Appendix G: DataPrep JCL for OS/390Z/OS LE

Introduction

The DataPrep JCL for Z/OS LE installation process creates dataset names on your system. The Unload JCL provided contains a specific naming convention. In particular, the second and last node in the dataset names contain identifying information (Version Release Date) to assist in tracking and identifying software in use. ***We strongly recommend that you retain this naming convention.***

Step 1: JCL for Installation

The following JCL will be used once to unload additional JCL. JCL for the Unload Tape, step 2, will then unload the rest of the tape. Your site will probably have a JCL file similar to this that executes IEBCOPY. You should modify the file to have the file names indicated below.

The Install JCL

```
// CLASS=A,MSGCLASS=A,REGION=4M,NOTIFY=&SYSUID
//*
//* ------------------ DSY20012 -------------------
//* JOB DESCRIPTION
//*
//* SYSTEM SOFTWARE         - GA DATA PROVIDER TAPE UNLOAD - PART1
//*
//* PSTEP010                - IEBCOPY
//*
//* -------------------------------------------------
//*
//        SET ENV=P
//        SET LVLSET=LS990923
//        SET SPACE01=TRK
//        SET UNITPERM=SYSDA
//        SET UNITTAPE=CART
//        SET VR=PROD
//*
//*
//*  JOBLIB   DD  DISP=SHR,DSN=?????????????????????
//*
//*
//* ------------------- IEBCOPY  -------------------
//*
//PSTEP010 EXEC PGM=IEBCOPY
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..CUTTAPE.&LVLSET,
//        DISP=SHR,
//        UNIT=&UNITTAPE,
//        LABEL=(2,SL)
//***     VOLSER=??????
//*
```

```
//SYSUT2   DD DSN=NSLDS&ENV..&VR..CUTTAPE.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(2,1,2)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
```

Step 2: JCL for the Unload Tape

The following JCL was unloaded to your system in step 1. This JCL sets up the actual libraries and software to allow you to execute the DataPrep software. This Unload Tape JCL will normally run only once. However, if you need to run this JCL again to reinstall DataPrep, be aware that step PSTEP005 will delete all datasets previously created.

This JCL may be referenced from the library created with CUTTAPE as part of the name (created in step 1). The library member name is UNLOAD.

The Unload JCL

```
//PSY20013 JOB (P75333AA-5100AAAA,066),'GA TAPE UNLD2',
// CLASS=A,MSGCLASS=A,REGION=4M,NOTIFY=&SYSUID
//*
//* ------------------ DSY20013 -------------------
//* JOB DESCRIPTION
//*
//* SYSTEM SOFTWARE        - GA DATA PROVIDER TAPE UNLOAD - PART2
//*
//* PSTEP010               - IEBGENER
//* PSTEP020               - IEBGENER
//* PSTEP030               - IEBCOPY
//* PSTEP040               - IEBCOPY
//* PSTEP050               - IEBCOPY
//* PSTEP060               - IEBCOPY
//* PSTEP070               - IEBCOPY
//* PSTEP080               - IEBGENER
//*
//* -------------------------------------------------
//*
//         SET ENV=P
//         SET LVLSET=LS990923
//         SET SPACE01=TRK
//         SET UNITPERM=SYSDA
//         SET UNITTAPE=CART
//         SET VR=PROD
//         SET SC=GA
//*
//*  JOBLIB  DD  DISP=SHR,DSN=?????????????????????????????
//*
//*
```

```
//PSTEP005 EXEC PGM=IEFBR14
//*
//TD1       DD DSN=NSLDS&ENV..&VR..&SC..DOC.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD2       DD DSN=NSLDS&ENV..&VR..&SC..DBEXT.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD3       DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD4       DD DSN=NSLDS&ENV..&VR..&SC..JCLLIB.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD5       DD DSN=NSLDS&ENV..&VR..&SC..LOAD.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD6       DD DSN=NSLDS&ENV..&VR..&SC..DBEXTERR.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD7       DD DSN=NSLDS&ENV..&VR..&SC..LOADERR.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//TD8       DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM,,DEFER)
//*
//*
//*
//PSTEP010 EXEC PGM=IEBGENER
//*
//SYSIN     DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1    DD DSN=NSLDS.&VR..DOC.&LVLSET,
//          DISP=SHR,
//          LABEL=(3,SL),
//          UNIT=&UNITTAPE,
//          VOL=(,RETAIN)
//***       VOL=(,RETAIN,,SER=&VOLSER)
//*
```

```
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..DOC.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(2,1)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- IEBGENER -------------------
//*
//PSTEP020 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..DBEXT.&LVLSET,
//         DISP=SHR,
//         LABEL=(4,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP010.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..DBEXT.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(1,1)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP020.RC NE 0 THEN
//PSTEP021 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- IEBCOPY  -------------------
//*
//PSTEP030 EXEC PGM=IEBCOPY
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..CNTL.&LVLSET,
//         DISP=SHR,
//         LABEL=(5,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP020.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(2,1,2)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP030.RC NE 0 THEN
//PSTEP031 EXEC CKRCODE
//         ENDIF
```

```
//*
//* ------------------ IEBCOPY  ------------------
//*
//PSTEP040 EXEC PGM=IEBCOPY
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..JCLLIB.&LVLSET,
//         DISP=SHR,
//         LABEL=(6,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP030.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..JCLLIB.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(10,2,2)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP040.RC NE 0 THEN
//PSTEP041 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ IEBCOPY  ------------------
//*
//PSTEP050 EXEC PGM=IEBCOPY
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..LOAD.&LVLSET,
//         DISP=SHR,
//         LABEL=(7,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP040.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..LOAD.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(10,1,1)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP050.RC NE 0 THEN
//PSTEP051 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ IEBCOPY  ------------------
//*
//PSTEP060 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
```

```
//SYSUT1   DD DSN=NSLDS.&VR..DBEXTERR.&LVLSET,
//         DISP=SHR,
//         LABEL=(8,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP050.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..DBEXTERR.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(1,1)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP060.RC NE 0 THEN
//PSTEP061 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- IEBCOPY  -------------------
//*
//PSTEP070 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..LOADERR.&LVLSET,
//         DISP=SHR,
//         LABEL=(9,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP060.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..LOADERR.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(1,1)),
//         UNIT=&UNITPERM
//*
//*
//         IF PSTEP070.RC NE 0 THEN
//PSTEP071 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- IEBCOPY  -------------------
//*
//PSTEP080 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS.&VR..PREVEXT.&LVLSET,
//         DISP=SHR,
//         LABEL=(10,SL),
//         UNIT=&UNITTAPE,
//         VOL=(,RETAIN,,REF=*.PSTEP070.SYSUT1)
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//         DISP=(NEW,CATLG,DELETE),
//         SPACE=(&SPACE01,(1,1)),
```

```
//          UNIT=&UNITPERM
//*
//*
//          IF PSTEP080.RC NE 0 THEN
//PSTEP081 EXEC CKRCODE
//          ENDIF
//*
//*
```

