DA Online – Council API Integration

Low level design document

Contents

Detailed design:

1. BUSINESS RULES / HIGH LEVEL REQUIREMENTS FROM USE CASE :

DPE launched DA online lodgement system with 12 councils in December 2018 with a long-term strategy to provide a single unified solution which applicants could submit and track their development applications. To achieve this strategy all councils will have to adopt the DA online lodgement system. Across the near-termfuture, the majority of councils councils will still be reliant on their own system to process development applications. In remains that councils whom have started using DA online are still using their own system to complete some of the internal workflows related to DA processing.

Whilst a number of councils have their own online application submission portal, they function as data capture forms and are not integrated into any backend application processing system. Despite the availability of these online portals, the majority of applicants still travel to council and submit their paper-based application in person.

To provide a more optimal user experience relating to lodging a DA, the Department of Planning has recommended that DA online be integrated with council systems to improve both the applicant and council user experience.

2. TECHNICAL IMPLEMENTATION APPROACH FOR SERVICES

2.1 Pega API Security

This section defines the security to be implemented on Pega and is primarily between the API Gateway and Pega. Additional and different security measure are implemented between the API Gateway and the Client. These are documented in the API Specifications document.

2.1.1 Inbound API Security

All Inbound API calls to Pega will be proxied by DPE's API Gateway. The APIGW will be responsible for securing the API calls from Council systems to Pega:

1. Authenticating the shared secret API key presented by the council to the API gateway.
2. Authorising use of the API by the API Key.
3. Rate limiting the inbound API calls to an agreed maximum transaction per second (TPS).
4. Termination of the TLS connection between the council system and API Gateway using TLS 1.2 or higher.
5. Establishing a new TLS connection between API Gateway and Pega using TLS 1.2 or higher.
6. Injecting required headers to authenticate the API Gateway to Pega.
7. Inject a header to inform Pega of the calling council.
8. Perform threat protection

The following HTTP Headers will be added to the request sent to Pega.

Header name	Example Values	Purpose
Authorisation	Basic cXZ0ZXN0YXBpa2V5Og==	Share secret API that authenticates the API Gateway to Pega. **The share secret API key to be greater than or equal to 25 characters in length. API Key is presented in in every HTTP request as a standard HTTP Authorisation header using the Basic scheme. Header is generated using Username: APIKEY** **Password: <25-character API key>**
CouncilID	LGAName – SUTHERLAND,LAKE MACQUARIE or PENRITH	LGAName returned by the address API

2.1.2 Outbound API Security

Outbound API calls from Pega to Council systems will be proxied by DPE's API Gateway. The APIGW will be responsible for securing the API calls from Pega to Council system:

1. Authenticating the shared secret API key presented by Pega to the API gateway.
2. Authorising use of the API by the API Key.
3. Routing the API call to the correct endpoint based on the CouncilID header set by Pega.
4. Injecting the correct credentials required by the Council system based on the LGAName header set by Pega.
5. Termination of the TLS connection between Pega and the API Gateway using TLS 1.2 or higher.
6. Establishing a new TLS connection between API Gateway and Client using TLS 1.2 or higher.
7. Striping of redundant headers from the request.

The following HTTP Headers will be added to the request sent to Pega.

Header name	Example Values	Purpose
Authorisation	Basic cXZ0ZXN0YXBpa2V5Og==	Share secret API that authenticates the API Gateway to Pega.

		The share secret API key to be greater than or equal to 25 characters in length. API Key is presented in in every HTTP request as a standard HTTP Authorisation header using the Basic scheme. Header is generated using Username: APIKEY *Password: <25-character API key>*
CouncilID	LGAName – SUTHERLAND,LAKE MACQUARIE or PENRITH	LGAName returned by the address API

2.2 SOLUTION DESCRIPTION

1. Pega will expose the APIs to Council system to handle the workflow updates happening in the council's system. Also, few APIs are consumed by PEGA to sync the data changes between Pega and Council system.
2. The APIs are distributed across multiple layers depending on their purpose.
    a. EP Integration layer: PEC-DPE-EP-Int-DA
    b. DPE integration layer: PEC-DPE-Int-CaseMgmt
    c. PECFW integration layer: PEC-FW-API-DocMgmt
3. Below are the list of APIs exposed from Pega to Council system – Pega services
    a. Reassign
    b. AcceptReturn
    c. UpdateDetermination
    d. WithdrawDA
    e. RejectDA
    f. RequestAdditionalInfo
    g. GetApplicantDoc
4. Below are the list of API consumed by Pega which are exposed by council system – Pega connectors
    a. CreateDA
    b. UpdateAdditionalInfo
    c. GetCouncilDoc
    d. WithdrawDA

2.3 SERVICES EXPOSED BY PEGA

2.3.1   Reassign

Purpose: This API can be used to update Pega when a case is assigned to self or anyone from council organisation i.e. CouncilRO will be updated in Pega

Endpoint: CaseMgmt/v1/Reassign/{CaseID}

Method: PUT

Class: PEC-DPE-Int-CaseMgmt-Reassign

Ruleset : PECDPEInt

Service package: CaseMgmt

Request mapping:

Attribute	Location	Data type	Sample value	Description	Property
CaseID	PATH	Numeric String (32)	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	
CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String		Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing. Typically, a UUID such as "63a9ba30-7a4b-4fac-b343-d1f05cf089f1"	
assignee	Payload	Object		Person this case is assigned to.	PEC-DPE-Data-Assignee **assignee**
person	Payload	Object		complex party type.	PEC-DPE-Data-Person **person**
firstName	Payload	String(20)	John	First name of the assignee	PEC-DPE-Data-Person **firstName**
surname	Payload	String(20)	Smith	Surname of the assignee	PEC-DPE-Data-Person **surname**

	Payload	String	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person **emailAddress**
emailAddress					
contactNumber	Payload	Numeric String (10)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person **contactNumber**

Sample Request Payload:

```
PUT / CaseMgmt/v1/Reassign/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
  "assignee": {
    "person": {
      "firstName": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
}
```

Response mapping:

Attribute	Data Type	Comments
HTTP Status 200 OK		On successful assignment in Pega, status 200 will be sent back to Council system.

Response Payload:

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```

Error codes:

Error code on page	Http status	Error code	Error description	More information to DEV team
001	*400*	*DPE_E100*	*Invalid request supplied*	*This should come when Inbound mapping fails or a malformed JSON is received*
002	404	DPE_E200	Case not found, or Case is locked by some other user	When Obj-Open-By-Handle fails
003	400	DPE_E100	Invalid Council Id or LGA name	
004	400	DPE_E100	First name is required	
005	400	DPE_E100	Surname is required	
006	400	DPE_E100	Email address is required	
007	400	DPE_E100	Contact number is required	
008	400	DPE_E100	First name should be of 20 characters length	
009	400	DPE_E100	Surname should be of 20 characters length	
010	400	DPE_E100	Invalid contact number	
011	400	DPE_E100	Invalid email address	
012	400	DPE_E300	Case already assigned to same user	
015	400	DPE_E400	Can't perform this action on a un submitted application	
016	400	DPE_E500	Can't perform this action on already resolved case	
	500	DPE_E900	Internal server error	For any other flow error, we should return 500

High level design:

- Create class PEC-DPE-Int-CaseMgmt-Reassign

- Create Reassign_request of type PEC-DPE-Data-UpdateCaseAssignment and Reassing_response of type PEC-DPE-Data-UpdateCaseAssignment properties in PEC-DPE-Int-CaseMgmt-Reassign class. We are reusing the data structure created for CNR APIs.
- Create the service activity PEC-DPE-Int-CaseMgmt-Reassign CaseReassign
- Create the decision table PEC-DPE-Int-CaseMgmt-Reassign DetermineErrorResponse for error response mapping
- Map all the properties from JSON to Reassign_request
- Validate the payload.
    o All the properties are required
- Log the API request with all the properties.
- Validate email address and contact number by calling appropriate validation rule PEC-DPE-Int-CaseMgmt-Reassign ValidateEmailAndPhone
- Open the Case using Obj-Open-By-Handle method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- emailAddress attribute in the request payload is used for case assignment.
- Check if the case is already assigned to the emailAddress in the incoming request payload. If yes, set appropriate errro code and determine the error message using the decision table DetermineErrorResponse
- If current user & new assignee are different, perform below steps.
    o Check if the new assignee is already in the system. If yes, call Data-Admin-Operator-ID CreateOperatorIfNotExists activity to create the operator
    o Reassign the case to the newly created operator
    o Update the workparty "CouncilRO" with the newly created operator. *For reference PEC-DPE-EP-Work-DevelopmentApplication CreateDACouncilWorkParty*
- If case is reassigned successfully, log the API response and return a http status code 200

Assumptions :

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.
- If any child case(s) are available (Example : CNR) will not be re-assigned to the user.

2.3.2 AcceptReturnCase

Purpose: This API will be called when a Council accepts or returns an Online DA case.

Endpoint: DAMgmt/v1/AcceptReturn/{CaseID}

Method: PUT

Class: PEC-DPE-EP-Int-DA-AcceptReturn

Ruleset : EPInt

Service package: DAMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property
CaseID	PATH	Numeric String (32)	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	PEC-DPE-EP-Int-DA CaseID
CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE-EP-Int-DA CouncilID
IdempotencyId	Header	String		Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing. Typically, a UUID such as "63a9ba30-7a4b-4fac-b343-d1f05cf089f1"	
lodgementOutcome	Payload	String(	Must be one of: 1.LODGED 2.RETURNED	Result of Council's lodgement process	PEC-DPE-EP-Int-DA-AcceptReturn-Req lodgementOutcome
If lodgementOutcome is LODGED					
isFeesPaid	Payload	String	Yes or No	While mapping, we need to convert Yes or No to true or false.	PEC-DPE-EP-Int-DA-AcceptReturn-Req isFeesPaid
totalFeesPaid	Payload	Decimal	$8732.00	If isFeesPaid is YES, then totalFeesPaid is a mandatory attribute. Fees paid by the applicant (upto 2 decimal places)	PEC-DPE-EP-Int-DA-AcceptReturn-Req totalFeesPaid
councilReference Number	Payload	String(20)	DA201900049	Internal id generated in the council system	PEC-DPE-EP-Int-DA-AcceptReturn-Req councilReferenceNumber
acceptDate	Payload	Date	YYYY-MM-DD	Date application was lodged in the council system	PEC-DPE-EP-Int-DA-AcceptReturn-Req acceptDate
If Application is returned					
returnDate	Payload	Date	YYYY-MM-DD	Date application was returned to Applicant	PEC-DPE-EP-Int-DA-AcceptReturn-Req returnDate

returnReason	Payload	String		Return reason	PEC-DPE-EP-Int-DA-AcceptReturn-Req returnReason
UpdatedBy	Payload			Person this case is assigned to.	PEC-DPE-EP-Int-DA-UpdatedBy
person	Payload	Object		complex party type.	PEC-DPE-Data-Person person
firstName	Payload	String(20)	John	First name of the assignee	PEC-DPE-Data-Person firstName
surname	Payload	String(20)	Smith	Surname of the assignee	PEC-DPE-Data-Person surname
emailAddress	Payload	String	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person emailAddress
contactNumber	Payload	Numeric String (10)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person contactNumber

Sample Request Payload – LODGED

```
POST /DAMgmt/v1/AcceptReturn/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
 "lodgementOutcome" : "LODGED",
  "isFeesPaid" : "Yes",
  "totalFeesPaid" : "21212.98",
  "councilReferenceNumber" : "council unique identifier",
  "acceptDate" : "2019-03-12",
   "UpdatedBy": {
    "person": {
      "firstname": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
```

Sample Request Payload – RETURN

```
POST / DAMgmt/v1/AcceptReturn/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
 "lodgementOutcome" : "RETURNED",
  "returnReason" : "reject reason",
  "returnDate" : "2019-03-12",
   "UpdatedBy": {
    "person": {
       "firstName": "John",
       "surname": "Smith",
       "emailAddress": "john.smith99@gmail.com",
       "contactNumber": "0414141414"
    }
  }
}
```

Response mapping:

Attribute	Data Type	Source System	Comments
HTTP Status 200 OK		Pega	On successful update in Pega, status 200 will be sent back to council system.

