ACE CRM Integration
Frequently Asked Questions (FAQs)

March 2021
Version 1

aws partner network

Contents

1. Purpose

This document provides information on the Frequently Asked Questions (FAQs) for a Partner to connect their CRM to APN Customer Engagement module within Partner Central (ACE).

2. General FAQs

1. *What documentation that APN will share with partners?*
   A: APN will provide following documentation. The sample codes files are for reference only.

	Description	File Names	Comments
1	*User Guide*	*ACE CRM Integration - User Guide GA*	*Provides the detailed information about the onboarding process*
2	*Checklist*	*Development Task Checklist*	*Provides the checklist for the list of steps to be followed for onboarding, read operation and update operation. This also has FAQs for the same.*
4	*Data definition file*	*Field Definitions for Field Mapping*	*Provides the definition for each field and if a fields is updatable or read only.*
3	*Sample Lead and Opportunity file and format*	*Lead-Outbound-Sample.json* *Opportunity-Outbound-Sample.json*	*Provides sample files for both inbound and outbound data structure.*
5	*Sample Results file and format*	*Results Sample file.json*	*Provides sample results file that we produce after processing each file for update operation.*
6	*Sample Code files*	*ace_read_s3.py* *Apex_Sample_REST_API_Code.cls* *S3_Authentication.cls* *Sample_AceOutboundBatch.cls* *SFDC apex s3 sample.txt*	*Provides sample code files to authenticate to S3, pull the files from S3 and update in SFDC.*
7	*Test scripts*	*Test Scripts for UAT*	*Provides test scripts that Partner has to validate before going live.*
8	*FAQs*	*ACE - Partner CRM Integration_FAQs_26052020.docx*	*Provides test scripts that Partner has to validate before going live.*

2. *What skillset is needed from the partner developer?*
   A: Partner has to identify developer having the skillset of their CRM system and AWS S3.
3. *Do the sample code files include complete code or partner has to write the code?*
   A: Partner has to write the code.
4. *Is the integration a batch process?*
   A: Yes, it is a batch process.
5. *What is the frequency of lead and opportunity file uploads by ACE?*
   A: ACE will send the leads and opportunities data for every 1 hour.
6. *Is there any sandbox environment for ACE?*

A: Yes, We do have a sandbox environment for ACE. We will not be able to provide access for this sandbox to partners due to security reasons. We will be able to help you if any sample opportunities needed and throughout the testing phase.

7. *How do we maintain identifiers across Partner's CRM and APN?*

   A: To give partners more flexibility we will be having two sets of identifiers in the system

   - *apnCrmUniqueIdentifier - Managed by AWS and will begin with OXX for opportunities and LXX for leads*
   - *PartnerCrmUniqueIdentifier/partnerCrmLeadId- Managed by Partner on opportunities and leads respectively within their CRM. Partners should add this identifier while ingesting new opportunities, so as to trace back updates to their CRM.*

   Example:

	Partner CRM			Sync		AWS/APN CRM		
	Unique Identifier	APN identifier	Customer/Account			apnCrmUniqueIdentifier	partnerCrmUniqueIdentifier	Customer Company Name
Scenario 1	PCRM1		A	Use partner's identifier to read and update - PCRM1. Will need partner to ingest their identifier into APN while submitting new opportunities		O1234	PCRM1	A
Scenario 2	PCRM1	O1234	A	Use AWS/APN identifier to read and update - O1234. Will need partner to ingest APN's identifier into their system while creation of the lead/opportunity in their CRM		O1234	PCRM1	A

8. *How do we prevent duplicate records getting created in both systems?*

   A: From partner CRM perspective, there needs to be a unique identifier for each record that is sent to ACE which is called partnerCrmUniqueIdentifier. Similarly, ACE also maintains a unique identifier for each record which is called apnCrmUniqueIdentifier. Whenever the data is sent, both ACE and partner has to include these two fields, which will help to identify if the record is a new record or an existing record.

3. FAQs - ACE

1. *What are the ACE sales stages?*

   Prospect: *Opportunity has been identified. Opportunity can be active (i.e. coming directly from the end customer via a lead, etc.) or latent (i.e. your Account Team believes exists based on research, account plans, sales plays, etc.).*

   Note: 'Prospect' opportunity needs to be further matured to a 'Qualified' opportunity before submission in ACE Pipeline Manager.

   Qualified: *Your account Team has engaged with prospect / end customer to discuss viability, understand requirements, etc. Prospect / End customer has agreed the opportunity is real, of interest, and may solve for key business / technical needs.*

   Technical Validation: *Once implementation plan is understood.*

   Business Validation: Once pricing has been proposed and steps to close have been agreed upon.