Step 3: JCL for DataPrep Extract Validation

The following JCL executes the DataPrep programs that perform Extract Validation and error reporting, and creates the Validated Extract file that will be the input to the Delta process. It can be referenced from the library created with JCLLIB as part of the name. The library member name is PRBD1000.

The summary error report can be sorted three different ways (by Error Count, Field Code, or Error Code) by changing the SET statement. See the SET statements in the in-stream JCL documentation below. The detail error report is only sorted by SSN.

The JCL includes a sample Database Extract file containing 50 student/loan records of which 2 are in error. This should be reported in the Extract Validation Log File Report, the Detail Extract Error Report, and the Summary Extract Error Report, which are outputs from the Extract Validation process.

A second sample extract is included for your use that contains 50 student/loan records and which error thresholds are exceeded. If you use this sample, an empty Validated Extract file will be created. You can use this second sample to test that you have installed DataPrep correctly. To use the second sample, you must change the JCL to reference the sample Database Extract containing DBEXTERR as part of the name. Be sure to comment out or delete the sample files once you have completed testing.

Previous Datasets

The first step in the JCL will delete any datasets previously created. If you want to save your previous Validated Extract file, you must copy it to another file name or run the backup JCL.

Extract Validation JCL

```
//PRBD1000 JOB (P75333AA-5100AAAA,066),'GA 1ST LEV VER',
// CLASS=A,MSGCLASS=A,REGION=6M
//*
//* ------------------- RBD100PB -------------------
//* JOB DESCRIPTION
//*
//* REPOSITORY BUILD       - GA EXTRACT VALIDATION AND ERROR REPORTING
//*
//* PSTEP010               - IEFBR14   DELETE FILES FROM PREVIOUS RUN
```

```
//* PSTEP020                      - TIRIOVFI  SPECIAL FOR COOL:GEN
//* PSTEP030                      - RBD100PB  VALIDATION
//* PSTEP040                      - SORT      SORT OF EXTRACT ERROR FILE
//*                                           FOR DETAIL ERROR REPORT
//* PSTEP050                      - TIRIOVFI  SPECIAL FOR COOL:GEN
//* PSTEP060                      - RBD200DB  DETAIL ERROR REPORTING
//* PSTEP070                      - IEBGENER  PRINT DETAIL ERROR REPORT
//* PSTEP080                      - UTD300PB  SUMMARY ERROR REPORT COUNTER
//* PSTEP090                      - SORT      SORT SUMMARY ERROR REPORT FILE
//* PSTEP100                      - UTD400PB  SUMMARY ERROR REPORT PROGRAM
//* PSTEP110                      - IEBGENER  PRINT SUMMARY ERROR REPORT
//*
//* ------------------------------------------------------
//*  THIS IS SAMPLE JCL THAT WILL GO TO THE DATA PROVIDER'S SITE.
//*  IT IS NOT TO BE RUN IN PRODUCTION AT NSLDS AND DOES NOT
//*  REFLECT NSLDS PROGRAMMING STANDARDS. THIS JCL IS SENT TO THE
//*  DATA PROVIDER AS A SUGGESTED SAMPLE AND ITS USE IS OPTIONAL.
//*
//          SET ENV=P
//          SET JOBNME=PRBD1000
//          SET LVLSET=LS990923
//          SET SPACE01=CYL
//          SET SRCNME01=PRBD1000
//          SET UNITPERM=SYSDA
//          SET UNITTEMP=SYSDA
//          SET VR=PROD
//          SET SC=GA
//*         ERROR COUNT ORDER
//*         SET SORTPARM=PUTD4001
//*         FIELD CODE ORDER
//*         SET SORTPARM=PUTD4002
//*         ERROR CODE ORDER
//          SET SORTPARM=PUTD4003
//*
//*
//*
//*JOBLIB   DD DSN=NSLDS&ENV..&VR..&SC..LOAD.&LVLSET,DISP=SHR
//*
//* ------------------- IEFBR14  -------------------
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD1      DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.VALEXT,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD2      DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD3      DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTERR,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
```

```
//TD4        DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.LOGFILE,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD5        DD DSN=NSLDS&ENV..&JOBNME..PSTEP060.ERRORRPT,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD6        DD DSN=NSLDS&ENV..&JOBNME..PSTEP050.IOVFILE,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD7        DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.ERRSORT,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD8        DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORCNT,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD9        DD DSN=NSLDS&ENV..&JOBNME..PSTEP090.ERRORCNT,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//TD10       DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORSUM,
//           DISP=(MOD,DELETE,DELETE),
//           SPACE=(TRK,(1,1)),
//           UNIT=(&UNITPERM)
//*
//           IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//           ENDIF
//*
//PSTEP020 EXEC PGM=TIRIOVFI
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//           BLKSIZE=0,
//           DISP=(NEW,CATLG,DELETE),
//           LRECL=4096,
//           RECFM=FB,
//           SPACE=(TRK,(1,1),RLSE),
//           UNIT=&UNITTEMP
//*
//TIRMSGF  DD SYSOUT=*
//*
//           IF PSTEP020.RC NE 110 THEN
//PSTEP021 EXEC CKRCODE
//           ENDIF
//*
```

```
//* ------------------- RBD100PB -------------------
//*
//PSTEP030 EXEC PGM=RBD100PB
//*
//*
//GA001    DD DSN=NSLDS&ENV..&VR..&SC..DBEXT.&LVLSET,
//         DISP=SHR
//*
//TEFFILE  DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PUTD3000),
//         DISP=SHR