Response Payload

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```

Error codes:

Error code on page	Http status	Error code	Error description	More information to DEV team
001	400	DPE_E100	Invalid request supplied	This should come when Inbound mapping fails or a malformed JSON is received
002	404	DPE_E200	Case not found, or Case is locked by some other user	When Obj-Open-By-Handle fails
020	400	DPE_E300	Case assigned to some other user, please reassign to self before performing any action	
004	400	DPE_E100	First name is required	
005	400	DPE_E100	Surname is required	
006	400	DPE_E100	Email address is required	
007	400	DPE_E100	Contact number is required	
010	400	DPE_E100	Lodgement outcome is required	
011	400	DPE_E100	Application return date is required	

012	400	DPE_E100	Application return reason required	Conditionally required
013	400	DPE_E100	The attribute IsFeesPaid is required	
021	400	DPE_E100	CouncilReferenceNumber is required	
014	400	DPE_E100	The attribute TotalFeesPaid may be needed only when isfeespaid is yes	Conditionally required
003	400	DPE_E100	Invalid Council Id or LGA name	
008	400	DPE_E100	First name should be of 20 characters length	
015	400	DPE_E700	Can't perform this action on a unsubmitted application	
009	400	DPE_E100	Surname should be of 20 characters length	
025	400	DPE_E100	DA lodgement date is required	
017	400	DPE_E100	Date of lodgement can't be future date and Date of lodgement must be after date of submission by applicant	
018	400	DPE_E100	Date of Return can't be future date and Date of lodgement must be after date of submission by applicant	
019	400	DPE_E400	Request not supported at this workflow stage	When case is not in appropriate stage
022	400	DPE_E100	Invalid IsFeesPaid, IsFeesPaid must be Yes or No	
023	400	DPE_E100	Invalid lodgementOutcome value specified, accepted values are LODGED or RETURNED	

024	400	DPE_E100	Invalid number format for Total fee paid	
016	400	DPE_E100	Can't perform this action on already resolved case	
026	400	DPE_E100	Invalid contact number	
027	400	DPE_E100	Invalid email address	
028	400	DPE_E100	Invalid date format specified for DA lodgement date	
029	400	DPE_E100	Invalid date format specified for application return date	
	500	DPE_E900	Internal server error	

High level design:

- Create classes PEC-DPE-EP-Int-DA-AcceptReturn, PEC-DPE-EP-Int-DA-AcceptReturn-Req, PEC-DPE-EP-Int-DA-AcceptReturn-Res
- Create AcceptReturn_request (single page and applies to PEC-DPE-EP-Int-DA-AcceptReturn-Req) and AcceptReturn_response (single page and applies to PEC-DPE-EP-Int-DA-AcceptReturn-Res) properties in PEC-DPE-EP-Int-DA-AcceptReturn class.
- Create the service activity Service activity: PEC-DPE-EP-Int-DA-AcceptReturn AcceptReturnCase
- Create the decision table PEC-DPE-Int-CaseMgmt-Reassign DetermineErrorResponse for error response mapping
- Map all the properties from JSON to AcceptReturn_request
- Log the API request with all the properties.
- Validate the payload.
    - Person type should have all the properties
    - Depending on Accept or Return validate the relevant properties
- Open the case using Obj-Open-By-Handle method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- Iterate through pxFlows fetch .pxRouteTo property value for the relevant assignment, compare the value with emailAddress (which is part of JSON). If the values are same, continue the process. If not same, return the service with error message asking the user to reassign the case before performing any action.
- Update the work page with all the properties and the validation rule ValidateFeePaidAndLodged

- Changes to be made for flow
  PEC-DPE-EP-Work-DevelopmentApplication ReviewApplicationCompleteness
    - When a call is coming from API, we need to skip the assignment "FeePaidAndLodged"
- If LogdementOutcome is LODGED or RETURNED
    - Update the property work item with relevant properties and call svcPerformFlowAction with below parameters
        - Flow name – ReviewApplicationCompleteness
        - Flow action name – CompletenessCheck
- If AcceptReturn API is successful, log the API response and return a http status code 204

Assumptions:

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.

2.3.3 UpdateDetermination

Purpose: To update the council's determination decision in the Pega

Endpoint: DAMgmt/v1/Determine/{CaseID}

Method: PUT

Class: PEC-DPE-EP-Int-DA-Determination

Ruleset : EPInt

Service package: DAMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property
CaseID	PATH	Numeric String	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	PEC-DPE-EP-Int-DA CaseID

CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String		Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing.	
determiningBody	Payload	String	Value must be one of the following: • Council • CSPC • SPP	Anticipated determining body for this DA. CSPC - Central State Planning Committee SPP - State Planning Committee	PEC-DPE-EP-Int-DA-Determination -Req determiningBody
inspectionDate	Payload	String	2018-03-03	The date on which the site inspection as completed. Pega will convert to relevant date format	PEC-DPE-EP-Int-DA-Determination -Req inspectionDate
isConcurrenceReq	Payload	String	Value must be one of the following • Yes • No	Is concurrence or referral sought for this Online DA. Pega will convert to respective Boolean type	PEC-DPE-EP-Int-DA-Determination -Req isConcurrenceReq
isApplicationExhibited	Payload	String	Value must be one of the following • Yes • No	Is this 'Online DA' notified or exhibited. Pega will convert to respective Boolean type	PEC-DPE-EP-Int-DA-Determination -Req isApplicationExhibited
exhibitStartDate	Payload	String	2019-03-03	Start of period. Pega will convert to relevant date format	PEC-DPE-EP-Int-DA-Determination -Req exhibitStartDate
exhibitEndDate	Payload	String	2019-03-03	End of period. Pega will convert to relevant date format	PEC-DPE-EP-Int-DA-Determination -Req exhibitEndDate
isSICReq	Payload	String	Value must be one of the following • Yes • No	Is this Site subject to Special Infrastructure Contributions (SIC). Pega will convert to respective Boolean type	PEC-DPE-EP-Int-DA-Determination -Req isSICReq
isVPAReq	Payload	String	Value must be one of the following • Yes • No	Is the development located within an Urban release area and trigger the need	PEC-DPE-EP-Int-DA-Determination -Req isVPAReq

				for a Voluntary Planning Agreement? Pega will convert to respective Boolean type	
determinationOutcome	Payload	String	Value must be one of the following • APPROVED • REFUSED • DEFERRED		PEC-DPE-EP-Int-DA-Determination -Req derterminationAuthority
derterminationAuthority	Payload	String	Value must be one of the following • COUNCIL • RPP • LPP • CSPC • LEC • SPP	What it means to Pega? • RPP -> Regional Planning Panel • LPP -> Local Planning Panel • CSPC -> Central State Planning Committee • LEC - >Land and Environment Court • SPP -> Sydney planning panel	
determinationDate	Payload	String	2019-03-03	Date on which this DA is determined. Pega will convert to relevant date format	PEC-DPE-EP-Int-DA-Determination -Req determinationDate
Documents[]	*Payload*	*ARRAY[]*		*Optional list of documents* *Page list*	*PEC-DPE-EP-Int-DA-Documents*
documentName	*Payload*	*String(55)*		*Document name*	*PEC-DPE-EP-Int-DA-Document documentName*
documentType	*Payload*	*String*	*Must upload:* *1. Notice of determination* Other document categories allowed are *Stampled plans* and *Other*	*Determination document category*	*PEC-DPE-EP-Int-DA-Document documentType*

documentURL	*Payload*	*String*	*https://s3-ap-southeast-2.amazonaws.com/docsfortesting/Architectural+Plans.docx* *https://s3-ap-southeast-2.amazonaws.com/docsfortesting/Site+Plan.zip* *https://s3-ap-southeast-2.amazonaws.com/docsfortesting/Determination_01.pdf*	*URL of the document to be downloaded*	*PEC-DPE-EP-Int-DA-Document - documentLocation*
uploadedDateTime	*Payload*	*String*	*YYYY-MM-DDThh:mm:ss 2018-08-24T14:24:40*	*Document uploaded date time. Pega will convert to date*	*PEC-DPE-EP-Int-DA-Document uploadedDateTime*
UpdatedBy	Payload			Person this case is assigned to.	PEC-DPE-EP-Int-DA-UpdatedBy
person	Payload	Object		complex party type.	PEC-DPE-Data-Person person
firstName	Payload	String(32)	John	First name of the assignee	PEC-DPE-Data-Person firstName
surname	Payload	String(32)	Smith	Surname of the assignee	PEC-DPE-Data-Person surname
emailAddress	Payload	String(64)	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person emailAddress
contactNumber	Payload	Numeric String (16)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person contactNumber

Sample Request Payload – UpdateDA

```
POST /DAMgmt/v1/Determine/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
"determiningBody" : "Council",
"inspectionDate" : "2019-03-03",
"isConcurrenceReq" : "No",
"isApplicationExhibited" : "Yes",
"exhibitStartDate" : "2019-03-03",
"exhibitEndDate" : "2019-03-03",
"isSICReq" : "No",
"isVPAReq" : "No",
"determinationOutcome" : "APPROVED",
"determinationAuthority" : "Council",
"determinationDate" : "2019-03-03",
"Documents" : [
      {
          "documentName" : "Hey.pdf",
          "documentType" : "Notice of determination",
          "documentURL" : "https://s3-ap-southeast-
2.amazonaws.com/docsfortesting/Determination_01.pdf",
                 "uploadedDateTime" : "2019-04-01T01:48:25"
    },
      {
          "documentName" : "Hello.pdf",
          "documentType" : "Other",
          "documentURL" : "https://s3-ap-southeast-
2.amazonaws.com/docsfortesting/Determination_01.pdf",
                 "uploadedDateTime" : "2019-04-01T01:48:25"
    }
  ],
  "UpdatedBy": {
    "person": {
      "firstName": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
}
```

Response mapping:

Attribute	Data Type	Comments
HTTP Status 200 OK		On successful UpdateDA, status 200 will be sent back to council system.

