: Large (m1.large) 7.5GB
    - Recommended storage: ephemeral
  + Use of Amazon RDS for back-end Portal MySQL Data storage
    - Recommended Large Database Instance making use of a Multi-AZ Deployment.

## API

* Minimum Requirements:
  + Utilize Amazon Elastic Load Balancer
  + Two Tomcat web servers  
    These run the Data Infrastructure software for the API servers
    - Recommended AWS Instance Class: Large (m1.large) 7.5GB
    - Recommended storage: ephemeral
* Requirements for 5M students  
  It is estimated that 5 million students will lead to a peak load of 55 pages/second (based on the SLI API Load Estimate spreadsheet). This load will require 5 Tomcat web servers.
* Recommendations for Sandbox  
  For Sandbox, we recommend 3 API servers.

## Data Browser

* Scaling the Data Browser layer is accomplished by scaling Rails Web Servers. It is anticipated that these servers will be sufficient for 5M students and for Sandbox.
  + Minimum Requirements:
    - Utilize Amazon Elastic Load Balancer
    - Two Ruby on Rails web servers  
      These run the Data Infrastructure software for the Dashboard
      * Recommended AWS Instance Class: Large (m1.large) 7.5GB
      * Recommended storage: ephemeral

## Admin Tools

* Scaling the Admin layer is accomplished by scaling Rails Web Servers. It is anticipated that these servers will be sufficient for 5M students and for Sandbox.
  + Minimum Requirements:
* Utilize Amazon Elastic Load Balancer
* Two Ruby on Rails web servers  
  These run the Data Infrastructure software for the Dashboard
  + Recommended AWS Instance Class: Large (m1.large) 7.5GB
  + Recommended storage: ephemeral
  + Notice: The Admin Tools are dependant upon the API, and the OpenLDAP servers.

## Simple IDP

* Simple IDP is the Identity Provider for the Admin realms.   
  It is anticipated that these servers will be sufficient for 5M students and for Sandbox.
  + Minimum Requirements:
    - Utilize Amazon Elastic Load Balancer
    - 2 Simple IDP Servers
      * Recommended AWS Instance Class: Large (m1.large) 7.5GB
      * Recommended storage: ephemeral
    - 2 OpenLDAP Servers
      * Recommended AWS Instance Class: Large (m1.large) 7.5GB
      * Recommended storage: EBS

# Suggested Base Configuration

## sli.properties

api.perf.log.path = /var/log/tomcat

sli.security.noSession.landing.url = https://rcapi.slidev.org/api/oauth/authorize?response\_type=code

# sli.security.sp.issuerName is the URL of the API service.

sli.security.sp.issuerName = https://rcapi.slidev.org

sli.security.gracePeriod = 2000

sli.trust.certificates = /opt/tomcat/trust/trustedCertificates

# Security events notices are sent to the following email address.

sli.support.email = sliops@wgen.net

#The following settings govern user login session lengths, in milliseconds.

sli.session.length = 1800000

sli.session.hardLogout = 28800000

# The following setting must be updated to match the cookie domain of the installation.

sli.api.cookieDomain = .slidev.org

# The following three settings govern Sandbox and API Application creation behavior.

sli.sandbox.enabled = true

sli.autoRegisterApps = true

bootstrap.sandbox.createSandboxRealm = true

# The following bootstrap settings will require the FQDN of service names to be updated.

bootstrap.admin.realm.name = Shared Learning Collaborative

bootstrap.admin.realm.tenantId = SLI

bootstrap.admin.realm.idpId = https://rcidp01ext.slidev.org/sliidp?realm=SLIAdmin

bootstrap.admin.realm.redirectEndpoint = https://rcidp01ext.slidev.org/sliidp?realm=SLIAdmin

bootstrap.sandbox.realm.uniqueId = SandboxIDP

bootstrap.sandbox.realm.name = Sandbox Environment

bootstrap.sandbox.realm.idpId = https://rcidp01ext.slidev.org/sliidp

bootstrap.sandbox.realm.redirectEndpoint = https://rcidp01ext.slidev.org/sliidp

bootstrap.app.conf = \${sli.conf}

# sli.tenant.ingestionServers is a depricated setting.

sli.tenant.ingestionServers = rcingest01

# sli.tenant.landingZoneMountPoint governs the file path that the API will utilize when creating tenant collection entries for the Ingestion Service.