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.VALEXT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(50,50),RLSE),
//         UNIT=(&UNITPERM)
//*
//ER001    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTERR,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(50,50),RLSE),
//         UNIT=(&UNITPERM)
//*
//LG001    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.LOGFILE,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=80,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,50),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSABOUT  DD SYSOUT=*
//SYSDBOUT  DD SYSOUT=*
//SYSOUT    DD SYSOUT=*
//SYSPRINT  DD SYSOUT=*
//SYSUDUMP  DD SYSOUT=*
//*
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//         DISP=(OLD,DELETE,KEEP)
//*
//TIRMSGF  DD SYSOUT=*
//*
//*
//         IF PSTEP030.RC NE 1000 THEN
//PSTEP031 EXEC CKRCODE
//         ENDIF
//*
//*-----------------SORT----------------------
//*
//PSTEP040 EXEC PGM=SORT
```

```
//*
//SORTIN    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTERR,
//         DISP=SHR
//*
//SORTOUT   DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.ERRSORT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(5,5),RLSE),
//         UNIT=(&UNITPERM)
//*
//SORTWK01 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK02 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK03 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SYSIN     DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PRBD4000),
//         DISP=SHR
//*
//SYSOUT    DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*
//*
//         IF PSTEP040.RC NE 0 THEN
//PSTEP041 EXEC CKRCODE
//         ENDIF
//*
//*------------------TIRIOVFI--------------------
//*
//PSTEP050 EXEC PGM=TIRIOVFI
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP050.IOVFILE,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=4096,
//         RECFM=FB,
//         SPACE=(CYL,(1,1),RLSE),
//         UNIT=&UNITTEMP
//*
//TIRMSGF  DD SYSOUT=*
//*
//*
//         IF PSTEP050.RC NE 110 THEN
//PSTEP051 EXEC PGM=CMPABEND
//         ENDIF
//*
//*-------------------RBD200PB----------------------
//*
//PSTEP060 EXEC PGM=RBD200PB
//*
```

```
//GA002      DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.ERRSORT,
//           DISP=SHR
//*
//TEFFILE  DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PUTD3000),
//           DISP=SHR
//*
//GA006      DD DSN=NSLDS&ENV..&JOBNME..PSTEP060.ERRORRPT,
//           BLKSIZE=0,
//           DISP=(NEW,CATLG,DELETE),
//           LRECL=133,
//           RECFM=FBA,
//           SPACE=(&SPACE01,(10,10),RLSE),
//           UNIT=&UNITTEMP
//*
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP050.IOVFILE,
//           DISP=(OLD,DELETE,KEEP)
//*
//TIRMSGF  DD SYSOUT=*
//*
//*
//         IF PSTEP060.RC NE 1000 THEN
//PSTEP061 EXEC CKRCODE
//         ENDIF
//*
//*----------------------IEBGENER-------------------------
//*
//PSTEP070 EXEC PGM=IEBGENER
//*
//*
//SYSIN     DD DUMMY
//*
//SYSPRINT  DD SYSOUT=*
//*
//SYSUT1    DD DSN=NSLDS&ENV..&JOBNME..PSTEP060.ERRORRPT,
//           DISP=SHR
//*
//SYSUT2    DD SYSOUT=*
//*
//* FOLLOWING WILL SEND REPORT DIRECTLY TO HP828 PRINTER
//*
//* SYSUT2    DD SYSOUT=(Q,,3E01),
//*             DCB=(*.SYSUT1)
//*
//*
//         IF PSTEP070.RC NE 0 THEN
//PSTEP071 EXEC PGM=CMPABEND
//         ENDIF
```

```
//*
//*----------------UTD300PB----------------------
//*
//PSTEP080 EXEC PGM=UTD300PB
//*
//GA001    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTERR,
//         DISP=SHR
//*
//TEFFILE  DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PUTD3000),
//         DISP=SHR
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORCNT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=117,
//         RECFM=FB,
//         SPACE=(&SPACE01,(10,10),RLSE),
//         UNIT=&UNITTEMP
//*
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//         IF PSTEP080.RC NE 0 THEN
//PSTEP081 EXEC CKRCODE
//         ENDIF
//*
//*
//*-----------------SORT----------------
//*
//PSTEP090 EXEC PGM=SORT
//*
//SORTIN   DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORCNT,
//         DISP=SHR
//*
//SORTOUT  DD DSN=NSLDS&ENV..&JOBNME..PSTEP090.ERRORCNT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=117,
//         RECFM=FB,
//         SPACE=(&SPACE01,(5,5),RLSE),
//         UNIT=(&UNITPERM)
//*
//SORTWK01 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK02 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK03 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SYSIN    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(&SORTPARM),
//         DISP=SHR
```

```
//*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*
//*
//         IF PSTEP090.RC NE 0 THEN
//PSTEP091 EXEC CKRCODE
//         ENDIF
//*
//*------------------UTD400PB----------------------
//*
//PSTEP100 EXEC PGM=UTD400PB
//*
//GA001    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(&SORTPARM),
//         DISP=SHR
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP090.ERRORCNT,
//         DISP=SHR
//*
//GA003    DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORSUM,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=133,
//         RECFM=FBA,
//         SPACE=(&SPACE01,(10,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//         IF PSTEP090.RC NE 0 THEN
//PSTEP101 EXEC CKRCODE
//         ENDIF
//*
//*
//*--------------------IEBGENER----------------------
//*
//PSTEP110 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORSUM,
//         DISP=SHR
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP110.RC NE 0 THEN
//PSTEP111 EXEC CKRCODE
//         ENDIF
//*
```

