

# Federal Student Aid

*An OFFICE of the U.S. DEPARTMENT of EDUCATION*

## **U.S. Department of Education Federal Perkins Data Provider Instructions (Version 9.0)**

**October 2022**

---

## Contents

<b>Chapter 1: Introduction .....</b>	<b>1</b>
1.1 About This Manual .....	1
1.2 What Is NSLDS? .....	1
1.2.1 NSLDS Functions .....	2
1.2.2 Origination of NSLDS Data .....	8
1.2.3 NSLDS Users.....	10
1.3 Getting Help .....	11
<b>Chapter 2: Data Provider Responsibilities .....</b>	<b>13</b>
2.1 Data Privacy .....	14
2.2 Data Accuracy and Timeliness .....	14
<b>Chapter 3: The Update Process .....</b>	<b>16</b>
3.1 Files Used in the NSLDS Update Process .....	20
3.1.1 Loans Closed Prior to October 1, 1989 .....	22
3.1.2 Report Outstanding Principal Balances Monthly .....	22
3.1.3 Reporting Outstanding Principal Balances That Are Less Than \$1 .....	22
3.1.4 Data Provider Loan ID .....	22
<b>Chapter 4: System Requirements .....</b>	<b>23</b>
4.1 Estimating Required Disk Space .....	23
4.2 Setting Up Perkins Batch Services with NSLDS .....	25
4.3 Obtaining a Submittal Schedule .....	25
4.4 Initial Population .....	25
4.5 File Protection and Backups .....	26
4.6 Using Servicers .....	26
4.7 Multiple Schools or School Branches .....	27

---

<b>Chapter 5: Download, Setup, Utilities, and Testing .....</b>	<b>29</b>
5.1 Download .....	29
5.2 Software Setup .....	30
5.2.1 Directory Setup .....	31
5.2.2 Directory Selection .....	31
5.2.3 Installing DataPrep on a z/OS LE Version 3.1 or Higher Mainframe .....	34
5.3 Options and Utilities .....	35
5.3.1 Changing Directory Paths .....	35
5.3.2 DataPrep Viewer .....	37
5.3.3 File Transfer .....	37
5.3.4 Help System .....	41
5.4 Running Test Files .....	41
5.4.1 Successful Extract Validation .....	42
5.4.2 Unsuccessful Validation .....	51
5.4.3 Testing Load Process Error Report.....	53
5.4.4 Testing Error Submittal Notification Report .....	56
5.5 Deleting Test Files .....	59
5.6 Sample Files z/OS LE Version 3.1 .....	59
<b>Chapter 6: The Database Extract File .....</b>	<b>61</b>
6.1 Business Rules .....	61
6.2 Record Types .....	62
6.2.1 Header Record .....	62
6.2.2 Detail Records .....	63
6.2.3 Past Period Change Records .....	64
6.3 File Standards .....	64
6.4 Field Standards .....	65
6.5 Updating Identifier Data .....	66
6.5.1 Loan and Student Identifiers .....	66
6.5.2 The Identifier Change Process .....	67

---

6.5.3 Updating Identifiers on Multiple Records .....	70
6.6 Updating Non-Identifier Data .....	71
6.6.1 What NSLDS Does .....	71
6.6.2 What You Do .....	77
6.7 Copy Your Database Extract File to the Extract Directory .....	83
<b>Chapter 7: Extract Validation.....</b>	<b>84</b>
7.1 What Happens in Extract Validation? .....	84
7.2 DataPrep Error Path .....	86
7.3 File-Level Edits .....	86
7.3.1 Domain-Level Edits .....	87
7.4 Running Extract Validation on a PC .....	87
7.4.1 Output .....	91
7.4.2 Using the Extract Validation Log Report .....	91
7.5 Running Extract Validation on a z/OS LE Version 3.1 or Higher Mainframe .....	96
<b>Chapter 8: Sending and Receiving Files.....</b>	<b>97</b>
8.1 Sending the Submittal File .....	97
8.1.1 Submittal Schedule .....	97
8.1.2 Submittal File Format .....	98
8.1.3 Submitting by Student Aid Internet Gateway .....	99
8.2 Receiving Files .....	99
8.2.1 Receiving Files by Student Aid Internet Gateway .....	99
<b>Chapter 9: The NSLDS Load Process .....</b>	<b>101</b>
9.1 File-Level Edits .....	104
9.2 Domain-Level Edits .....	104
9.3 Record-Level Edits .....	105
9.3.1 Duplicates .....	105
9.3.2 Reasonability Edits .....	105



---

9.4 Load-Level Edits .....	106
9.4.1 Identifier Edits .....	106
9.4.2 OPEID Edits .....	108
9.4.3 Validate Codes .....	108
9.4.4 Date Sequence Edits .....	108
<b>Chapter 10: Generating Reports on Windows-Based PCs .....</b>	<b>110</b>
10.1 The Extract Validation Log Report .....	111
10.2 Error Reports .....	114
10.2.1 Error Files .....	114
10.2.2 Generating Summary Error Reports .....	115
10.2.3 Generating Detail Error Reports .....	117
10.3 Loan Detail Reports .....	121
10.3.1 Loan Detail Files .....	122
10.3.2 Generating Loan Detail Reports .....	122
10.4 The Error Submittal Summary Notification Report .....	126
10.4.1 The Error Submittal Summary Notification File .....	126
10.4.2 Generating the Error Submittal Summary Notification Report .....	127
10.5 Selection Criteria .....	129
10.5.1 Adding Selection Criteria .....	130
10.5.2 Editing Selection Criteria .....	133
10.5.3 Deleting Selection Criteria .....	134
10.5.4 Adding Variable Selection Criteria .....	134
10.5.5 Selection Criteria Comparisons Syntax .....	136
10.6 Sort Options .....	139
10.6.1 Editing a Sort Option .....	143
10.6.2 Deleting a Sort Option .....	144
10.6.3 Sort Parameter Positions' Syntax .....	144
<b>Chapter 11: Generating Reports on z/OS LE Version 3.1 or Higher Mainframes .....</b>	<b>146</b>

---

---

11.1 Extract Error Report .....	146
11.1.1 Summary Report Sorting .....	146
11.1.2 Detail Report Sorting .....	147
11.1.3 Load Process Error Report .....	148
<b>Chapter 12: Using Reports .....</b>	<b>149</b>
12.1 Extract Validation Log Report .....	149
12.2 Error Reports .....	149
12.2.1 Summary Error Reports .....	149
12.2.2 Detail Error Reports .....	150
12.3 Loan Detail Reports .....	153
12.4 Error Submittal Summary Notification Report .....	153
12.5 Error Types .....	154
12.5.1 File-Level Errors .....	154
12.5.2 Domain-Level Errors .....	154
12.5.3 Record-Level Errors .....	156
12.5.4 Load-Level Errors .....	158
<b>Chapter 13: Reporting Reminders .....</b>	<b>161</b>
13.1 Enrollment Information .....	161
13.2 School Mergers and Closures .....	161
13.3 Loan Transfer Information .....	162
13.4 Ending Perkins Participation .....	163
<b>Chapter 14: Final Thoughts .....</b>	<b>165</b>

**Appendix A: Federal Perkins Loans Data Dictionary**

**Appendix B: Federal Perkins Loan Program Code and Error Tables**

**Appendix D: Federal Perkins Loans Load Error File (Record Layouts)**

**Appendix E: Federal Perkins Loans TEF File Layout**

**Appendix F: Error Submittal Summary Notification File**

**Appendix G: DataPrep JCL for z/OS**

**Appendix H: Glossary of Terms**

**Appendix I: Technical Updates**

**Appendix J: NSLDS Perkins Report**

## Chapter 1: Introduction

Schools participating in the Federal Perkins Loan Program are required to report detailed loan information to the National Student Loan Data System (NSLDS). This operating manual explains Federal Perkins Loan reporting requirements and the processes used to add or update Federal Perkins loans on NSLDS. It explains how to use the new NSLDS DataPrep software and is for the use of data providers (schools and their servicers) with administrative responsibility for the Federal Perkins Loan Program.

### 1.1 About This Manual

This manual is intended to assist users with the data provider portion of the NSLDS update process, as well as provide basic information about the entire process.

To make the instruction manual easy to follow, we have used the following icons to identify key points:



This icon indicates a definition or explanation that you will need to keep in mind throughout the discussion.



This icon indicates a special note, suggestion, or comment that will assist you in running DataPrep or in providing insight into the NSLDS update process.



This icon indicates a warning of which you should take special note.



**Dear Colleague Letter  
April 1995  
CB-95-5 (LD)**

All schools in the Title IV aid programs are required to participate with NSLDS. Schools with active Perkins Loans (including National Direct Student Loans, National Defense Student Loans, and Income Contingent Loans) are required to provide updated data to NSLDS once a month on a schedule established by ED.

### 1.2 What Is NSLDS?

NSLDS supports the U.S. Department of Education (ED) in a variety of operational and research functions meant to improve the administration and delivery of student aid through Title IV aid programs. Specifically, the three main goals of NSLDS are to:

1. Improve the quality and accessibility of student aid data.
2. Reduce the burden of administering Title IV aid.

3. Minimize abuse within the aid programs through accurate tracking of funds appropriated to assist the postsecondary students for whom the programs were designed.

NSLDS is a national database of recipients, enrollment, loan, grant, and overpayment information on student aid disbursed under Title IV of the Higher Education Act of 1965, as amended (the Act). Data in NSLDS are provided by schools, guaranty agencies, and ED agencies. The data include information about the following:

- The Federal Family Education Loan Program (FFELP)
- The Federal Direct Loan Program (FDLP)
- Federal Perkins loans (including National Direct Student Loans, National Defense Student Loans, and Income Contingent Loans)
- Federal Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOGs), Academic Competitiveness Grants (ACGs), and National Science and Mathematics Access to Retain Talent (SMART) grants
- Overpayments from the Federal Pell Grants, FSEOGs, ACGs, National SMART grants, Iraq/Afghanistan Service Grants (IASG) and Federal Perkins Loan programs
- Demographic and enrollment data on Title IV recipients

### 1.2.1 NSLDS Functions

NSLDS performs the following administration functions:

- **Aid Overpayment**—The [NSLDS Professional Access](#) Web site Aid Overpayment function allows data providers to update NSLDS when a student owes or repays an overpayment on a Pell, ACG, National SMART, TEACH Grant, FSEOG, IASG, or Perkins loan. This function also facilitates the reporting of fraud by schools and DMCS. Adding of an active overpayment triggers a message that borrowers are ineligible for aid.
- **Audit Support**—Audits and risk assessments are supported by a combination of audit logs, audit reports, Web and database queries.
- **Cohort Default Rate (CDR) Calculations**—NSLDS calculates draft and official default rates for schools participating in FFELP and FDLP, lenders/lender servicers, and GAs. NSLDS stores the numerator, denominator, and backup detail, and processes appeal rates. The cohort default rates are made available to each

organization through the [NSLDS Professional Access](#) Web site. The school rates are made available to schools through the electronic CDR (eCDR) process. NSLDS determines eligibility for sanctions or benefits based on CDRs, and sends letters to schools on behalf of the Default Management Division (DMD), notifying schools of their sanction or benefit status.

- **Credit Reform Act Support**—The Credit Reform Act and related OMB circulars require the Department to identify loans by loan program, cohort year, and risk category. NSLDS is the Department’s only source of this loan-level data. NSLDS makes available the data the Department’s Budget Services requires for this purpose.
- **College Scorecard**—NSLDS annually calculates data by school for the College Scorecard’s Loan Repayment Rate, Completion Rate, Median Debt Amounts, and completion cohorts for Earnings Data retrieval from the Department of the Treasury. After each calculation, College Scorecard Calculation data is sent to the College Scorecard Website and the Department of Treasury Statistics of Income Division (SOI).
- **Customer Support**—NSLDS personnel from the Customer Support Center (CSC), Business Operations Support (BOS), Data Integrity Group (DIG), and Quality Assurance (QA) document, research, negotiate, and resolve NSLDS data conflicts, as well as assist data providers with data submissions and NSLDS users with all web functionality.
- **Enrollment Reporting**—NSLDS generates and sends Enrollment Reporting Rosters to schools. Schools or their servicers (often the National Student Clearinghouse) can respond to the reports by batch submission (via SAIG or spreadsheet upload submittal) or by entering data online. NSLDS then updates its database to reflect any changes in student enrollment status or program enrollment data and forwards enrollment status change data to the loan-holding community. Statistics for the percentage of students certified and the percentage of students certified with program enrollment data are also available on the NSLDS Web site.
- **Exit Counseling**—Exit Counseling data, for Loans and TEACH Grants, is collected by NSLDS and reported to GAs, Federal Loan Servicers, and schools.
- **Financial Aid History (FAH) Information**—NSLDS generates FAH information and forwards a subset of a borrower’s history to CPS as part of the

prescreening/ISIR process. NSLDS also generates a borrower's entire FAH, consisting of borrower-level flags/indicators, aggregate loan amounts, loan, grant and overpayment details, outside the prescreening process in response to ad hoc FAH requests from schools. These requests can be made online or by SAIG batch submittal, and are part of Transfer Student Monitoring. GAs can make FAH requests by SAIG batch submittal and the data response(s) are restricted to borrowers with whom they hold or held a loan. The FAH information they receive contains only borrower and loan data. No grant information is included in the FAH for GAs.

- **Income Driven Repayment (IDR) Information**—NSLDS processes and stores information about electronic applications for IDR programs reported by COD, Federal Loan Servicers, and participating FFEL lenders and lender servicers. This information is used to create summary-level report extracts about IDR applications and programs which are available for download by authorized users on the [NSLDS Professional Access](#) Web site.
- **Loan Purchase Program (PUT)**—NSLDS matches FFELP records that have been purchased by ED and are now reported from a Federal Loan Servicer. NSLDS applies the servicers' loan identifier to the record to facilitate continued reporting and updating by the servicer. NSLDS also provides online match resolution options to allow the servicer to indicate loans for which they now have reporting responsibility but was not updated based on data provided from the servicer.
- **Online Loan Update**—NSLDS allows approved GAs, federal loan servicers, and designated ED users to update their agency's loan data via the Web. This instantaneous update feature helps to reduce the turnaround time for problem resolution and error corrections.
- **Postscreening for Title IV Aid Eligibility**—For each award year, NSLDS postscreens Title IV aid applicants to identify those whose eligibility status has changed since the time of their original, or most recent SAR/ISIR, aid application. The process screens for default, overpayment, and fraud convictions, as well as loan eligibility criteria.
- **Prescreening for Title IV Aid Eligibility**—NSLDS prescreens all Free Application for Federal Student Aid (FAFSA) applicants for Title IV Aid, or when other criteria is met subsequent SAR/ISIR transactions, to identify those applicants who go into/out of default on an existing Title IV loan; who owe/paid overpayments on Pell, ACG, National SMART Grants, TEACH Grants, FSEOGs, IASG, or Perkins loans;

or who have come close, exceeded or resolved aggregate loan limits, or other changes in aid that impact a borrower's eligibility.

- **Reaffirmation Information**—NSLDS processes, stores and displays reaffirmation information reported by FFELP lender/lender servicers and Federal Loan Servicers (FLS) on the [NSLDS Professional Access](#) Web site. This information is used by schools when considering the awarding of additional Title IV aid. In additions, the NSLDS postscreening process monitors and provides notification of reaffirmation changes to CPS for inclusion on the ISIR. **Note:** Reporting reaffirmation data to NSLDS is required of our federal loan servicers and optional for FFEL Program lenders and lender servicers.
- **Real Time Data Inquiries**—NSLDS maintains Real Time Interfaces with requesting entities so that NSLDS can provide the information needed by these entities to support their business processes.
- **Repayment (Notional) Information**—NSLDS provides schools summary and detail student repayment data for informational purposes.
- **Security Control**—ED and Contractor User IDs, and the access these IDs have to NSLDS resources, are maintained by the Systems Security Officer (SSO)/Alternate via the [NSLDS Professional Access](#) Web site.
- **Security Monitoring**—NSLDS provides monitoring tools that an organization's PDPA and FSA can use to ensure that users are compliant with the NSLDS rules of access. NSLDS systematically monitors and provides e-mail notifications to PDPAs so they are alerted and can take the appropriate and necessary actions. NSLDS provides an ad hoc Adobe PDF reporting capability to help monitor user activities, as well as reports delivered via SAIG mailboxes.
- **Subsidy Override**—NSLDS allows approved ED users to override the Actual Subsidized Usage Period values and the Subsidy Status values determined by NSLDS for award origination records. This instantaneous update feature helps to reduce the turnaround time for problem resolution and error corrections.
- **Transfer Student Monitoring (TSM)**—NSLDS receives school profile and transferring student information via [NSLDS Professional Access](#) Web site pages and/or SAIG batch submissions. NSLDS monitors each of these students for specific changes in loan and Pell, ACG, National SMART, and TEACH Grant status. NSLDS reports these changes to schools via Web pages or SAIG batch files. TSM alert e-mails are provided to the designated TSM point of contact. NSLDS



Customer Support and authorized FSA Program Compliance personnel have access to view a school's [NSLDS Professional Access](#) Web site TSM pages to provide support and oversight.

- **Web Inquiries**—NSLDS provides the [NSLDS Professional Access](#) Web site for schools, state grant agencies, eligible and approved GAs, Federal Loan Servicers, lenders and lender servicers, students, and ED and its contractors to view NSLDS data. Depending on user access, the Web site also provides a list of ad hoc or scheduled reports that can be requested to receive organization-specific data from NSLDS.