   Committed: *Once launch date is committed and final obstacles understood.*

   Launched: *Workload is complete and billing has started on AWS.*

   Closed Lost: *Opportunity is lost and there are no steps to move forward.*

2. *What are the Partner Primary Need from AWS?*

   Architectural Validation | *Confirmation from AWS that the APN Partner's proposed solution architecture is aligned with AWS best practices and poses minimal architectural risks*

   Business Presentation | *Request AWS Seller's participation in joint customer presentation*

   Competitive Information | *Access to AWS Competitive resources and support for APN Partner's proposed solution*

Pricing Assistance | *Connection with AWS Seller for support situations where an APN Partner may be receiving an up-front discount on a service (e.g. EDP deals)*
Technical Consultation | *Connection with an AWS SA to address APN Partner's questions of proposed solution*
Total Cost of Ownership Evaluation | *Assistance in quoting the different cost savings of running the proposed solution on AWS vs on-premises or a traditional hosting environment*
For Visibility – No Assistance Needed | *No assistance needed and submitted for tracking purposes only*
Other | Assistance required not currently described

4. Technical FAQs - Onboarding

1. *How to create an AWS account?*
   A: Follow the steps mentioned in the below link.
   https://aws.amazon.com/es/premiumsupport/knowledge-center/create-and-activate-aws-account/
2. *How to create an IAM user?*
   A: Follow the steps in the below link.
   https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users_create.html
3. *Is there any cost associated with the AWS account?*
   A: No, there is no cost associated with AWS account.
4. *Where will get the AWS S3 rest API documentation?*
   A: Follow the link that provides the rest API documentation in various languages.
   https://docs.aws.amazon.com/AmazonS3/latest/API/Welcome.html
5. *How do we get key details to authenticate S3 bucket?*
   A: APN will share a policy that includes the key name.
6. *How often we rotate the keys?*
   A: 90 days. As the Key name is same, no change needed from partners for any keys rotation.
7. *Who owns the S3 bucket?*
   A: APN team owns the S3 bucket in their AWS account. The partner can access to this using the IAM user.
8. *Are there separate folders or buckets for receiving and sending files?*
   A: There will be one single bucket with different folders for receiving and sending the files. Refer to the user guide for further details on the folders.
9. *Do I need to access S3 bucket using Lambda or can I directly access using the CRM system?*
   A: Yes, Partner can build the code to directly access the S3 bucket using CRM system. It is upto the partner to decide which option best works for them.
10. *Is S3 bucket secured or encrypted?*
    A: Yes, we enabled the default encryption mechanism that AWS S3 offers.
11. *Is it possible to enable SNS listening to the S3 bucket so that Partner can have an efficient system to act only on the event, rather than keep polling periodically?*
    A: No, Currently ACE do not support this feature.
12. *If Partner develops their solution in Python or Golang or any other languages, do ACE provide any SDK in those languages for this integration?*
    A: No

5. Technical FAQs – File formats/Field definitions

1. *What is the format of the leads and opportunities?*
   A: APN will send the sample format and field definition files as an attachments in the email.
   For Leads: *File named "Lead-Outbound-Sample.json" (Shared via email)*
   For Opportunities: *File named "Opportunity-Outbound-Sample.json (Shared via email)*

For Results: *File named "Results Sample file" (Shared via email)*
Data definition file: *"Field Definitions_V4.xlsx" (Shared via email)*

2. *What is the format for inbound JSON files?*
   A: Same as outbound JSON file
3. *Does the integration support csv format?*
   A: No, The integration accepts only JSON file formats.
4. *When the files have to be deleted from outbound folders?*
   A: Delete only after successful processing at their end. If partially updated, you can tag the files as well.
5. *Incase if we delete the files by mistake from outbound folders, where can I find the original files?*
   A: The files will be available in the opportunity-outbound-archive and lead-outbound-archive folders.
6. *What needs to be done when there is any data file issues after production launch?*
   A: Raise a ticket with APN Support.
7. *What is the difference between opportunityOwnerName and opportunityOwnerEmail ?*
   A: opportunityOwnerName --> Name of the owner of the opportunity in the Partner organization. This needs to be a Partner Central user. opportunityOwnerEmail --> Email of the owner of the opportunity in the Partner organization. This needs to be a Partner Central user
8. *What is the timezone for target close Date?*
   A: It is GMT time zone
9. *What is the file naming convention?*
   A: As mentioned in the user guide, each file name need to be unique when Partner sends the files to ACE. The recommended file name is "Partner provided file name_timestamp.json'
10. *Do ACE supports versioning of inbound JSON files?*
    A: No, ACE doesn't support versioning of the files. ACE will process the file immediately after receiving and then deletes it after successful processing. If ACE receives same file name again, it will get rejected.
11. *What fields in S3 JSON file indicates the creation and latest update date of a particular lead and opportunity?*
    A: "createdDate" and "lastModifiedDate"
12. *How do you determine if an opportunity is new or an existing opportunity?*
    A: The field "PartnerCrmUniqueIdentifier" on each opportunity is a unique identifier we expect from the Partner. This identifier must be defined in the source CRM of the Partner's system. AWS will use this to determine if an opportunity already exists in ACE or not. If the "PartnerCrmUniqueIdentifier" is available in ACE, we will use the information shared to update the opportunity, else if "PartnerCrmUniqueIdentifier" is not available in ACE we will use the information shared to create a new opportunity.

