

Archival Framework for Oracle

Cabinet Archival

This section gives description about how to make archival of cabinets in iBPS.

Archival Approach

This section provides description about archival approach for cabinets.

1. System has 2 cabinets:
 - Active
 - Archive
2. A database script will periodically move the completed (on exit workstep) transactions (ProcessInstances) from Active cabinet to Archival cabinet (through DB link if archive cabinet is on a different database). The optimum duration for execution of this script is 1 month.
3. Process Metadata migration will move the following:
 - Process specific metadata.
 - Process folders.
 - External tables.
 - Tables created for Complex variables without any data.
 - Cabinet level metadata.
4. Process Metadata migration will also create partitions for Processes.
5. Transactional data migration will move:
 - ProcessInstance data
 - Associated folder data

Steps to Migrate Archival Data in Oracle

This section provides description about steps required to migrate archival data in Oracle.

Steps:

1. Create DB Link on Archival cabinet if active and archive cabinet are on different database servers otherwise Execute WFGrantRightsToTarget stored procedure in case two cabinets exists on same database servers and database link is not being used.
2. Execute procedure ODArchivalInitialScript on Archive cabinet.
3. Run SynchCabinet procedure of OD. It accepts following parameters:

Parameter Name	Type	Description
DBSourceCabinet	String	Source cabinet name.
DBTargetCabinet	String	Archive cabinet name.
DBsrcLinkName	String	Name of DBLink(if cabinets exists on different database servers)
DBStatus	String	Status

Table: Parameters Description

Steps for Migrating Process Metadata

Execute WFGrantRightsToTarget stored procedure in case two cabinets exist on same database servers and database link is not being used.

From Oracle database client such as SQL developer etc, Run SetAndMigrateMetaData procedure to migrate processdefid and variant id as specified in SetAndMigrateMetaData procedure. This procedure has following input parameters:

Parameter Name	Type	Description
v_sourceCabinet	String	Name of active cabinet
v_targetCabinet	String	Name of archive cabinet
v_isDBLink	String	N – active and archive cabinet are on same database server

		Y - active and archive cabinet are on different database server
idblinkname	String	Name of DB link
v_migrateAllData	String	Y – Move data for all processes N – Data is expected in ProcessList input parameter
v_copyForceFully	String	Y - If target cabinet already contain definition for process, delete existing definition and insert again N – If target cabinet already contain definition for process, skip the process NOTE: This is applicable to process specific tables only.
v_overRideCabinetData	String	Y - If target cabinet already contain any row in cabinet table, truncate that table and reinsert data N – If target cabinet already contain any row in cabinet table, skip that table NOTE: This is applicable to cabinet specific tables only.

Table: Parameters Description

NOTE:

From Oracle client, Modify SetAndMigrateMetaData to specify processdefid and processvariantid's to be migrated:

To migrate Multivariant processdefid 4 and its variant with variantid as 1, add following lines in procedure:

tableVariableMap.extend;

tableVariableMap(tableVariableMap.Last) := Process_Variant_Type(4, 1);

To migrate Generic processdefid 5, add following lines in procedure:

tableVariableMap.extend;

tableVariableMap(tableVariableMap.Last) := Process_Variant_Type(5, 0);

Sample Call:

DECLARE

```

V_SOURCECABINET VARCHAR2(200);
V_TARGETCABINET VARCHAR2(200);
V_ISDBLINK VARCHAR2(200);
IDBLINKNAME VARCHAR2(200);
V_MIGRATEALLDATA VARCHAR2(200);
V_COPYFORCEFULLY VARCHAR2(200);
V_OVERRIDECABINETDATA VARCHAR2(200);
BEGIN
V_SOURCECABINET := 'ORAIBPMS13MAY';
V_TARGETCABINET := 'MOHTARGETCAB';
V_ISDBLINK := 'Y';
IDBLINKNAME := 'ORA13_DBLINK';
V_MIGRATEALLDATA := 'N';
V_COPYFORCEFULLY := 'N';
V_OVERRIDECABINETDATA := 'Y';
SETANDMIGRATEMETADATA(
V_SOURCECABINET => V_SOURCECABINET,
V_TARGETCABINET => V_TARGETCABINET,
V_ISDBLINK => V_ISDBLINK,
IDBLINKNAME => IDBLINKNAME,
V_MIGRATEALLDATA => V_MIGRATEALLDATA,
V_COPYFORCEFULLY => V_COPYFORCEFULLY,
V_OVERRIDECABINETDATA => V_OVERRIDECABINETDATA
);
END;

```

Steps for Archiving Transactional Data

From Oracle database client such as SQL developer etc, Run SetAndMigrateTransactionalData procedure to migrate transactional data of processdefid and variant id as specified in SetAndMigrateTransactionalData procedure. This procedure has following input parameters:

Parameter Name	Type	Description
V_SOURCECABINET	String	Name of active cabinet
V_TARGETCABINET	String	Name of archive cabinet
V_ISDBLINK	String	N – active and archive cabinet are on same database server Y - active and archive cabinet are on different database server
IDBLINKNAME	String	Name of DB link
V_MIGRATEALLPROCESSES	String	Y – Move data for all processes, all variants N – Data is expected in ProcessList input parameter

V_FROMDATE	Date	Date in DD-MMM-YYYY format from which transactional data is to be archived. Specify in Format 'DD-MMM-YYYY'
V_TODATE	Date	Non mandatory, if NULL treats it as [CURRENT_DATE – 1 year]. EndDate cannot be <= StartDate EndDate, if provided cannot be > [CURRENT_DATE – 15 days].Date in DD-MMM-YYYY format till which transactional data is to be archived. Specify in Format 'DD-MMM-YYYY'
V_BATCHSIZE	Integer	No of processInstanceIds for which data will be committed in one go Default value - 500
V_MOVEAUDITTRAILDATA	String	Flag to indicate whether audit trail data is to be archived. Possible values are 'Y'/'N'.
V_MOVEFROMHISTORYDATA	String	Flag to indicate whether history data is to be archived. Possible values are 'Y'/'N' .If this flag is 'Y', transactional data will not be archived.
V_MOVEEXTERNALPROCESSDATA	String	Flag to indicate whether data of external variables and complex variables is to be archived. Possible values are 'Y'/'N'.
V_LOGGINGENABLED	String	Flag to indicate whether query logging is required in WFQueryLogTable Possible values are 'Y'/'N'.