NSLDS performs the following operations support functions:

- **Assessment of FFELP, FDLF, and Other Program Administration**—NSLDS supplies data used in short- or long-term studies aimed at determining the effectiveness of particular loan program practices.
- **Audit and Program Review Planning**—NSLDS supplies auditors and program reviewers with data on specific organizations and on key indicators used to schedule audits and program reviews for maximum effectiveness. ED's contractor supports various security audits.
- **Budget Analysis and Development**—NSLDS data on loan program performance are used to support assumptions for estimating the long-term budgets for FSA programs. These data are also used to answer budget-related questions and to support "what-if" analyses.
- **Freedom of Information Act (FOIA) requests**—NSLDS completes FOIA requests when they meet established guidelines.
- **Loan Participation Program (LPP)**—NSLDS contains data regarding Custodian and Sponsor lending organizations that are part of the ECASLA enacted funding process that allows participation interest agreements with ED. NSLDS links loans on NSLDS with the Custodian or Sponsor records received from FMS.
- **Loan Transfer Tracking**—NSLDS preserves historical data on loan holders and loan sales dates used to understand secondary market activity, identify potential problems with loan program participants, assist borrowers in locating lenders or GAs associated with their loans, and assessing the administration and billing practices of Title IV loan programs.

- **Monitoring GA and Lender Financial Reporting for Reasonability**—NSLDS supplies ED personnel with the detailed-level information needed to assess the reasonability of financial reporting from GAs and lenders based on changes in loan portfolios, loan status, loan balance information, and other loan details. NSLDS performs monthly and annual reasonability calculations for GAs.
- **Payment Support of Account Maintenance Fees (AMFs) to GAs**—NSLDS provides data about Outstanding Principal Balance (OPB) on open loans that support AMF payments by FMS. With the change to supporting origination of only Direct Loans, the LPIF is no longer calculated for GAs.
- **Research Studies and Policy Development**—NSLDS supports long-term research studies and short-term policy development by providing ED with current detailed and aggregated loan, grant, and student data.

In addition to these specific operational support functions, NSLDS performs the following general activities:

- Generates statistically valid extracts of the production database.
- Incorporates and supports data standardization.
- Interfaces with Government-provided telecommunications links.
- Maintains a training database.
- Maintains demographic data on recipients and institutions.
- Maintains organization contact information for ED Regions, the federal loan servicers, schools, GAs, Lenders, Lender Branch servicers, and state agencies.
- Meets data currency requirements.
- Meets performance and response standards.
- Monitors user access and provides FSA with data of users that fall outside of acceptable usage parameters.
- Preserves data security and confidentiality as required under the Privacy Act of 1974, as amended.
- Provides output in formats that support executive information systems.
- Provides subject matter experts (SMEs) to interface with the user community and to provide input for new functionality.
- Provides support for Web site access.

- Receives and processes new, changed, and removed user information from Participation Management.
- Supports prevention and resolution of errors.

### 1.2.2 Origination of NSLDS Data

As a comprehensive repository of Title IV recipients and their loans, Pell Grants, overpayments, and enrollment information, NSLDS receives data from many sources (some external and some internal to ED) and makes it available to approved users for a variety of purposes authorized by the Act. The principal sources of NSLDS data are the following:

- **Guaranty Agencies** provide loan data on FFELP loans from loan origination until the loan is paid in full. Some of the information guaranty agencies provide, such as loan balances, is received from lenders who report on loans through their guaranty agencies. Guaranty agencies submit their data monthly and daily through online updates.
- **Schools (or their servicers)** provide enrollment data via the Enrollment Reporting process.
- **Schools (or their servicers)** that participate in the Federal Perkins Loan Program provide monthly updates of loans.
- **Federal Loan Servicers** (FLS) provide NSLDS with New Loan Updates and Updates to existing Loans.
- The **Debt Management and Collections System** (DMCS) provides data weekly on loans and overpayments assigned to ED and on lenders and lender servicers.
- The **Postsecondary Education Participants System** (PEPS) provides daily data on schools.
- The **Central Processing System** (CPS) provides quarterly demographic data on students in the NSLDS database.
- The **Common Origination and Disbursement** (COD) provides daily updates on all Federal grant payments to students.

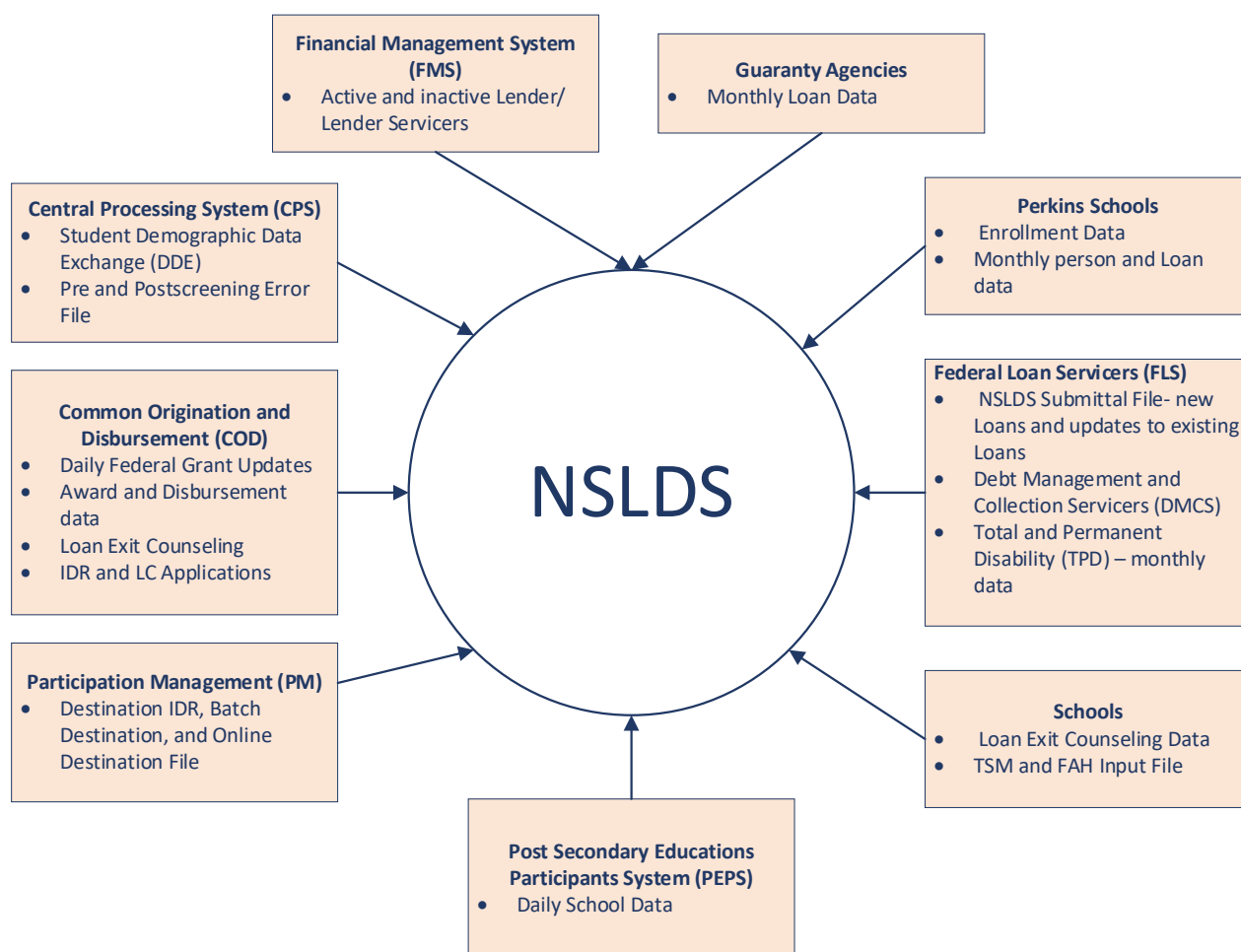


Figure 1-1: Inflow of NSLDS Information

### 1.2.3 NSLDS Users

NSLDS users include personnel from ED, other Federal agencies, guaranty agencies, lenders, schools, and independent researchers.

NSLDS provides its users with Internet access and batch processing. The system's products are designed to provide efficient access to NSLDS data for a variety of user levels and purposes. See Figure 1-2: for the flow of data from NSLDS to various users.

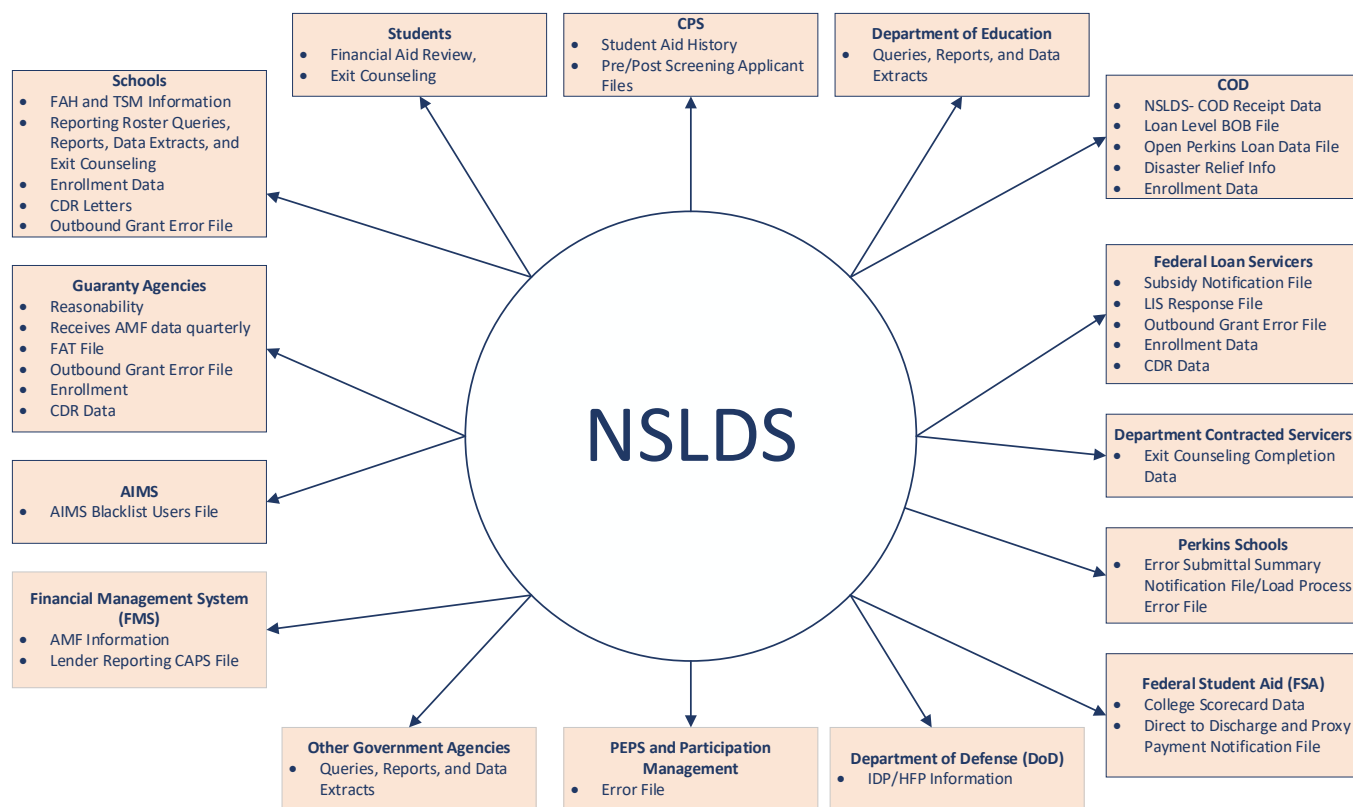


Figure 1-2: Outflow of NSLDS Information

## 1.3 Getting Help

The NSLDS Customer Support Center (CSC) is available to answer your questions. The CSC offers comprehensive assistance on all aspects of using the DataPrep software, from step-by-step installation questions to receiving error reports. The CSC can help you identify and correct Extract problems resulting from file- and domain-level edits, or NSLDS update problems resulting from record-level and load-level errors. The CSC will address your Perkins data provider set-up and scheduling questions and will distribute your school's yearly data provider load schedule each November.

In addition, the CSC can help:

- Identify other data providers to resolve identifier conflicts.
- Clarify Data Provider Instructions.
- Schedule initial and ongoing data loads.
- Troubleshoot problems with DataPrep.
- Discuss submittal requirements.

- Explain specific error codes.
- Review your submittal schedule.

When you call the CSC, you may be asked to provide specific information, including:

- Your Office of Postsecondary Education Identification (OPEID) 8-digit code and school name and phone number
- Whether you are using the mainframe or Windows-based version of the software
  - The Version/Release number and release date of the DataPrep software you are using
- The nature of the problem
- The part of the process you were working with at the time the problem occurred
- Whether you have been able to duplicate the problem, and if so, what the conditions were at the time
- Error messages or other indicators of the source of the problem.



### **Customer Support Center**

Contact the CSC at 800-999-8219 between 8 a.m. and 8 p.m. Eastern time, weekdays, excluding Federal holidays. Customer Support personnel will log your call, issue a confirmation number, answer questions, and if possible, resolve problems immediately. If the problem requires further research, Customer Support will estimate when you can expect a return call.

## Chapter 2: Data Provider Responsibilities

Data providers must provide information to NSLDS on Federal Perkins loans; and they must regularly report on new loans and changes to existing loans. These reports must be submitted on an ongoing basis and on a regular schedule established between the data provider and ED.

Data providers must:

- Meet all NSLDS reporting requirements, as detailed in this operating manual.
- Report all Federal Perkins loans that were open or closed on or after October 1, 1989.
- Report new loans or updates to existing loans monthly on a schedule established by NSLDS. Data reported must be current and not extracted earlier than shown on the established schedule for the data provider.
- Create a Database Extract file meeting the specifications contained in Appendix A. Data providers are responsible for coding and testing their software, as needed, to properly format the Database Extract file.
- Use NSLDS-provided DataPrep software to perform Extract Validation and create a Submittal file.
- Transmit the Submittal file to NSLDS on ED-provided software and SAIG network, in accordance with their established schedule.
- Retrieve the Load Process Error file for each submittal. Data providers must review errors and correct as many as possible before the next submittal. Data providers are responsible for the accuracy of their data, as well as for the timely reporting of loan data to NSLDS.
- Retrieve any Error Submittal Summary Notification files sent by NSLDS. Data providers are responsible for taking action to remedy file-level errors or missed submissions identified by such files.
- Work with other data providers—including guaranty agencies, Federal Loan Servicers, the Debt Management Collection System (DMCS), and the Common Origination & Disbursement (COD) System—to resolve identifier conflicts



### Schools and Servicers

The term “schools” in this document includes both schools and their servicers. Together, schools and servicers are referred to as “data providers.”

- Receive and process reconciliation files provided by NSLDS. Reconciliation of loan data between NSLDS and the school's system of record can be done voluntarily upon request from the school or mandated by ED if it determines reconciliation is necessary to meet data quality standards. This process can help identify and resolve error conditions within your database. Reconciliation should be done every 6 months. This file can be requested on the NSLDS Professional Access Web site <https://nslidsfap.ed.gov>. See Appendix J for more information regarding this report.

In summary, data provider data must meet NSLDS reporting requirements and quality standards. All data submitted to NSLDS must be as complete and correct as possible. Schools that fail to meet their NSLDS reporting requirements are subject to the limitation, suspension, and termination regulatory provisions.

## 2.1 Data Privacy

NSLDS data are subject to the protections of the Privacy Act of 1974, as amended. Maintaining the security and confidentiality of the personal data supplied by those applying for and receiving loans is of paramount concern to NSLDS. Both NSLDS and its data providers are responsible for preserving the security of any NSLDS data in their possession.

You must be constantly vigilant in assuring the security of data being prepared for, sent to, and received from NSLDS. You must also protect student loan data against intentional or inadvertent disclosure or destruction. You should label sensitive materials—such as data, software documentation, operation manuals, and handbooks—as such and store them in a secured location. Failure to follow these steps can lead to personal liability under the Privacy Act.



### Privacy of Data

All NSLDS data are subject to the protections of the Privacy Act of 1974, as amended. Failure to preserve its confidentiality can lead to personal liability under that act.

## 2.2 Data Accuracy and Timeliness

For NSLDS to meet the needs of its user community, the submissions it receives from data providers must be timely, complete, and accurate. To ensure the best data quality, NSLDS monitors submissions in two ways:

1. **Submittal Tracking**—NSLDS monitors late and missed submittals on a continuing basis.



**2. Error Tracking**—NSLDS calculates the percentage of records in a submittal that are in error and maintains a record of all errors until the error condition is resolved. Error rates are monitored on a regular basis to ensure data accuracy.

The error rate is calculated by dividing the number of loan records with errors by the total number of records extracted. If a record contains more than one error, the system still only counts it as a single record with errors when calculating the error rate. Thus, the total number of errors will not necessarily equal the number of records with errors.

Data providers falling short of expectations in either of these areas are subject to the limitation, suspension, and termination regulations of ED. Errors can occur on the file-level, domain-level, record-level, or load-level. While error rates are calculated on the number of loan records with errors, as explained above, all errors, regardless of the level in which they occurred, need to be corrected and records re-submitted to NSLDS. Common load level errors include identifier errors (For Example, SSN doesn't match a Perkins loan on NSLDS but other fields, Identifiers don't match NSLDS for a record

previously reported or the student as supplied isn't found on NSLDS). The errors must be reviewed, the student's identifiers corrected in the database from which the extract file was created, the record re-extracted and submitted to NSLDS before the error is considered closed.



**Calculating the Error Rate:**

The error rate uses the number of records that contain errors, not the total number of errors. (There can be more than one error in a record.)

