

Oracle® Banking Electronic Data Exchange for Corporates OBEDX-Trace Integration Guide Integration Guide



Patchset Release 14.7.4.0.0

G10292-01

June 2024

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Purpose

Purpose of this guide is to help you integrate Oracle Banking Electronic Data Exchange with Transformer (licensed product of Trace Financial Limited). Bank need to procure licenses for Transformer separately from Trace Financial Limited.

Audience

This guide is primarily intended for the following user/user roles:

Table 1 Audience

| Role | Function |
|-----------------------------|--|
| Implementation and IT Staff | Implementation and maintenance of the software |

Acronyms and Abbreviations

The list of acronyms and abbreviations that are used in this guide are as follows:

| Abbreviation | Description |
|--------------|--|
| OBEDX | Oracle Banking Electronic Data Exchange for Corporates |

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Personal information used in the interface or documents are dummy and does not exist in the real world. It is only for reference purposes.

1

Integration Guide

- [Introduction](#)
OBEDX supports processing of files uploaded in the canonical format, out of the box. Canonical formats supported out of the box are:
- [Maintenance in Transformer](#)
- [Middleware service](#)
- [Maintenance in OBRH](#)
- [Maintenance in OBEDX](#)

1.1 Introduction

OBEDX supports processing of files uploaded in the canonical format, out of the box. Canonical formats supported out of the box are:

| Transaction | Canonical format |
|-------------------------|------------------|
| Payments | pain001v6 |
| Virtual Account Open | csv |
| Virtual Account Closure | csv |

If banks want to support any other template or format, apart from the canonical formats mentioned above, such as MT, txt, csv, excel, etc., for payment processing or txt, XML, excel, or a csv file in a different template than what is supported for Virtual Account Management, then any third-party message transformation provider such as Transformer can be used to accomplish this.

This document briefs you about the specific steps and maintenances needed for Integration of these two products.

Following are the steps required integration with transformer:

1. Maintenance in transformer
2. Middleware service
3. Maintenance in Oracle Banking Routing Hub
4. Maintenance in Oracle Banking Electronic Data Exchange

1.2 Maintenance in Transformer

Transformer is a message formatting and translation toolkit. Using this toolkit, we can transform the files from corporate's preferred format to OBEDX format.

Transformer consist of two parts –

- Message & Mapping definition GUI toolkit used to define set of Dictionary Definitions (DAD)

- A run-time application programming interface (API) which uses the DAD to transform messages from one format to another.

Follow following steps to use transformer for message transformation

Prerequisites

1. Corporate preferred format/template – File format which a corporate upload
2. OBEDX format – This template is supplied by Oracle. The template can be found in the OBEDX Formats for Transformation.zip folder.

Steps to be followed

1. Create new project in Transformer
2. Create or import the message of corporate preferred format – The template which needs to be transformed.
3. Import the OBEDX format template as per below steps.
4. Tools > JSON schema import > Single file > Next > Schema file > select the schema file provided by Oracle > Next > Enter Group name > Next > Uncheck root schema check box (*but keep all the check boxes checked below root schema check box*) > Next > Move everything to selected window > Next > Finish
5. Do the mappings between preferred format and OBEDX format.
6. Add validations as per the requirement, refer table list of supported error codes
7. Create new exposed service and select the service builder as project jar builder
8. Select the java version 8
9. Add new exposed service operation select the operation type as OneToOneMapping
10. Select the appropriate message definition group and mapping definition
11. Test the mappings
12. Build the exposed service, this will generate the jar file
13. Note down the project key, service name & operation name generated on transformer's console.
14. Deploy this jar in middleware service.

List of supported status / error codes:

| ERROR CODE | ERROR MSG |
|-------------|--|
| TRA-RLV-001 | Record Level Validations Failed. |
| TRA-STX-001 | Transaction syntax check failed |
| TRA-PAR-000 | PARSING SUCESS |
| TRA-PAR-001 | PARSING DONE with exceptions |
| TRA-RLV-002 | Expected value for \$1 is \$2, actual value provided \$3 |
| TRA-STX-003 | Invalid date \$1 |
| TRA-STX-002 | Max length of the field with value \$1 is breached. Expected max length is \$2 |
| TRA-STX-004 | \$1 is mandatory |
| TRA-STX-005 | Invalid currency \$1 |

**Note:**

Once should use above error codes while performing mapping in transformer's desktop application. \$1 is placeholder and it should be replaced with appropriate value.