Response Payload

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```

Error codes:

HTTP Status	Error Code: DPE_ERROR_CODE	Error description: DPE_ERROR_DESCRIPTION	Error message
001	400	DPE_E100	Invalid request supplied
002	404	DPE_E200	Case not found or Case is locked by some other user
003	400	DPE_E100	Invalid Council Id or LGA name
004	400	DPE_E100	First name is required
005	400	DPE_E100	Surname is required
006	400	DPE_E100	Email address is required
007	400	DPE_E100	Contact number is required
008	400	DPE_E100	First name should be of 20 characters length
009	400	DPE_E100	Surname should be of 20 characters length
010	400	DPE_E100	Invalid contact number
011	400	DPE_E100	Invalid email address
012	400	DPE_E100	Determining body is required

013	400	DPE_E100	Site inspection date is required
014	400	DPE_E100	The attribute isConcurrenceReq is required
015	400	DPE_E100	Can't perform this action on a un submitted application
016	400	DPE_E100	Case is already determined or withdrawn or rejected
017	400	DPE_E100	Application exhibited is required
018	400	DPE_E100	The attribute isSICReq is required
019	400	DPE_E100	The attribute isVPAReq is required
020	400	DPE_E100	Invalid value specified for DA Exhibited. Allowed values are Yes/No
021	400	DPE_E100	Invalid value specified for isConcurrenceReq. Allowed values are Yes/No
022	400	DPE_E100	Invalid value specified for isSICReq. Allowed values are Yes/No
023	400	DPE_E100	Invalid value specified for isVPAReq. Allowed values are Yes/No
024	400	DPE_E100	Exhibition start date is required
025	400	DPE_E100	Exhibition end date is required
026	400	DPE_E100	Determination outcome is required
027	400	DPE_E100	Determination authority is required
028	400	DPE_E100	Determination date is required
029	400	DPE_E100	At least 1 document is Mandatory
030	400	DPE_E100	Invalid determining body is specified
031	400	DPE_E100	Determining body can't be RPP or SPP

032	400	DPE_E100	Invalid determining outcome is specified
033	400	DPE_E100	Invalid determining authority is specified
034	400	DPE_E500	"Can't initiate concurrence and referral process and/or SIC process"
035	400	DPE_E100	Invalid date format specified for site inspection
036	400	DPE_E100	Invalid date format specified for exhibition start date
037	400	DPE_E100	Invalid date format specified for exhibition end date
038	400	DPE_E100	Invalid date format specified for determination date
039	400	DPE_E400	Request not supported at this stage of workflow
040	400	DPE_E300	Case is assigned to some other user, please reassign to self before performing any action
041	400	DPE_E100	"Date of site inspection and exhibition start, and end dates must be after date of lodgement date OR Site inspection date and exhibition dates can't future"
042	400	DPE_E100	Validation failed. Check for mandatory documents OR Date of determination can't be future date and/or Date of determination must be after date of lodgement
043	400	DPE_E100	A concurrence and referral case are still in progress. Please act on the concurrence case to proceed with determination on DA

044	400	DPE_E100	Online DA can't be determined as APPROVED or DEFERRED while a Concurrence and Referral / Agency assessment process is under assessment
DOC01	400	DPE_E100	Document type is required
DOC02	400	DPE_E100	Document name is required
DOC03	400	DPE_E100	Document URL is required
DOC04	400	DPE_E100	Document uploaded date and time is required
DOC05	400	DPE_E100	"Invalid document type. Allowed document type are Notice of determination and Other"
DOC06	400	DPE_E100	"Invalid file name. File name cannot contain special characters"
DOC07	400	DPE_E100	"Invalid document name. Document name can't contain special characters and length of the file name (excluding extension) should not be more than 55 characters."
DOC08	400	DPE_E600	"Select a valid file. Only PDF, MS word, MS excel, jpeg and png documents are allowed"
DOC09	400	DPE_E700	"File doesn't exist due to malicious file/size"
	500	DPE_E900	Internal server error

High level design:

- Create classes PEC-DPE-EP-Int-DA-Determination, PEC-DPE-EP-Int-DA-Determination-Req, PEC-DPE-EP-Int-DA-Determination-Res
- Create UpdateDetermination_request (single page and applies to PEC-DPE-EP-Int-DA-Determination-Req) and UpdateDetermination_response (single page and applies to PEC-DPE-EP-Int-DA-Determination-Res) properties in PEC-DPE-EP-Int-DA-Determination class.
- *Create a service activity:* PEC-DPE-EP-Int-DA-Determination *DetermineDA*
- Map all the properties from http request to UpdateDetermination_request
- Log the API request with all the properties
- Validate the payload
    - Check for the empty values for all the properties in payload
    - Check if the properties isConcurrenceReq, isApplicationExhibited, isSICReq and isVPAReq has appropriate values Yes or No
    - Validate the values for the *DeterminingOutcome ,AnticipatedDeterminingBody* and *DeterminingAuthority*
    - If the anticipated determining body is RPP or SPP, set the error message and exit the operation.
    - If isApplicationExhibited is set to "Yes", make sure payload has values for *exhibitStartDate* and *exhibitEndDate*
- Iterate through pxFlows fetch .pxRouteTo property value for the relevant assignment, compare the value with emailAddress (which is part of JSON). If the values are same, continue the process. If not same, return the service with error message asking the user to reassign the case before performing any action.
- Open the case using Obj-Open-By-Handle{CaseID} method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- If the case in Assessment stage, perform below steps
    - Update the work item with Preliminary Assessment fields
    - Call validate rule ValidatePreliminaryAssessment. If failed, return appropriate error code and EXIT.
    - If validation is success, Call CheckAgenciesDecisionCompleted activity. This activity check if there is any Open CNR case and/or Assessment is completed for agency cases
    - If there is agency decision pending, and DeterminationOutcome is Approved/Deferred, return appropriate error code and EXIT
- If the Online DA case is assessment stage and DetermineDA API is called, then
    - If value of the property isConcurrenceReq == "Yes" or isSICReq == "Yes", set appropriate error code with message, "Can't initiate concurrence and referral process and/or SIC process"
- If Preliminary and Final assessment are already performed on DA case or Case is in Determination stage, don't override the work object with properties from payload.

- o If value of the property isConcurrenceReq == "Yes" or isSICReq == "Yes",No validation is required and we should not create any CNR case
- Update the work item with appropriate properties related to Determination.
- Iterate through the documents payload and perform
  - o Call the function @PECDPEUtils.ReadFileFromURL(documentURL). This function returns the Base64 encoded string. Call the activity PEC-DPE UploadAttachment
  - o After documents are attached, Call validation rule ValidateDeterminationDetails
- If not determining stage, Perform the change stage, move to Determination stage
- Validate if all the required documents are attached to the case
- If determining stage, Perform ResumeFlow with below parameters
  - o Flow name : DetermineOutcome
  - o Flow action name : CaptureDetermination
- If DetermineDA API is successful, log the API response and return a http status code 204

Assumptions :

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.
- Council will login to ePlanning portal to submit the CNR case and take appropriate action If Preliminary Assessment is performed from ePlanning portal

2.3.4 WithdrawDA

Purpose: To update the withdraw decision in the Pega.

Endpoint: CaseMgmt/v1/Withdraw/{CaseID}

Method: PUT

Class: PEC-DPE-Int-CaseMgmt-Withdraw

Ruleset : PECDPEInt

Service package: CaseMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property
CaseID	PATH	Numeric String	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	PEC-DPE-Data-AgencyAPIUpdates CaseID

CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing.	
withdrawalDate	Payload	Date	2019-03-31	Date on which Online DA case is withdrawn	PEC-DPE-Int-CaseMgmt-Withdraw-Req WithdrawalDate
UpdatedBy	Payload			Person this case is assigned to.	PEC-DPE-EP-Int-DA-UpdatedBy
person	Payload	Object		Complex party type.	PEC-DPE-Data-Person person
firstName	Payload	String(20)	John	First name of the assignee	PEC-DPE-Data-Person firstName
surname	Payload	String(20)	Smith	Surname of the assignee	PEC-DPE-Data-Person surname
emailAddress	Payload	String	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person emailAddress
contactNumber	Payload	Numeric String (10)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person contactNumber

Sample Request Payload – WithdrawDA

Response mapping:

```
POST /CaseMgmt/v1/Determine/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
 "withdrawalDate" : "2019-03-31",
   "UpdatedBy": {
    "person": {
      "firstName": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
}
```

Attribute	Data Type	Comments
HTTP Status 200 OK		On successful WithdrawDA, status 200 will be sent back to council system.

Response Payload

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```

Error codes:

HTTP Status	Error Code: DPE_ERROR_CODE	Error description: DPE_ERROR_DESCRIPTION	Error message
001	400	DPE_E100	Invalid request supplied
002	404	DPE_E200	Case not found or Case is locked by some other user
003	400	DPE_E100	Invalid Council Id or LGA name
004	400	DPE_E100	First name is required

005	400	DPE_E100	Surname is required
006	400	DPE_E100	Email address is required
007	400	DPE_E100	Contact number is required
008	400	DPE_E100	First name should be of 20 characters length
009	400	DPE_E100	Surname should be of 20 characters length
010	400	DPE_E100	Invalid contact number
011	400	DPE_E100	Invalid email address
012	400	DPE_E100	Application withdraw date is required
013	400	DPE_E100	Invalid application withdraw date. The withdraw date can't be before application submission date or can't be a future date
014	400	DPE_E300	Case assigned to some other user, please reassign to self before performing any action
015	400	DPE_E400	Can't perform this action on a un submitted application
016	400	DPE_E500	Can't perform this action on already resolved case
017	400	DPE_E100	Invalid date format specified for withdraw date
	500	DPE_E900	Internal server error

High level design:

- Create classes PEC-DPE-Int-CaseMgmt-Withdraw, PEC-DPE-Int-CaseMgmt-Withdraw-Req, PEC-DPE-Int-CaseMgmt-Withdraw-Res
- Create Withdraw_request (single page and applies to PEC-DPE-Int-CaseMgmt-Withdraw - Req) and Withdraw_response (single page and applies to PEC-DPE-Int-CaseMgmt-Withdraw -Res) properties in PEC-DPE-Int-CaseMgmt-Withdraw class.
- *Create a service activity:* PEC-DPE-Int-CaseMgmt-Withdraw *WithdrawCase*

- *Map all the properties from JSON to* Withdraw_request
- Log the API request with all the properties.
- Validate the payload i.e. withDrawl date and person details are required
- Open the case using Obj-Open-By-Handle {CaseID} method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- Iterate through pxFlows fetch .pxRouteTo property value for the relevant assignment, compare the value with emailAddress (which is part of JSON). If the values are same, continue the process. If not same, return the service with error message asking the user to reassign the case before performing any action.
- Validate the withdrawl date by calling the appropriate work type specific validation rule.
- Create an activity PEC-DPE-EP-Work WorkSpecificWithdrawValidations and *override in PEC-DPE-EP-Work-DevelopmentApplication* - This perform the case specific validation if any before withdrawing the application and call this activity from service activity
- Update the work item with appropriate properties
- As this is a generic API, the withdraw stage names could vary so create a Decision table to fetch a stage name based on the work type. Create a decision table PEC-DPE-EP-Work GetWithdrawStageByWorktype to fetch the work specific withdraw stage name
- Perform the stage change based on the stage name returned in above step
- If WithdrawDA API is successful, log the API response and return a http status code 204

Assumptions :

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.