Step 4: JCL for DataPrep Delta Processing

The following JCL executes Delta Processing. The output from this job will be the Delta Processing Log file and the final Submittal file. It can be referenced from the library created with JCLLIB as part of the name. The library member name is PRBD6000.

The Validated Extract file from PRBD1000 is the input to this job. It is sorted by the 61-byte identifier. The sorted Validated Extract file is the input to Delta Processing. The JCL references a sample prior Validated Extract file containing 'PREVEXT' as part of the name. The current Validated Extract file should come from the Extract Validation (PRBD1000) procedure. When using the sample prior Validated Extract file provided, the current Validated Extract file should be the output from PRBD1000 with the sample input file with 'DBEXT' as part of the file name. Using a different file could produce unexpected results. The output Submittal file will be sent to NSLDS. The sample Validated Extract file contains 50 records. Twenty records should be written to the final Submittal file.

Once the Delta process runs, steps 50 to 70 will create a backup of the previous Validated Extract file. Step 60 will delete the previous Validated Extract file, and step 70 will replace it with the sorted Validated Extract file.

Previous Datasets

The first step in the JCL will delete any datasets previously created. If you want to save your previous Submittal file, you must copy it to another file name or run the backup JCL.

Delta Processing JCL

```
//PRBD6000 JOB (P75333AA-5100AAAA,066),'GA DELTA PROCE',
// CLASS=A,MSGCLASS=A,REGION=6M
//*
//* ------------------- RBD600PB -------------------
//* JOB DESCRIPTION
//*
//* REPOSITORY BUILD        - GA DELTA PROCEDURE
//*
//* PSTEP010                - IEFBR14   DELETE FILES FROM PREVIOUS RUN
//* PSTEP020                - TIRIOVFI  SPECIAL FOR COOL:GEN
//* PSTEP030                - SORT      SORT VALIDATED EXTRACT FILE
//*                                     BY IDENTIFIER
//* PSTEP040                - RBD600PB  DELTA PROCESSING
//* PSTEP050                - IEBGENER  COPY PREVIOUS EXT FILE TO BKUP
//* PSTEP060                - IEFBR14   DELETE PREVIOUS EXT FILE
//* PSTEP070                - IEBGENER  COPY CURRENT VALIDATED EXT FILE
//*                                     TO THE PREVIOUS EXTRACT FILE
//*                                     FOR NEXT PERIOD PROCESSING
//*
//* ----------------------------------------------------
//*  THIS IS SAMPLE JCL THAT WILL GO TO THE DATA PROVIDER'S SITE.
//*  IT IS NOT TO BE RUN IN PRODUCTION AT NSLDS AND DOES NOT
//*  REFLECT NSLDS PROGRAMMING STANDARDS. THIS JCL IS SENT TO THE
//*  DATA PROVIDER AS A SUGGESTED SAMPLE AND ITS USE IS OPTIONAL.
```

```
//*
//          SET JOBNME=PRBD6000
//          SET LVLSET=LS990923
//          SET SPACE01=CYL
//          SET SRCNME01=PRBD1000
//          SET UNITPERM=SYSDA
//          SET UNITTEMP=SYSDA
//          SET VR=PROD
//          SET SC=GA
//          SET ENV=P
//          SET SORTPARM=PRB01000
//*
//*
//*
//JOBLIB    DD DSN=NSLDS&ENV..&VR..&SC..LOAD.&LVLSET,DISP=SHR
//*
//* ------------------- IEFBR14  -------------------
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD1       DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.LOG,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//TD2       DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//TD3       DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.SUBMITTL,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//TD4       DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTSORT,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//TD5       DD DSN=NSLDS&ENV..&VR..&SC..PREVBKUP.&LVLSET,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//          IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//          ENDIF
//*
//PSTEP020 EXEC PGM=TIRIOVFI
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=4096,
```

```
//          RECFM=FB,
//          SPACE=(TRK,(1,1),RLSE),
//          UNIT=&UNITTEMP
//*
//TIRMSGF  DD SYSOUT=*
//*
//          IF PSTEP020.RC NE 110 THEN
//PSTEP021 EXEC CKRCODE
//          ENDIF
//*
//*-----------------SORT----------------------------------
//*
//PSTEP030 EXEC PGM=SORT
//*
//SORTIN   DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.VALEXT,
//          DISP=SHR
//*
//SORTOUT  DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTSORT,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(5,5),RLSE),
//          UNIT=(&UNITPERM)
//*
//SORTWK01 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SORTWK02 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SORTWK03 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SYSIN    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(&SORTPARM),
//          DISP=SHR
//*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*
//*
//          IF PSTEP030.RC NE 0 THEN
//PSTEP031 EXEC CKRCODE
//          ENDIF
//*
//*
//* ------------------- RBD600PB --------------------
//*
//PSTEP040 EXEC PGM=RBD600PB
//*
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTSORT,
//          DISP=SHR
//*
//GA004    DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//          DISP=SHR
//*
```

```
//GA003     DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.SUBMITTL,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,KEEP),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(50,50),RLSE),
//          UNIT=(&UNITPERM)
//*
//LG001     DD DSN=NSLDS&ENV..&JOBNME..PSTEP040.LOG,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,KEEP),
//          LRECL=80,
//          RECFM=FB,
//          SPACE=(&SPACE01,(100,50),RLSE),
//          UNIT=(&UNITPERM)
//*
//SYSABOUT  DD SYSOUT=*
//SYSDBOUT  DD SYSOUT=*
//SYSOUT    DD SYSOUT=*
//SYSPRINT  DD SYSOUT=*
//SYSUDUMP  DD SYSOUT=*
//*
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.IOVFILE,
//          DISP=(OLD,DELETE,KEEP)
//*
//TIRMSGF  DD SYSOUT=*
//*
//*
//         IF PSTEP040.RC NE 1000 THEN
//PSTEP041 EXEC CKRCODE
//         ENDIF
//*
//*
//*----------------IEBGENER------------------------------
//*  MAKE A BACKUP COPY OF THE PREVIOUS EXTRACT FILE
//*
//PSTEP050 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//          DISP=SHR
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..PREVBKUP.&LVLSET,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(100,10),RLSE),
//          UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
```

```
//*
//*
//         IF PSTEP050.RC NE 0 THEN
//PSTEP051 EXEC CKRCODE
//         ENDIF
//*
//*----------------IEFBR14--------------------------------
//*  DELETE THE CURRENT PREVIOUS EXTRACT FILE
//*
//PSTEP060 EXEC PGM=IEFBR14
//*
//TD1      DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//         IF PSTEP060.RC NE 0 THEN
//PSTEP061 EXEC CKRCODE
//         ENDIF
//*
//*---------------IEBGENER-------------------------------
//*  MOVE THE CURRENT SORTED VALIDATED EXTRACT FILE TO
//*  THE PREVIOUS EXTRACT FILE FOR NEXT PERIOD PROCESSING
//*
//PSTEP070 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&JOBNME..PSTEP030.EXTSORT,
//         DISP=SHR
//*
//SYSUT2   DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LVLSET,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP070.RC NE 0 THEN
//PSTEP071 EXEC CKRCODE
//         ENDIF
//*
```