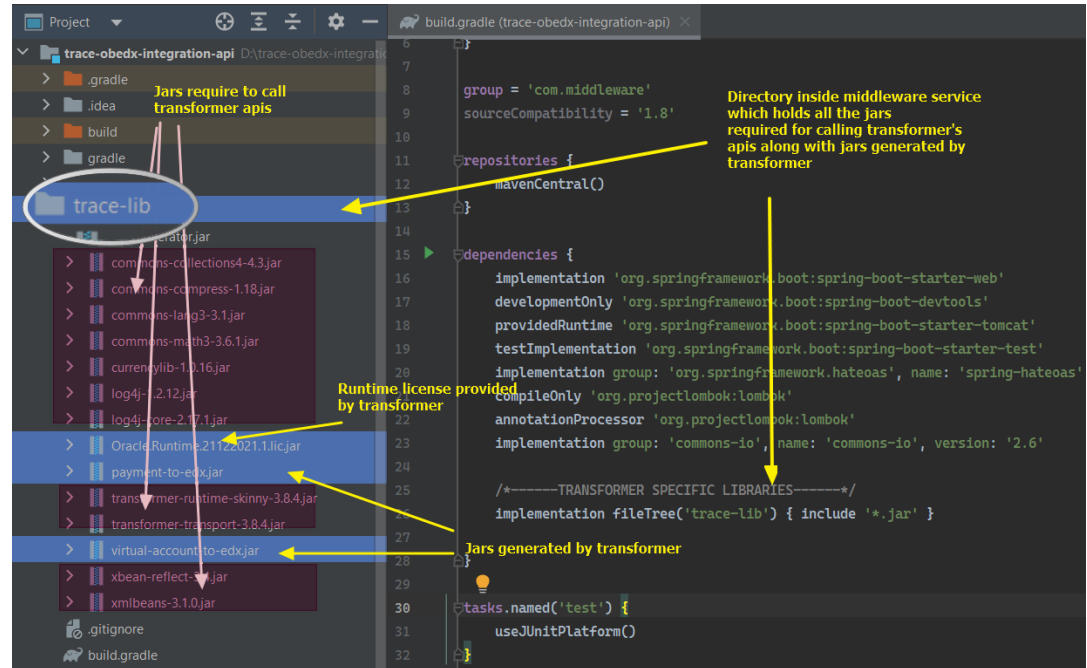
1.3 Middleware service

Middleware service acts as common access point for OBEDX to access Transformer's APIs. It is required for accessing the jars generated by transformer over the network.

Middleware service is wrapper around transformer's API. Since transformer may take some time for message transformation and enrichment, the middleware service must be designed in such a way that it should support asynchronous non-blocking communication.

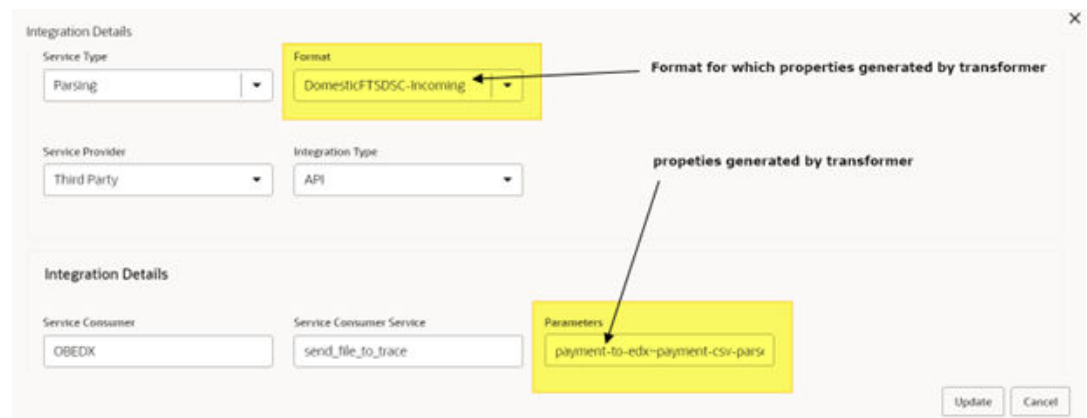
- Implementation team is required to build this service. Below are the expectations from the middleware service.
- Must be restful webservice
- Must support asynchronous and non-blocking API's
- Must have a rest endpoint to accept parsing requests from OBEDX with predefined request parameters
- Must be able to identify and decide which transformer api operation to call based on incoming format identifier
- Must be able to send acknowledgement of parsing request
- Must be able to send the parsed response in OBEDX format along with all the validations / exceptions details if any to below end point.
- `https://HOST_NAME:PORT_NUMBER/cmcc-obr-h-services/route/dispatch`
(OBRH_SERVICE_URL)
- Service must provide a directory to place all the jars required for transformer api's and jar generated by transformer.
- Refer below screenshot for more details

Figure 1-1 Middleware service



- After building the middleware service all the jars must be available in **WEB-INF/lib** folder for runtime access (refer line 26 from above screenshot).
- Transformer GUI Toolkit application generates three properties project key, service name & operation name on console, while building the exposed service or in the service info file present in jar generated by transformer at /META-INF directory
- These three properties must be configured in **Parameters** field present on integration preference screen UI as shown in below screenshot.
- One should follow below sequence while configuring these properties
- **{project key}~{service name}~{operation name}** (separator used is Tilde “~”)

Figure 1-2 Integration Details



- OBEDX will provide format identifier along with transaction name in below format
format name-transaction name as a parsing request parameter named “format id” ;

- Along with properties configured in Parameters field on integration preferences UI as parsing request parameters named “parameters”.