**Example:**

If there are 25 errors in total, but those errors appear in only 19 records out of 456 records extracted, the calculated error rate is

$$19/456 = 4.2\%$$

A very common file-level error occurs when the school code in the header is different than the school code provided in the loan detail records. This error frequently occurs when a school has merged into another school and the records from the merged school are applied to the current file without updating the Code for Current School field. This error is identified by DataPrep, before the file is ever sent to NSLDS for processing. Code for Current School- Field Code #286 for each loan record from the merger must be updated in the database from which the extract file was created, the record re-extracted and re-processed by the DataPrep software to be made ready for submission to NSLDS. For schools utilizing a third-party servicer, it is ultimately the **school's responsibility** to ensure that its required reporting to NSLDS (which includes Perkins loan account detail) is completed timely and accurately. This responsibility extends to resolving any errors in the file, regardless of which level of editing they occur. For more information regarding

error checking, file validation and error resolution, see Chapter 9: The NSLDS Load Process.

## Chapter 3: The Update Process

The NSLDS update process is comprised of six steps:

**1. Data Providers Create a Database Extract File**— You create a copy of your loan portfolio in a format specified by NSLDS. This copy, called the Database Extract file, includes all open loans and all loans closed on or after October 1, 1989, formatted according to the guidelines established in Appendixes A and C.

### 2. Data Providers Run the Extract Validation

**Process Using DataPrep**—You run the Database Extract file through the NSLDS DataPrep Extract Validation process to check for file-level and domain-level errors. If there are file-level errors (such as an incorrect header or a school code for any record that does not match the header record school code), the process stops.

If the rate of domain-level errors (such as a nonnumeric character in a numeric field, an invalid date, a missing identifier, or a missing new identifier) is above a specified threshold, the process also stops and the complete Database Extract file is rejected. You must correct the error(s) before proceeding.

If there are no file-level errors, and if the number of domain-level errors is within the acceptable threshold levels tolerances, DataPrep creates a new file called the Submittal file.

**3. Data Providers Perform Error Report Generations**—Using the Extract Error file produced by DataPrep, you generate Extract Error reports (both a summary and detail report are available) and use this information to make all necessary file-level



#### Warning: Data Provider Responsibility

Data providers are responsible for submitting data to NSLDS using the edit rules, format, and processing flow specified by ED. Caution should be exercised when using specifications or software applications developed by other organizations or vendors. Regardless of whether third-party software or procedures are used, data providers remain responsible for the accuracy of their data and for using procedures approved by ED. Schools and Third-Party Servicers are jointly and severally responsible for compliance.

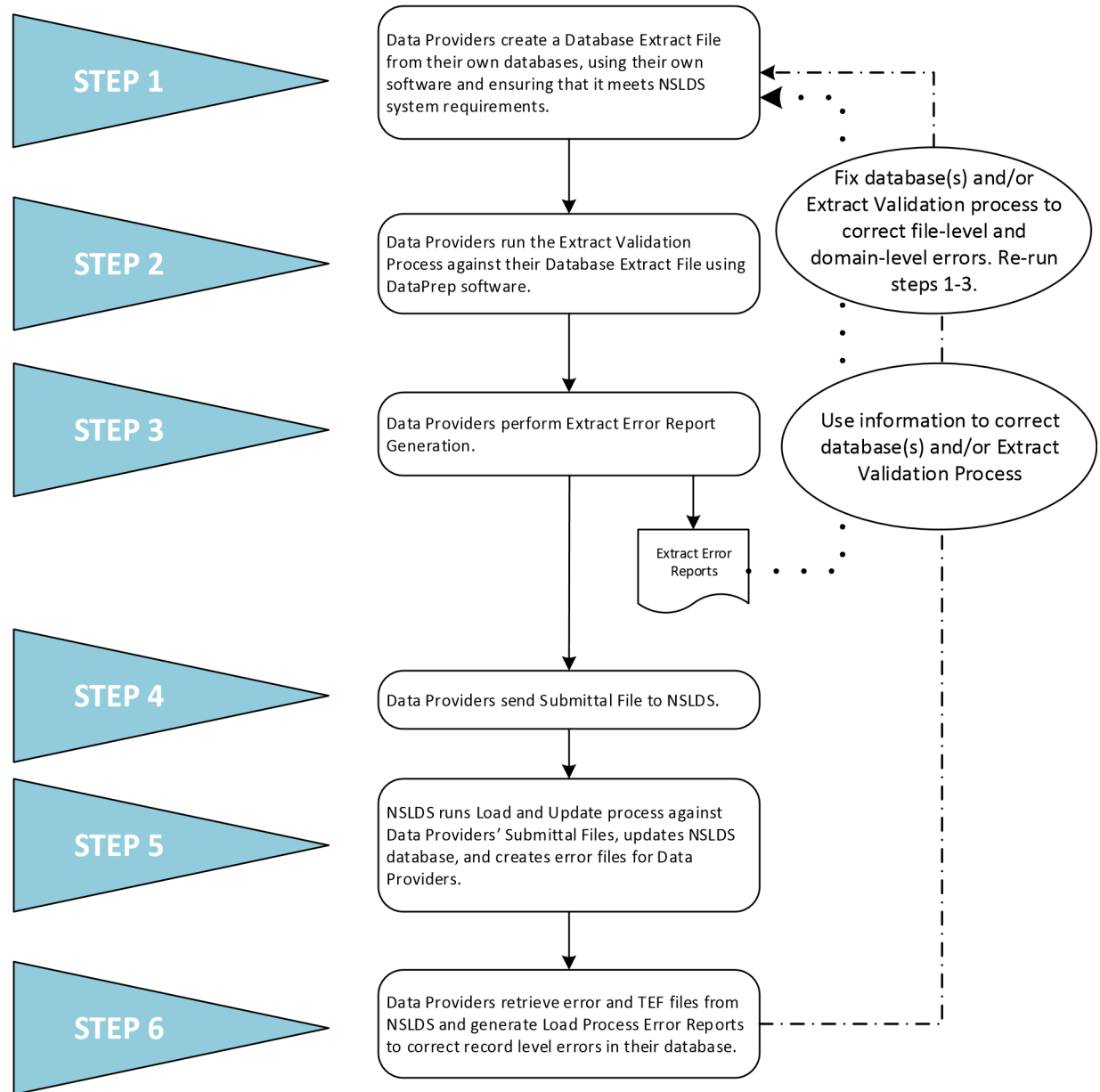
and domain-level changes to your database and/or extract process. You can also use the Extract Validation Log report to perform a test of reasonability—a review of the data comparing the current data with previous submittals to look for the numbers of records processed and loan amount totals.

If you make corrections, you then start again at step 1 by recreating the Database Extract file, running the Extract Validation process, and running Extract Error report.

- 4. Data Providers Send or Transmit the Submittal File**—Once a Submittal file has been successfully created (after all file-level errors are corrected and after the number of domain-level errors is below the specified thresholds), you transmit the data to NSLDS via the Student Aid Internet Gateway (SAIG).
- 5. NSLDS Runs the Load and Update Process**—NSLDS receives your Submittal file and runs file-level edits on it. If the file passes all file-level edits, NSLDS then checks each loan record for domain-, record-, and load-level errors. Loan records that pass all edits are matched against records already existing in the NSLDS database. Depending on the outcome of that match, NSLDS either creates new student or loan records, or updates existing records. Loan records that fail one or more edits are added to the Load Process Error file NSLDS returns to you after loading your data.
- 6. Data Providers Retrieve Error Files and Generate Load Process Error Reports**—If your Submittal file passes all file-level edits and is loaded onto NSLDS, NSLDS sends you, within 48 hours, a Load Process Error file containing all the domain-, record-, and load-level errors detected during the Load process. You then use DataPrep to generate Load Process Error reports (both summary and detail reports are available), which will help you make corrections to your database and resolve data conflicts prior to your next monthly extract.

If you fail to send NSLDS a Submittal file at the scheduled time, or if the file you send is not loaded because of file-level edits, NSLDS sends you, within 48 hours, an Error Submittal Summary Notification file notifying you that your file was not received or was not loaded. In this case, NSLDS does not send you a Load Process Error file or Threshold Error File (TEF) file.

Viewed as a linear sequence, the six-step update process looks like this:



Note: On regular intervals (roughly every 90 days), NSLDS posts the TEF files for Data Providers, and the Data Prep software, to FSADownload.

Figure 3-1: Data Provider Six-Step Process

Viewed as an ongoing or cyclical process, the update process can also be illustrated in the following way, with the shaded boxes representing school or data provider responsibility and the darkened boxes representing operations handled by DataPrep.

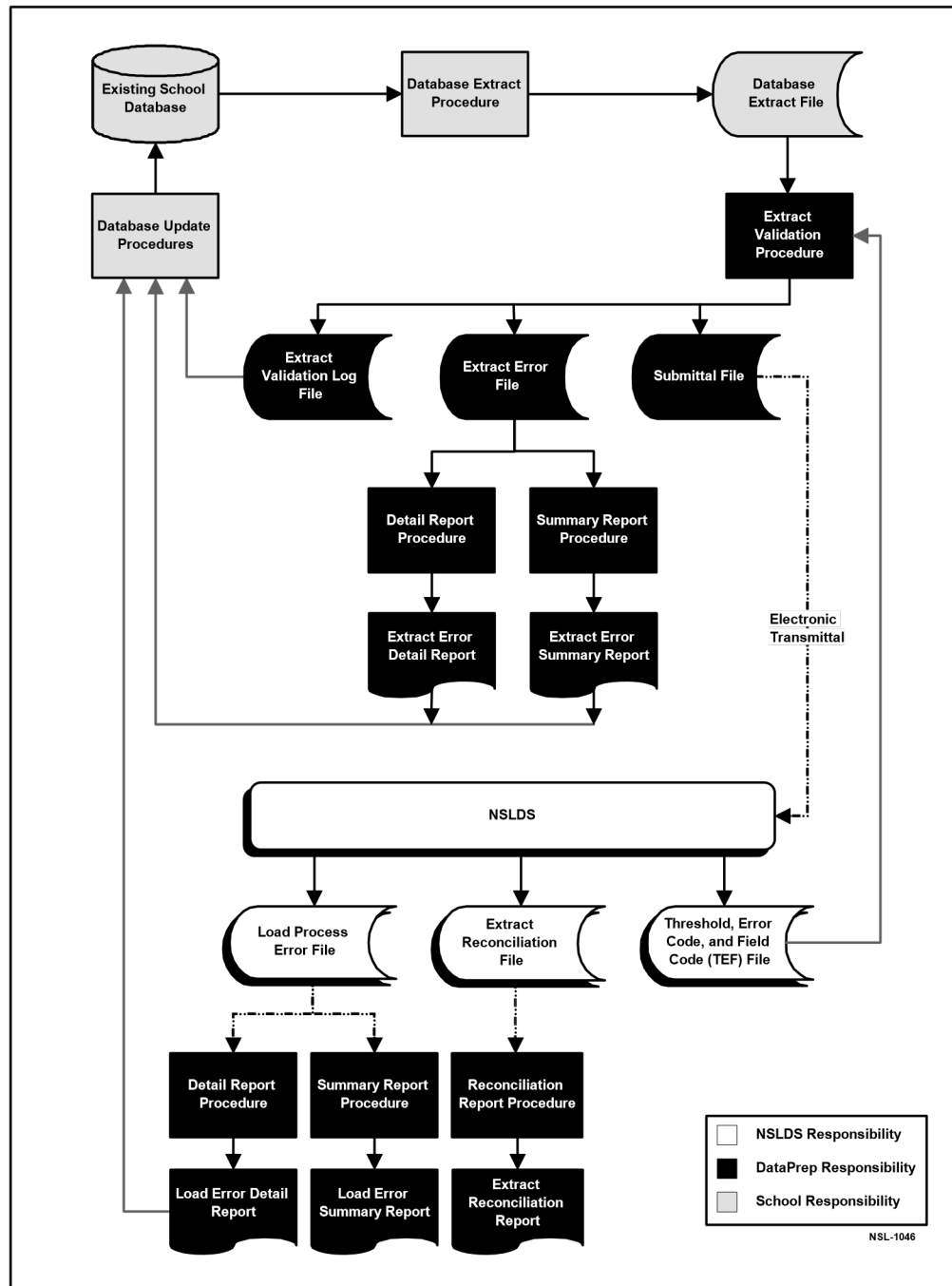


Figure 3-2: DataPrep Processing Flow for Extract Validation and Error Report Generation

### 3.1 Files Used in the NSLDS Update Process

The following files are created or updated in the update process:

- **Database Extract File (extract.ff)**—This is the formatted Database Extract file you create from your loan database. It includes Header and Detail records and can include Past Period Change (PPC) records to correct certain kinds of reporting errors in previous cycles. This file is the input to the Extract Validation process.
- **Submittal File (submit.ff)**—This file is created by DataPrep software if there are no file-level errors and the number of domain-level errors in the Database Extract file is below the acceptable threshold levels. The Submittal file contains all current records and all PPC records. You transmit this file to NSLDS via the SAIG message class of SHSLDSIN, where it becomes input to the Load Process. This file can contain four record types: Header, Detail, Past Period Change, and Trailer. The Trailer record is added by DataPrep.
- **Extract Error File (extrerr.ff)**—This file is an output from the Extract Validation process. It contains an error record for each domain error listing the field in which the error occurred, the value and description of the error. The contents of this file can either be viewed on-screen or printed.
- **Error Submittal Summary Notification File (shsntfop.ff)**— This file is sent over SAIG from NSLDS in the message class of SHSNTFOP which informs you that your Submittal file was not loaded onto the NSLDS database, either because it was not received by NSLDS or because it contained file-level errors. In the latter case, it



You can determine the naming conventions for files used and created exclusively at your own site. Windows users cannot alter the names used by DataPrep; otherwise, the program will not work properly.

We strongly recommend that mainframe users use the suggested file names provided by DataPrep and used in the sample Job Control Language (JCL) in Appendix G.

identifies the errors that prevented the Submittal file from being loaded.

- **Load Process Error File (loaderr.ff)**— This file is sent over the SAIG from NSLDS in the message class of SLDERROP and is an output of the load process. It contains an error record for each domain, record, and load-level error that failed NSLDS load edits. It identifies errors detected during the Load process and also contains header and trailer records. The contents of this file can either be viewed on-screen or printed.
- **Threshold, Error Code, and Field Code (TEF) File (TEF.ff)**— This Perkins threshold file is available for download on FSADownload (<https://fsadownload.ed.gov>) and needs to be placed in the software's proper folder prior to running DataPrep.

Figure 3-3: shows the edit process, some of the problems that can arise during that process, and possible solutions.

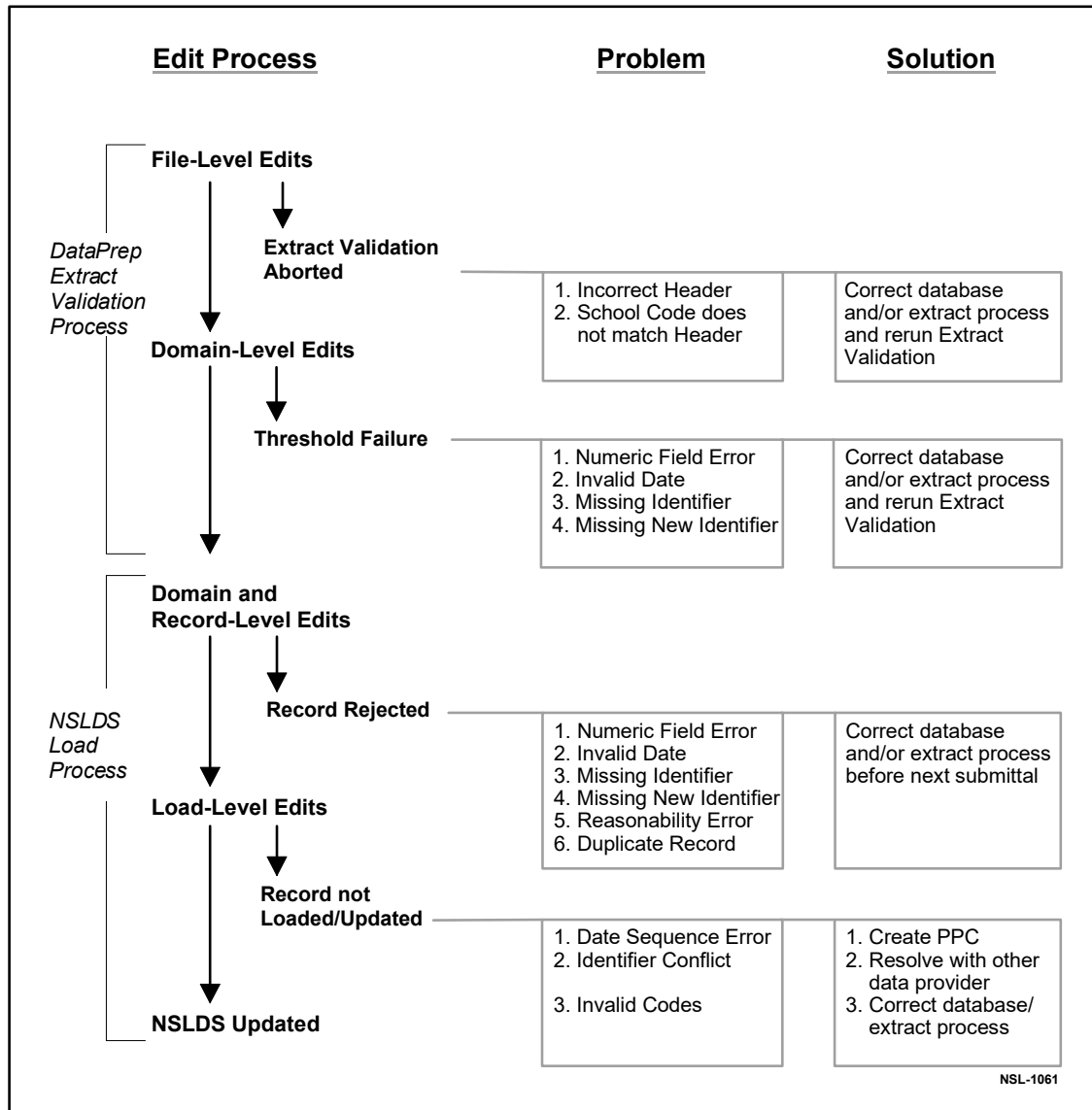


Figure 3-3: NSLDS Edit Process

### 3.1.1 Loans Closed Prior to October 1, 1989

If you currently extract loans that were closed before October 1, 1989, stop extracting such loans. A new edit will reject any loan closed before October 1, 1989. You can prevent these rejects by not extracting such loans.



