Building on AWS

WEEK 1

Welcome to the Course

Welcome to Building on AWS
Meet the instructors
Discussion:Introduce yourself
What are we building this course? Project Intro
Intro to Week 1

Getting Started on AWS

Why should I (developer) build on the AWS cloud?
AWS Free Tier
Quiz
Exercise 1: Creating an AWS Account
Service Oriented Architectures and APIs in AWS
Exercise 2: Hello Amazon EC2
Quiz

Cloud Infrastructure and Responsibility

Understanding AWS Infrastructure
Networking: Amazon Virtual Private Cloud (VPC)
AWS vs Developer responsibility in the cloud
Quiz
EC2 Metadata
Exercise 3 - Logs, SSH, instance metadata
Quiz

Week 1 Discussion
Weekly Readings/Resources

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Intro to Week 2

Invoking AWS APIs/ AWS Identity and Access Management (IAM)
Create an AWS IAM user/access key video
Exercise 4: AWS IAM user, CLI, Boto, access keys
AWS APIs

Amazon S3
Intro to Amazon S3
Amazon S3 Access Control

Working with our Development Environment
Developing on AWS Cloud
Exercise 5: AWS Cloud 9
Quiz

Amazon Rekognition
Introduction to Amazon Rekognition
Exercise 6: Amazon Rekognition

Week 2 Discussion
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AWS IAM Roles
Amazon Relational Database Service
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Quiz

Availability and Application Failure
Availability
What could go wrong?
Elastic Load Balancer
Exercise 8: Deploy an instance add ALB
Quiz

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WEEK 4

Intro to Week 4

Adding Support for Users and Private Data to the Application

Building on AWS

WEEK 5

Intro to Week 5

Debugging and Profiling a Distributed System
    AWS XRay
    Exercise 10: Adding X-Ray
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Taking a Task Off the Server Asynchronously
    Intro to AWS Lambda
    Exercise 11: AWS Lambda
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WEEK 6

Intro to Week 6

Making our System More Distributed
Event Driven Architectures
How do AWS services do Async?

Queueing and On-Premises Hardware
Amazon Simple Queuing Service
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Course Wrap up
Couse Wrap up and Preview of Next course
End of Course Assessment
Weekly Readings/Resources
Week 6 Discussion

MLR Life Sciences

Technical Design: Entities

Version History

Version #	Date	Author	Change Description
1.1	09/21/2018	Karthi	Initial Document

Table of Contents

Abbreviations

Abbreviation Code	Description
PSP	Process Suite Platform
CR	Creative Review
OTDS	OPENTEXT Directory Services
OTMM	OpenText Media Management
PSA	Process Suite Accelerator
MLR	Medical Legal Regulatory Affairs Approval

Overview

In MLR we use Entity modelling as the base to define DB design and structure of the application.

We have three levels of entities in MLR.

- Base Entity
- Supporting Entity
- Identity Package

Base Entity:

Base Entity will have the Entities which are the base for the application. Base Entities contain the following

- Submission
- Contact Info
- Regulatory Info

Submission

This is the base entity of the application, it contains all the request related information.

Properties

This contains all the Properties (columns) in the submission entity.

Properties	Description
COUNTRY	Submission Country
DATE_TARGETED	Submission Targeted Date
DESCRIPTION	Submission Description
DESIGNER	Submission Designer Assigned
EXPIRY_DATE	Submission Expiry Date
FDA_FOLDER_ID	OTMM FDA Folder ID for the Submission
IS_REFERENCE_ASSET	Flag to check if Submission is Reference
JOB_TITLE	Submission Title
OTMM_FOLDER_ID	Submission OTMM Folder ID
PRIORITY	Priority of the Submission
REQUESTER	Submission Requester Name
STATUS	Submission Status

List

All the instance of the Submission entity can be viewed in this list from Process Experience.

Rule

Rule or condition to perform some action are configured in this section, the following rules will be configured inside Task List.

- Rule Create CR Task List – This Rule is triggered When a Task is Assigned to user, this will Create new entry for Task in CR Task List.

- Rule Create Review Task - This rule is triggered when a STATE property value changes, this will call the DynamicTask Assign BPM.

Web Service

This will generate basic web service for the submission entity

Relationship

This contains all the relationship details with other entities

Contact Info

This has Peer to Many relationship with CONTACT_INFO entity.

Regulatory Info

This has Peer to Many relationship with REGULATORY_INFO entity.

