

# ECommerce CRM Facade API

## Introduction

### Introduction Sections

#### Context

##### Problem Statement

*DCX specific business logic needs to be applied to Contacts and Cases when integrating with Dynamics 365 CRM.*

Currently the integration between DCX and CRM is done by APIM policies.

It is difficult or impossible to implement the required business logic using policies.

**Refer Solution Architecture for DCX:** [DCX Architecture](#)

##### Current State

*Optimizely currently accesses the Native CRM OData APIs via a policy in APIM, with no business logic layer.*

##### Business Drivers (Intent & Objectives)

*Implementing business logic using a policy in APIM is difficult or impossible. It is preferable to use an Azure API app or Azure function to implement DCX specific business logic related to CRM contacts and Cases.*

## Solution Overview

### Data & Integration Sections

#### Solution Component Diagram

#### Definitions

Component	Description
Optimizely	
Coates CRM (365 Dynamics)	

ECommerce CRM Facade	
Waf Gateway	
Coates APIM	
Insights	
Key Vault	

Assertions

this Solution is valid only for Ecommerce and should NOT be accessed by any other application/Service and infrastructure should considers that.

Integration

▼ Data & Integration Sections

APIs & Interfaces

Surface Area changes

Case API

```
1 {
2   "title": "Web Enquiry:Equipment",
3   "customerid_contact@odata.bind": "/contacts(80A163EF-ADF4-EF11-BE20-000D3A6A6EC1)",
4   "caseorigincode": 3,
5   "int_enquirytype": 757460001,
6   "description": "ENQUIRY DETAILS SUBMITTED\r\nCompany:CNN\r\nPhone:0423 123
7   234\r\nComments:I lilke a knuckle
8   boom\r\nBranch:Alexandria\r\nPostcode:2015\r\nSuburb:Alexandria\r\nState:NSW\r\nReservati
9   on Requested?:true\r\nFrom Date:2024-10-30T09:53:39\r\nTo Date:2024-11-
10  06T09:53:39\r\nFrom Page:http://www.coates.com.au\r\n",
11  "prioritycode": 2,
12  "casetypecode": 3,
13  "new_customerfromdate": "01/03/2025",
14  "new_customertodate": "15/03/2025",
15  "int_customerbranchselected": "ALEX",
16  "int_customerpostcode": "2015",
17  "new_customerstate": "NSW",
18  "new_customerfrompage": "http://www.coates.com.au",
19  "new_reservationrequest": "true"
20 }
```

public enum CaseTypeCode {

```
Question = 1,  
Problem = 2,  
Request = 3,  
DrivingIssue = 757460001,  
Other = 757460007
```

```
}
```

```
public enum CaseEnquiryType {
```

```
    Account = 279640007,  
    BookingOrder = 181370002,  
    Campaign = 181370004,  
    Feedback = 757460002,  
    EquipmentEnquiry = 757460001,  
    ESEnquiry = 181370000,  
    General = 757460000,  
    ISEnquiry = 181370003,  
    PowerHVACEnq = 279640012,  
    QuoteRequest = 279640006,
```

```
}
```

```
public enum CaseOriginCode {
```

```
    Phone = 1,  
    Email = 2,  
    Web = 3,  
    Listen25RedFlag = 4,  
    GoogleReview = 5,  
    Facebook = 2483,  
    Twitter = 3986,  
    Branch = 757460000,
```

```
InPerson = 757460001,  
}
```

```
public enum PriorityCode {  
  
    High = 1,  
  
    Normal = 2,  
  
    Low = 3,  
  
}
```

### Contact API

```
1 grant_type:client_credentials  
2 client_id:(coates team has already)  
3 client_secret:(coates team has already)  
4 scope:{clientid}/.default
```

### 3rd party APIs

List here references to 3rd party API documentation relevant to this change.