Table: Parameters Description

NOTE:

From Oracle client, Modify SetAndMigrateTransactionalData to specify processdefid and processvariantid's to be migrated:

To archive transactional data of Multivariant processdefid 4 and its variant with variantid as 1, add following lines in procedure:

tableVariableMap.extend;

tableVariableMap(tableVariableMap.Last) := Process_Variant_Type(4, 1);

To migrate Generic processdefid 5, add following lines in procedure:

tableVariableMap.extend;

tableVariableMap(tableVariableMap.Last) := Process_Variant_Type(5, 0);

Sample Call:

```
DECLARE
V_SOURCECABINET VARCHAR2(200);
V_TARGETCABINET VARCHAR2(200);
V_ISDBLINK VARCHAR2(200);
IDBLINKNAME VARCHAR2(200);
V_MIGRATEALLPROCESSES VARCHAR2(200);
V_FROMDATE VARCHAR2(200);
V_TODATE VARCHAR2(200);
V_BATCHSIZE NUMBER;
V_MOVEAUDITTRAILDATA VARCHAR2(200);
V_MOVEFROMHISTORYDATA VARCHAR2(200);
V_MOVEEXTERNALPROCESSDATA VARCHAR2(200);
V_LOGGINGENABLED VARCHAR2(200);
BEGIN
V_SOURCECABINET := 'ORAIBPMS13MAY';
V_TARGETCABINET := 'MOHTARGETCAB';
V_ISDBLINK := 'Y';
IDBLINKNAME := 'ORA13_DBLINK';
V_MIGRATEALLPROCESSES := 'N';
V_FROMDATE := '02-FEB-2014';
V_TODATE := '02-APR-2014';
V_BATCHSIZE := 1000;
V_MOVEAUDITTRAILDATA := 'Y';
V_MOVEFROMHISTORYDATA := 'N';
V_MOVEEXTERNALPROCESSDATA := 'Y';
V_LOGGINGENABLED:='N'
SETANDMIGRATETRANSACTIONALDATA (
V_SOURCECABINET => V_SOURCECABINET,
V_TARGETCABINET => V_TARGETCABINET,
V_ISDBLINK => V_ISDBLINK,
IDBLINKNAME => IDBLINKNAME,
V_MIGRATEALLPROCESSES => V_MIGRATEALLPROCESSES,
V_FROMDATE => V_FROMDATE,
V_TODATE => V_TODATE,
V_BATCHSIZE => V_BATCHSIZE,
V_MOVEAUDITTRAILDATA => V_MOVEAUDITTRAILDATA,
V_MOVEFROMHISTORYDATA => V_MOVEFROMHISTORYDATA,
V_MOVEEXTERNALPROCESSDATA => V_MOVEEXTERNALPROCESSDATA,
V_LOGGINGENABLED => V_LOGGINGENABLED
```

NOTE:

This stored procedure can be scheduled as per client requirement. Kindly refer section 5.1.1 "Scheduling Stored Procedure for Oracle" of "IBPS 2.1.3 Post Installation Guide" for scheduling Stored Procedure in Oracle.

Steps to Migrate Cabinet level Transactional Data

From Oracle database client such as SQL developer etc, Call WFMigrateTxnCabinetData procedure to archive cabinet level transactional data before specific date passed as input parameter. This procedure has following input parameters:

Parameter Name	Type	Description
v_sourceCabinet	String	Name of active cabinet
v_targetCabinet	String	Name of archive cabinet
v_isDBLink	String	N – active and archive cabinet are on same database server Y - active and archive cabinet are on different database server
idblinkname	String	Name of DB link
v_beforeDate	String	Date in DD-MMM-YYYY format before which data is to be archived.

Table: Parameters Description

Sample XML

```
DECLARE
V_SOURCECABINET VARCHAR2(200);
V_TARGETCABINET VARCHAR2(200);
V_ISDBLINK VARCHAR2(200);
IDBLINKNAME VARCHAR2(200);
V_BEFOREDATE VARCHAR2(200);
BEGIN
V_SOURCECABINET := 'ORAIBPMS13MAY';
V_TARGETCABINET := 'MOHTARGETCAB';
V_ISDBLINK := 'Y';
IDBLINKNAME := 'ORA13_DBLINK';
V_BEFOREDATE := '02-APR-2014';
WFMIGRATETXNCABINETDATA(
V_SOURCECABINET => V_SOURCECABINET,
V_TARGETCABINET => V_TARGETCABINET,
V_ISDBLINK => V_ISDBLINK,
IDBLINKNAME => IDBLINKNAME,
V_BEFOREDATE => V_BEFOREDATE
);
END;
```

NOTE:

This stored procedure can be scheduled as per client requirement. Kindly refer section 5.1.1 "Scheduling Stored Procedure for Oracle" of "iBPS 2..1.3 Post Installation Guide" for scheduling Stored Procedure in Oracle.