Note that middleware service needs to be re-deployed every time new jar need to be added or modification done in existing mappings.

An example sudo code for middleware service written in java is provided below :

 **Note:**

Code provided below is sample code for implementation partners to implement this service seamlessly. This code requires certain dependencies provided by transformer along with transformer’s runtime license jar.

Implementation team must retain the signature of submit() method, response headers, & response map keys as specified in the code below.

```
@RestController public class MiddlewareService {
    @PostMapping("/submit")
    public ResponseDtoWrapper submit(@RequestBody MultipartFile file,
    String fileRefId, String formatId, String
    parameters) {
        // perform technical validations such as
        // not null check... etc
        // handleParsingRequest() must be
        // async (execute in separate
        // thread).
        handleParsingRequest(incomingFile, fileRefId,
        originalFileName,
        formatId, parameters);
        //
        // sendAcknowledgement() will return the ResponseDtoWrapper without waiting for
        // handleParsingRequest() to finish
        return
        sendAcknowledgement(originalFileName);
    }
    @Async
    public void handleParsingRequest(MultipartFile file,
    String fileRefId, String originalFileName,
    String formatId, String parameters) {
        String
        responseFromTrace = callTransformerApi(formatId, file,
        parameters);
        sendResponseToObrhService(responseFromTrace,
        fileRefId);
    }
    private String callTraceParserApi(String
    formatId, File file, String parameters)
    {
        Object output;
        try {
            // Project
            // key, Service name, & Operation name will be generated by
            // transformer
            String [] parserParams =
            parameters.split("~");
            output =
            ServicePerformerExecutor.performServiceWithSimpleExceptions(ClasspathProjectMa
            nager.getInstance(),
            parserParams[0],
            parserParams[1],
            parserParams[2],
            Files.newInputStream(file.toPath()),
            null,
            OutputInstruction.asStringOutput());
            String response = (String)
            output;
            return response;
        }
        catch (Exception exception) {
            // log or handle exception here and
            return String response
            return
            TECHNICAL_ERROR_IN_PARSING;
        }
        private void
        sendResponseToObrhService(String responseFromTrace, String fileRefId)
    }
}
```

```

{
    restTemplate.postForObject(OBRH_SERVICE_URL,
        getObrhRequest(responseFromTrace,
            fileRefId),
            ResponseDtoWrapper.class);} private HttpEntity<Map<String,
Map<String, String>>> getObrhRequest(String responseFromTrace,
    String fileRefId) {
    Map<String, Map<String, String>>
responseMap =
    getResponseMap(responseFromTrace, fileRefId);
HttpHeaders httpHeaders = new HttpHeaders();
    httpHeaders.add("appId",
"CMNCORE");
    httpHeaders.add("userId", "EDXWORKFLOW");
httpHeaders.add("branchCode", "006");
    httpHeaders.add("SERVICE-
CONSUMER", SERVICE-CONSUMER); // SERVICE-CONSUMER must be replaced with
name
of
    service consumer configured in OBRH
httpHeaders.add("entityId", "DEFAULTENTITY");
    httpHeaders.add("SERVICE-
CONSUMER-SERVICE", SERVICE-CONSUMER-SERVICE); // SERVICE-CONSUMER-SERVICE
must
be
    replaced with name of service consumer service configured in
OBRH
httpHeaders.setContentType(MediaType.APPLICATION_JSON);
return new HttpEntity<>(responseMap, headers);
} public
Map<String, Map<String, String>> getResponseMap(String responseFromTrace,
String
    fileRefId) {
    Map<String, String> paramMap = new
HashMap<>(2);
    paramMap.put("input-file", fileRefId);
paramMap.put("output-file", responseFromTrace);
    Map<String,
Map<String, String>> responseMap =
    new HashMap<>(1);
    responseMap.put("external-parser-
output", paramMap);
    // "input-file", "output-file" &
"external-parser-output" are keys of response
map and are must NOT be changed in any case.
return responseMap;
} private ResponseDtoWrapper
sendAcknowledgement(String originalFilename) {
    ResponseDtoWrapper
responseDtoWrapper = new ResponseDtoWrapper();
    ResponseDto responseDto
= new ResponseDto();
    responseDto.addToResponseList(new
ResponseCode(ACCEPT_FOR_PARSE));
    responseDto.addToResponseList(new
ResponseCode(HttpStatus.ACCEPTED.toString()));
responseDto.setStatus("OK");
responseDto.setHttpStatusCode(HttpStatus.OK);
    String requestId =
String.format(" %s-%s ", UUID.randomUUID(), originalFilename);
    responseDto.setRequestId(requestId);
responseDtoWrapper.setMessages(responseDto);
    return
responseDtoWrapper;
}}

```

Middleware service's api must return ResponseDtoWrapper object, structure of which is as shown below.

```

import org.springframework.stereotype.Component;
@Componentpublic class ResponseDtoWrapper
{
    private ResponseDto messages;
    private ResponseResourceSupport
data;
    public ResponseDtoWrapper() {
}
    public ResponseDto getMessages() {
return this.messages;
}
    public void setMessages(ResponseDto messages)

