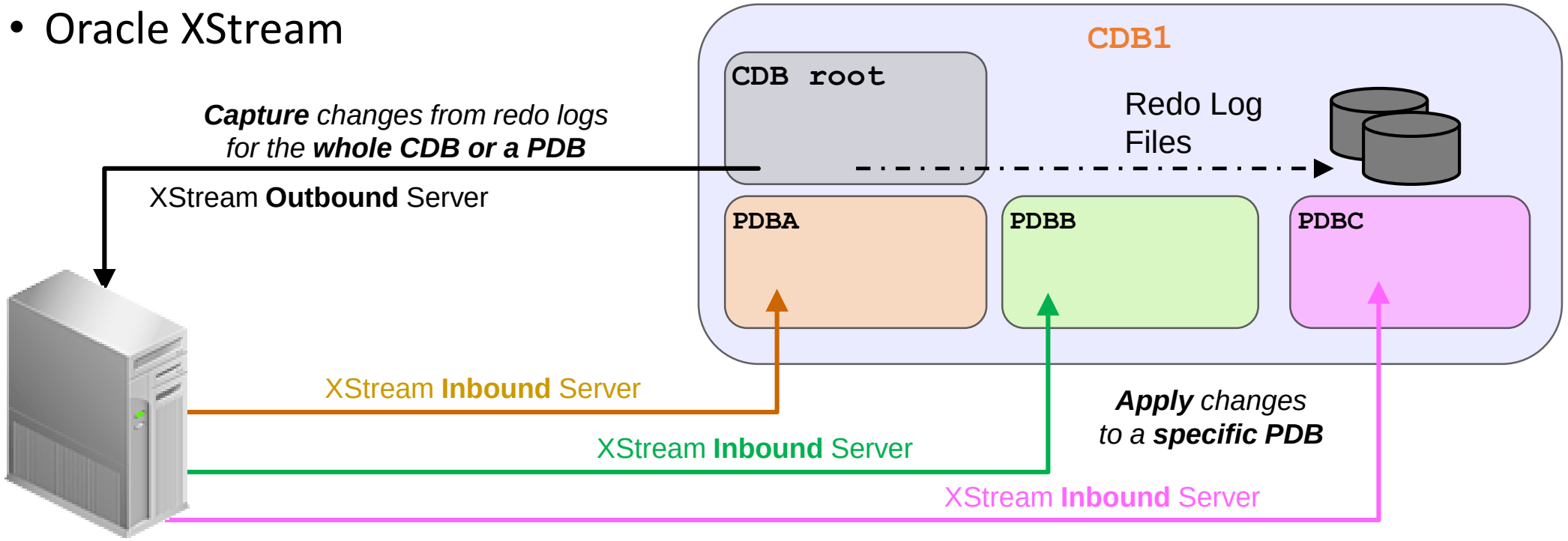
Miscellaneous

Objectives

- After completing this lesson, you should be able to:
  - Describe the limits of data replication
  - Describe XStreams usage with PDB and CDB
  - Describe Data Guard with CDB and PDB
  - Instantiate a PDB on a standby
  - Schedule operations in a PDB by using Oracle Scheduler
  - Mine PDB statements using LogMiner

Using Xstreams with a CDB and PDB

- Replicate data:
  - Oracle Streams supported in Oracle Database 12c
    - With non-CDBs
    - Not with CDBs
  - Oracle XStream



Creating a Standby of a CDB

- Oracle Data Guard at CDB level
  - Create a standby of a CDB as you create a standby of a primary non-CDB.
  - Create a PDB on a primary CDB.
    - From an XML file: Copy the datafiles specified in the XML file to the standby database.
    - As a clone from another PDB: Copy the datafiles belonging to the source PDB to the standby database.
  - Remove or rename PDBs in a primary CDB.
    - UNPLUG and DROP operations on the PDB: The PDB must be closed on the primary as well as all standby databases.
    - RENAME operation on the PDB: The PDB must be in open restricted mode on the primary and closed on all standby databases.

Instantiating a PDB on a Standby

- Creating a PDB on a primary CDB:

12c From an XML file: Copy the datafiles specified in the XML file to the standby database.

19c Use the `STANDBY_PDB_SOURCE_FILE_DIRECTORY` parameter to specify a directory location on the standby where source datafiles for instantiating the PDB may be found ➔Datafiles are automatically copied.