Step 5: JCL for Current File Backup

The following JCL is the software to perform current file backup. This JCL copies the Validated Extract file, Submittal file, and Prior Validated Extract file to files with 'BKUP01' appended to the name. This JCL can be run after the Delta processing step or independently. This step is optional. We do not require you use this JCL if you have a preferred method to back up files.

This JCL may be referenced from the library created with JCLLIB as part of the name. The library member name is PRD01004.

DataPrep Current Backup JCL

```
//PRD01004 JOB (P75333AA-5100AAAA,066),'GA DELTA BKUP',
// CLASS=N,MSGCLASS=A,REGION=4M
//*
//* ------------------ PRB01004 -------------------
//* JOB DESCRIPTION
//*
//* REPOSITORY BUILD        - GA DELTA PROCESSING
//*                           CURRENT FILE BACKUP
//*
//* PSTEP010                - IEFBR14
//* PSTEP020                - IEBGENER
//* PSTEP030                - IEBGENER
//* PSTEP040                - IEBGENER
//*
//* --------------------------------------------------
//*
//         SET DB2=NSLP
//         SET ENV=P
//         SET LEVSET=LS990923
//         SET SPACE01=CYL
//         SET SRCNME00=PRBD1000
//         SET SRCNME01=PRBD6000
//         SET UNITPERM=SYSDA
//         SET UNITTEMP=SYSDA
//         SET VR=PROD
//         SET SC=GA
//*
//* ------------------ IEFBR14  -------------------
//*
//*
//JOBLIB   DD  DSN=DB2.&DB2..DSNLOAD,DISP=SHR
//         DD  DSN=DB2.&DB2..DSNEXIT,DISP=SHR
//         DD  DSN=DB2.BMCUTIL.&DB2..LOAD,DISP=SHR
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD1      DD DSN=NSLDS&ENV..&SRCNME00..PSTEP020.VALEXT.BKUP01,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD2      DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.SUBMITTL.BKUP01,
```

```
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//TD3       DD DSN=NSLDS&ENV..&SRCNME01..PSTEP040.PREVEXT.BKUP01,
//          DISP=(MOD,DELETE,DELETE),
//          SPACE=(TRK,(1,1)),
//          UNIT=(&UNITPERM)
//*
//*
//          IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//          ENDIF
//*
//* ------------------ IEBGENER --------------------
//*
//PSTEP020 EXEC PGM=IEBGENER
//*
//SYSIN     DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1    DD DSN=NSLDS&ENV..&SRCNME00..PSTEP030.VALEXT,
//          DISP=SHR
//*
//SYSUT2    DD DSN=NSLDS&ENV..&SRCNME00..PSTEP020.VALEXT.BKUP01,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(100,10),RLSE),
//          UNIT=(&UNITPERM)
//*
//SYSUT2    DD SYSOUT=*
//*
//*
//          IF PSTEP020.RC NE 0 THEN
//PSTEP021 EXEC CKRCODE
//          ENDIF
//*
//* ------------------ IEBGENER --------------------
//*
//PSTEP030 EXEC PGM=IEBGENER
//*
//SYSIN     DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1    DD DSN=NSLDS&ENV..&SRCNME01..PSTEP040.SUBMITTL,
//          DISP=SHR
//*
//SYSUT2    DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.SUBMITTL.BKUP01,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(100,10),RLSE),
```

```
//          UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//          IF PSTEP030.RC NE 0 THEN
//PSTEP031 EXEC CKRCODE
//          ENDIF
//*
//* ------------------- IEBGENER -------------------
//*
//PSTEP040 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LEVSET,
//          DISP=SHR
//*
//SYSUT2   DD DSN=NSLDS&ENV..&SRCNME01..PSTEP040.PREVEXT.BKUP01,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=640,
//          RECFM=FB,
//          SPACE=(&SPACE01,(100,10),RLSE),
//          UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//          IF PSTEP040.RC NE 0 THEN
//PSTEP041 EXEC CKRCODE
//          ENDIF
```