sli.tenant.landingZoneMountPoint = /ingestion/lz

sli.landingZone.server = rclz01.slidev.org

sli.useraccount.maximum = 500

# The following settings until sli.ingestion settings generally need to be unmodified with the exception of sli.api.ldap settings.

sli.api.ldap.user = cn=Admin,dc=slidev,dc=org

sli.api.ldap.pass = [LDAP\_ADMIN\_PASS]

sli.application.buildTag = sli.app.buildTag

sli.api.performance.tracking = false

sli.api.security.context.paging = 100000

sli.security.in\_clause\_size = 100000

sli.sandbox.autoRegisterApps = false

sli.mongodb.database = sli

sli.mongodb.host = localhost:27017

sli.mongodb.port = 27017

sli.mongodb.user =

sli.mongodb.pass =

sli.mongodb.keyencoding = \%:\%25,\\.:\%2E

sli.perf.mongodb.database = apiPerf

sli.perf.mongodb.host = localhost

sli.perf.mongodb.port = 27017

sli.mongodb.connections = 20

sli.stagingmongodb.connections = 20

sli.batchjobmongodb.connections = 20

# sli.ingestion settings require server names and potentially database names updated based on the environment configuration. Generally the bulk of the settings here should remain unmodififed.

sli.ingestion.staging.mongodb.database = is

sli.ingestion.staging.mongodb.host = rcmongo10.slidev.org

sli.ingestion.staging.mongodb.port = 27017

sli.ingestion.staging.mongodb.user =

sli.ingestion.staging.mongodb.pass =

sli.ingestion.staging.clearOnCompletion = true

sli.ingestion.batchjob.mongodb.database = ingestion\_batch\_job

sli.ingestion.batchjob.mongodb.host = rcmongo10.slidev.org

sli.ingestion.batchjob.mongodb.port = 27017

sli.ingestion.batchjob.mongodb.user =

sli.ingestion.batchjob.mongodb.pass =

sli.ingestion.errors.tracking = true

sli.ingestion.warnings.tracking = true

sli.test.prop = ci DAL Context Test Property

sli.ingestion.securityEvent.capSize =

sli.ingestion.healthcheck.user = admin

sli.ingestion.healthcheck.pass = admin

sli.mongo.tracking = false

sli.mongo.tracking.interval.seconds = 5

sli.ingestion.mongotemplate.writeConcern = SAFE

sli.ingestion.staging.mongotemplate.writeConcern = SAFE

sli.default.mongotemplate.writeConcern = SAFE

landingzone.inbounddir = /ingestion/lz/

sli.ingestion.lz.readLockCheckInterval = 10000

sli.ingestion.lz.readLockTimeout = 600000

sli.ingestion.lz.pollInterval = 30000

logging.path = /var/log/tomcat

sli.ingestion.topic.command = activemq:topic:ingestion.command

sli.ingestion.exception.message.log = true

sli.ingestion.log.level = info

sli.ingestion.processor.edfi = concurrent

sli.ingestion.processor.xml = concurrent

sli.ingestion.queue.workItem.host = rcingest01.slidev.org

sli.ingestion.queue.workItem.port = 61616

sli.ingestion.queue.workItem.secondaryhost =

sli.ingestion.queue.workItem.secondaryport =

sli.ingestion.queue.options = keepAlive=true&jms.prefetchPolicy.queuePrefetch=0&wireFormat.maxInactivityDurationInitalDelay=60000

sli.ingestion.queue.brokerUrl = tcp://${sli.ingestion.queue.workItem.host}:${sli.ingestion.queue.workItem.port}?${sli.ingestion.queue.options}

sli.ingestion.queue.maxConnections = 25

sli.ingestion.queue.maximumActive = 500

sli.ingestion.queue.workItem.queueURI = seda:IngestionWorkItem

sli.ingestion.queue.workItem.concurrentConsumers = 4

sli.ingestion.queue.workItem.keystore = /opt/tomcat/encryption/tomcat.keystore

sli.ingestion.queue.workItem.keystorePassword = [redacted]