### **3.1.2 Report Outstanding Principal Balances Monthly**

The Date of Outstanding Principal Balance reflects the date of the most recent change in the principal balance. The Outstanding Principal Balance may change due to a disbursement, loan payment, or cancellation. Since you submit all loans in your database every month, the requirement to update Outstanding Principal Balance on a quarterly basis is eliminated. Instead, you must update the dollar amount and the date of the Outstanding Principal Balance using the current remaining amount and the date of the most recent change in Outstanding Principal Balance. If you have been reporting the last day of the month as the Date of Outstanding Principal Balance regardless of when the balance changed, you must modify your extract procedure to provide the actual day when the balance changed.

### **3.1.3 Reporting Outstanding Principal Balances That Are Less Than \$1**

If a loan is reported with an open loan status, it must have a positive Outstanding Principal Balance. If the loan has a balance of less than \$1, but not zero, you should report the Outstanding Principal Balance as \$1. If the loan is being maintained in an open status because of a negative balance on the account (that is, a credit balance), you should also report a balance of \$1 until the loan is closed.

Should there be remaining fees owed after the outstanding principal balance reaches \$0 and the loan is reported as closed, these fees may be reported in the Outstanding Principal Balance field, and the loan re-opened with an open loan status.

### **3.1.4 Data Provider Loan ID**

You can track a loan through the NSLDS process using your own unique Data Provider Loan ID if you so choose. The last field in the Detail record is available to allow you to insert a unique loan ID that will be carried through the update process and returned on the error records in the Load Process Error file. The use of this new field is optional.

## **Chapter 4: System Requirements**

This manual is written for data providers who use the ED-provided DataPrep software to prepare data for submission to NSLDS from either a mainframe (z/OS LE Version 3.1 or higher) batch environment or a Windows-based personal computer (PC). Data providers, who use other platforms or who want to develop their own software, should

contact ED for more information. Software developed by data providers must meet the standards established in this manual.

To run the DataPrep software and submit your data, the minimum system requirements are either:

- An IBM/IBM-compatible mainframe running the z/OS LE, Version 3.1 or higher operating system and an appropriate sort utility, or
- An IBM-compatible personal computer with at least a 200 MHz Pentium processor, 64 Mb of available memory, and 8 Mb of hard disk space to store the program and work files, with additional hard disk space to store data files and backups. For optimal viewing of reports, you may have to set your monitor's resolution to 1024 x 768 pixels. The new version of Perkins DataPrep is fully compatible with Windows 2000 and newer. For more information about ED system requirements, see Perkins Technical Update, PK-2004-01 (January 2004).

**z/OS LE Runtime Library**

If you are running the z/OS LE environment, your LE Runtime Library must be in your standard system program library concatenation.

## 4.1 Estimating Required Disk Space

You will need approximately 8 Mb of disk space to store the PC DataPrep software and its associated test data files. This is the minimum disk space required and does not include storage space for your data files. You should also allow enough space in which to sort work files.

**Enough Disk Space?**

Database Extract files can be quite large. So it is very important that you evaluate whether your computer has enough disk space to store both the DataPrep software and the data files it processes.

Estimate your space requirements by adding the following:

Database Extract files	$N * 300 \text{ bytes} * Y$
Submittal Files	$[(N * 300 \text{ bytes}) + (PPC * 300 \text{ bytes})] * Y$
Extract Error Files	$X * 300 \text{ bytes} * Y$

Extract Error Reports	$X * 132 \text{ bytes} * Z * 1.1$
Load Process Error Files	$X * 300 \text{ bytes} * Y$
Load Process Error Reports	$X * 132 \text{ bytes} * Z * 1.1$
Threshold Error File	32,000 bytes
Loan Detail File	$N * 300 \text{ bytes} * Y$
Loan Detail Reports	$N * 132 \text{ bytes} * Z * 1.1$

(Equals) \_\_\_\_\_ bytes of space required

Where:

N	=	Number of records extracted from your database
X	=	Estimated number of errors
PPC	=	Estimated number of PPC records
Y	=	Number of backup files created and stored
Z	=	Number of reports generated

All the mainframe examples in this document assume use of a Direct Access Storage Device (DASD).

## 4.2 Setting Up Perkins Batch Services with NSLDS

All data providers submit to NSLDS through the SAIG. CPS/SAIG Technical Support is responsible for managing mailbox and batch services assigned by school's Primary Destination Point Administrator (PDPA) online at [FSAWebenroll.ed.gov](https://FSAWebenroll.ed.gov). You can obtain user documentation for the SAIG interface at [FSADownload](#) or by calling 800-330-5947 for questions on enrolling for NSLDS services.

### Contact Information

Contact SAIG Technical Support to set up a SAIG mailbox and batch services: 800-330-5947

## 4.3 Obtaining a Submittal Schedule

NSLDS will assign a submittal schedule to you each year, usually in November. You can check your schedule or create a new schedule at any time by selecting the Perkins Enrollment Notification Profile link on the School page of the [NSLDS Professional Access Website](#).

It is ultimately the ***school's responsibility*** to ensure that its required reporting to NSLDS (which includes Perkins loan account detail) is completed timely and accurately. Schools that use a third-party servicer must ensure that its servicer complies with timely and accurate reporting. Schools are responsible for any non-compliance by the servicer, whether it be in timely submissions, or data quality.

For more information, or to obtain a copy of the submittal schedule, contact the NSLDS Customer Support Center at 800-999-8219.



### Submittal Schedules on the Web

You can check your submittal schedule at any time on the School page of the NSLDS Professional Access Web site (<https://nslsdfap.ed.gov>).

## 4.4 Initial Population

The first-time transfer of information from schools or data providers to NSLDS is called the initial population. In addition to current loan data, the initial population also includes data for loans that are closed. See Appendix A for detailed information about what data to include in an initial population Database Extract file.

Except for the addition of closed loan data and a slight difference in data reporting requirements, the process for an initial population submission is the same as the one you follow for subsequent updates.

**Saving Generations**

We recommend that you plan on saving at least two generations of all your files and reports.

## 4.5 File Protection and Backups

Files are subject to corruption, especially during transmission. Therefore, we recommend that you keep backups of at least your last two Database Extract files and Submittal files in case errors occur during transmission of the Submittal file or during the Load process.

While we recommend a minimum of two generations, the sample JCL for z/OS LE Version 3.1 environments provided in Appendix G allows for four generations of backups. Mainframe operators who use the sample JCL provided in Appendix G will find that a backup of the Submittal file, named NSLDS.SUBMIT.BKUP, is created automatically by the software.

## 4.6 Using Servicers

While your school remains responsible for the timely and accurate submission of its data to NSLDS, you can choose to work with a servicer or third-party (including a centralized collection office for a multi-campus school) to process and submit all of your loan-level records to NSLDS.

If you use a servicer, you must consider and incorporate into your reporting procedures the following:

- **Coordinating Any Changes to Identifiers—**

Whenever an identifier changes, you must submit the new identifier on every loan affected by the change. This must be done through the servicer.

- **Transferring Records From School to Servicer or Third Party—**The organization reporting on a loan must report all attributes for that specific loan. If the responsibility for reporting on a specific loan is transferred from one party to another, all the data for that loan must be transferred. The receiving party must then

**Institutional Responsibility**

Because systems and procedures vary significantly from one institution to another, each school is responsible for determining how it will meet the NSLDS reporting requirements

continue to report all required attributes on that loan even though there may not be updates to a specific attribute.

For example, when a school transfers a loan to a servicer, the school must transfer all the data for that loan, including the student's enrollment status at the time the loan was first disbursed. Although the servicer may not update this attribute, the servicer must include it as part of the loan record that it extracts and submits to NSLDS. All data fields in the NSLDS extract should be transferred.

- **Changing Servicers**—If a school changes servicers, it must carefully coordinate with both the current and new servicers to ensure that all data are properly transferred. Regardless of any change in servicer, the school is expected to transmit the Submittal file within 90 days from the date the new servicer becomes responsible for servicing the loans. ED has determined that servicers should transfer portfolios using the same file layout as a Submittal file to NSLDS. The same data should be extracted and prepared as would be for a Submittal file. The Database Extract file thus created should be sent to the new servicer, who in turn should use the Submittal file to populate its database so it can provide the proper student and loan identifiers to NSLDS.

It is ultimately the **school's responsibility** to ensure that its required reporting to NSLDS (which includes Perkins loan account detail) is completed timely and accurately. Schools are ultimately responsible for any non-compliance by the servicer. Schools that use a third-party servicer must communicate the reporting requirements to its third-party servicer and ensure that its servicer complies with timely and accurate reporting.

## 4.7 Multiple Schools or School Branches

Servicers that report data for multiple schools, or schools that report data for multiple branches with separate OPEIDs (Code for Original School), must submit a single file to NSLDS containing data for all the schools or branches being reported. The NSLDS DataPrep software has been developed to process a Database Extract file containing multiple OPEIDs.

If you report data for multiple schools or branches, you must concatenate their data records into one single file for processing through DataPrep. The resulting file should be structured to



### Numbers of Schools or Branches

There is no limit on the number of school or branch data sets that can be appended together in a single Database Extract file.

contain a Header record, all Detail records, and all PPC records for the first school or branch, then the same sequence (Header record, Detail records, Past Period

Change records) for each additional school or branch in turn. The file structure is illustrated in the box at right.

Once you have created the combined Database Extract file, you can process it just like a file containing a single school's data using the DataPrep software.

Note: You should not insert trailer records for individual schools or branches because DataPrep will do so for you during the Extract Validation process.

**Multiple School/Branch  
File Structure**

School 1 Header Record  
School 1 Detail Records  
School 2 Header Record  
School 2 Detail Records  
School 3 Header Record  
School 3 Detail Records  
And so on.

## Chapter 5: Download, Setup, Utilities, and Testing

After you have made sure that you meet the system requirements for Perkins DataPrep Version 4.0 you are ready to download Perkins DataPrep, set up its utilities, and run test files designed both to test whether you have setup DataPrep properly and to familiarize yourself with how DataPrep works.

### 5.1 Download

Perkins DataPrep is specifically designed to be downloaded from the FSADownload web site, to run on PCs running Windows 2000 operating systems or later. The PC must also run Java 1.6 version build or later.

1. Create a folder in a secure location which will be used as the location for all Perkins DataPrep files. We strongly recommend that you use the default path C:\dataprep\.
2. Open an internet browser.
3. In the Address field, enter the following URL:  
<https://fsadownload.ed.gov>
4. Click on Software and Associated Documents.
5. Scroll down to find Perkins DataPrep Version 4.0 and click on the link
6. On the Perkins DataPrep page, in the Software area, click **Full Download**, to start the download.
7. Once the download has started, Click Save As and identify the location where you would like the software to be stored. We urge you NOT to rename the software, or it's extension, as this may affect the software's ability to function properly.



#### Having Trouble with your Internet Browser?

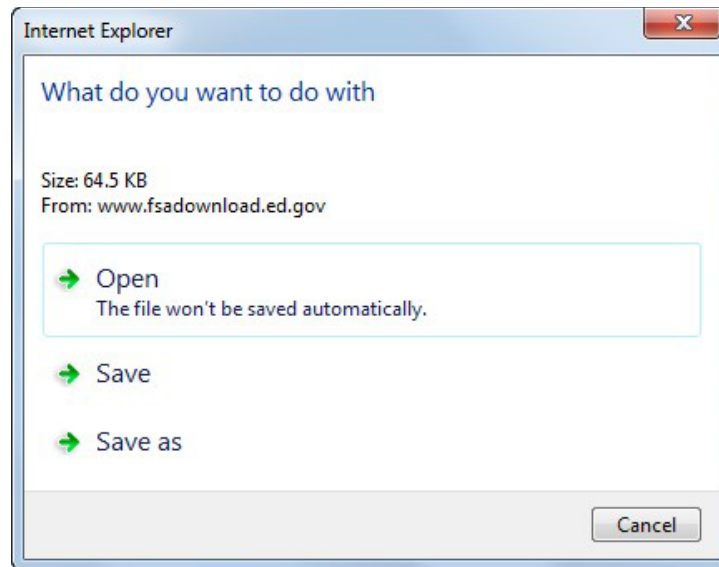
"If your PC setup does not allow you to download the Perkins DataPrep software of TEF file using IE, please utilize the Chrome web browser"



#### Determine version of Java on the PC

Go to your Windows Control Panel, navigate to find and select the Java icon. After launching, click the About button to display the Java versions.





Select the directory created in Step 1. Click Save to download the file to the directory.

NSLDS has made Sample files with fictitious data available for download on FSADownload.ed.gov. Should you want to practice with this data, proceed with downloading and saving the following files for use with DataPrep:

- Sample Files Folder (c:\dataprep\samples) – should contain 4 files:
  - Two Database Extract files (**extract-fail.ff** and **extract pass.ff**),
  - A Load Process Error file (**loaderr.ff**).
  - An Error Submittal Notification Summary file (shsntfop.ff)
  - A Threshold, Error Code and Field Code (TEF) file (TEF.ff)

The Sample files are to be used to practice using the new software, and to become proficient without having to use your own live data. Once you are comfortable with your level of understanding of the software, you will no longer use these files.

You are now ready to complete the software setup.

## 5.2 Software Setup

Several steps must be completed prior to the first usage of the DataPrep software. These steps include:

- Creating or locating the DataPrep directories on your computer.
- Identify the Directories in DataPrep

- Familiarizing yourself with the software's terminology
- Run a sample files

### 5.2.1 Directory Setup

When you start PC DataPrep for the first time, you will need to select/create where the Directories for the work files used by DataPrep are located. It is essential that you supply the paths to where your working files are in fact going to be located, or DataPrep will be unable to find your data. It will be helpful for you to become familiar with your organizations directory paths (e.g. send/receive directories for EDconnect) when transmitting your data to/from NSLDS via SAIG.

These are the folders where DataPrep working files are stored:

- **Temp**—the location of your temporary sort work files (\*.tmp)
- **Extract**—the location of your Database Extract file (extract.ff)
- **Current**—the location of the TEF file (TEF.ff) and all DataPrep output files (\*.ff)
- **Loan** – the location of the Loan Detail file obtained by special arrangement (loandtl.ff)



#### Directories and Folders

The terms “directory” and “folder” refer to the same object but viewed from different perspectives. Both refer to a place where files are stored. That place is a *directory* when it is viewed from the point of view of a computer or network's total file structure. The *directory path* is the route a program takes through that file structure to find an individual file. A *folder* is the visual representation of the directory as an individual icon (as in a desktop shortcut) or within My Computer or Windows Explorer.

If no directories for DataPrep exist on your computer, DataPrep V4 will prompt for missing folders and create them when the user selects “yes”.

All directories necessary to utilize DataPrep have now been created.

If you have designated other folders for use with DataPrep, perhaps from previous versions of the software, you can use these folders rather than the above identified folder names. To use previously created folders, you can Browse and Select them once the software has been opened on your computer.

## 5.2.2 Directory Selection

Now that the directories have been created, you will need to set the Directories within the DataPrep software for the work files. Locate the place where the software is stored and click on it. The software will automatically open and you are ready to continue with the directory setup. To set the Directories, click on Options and select Directories from the menu.

