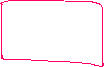
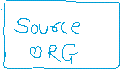
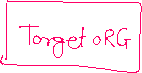
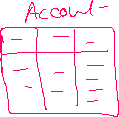
73. Apex Rest Request and Response API GET, POST, PUT, DELETE - 20 July 2022



1] GET 🡺 To Fetch the records from Target Org



USER STORY 1] Fetch All the Applicant Records from Target to Source.

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| --- | --- |
| Source (Request API) | Target (Response API) |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData');  request.setMethod('GET');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response.getStatusCode());    if(response.getStatusCode() == 200){  System.debug('Received Data = '+response.getBody());    List<object> objList = (List<Object>) JSON.deserializeUntyped(response.getBody());  List<Account> accListInsert = new List<Account>();    for(object obj : objList){  Map<String,Object> accMap = (Map<String,Object>) obj;    System.debug('Id = '+accMap.get('Id'));  System.debug('Name = '+accMap.get('Name'));  System.debug('Type = '+accMap.get('Type'));  System.debug('SLA = '+accMap.get('SLA\_\_c'));    Account objAcc = new Account();  objAcc.Name = String.valueOf(accMap.get('Name'));  objAcc.Type = String.valueOf(accMap.get('Type'));  objAcc.SLA\_\_c = String.valueOf(accMap.get('SLA\_\_c'));    accListInsert.add(objAcc);      }    if(!accListInsert.isEmpty()){  Database.insert(accListInsert,false);  }    }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {  @httpGet  global static List<Account> getAllAccounts(){  return ([select Id, Name, Type, SLA\_\_c from Account]);  }      } |

User Story 2] Fetch All Account having Type “Prospect” and SLA = “Gold”.

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| Source API | Target API |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData?type=Prospect&sla=Gold');  request.setMethod('GET');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response);    if(response.getStatusCode() == 200){  System.debug('Received Data = '+response.getBody());    List<object> objList = (List<Object>) JSON.deserializeUntyped(response.getBody());  List<Account> accListInsert = new List<Account>();    for(object obj : objList){  Map<String,Object> accMap = (Map<String,Object>) obj;    System.debug('Id = '+accMap.get('Id'));  System.debug('Name = '+accMap.get('Name'));  System.debug('Type = '+accMap.get('Type'));  System.debug('SLA = '+accMap.get('SLA\_\_c'));    Account objAcc = new Account();  objAcc.Name = String.valueOf(accMap.get('Name'));  objAcc.Type = String.valueOf(accMap.get('Type'));  objAcc.SLA\_\_c = String.valueOf(accMap.get('SLA\_\_c'));    accListInsert.add(objAcc);      }    if(!accListInsert.isEmpty()){  Database.insert(accListInsert,false);  }    }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {  @httpGet  global static List<Account> getAllAccounts(){  RestRequest req = RestContext.request;  RestResponse res = RestContext.response;  String receivedType = req.params.get('type');  String receivedSla = req.params.get('sla');    return [select id, Name, Type,Rating, CreatedDate, SLA\_\_c from Account where Type=:receivedType and SLA\_\_c=:receivedSla];    }    } |

2] POST 🡺 To Create a record in the Target Org. Send the value from Source Org.

Send “Pan Wala Babu” Account Name (Type, Rating, SLA) from Source Org and create this record into the Target Org.

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| --- | --- |
| Source API | Target API |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData');  request.setHeader('Content-Type', 'application/json;charset=UTF-8');  request.setMethod('POST');  request.setBody('{"Name":"Pan Wala Babu" , "Type" : "Prospect" , "Rating" : "Cold" , "SLA" : "Gold"}');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response);    if(response.getStatusCode() == 200){  Map<String, Object> accMap = (Map<String,Object>) JSON.deserializeUntyped(response.getBody());//Single Object Record    System.debug('Received Response = '+accMap.get('Id'));  System.debug('Received Response = '+accMap.get('Name'));  System.debug('Received Response = '+accMap.get('Type'));  System.debug('Received Response = '+accMap.get('Rating'));  System.debug('Received Response = '+accMap.get('SLA\_\_c'));    }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {  @httpPost  global static Account createNewAccount(){  RestRequest req = RestContext.request;  RestResponse res = RestContext.response;    String receivedRequestData = req.requestBody.toString();    AccountProviderWrapper objAccProWrap = (AccountProviderWrapper) JSON.deserialize(receivedRequestData, AccountProviderWrapper.class);    Account objAcc = new Account(Name=objAccProWrap.NAME, Type=objAccProWrap.TYPE, Rating=objAccProWrap.RATING, SLA\_\_c=objAccProWrap.SLA);  insert objAcc;    return objAcc;  }      global class AccountProviderWrapper{  global String NAME;  global String TYPE;  global String RATING;  global String SLA;  }  } |

User Story Parent Child:

Send Account Name = Pan Wala Babu (It should exists in Target Org)

Send Contact Name = Munna Modi

Create Contact under Account.