2.3.5 RejectDA

Purpose: To update/capture the reject decision in the Pega.

Endpoint: CaseMgmt/v1/Reject/{CaseID}

Method: PUT

Class: PEC-DPE-Int-CaseMgmt-Reject

Ruleset : PECDPEInt

Service package: CaseMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property

CaseID	PATH	Numeric String	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	.CaseID
CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing.	

rejectReason	Payload	String	Any one of the values
			
			   o MISSING_ENVIRONMENTAL_IMPACT_STATEMENT
			   o DOES_NOT_COMPLY_WITH_EPA_REGULATION
			   o ILLEGIBLE_OR_UNCLEAR_APPLICATION
				Date on which Online DA case is withdrawn.
				What does the shortcut code mean to Pega?
				
				MISSING_ENVIRONMENTAL_IMPACT_STATEMENT - The application is for State significant development or designated development and is not accompanied by an environmental impact statement
				DOES_NOT_COMPLY_WITH_EPA_REGULATION - The application does not contain the information specified in Part 1 of Schedule 1 of the EP&A Regulation
				ILLEGIBLE_OR_UNCLEAR_APPLICATION - The application is illegible or unclear as to the development consent sought
					PEC-DPE-Int-CaseMgmt-Reject - Req rejectReason

rejectReasonDescription	Payload	String	Some text	Detailed reason for the rejection	PEC-DPE-Int-CaseMgmt-Reject - Req rejectReasonDescription
rejectDate	Payload	String	YYYY-MM-DD 2019-03-31	Date on which the Online DA case is rejected	PEC-DPE-Int-CaseMgmt-Reject - Req rejectDate

UpdatedBy	Payload			Person this case is assigned to.	PEC-DPE-EP-Int-DA-UpdatedBy
person	Payload	Object		complex party type.	PEC-DPE-Data-Person person
firstname	Payload	String(20)	John	First name of the assignee	PEC-DPE-Data-Person firstName
surname	Payload	String(20)	Smith	Surname of the assignee	PEC-DPE-Data-Person surname
emailAddress	Payload	String	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person emailAddress
contactNumber	Payload	Numeric String (10)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person contactNumber

Sample Request Payload – RejectDA

```
POST /CaseMgmt/v1/Reject/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json

{
 "rejectReason" : "MISSING_ENVIRONMENTAL_IMPACT_STATEMENT",
 "rejectReasonDescription" : "more explanation about reject",
 "rejectDate" : "2109-03031",
  "UpdatedBy": {
    "person": {
      "firstName": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
}
```

Response mapping:

Attribute	Data Type	Comments
HTTP Status 200 OK		On successful RejectDA, status 200 will be sent back to council system.

Response Payload

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```

Error codes:

HTTP Status	Error Code: DPE_ERROR_CODE	Error description: DPE_ERROR_DESCRIPTION	Details
001	400	DPE_E100	Invalid request supplied
002	404	DPE_E200	Case not found or Case is locked by some other user
003	400	DPE_E100	Invalid Council Id or LGA name
004	400	DPE_E100	First name is required
005	400	DPE_E100	Surname is required
006	400	DPE_E100	Email address is required
007	400	DPE_E100	Contact number is required
008	400	DPE_E100	First name should be of 20 characters length
009	400	DPE_E100	Surname should be of 20 characters length
010	400	DPE_E100	Invalid contact number
011	400	DPE_E100	Invalid email address
012	400	DPE_E100	Application reject reason is required
013	400	DPE_E100	Application reject reason description is required
014	400	DPE_E100	Application reject date is required
018	400	DPE_E100	"Invalid reject reason. Reject reason must be one of the following MISSING_ENVIRONMENTAL_IMPACT_STATEMENT,

			DOES_NOT_COMPLY_WITH_EPA_REGULATI ON and ILLEGIBLE_OR_UNCLEAR_APPLICATION"
019	400	DPE_E100	"Invalid reject date. Rejection date can't be before application submission date or can't be a future date"
017	400	DPE_E100	Case assigned to some other user, please reassign to self before performing any action
015	400	DPE_E100	Can't perform this action on a un submitted application
016	400	DPE_E100	Can't perform this action on already resolved case
020	400	DPE_E100	Invalid date format specified for Reject date
	500	DPE_E900	Internal server error

High level design:

- Create classes PEC-DPE-Int-CaseMgmt- *Reject*, PEC-DPE-Int-CaseMgmt- *Reject*-Req, PEC-DPE-Int-*Reject*-Withdraw-Res
- Create Reject_request (single page and applies to PEC-DPE-Int-CaseMgmt-*Reject*-Req) and Reject_response (single page and applies to PEC-DPE-Int-CaseMgmt- Reject-Res) properties in PEC-DPE-Int-CaseMgmt-Reject class.
- *Create a service activity: PEC-DPE-Int-CaseMgmt-Reject RejectCase*
- Map all the properties from JSON to Reject_request
- Log the API request with all the properties.
- Validate the payload i.e. rejectReason,reasonDescription,rejectDate and person details are required
- Open the case using Obj-Open-By-Handle {CaseID} method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- Iterate through pxFlows fetch .pxRouteTo property value for the relevant assignment, compare the value with emailAddress (which is part of JSON). If the values are same, continue the process. If not same, return the service with error message asking the user to reassign the case before performing any action.
- Create an activity PEC-DPE-EP-Work WorkSpecificRejectValidations and override in PEC-DPE-EP-Work-DevelopmentApplication - This can be used to perform the case specific validation if any before rejecting the application.
- Update the work item with appropriate properties
- As this is a generic API, the withdraw stage names could vary so create a Decision table to fetch a stage name based on the work type. Create a decision table PEC-DPE-EP-Work GetRejectStageByWorktype to fetch the work specific reject stage name

- Perform the stage change based on the stage name returned in above step
- If RejectDA API is successful, log the API response and return a http status code 204

Assumptions :

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.
- Clocks are not considered i.e. in the current system 'Reject Application' action will be visible to council for 14 days from date of lodgement

2.3.6   RequestAdditionalInfo

Purpose: To update the case with additional information request

Endpoint: CaseMgmt/v1/ReqAddInfo/{CaseID}

Method: POST

Class : PEC-DPE-Int-CaseMgmt-ReqAddInfo

Ruleset : PECDPEInt

Service package : CaseMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property
CaseID	PATH	Numeric String	PEC-DPE-EP-WORK PAN-1234	A fully qualified Portal application number	PEC-DPE-Int-CaseMgmt CaseID
CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing.	
requestDetails	Payload	String	Any text	Describes what council is expecting from applicant	PEC-DPE-Int-CaseMgmt-ReqAddInfo-Req requestDetails
requestDate	Payload	String	2019-03-31	Date on which this request was made	PEC-DPE-Int-CaseMgmt-ReqAddInfo-Req requestDate
Documents	Payload	Array	This is an optional attribute – Root element		*PEC-DPE-EP-Int-DA-Documents*

documentName	Payload	String(55)	Document name	With this name, a document will be created in Pega and attached to the case	PEC-DPE-EP-Int-DA-Document documentName
documentType	Payload	String	Document category and must be one of the following. • Fee estimate • Other	Document category	PEC-DPE-EP-Int-DA-Document documentType
documentLocation	Payload	String	https://s3-ap-southeast-2.amazonaws.com/docsfortesting/Architectural+Plans.docx	Using this URL, we fetch the document and attach to the Case	PEC-DPE-EP-Int-DA-Document documentLocation
uploadedDateTime	Payload	String	YYYY-MM-DDThh:mm:ss 2018-08-24T14:24:40	Document uploaded date time. Pega will convert to date	PEC-DPE-EP-Int-DA-Document uploadedDateTime
UpdatedBy	Payload			Person this case is assigned to.	PEC-DPE-EP-Int-DA-UpdatedBy
person	Payload	Object		complex party type.	PEC-DPE-Data-Person person
firstname	Payload	String(20)	John	First name of the assignee	PEC-DPE-Data-Person firstName
surname	Payload	String(20)	Smith	Surname of the assignee	PEC-DPE-Data-Person surname
emailAddress	Payload	String	John.smith@gmail.com	Email address. Also used as the user ID in the system.	PEC-DPE-Data-Person emailAddress
contactNumber	Payload	Numeric String (10)	Numbers only, between 8 and 10 digits E.g. 0414141414	Phone number (mobile number preferred)	PEC-DPE-Data-Person contactNumber

Sample Request Payload – RequestAddInfo

```
POST /CaseMgmt/v1/ReqAddInfo/{CaseID} HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json


{
 "requestDetails" : "what additional information council wants from applicant",
 "requestDate" : "2019-03-31",
"Documents" : [
     {
         "documentName" : "Hey.pdf",
         "documentType" : "Fee estimate",
         "documentURL" : "https://s3-ap-southeast-
2.amazonaws.com/docsfortesting/Determination_01.pdf",
                "uploadedDateTime" : "2019-04-01T01:48:25"
     },
     {
         "documentName" : "Hello.pdf",
         "documentType" : "Other",
         "documentURL" : "https://s3-ap-southeast-
2.amazonaws.com/docsfortesting/Determination_01.pdf",
                "uploadedDateTime" : "2019-04-01T01:48:25.29"
     }
  ],
"UpdatedBy": {
    "person": {
      "firstName": "John",
      "surname": "Smith",
      "emailAddress": "john.smith99@gmail.com",
      "contactNumber": "0414141414"
    }
  }
}
```

Response mapping:

Attribute	Data Type	Comments
HTTP Status 201 Created		On successful RequestAddInfo, status 201 will be sent back to council system.