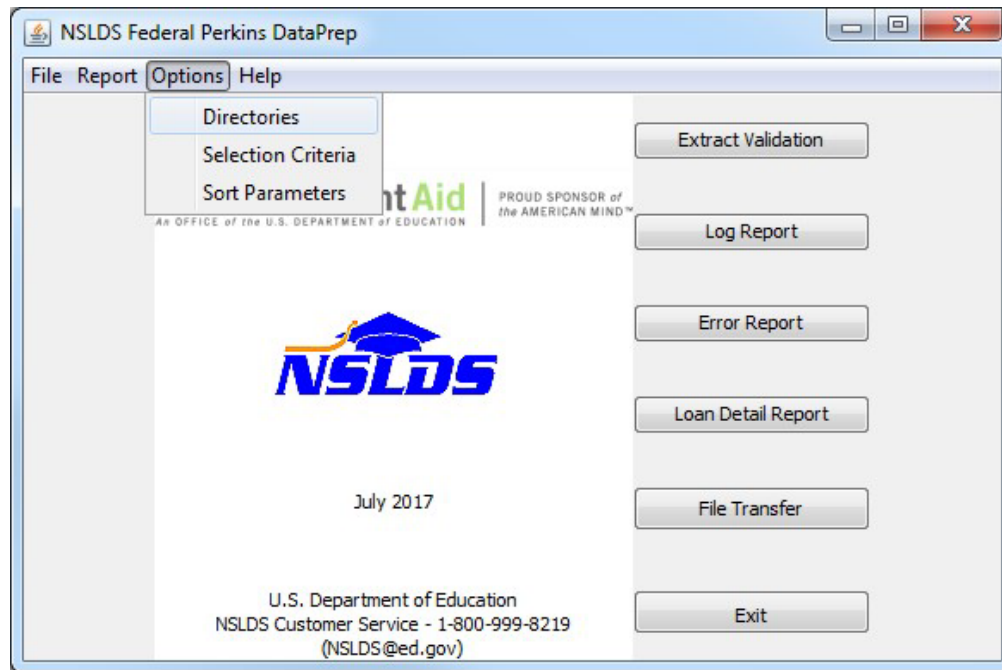


Figure 5-1: Select Directories

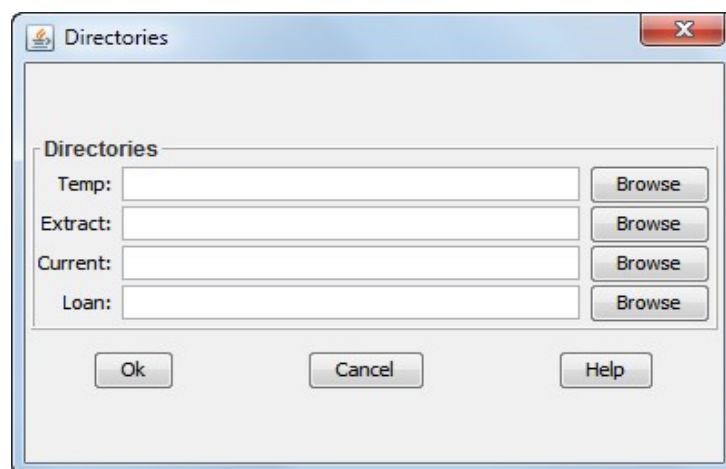
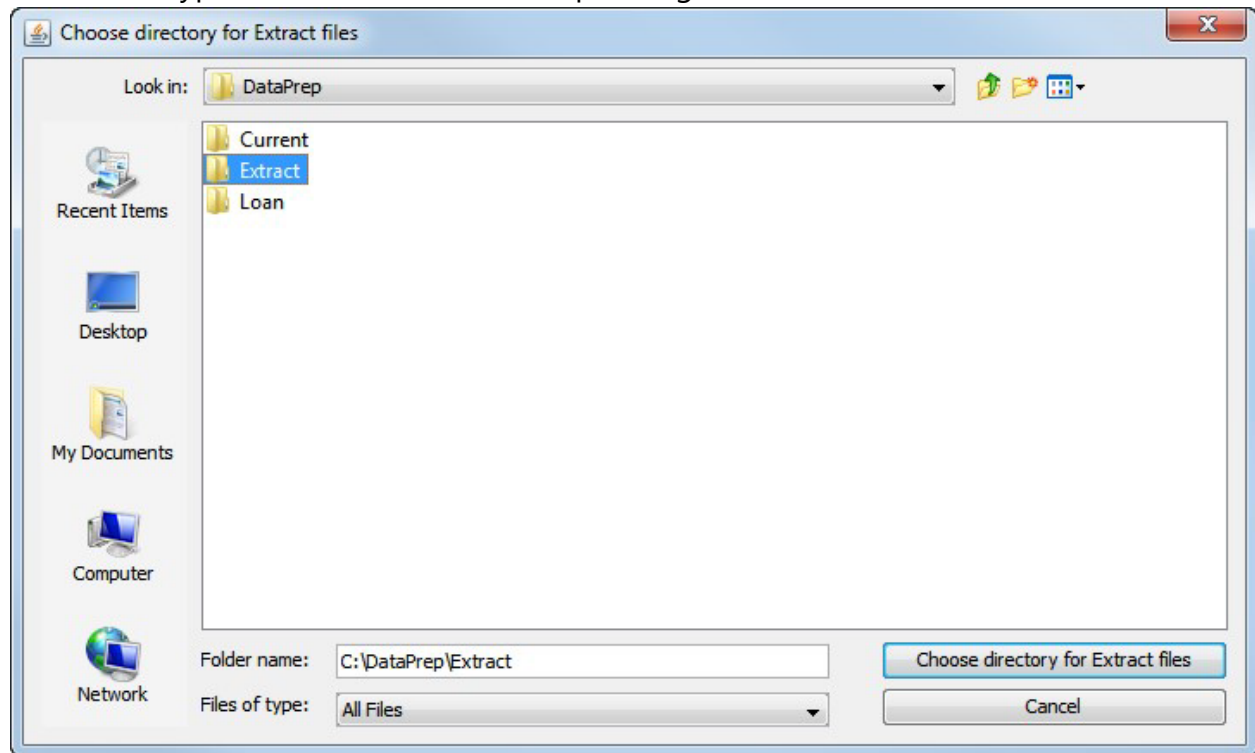


Figure 5-2: File Directories Box - Incomplete

When Browsing for a file, click Browse and locate the directory on your computer or network. The dialog box at the top of the Browse window will indicate which directory you are attempting to select. Note: the “temp” directory is a folder you designate where DataPrep uses for sorting files and is typically designated as C:\temp and can be Browsed or typed in like the other corresponding directories.



*Figure 5-3: File Directories Browse*

Click Choose directory for Extract files to populate the Directories box with that selection and continue to complete the remainder of the Directories entries.

When you are satisfied with the directory paths listed in the Directories dialog box, click OK.

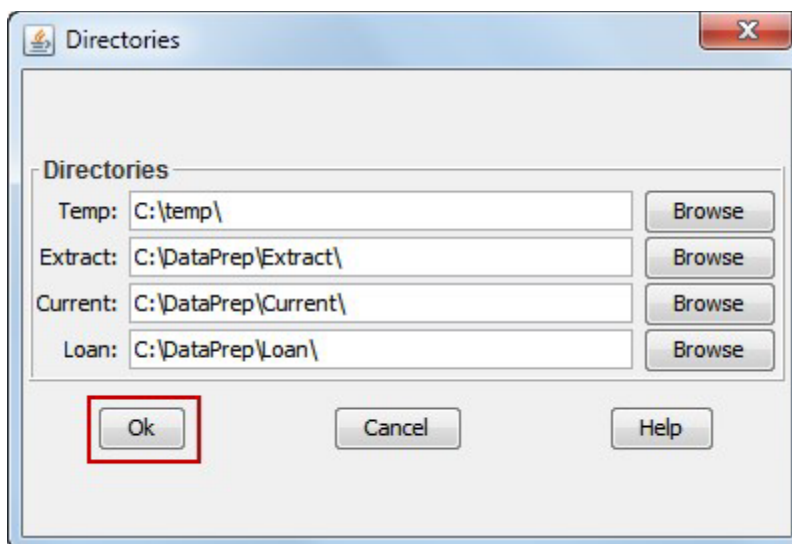


Figure 5-4: File Directories Box – Complete

### 5.2.3 Installing DataPrep on a z/OS LE Version 3.1 or Higher Mainframe

To install DataPrep on your mainframe, you must first install the Installation JCL that appears in Step 1 of Appendix G. This Installation JCL is not included on the tape that contains the rest of DataPrep for z/OS LE Version 3.1, so you must create your own copy. Your site will probably have a JCL file for executing IEBCOPY that closely resembles the Installation JCL. To create the Installation JCL, make a copy of the IEBCOPY JCL and modify it so it contains the same file names as the Installation JCL in Step 1 of Appendix G.

Run the Installation JCL once to unload the Unload JCL that appears in Step 2 of Appendix G from the DataPrep tape. Then run the Unload JCL once to unload and install the actual libraries and software that will allow you to run DataPrep. If you need to run the Unload JCL again to reinstall DataPrep, be aware that step PSTEP005 will delete all data sets previously created.



#### **z/OS LE, Version 2.4 or Higher**

For DataPrep to work on your mainframe, you must be running z/OS LE, Version 3.1 or higher.

Note: By installing DataPrep JCL for z/OS LE Version 3.1, you will be creating data set names on your system. The second and last node in all data set names created by DataPrep contain identifying information (Version/Release/Levelset Date) meant to track which release of DataPrep you are using. **We strongly recommend that you retain this naming convention.**

The Unload JCL can be referenced from the library created by the Installation JCL with CUTTAPE as part of the name. The library member name is UNLOAD.

## 5.3 Options and Utilities

### 5.3.1 Changing Directory Paths

If at some time after the initial software setup you decide to change the directory path for any of DataPrep's working files, follow these steps:

1. From the DataPrep Main Menu, click Options and then Directories.

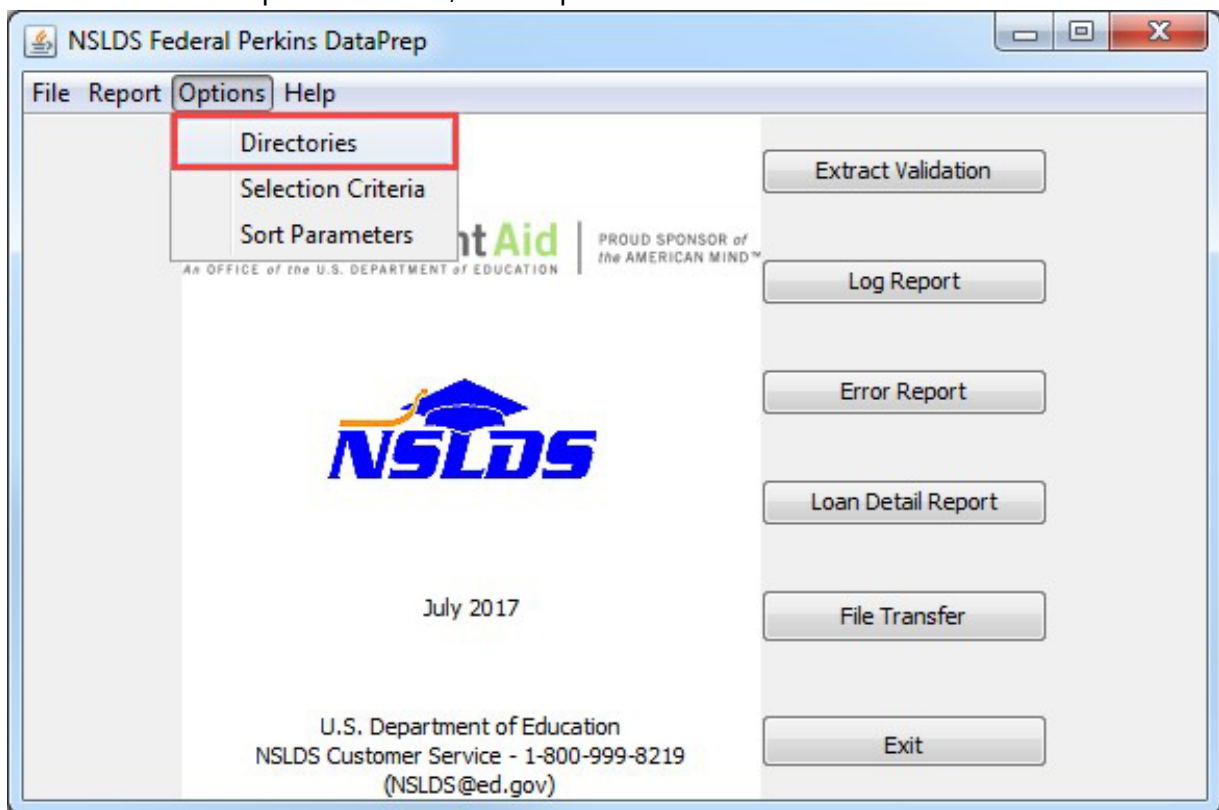


Figure 5-5: DataPrep Main Menu with Directories Selected on the Options Menu

2. The Directories dialog box appears.

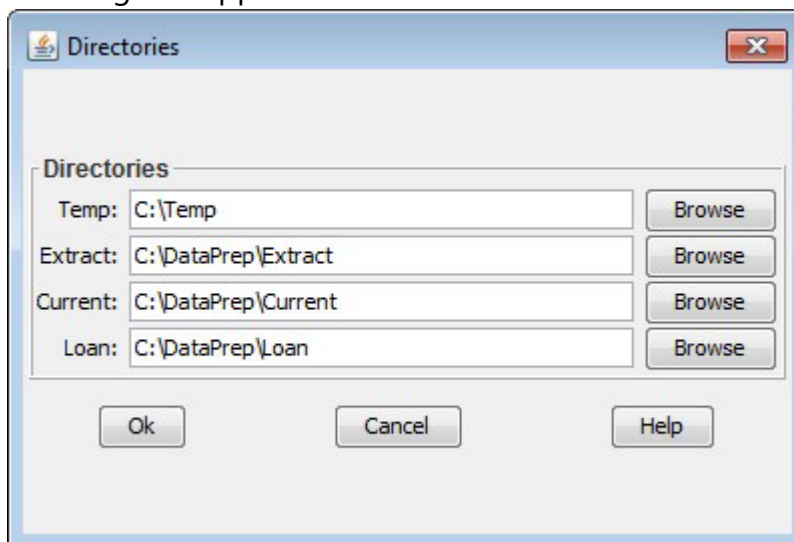


Figure 5-6: Directories Dialog Box

3. Select new directory paths in one of two ways:

A. Type the new path into the text box.

Note: When manually entering in the drive & directory (path), the software will prompt for creation if the path\folder doesn't exist.

B. Press the Browse button to the right of the text box and use the Select File Directory dialog box that appears to select the new path.

4. Click OK to save your changes.

Note: If you change the directory path for your Current folder, you must use Windows Explorer or My Computer to copy the following files from your old Current directory to your new Current directory:

- ERRDTL.sel
- ERRDTL.srt
- ERRDTL.var
- LOANDTL.sel
- LOANDTL.srt
- LOANDTL.var
- TEF.ff



#### Copy Your Sort Files

If you use the Directories dialog box to change the directory path for your Current folder after you have installed DataPrep, you must be sure to copy the files containing sort parameters from your old Current directory to your new Current directory. Those files have names that end with the following suffixes:

- .sel
- .srt
- .var

**Copy Your Sort Files**

If you fail to copy these files to your new Current directory, DataPrep will be unable to sort your detailed Extract Error report or Load Process Error report.

In addition, you may wish to copy any additional files that you wish to retain.

**5.3.2 DataPrep Viewer**

DataPrep allows you to generate a series of reports as you move through the NSLDS update process. When you download DataPrep, it automatically establishes its own builtin viewer for reports. This viewer was designed to display and print reports in the correct format, and we recommend that you become familiar with its features.

Likewise, when you print reports from the DataPrep viewer, it automatically formats them so they look on the page much as they do on screen, and so the individual rows of the report are not broken across two or more lines of print.

The DataPrep viewer includes the following features, which are deployed down the right side of your screen when it displays:

- A drop-down zoom box—You can also zoom in by left clicking on the text of the report, or zoom out by right clicking on it.
- A button that centers the report on the screen.
- A spin box that allows you to navigate through the report one page at a time.
- Fast-forward and rewind buttons that allow you to move directly to the first or last page of the report.
- A Print Current Page button.
- A Print button.
- An Exit button.
- A Help button.



### 5.3.3 File Transfer

DataPrep's File Transfer utility allows you to import specific files associated with DataPrep and the NSLDS update process. You can import the following files sent to you by NSLDS via the Student Aid Internet Gateway (SAIG):

- Load Process Error File (Message Class SLDERROP)
- Loan Detail File (Message Class SCHRECOP)
- Error Submittal Summary Notification File (Message Class SHSNTFOP)

Note: To import the latest Thresholds, Error Codes and Field Codes File, go to <https://fsadownload.ed.gov>, download and save locally the Perkins Threshold, Error Code and Field Code (TEF).

When you import a file, the File Transfer utility copies (or moves) it to the folder defined in the directories setup for files of that type and renames it so DataPrep will recognize it.

To import a file using the File Transfer utility, follow these steps:

1. From the DataPrep Main Menu, click File Transfer. The File Transfer dialog box appears.

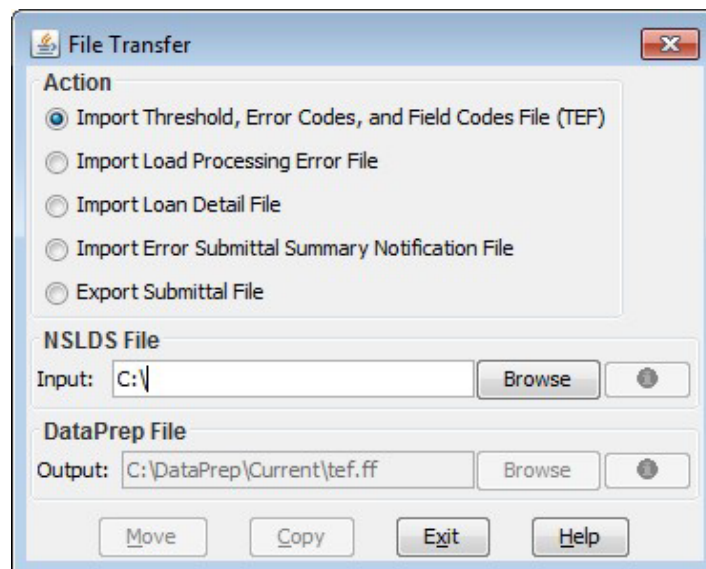


Figure 5-7: Initial File Transfer Dialog Box for File Import



#### Message Class Input and Output Files

Regardless of what file name you insert in the input screen, DataPrep will change the output name so DataPrep can recognize the file. The TEF file downloaded from FSADownload will be renamed as TEF.ff.

2. Select the action you want to perform. DataPrep displays the default directory path for files of that type as the DataPrep File Output (Figure 5-7:). You cannot change this default path. However, if you are importing an NSLDS Loan Detail file (Section 10.3.1), DataPrep does give you the option of assigning it a version name.
3. Press the Browse button to the right of the NSLDS File Input box to display the Open dialog box. It will display with the File of type option at the bottom of the dialog box set to the kind of file you seek.

For example, the first time you select Import Thresholds, Error Codes and Field Codes File as an action and click browse, you should see a dialog box similar to the one in Figure 5-8: Notice that the File of type option to display the downloaded TEF File (All Files).

**Browsing for Files**

When you browse for files, make sure that the Files of type option is set to the file type you seek to All Files (\*.\*)).