```

```
{      this.messages = messages;    }      public ResponseResourceSupport
getData()
{      return this.data;    }      public void
setData(ResponseResourceSupport data)
{      this.data = data;    }}

import org.springframework.http.HttpStatus; import
java.io.Serializable;import java.math.BigDecimal;
import java.util.ArrayList;import java.util.List; public class ResponseDto
implements Serializable
{      private static final long serialVersionUID = -8555557115768857726L;
private String keyId;      private String status;      private
List<ResponseCode> codes = new ArrayList<>();
private String requestId;      private HttpStatus httpStatusCode;      private
BigDecimal overrideAuthLevelsReqd;
public ResponseDto() {    }      public HttpStatus getHttpStatusCode()
{      return this.httpStatusCode;    }
public void setHttpStatusCode(HttpStatus httpStatusCode)
{      this.httpStatusCode = httpStatusCode;    }      public String
getKeyId() {      return this.keyId;    }
public void setKeyId(String keyId)
{      this.keyId = keyId;    }
public void addToResponseList(ResponseCode respObj)
{      this.codes.add(respObj);    }
public void removeFromResponseCodeList(ResponseCode respObj)
{      this.codes.remove(respObj);    }
public void appendToResponseList(List<ResponseCode> respCodeListObj)
{      this.codes.addAll(respCodeListObj);    }
public String getStatus() {      return this.status;    }      public void
setStatus(String status)
{      this.status = status;    }
public List<ResponseCode> getCodes()
{      return this.codes;    }      public void setCodes(List<ResponseCode>
codes) {
this.codes = codes;    }      public String getRequestId() {      return
this.requestId;    }
public void setRequestId(String requestId) {      this.requestId =
requestId;    }
public BigDecimal getOverrideAuthLevelsReqd() {      return
this.overrideAuthLevelsReqd;    }
public void setOverrideAuthLevelsReqd(BigDecimal overrideAuthLevelsReqd)
{      this.overrideAuthLevelsReqd = overrideAuthLevelsReqd;}}

import java.io.Serializable;import java.math.BigDecimal;import
java.util.List;
public class ResponseCode implements Serializable {
private String Code;      private String Desc;
private String Type;      private String Language;
private List<Object> args;      private String arg;
private boolean information;      private boolean override;
private boolean error;      private BigDecimal overrideAuthLevelsReqd;
public List<Object> getArgs() {      return this.args;    }
public void setArgs(List<Object> args) {      this.args = args;    }
public ResponseCode() {    }      public ResponseCode(String code)
```

```

    {      this.Code = code;      }      public ResponseCode(String code, String
msg)
    {      this.Code = code;      this.arg = msg;      }      public String
getArg()
    {      return this.arg;      }      public void setArg(String arg)
    {      this.arg = arg;      }      public ResponseCode(String code,
List<Object> msg)
    {      this.Code = code;      this.args = msg;      }      public String
getCode()
    {      return this.Code;      }      public void setCode(String code)
    {      this.Code = code;      }      public String getDesc()
    {      return this.Desc;      }      public void setDesc(String desc)
    {      this.Desc = desc;      }      public String getType()
    {      return this.Type;      }      public void setType(String type)
    {      this.Type = type;      }      public String getLanguage()
    {      return this.Language;      }      public void setLanguage(String
language)
    {      this.Language = language;      }      public boolean isError()
    {      return null != this.Type &&
this.Type.equalsIgnoreCase("E");      }
    public boolean isOverride() {      return null != this.Type &&
this.Type.equalsIgnoreCase("O");      }
    public boolean isInformation() {      return null != this.Type &&
this.Type.equalsIgnoreCase("I");      }
    public BigDecimal getOverrideAuthLevelsReqd() {      return
this.overrideAuthLevelsReqd;      }
    public void setOverrideAuthLevelsReqd(BigDecimal overrideAuthLevelsReqd)
    {      this.overrideAuthLevelsReqd = overrideAuthLevelsReqd; }

import org.springframework.hateoas.RepresentationModel;
public class ResponseResourceSupport extends RepresentationModel
{      public ResponseResourceSupport() {      }}

```

1.4 Maintenance in OBRH

All the communication between middleware service and OBEDX will happen only via OBRH.

Steps to configure OBRH are as follows

1. Create if not exists, service consumer named "OBEDX"
2. Under the service consumer create service provider named "THIRD_PARTY"
 - a. Provide the host and port of server where middleware service is deployed
 - b. Edit the implementation and add headers and service path
3. Select the consumer service tab and add new consumer service
 - a. Click on the service, by default transformation tab will be selected
 - b. Click on add transformation, input required info and save
 - c. Click on add route, input required info and save
4. Create if not exists, service consumer named "Transformer"
5. Under the service consumer create service provider named "OBEDX"
 - a. Provide the host and port of server where obedx-workflow-service is deployed

- b. Edit the implementation and add headers and service path
- 6. Select the consumer service tab and add new consumer service
 - a. Click on the service, by default transformation tab will be selected
 - b. Click on add transformation, input required info and save
 - c. Click on add route, input required info and save

1.5 Maintenance in OBEDX

Maintenance in OBEDX requires two steps as follows

1. Create new format in OBEDX with a unique identifier
2. Add integration preference entry for new format along with properties generated by transformer to support parsing via Transformer as shown below.