Response Payload

```
HTTP/1.1 201
status: 201
content-type: application/json
content-length: 1234
```

Error codes:

HTTP Status	Error Code: DPE_ERROR_CODE	Error description: DPE_ERROR_DESCRIPTION	Details
001	400	DPE_E100	Invalid request supplied
002	404	DPE_E100	Case not found or Case is locked by some other user
003	400	DPE_E100	Invalid Council Id or LGA name
004	400	DPE_E100	First name is required
005	400	DPE_E100	Surname is required
006	400	DPE_E100	Email address is required
007	400	DPE_E100	Contact number is required
008	400	DPE_E100	First name should be of 20 characters length
009	400	DPE_E100	Surname should be of 20 characters length
010	400	DPE_E100	Invalid contact number
011	400	DPE_E100	Invalid email address
012	400	DPE_E100	Case assigned to some other user, please reassign to self before performing any action
013	400	DPE_E100	Additional information request date is required
014	400	DPE_E100	Invalid date format specified for Additional information request date
015	400	DPE_E100	Can't perform this action on a un submitted application
016	400	DPE_E100	Can't perform this action on already resolved case
017	400	DPE_E100	Additional information request comments are required

DOC01	400	DPE_E100	Document type is required
DOC02	400	DPE_E100	Document name is required
DOC03	400	DPE_E100	Document URL is required
DOC04	400	DPE_E100	Document uploaded date and time is required
DOC05	400	DPE_E100	"Invalid document type. Allowed document type are Fee estimate and Other"
DOC06	400	DPE_E100	"File name cannot contain special characters. Please rename file"
DOC07	400	DPE_E100	"Invalid document name. Document name can't contain special characters and length of the file name (excluding extension) should not be more than 55 characters."
DOC08	400	DPE_E100	"Select a valid file. Only PDF, MS word, MS excel, jpeg and png documents are allowed"
DOC09	400	DPE_E100	"File doesn't exist due to malicious file/size"
	500	DPE_E900	Internal server error

High level design:

- Create classes PEC-DPE-Int-CaseMgmt-ReqAddInfo, PEC-DPE-Int-CaseMgmt-ReqAddInfo-Req, PEC-DPE-Int-CaseMgmt-ReqAddInfo-Res
- Create RequestAddInfo_request (single page and applies to PEC-DPE-Int-CaseMgmt-ReqAddInfo-Req) and RequestAddInfo_response (single page and applies to PEC-DPE-Int-CaseMgmt-ReqAddInfo-Res) properties in PEC-DPE-Int-CaseMgmt-ReqAddInfo class.
- *Create a service activity: PEC-DPE-Int-CaseMgmt-ReqAddInfo RequestAddInfo*
- Map all the properties from JSON to Withdraw_request
- Log the API request with all the properties.
- Validate the payload i.e. check if all the required parameters are available.

- Open the case using Obj-Open-By-Handle {CaseID} method– if failed, return an appropriate error message and EXIT
- Fetch the LGAName from the work item and compare the same with CouncilID. If not same, return an appropriate error message and EXIT
- Iterate through the documents payload and perform
- Call the function @PECDPEUtils.ReadFileFromURL(documentURL). This function returns the Base64 encoded string. Call the activity PEC-DPE UploadAttachment
- After setting all the properties and validating the person object, call the activity on PostRequestAdditionalInfo. This activity is an existing activity
- If RequestAddInfo API is successful, log the API response and return a http status code 204

Assumptions :

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.

2.3.7   **GetApplicantDoc**

Purpose: To pull a document from Pega

Endpoint: DocMgmt/v1/Documents/{DocID}

Method: GET

Class: PEC-FW-API-DocMgmt

Ruleset : PECFWDocAPI

Service package: DocMgmt

Request mapping:

Attribute	Location	Data Type	Sample Value	Description	Property
CouncilID	Header	String	PENRITH,SUTHERLAND	Contain the council LGA name to indicate the request is originating from a specific council	PEC-DPE CouncilID
IdempotencyId	Header	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing.	

DocID	PATH	String(128)	DATA-WORKATTACH-FILE PEC-DPE-EP-WORK CNR-18987!20190312T090349.264 GMT	This is a unique attachment id created by Pega	
A sample well formed URL - https://nswpe-dt1.pegacloud.io:443/prweb/PRRestService/DocMgmt/v1/Documents/DATA-WORKATTACH-FILE PEC-DPE-EP-WORK CNR-18987!20190312T090349.264 GMT					

Sample Request Payload – RequestAddInfo

```
POST /DocMgmt /v1/Documents/{DocURL} HTTP/1.1

IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Accept: application/json
```

Response mapping:

Attribute	Data Type	Comments
HTTP Status 200		On successful RequestAddInfo, status 200 will be sent back to council system.

Response Payload

```
HTTP/1.1 200
status: 200
content-type: application/json
content-length: 1234
```
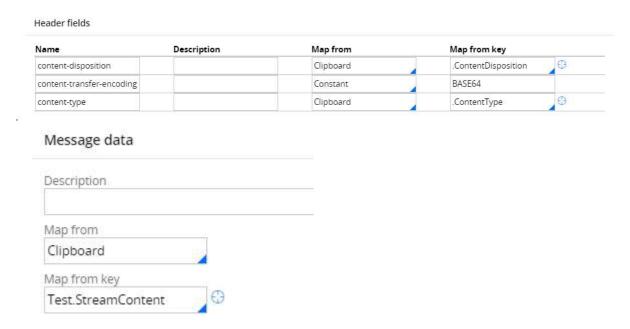
Error codes:

HTTP Status	Error Code: DPE_ERROR_CODE	Error description: DPE_ERROR_DESCRIPTION	Details
001	404	DPE_E100	Document ID not found
	500	DPE_E100	Internal server error

High level design:

- Create classes PEC-FW-API-DocMgmt, PEC-FW-API-DocMgmt-Req, PEC-FW-API-DocMgmt-Res
- Create Documents_request (single page and applies to PEC-FW-API-DocMgmt-Req) and Documents _response (single page and applies to PEC-FW-API-Error) properties in PEC-FW-API-DocMgmt class.
- *Create a service activity:* PEC-FW-API-DocMgmt *GetDocument*
- Map all the properties from JSON to Withdraw_request

- Log the API request with all the properties.
- Open the Data-WorkAttach-File using Obj-Open-By-Handle {DocID} method– if failed, return an appropriate error message and EXIT
- Get the base64 content of the file from webstorage and put (Use putObject() method) the base 64 content in the Clipboard page.
- Call pxGetMimetypeFromFileName to get the mime type and set the value for .ContentType property defined in PEC-FW-API-DocMgmt
- Set ContentDisposition header. This header lets the user save the file to their computer and then decide how to use it, instead of the browser trying to use the file
- For error handling, use DetermineErrorResponse decision table
- In GetDocument Service REST rule, set response headers for GET method and message data

Header fields

Name	Description	Map from	Map from key	
content-disposition		Clipboard	.ContentDisposition	⊕
content-transfer-encoding		Constant	BASE64	
content-type		Clipboard	.ContentType	⊕

Message data

Description

Map from

Clipboard

Map from key

Test.StreamContent   ⊕

- If GetDocument API is successful, log the API response and return a http status code 200

Assumptions:

- No validation will be performed whether user (who is part of assignee payload) belongs to same organisation or not.

2.4   SERVICES CONSUMED BY PEGA

For all the outbound APIs, Pega needs to set the APIKey and this key will be used by API Gateway to identify the council.

2.4.1 CerateDA

Purpose: Create an Online DA in the council system

Endpoint:

Method: POST

Class: PEC-DPE-EP-Int-DA-Create

Ruleset : EPInt

Request mapping:

Field Name	Data type	Sample value	Description	Class	Pega property mapping
CaseID	String	PAN-1234	Portal application number in the ePlanning digital system		.pzInskey
IdempotencyId	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing. Typically, a UUID such as "63a9ba30-7a4b-4fac-b343-d1f05cf089f1"		
CouncilID	String	PENRITH,SUTHERLAND	This property needs to be mapped in the HEADER		.LGAName
caseStatus	String	In-progress, Pending lodgement,Under Assessment	Status of the Online DA Case.	PEC-DPE-EP-Int-DA-CreateUpdate-Request caseStatus	.pyStatusWork
applicant	Object	Applicat details		PEC-DPE-EP-Int-DA-Applicant	
title	String	One of the value	Title of the applicant	PEC-DPE-EP-Int-DA-	.Applicant.PersonalInformation.pyTitle

		Miss/Mr/Mrs/Ms		CreateUpdate-Request title	
firstName	String	John	firstName of the applicant		.Applicant.PersonalInformation.FirstName
otherName	String		Middle name of the applicant		.Applicant.PersonalInformation.MiddleName
familyName e	String	Smith	lastName of the applicant		.Applicant.PersonalInformation.LastName
contactNumber mber	Number	0403294279	Contact number of applicant		.Applicant.Address.ContactNumber
email	String	Jogn.smith@gmail.com	Email address of the applicant		.Applicant.PersonalInformation.Email
address	String		Address of the applicant		.Applicant.Address.FULL ADDRESS
isApplyBehalfOnCompany	Boolean		Is applicant applying on behalf of a company		.Applicant.ApplOnBehalfOfCompany
applyOnBehalfCompany ny	Object		Object that holds the companyName e and ABNorACN		
companyName ame	String		Compnay name		.Applicant.CompanyName me
ABNorACN	String		Company ABN or ACN		.Applicant.ACNABN
nominatedCompanyApplicant pplicant	Boolean	True of false	Is the nominated company the applicant for this application		.Applicant.IsApplicantCompany ompany

developmentSiteOwner	String	One of the values APPLICANT_OWNED, MULTI_PLUS_APPLICANT, MULTI_EXCL_APPLICANT, COMPANY_OWNED	If .Applicant.Ownership = 'SoleOwner', we set the value as APPLICANT_OWNED		.Applicant.Ownership
ownerDetails	Array				
ownerPerson	Object	Required if the devbelopmentsiteowner is one of the following APPLICANT_OWNED, MULTI_PLUS_APPLICANT, MULTI_EXCL_APPLICANT	Object that holds the owner details		
title	String	Any one of the values: Mr/Miss/Mrs/Ms	One Owner title		.OwnerList(n).PersonalInformation.pyTitle
firstName	String	John	Owner first name		.OwnerList(n).PersonalInformation.FirstName
otherName	String	Peter	Owner middle name		.OwnerList(n).PersonalInformation.MiddleName
familyName	String	Smith	Owner family name		.OwnerList(n).PersonalInformation.LastName
contactNumber	Number(10)	0403294279	Owner contact number		.OwnerList(n).Address.ContactNumber

email	String	John.smith@gmail.com	Owner valid email address		.OwnerList(n).PersonalInformation.Email
address	String	19-33 Elizabeth Street, Narrandera, 2700	Address		.OwnerList(n).FULLADDRESS
ownerCompany	Object	Required if the development siteowner is **COMPANY_OWNED**	A company or business owns the development site		
companyName	String	DevCorp	Company name		.OwnerList(1).OrgName
ABNorACN	String	12 345 678 892	ABB or CAN number of the company		.OwnerList(1).LandownerABNACN
applicationType	String	One of the following **DA** **MODIFICATION** **REVIEW**	Mapping : Development Application = DA Modification Application = MODIFICATION, Review of determination = REVIEW		.DevelopmentApplication.DevType
modificationType	String	One of the following **MOD_MINOR, MOD_ENV_IMPACT, MOD_OTHERS**	Required if the applicationType is **MODIFICATION**		.DevelopmentApplication.TypeOfModificationApplication
existingDANumber	String	DA-1234/2019/21	Required if the applicationType is		If applicationType = **MODIFICATION**