Step 6: JCL for Previous File Backup

The following JCL is the software to perform previous file backup. This JCL copies the current backup copies of the Validated Extract file, Submittal file, and Prior Validated Extract file to files with 'BKUP02' appended to the name. This JCL can be run after the current backup job. This step is optional. We do not require you use this JCL if you have a preferred method to back up files.

This JCL may be referenced from the library created with JCLLIB as part of the name. The library member name is PRD01003.

DataPrep Previous Backup JCL

```
//PRD01003 JOB (P75333AA-5100AAAA,066),'GA DELTA BKUP',
// CLASS=N,MSGCLASS=A,REGION=4M
//*
//* ------------------- DRD01003 -------------------
```

```
//* JOB DESCRIPTION
//*
//* REPOSITORY BUILD        - GA DELTA PROCESSING
//*                           PREVIOUS FILE BACKUP
//*
//* PSTEP010                - IEFBR14
//* PSTEP020                - IEBGENER
//* PSTEP030                - IEBGENER
//* PSTEP040                - IEBGENER
//*
//* --------------------------------------------------
//*
//         SET DB2=NSLP
//         SET ENV=P
//         SET LEVSET=LS990923
//         SET SPACE01=CYL
//         SET SRCNME00=PRBD1000
//         SET SRCNME01=PRBD6000
//         SET UNITPERM=SYSDA
//         SET UNITTEMP=SYSDA
//         SET VR=PROD
//         SET SC=GA
//*
//* ------------------- IEFBR14  --------------------
//*
//*
//JOBLIB   DD  DSN=DB2.&DB2..DSNLOAD,DISP=SHR
//         DD  DSN=DB2.&DB2..DSNEXIT,DISP=SHR
//         DD  DSN=DB2.BMCUTIL.&DB2..LOAD,DISP=SHR
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD1      DD DSN=NSLDS&ENV..&SRCNME00..PSTEP020.VALEXT.BKUP02,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD2      DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.SUBMITTL.BKUP02,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD3      DD DSN=NSLDS&ENV..&SRCNME01..PSTEP040.PREVEXT.BKUP02,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//*
//         IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- IEBGENER --------------------
//*
//PSTEP020 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
```

```
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&SRCNME00..PSTEP020.VALEXT.BKUP01,
//         DISP=SHR
//*
//SYSUT2   DD DSN=NSLDS&ENV..&SRCNME00..PSTEP020.VALEXT.BKUP02,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP020.RC NE 0 THEN
//PSTEP021 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ IEBGENER -------------------
//*
//PSTEP030 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.SUBMITTL.BKUP01,
//         DISP=SHR
//*
//SYSUT2   DD DSN=NSLDS&ENV..&SRCNME01..PSTEP030.SUBMITTL.BKUP02,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP030.RC NE 0 THEN
//PSTEP031 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ IEBGENER -------------------
//*
//PSTEP040 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&VR..&SC..PREVEXT.&LEVSET,
//         DISP=SHR
```

```
//*
//SYSUT2   DD DSN=NSLDS&ENV..&SRCNME01..PSTEP040.PREVEXT.BKUP02,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP040.RC NE 0 THEN
//PSTEP041 EXEC CKRCODE
//         ENDIF
```

Step 7: JCL for NSLDS DataPrep Reporting

The following JCL executes the software to perform error reporting. This JCL will be used primarily to report any errors you receive from the Load Process Error file that you will receive from NSLDS after each submittal. It can also be used to report errors from the Extract Validation process.

This JCL may be referenced from the library created with JCLLIB as part of the name. The library member name is PRBD2000.

As with the Validation and Error Reporting JCL above, the option to sort the summary error report three different ways (by Error Count, Field Code, or Error Code) is available by changing the SET statement. See the SET statements in the in-stream JCL documentation below. The Detail Error Report is only sorted by SSN.

Remember that the first step in the JCL will delete any datasets previously created. If you want to save your previous error files, you may want to copy them to another file name or run the backup JCL.

The JCL includes a sample Load Process Error file containing 11 student/loan records. This should be reported in the Detail Error Report and the Summary Error Report, which are outputs from this process.