Refer User manual for creating a format & integration preference.

2

Formats Supported (Out of the box)

- [Internal Fund Transfer Format 1](#)
- [Internal Fund Transfer Format 2](#)
- [Domestic Fund Transfer Format 1](#)
- [Domestic Fund Transfer Format 2](#)
- [International Fund Transfer Format 1](#)

2.1 Internal Fund Transfer Format 1

Format Supported - CSV

Field Descriptions

| Field Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------------|-------------------------|-----------|--|------------|------------|
| 1 | mixedIdentifier | Y | This field can contain value A or B. In case adhoc payment the value should be A | 1 | String |
| 2 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 3 | debitAccountId | Y | Source/Debit account number. | 50 | String |
| 4 | amount debit identifier | Y | Debit amount or Transfer amount Allowed Value - D/T | 1 | String |
| 5 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |
| 6 | amountCurr | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |

| Field Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------------|------------------|-----------|---|------------|-----------|
| 7 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 8 | creditAccountId | Y | Credit/beneficiary account number | 34 | String |
| 9 | debitNarrative | Y | Narrative for debit account | 35 | String |
| 10 | creditNarrative | Y | Narrative for credit account | 35 | String |
| 11 | Deal ref number | N | Deal Reference Number | 35 | String |
| 12 | Email id | N | Email ID of the creditor | 35 | String |
| 13 | Charges account | N | Charges Account Details | 35 | String |
| 14 | Reference number | N | Reference Number | 35 | String |

Field Mapping

| Field Name | Canonical Field |
|-------------------------|--------------------|
| mixedIdentifier | Not Required |
| partyId | initiatingPartyId |
| debitAccountId | drAccNo |
| amount debit identifier | Not Required |
| amount | amount |
| amountCurr | currency |
| valueDate | valueDate |
| creditAccountId | beneAccNo |
| debitNarrative | drAccTypePropriety |
| creditNarrative | remittanceInfo |
| Deal ref number | contractID |
| Email id | emailAddress |
| Charges account | chargesAccount |
| Reference number | instructionId |

2.2 Internal Fund Transfer Format 2

Format Supported - CSV

Field Descriptions

| Field Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------------|-----------------------|-----------|---|------------|------------|
| 1 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 2 | debitAccountId | Y | Source/Debit account number. Should be one account per file. It can either be VA or RA | 50 | String |
| 3 | amountDebitIdentifier | Y | Debit amount or Transfer amount Allowed Value - D/T | 1 | String |
| 4 | totalAmount | Y | Total transaction/ transfer amount with format (###.##) for example 100.50. Total amount should be equal to addition of credit/transfer amount from body section. | - | BigDecimal |
| 5 | amountCurrency | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |
| 6 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 7 | debitNarrative | Y | Narrative for debit account | 35 | String |
| 8 | Charges account | N | Charges Account Details | 50 | String |
| Records Fields | | | | | |
| 1 | mixedIdentifier | Y | This field can contain value A or B. In case adhoc payment the value should be A | 1 | String |

| Field Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------------|------------------|-----------|--|------------|------------|
| 2 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |
| 3 | creditAccountld | Y | Credit/beneficiary account number | 34 | String |
| 4 | creditNarrative | Y | Narrative for credit account | 35 | String |
| 5 | Deal ref number | N | Deal Reference Number | 35 | String |
| 6 | Email id | N | Email ID of creditor | 35 | String |
| 7 | Reference number | Y | Reference Number | 35 | String |

Field Mapping

| Field Sequence | Field Name | Canonical Field |
|----------------|-------------------------|--------------------|
| 1 | partyld | initiatingPartyld |
| 2 | debitAccountld | drAccNo |
| 3 | amount debit identifier | Not Required |
| 4 | totalamount | totalAmount |
| 5 | amountCurr | currency |
| 6 | valueDate | valueDate |
| 7 | debitNarrative | drAccTypePropietry |
| 8 | Charges account | chargesAccount |
| Records Fields | | |
| 1 | mixedIdentifier | Not Required |
| 2 | amount | amount |
| 3 | creditAccountld | beneAccNo |
| 4 | creditNarrative | remittanceInfo |
| 5 | Deal ref no | contractID |
| 6 | Email id | emailAddress |
| 7 | Ref no | instructionld |