			MODIFICATION or REVIEW		.DevelopmentApplication.DANumber Or If applicationType = **REVIEW** .DevelopmentApplication.DANumberFromCouncil
proposedModification Description	String	Sample desc	Required if the applicationType is **MODIFICATION**		.DevelopmentApplication.DescForProposedModification
siteAddresses	Array				
address	String	19-33 Elizabeth Street, Narrandera, 2700	Address where the development is happening		.SiteAddressList(n).StreetNoAndName
lotdp	String	X/sasa/DP411496	Lot or section or plan numbers		.SiteAddressList(n).PropertyDetailsList(1).lotnumber + " / " + .SiteAddressList(n).PropertyDetailsList(1).sectionnum + " / " + .SiteAddressList(n).PropertyDetailsList(1).plannumber
lga	String	PENRITH SUTHERLAND	Local Government Area under which this DA falls		.LGAName
isPrimary	Boolean	True or false	As we can have multiple addresses, we need one address as primary		.SiteAddressList(n).IsPrimary

developmentTypes	Array	Dwelling, Secondary dwelling, Semi-attached dwelling	What type of development is proposed		All the selected development types .ClassOfBuiliding(n).pySelected = true
isPoolSpa40KlitersProposed	Boolean	True or false	If the development type is proposed as "Pools / decks / fencing", applicant needs to answer if the pool has more than 40k capacity		If property is available – .DevelopmentApplication.IsPoolOrSpaCapacityMoreThan40k
developmentDescription	String	Sample desc	Development description		.DevelopmentApplication.DevPurpose
proposed24HrWork	Object				
MonWorkDay	Object				
proposed24HrWork	Boolean	True or false	What are the working hours on Monday		.DevelopmentApplication.Proposed24HrWork(Mon)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pyMondayStart
endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pyMondayEnd

TueWorkDay	Object				
proposed24HrWork	Boolean	True or false	What are the working hours on Tuesday		.DevelopmentApplication.Proposed24HrWork(Tue)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pyTuesdayStart
endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pyTuesdayEnd
WedWorkDay	Object				
proposed24HrWork	Boolean	True or False	What are the working hours on Wednesday		.DevelopmentApplication.Proposed24HrWork(Wed)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pyWednesdayStart
endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pyWednesdayEnd
ThuWorkDay	Object				
proposed24HrWork	Boolean	True or False	What are the working hours on Thursday		.DevelopmentApplication.Proposed24HrWork(Thu)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pyThursdayStart

endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pyThursdayEnd
FriWorkDay	Object				
proposed24HrWork	Boolean	True or False	What are the working hours on Friday		.DevelopmentApplication.Proposed24HrWork(Fri)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pyFridayStart
endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pyFrindayEnd
SatWorkDay	Object				
proposed24HrWork	Boolean	True or False	What are the working hours on Saturday		.DevelopmentApplication.Proposed24HrWork(Sat)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pySaturdayStart
endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pySaturdayEnd
SunWorkDay	Object				
proposed24HrWork	Boolean	True or False	What are the working hours on Sunday		.DevelopmentApplication.Proposed24HrWork(Sun)
startWorkingHours	Datetime	O9:30 AM	If not 24 hrs, specify the start time		DevelopmentApplication.WorkingHours.pySundayStart

endWorkingHours	Datetime	O5:30 PM	If not 24 hrs, specify the end time		DevelopmentApplication.WorkingHours.pySundayEnd
numDwellingsUnitsProposed	Number(4)	12	Number of dwellings / units proposed		.DevelopmentApplication.UnitsProposed
numStoreysProposed	Number(4)	21	Number of storeys proposed		.DevelopmentApplication.StoreysProposed
numPreExistingDwellings	Number(4)	21	Number of pre-existing dwellings on site		.DevelopmentApplication.PreExistingDwellingsOnSite
numDwellingsDemolished	Number(4)	22	Number of dwellings to be demolished		.DevelopmentApplication.DwellingsDemolished
costOfDevelopment	Decimal	434345.54	estimated cost of the development		.DevelopmentApplication.InvestmentValue
numExistingLots	Number(4)	32	Number of existing lots		.DevelopmentApplication.ExistingLots
isSubdivisionProposed	Boolean	True or false	Is Subdivision proposed or not		.IsSubdivisionSelected
subdivisionTypes	Array				
subdivisionType	String	One of the following **STRATA, COMMUNITY, TORRENS, STRATUM**	All the selected types i.e pySelected=true		.DevelopmentApplication.SubdivisionList(n).pySelected

numProposedLots	Number(4)	232	Number of proposed lots		.DevelopmentApplication.ProposedLots
numStaff	Number(4)	32	Staff/employees on the site		.DevelopmentApplication.ProposedEmployeeCount
numParkingSpaces	Number(4)	2321	Number of parking spaces		.DevelopmentApplication.ParkingSpaces
numLoadingBays	Number(4)	32	Number of loading bays		.DevelopmentApplication.LoadingBays
isNewRoadProposed	Boolean	True or false	Is new road proposed		.DevelopmentApplication.RoadProposed
proposedRoadWorkDescription	String	Sample desc	description of the proposed roadworks		.DevelopmentApplication.RoadproposedDesc
isStagedDevelopment	Boolean	True or false	Is the development to be staged or not		.DevelopmentApplication.IsStagedDevelopment
stagedDevelopmentDescription	String	Sample description	Description of the proposed staging of the development		.DevelopmentApplication.ProposedStagingComments
isCrownDevelopment	Boolean	True or false	Is this a proposed Crown development or not		.DevelopmentApplication.IsCrownDevelopment
crownDevelopmentNSWAgency	String	Some government agency name	Identify the NSW government agency		.DevelopmentApplication.CrownAgencyDesc
isIntegratedDevelopment	Boolean				.PolicyCheck.HasIntegratedDevelopment

integrated DevelopmentTypes	Array				
integrated DevelopmentType	String	One or more from values from the integrated development options **Coal Mine Subsidence Compensation Act 2017, Fisheries Management Act 1994, Heritage Act 1977, Mining Act 1992, National Parks and Wildlife Act 1972, Petroleum (Onshore) Act 1991, Protection of the Environment Operations Act 1997, Roads Act 1993, Rural Fires Act 1997, Water Management Act 2000**			All the selected values in the page list IntegratedDevOptions .IntegratedDevOptions(n).pySelected
doesImpactHabitat	Boolean	True or false	Is your proposal likely to significantly impact on threatened species, populations, ecological communities or their habitats, or is it located on land identified as critical habitat		.PolicyCheck.IsCriticalHabitat
doesVaryLEP	Boolean	True or false	Does the application propose a variation to a development standard in an environmental planning instrument (eg LEP or SEPP)		.PolicyCheck.IsEPIVariationProposed

LEPVariationDescription	String	Sample description	Description of the variation		.PolicyCheck.EPIVariationProposedDesc
isApplicationVPA	Boolean	True or false	Is the application accompanied by a Voluntary Planning Agreement (VPA)		.PolicyCheck.HasAccompaniedVPA
vpaDetails	Array				
vpaDescription	String	Sample description	VPA description		.PolicyCheck.VPAList(n).Title
vpaStatus	String	One of the following values : **PROPOSED, ON_EXHIBITION, EXECUTED**	VPA status		.PolicyCheck.VPAList(n).Status
isLGAS68ApprovalReq	Boolean	True or false	Is approval under s68 of the Local Government Act 1993 required		.PolicyCheck.IsS68LGAct1993ApprovalReq
S68ReqDescription	String	True or false	Description of the approval		.PolicyCheck.S68LGAct1993ApprovalDesc
doesIncludeHeritageArea	Boolean	True or false	Does the development site include an item of environmental heritage or sit within a heritage conservation area		.PolicyCheck.HasEnvironmentalHeritage

doesInclude HeritageB uilding	Boolean	True or false	Are works proposed to any heritage listed buildings		.PolicyCheck.IsHeritage BuildingImpacted
doesInclud eHeritageT reeRemova l	Boolean	True or false	Is heritage tree removal proposed		.PolicyCheck.IsHeritage TreeRemovalProposed
isApplicant CouncilMe mber	Boolean	True or false	Is the applicant or owner a staff member or councillor of the council assessing the application		.PolicyCheck.IsSelfRelat edToCouncil
applicantC ouncilRole Description	String	Sample description	Description of the council and role (name of person, role in council)		.PolicyCheck.SelfCouncil RelationDesc
isApplicant RelatedToC ouncil	Boolean	True or false	Does the applicant or owner have a relationship with any staff or councillor of the council assessing the application		.PolicyCheck.HasRelatio nToCouncil
applicantC ouncilRelat ionDecripti on	String	Sample description	description (name of person, role in council, relationship to the person)		.PolicyCheck.RelationTo CoucilDesc
anyPolitical Donation	Boolean	True or false	Have you made any political donations		.PolicyCheck.IsPoliticalD onorWithFinInterestKn own

politicalDonations	Object				
Donations	Array				
donationType	String	Gift or Donation or Any	Donation type		PolicyCheck.PoliticalDonationsList(n).transactionType
personDonatedTo	String	Name of person or party	Name of party or person for whose benefit the donation / gift was made		PolicyCheck.PoliticalDonationsList(n). Beneficiary
donationDate	Date	Donation date	Date of benefit		PolicyCheck.PoliticalDonationsList(n). EffectiveDate
donationValue	Number	Donation amount	Donation amount		PolicyCheck.PoliticalDonationsList(n).Amount
donationDeclarationPersonName	String	Person making the declaration	Name of the person making the donation		.PolicyCheck.DonatorPage.FullName
entityNameDonatedTo	String	Name of the entity	Name of the entity		.PolicyCheck.DonatorPage.CompanyName
ABNDonatedTo	String	Valid ABN number	ABN number if the donation is not made by an individual		.PolicyCheck.DonatorPage.ACNABN
addressDonatedTo	String	Address	Address		.PolicyCheck.DonatorPage.FULLADDRESS
payerInformation	Object				

payerPerson	Object				
firstName	String	John	First name of the payer who will pay this fee		.PayerInformation.First Name
otherName	String	Middle name	Middle name		.PayerInformation.Midd leName
familyName	String	Family name	Family name		.PayerInformation.Famil yName
contactNumber	Number	0403294279	Contact number of the person who will be making the payment		.PayerInformation.Cont actNumber
email	String	John.smith@ gmail.com	Email ID		.PayerInformation.Emai lAddress
billingAddress	String	Address	Address		.PayerInformation.FULL ADDRESS
Documents	Array				
Document	Object				
documentName	String	Name of the document	Supporting document		.Documents(5).Attachm ents(1).pyMemo
documentType	String	Category of the document	Supporting document		.Documents(n).Docume ntType
uploadedDateTime	Datetime	13/02/2019 11:52 AM	Supporting document		.Documents(n).Attachm ents(n).pxCreateDateTi me

document	String	https://nswpe-dt1.pegacloud.io:443/prweb/PRRestService/DocMgmt/v1/Documents/DATA-WORKATTACH-FILE PEC-DPE-EP-WORK CNR-18987!20190312T090349.264 GMT	A full URL with all the details		FULL URL – need to build this
Declarations					.ConsentList(n).pySelected
PoliticalDonationsdeclaration					.PolicyCheck.DonationDeclaration