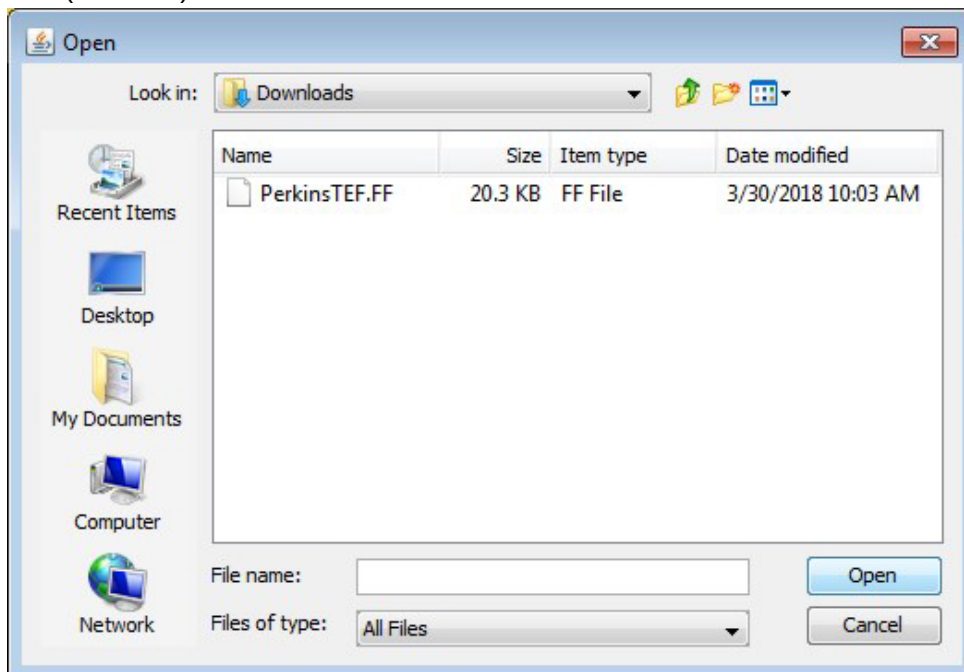


Figure 5-8: Initial Select NSLDS File Dialog Box for TEF File

4. Use the appropriate navigation methods and files of type option to locate the folder

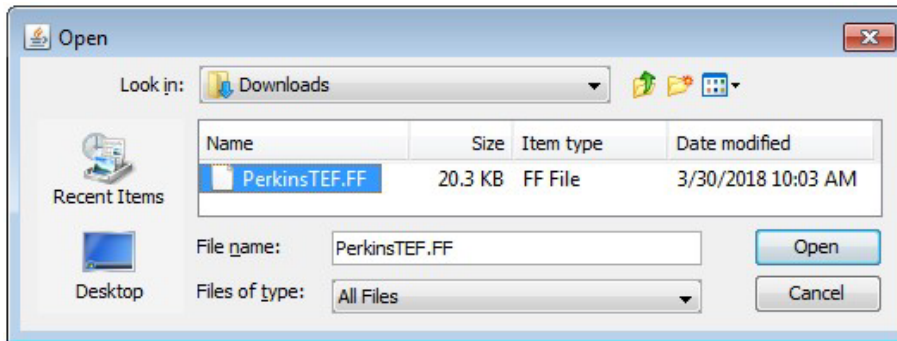


Figure 5-9: Final Select NSLDS File Dialog Box for TEF File

5. Select the file you want to import. Whatever file you select will be displayed as the default NSLDS File Input option the that contains the NSLDS file you want to import. next time you import the same type of file. Click Open to return to the File Transfer dialog box.



#### Where to Look

These instructions assume that when you receive files from NSLDS via SAIG, they are saved to the transmission software's directory named C:\IAM\DATA. If you store them elsewhere, you will need to adjust accordingly.

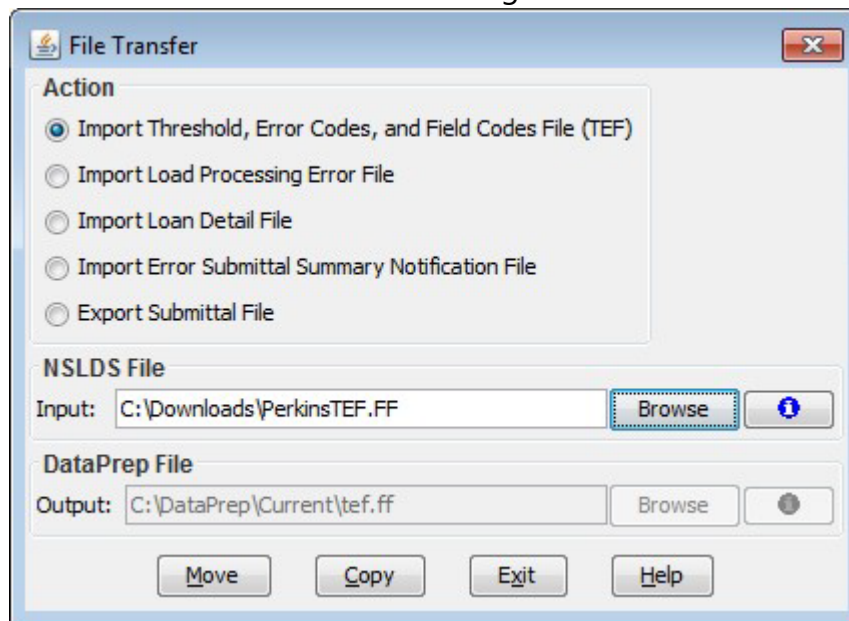


Figure 5-10: Final File Transfer Dialog Box for File Import

6. Clicking on the blue plus signs to the right of the Browse buttons for the NSLDS File Input and DataPrep File Output boxes displays a File Information message box you can use to check that you are transferring the right file and that it is more recent than any file it might replace.

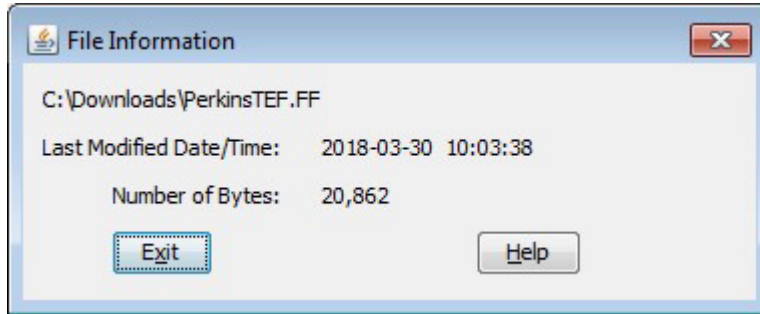


Figure 5-11: File Information Box

7. If you displayed the File Information message box, click Exit to return to the File Transfer dialog box.
8. Check that the directory paths in both the NSLDS File Input and DataPrep File Output boxes are correct and click Copy or Move. If a file of the type you are transferring already exists in the destination folder, a message similar to the following displays



#### Copy or Move

When you use DataPrep's File Transfer utility to copy a file, DataPrep copies and pastes the file to a new location. When you use it to move a file, DataPrep cuts and paste's the file to a new location.

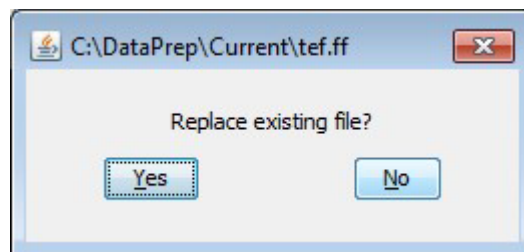


Figure 5-12: File Box

9. Click Yes to continue. If the copy or move is successful, DataPrep displays a message similar to the following:

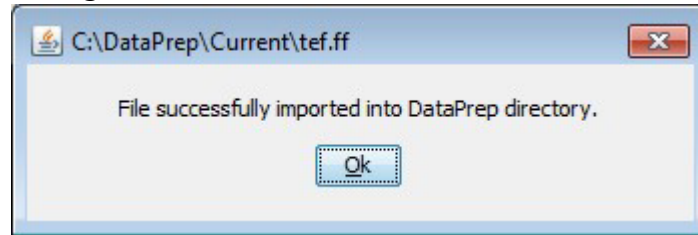


Figure 5-13: File Import Box

### 5.3.4 Help System

The PC version of DataPrep contains a full-featured Help system covering these topics:

- All the menus, commands, and buttons on the DataPrep Main Menu
- The input files, output files, controls, and processing options associated with each DataPrep dialog box
- Built-in shortcut keys available in DataPrep (performed by pressing the ALT key plus the underlined letter on the keyboard).

The Help system documents all DataPrep's functions and includes material not contained in this manual. It is your best source for detailed information about specific DataPrep functions.

## 5.4 Running Test Files

Included in both the mainframe software are test files, which will verify that you have installed the software correctly, and will illustrate how DataPrep works.

For Windows-based DataPrep, TEF and test files are available for download from FSAdownload:

- Two Database Extract files (**extract-fail.ff** and **extract-pass.ff**) □ A Threshold, Error Code and Field Code (TEF) file (**TEF.ff**) □ A Load Process Error file (**loaderr.ff**).
- An Error Submittal Notification Summary file (**shsntfop.ff**)

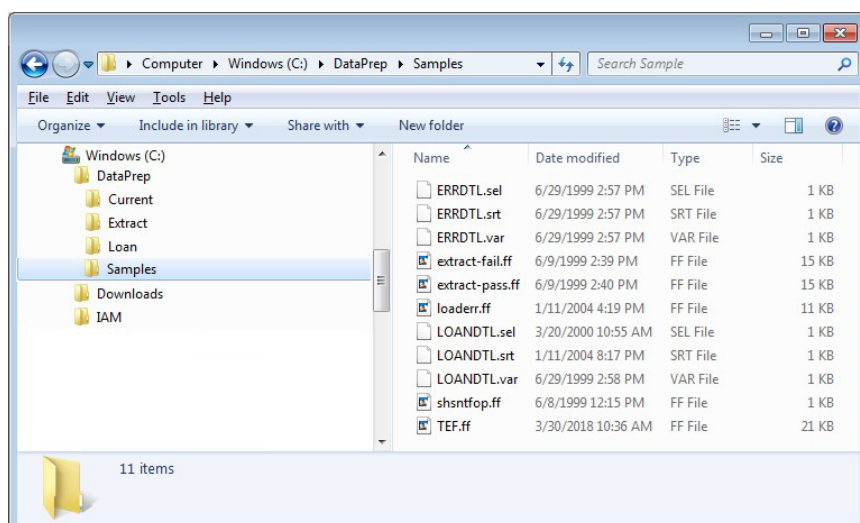


Figure 5-14: Test files are manually copied into in a directory of your choice (e.g. C:\DataPrep\Samples)

For mainframes, the Running Test Files JCL is in Appendix G; it was unloaded when you installed DataPrep.

### 5.4.1 Successful Extract Validation

#### Extract Validation

First, test Extract Validation using the sample Database Extract file. To test Extract Validation on DataPrep for Windows, follow these steps:

1. Use Windows Explorer or My Computer to copy the good Database Extract file (**extract-pass.ff**) from the Samples folder to the Extract folder (C:\DataPrep\Extract) and rename it **extract.ff**. DataPrep will only validate files called extract.ff.



#### File Locations

Here, and throughout this manual, instructions for copying or moving files presuppose that you installed DataPrep's work folders in the following default locations:

- **Samples Folder\*\***— C:\DataPrep\Samples
- **Backup Folder\*\***— C:\DataPrep\Backup
- **Current Folder**— C:\DataPrep\Current
- **Extract Folder**— C:\DataPrep\Extract
- **Loan Folder**— C:\DataPrep\Loan

If you chose different folder locations during setup or moved these folders after setup, you will need to adjust accordingly as you copy files, then test and use DataPrep.

\*\*folders manually created and maintained using Windows Explorer or My Computer.

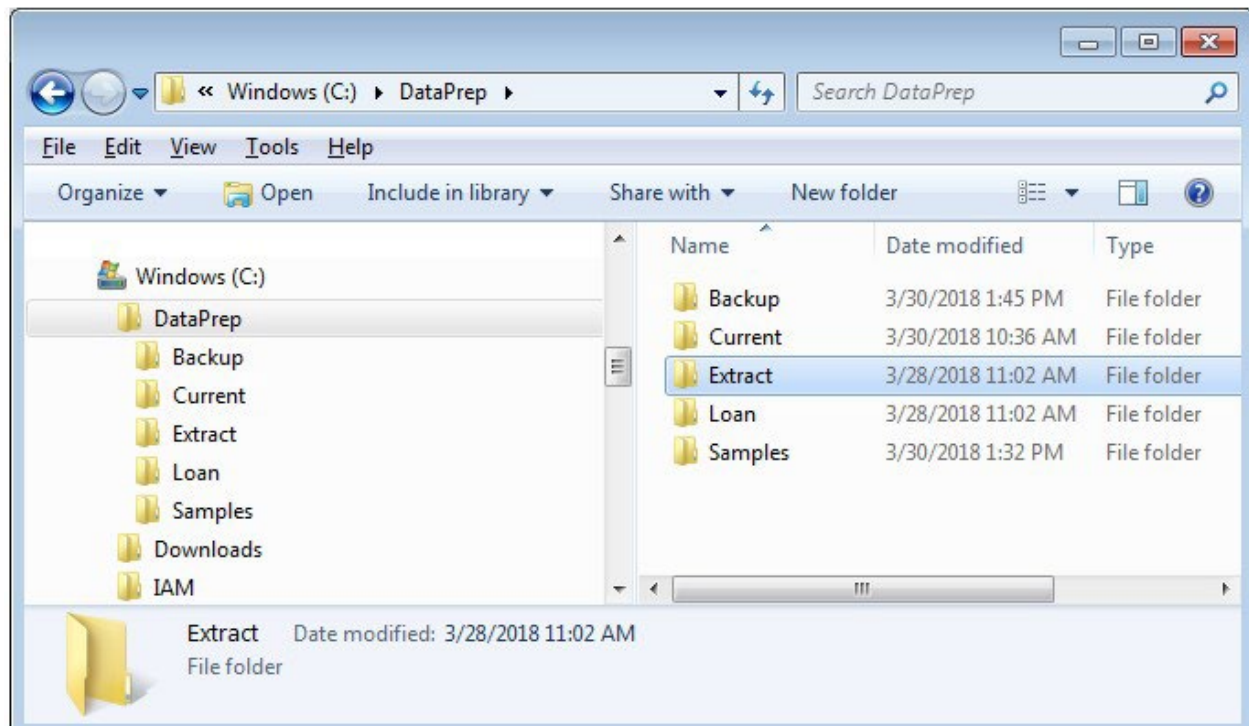


Figure 5-15: View of C:\DataPrep Folder with subfolders viewed in Windows Explorer



### Copying Test Files

Before you test DataPrep, you must copy two Database Extract files from the Samples folder (C:\DataPrep\Samples) to the Extract folder (C:\DataPrep\Extracts):

1. A file that should pass Extract Validation (**extract-pass.ff**)
2. A file that should fail Extract Validation (**extract-fail.ff**)

Be sure to copy (copy and paste) these two files rather than move (cut and paste) them from one folder to the other, so copies remain in the Samples folder if you need them later.

Use Windows Explorer or My Computer to copy these files. For more information about copying or renaming files, refer to the online Help for Windows.



2. From the DataPrep Main Menu, click Extract Validation.

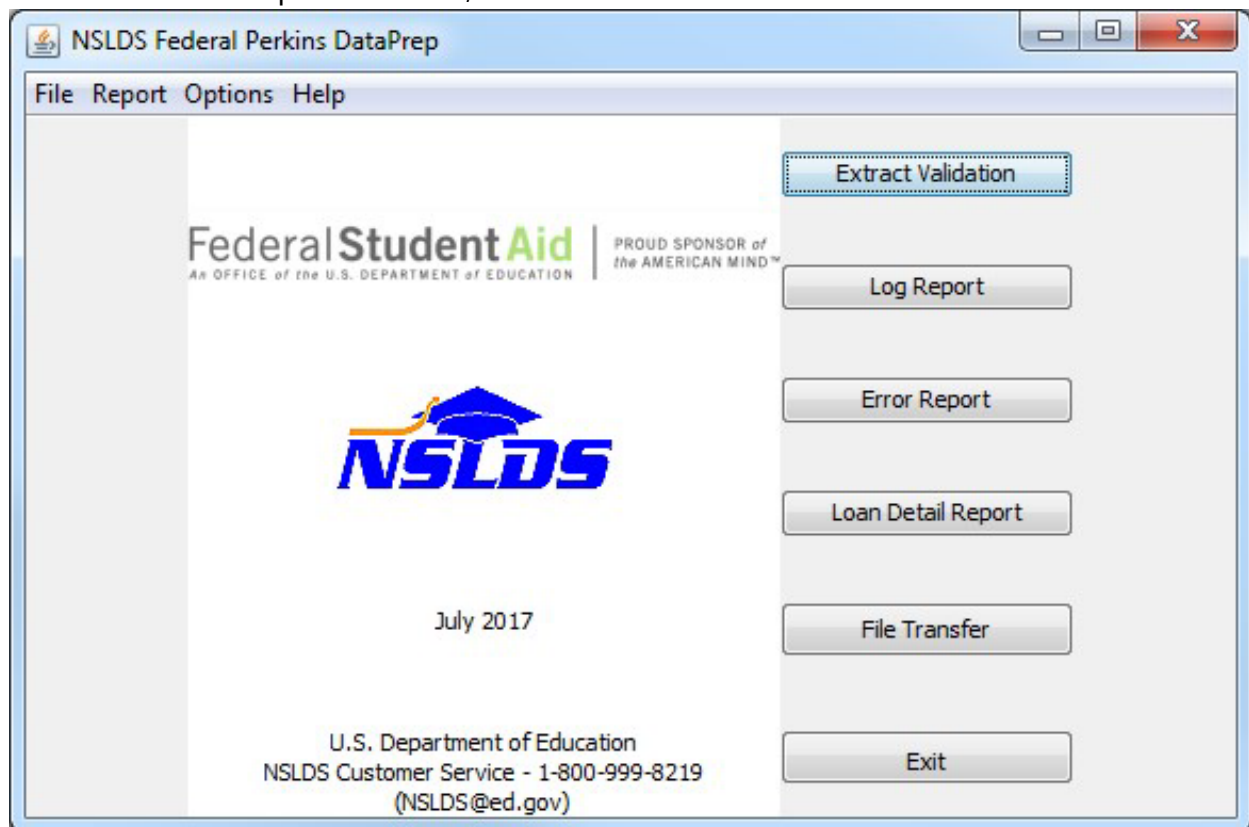


Figure 5-16: DataPrep Main Menu with Extract Validation Selected 3.