sli.ingestion.queue.maestro.host = rcingest01.slidev.org

sli.ingestion.queue.maestro.port = 61616

sli.ingestion.queue.maestro.queueURI = activemq:queue:ingestion.maestro

sli.ingestion.queue.maestro.consumerQueueURI = txActivemq:queue:ingestion.maestro

sli.ingestion.queue.maestro.concurrentConsumers = 1

sli.ingestion.queue.maestro.uriOptions = &transferExchange=true

sli.ingestion.queue.maestro.keystore = /opt/tomcat/encryption/tomcat.keystore

sli.ingestion.queue.maestro.keystorePassword = [DAL\_KEYSTORE\_PASS]

sli.ingestion.queue.pit.host = rcingest01

sli.ingestion.queue.pit.port = 61616

sli.ingestion.queue.pit.queueURI = activemq:queue:ingestionPit

sli.ingestion.queue.pit.consumerQueueURI = txActivemq:queue:ingestionPit

sli.ingestion.queue.pit.concurrentConsumers = 5

sli.ingestion.queue.pit.uriOptions = &transferExchange=true

sli.ingestion.queue.pit.keystore = /opt/tomcat/encryption/tomcat.keystore

sli.ingestion.queue.pit.keystorePassword = [DAL\_KEYSTORE\_PASS]

sli.ingestion.nodeType = standalone

sli.ingestion.tenant.deriveTenants = true

sli.ingestion.tenant.loadDefaultTenants = true

sli.ingestion.tenant.tenantPollingRepeatInterval = 5s

sli.ingestion.cache.type = inmemory

sli.ingestion.cache.servers =

sli.ingestion.cache.opTimeout = 10

sli.ingestion.split.chunk.size = 500

sli.ingestion.split.threshold.percentage = 0.3

sli.ingestion.referenceSchema.referenceCheckEnabled = false

sli.ingestion.errorsCountPerInterchange = 15

sli.ingestion.warningsCountPerInterchange = 15

sli.ingestion.totalRetries = 5

sli.ingestion.dataset.sample = {"small":["SmallSampleDataSet.zip"],"medium":["MediumSampleDataSet.zip"]}

sli.ingestion.zipfile.timeout = 600000

sli.ingestion.zipfile.retryinterval = 30000

sli.ingestion.recordLevelDeltaEntities = calendarDate,cohort,competencyLevelDescriptor,course,courseOffering,disciplineAction,disciplineIncident,educationOrganization,grade,gradebookEntry,gradingPeriod,graduationPlan,learningStandard,localEducationAgency,parent,program,reportCard,school,section,session,staff,staffCohortAssociation,staffEducationOrganizationAssociation,staffProgramAssociation,stateEducationAgency,student,studentAcademicRecord,studentCohortAssociation,studentCompetency,studentCompetencyObjective,studentDisciplineIncidentAssociation,studentParentAssociation,studentProgramAssociation,studentSchoolAssociation,studentSectionAssociation,studentGradebookEntry,teacher,teacherSchoolAssociation,teacherSectionAssociation,attendance,learningObjective,studentTranscriptAssociation. courseTranscript

sli.ingestion.file.timeout = 600000

sli.ingestion.file.retryinterval = 30000

sli.ingestion.queue.landingZone.host - rcingest01.slidev.org

sli.ingestion.queue.landingZone.port = 61613

sli.ingestion.queue.landingZone.keystore = /opt/tomcat/encryption/tomcat.keystore

sli.ingestion.queue.landingZone.keystorePassword = [DAL\_KEYSTORE\_PASS]

sli.ingestion.queue.landingZone.queueURI = activemq:queue:ingestion.landingZone

sli.ingestion.queue.landingZone.concurrentConsumers = 1

api.client = apiClient

# api.server.url and security.server.url MUST to be set to the FQDN of the API.

api.server.url = https://rcapi.slidev.org/

security.server.url = https://rcapi.slidev.org/

# Portal.footer.url and portal.header.url are Dashboard settings that are utilize to help render the GUI with Portal integration. NOTICE, FQDN must be modified to match the environment.