    Similarly, when we send the data to Partner, we include PartnerCrmUniqueIdentifier and apnCrmUniqueIdentifier. If the opportunity shared by AWS, very first time, you will not see any value for PartnerCrmUniqueIdentifier. That helps you to consider the opportunity as a new opportunity from ACE. Once you ingest it into your CRM, you would send the updates back to us with both PartnerCrmUniqueIdentifier and apnCrmUniqueIdentifier.
13. *What timezone (e.g. last modified date) is in the outbound JSON file?*
    A: GMT
14. *Is there a possibility to have more than one outbound and result JSON files in S3?*
    A: Yes. Sometimes we may generate more files in the outbound folder. Similarly, if you send files into inbound folder, we will process them and keep the results files in result folder. You will have to tag/delete the result files after processing at your end.
15. *Suppose if 20 inbound opportunities are sent in a single input JSON file under the opportunities section and let's say one of the opportunities doesn't comply with APN standard. Will the behavior of the result file from APN will be the same as mentioned by you or it changes?.*

A: Suppose if the format itself is incorrect, irrespective of the case, the entire file will be rejected. Suppose if the format is correct but only opportunity can't be processed at our end, the results file include all the 20 opportunities and their status along with error message for the failed opportunity.

6. Technical FAQs – Send and Receive leads and opportunities

1. *How to authenticate S3 from SFDC?*
   A: Sample code file (Authentication.cls) to authenticate the S3 from SFDC is provided as an attachment to the email.
2. *How to upload the file from AWS SDK to S3?*
   A: Use the following command to upload the file to S3.
   AWS s3 cp example.json s3://awsexamplebucket --acl bucket-owner-full-control
   Sample code file (Sample_AceOutboundBatch.cls) for uploading the data file from SFDC is provided as an attachment to the email.
3. *Is there any file naming convention?*
   A: Each file name need to be unique. The recommended file name is 'Partner provided file name+timestamp.json'
4. *What is the structure of the results?*
   A: Sample files for the results (success, error and partial) provided for reference.
5. *What is the naming convention of the results?*
   A: Partner given file name_results.json
6. *What happens if partner gives duplicate file?*
   A: We will not process the file and file will be moved to archive folder.
7. *What is the inbound file size?*
   A: 1MB
8. *I am not able to upload the files. Getting access denied error message.*
   A: The common mistake that partners make is that they upload the file into the outbound folder instead of inbound folder. In that case, you will receive the access denied error message.
9. *What happens if files with extension such as .pdf, .docx other than .json uploaded?*
   *A: We will reject the files and generate *._error.json file with the reason details.*
10. *What needs to be done when there is any data file issues?*
    a) If the data needs to be corrected at partner CRM system, send the revised file to S3 after correcting the data.
    b) If any clarifications required for the data, reach out to PDMs.
    c) If any technical support required, reach out to APN support by raising a ticket.
11. *Where can I find the results files and how long the results file will be available?*
    A: The results files will be available in the lead-inbound-results and opportunity-inbound-results. Partners can delete the files after successful pull.
12. *Incase if we need to find the results file after deletion, where can we find?*
    A: You can find the results files in the lead-inbound-results-archive/YYYY/MM/DD and opportunity-inbound-results-archive/YYYY/MM/DD
13. *If there is any failure in processing the file by APN, how do we get to know?*
    A: APN has alarms which will autocreate sev2 tickets to track the processing errors at APN. We will review, resolve and communicate to partners.
14. *What fields can be updated after the opportunity is launched?*
    A: The following fields can be updatable.
    isThisAPublicReference
    publicReferenceUrl
    publicReferenceTitle
15. *Receiving "Record not editable" error. What does this mean?*

A: When Partner sends new Partner referred opportunities, the opportunity has to go through the validation process and need to be either Approved or rejected by the ACE team. While the opportunity is not Approved/rejected, Partner will not be able to update the record and will receive this error message.