2.3 Domestic Fund Transfer Format 1

Format Supported - CSV

Field Descriptions

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|-------------------------|-----------|---|------------|------------|
| 1 | mixedIdentifier | Y | This field can contain value A or B. In case adhoc payment the value should be A | 1 | String |
| 2 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 3 | debitAccountId | Y | Source/Debit account number. | 50 | String |
| 4 | amount debit identifier | Y | Debit amount or Transfer amount Allowed Value - D/T | 1 | String |
| 5 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |
| 6 | amountCurr | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |
| 7 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 8 | beneficiary name | Y | Name of Beneficiary/ Payee | 35 | String |
| 9 | creditAccountId | Y | Credit/ beneficiary account number | 34 | String |
| 10 | network | Y | Network type like ACH, NEFT, RTGS, SEPA for payment ACH=ACH NEFT=NEFT RTGS=RTGS SEPA=SEPA except this=SEPA | 35 | String |
| 11 | sortcode | Y | Beneficiary/ Payee bank/ clearing/ifsc code | 11 | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|------------------|-----------|------------------------------|------------|-----------|
| 12 | creditNarrative1 | N | Narrative for credit account | 35 | String |
| 13 | creditNarrative2 | N | Narrative for credit account | 35 | String |
| 14 | creditNarrative3 | N | Narrative for credit account | 35 | String |
| 15 | creditNarrative4 | N | Narrative for credit account | 35 | String |
| 16 | Deal ref no | N | Deal Reference Number | 35 | String |
| 17 | Email id | N | Email ID of the creditor | 35 | String |
| 18 | Charges account | N | Charges Account Details | 35 | String |
| 19 | Ref no | N | Reference Number | 35 | String |

Field Mapping

| Sequence | Field Name | Canonical Field |
|----------|-------------------------|-------------------|
| 1 | mixedIdentifier | Not Required |
| 2 | partyId | initiatingPartyId |
| 3 | debitAccountId | drAccNo |
| 4 | amount debit identifier | Not Required |
| 5 | amount | amount |
| 6 | amountCurrency | currency |
| 7 | valueDate | valueDate |
| 8 | beneficiary name | beneName |
| 9 | creditAccountId | IBAN |
| 10 | network | extServiceLevelCd |
| 11 | sortcode | crBicFi |
| 12 | creditNarrative1 | remittanceInfo |
| 13 | creditNarrative2 | remittanceInfo |
| 14 | creditNarrative3 | remittanceInfo |
| 15 | creditNarrative4 | remittanceInfo |
| 16 | Deal reference number | contractID |
| 17 | Email id | emailAddress |
| 18 | Charges account | chargesAccount |
| 19 | Reference number | instructionId |

2.4 Domestic Fund Transfer Format 2

Format Supported - CSV

Field Descriptions

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------------|-------------------------|-----------|---|------------|------------|
| Header fields | | | | | |
| 1 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 2 | debitAccountId | Y | Source/Debit account number. Should be one account per file. It can either be VA or RA | 50 | String |
| 3 | amount debit identifier | Y | Debit amount or Transfer amount Allowed Value - D/T | 1 | String |
| 4 | totalamount | Y | Total transaction/ transfer amount with format (###.##) for example 100.50. Total amount should be equal to addition of credit/transfer amount from body section. | - | BigDecimal |
| 5 | amountCurr | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |
| 6 | network | Y | Network type like ACH, NEFT, RTGS for payment | 35 | String |
| 7 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 8 | Charges account | N | Charges Account Details | 50 | String |
| Records Fields | | | | | |
| 1 | mixedIdentifier | Y | This field can contain value A or B. In case adhoc payment the value should be A | 1 | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|-------------------|-----------|--|------------|------------|
| 2 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |
| 3 | beneficiary name | Y | Name of Beneficiary/ Payee | 35 | String |
| 4 | creditAccountld | Y | Credit/ beneficiary account number | 34 | String |
| 5 | sortcode | Y | Beneficiary/ Payee bank/ clearing/ifsc code | 11 | String |
| 6 | creditNarrative1 | N | Narrative for credit account | 35 | String |
| 7 | creditNarrative2 | N | Narrative for credit account | 35 | String |
| 8 | creditNarrative3 | N | Narrative for credit account | 35 | String |
| 9 | creditNarrative4 | N | Narrative for credit account | 35 | String |
| 10 | Deal reference no | N | Deal Reference Number | 35 | String |
| 11 | Email id | N | Email ID of Creditor | 35 | String |
| 12 | Reference Number | Y | Reference Number | 35 | String |

Field Mapping

| Sequence | Field Name | Canonical Field |
|----------------|-------------------------|-------------------|
| Header Fields | | |
| 1 | partyld | initiatingPartyld |
| 2 | debitAccountld | drAccNo |
| 3 | amount debit identifier | |
| 4 | totalamount | |
| 5 | amountCurr | |
| 6 | network | extServiceLevelCd |
| 7 | valueDate | valueDate |
| 8 | Charges account | chargesAccount |
| Records Fields | | |
| 1 | mixedIdentifier | Not Required |
| 2 | amount | amount |
| 3 | beneficiary name | Creditor Name |
| 4 | creditAccountld | IBAN |
| 5 | sortcode | crBicFi |
| 6 | creditNarrative1 | remittanceInfo |

| Sequence | Field Name | Canonical Field |
|----------|-------------------|-----------------|
| 7 | creditNarrative2 | remittanceInfo |
| 8 | creditNarrative3 | remittanceInfo |
| 9 | creditNarrative4 | remittanceInfo |
| 10 | Deal reference no | contractID |
| 11 | Email id | emailAddress |
| 12 | Reference Number | instructionId |