portal.footer.url = https://rcportal.slidev.org/headerfooter-portlet/api/secure/jsonws/headerfooter/get-footer

portal.header.url = https://rcportal.slidev.org/headerfooter-portlet/api/secure/jsonws/headerfooter/get-header

dashboard.log.level = warn

# The oauth. settings are utilized by Dashboard for OAUTH.

oauth.client.id = [DASHBOARD\_CLIENT\_ID]

oauth.client.secret = [DASHBOARD\_CLIENT\_SECRET]

oauth.redirect = https://rcdashboard.slidev.org/dashboard/callback

panel.config.driver.dir = config

panel.config.custom.dir = custom

# Dashboard settings generally do not require modification.

dashboard.google\_analytics.id = [GOOGLE\_ANALYTICS\_ID]

dashboard.WSCall.timeout = 3000

dashboard.minify.js = true

dashboard.cache.disable = false

dashboard.encryption.keyStorePass = [DAL\_KEYSTORE\_PASS]

dashboard.encryption.dalKeyAlias = dalKey

dashboard.encryption.dalKeyPass = [DAL\_KEY\_PASS]

dashboard.encryption.keyStore = ../data-access/dal/keyStore/ciKeyStore.jks

# Bootstrap settings are below. URL FQDNs, Client IDs and Secrets must be updated.

# bootstrap.app.keys is a list of the applicaitons to be bootstrapped upon API Start=up.

bootstrap.app.keys = admin,portal,dashboard,databrowser

bootstrap.app.admin.template = applications/admin.json

bootstrap.app.admin.name = Admin Apps

bootstrap.app.admin.description = The SLC Administration Application allows you to change a variety of system settings.

bootstrap.app.admin.version = 0.0

bootstrap.app.admin.authorized\_for\_all\_edorgs = true

bootstrap.app.admin.allowed\_for\_all\_edorgs = true

bootstrap.app.databrowser.template = applications/databrowser.json

bootstrap.app.databrowser.name = SLC Data Browser

bootstrap.app.databrowser.description = The SLC Data Browser allows developers and administrators to access all available information in the SLC datastore.

bootstrap.app.databrowser.version = 0.0

bootstrap.app.databrowser.authorized\_for\_all\_edorgs = true

bootstrap.app.databrowser.allowed\_for\_all\_edorgs = true

bootstrap.app.dashboard.name = SLC Dashboards

bootstrap.app.dashboard.description = The SLC Dashboards allow you to see information about students in lists and profiles.

bootstrap.app.dashboard.template = applications/dashboard.json

bootstrap.app.dashboard.version = A.0

bootstrap.app.dashboard.authorized\_for\_all\_edorgs = true

bootstrap.app.dashboard.allowed\_for\_all\_edorgs = true

bootstrap.app.portal.name = Portal

bootstrap.app.portal.description = The SLC Portal application is the primary access portal.

bootstrap.app.portal.version = 0.0

bootstrap.app.portal.template = applications/portal.json

bootstrap.app.portal.url = https://rcportal.slidev.org/portal

bootstrap.app.portal.client\_id = [PORTAL\_CLEARTEXT\_CLIENT\_ID]

bootstrap.app.portal.client\_secret = [PORTAL\_CLEARTEXT\_CLIENT\_SECRET]

bootstrap.app.portal.authorized\_for\_all\_edorgs = true

bootstrap.app.portal.allowed\_for\_all\_edorgs = true

bootstrap.app.vendor = SLC

bootstrap.app.admin.client\_secret = [ADMIN\_CLEARTEXT\_CLIENT\_SECRET]

bootstrap.app.admin.client\_id = [ADMIN\_CLEARTEXT\_CLIENT\_ID]

bootstrap.app.admin.url = https://rcadmin.slidev.org

bootstrap.app.databrowser.client\_secret = [DATABROWSER\_CLEARTEXT\_CLIENT\_SECRET]