16. *What happens if there is no activity happening on the Partner side [i.e Partner is not processing the file or Partner is not sending any inbound opportunity]*
    A: If Partner doesn't send any information or not processing the files that we provide, currently we do not have any mechanism built in to alert Partner. We encourage Partner to monitor their system to ensure the information is flowing to APN.
17. *How soon the result JSON gets put into S3 for a submitted new/updated inbound opportunity/lead?*
    A: The processing is almost real time. You would receive the files less than 5 minutes
18. *What happens if the partner doesn't delete the file after reading it from the S3 folder?*
    A: If Partner does not delete the files, Partner would have to tag the file as Processed. This will help to filter the files that are awaiting for processing at Partner end. Otherwise, Partner would be processing the same files again and again which may override the latest info in your CRM system.
19. *Suppose the inbound opportunity sent by Partner CRM doesn't comply with the format/length restriction of the APN standard, how does the system handle it? Will it gives the error report in this case, if yes then will the error report contain all the error details or just a single generic detail?.*
    A: The result file from APN will call out the file is not as per the desired format.
20. *After processing the S3 file, Partner has to delete or tag the file. Is there any kind of specific way to tag the files?*
    A: No, it is up to Partner to go with convenient approach.
21. *We do not have AWS Account ID at the time of launching. What needs to be done?*
    A: As per the ACE process, Launched means workload completed and billing started. This means there should be AWS Account Id. Please refer to [FAQs-ACE section](#).

7. FAQs for creating new opportunities

1. *How do we ingest new "Partner Referred (Originated) opportunities into ACE through the integration"*
   A: To create new opportunities into ACE through the integration, partners will need to ingest the required opportunity information in the defined JSON format (refer to the Field Definitions file to understand which fields are required) into the "opportunity-inbound" folder. AWS will process this information, create a new opportunity in ACE and share back results of a successful/failed create operation in the opportunity-inbound-processed-results folder.
2. *How does the integration differentiate between inserts and updates through the integration?*
   A: The field "PartnerCrmUniqueIdentifier" on each opportunity is a unique identifier we expect from the Partner. This identifier must be defined in the source CRM of the Partner's system. AWS will use this to determine if an opportunity already exists in ACE or not. If the "PartnerCrmUniqueIdentifier" is available in ACE, we will use the information shared to **update** *the opportunity, else if "PartnerCrmUniqueIdentifier" is not available in ACE we will use the information shared to* **create a new** *opportunity.*
3. *If I as a Partner, have already implemented the update functionality through the integration, what will I need to do to use the integration to insert (create) new opportunities?*
   A: The Partner will have to make the following changes to the existing integration

- *Start ingesting new opportunities for creation in "opportunity-inbound" folder, in addition to the updates being provided in the same folder*
- *Ensure that the mandatory fields required for create are available in the Opportunity JSON shared*
- *Ensure each new opportunity has a unique "PartnerCrmUniqueIdentifier" which does not exist in ACE/Partner Central. An important go live best practice is to map and update the existing data in ACE*

to each "PartnerCrmUniqueIdentifier" in Partner's CRM so that we do not create duplicates while receiving updates.

4. *As part of the go-live, how do partner update the existing opportunities in ACE with PartnerCrmUniqueIdentifier?*
   A: Partner has to map the existing opportunities in ACE with the respective PartnerCrmUniqueIdentifier and update the ACE system.
5. *What fields are required while creating a new opportunity?*
   A:
   The following 14 fields are mandatory fields along with a new and unique "partnerCrmUniqueIdentifier"


```
{
 "version": "1",
 "spmsId": "XXXXX",
 "opportunities": [
  {
   "useCase": "Business Applications",
   "targetCloseDate": "2020-06-30",
   "projectDescription": "Automation Platform development for bank. Need support in understanding customer requirements and any background on their cloud projects",
   "postalCode": "84133",
   "partnerProjectTitle": "AllySegall - Development Platform",
   "partnerPrimaryNeedFromAws": "Architectural validation",
   "partnerCrmUniqueIdentifier": "PR123456",
   "industry": "Financial Services",
   "expectedMonthlyAwsRevenue": 100.0,
   "deliveryModel": "SaaS or PaaS",
   "customerWebsite": "ally.com",
   "customerCompanyName": "Ally Segall",
   "country": "United States",
   "state": "Alaska"
    }
 ]
}
```


   In certain cases, there could be additional fields required for example Contract Vehicles are required if an incoming opportunity is the Education or Government Industry in the United States.