The Extract Validation dialog box appears.

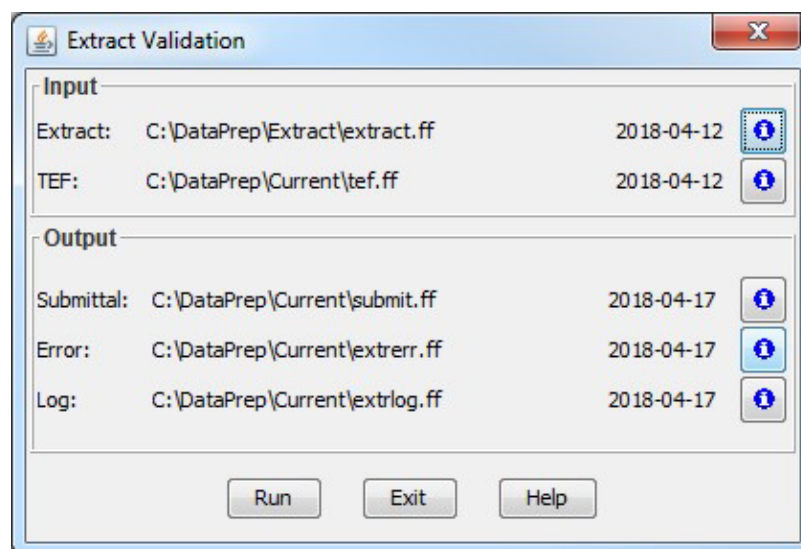




Figure 5-17: Extract Validation Dialog Box

4. Check that the Input directory paths point to the folders where the Extract and TEF files are located and click Run. The Extract Validation Process dialog box displays the Extract Validation Log Report containing a message telling you that Extract Validation was completed successfully.

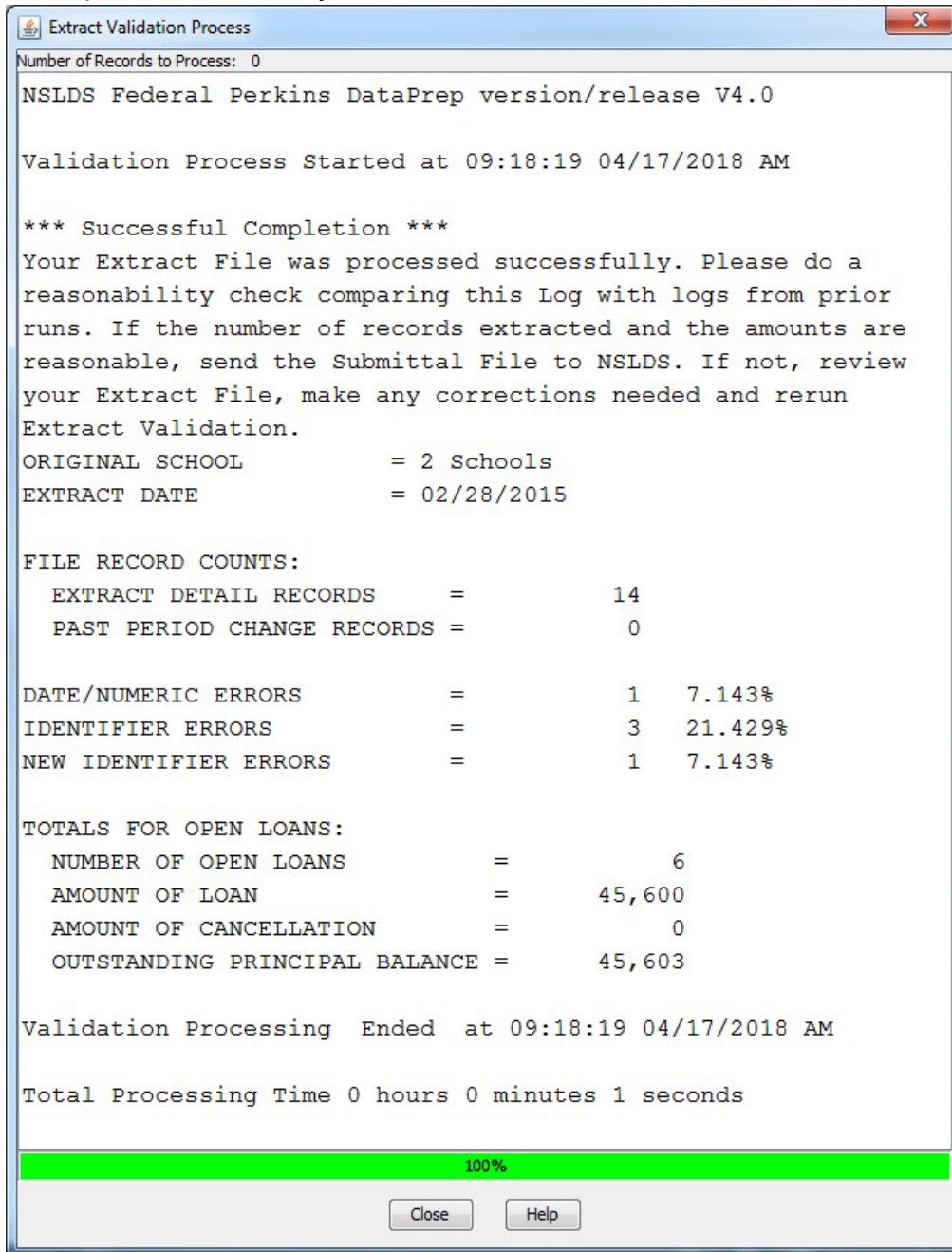


Figure 5-18: Extract Validation Process Dialog Box

If you get any other message, or if Extract Validation did not run, check the following:

- When you copied the file originally called extract-pass.ff to the Extract folder, you renamed it extract.ff.
- There was a valid TEF file in your Current folder.
- The Extract Validation dialog box showed the correct directory path for the extract.ff file.

If you get a message that the Database Extract file was processed successfully, click Done to return to the Extract Validate dialog box, then click Exit to go to the DataPrep Main Menu.

### Extract Validation Log Report

If you wish to display or print the test Extract Validation Log report, do the following:

1. From the DataPrep Main Menu, click Log Report. The Log Report dialog box appears.

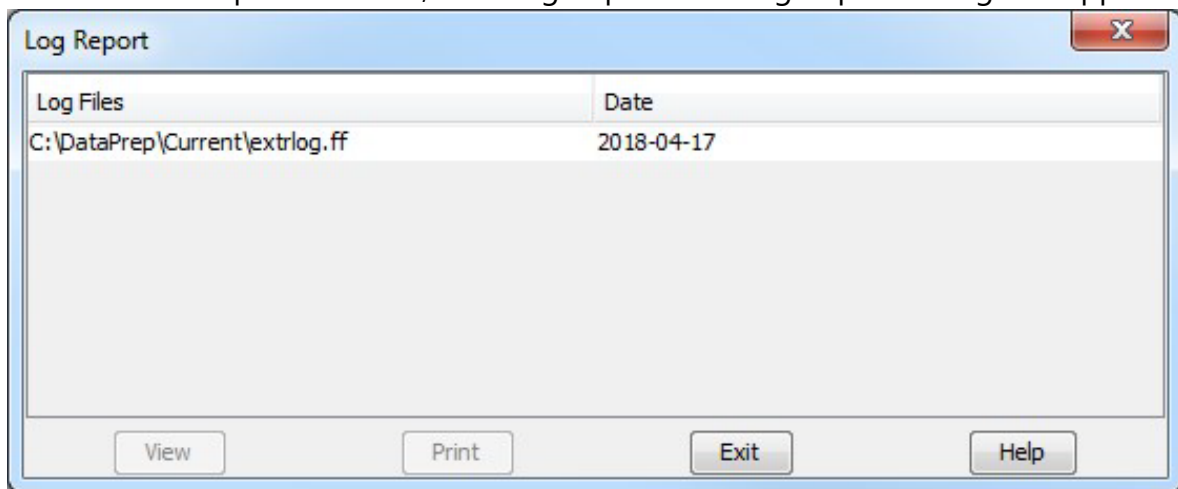


Figure 5-19: Log Report Dialog Box

2. Select the Extract Validation Log file (**C:\DataPrep\Current\extrlog.ff**) in the Log Files list by clicking on it. The Log File will be highlighted, and the View and Print features will be activated. Click View to have the Extract Validation Log report presented in the viewer. Click print to send the report directly to the default printer setup on your computer.

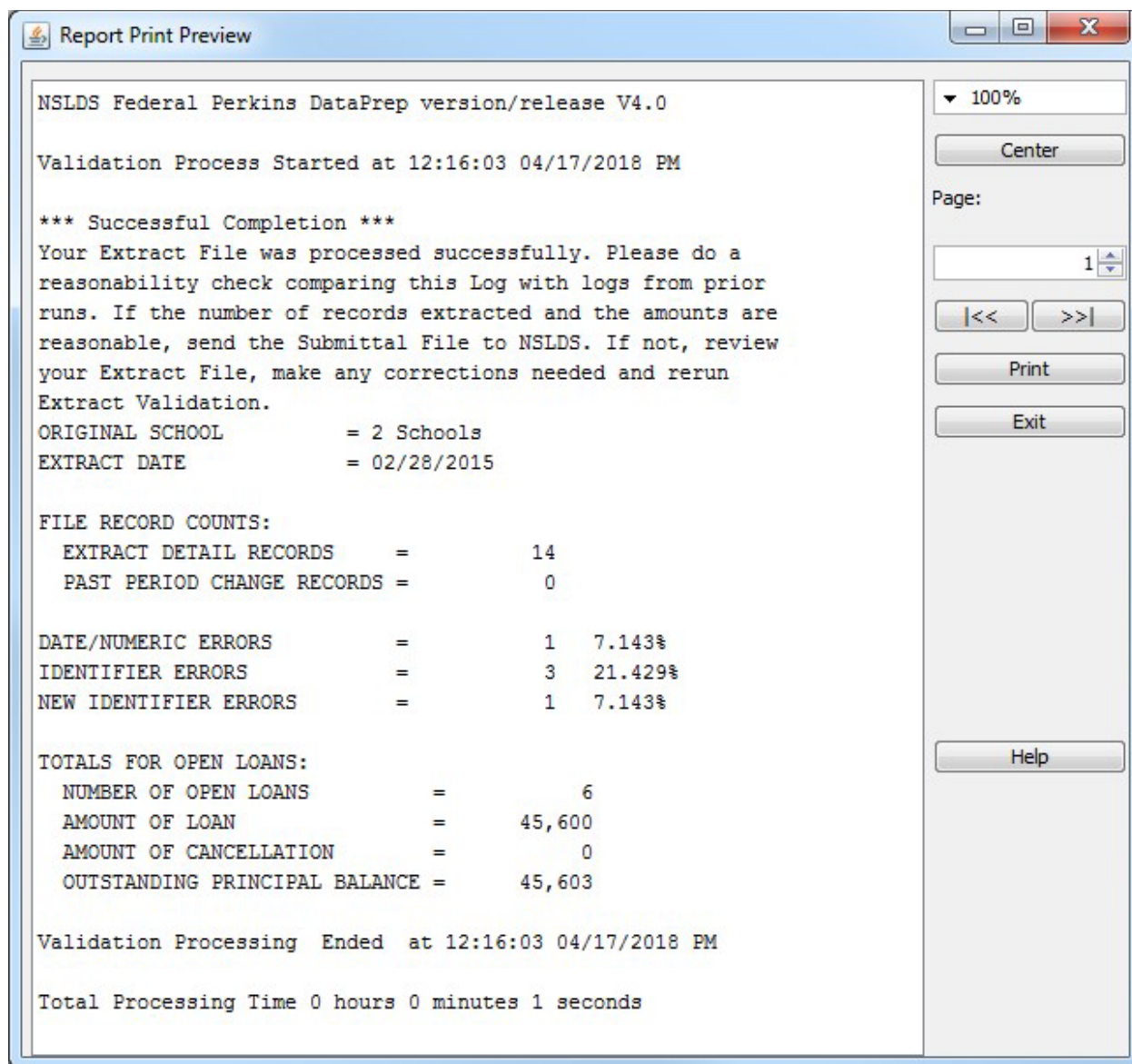


Figure 5-20: Sample Log Report

When the Log report displays successfully, you will be given the option the following options on the right side of the viewer:

- Increase / decrease the size of the report font in the viewer.
- Adjust the justification of the report. (This feature is designed for smaller screens.)
- Ability to navigate from page to page without scrolling.
- Print the report directly to the default printer setup on your computer.

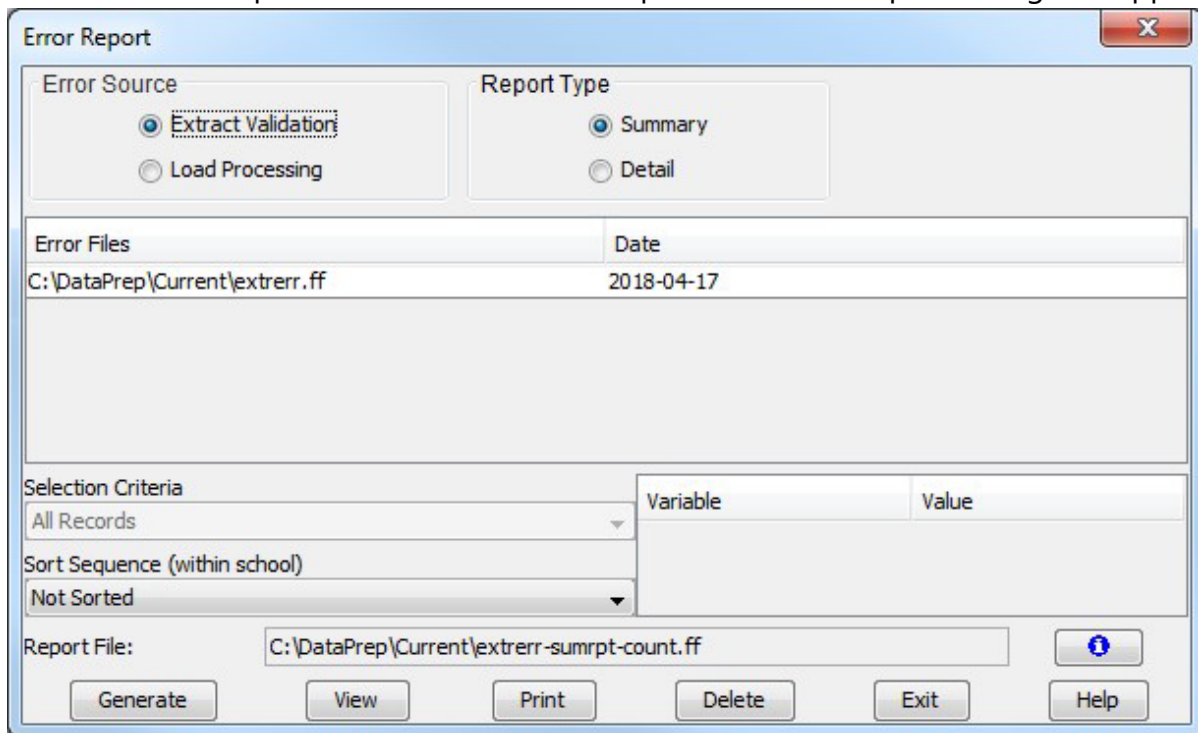
- Exit the viewer

Click Exit to return to the Log Report Menu.

## Extract Error Reports

You are now ready to produce test Extract Error reports. To do so, follow these steps:

1. From the DataPrep Main Menu, click Error Report. The Error Report dialog box appears.



The Error Report dialog box is shown with the following settings:

- Error Source:** ☒ Extract Validation, ☐ Load Processing
- Report Type:** ☒ Summary, ☐ Detail
- Error Files:** C:\DataPrep\Current\extrerr.ff
- Date:** 2018-04-17
- Selection Criteria:** All Records
- Sort Sequence (within school):** Not Sorted
- Report File:** C:\DataPrep\Current\extrerr-sumrpt-count.ff

Buttons at the bottom: Generate, View, Print, Delete, Exit, Help.

Figure 5-21: Error Report Dialog Box

2. Select Extract Validation as the Error Source.

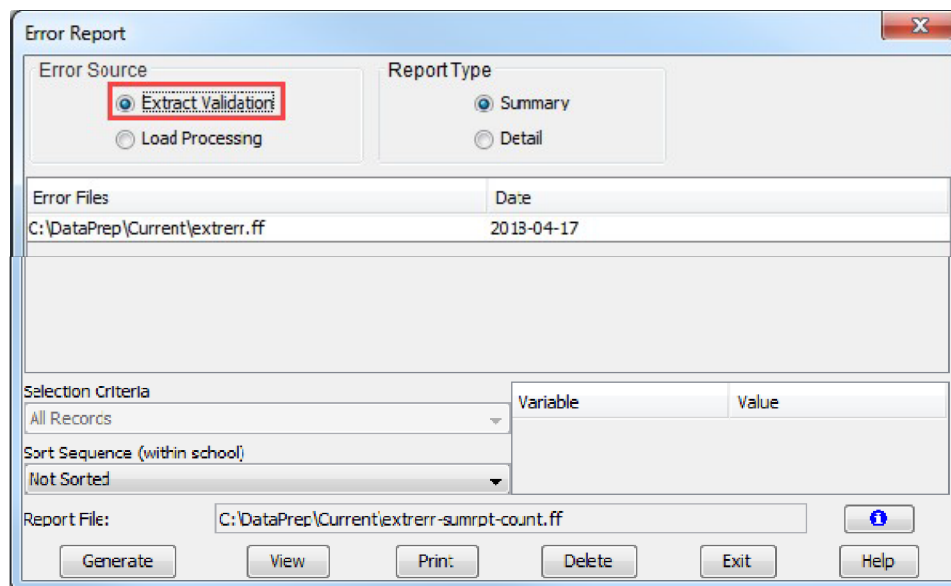


Figure 5-22: Error Report Dialog Box 3.