bootstrap.app.databrowser.client\_id = [DATABROWSER\_CLEARTEXT\_CLIENT\_ID]

bootstrap.app.databrowser.url = https://rcdatabrowser.slidev.org

bootstrap.app.dashboard.client\_secret = [DASHBOARD\_CLEARTEXT\_CLIENT\_SECRET]

bootstrap.app.dashboard.client\_id = [DASHBOARD\_CLEARTEXT\_CLIENT\_ID]

bootstrap.app.dashboard.url = <https://rcdashboard.slidev.org/dashboard>

sli.encryption.ldapKeyAlias: [LDAP\_KEY\_ALIAS]

sli.encryption.ldapKeyPass: [LDAP\_KEY\_PASSWORD]

sli.encryption.keyStorePass = [DAL\_KEYSTORE\_PASSWORD]

sli.encryption.dalKeyAlias = dalKey

sli.encryption.dalKeyPass = [DAL\_KEY\_PASSWORD]

sli.encryption.dalInitializationVector = aabbccddeeff11223344556677889900

sli.wildcard.x509certificate.alias = wildcard

# sli.simple-idp.issuer-base is the base SimpleIDP URL

sli.simple-idp.issuer-base = https://rcidp01ext.slidev.org/sliidp

# sli.simple-idp.cot contains the information defining the IDP Circle of trust. The FQDN of the API must be updated.

sli.simple-idp.cot = https://rcapi.slidev.org=https://rcapi.slidev.org/api/rest/saml/sso/post

# The next five settings do not need to be modified.

sli.simple-idp.sandbox.users= SmallDatasetUsers,Small Sample Dataset,MediumDatasetUsers,Medium Sample Dataset

sli.simple-idp.userSearchAttribute = uid

sli.simple-idp.userObjectClass = inetOrgPerson

sli.simple-idp.groupSearchAttribute = memberUid

sli.simple-idp.groupObjectClass = posixGroup

sli.simple-idp.sliAdminRealmName = SLIAdmin

# sli.simple-idp.sandboxImpersonationEnabled must be set to true for Sandbox logins to be enabled.

sli.simple-idp.sandboxImpersonationEnabled = false

# sli.simple-idp.ldap.urls is the list of LDAP servers that the Simple IDP can utilize for authenticaiton.

sli.simple-idp.ldap.urls = ldaps://rcldap01.slidev.org/

# sli.simple-idp.ldap.base is the search base for the SimpleIDP.

sli.simple-idp.ldap.base = ou=rcEnvironment,dc=slidev,dc=org

########## Settings below this line do not need to be edited under normal circumstances.

sli.dev.subdomain = ERRORNOTUSED.slidev.org

sli.log4j.rootLogger = INFO, out

sli.log4j.logger.org.apache.camel = WARN

sli.log4j.logger.org.apache.activemq = WARN

sli.log4j.logger.org.springframework = WARN

log.path = /var/log/tomcat/

# sli.sample configuration options are utilized by the Sample Application, and do not need to be edited for any production use.

sli.sample.apiUrl = http://local.slidev.org:8080/

sli.sample.callbackUrl = http://local.slidev.org:8081/sample/callback

sli.sample.clientId = fm67sH6vZZ

sli.sample.clientSecret = sb70uDUEYK1IkE5LB2xdBkTJRIQNhBnaOYu1ig5EZW3UwpP4

# sli.sif-agent confiugraiton is not presently utilized.

sli.sif-agent.agentId = test.subscriber.agent

sli.sif-agent.agentPort = 25100

sli.sif-agent.zoneId = TestZone

sli.sif-agent.zoneUrl = http://local.slidev.org:8087/mock-zis/zis

sli.sif-agent.adk.logFile = sif-openadk.log

sli.sif-agent.idmap = default-idmap.csv

sli.sif-agent.zonemap = default-zonemap.csv

# bootstrap.app.sif settings are presently not required.

bootstrap.app.sif.name = SIF Agent

bootstrap.app.sif.description = SIF Agent

bootstrap.app.sif.template = applications/sif.json

bootstrap.app.sif.version = 0.0

bootstrap.app.sif.url = http://local.slidev.org:1338/

bootstrap.app.sif.apiUrl = http://local.slidev.org:8080/

bootstrap.app.sif.callbackUrl = http://local.slidev.org:8081/

bootstrap.app.sif.guid = 2ad39ff1-65f8-4a16-8912-b49872f1ee97

bootstrap.app.sif.token = e4e9d71c-d674-11e1-9ea4-f9fc6188709b

bootstrap.app.sif.client\_id = [redacted]