DataPrep Reporting JCL

```
//PRBD2000 JOB (P75333AA-5100AAAA,066),'GA ERROR RPT',
// CLASS=A,MSGCLASS=A,REGION=6M,NOTIFY=L#B
//*
//* ------------------- RBD221DB -------------------
//PRBD2000 JOB (P75333AA-5100AAAA,066),'GA ERROR RPT',
// CLASS=A,MSGCLASS=A,REGION=6M
//*
//* ------------------- RBD200PB -------------------
//* JOB DESCRIPTION
```

```
//*
//* REPOSITORY BUILD        - GA EXTRACT OR LOAD ERROR REPORTING
//*
//* PSTEP010                - IEFBR14   DELETE FILES FROM PREVIOUS RUN
//* PSTEP020                - SORT      SORT EXTRACT/LOAD FILE BY SSN
//* PSTEP070                - TIRIOVFI  SPECIAL FOR COOL:GEN
//* PSTEP080                - RBD200PB  DETAIL ERROR REPORT
//* PSTEP090                - IEBGENER  PRINT DETAIL ERROR REPORT
//* PSTEP100                - UTD300PB  SUMMARY ERROR REPORT COUNTER
//* PSTEP110                - SORT      SORT SUMMARY ERROR REPORT FILE
//* PSTEP120                - UTD400PB  SUMMARY ERROR REPORT PROGRAM
//* PSTEP130                - IEBGENER  PRINT SUMMARY ERROR REPORT
//*
//* ----------------------------------------------------
//*  THIS IS SAMPLE JCL THAT WILL GO TO THE DATA PROVIDER'S SITE.
//*  IT IS NOT TO BE RUN IN PRODUCTION AT NSLDS AND DOES NOT
//*  REFLECT NSLDS PROGRAMMING STANDARDS. THIS JCL IS SENT TO THE
//*  DATA PROVIDER AS A SUGGESTED SAMPLE AND ITS USE IS OPTIONAL.
//*
//         SET JOBNME=PRBD2000
//         SET LVLSET=LS990923
//         SET SPACE01=CYL
//         SET SRCNME01=PRBD1000
//         SET UNITPERM=SYSDA
//         SET UNITTEMP=SYSDA
//         SET VR=PROD
//         SET ENV=P
//         SET SC=GA
//*
//*        ERROR COUNT ORDER
//         SET SORTPARM=PUTD4001
//*
//*        FIELD CODE ORDER
//*        SET SORTPARM=PUTD4002
//*
//*        ERROR CODE ORDER
//*        SET SORTPARM=PUTD4003
//*
//*
//JOBLIB   DD DISP=SHR,DSN=NSLDS&ENV..&VR..&SC..LOAD.&LVLSET
//*
//* -------------------- IEFBR14  --------------------
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD5      DD DSN=NSLDS&ENV..&JOBNME..PSTEP070.IOVFILE,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD6      DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORRPT,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD7      DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORCNT,
//         DISP=(MOD,DELETE,DELETE),
```

```
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD8      DD DSN=NSLDS&ENV..&JOBNME..PSTEP110.ERRORCNT,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD9      DD DSN=NSLDS&ENV..&JOBNME..PSTEP120.ERRORSUM,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//TD10     DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.EXTSORT,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//         IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//         ENDIF
//*
//* ------------------- SORT     -------------------
//*
//PSTEP020 EXEC PGM=SORT
//*
//*
//SORTIN   DD DSN=NSLDS&ENV..&VR..&SC..LOADERR.&LVLSET,
//         DISP=SHR
//*
//SORTOUT  DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.EXTSORT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(1,1),RLSE),
//         UNIT=(&UNITPERM)
//*
//SORTWK01 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK02 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SORTWK03 DD SPACE=(&SPACE01,(100,100)),
//         UNIT=&UNITTEMP
//*
//SYSIN    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PRBD4000),
//         DISP=SHR
//*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*
//*
//         IF PSTEP020.RC NE 0 THEN
//PSTEP021 EXEC CKRCODE
//         ENDIF
```

```
//*
//PSTEP070 EXEC PGM=TIRIOVFI
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP070.IOVFILE,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=4096,
//         RECFM=FB,
//         SPACE=(CYL,(1,1),RLSE),
//         UNIT=&UNITTEMP
//*
//TIRMSGF  DD SYSOUT=*
//*
//         IF PSTEP070.RC NE 110 THEN
//PSTEP071 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ RBD200PB -------------------
//*
//PSTEP080 EXEC PGM=RBD200PB
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP020.EXTSORT,
//         DISP=SHR
//*
//TEFFILE  DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PUTD3000),
//         DISP=SHR
//*
//GA006    DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORRPT,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=133,
//         RECFM=FBA,
//         SPACE=(&SPACE01,(10,10),RLSE),
//         UNIT=&UNITTEMP
//*
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//*
//TIRERRF  DD SYSOUT=*
//*
//TIRIOVF  DD DSN=NSLDS&ENV..&JOBNME..PSTEP070.IOVFILE,
//         DISP=(OLD,DELETE,KEEP)
//*
//TIRMSGF  DD SYSOUT=*
//*
//*
//         IF PSTEP080.RC NE 1000 THEN
//PSTEP081 EXEC CKRCODE
//         ENDIF
//*
```

```
//* ------------------- IEBGENER -------------------
//*
//PSTEP090 EXEC PGM=IEBGENER
//*
//*
//SYSIN     DD DUMMY
//*
//SYSPRINT  DD SYSOUT=*
//*
//SYSUT1    DD DSN=NSLDS&ENV..&JOBNME..PSTEP080.ERRORRPT,
//          DISP=SHR
//*
//SYSUT2    DD SYSOUT=*
//*
//*
//          IF PSTEP090.RC NE 0 THEN
//PSTEP091 EXEC CKRCODE
//          ENDIF
//*
//* ------------------- UTD300PB -------------------
//*
//PSTEP100 EXEC PGM=UTD300PB
//*
//GA001     DD DSN=NSLDS&ENV..&VR..&SC..LOADERR.&LVLSET,
//          DISP=SHR
//*
//TEFFILE   DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(PUTD3000),
//          DISP=SHR
//*
//GA002     DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORCNT,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=117,
//          RECFM=FB,
//          SPACE=(&SPACE01,(10,10),RLSE),
//          UNIT=&UNITTEMP
//*
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//          IF PSTEP100.RC NE 0 THEN
//PSTEP100 EXEC CKRCODE
//          ENDIF
//*
//*
//* ------------------- SORT     -------------------
//*
//PSTEP110 EXEC PGM=SORT
//*
//SORTIN    DD DSN=NSLDS&ENV..&JOBNME..PSTEP100.ERRORCNT,
//          DISP=SHR
//*
//SORTOUT   DD DSN=NSLDS&ENV..&JOBNME..PSTEP110.ERRORCNT,
```

```
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=117,
//          RECFM=FB,
//          SPACE=(&SPACE01,(5,5),RLSE),
//          UNIT=(&UNITPERM)
//*
//SORTWK01 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SORTWK02 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SORTWK03 DD SPACE=(&SPACE01,(100,100)),
//          UNIT=&UNITTEMP
//*
//SYSIN    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(&SORTPARM),
//          DISP=SHR
//*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*
//*
//          IF PSTEP110.RC NE 0 THEN
//PSTEP111 EXEC CKRCODE
//          ENDIF
//*
//* ------------------- UTD400PB -------------------
//*
//PSTEP120 EXEC PGM=UTD400PB
//*
//GA001    DD DSN=NSLDS&ENV..&VR..&SC..CNTL.&LVLSET(&SORTPARM),
//          DISP=SHR
//*
//GA002    DD DSN=NSLDS&ENV..&JOBNME..PSTEP110.ERRORCNT,
//          DISP=SHR
//*
//GA003    DD DSN=NSLDS&ENV..&JOBNME..PSTEP120.ERRORSUM,
//          BLKSIZE=0,
//          DISP=(NEW,CATLG,DELETE),
//          LRECL=133,
//          RECFM=FBA,
//          SPACE=(&SPACE01,(10,10),RLSE),
//          UNIT=(&UNITPERM)
//*
//SYSABOUT DD SYSOUT=*
//SYSDBOUT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
//*
//          IF PSTEP120.RC NE 0 THEN
//PSTEP121 EXEC CKRCODE
//          ENDIF
//*
//*
//* ------------------- IEBGENER -------------------
```

```
//*
//PSTEP130 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=NSLDS&ENV..&JOBNME..PSTEP120.ERRORSUM,
//         DISP=SHR
//*
//SYSUT2   DD SYSOUT=*
//*
//*
//         IF PSTEP120.RC NE 0 THEN
//PSTEP121 EXEC CKRCODE
//         ENDIF
//*
```