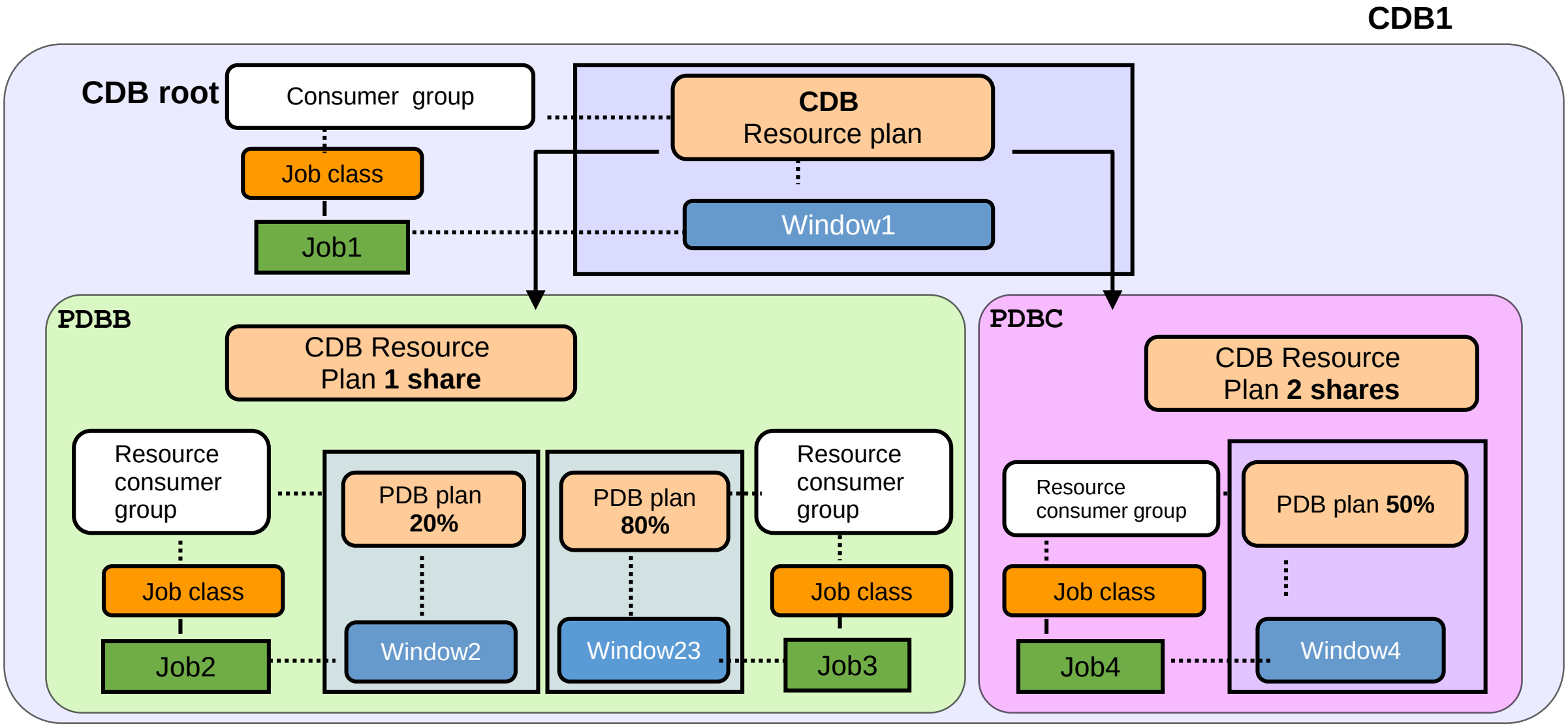
12c As a clone from another PDB: Copy the datafiles belonging to the source PDB to the standby database.

19c Use the `STANDBY_PDB_SOURCE_FILE_DBLINK` parameter to specify the name of a database link that is used to copy the datafiles from the source PDB to which the database link points.
➔The file copy is automatically done only if the database link points to the source PDB and the source PDB is open in read-only mode.

Scheduling Operations in a PDB

- A job defined in a PDB runs only if a PDB is open.
- User-created scheduler objects can be exported/imported into the PDB using Data Pump.
- Predefined scheduler objects are NOT exported.
    - Any changes made to these objects have to be made once again after the database has been imported into the PDB.

Jobs Coordinator and Resources



Mining Statements of a PDB Using LogMiner

- Mining the CDB redo log files
- V$LOGMNR_CONTENTS view
  - SRC_CON_NAME contains the pluggable database (PDB) name.
  - SRC_CON_ID contains the PDB ID.
  - SRC_CON_DBID contains the PDB identifier.
  - SRC_CON_GUID contains the GUID associated with the PDB.

Summary

- In this lesson, you should have learned how to:
  - Describe the limits of data replication
  - Describe XStreams usage with PDB and CDB
  - Describe Data Guard with CDB and PDB
  - Instantiate a PDB on a standby
  - Schedule operations in a PDB by using Oracle Scheduler
  - Mine PDB statements using LogMiner

Practice 14: Overview

- No practices