6. *Can I update only a few fields in the opportunity or lead and not share all the fields illustrated in the samples?*
   A: Yes. As long as there are no additional validation requirements, you can share the identifiers and only the fields where there were updates. For example the following update with a reduced set of fields for an opportunity is a completely valid update.


```
{
    "version":"1",
    "spmsId":"spmsId",
    "opportunities":
   [
      {
        "targetCloseDate":"2020-03-01",
               "stage":"Committed",
        "nextStep":"Meet customer on 3rd Feb 2020",
```

```
        "partnerCrmUniqueIdentifier":"PCRM1",
    "apnCrmUniqueIdentifier":"O1234",
    }
  ]
}
```

7. *What are the various data validation rules that are applicable while creating and updating opportunities?*
   While creating new opportunities

Create Validations	*The following fields are mandatory on the opportunity (If any of these fields are missing then the opportunity will not be created)* *"useCase": "Business Applications",* *"targetCloseDate": "2020-06-30",* *"projectDescription": "Automation Platform development for bank. Need support in understanding customer requirements and any background on their cloud projects",* *"postalCode": "84133",* *"partnerProjectTitle": "AllySegall - Development Platform",* *"partnerPrimaryNeedFromAws": "Architectural validation",* *"partnerCrmUniqueIdentifier": "PR123456",* *"industry": "Financial Services",* *"expectedMonthlyAwsRevenue": 100.0,* *"deliveryModel": "SaaS or PaaS",* *"customerWebsite": "ally.com",* *"customerCompanyName": "Ally Segall",* *"country": "United States",* *"state": "Alaska"*
Create Validations	*For Public Sector partner where Industry = (Education or Government) and Country = United States contractvehicle is mandatory*
Create Validations	*The following field updates take in only standard values* *partnerPrimaryNeedFromAws* *competitiveTracking* *useCase* *subUseCase* *isThisForMarketplace* *isMarketingDevelopmentFunded* *deliveryModel* *awsFieldEngagement* *industry*
Create Validations	*If Country is "United States", State is a required field*
Create Validations	*AWS Account ID needs to be a 12 digit numbers*
Create Validations	*expectedMonthlyAwsRevenue cannot be negaitive or Zero*
Create Validations	*partnerCrmUniqueIdentifier is unique and a new entry for create opportunity*
Update Validations	*For an ISV Accelerate program partner* *isNetNewBusinessForCompany is mandatory before Stage = Launched* *awsFieldEngagement is mandatory before Stage = Launched*

Update Validations	*The following fields are mandatory on the opportunity (Note: if already available on the APN opportunity you are not required to share it subsequently)* *useCase* *targetCloseDate* *stage* *partnerPrimaryNeedFromAws* *expectedMonthlyAwsRevenue* *deliveryModel*
Update Validations	*For consulting partners Stage cannot be updated to Launched till AWSAccountID (12 digit number) is updated*
Update Validations	*For Public Sector partner where Industry = (Education or Government) and Country = United States contractvehicle is mandatory*
Update Validations	*AWSclosedlost reason is mandatory if Stage = Closed Lost*
Update Validations	*The following fields can be updated only when Stage = Launched* *isThisAPublicReference* *publicReferenceUrl* *publicReferenceTitle*
Update Validations	*The following field updates take in only standard values* *partnerPrimaryNeedFromAws* *competitiveTracking* *useCase* *subUseCase* *partnerAcceptanceStatus* *stage* *isThisForMarketplace* *isThisAPublicReference* *isNetNewBusinessForCompany* *isMarketingDevelopmentFunded* *deliveryModel* *awsFieldEngagement* *Closed Lost reason*
Update Validations	*Partner is not able to update opportunities where Status not equal to Approved*
Update Validations	*Partner is not able to update pipeline fields on the opportunity where Stage = Launched*
Update Validations	*For an ISV Accelerate program partner* *isNetNewBusinessForCompany is mandatory before Stage = Launched* *awsFieldEngagement is mandatory before Stage = Launched*
Update Validations	*The following fields are mandatory on the opportunity (Note: if already available on the APN opportunity you are not required to share it subsequently)* *useCase* *targetCloseDate* *stage* *partnerPrimaryNeedFromAws* *expectedMonthlyAwsRevenue* *deliveryModel*