Step 8: JCL for Renaming the Submittal File

The following JCL will be used to rename the final Submittal file for transmission to NSLDS.
The Data Provider Instructions specify naming standards for final Submittal file by tape. Modify
the set statements as directed in the JCL.

```
//PRBD1001 JOB (P75333AA-5100AAAA,066),'RB01 RNME SUB FILE',
// CLASS=N,MSGCLASS=A,REGION=4M
//*
//* ------------------ PRBD1001 -------------------
//* JOB DESCRIPTION
//*
//* REPOSITORY BUILD      - GA RENAME SUBMITTAL FILE
//*
//* PSTEP010              - IEFBR14
//* PSTEP020              - IEBGENER
//*
//* -----------------------------------------------------
//*
//         SET DB2=NSLP
//         SET HLQDSN=NSLDSP
//         SET HLQTGT=NSLINPTP
//         SET LEVSET=LS990923
//         SET SPACE01=CYL
//         SET SRCNME01=PRBD6000
//         SET UNITPERM=SYSDA
//*
//* ------------------- NOTE     -------------------
//*       REPLACE XXX WITH GA CODE
//*       REPLACE 9999 WITH SUBMITTAL MONTH (MM) AND DAY (DD)
//*
//         SET GACODE=XXX
//         SET DATEMMDD=9999
//*
//* ------------------- NOTE     -------------------
```

```
//*
//* ------------------ IEFBR14  -------------------
//*
//*
//JOBLIB   DD  DSN=DB2.&DB2..DSNLOAD,DISP=SHR
//         DD  DSN=DB2.&DB2..DSNEXIT,DISP=SHR
//         DD  DSN=DB2.BMCUTIL.&DB2..LOAD,DISP=SHR
//*
//PSTEP010 EXEC PGM=IEFBR14
//*
//TD1      DD DSN=&HLQTGT..GA&GACODE..D&DATEMMDD,
//         DISP=(MOD,DELETE,DELETE),
//         SPACE=(TRK,(1,1)),
//         UNIT=(&UNITPERM)
//*
//*
//         IF PSTEP010.RC NE 0 THEN
//PSTEP011 EXEC CKRCODE
//         ENDIF
//*
//* ------------------ IEBGENER -------------------
//*
//PSTEP020 EXEC PGM=IEBGENER
//*
//SYSIN    DD DUMMY
//*
//SYSPRINT DD SYSOUT=*
//*
//SYSUT1   DD DSN=&HLQDSN..&SRCNME01..PSTEP040.SUBMITTL,
//         DISP=SHR
//*
//SYSUT2   DD DSN=&HLQTGT..GA&GACODE..D&DATEMMDD,
//         BLKSIZE=0,
//         DISP=(NEW,CATLG,DELETE),
//         LRECL=640,
//         RECFM=FB,
//         SPACE=(&SPACE01,(100,10),RLSE),
//         UNIT=(&UNITPERM)
//*
//*
//         IF PSTEP020.RC NE 0 THEN
//PSTEP021 EXEC CKRCODE
//         ENDIF
```