## Security & Risks Overview

▼ Security & Risks Sections

### Release Checklist

(M)andatory or (P)referred		Yes	No	N/A
Solution includes logging (using App Insights where possible)	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secrets are appropriately managed (using Key Vault where possible)	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All connections between components are authenticated	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Azure components use <a href="#">Managed Identities</a> to authenticate	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All data is encrypted in flight (HTTPS / TLS / SSL / etc)	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All <a href="#">PII</a> data is encrypted at rest	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All data is encrypted at rest	P	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Solution is <a href="#">PCI compliant</a>	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do any components need to be exposed to the public internet?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so, are those components appropriately secured (WAF / Front Door / etc)?	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If not, are private endpoints used to restrict access to components?	P	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where applicable, uses the <a href="#">Integration Database Pattern</a> or <a href="#">Mercury</a>	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# Infrastructure Map & Costs Breakdown

Costs Section

## [Resource Group]

Purpose (brief)	Resource Group to host azure resources for ECommerce CRM Facade
Change Type	New

Environment	DEV	UAT	PROD
Physical Name	rg-d-ECommCRMFacade-XXXXX	rg-u-ECommCRMFacade-XXXXX	rg-ECommCRMFacade-XXXXX
Service Tier	NA	NA	NA
Monthly Cost Charge	\$0.00	\$0.00	\$0.00

## [Azure Web App]

Purpose (brief)	Required to host CRM Service
Change Type	New

Environment	DEV	UAT	PROD
Physical Name	aps-d- ECommCRMFacade- XXXXX	aps-u- ECommCRMFacade- XXXXX	aps- ECommCRMFacade- XXXXX
Service Tier	Basic Tier; 1 B1 (1 Core(s), 1.75 GB RAM, 10 GB Storage) x 730 Hours; Linux OS	Basic Tier; 1 B1 (1 Core(s), 1.75 GB RAM, 10 GB Storage) x 730 Hours; Linux OS	P0V3 (1 Core(s), 4 GB RAM, 250 GB Storage); 3 year reserved; Linux OS
Monthly Cost Charge	\$19.71	\$19.71	\$45.35

#### [Azure Application Insight]

Purpose (brief)	To collect logs, performance and error data from app service
Change Type	New

Environment	DEV	UAT	PROD
Physical Name	ai- ECommCRMFacade- XXXXX	ai-u- ECommCRMFacade- XXXXX	ai-d- ECommCRMFacade- XXXXX
Service Tier	Basic	Basic	Basic
Monthly Cost Charge	\$0.00  The first 5 GB of data ingested per month is free,Data is retained for 90 days by default	\$0.00  The first 5 GB of data ingested per month is free,Data is retained for 90 days by default	\$0.00  The first 5 GB of data ingested per month is free,Data is retained for 90 days by default

#### [Key Vault]

<b>Purpose (brief)</b>	Required to store Secrets like connection string etc
<b>Change Type</b>	New

Environment	DEV	UAT	PROD
<b>Physical Name</b>	kv-d- ECommCRMFacade- XXXXXX	kv-u- ECommCRMFacade- XXXXXX	kv- ECommCRMFacade- XXXXXX
<b>Service Tier</b>	Standard	Standard	Standard
<b>Monthly Cost Charge</b>	\$4.00	\$4.00	\$4.00

#### [Azure API Management services]

<b>Purpose (brief)</b>	Service used for securing, monitoring, and optimizing APIs that will be calling CRM endpoints
<b>Change Type</b>	Existing

Environment	DEV	UAT	PROD
<b>Physical Name</b>	devapicoateshire	uatapicoateshire	apicoateshire
<b>Service Tier</b>	developer	developer	production
<b>Monthly Cost Charge</b>	\$0.00	\$0.00	\$0.00

#### [Azure Application Gateway]

<b>Purpose (brief)</b>	Azure Web Application Firewall (WAF) on Azure Application Gateway actively safeguards web applications against common exploits and vulnerabilities
<b>Change Type</b>	Existing

Environment	DEV	UAT	PROD
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Environment	DEV	UAT	PROD
Physical Name	AGW-AAE-APIM-DEV	AGW-AAE-APIM-UAT	AGW-AAE-APIM
Service Tier	WAF	WAF	WAF
Monthly Cost Charge	\$0.00	\$0.00	\$0.00

Total Monthly Cost Charge

Dev	\$23.71
UAT	\$23.71
Prod	\$49.35

DRB Signoff

People	Date	Comments
Presented by:	28/03/2025	Kareem
Design Review Board	28/03/2025	Approved by @Nevin Swan