2.5 International Fund Transfer Format 1

Format Supported - CSV

Field Descriptions

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|-----------------|-----------|--|------------|------------|
| 1 | mixedIdentifier | Y | This field can contain value A. | 1 | String |
| 2 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 3 | debitAccountId | Y | Source/Debit account number. Should be one account per file. It can either be VA or RA | 50 | String |
| 4 | amount type | Y | Debit amt or Trfr amount | 1 | String |
| 5 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |
| 6 | amountCurr | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |
| 7 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 8 | beneName | Y | Name of Beneficiary/ Payee | 35 | String |
| 9 | creditAccountId | Y | Credit/ beneficiary account number | 34 | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|---------------------|-----------|--|------------|-----------|
| 10 | beneAddrLine1 | N | Beneficiary/ Payee address line 1 | | String |
| 11 | beneAddrLine2 | N | Beneficiary/ Payee address line 2 | | String |
| 12 | beneCity | N | Beneficiary/ Payee city | | String |
| 13 | beneCountry | N | Beneficiary/ Payee country | | String |
| 14 | codeType | Y | Code/Payment Type of intermediary bank For swiftCode the value should be - SWI For National Clearing Code the value should be – NAC For Specific Bank details the value should be - SPE | | String |
| 15 | bicCode | N | This will be swift code incase SWI This will be NCC code incase NCA This will be empty incase SPE | | String |
| 16 | ultBankName | N | Beneficiary/ Payee Bank Name | | String |
| 17 | ultAddrLine | N | Beneficiary/ Payee Bank address | | String |
| 18 | ultCity | N | Beneficiary/ Payee Bank City | | String |
| 19 | ultCountry | N | Beneficiary/ Payee Bank Country | | String |
| 20 | paymentDetails 1 | N | paymentDetails 1 | 35 | String |
| 21 | paymentDetails 2 | N | paymentDetails 2 | 35 | String |
| 22 | paymentDetails 3 | N | paymentDetails 3 | 35 | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|---|---------------------|-----------|--|------------|------------|
| 23 | paymentDetails 4 | N | paymentDetails 4 | 35 | String |
| 24 | charges | Y | Correspondence Charges expected value PAYEE, PAYER or SHARED mapping logic - SHARED--> SHAR PAYEE --> CRED PAYER --> DEBT | | String |
| 25 | Deal ref no | N | Deal Reference Number | 35 | String |
| 26 | Email id | N | Email ID of the creditor | 35 | String |
| 27 | Charges account | N | Charges Account Details | 35 | String |
| 28 | OBDX ref no | N | OBDX Reference Number | 35 | String |
| Structure for International Adhoc Payment via intermediary bank details | | | | | |
| 1 | mixedIdentifier | Y | Incase international adhoc payment the value should be AI | 1 | String |
| 2 | partyId | Y | Customer/Party id of customer who uploading the file. This value should be as per core banking data. | 20 | String |
| 3 | debitAccountId | Y | Source/Debit account number. Should be one account per file. It can either be VA or RA | 50 | String |
| 4 | amount type | Y | Debit amount or Transfer amount Allowed Value - D/T | 1 | String |
| 5 | amount | Y | Transaction amount with format (###.##) for example 20.25, 20.00 | - | BigDecimal |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|------------------|-----------|---|------------|-----------|
| 6 | amountCurr | Y | 3 digit transfer currency such as EUR, GBP | 3 | String |
| 7 | valueDate | Y | Transfer date with format DD-MM-YYYY for example 26-03-2020 | 10 | Date |
| 8 | beneficiary Name | Y | Name of Beneficiary/ Payee | 35 | String |
| 9 | creditAccountld | Y | Credit/ beneficiary account number | 34 | String |
| 10 | beneAddrLine1 | N | Beneficiary/ Payee address line 1 | | String |
| 11 | beneAddrLine2 | N | Beneficiary/ Payee address line 2 | | String |
| 12 | beneCity | N | Beneficiary/ Payee city | | String |
| 13 | beneCountry | N | Beneficiary/ Payee country | | String |
| 14 | intmdCodeType | N | Code/Payment Type of intermediary bank For swiftCode the value should be - SWI For National Clearing Code the value should be – NAC For Specific Bank details the value should be - SPE | | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|---------------|-----------|---|------------|-----------|
| 15 | intmdBicCode | N | This will be swift code incase SWI added for intermediary bank This will be NCC code incase NCA added for intermediary bank This will be empty incase SPE added for intermediary bank | | String |
| 16 | intmdBankName | N | Intermediary bank name | | String |
| 17 | intmdAddrLine | N | Intermediary bank address line | | String |
| 18 | intmdCity | N | Intermediary bank city | | String |
| 19 | intmdCountry | N | Intermediary bank country | | String |
| 20 | codeType | Y | Code/Payment Type of intermediary bank For swiftCode the value should be - SWI For National Clearing Code the value should be – NAC For Specific Bank details the value should be - SPE | | String |
| 21 | bicCode | N | This will be swift code incase SWI This will be NCC code incase NCA This will be empty incase SPE | | String |
| 22 | ultBankName | N | Beneficiary/ Payee Bank Name | | String |