Sample Request Payload:

```
PUT  HTTP/1.1
IdempotencyId: a1b22c16-4870-428c-a199-6203cbec7290
Authorization: Basic cXZ0ZXN0YXBpa2V5Og==
Content-type: application/json
{
  "caseStatus": "Pending Lodgement",
  "applicant": {
    "title": "Miss",
    "firstName": "string",
    "otherName": "string",
    "familyName": "string",
    "contactNumber": "string",
    "email": "user@example.com",
    "address": "string"
  },
  "isApplyBehalfOnCompany": true,
  "applyOnBehalfCompany": {
    "companyName": "string",
    "ABNorACN": "string"
  },
  "nominatedCompanyApplicant": true,
  "developmentSiteOwner": "APPLICANT_OWNED",
  "ownerDetails": [
    {
      "ownerPerson": {
        "title": "Miss",
        "firstName": "string",
        "otherName": "string",
        "familyName": "string",
        "contactNumber": "string",
        "email": "user@example.com",
        "address": "string"
      },
      "ownerCompany": {
        "companyName": "string",
        "ABNorACN": "string"
      }
    }
  ],
  "applicationType": "DA",
  "modificationType": "MOD_MINOR",
  "existingDANumber": "string",
  "proposedModificationDescription": "string",
  "siteAddresses": [
    {
      "address": "7 Tamar Street, Sutherland, 2232",
      "lotdp": "string",
      "lga": "string",
      "isPrimary": true
    }
  ],
  "developmentTypes": [
```

```
    "isSubdivisionProposed": true,
    "subdivisionType": "STRATA"
  "payerInformation": {
    "payerPerson": {
      "title": "Miss",
      "firstName": "string",
      "otherName": "string",
      "familyName": "string",
      "contactNumber": "string",
      "email": "user@example.com",
      "address": "string"
    },
    "billingAddress": "string"
  },
  "documents": [
    {
      "documentName": "string",
      "documentType": "string",
      "organisation": "string",
      "uploadedBy": "string",
      "uploadedDateTime": "2019-03-21T02:02:21.851Z",
      "documentURL": " https://nswpe-
dt1.pegacloud.io:443/prweb/PRRestService/DocMgmt/v1/Documents/DATA-
WORKATTACH-FILE PEC-DPE-EP-WORK CNR-18987!20190312T090349.264 GMT "
    }
  ]
`                vpdatca3 :  iKorobED
    }
  ],
  "isLGAS68ApprovalReq": true,
  "S68ReqDescription": "string",
  "doesIncludeHeritageArea": true,
  "doesIncludeHeritageBuilding": true,
  "doesIncludeHeritageTreeRemoval": true,
  "isApplicantCouncilMember": true,
  "applicantCouncilRoleDescription": "string",
  "isApplicantRelatedToCouncil": true,
  "applicantCouncilRelationDecription": "string",
  "anyPoliticalDonation": "string",
  "politicalDonation": {
    "donationDeclarationPersonName": "string",
    "entityNameDonatedTo": "string",
    "ABNDonatedTo": "string",
    "addressDonatedTo": "string",
    "Donations": ["donation" : {
        "donationType": "string",
        "personDonatedTo": "string",
        "donationDate": "2019-03-21",
        "donationValue": 0
      }
    ]
  },
```

Response mapping:

Filed name	Type	Data type	Required	Description
Status	Header	A valid HTTP status code Example: 201	Yes	

Response Payload:

```
HTTP/1.1 201
status: 201
content-type: application/json
content-length: 1234
```

Configurations:

1. Create a DSS with name **EnableOnlineDASyncAPIs** in EPInt ruleset, which will contain true/false as value. This setting will act as toggle for calling the Council APIs from flows. This DSS value is fetched from D_AppExtension Data-Page from property *D_AppExtension.ReferenceData(***EnableOnlineDASyncAPIs***)*
2. Create DSS for all end-point URLs and Update the **DAAppExtension** DT to capture the End-point URLs
3. Also, end-point URLs for each API should be configured in a decision table **GetEndpointURL** (**PEC-DPE-EP-Int-DA**) and the values in the decision table should be fetched from D_AppExtension (=D_AppExtension.ReferenceData(CreateDAAPI))
4. Update the **DAAppExtension** DT to capture the End-point URLs

High level design :

1. Data model for CreateDA REST API will be as below.
   - *PEC-DPE-EP-Int-DA-Create-Request* and *PEC-DPE-EP-Int-DA-Create-Response* are created and all the request JSON properties are created in the Request class and Response properties are created in Response class.
   - **Resuest_POST** and **Response** properties are created in *PEC-DPE-EP-Int-DA-Create* class.
2. Connect REST rule **CreateDA** is created in *PEC-DPE-EP-Int-DA-Create* class and proper mapping is done in PUT method of the connector rule.
3. Create Activity **CreateOnlineDAAPI** in *PEC-DPE-EP-Int-DA-CreateDA* class which will have below steps:
   - Create **CreateDAPage** page of type *PEC-DPE-EP-Int-DA-Create*

- Set required properties to **CreateDAPage.Request_POST** page. (Use parameterised page to get DA case page passed from the calling activity)
- Get End Point URL from configured Decision table **GetEndPointURL** by passing *ServiceName* and *LGA.*
- Call Connect REST **CreateDA** with steppage as **CreateDAPage** and passing serviceName and EndPointURL.
- If request is failed because of any reason, Error handling is done as per steps mentioned in Error handling section.

4. Create the activity **CreateDAAPIWrapper** *in PEC-DPE-EP-Work-DevelopmentApplication* class which will call activity **CreateOnlineDAAPI** (*PEC-DPE-EP-Int-DA-Create*).

Error handling:

1. **FailedAPIRequests** Data-Type (*PEC-DPE-EP-Data-FailedAPIRequests*) is already existing to capture failed requests and we need to add a new column (Council Name) to capture the council name.
   i. CouncilName
   ii. CaseID
   iii. ErrorMessage
   iv. ServiceName

2. Standard Agent **RetryCreateOnlineDAAPI** is created in **EP** rule-set to handle failed requests by retrying.

3. When the Request is failed, a page of type *PEC-DPE-EP-Data-FailedAPIRequests* is created by setting the properties defined in step 1 and do a Queue-For-Agent **RetryCreateOnlineDAAPI**. Minimum Age for processing the queued record is set by a dynamic system setting "MinimumAgeForDAAPIRetry" so that it can be changed in future without any code change. Also create a dynamic system setting "MaximumRetryCount".

4. Agent Activity **RetryCreateOnlineDAAPI (** *PEC-DPE-EP-Data-FailedAPIRequests* **)** performs below steps.
   i. Gets the properties (CaseID, LGAName, ErrorMessage and Service) from Primary page.
   ii. Build the Request Page again with the values from the Case (by performing Obj-Open with CaseID as key)
   iii. Call Connect-REST

5. If all the retries fail, record is moved to the broken queue. Support team analyst can re-que the item manually once the interface issue is resolved by following steps:
   i. Login to Designer Studio
   ii. Navigate to DESIGNER STUDIO → System → Operations → Queue Management.
   iii. Click on the box "Broken" and click on "System-Queue-DefaultEntry" queue.
   iv. This list shows records for which all retries are failed. User can select the record which should be retried and re-queue that record.

2.4.2   UpdateAdditionalInfo

Purpose: Update the council system with the additional information response

Endpoint:

Method: GET

Class: PEC-DPE-EP-Int-AddlInfo-Update

Ruleset: EPInt

Request mapping:

Field Name	Data type	Sample value	Description	Class	Pega property mapping
CaseID	String	PAN-1234	Portal application number in the ePlanning digital system		.pzInskey
Idempoten cyId	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing. Typically, a UUID such as "63a9ba30-7a4b-4fac-b343-d1f05cf089f1"		
CouncilID	String	PENRITH,SUTHERLAND	Should be mapped as HEADER param		.LGAName
caseStatus	String	In-progress, Pending lodgement, Under Assessment	Status of the Online DA Case.	PEC-DPE-Int-RFI-UpdateAdditionalInfo-Request caseStatus	.pyStatusWork
responseDate	Date	2019-03-31	Date on which the information was provided	PEC-DPE-Int-RFI-UpdateAdditionalInfo-Request responseDate	.AdditionalInfoSubmissionDate
responeDetails	String	Some description	Comment provided as part of response	PEC-DPE-Int-RFI-UpdateAdd	. ResponseText

				itionalInfo-Request responeDetails	
Documents	Array		Array of documents	*PEC-DPE-EP-Int-DA-Documents*	
document Name	String	Document name	Document name	PEC-DPE-EP-Int-Document	.Documents(5).Attachments(1).pyMemo
documentType	String	Document category	Document category	PEC-DPE-EP-Int-Document	.Documents(n).DocumentType
uploadedDateTime	String	13/02/2019 11:52 AM	Document uploaded date time	PEC-DPE-EP-Int-Document	.Documents(n).Attachments(n).pxCreateDateTime
document URL	String	Full URL	https://nswpe-dt1.pegacloud.io:443/prweb/PRRestService/DocMgmt/v1/Documents/DATA-WORKATTACH-FILE PEC-DPE-EP-WORK CNR-18987!20190312T090349.264 GMT	PEC-DPE-EP-Int-Document	Pega needs to build this URL and must be included in the request. Council system

Response mapping:

Filed name	Type	Data type	Required	Description
Status	Header	A valid HTTP status code

Example: 201 | Yes | |

Response Payload:

```
HTTP/1.1 201
status: 201
content-type: application/json
content-length: 1234
```