bootstrap.app.sif.client\_secret = [redacted]

bootstrap.app.sif.authorized\_for\_all\_edorgs = true

bootstrap.app.sif.allowed\_for\_all\_edorgs = true

## Portal Application sli.properties

# The security.server.url and api.server.url settings point to the root of the REST API server. The FQDN must be updated to match the environment.

security.server.url=https://rcapi.slidev.org/

api.server.url=https://rcapi.slidev.org/

# The portal.oauth.client.id and portal.oauth.client.secret settings are the same settings that the portal application is bootstrapped with via the API sli.properties file.

portal.oauth.client.id=[PORTAL\_CLIENT\_ID]

portal.oauth.client.secret=[PORTAL\_CLIENT\_SECRET]

# The portal.oauth.encryption setting tells the application if the above settings are encrypted utilizing the encryption tool.

portal.oauth.encryption=true

portal.oauth.redirect=https://rcportal.slidev.org/portal/login

log.path = /opt/portal

log.level = INFO

sli.google\_analytics.id = [GOOGLE\_ANALYTICS\_ID]

sli.domain = slidev.org

api.client=apiClient

# These settings have been depricated, and renamed to the portal.oauth settings.

oauth.encryption=true

oauth.client.id=[REDACTED]

oauth.client.secret=[REDACTED]

oauth.encryption=true

oauth.redirect=https://rcportal.slidev.org/portal/login

## portal-ext.properties

# The following settings define the JDBC Parameters for connecting Liferay to a database. The url, username, and password will need to match the environment configuration.

jdbc.default.driverClassName=com.mysql.jdbc.Driver

jdbc.default.url=jdbc:mysql://rcmysql01.slidev.org/lportal?emulateLocators=true&useUnicode=true&characterEncoding=UTF-8&useFastDateParsing=false&createDatabaseIfNotExists=true&useSSL=true&requireSSL=true

jdbc.default.username=[LIFERAY\_DB\_USER]

jdbc.default.password=[LIFERAY\_DB\_PASS]

# The setting below governs if the two settings above are encrypted or not. The settings can be encrypted utilizing the encryption toolkit that is provided with the software packages.

jdbc.default.encrypted.password=false

# The following setting governs if Liferay is clustered with multiple servers via Tomcat Clustering. Set to false if the server is a stand-alone server without Tomcat clustering.

cluster.link.enabled=true

# The following timeout is the Portal Session Timeout in minutes.

session.timeout=30

mail.session.mail.smtp.host=email-smtp.us-east-1.amazonaws.com

mail.session.mail.smtp.port=587

mail.session.mail.smtp.auth=true

mail.session.mail.smtp.user=[ENCRYPTED\_MAIL\_USERNAME]

mail.session.mail.smtp.password=[ENCRYPTED\_MAIL\_PASSWORD]

mail.session.mail.transport.protocol=smtp

mail.session.mail.smtp.credential.encryption=true

# sli.cookie.domain is the setting for at what context the application should issue cookies for browser storage.

sli.cookie.domain=.slidev.org

# The following setting informs Portal if the application is in Sandbox mode. This setting MAY no longer be utilized.

is\_sandbox = false

# The following settings requires that the sli.encryption.properties variable is defined on the Tomcat Command line. This is utilized to decrypt encrypted configuration.

include-and-override=\${sli.encryption.properties}

########## The following setting below this line should not need to be modified.