| Sequence | Field Name | Mandatory | Remarks/Value | Max Length | Data Type |
|----------|---------------------|-----------|---|------------|-----------|
| 23 | ultAddrLine | N | Beneficiary/ Payee Bank address | | String |
| 24 | ultCity | N | Beneficiary/ Payee Bank City | | String |
| 25 | ultCountry | N | Beneficiary/ Payee Bank Country | | String |
| 26 | paymentDetails 1 | N | paymentDetails 1 | 35 | String |
| 27 | paymentDetails 2 | N | paymentDetails 2 | 35 | String |
| 28 | paymentDetails 3 | N | paymentDetails 3 | 35 | String |
| 29 | paymentDetails 4 | N | paymentDetails 4 | 35 | String |
| 30 | charge bearer | Y | Correspondenc e Charges expected value PAYEE, PAYER or SHARED mapping logic - SHARED--> SHAR PAYEE --> CRED PAYER --> DEBT | | String |
| 31 | Deal ref no | N | Deal Reference Number | 35 | String |
| 32 | Email id | N | Email ID of the creditor | 35 | String |
| 33 | Charges account | N | Charges Account Details | 35 | String |
| 34 | Ref no | N | Reference Number | 35 | String |

Field Mapping

Structure International Adhoc Payment

| Sequence | Field Name | Canonical Field |
|----------|-----------------|-------------------|
| 1 | mixedIdentifier | Not Required |
| 2 | partyId | initiatingPartyId |
| 3 | debitAccountId | drAccNo |
| 4 | amount type | NA |
| 5 | amount | amount |
| 6 | amountCurr | currency |
| 7 | valueDate | valueDate |

| Sequence | Field Name | Canonical Field |
|----------|---|----------------------|
| 8 | beneName | beneName |
| 9 | creditAccountld | beneAccNo |
| 10 | beneAddrLine1 | crBuildingNo |
| 11 | beneAddrLine2 | streetName |
| 12 | beneCity | townName |
| 13 | beneCountry | country |
| 14 | codeType | |
| 15 | bicCode | crBicFi |
| 16 | ultBankName | crAgentAccName |
| 17 | ultAddrLine | crAgentStreetName |
| 18 | ultCity | crAgentTownName |
| 19 | ultCountry | crAgentCountry |
| 20 | paymentDetails1 | remittanceInfo |
| 21 | paymentDetails2 | remittanceInfo |
| 22 | paymentDetails3 | remittanceInfo |
| 23 | paymentDetails4 | remittanceInfo |
| 24 | charges | chargeBearer |
| 25 | Deal ref no | contractID |
| 26 | Email id | emailAddress |
| 27 | Charges account | chargesAccount |
| 28 | OBDX ref no | instructionId |
| | Structure for International Adhoc Payment via intermediary bank details | |
| 1 | mixedIdentifier | Not Required |
| 2 | partyId | initiatingPartyId |
| 3 | debitAccountld | drAccNo |
| 4 | amount type | NA |
| 5 | amount | amount |
| 6 | amountCurr | currency |
| 7 | valueDate | valueDate |
| 8 | beneficiary Name | beneName |
| 9 | creditAccountld | beneAccNo |
| 10 | beneAddrLine1 | crBuildingNo |
| 11 | beneAddrLine2 | streetName |
| 12 | beneCity | townName |
| 13 | beneCountry | country |
| 14 | intmdCodeType | |
| 15 | intmdBicCode | intrmBicFi |
| 16 | intmdBankName | |
| 17 | intmdAddrLine | intrmAgentStreetName |
| 18 | intmdCity | intrmAgentTownName |
| 19 | intmdCountry | |
| 20 | codeType | |
| 21 | bicCode | crBicFi |
| 22 | ultBankName | crAgentAccName |

| Sequence | Field Name | Canonical Field |
|-----------------|-------------------|------------------------|
| 23 | ultAddrLine | crAgentStreetName |
| 24 | ultCity | crAgentTownName |
| 25 | ultCountry | crAgentCountry |
| 26 | paymentDetails1 | remittanceInfo |
| 27 | paymentDetails2 | remittanceInfo |
| 28 | paymentDetails3 | remittanceInfo |
| 29 | paymentDetails4 | remittanceInfo |
| 30 | charge bearer | chargeBearer |
| 31 | Deal ref no | contractID |
| 32 | Email id | emailAddress |
| 33 | Charges account | chargesAccount |
| 34 | Reference number | instructionId |

3

List of Topics

| Chapters | Description |
|-----------------|--|
| Chapter 1 | Provides information on the intended audience. It also lists the various chapters covered in this manual. |
| Chapter 2 | This chapter helps you to Integrate Oracle Banking Electronic Data Exchange for Corporates with Transformer. |

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