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| --- | --- |
| Request API | Target API |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData');  request.setHeader('Content-Type', 'application/json;charset=UTF-8');  request.setMethod('POST');  request.setBody('{"Name":"Pan Wala Babu" , "firstName" : "Munna", "lastName" : "Modi"}');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response);    if(response.getStatusCode() == 200){  Map<String, Object> accMap = (Map<String,Object>) JSON.deserializeUntyped(response.getBody());//Single Object Record    System.debug('Received Response = '+accMap.get('Id'));  System.debug('Received Response = '+accMap.get('FirstName'));  System.debug('Received Response = '+accMap.get('LastName'));      }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {  @httpPost  global static Contact createNewAccount(){  RestRequest req = RestContext.request;  RestResponse res = RestContext.response;    String receivedRequestData = req.requestBody.toString();    AccountProviderWrapper objAccProWrap = (AccountProviderWrapper) JSON.deserialize(receivedRequestData, AccountProviderWrapper.class);    Id accId = [select Id from Account where Name=:objAccProWrap.name].Id;    Contact objCon = new Contact(AccountId=accId, FirstName=objAccProWrap.firstName, LastName=objAccProWrap.lastName);  insert objCon;    return objCon;    }      global class AccountProviderWrapper{  global String name; // acc Name  global String firstName; //Contact  global String lastName; //Contact  }  } |

3] PUT 🡺 Updated the Record into to Target Org

Send “Pan Wala Babu” and Update His SLA to Silver and Type to “Other”.

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| --- | --- |
| Source Request API | Target Response API |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData');  request.setHeader('Content-Type', 'application/json;charset=UTF-8');  request.setMethod('PUT');  request.setBody('{"Name":"Pan Wala Babu" , "Type" : "Other", "SLA" : "Silver"}');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response);    if(response.getStatusCode() == 200){  Map<String, Object> accMap = (Map<String,Object>) JSON.deserializeUntyped(response.getBody());//Single Object Record    System.debug('Received Response = '+accMap.get('Id'));  System.debug('Received Response = '+accMap.get('Name'));  System.debug('Received Response = '+accMap.get('Type'));  System.debug('Received Response = '+accMap.get('SLA\_\_c'));      }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {    @httpPut  global static Account createNewAccount(){  RestRequest req = RestContext.request;  RestResponse res = RestContext.response;    String receivedRequestData = req.requestBody.toString();    AccountProviderWrapper objAccProWrap = (AccountProviderWrapper) JSON.deserialize(receivedRequestData, AccountProviderWrapper.class);    Account objAcc = [select Id, Name, Type, SLA\_\_c from Account where Name=:objAccProWrap.name];  objAcc.Type = objAccProWrap.type;  objAcc.SLA\_\_c = objAccProWrap.sla;    Database.update(objAcc, false);    return objAcc;    }      global class AccountProviderWrapper{  global String name;  global String type;  global String sla;  }  } |

4] Delete 🡺 Delete a particular record from the Target ORG

Send Account “Pan Wala Babu” from Source Org and Delete it from the Target Org.

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| --- | --- |
| Source Request API | Target API |
| public class AccountRequestAPI {  public static void getPanIndiaAccount(){  Http http = new Http();  HttpRequest request = new HttpRequest();  request.setEndpoint('callout:PanIndiaNamedCred/services/apexrest/v1/getAccountData');  request.setHeader('Content-Type', 'application/json;charset=UTF-8');  request.setMethod('DELETE');  request.setBody('{"Name":"Pan Wala Babu"}');    HttpResponse response = http.send(request);    System.debug('Response Status Code = '+response);    if(response.getStatusCode() == 200){  System.debug('Response Body = '+response.getBody());  }    }  } | @RestResource(urlMapping='/v1/getAccountData')  global class AccountProvider {    @httpDelete  global static String createNewAccount(){  RestRequest req = RestContext.request;  RestResponse res = RestContext.response;    String receivedRequestData = req.requestBody.toString();    AccountProviderWrapper objAccProWrap = (AccountProviderWrapper) JSON.deserialize(receivedRequestData, AccountProviderWrapper.class);    Account objAcc = [select Id, Name, Type, SLA\_\_c from Account where Name=:objAccProWrap.name];  Database.delete(objAcc,false);    return 'Account '+objAcc.Name+' has been deleted successfully...!!!';    }      global class AccountProviderWrapper{  global String name;  global String type;  global String sla;  }  } |

Assignment

1] Fetch All the Cases from Target Org created on Today and Store into the Source Org.

2] Fetch Applicant Record from Target Org whose Id is “APID-0003”.

3] Fetch All the Applicant having Gender Male and Eligible for Police Verification.

4] Create a new Applicant on the Target Org. Send data from Source Org.

5] Update the Gender as “Female” and Police Verification as False for Record “APID-0003” .

6] Delete the Record “APID-0003”.

|  |  |
| --- | --- |
| Long Method | Short |
| accMap  List<Account> accListUpdate = new List<Account>();  accListUpdate.addAll(accMap.Values());  Database.update(accListUpdate , false); | accMap  Database.update(accMap.Values(), false); |