portal.ctx=/portal

users.reminder.queries.enabled=false

users.reminder.queries.custom.question.enabled=false

users.reminder.queries.required=false

system.roles=SLI Administrator, Educator

setup.wizard.enabled=false

portlet.event.distribution=layout-set

portlet.public.render.parameter.distribution=ALL\_PORTLETS

org.slc.sli.login.servlet.filter.sso.SLIFilter=true

users.screen.name.validator=com.liferay.portal.security.auth.LiberalScreenNameValidator

users.email.address.required=false

terms.of.use.required=true

sli.sso.logout.on.session.expiration=true

sso.login.error.page=/portal/web/guest/error

sli.role.itadmin=IT Administrator

sli.role.sliadmin=SLI Administrator

sli.role.educator=Educator

sli.role.admin=LEA Administrator,Realm Administrator,IT Administrator,SEA Administrator,SLC Operator,Application Developer,Ingestion User,SEA Super Administrator,LEA Super Administrator,Realm Admin,App Developer

sli.role.liferayadmin=SLC Operator

wsrp.page=/portal/web/guest/wsrp

iframe.page=/portal/web/guest/iframe

template.processing.enabled=false

image.menu\_arrow=menu\_arrow1.png

image.arrow=arrow.png

image.arrow\_w=arrow\_w.png

image.sli\_logo=sli\_logo\_icn.png

layout.user.public.layouts.enabled=false

layout.user.public.layouts.modifiable=true

layout.user.public.layouts.auto.create=false

# IMPORT LAR APPROACH

layout.lar.file.name=layout.lar

auto.deploy.deploy.dir=/opt/deploy

# Set path for error page

layout.friendly.url.page.not.found=/web/guest/error

org.quartz.jobStore.isClustered=true

net.sf.ehcache.configurationResourceName=/ehcache/hibernate-clustered.xml

ehcache.multi.vm.config.location=/ehcache/liferay-multi-vm-clustered.xml

dl.store.impl=com.liferay.portlet.documentlibrary.store.JCRStore

lucene.replicate.write=false

lucene.store.jdbc.auto.clean.up.enabled=true

lucene.store.type=jdbc

layout.user.private.layouts.enabled=false

layout.user.private.layouts.modifiable=true

layout.user.private.layouts.auto.create=false

auto.deploy.copy.log4j=false

browser.cache.signed.in.disabled=true

http.header.version.verbosity= partial

session.timeout.warning=0

## Admin config.yml

production:

# NOTICE: The vast majority of these settings will need to be modified to meet the environment that is being utilized.

# api\_base is the URL to the REST API

api\_base: https://rcapi.slidev.org/api/rest

# client\_id and client\_secret are the credentials utilized for

client\_id: [ADMIN\_CLIENT\_ID]

client\_secret: [ADMIN\_CLIENT\_SECRET]

# This is the redirect URL from the IDP to the application. Only the FQDN of the URL should be updated.

redirect\_uri: https://rcadmin.slidev.org/callback

# The following settings are the settings for connecting to the LDAP server.

ldap\_host: rcldap01.slidev.org

ldap\_port: 636

ldap\_base: ou=SLIAdmin,ou=rcEnvironment,dc=slidev,dc=org

# The user defined by ldap\_user and ldap\_pass MUST NOT be the directory manager. It must be a standard account with elevated permissions via access/olcAccess.

ldap\_user: cn=Admin,dc=slidev,dc=org

ldap\_pass: [LDAP\_PASSWORD]

# is\_sandbox defines if the Admin applicaiton is running in Sandbox mode or Production mode.

is\_sandbox: false

# auto\_approve is a setting that controls if Developer Registration requests are automatically approved or not.

auto\_approve: true

# email\_sender\_address\_user\_reg\_app is the email address that a user registration email is sent from.

email\_sender\_address\_user\_reg\_app: [USER\_REGISTRATION\_EMAIL]

# The following settings are the API keys for Google Recaptcha

recaptcha\_pub: [RECAPTCHA\_KEY\_ID]

recaptcha\_priv: [RECAPTCHA\_PRIVATE\_KEY]

# The password\_policy setting is the text returned to the user upon the LDAP server responding that the supplied password is insufficent. This MUST be changed to a text string that defines the implemented password policy.

password\_policy: ["password must satisfy password policy"]

# The following settings are settings governing the application sending electronic email for notices.

support\_email: [SUPPORT\_EMAIL\_ADDRESS]

email\_sender\_name: SLC Administrator

email\_sender\_address: [SUPPORT\_EMAIL\_ADDRESS]

email\_host: email-smtp.us-east-1.amazonaws.com

email\_port: 587

email\_username: [AMAZON\_SES\_USER]

email\_password: [AMAZON\_SES\_PASS]

email\_tls: true

############ Review settings below this point, however changes MAY not be necessary.