Country

This has Peer to One relationship with Identity Package Country.

Country User

This has Peer to One relationship with COUNTRY_NAME_CARDS entity.

Language

This has Peer to One relationship with Identity Package Language.

Business Segment

This has Peer to One relationship with BUSINESS_SEGMENT entity.

Brands

This has Peer to One relationship with BRAND entity.

Audience

This has Peer to One relationship with AUDIENCE entity.

Product Type

This has Peer to One relationship with PRODUCT_TYPE entity.

Designer

This has Peer to One relationship with DESIGNER entity.
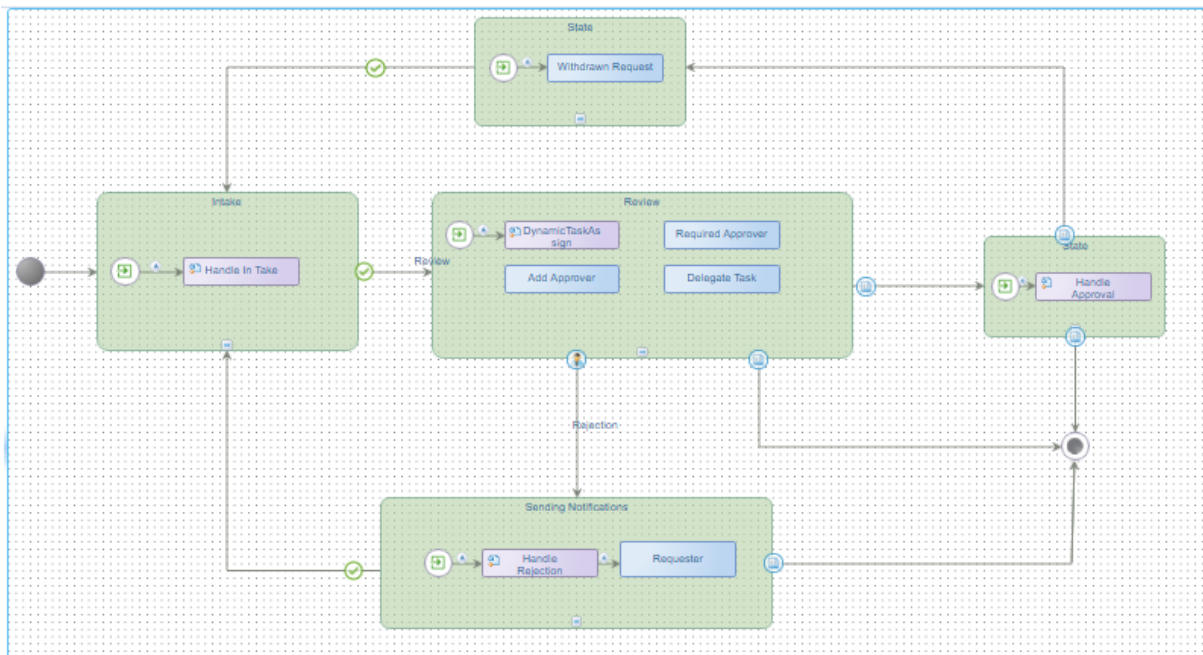
File Formats

This has Peer to One relationship with FORMATS entity.

Layouts

This has Peer to One relationship with LAYOUTS entity.

Lifecycle

This defines lifecycle of the submission entity. Below is the Lifecycle design.

Task List

This is a child entity of the Submission, this will contain all the task related information.

Contact Info

This is another base entity of the application. Also, a supporting entity for Submission.

List

All the instance of the Contact Info entity can be viewed in this list from Process Experience.

Relationship

This contains all the relationship details with other entities

Submission

This has Peer to One relationship with SUBMISSION entity.

Contacts

This has Peer to One relationship with CONTACTS Entity.

Regulatory Info

This is another base entity of the application. Also, a supporting entity for Submission.

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
RC_MEETING_DATE	Regulatory Info RC Meeting Date

List

All the instance of the Regulatory Info entity can be viewed in this list from Process Experience.

Relationship

This contains all the relationship details with other entities

Submission

This has Peer to One relationship with SUBMISSION entity.

Application Type

This has Peer to One relationship with APPLICATION_TYPE entity.

Regulatory Code

This has Peer to One relationship with REGULATORY_MATERIAL_CODE entity.

Review Type

This has Peer to One relationship with REVIEW_TYPE entity.