Configurations :

o   Create a DSS with name EnableOnlineDASyncAPIs in EPInt ruleset, which will contain true/false as value. This setting will act as toggle for calling the Council APIs from flows. This DSS value is fetched from D_AppExtension.ReferenceData data-Page.
  Example : D_AppExtension.ReferenceData(EnableOnlineDASyncAPIs)

o   Define a DSS UpdateDADeterminationAPI. This DSS will hold the URL of the council system

o   Update the DAAppextension to set the UpdateAdditionaInfoURL API end-point URL.
  Example: D_AppExtension.ReferenceData(UpdateDADeterminationAPI) = @getDataSystemSetting(EPInt,"UpdateDADeterminationAPI")

o   Also, end-point URLs for each API should be configured in a decision table GetEndpointURL (PEC-DPE-EP-Int-DA) and the values in the decision table should be fetched from D_AppExtension

High level design :

o   Data model for UpdateAdditionalInfo REST API will be as below.
  • PEC-DPE-EP-Int-AddlInfo-Update-Request and PEC-DPE-EP-Int-AddlInfo-Update-Response are created and all the request JSON properties are created in the Request class and Response properties are created in Response class
  • Request_PUT and Response properties are created in PEC-DPE-EP-Int-AddlInfo-Update class

o   Create Connect REST rule **UpdateAddInfo** in PEC-DPE-EP-Int-AddlInfo-Update class and do proper request mapping in PUT method of the connector rule.

o   Create activity **UpdateAddInfo** in PEC-DPE-EP-Int-AddlInfo-Update class which will have below steps:
  • Create **UpdateAddInfoPage** page of type PEC-DPE-EP-Int-AddlInfo-Update
  • Set required properties to UpdateAddInfoPage.Request_ PUT page. (Use parameterised page to get DA case page passed from the calling activity)
  • Get End Point URL from configured Decision table GetEndPointURL by passing ServiceName and LGA
  • Call Connect REST **UpdateAddInfo** with steppage as **UpdateAddInfoPage** and passing serviceName and EndPointURL.
  • Create the activity UpdateAddInfoAPIWrapper in PEC-DPE-EP-Work-AdditionalInfo class which will call activity PEC-DPE-EP-Int-AddlInfo-Update **UpdateAddInfo**.

- If request is failed because of any reason, Error handling is done as per steps mentioned in Error handling section.

Error handling:

- FailedAPIRequests Data-Type (PEC-DPE-EP-Data-FailedAPIRequests) is already existing to capture failed requests and we need to add a new column (CouncilName) to capture the council name.
  - o CouncilName
  - o CaseID
  - o ErrorMessage
  - o ServiceName
- Create a Standard Agent RetryUpdateAddInfoAPI is created in EP rule-set to handle failed requests by retrying
- When the Request is failed, a page of type PEC-DPE-EP-Data-FailedAPIRequests is created by setting the properties defined in step 1 and do a Queue-For-Agent **RetryUpdateAddInfoAPI**. Minimum Age for processing the queued record is set by a dynamic system setting "MinimumAgeForDAAPIRetry" so that it can be changed in future without any code change. Also create a dynamic system setting "MaximumRetryCount".
- Agent Activity **RetryUpdateAddInfoAPI** (PEC-DPE-EP-Data-FailedAPIRequests) performs below steps
  - o Gets the properties (CaseID, LGAName, ErrorMessage and Service) from Primary page
  - o Build the Request Page again with the values from the Case (by performing Obj-Open with CaseID as key)
  - o Call Connect-REST
- If all the retries fail, record is moved to the broken queue. Support team analyst can re-que the item manually once the interface issue is resolved by following steps:
  - o Login to Designer Studio
  - o Navigate to DESIGNER STUDIO ▯ System ▯ Operations ▯ Queue Management.
  - o Click on the box "Broken" and click on "System-Queue-DefaultEntry" queue.
  - o This list shows records for which all retries are failed. User can select the record which should be retried and re-queue that record.

Request_JSON :

AddInfoUpdate.jso
n

2.4.3 GetCouncilDocument

Purpose: To pull a document from council system

Endpoint:

Method: GET

Class: PEC-DPE-Int-CaseMgmt-GetDocument

Ruleset : PECDPEInt

Request mapping:

Field Name	Data type	Sample value	Description	Class	Pega property mapping
CaseID	String	PAN-1234	Portal application number in the ePlanning digital system		.pzInskey
IdempotencyId	String	a1b22c16-4870-428c-a199-6203cbec7290	Unique Id for this request. Allows the API to respond in an idempotent way if it has already been called with these parameters and prevents duplicate processing. Typically, a UUID such as "63a9ba30-7a4b-4fac-b343-d1f05cf089f1"		
CouncilID	String	PENRITH,SUTHERLAND	Should be mapped as Header param		.LGAName
caseStatus	String	In-progress, Pending lodgement,Under Assessment	Status of the Online DA Case.	PEC-DPE-Int-CaseMgmt-GetDocument-Request caseStatus	.pyStatusWork
base64EncodedString	String		Bse64 encoded string	PEC-DPE-Int-CaseMgmt-GetDocument-Request	

				base64Encoded String	

Response mapping:

Filed name	Type	Data type	Required	Description
Status	Header	A valid HTTP status code Example: 201	Yes	

Response Payload:

```
HTTP/1.1 201
status: 201
content-type: application/json
content-length: 1234
```

Configurations :

- o Create a DSS with name EnableOnlineDASyncAPIs in EPInt ruleset, which will contain true/false as value. This setting will act as toggle for calling the council APIs from flows. This DSS value is fetched from D_AppExtension.ReferenceData data page

  D_AppExtension.ReferenceData(EnableOnlineDASyncAPIs)

- o Define a DSS GetDocumentAPI. This DSS will hold the URL of the council system for get document.
- o Update the DAAppextension to set the GetDocumentAPI end-point URL.
  Example: D_AppExtension.ReferenceData(GetDocumentAPI) = @getDataSystemSetting(EPInt," GetDocumentAPI ")

High level design :

- o Data model for GetDocument REST API will be as below.
  - PEC-DPE-Int-CaseMgmt-GetDocument-Request and PEC-DPE-Int-CaseMgmt-GetDocument-Response are created and all the request JSON properties are created in the Request class and Response properties are created in Response class
  - Resuest_GET and Response properties are created in PEC-DPE-Int-CaseMgmt-GetDocument class

- o Create Connect REST rule **GetDocument** is created in PEC-DPE-Int-CaseMgmt-GetDocument class and do proper mapping in PUT method of the connector rule.
- o Create activity **GetDocument** in PEC-DPE-Int-CaseMgmt-GetDocument class which will have below steps:
  - Create **GetDocumentPage** page of type PEC-DPE-Int-CaseMgmt-GetDocument
  - Set required properties to GetDocumentPage.Request_ GET page. (Use parameteried page to get DA case page passed from the calling activity)
  - Get End Point URL from configured Decision table GetEndPointURL by passing ServiceName and LGA
  - Call Connect REST **GetDocument** with steppage as **GetDocumentPage** and passing serviceName and EndPointURL.
  - Create the activity **GetDocumentAPIWrapper** in PEC-DPE-Int-CaseMgmt-GetDocument class which will call activity PEC-DPE-EP-Int-AddlInfo-Update **GetDocumentAPI**.
  - If request is failed because of any reason, Error handling is done as per steps mentioned in Error handling section.

Error handling:

- FailedAPIRequests Data-Type (PEC-DPE-EP-Data-FailedAPIRequests) is already existing to capture failed requests and we need to add a new column (CouncilName) to capture the council name.
  - o CouncilName
  - o CaseID
  - o ErrorMessage
  - o ServiceName
- Create a Standard Agent RetryGetDoucmentAPI is created in EP rule-set to handle failed requests by retrying
- When the Request is failed, a page of type PEC-DPE-EP-Data-FailedAPIRequests is created by setting the properties defined in step 1 and do a Queue-For-Agent **RetryGetDoucmentAPI**. Minimum Age for processing the queued record is set by a dynamic system setting "MinimumAgeForDAAPIRetry" so that it can be changed in future without any code change. Also create a dynamic system setting "MaximumRetryCount" and set the value as 5.
- **Agent Activity RetryGetDoucmentAPI(PEC-DPE-EP-Data-FailedAPIRequests) performs below steps**
  - o Gets the properties(CaseID, LGAName, ErrorMessage and Service) from Primary page
  - o Build the Request Page again with the values from the Case (by performing Obj-Open with CaseID as key)
  - o Call Connect-REST
- If all the retries fail, record is moved to the broken queue. Support team analyst can re-que the item manually once the interface issue is resolved by following steps:
  - o Login to Designer Studio
  - o Navigate to DESIGNER STUDIO ⯈ System ⯈ Operations ⯈ Queue Management.
  - o Click on the box "Broken" and click on "System-Queue-DefaultEntry" queue.

- This list shows records for which all retries are failed. User can select the record which should be retried and re-queue that record.

2.5 CLASS STRUCTURE AND OTHER DETAILS

API	Class	Ruleset	URL	Service/Connector
GetApplicantDoc API	PEC-FW-API-DocMgmt	PECFWDoc API	DocMgmt/v1/Documents/{DocID}	Service/Inbound
RequestAdditionalInfo API	PEC-DPE-Int-CaseMgmt-ReqAddInfo	PECDPEInt	CaseMgmt/v1/ReqAddInfo/{CaseID}	Service/Inbound
AcceptReturnAPI	PEC-DPE-EP-Int-DA-AcceptReturn	EPInt	DAMgmt/v1/AcceptReturn/{CaseID}	Service/Inbound
UpdateDetermination API	PEC-DPE-EP-Int-DA-Determination	EPInt	DAMgmt/v1/Determine/{CaseID}	Service/Inbound
WithdrawDA API	PEC-DPE-Int-CaseMgmt-Withdraw	PECDPEInt	CaseMgmt/v1/Withdraw/{CaseID}	Service/Inbound
Reassign API	PEC-DPE-Int-CaseMgmt-Reassign	PECDPEInt	CaseMgmt/v1/Reassign/{CaseID}	Service/Inbound
Reject API	PEC-DPE-Int-CaseMgmt-Reject	PECDPEInt	CaseMgmt/v1/Reject/{CaseID}	Service/Inbound
CreateDA API	PEC-DPE-EP-Int-DA-Create	EPInt		Connector/Outbound
GetCouncilDoc API	PEC-DPE-Int-CaseMgmt-GetDocument	PECDPEInt		Connector/Outbound
UpdateAdditionalInfo API	PEC-DPE-EP-Int-AddIInfo-Update	EPInt		Connector/Outbound

2.6 ANY OTHER CHANGES

Rule Type	Rule Name	Class	Ruleset	Description

3. RULES CHANGED / IMPLEMENTED

NA

4. COMMENTS FOR REVIEWER / TESTING TEAM

NA