# The following URLs are utilized for links within the Admin application, or for links embedded in emails. They may need to be modified.

portal\_url: https://rcportal.slidev.org/portal

email\_replace\_uri: https://rcadmin.slidev.org

admin\_documentation\_link: https://rcadmin.slidev.org/documentation/link

app\_dev\_documentation\_link: http://dev.slcedu.org/getting-started

redirect\_slc\_url: http://www.slcedu.org

sample\_data\_url: http://dev.slcedu.org/getting-started/sandbox

sample\_data\_url: http://www.slcedu.org

terms\_url: http://dev.slcedu.org/legal/terms-of-use

privacy\_policy\_url: http://dev.slcedu.org/legal/privacy

############ Settings below this point should not need to be changed under normal circumstances.

# Setting recaptcha\_disable to true disables captcha validation.

recaptcha\_disable: false

# Do not modify the admin\_realm text unless it exactly matches the API settings.

admin\_realm: Shared Learning Infrastructure

email\_sender\_name\_user\_reg\_app: Administrator

reset\_password\_lifespan: 86400

# maximum\_user\_count is the maximum number of registered users that can be permitted into Sandbox.

maximum\_user\_count: 500

encryption\_keyfile: /path/to/rcRailsKey

encryption\_iv: [IV\_VALUE\_FROM\_KEY\_GENERATION

## Data browser config.yml

production:

#Notice: All of the settings below MUST be modified to meet the settings of the environment.

# api\_base must be set to the URL to access the REST API.

api\_base: https://rcapi.slidev.org/api/rest/v1

# The client\_id and client\_secret settings are the settings utilized for application/API interaction. You would utilize the values set as part of bootstrapping the Databrowser application from the sli.properties file.

client\_id: [DATABROWSER\_CLIENT\_ID]

client\_secret: [DATABROWSER\_CLIENT\_SECRET]

# The redirect\_uri setting should be static with the exception of the FQDN of the application. It is the URL that is passed to the IDP for the redirect back to the application.

redirect\_uri: https://rcdatabrowser.slidev.org/callback

# The portal\_url is the setting for the Portal Header/Footer. Only the FQDN of the server name should change in this setting.

portal\_url: https://rcportal.slidev.org/headerfooter-portlet/api/secure/jsonws/headerfooter

## Apache Tomcat

Tomcat’s command line for Ingestion needs to continue to have “-Xmx40G”.

Additionally, Tomcat connectors for the API should have the following setting appended to the connector statement:

maxHttpHeaderSize="16384"

## ActiveMQ

ActiveMQ Configuration Blocks from the default configuration, conf/activemq.xml file. The bolded lines below contain the suggested settings.

<destinationPolicy>

<policyMap>

<policyEntries>

**<policyEntry topic=">" producerFlowControl="true" memoryLimit="750mb">**

<pendingSubscriberPolicy>

<vmCursor />

</pendingSubscriberPolicy>

</policyEntry>

**<policyEntry queue=">" producerFlowControl="true" memoryLimit="750mb">**

</policyEntry>

</policyEntries>

</policyMap>

</destinationPolicy>

<systemUsage>

<systemUsage>

<memoryUsage>

**<memoryUsage limit="1gb"/>**

</memoryUsage>

<storeUsage>

<storeUsage limit="100 gb"/>

</storeUsage>

<tempUsage>

<tempUsage limit="50 gb"/>

</tempUsage>

</systemUsage>

</systemUsage>

<transportConnectors>

<transportConnector name="openwire" uri="tcp://0.0.0.0:61616"/>

**<transportConnector name="stomp" uri="stomp://0.0.0.0:61613"/>**

</transportConnectors>