Supporting Entity:

These are separate entities that have relationship with Base entities or provide data to perform other operations.

Application Roles

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
ROLE_DN	Role DN of the role configured
ROLE_NAME	Role Name

Application Type

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Application Type name
Description	Description of the Application Type
Is_Active	Is active flag

Audience

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Audience_Name	Audience name
Description	Description of the Audience
Is_Active	Is active flag

All Countries

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Country_Name	Country name
ISO_CODE	Country Code
Is_Active	Is active flag

Brand

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Brand name
Description	Description of the Brand
Is_Active	Is active flag

Relationship

This contains all the relationship details with other entities

Business Segment

This has Peer to One relationship with BUSINESS_SEGMENT entity.

Business Segment

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Business Segment name
Description	Description of the Business Segment
Is_Active	Is active flag

Relationship

This contains all the relationship details with other entities

Business Segment User

This has Peer to Many relationship with Identity Package User entity.

Brand

This has Peer to One relationship with BRAND entity.

Rule

Rule or condition to perform some action are configured in this section.

- Trigger Add Event
- Trigger Delete Event

Business Segment user

Relationship

This contains all the relationship details with other entities

User

This has Peer to One relationship with Identity Package User entity.

Business Segment

This has Peer to One relationship with BUSINESS_SEGMENT entity.

Contact Type

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Contact Type name
Description	Description of the Contact Type
Is_Active	Is active flag

Contacts

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Address	Address
Business_Name	Business name
City	City
Contact_Name	Contact name
Contact_Notes	Contact notes
Hours_of_Operation	
Is_Active	Is Active flag
Phone	Phone number
State	
Zip	

List

All the instance of the Contacts entity can be viewed in this list from Process Experience.

Relationship

This contains all the relationship details with other entities

Country

This has Peer to One relationship with Identity Package Country entity.

Contact Type

This has Peer to One relationship with CONTACT_TYPE entity.

Country Name Cards

Relationship

This contains all the relationship details with other entities

Countries

This has Peer to One relationship with ALL_COUNTRIES entity.

Name Cards

This has Peer to One relationship with NAME_CARDS entity.

User

This has Peer to One relationship with Identity Package User entity.

Application Roles

This has Peer to One relationship with ALL_APPLICATION_ROLES entity.

Designer

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Designer Name
Is_Active	Is Active flagg

Formats

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Format name
Category	Format category
Extension	Format extension
Is_Active	Is active flag

Layout

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Layout_Name	Layout name
Layout _Description	Description of the Layout
Is_Active	Is active flag

MLR CR Task List

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Request_Item_ID	Submission Item ID
Request_Task_Item_ID	Submission Task Item ID
Review_Name	Review Name
Task_Asset_ID	Asset Id
Task_Asset_Version	Asset Version
Task_OTMM_Asset_ID	Asset Item ID
Task_OTMM_ID	OTMM Asset ID
Task_Role_Name	Role Name

MLR Delegation

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Delegated_Task_ID	Delegated Task Item ID
Delegated_Task_Status	Delegated Task Status
Delegated_User	Delegated User
Delegation_Reason	Reason
Main_Task_ID	Main Task ID
Main_User	Task Owner
Parent_Task_ID	Main Task Item ID

MLR Review Config

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Sequence	Sequence

Relationship

This contains all the relationship details with other entities

Countries

This has Peer to One relationship with ALL_COUNTRIES entity.

Application Roles

This has Peer to One relationship with ALL_APPLICATION_ROLES entity.

Name Cards

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Address	Address
Business_Function	Business category
City	City
Country	Country
Department	Department
First_Name	First Name
Last_Name	Last Name
Is_Active	Is Active flag
State	State
User_Id	User ID

Product Type

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Product Type name
Description	Description of the Product Type
Is_Active	Is active flag

Regulatory Material Code

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Code	Material Code
Translation	Material code translation
Is_Active	Is active flag

Review Type

Properties

This contains all the Properties (columns) in the entity.

Properties	Description
Name	Review Type name
Description	Description of the Review Type
Is_Active	Is active flag

Identity Package:

These are system level entities that's comes with Process suite as a package. From this we'll be using the following,

- User
- Country
- Language

User

We use the Identity Package User get user details, the Users will be pushed from OTDS.

Country

We use the Identity Package Country to config and use them in Application

Language

We use the Identity Package Language to config and use them in Application