Select Summary as the Report Type.

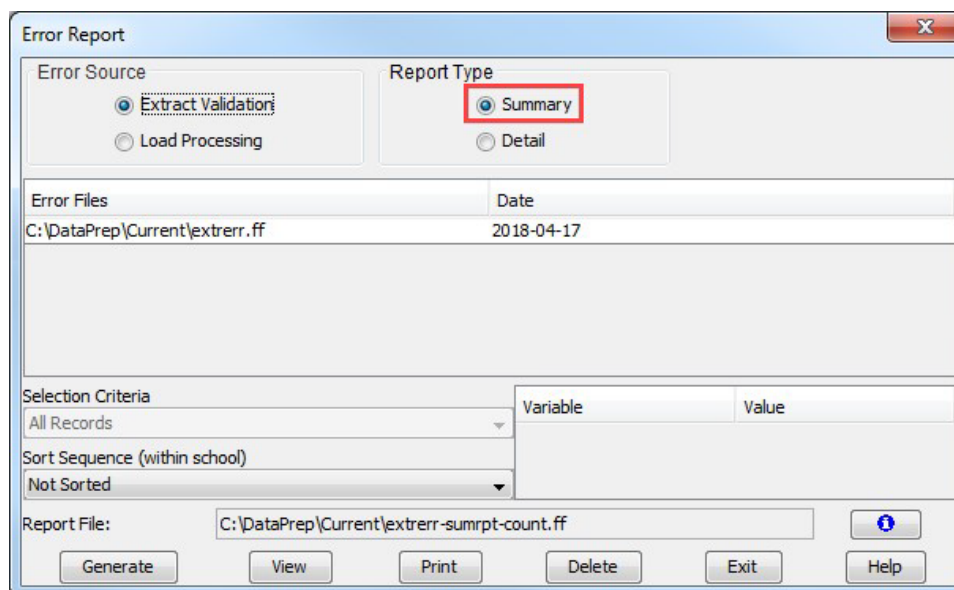


Figure 5-23: Error Report Dialog Box

4. Select the error file listed in the Error Files list (**C:\DataPrep\Current\extrerr.ff**).
5. Click Generate.

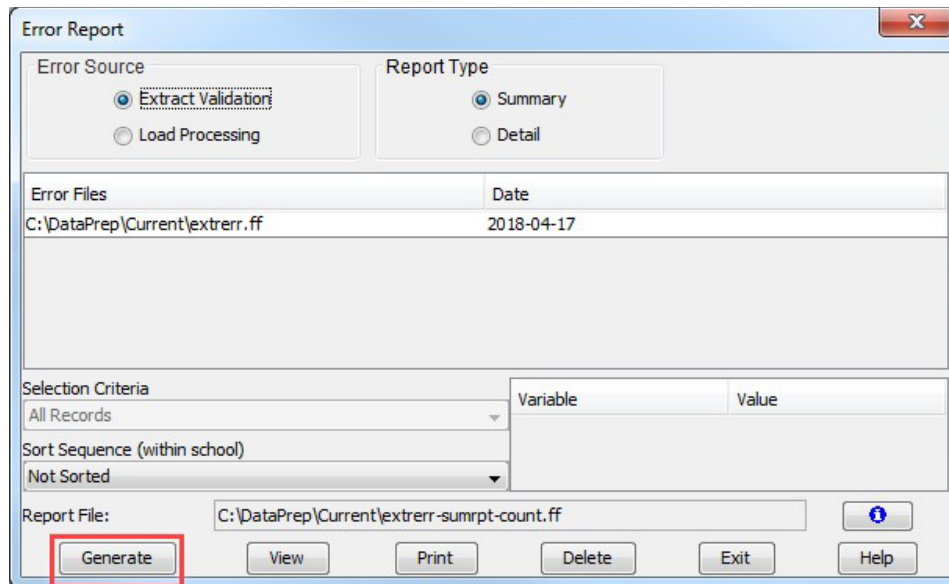


Figure 5-24: Error Report Dialog Box

6. The Summary Error Report dialog box displays when the Report has been generated and is ready to be viewed.

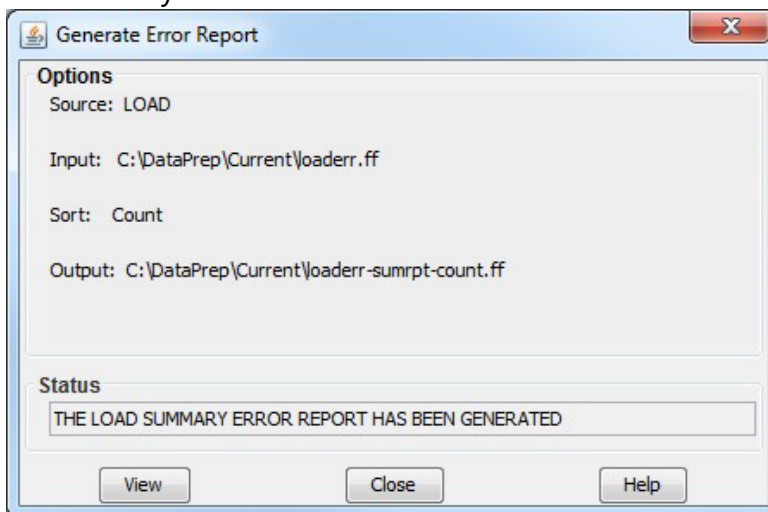


Figure 5-25: Summary Error Report Status Box



#### Selecting Files for Reports

For DataPrep to create an Extract Error report (or any other report), you must select the individual file from which you want to generate the report. Select a file from the Error Files list by clicking on it. Files that have been selected will appear highlighted.



7. Click View. The software viewer displays the Extract Summary Error Report.

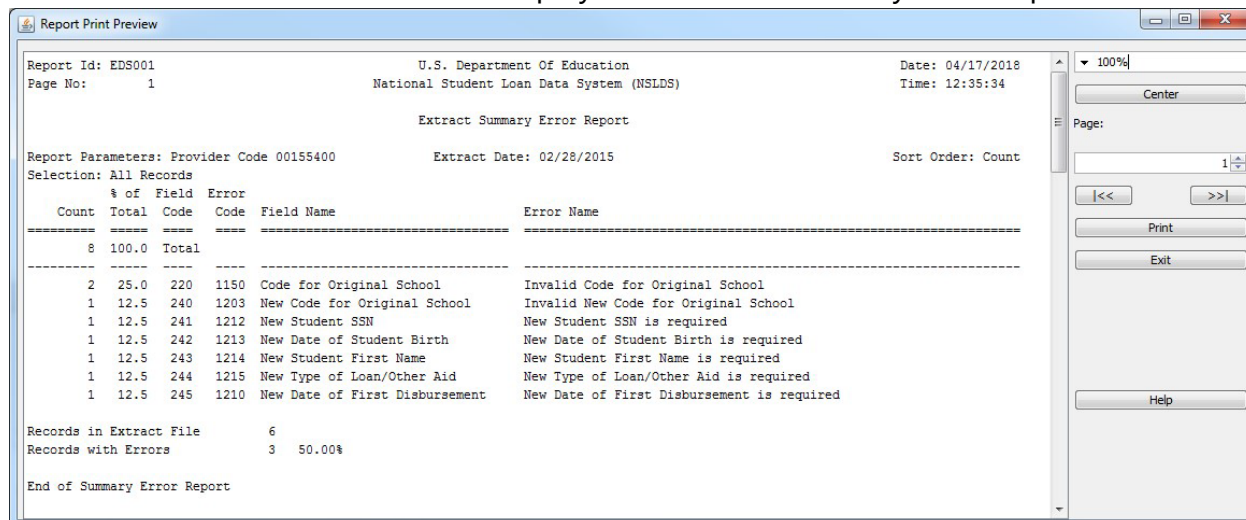


Figure 5-26: Summary Extract Error Report

If this report appears, you have successfully generated the Extract Validation Summary Error Report.

To create an Extract Validation Detail Error Report, follow the same steps as outlined above except in Step 3 change "Select Summary as the Report Type" to "Select Detail as the Report Type."

Now that you have verified that you installed DataPrep successfully, and have generated Extract Error reports, you should strengthen your familiarity with DataPrep by returning to the DataPrep Main Menu and running error reports using different sort criteria. Then look over the reports to get a good idea of what they provide. You can also check Chapters 10 and 12 for more information about reports.

## 5.4.2 Unsuccessful Validation

Now you are ready to run the second test and see what happens when a Database Extract file contains too many errors. To do so, follow these steps:

1. Rename the **extract.ff** file in the Extract folder to **extract-pass.ff**.
2. Copy the file named **extract-fail.ff** from the Samples folder (C:\DataPrep\Samples) to the Extract folder and rename it **extract.ff**.

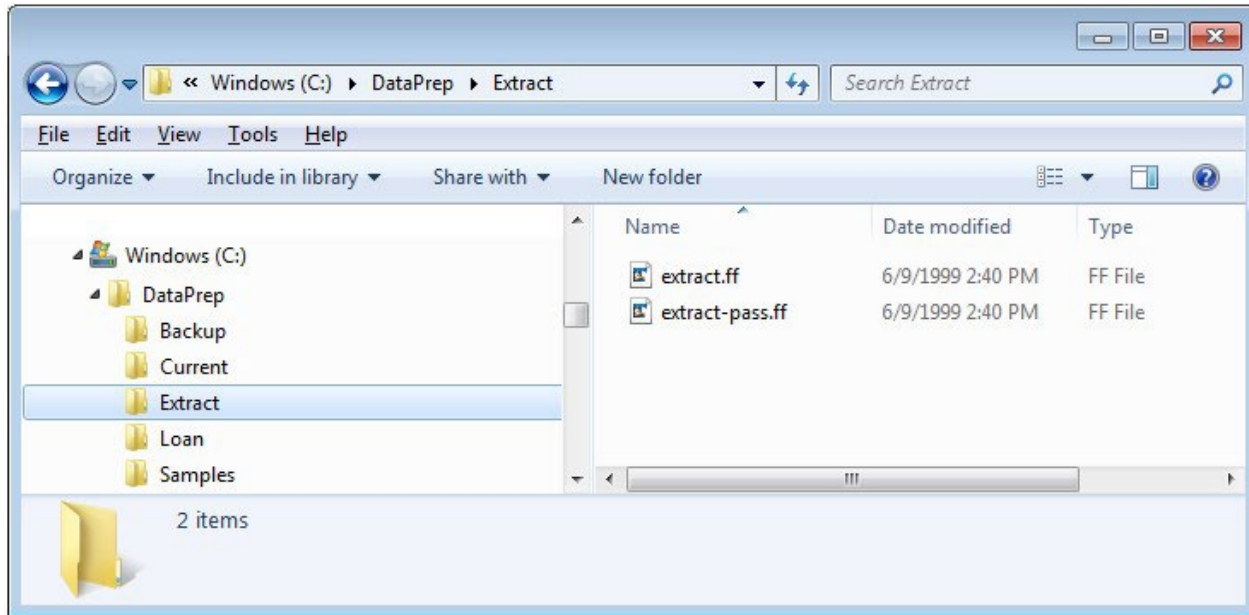


Figure 5-27: Extract Folder

3. From the DataPrep Main Menu, click Extract Validation. The Extract Validation dialog box appears.

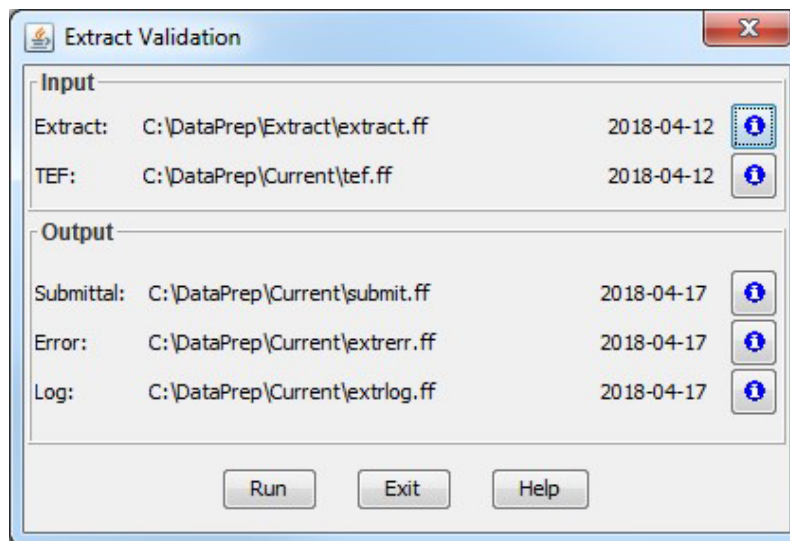


Figure 5-28: Extract Validation Dialog Box

4. Check that the Input directory paths point to the folders where the Extract and TEF files are located and click Run. The Extract Validation Process dialog box displays the Extract Validation Log Report containing a message informing you, "The percentage of domain errors exceeds the allowable tolerances. Therefore, no Submittal File has been created."



If this message appears, return to the DataPrep Main Menu and run the Extract Error reports using the directions in the previous subsection to troubleshoot and research your errors. You may also want to print the Extract Validation Log Report as explained in a previous subsection.

If you want to know more about reports, use the instructions in Chapter 10 to generate detailed Extract Error reports with different sort criteria and examine the results.

### 5.4.3 Testing Load Process Error Report

Now you are ready to generate a sample Load Process Error report. Before you can do so, you must import the sample Load Process Error file into the Current folder.

You can use Windows Explorer or My Computer to copy these files.

#### Generate the Load Process Error Report

After you've successfully copied the Load Process Error file into the Current Directory, you are ready to generate a Load Process Error report. To do so, follow these steps:

1. From the DataPrep Main Menu, click Error Report. The Error Report dialog box appears.



#### Mainframe Testing

For testing the Load Process Error Report function for mainframes, refer to Appendix G.

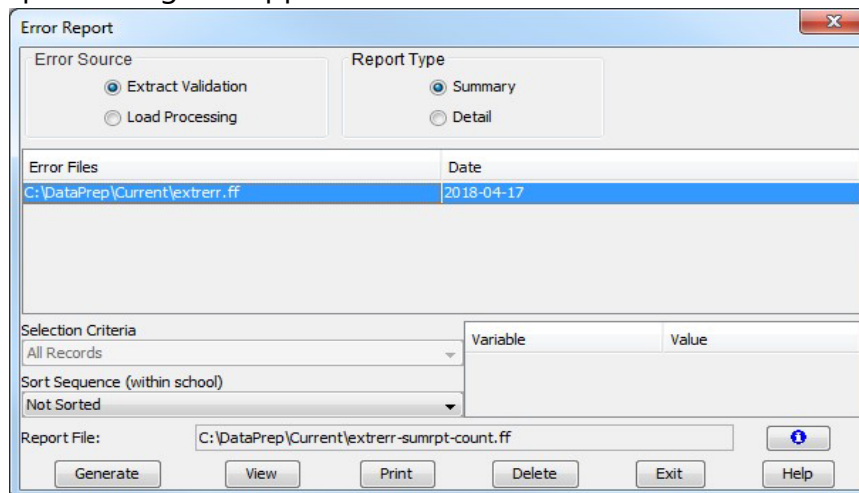


Figure 5-29: Error Report Dialog Box for Load Process Error Report

2. Select the Error Source, Report Type.

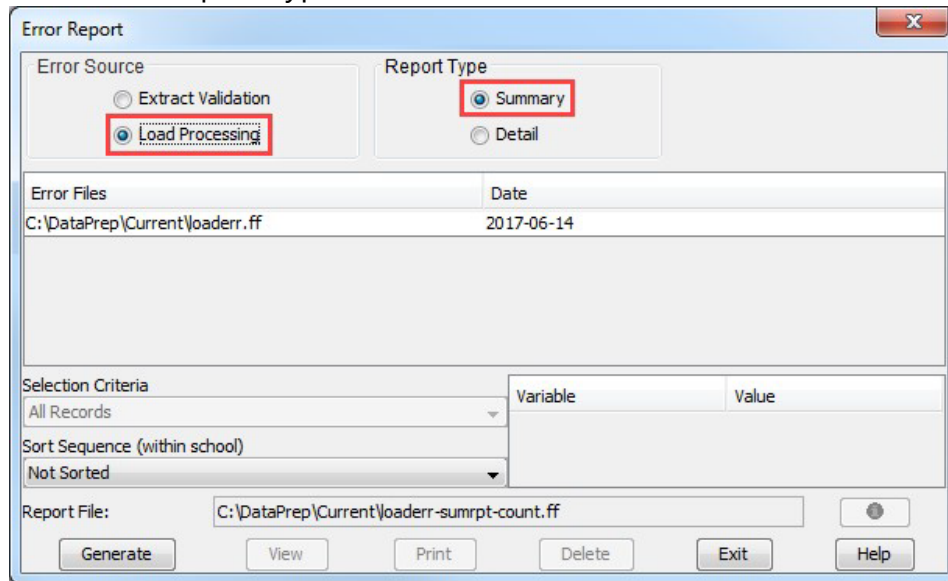


Figure 5-30: Error Report Dialog Box for Load Process Error Report

3. Selection Criteria, and Sort Sequence options are available to utilize prior to generating the error report.

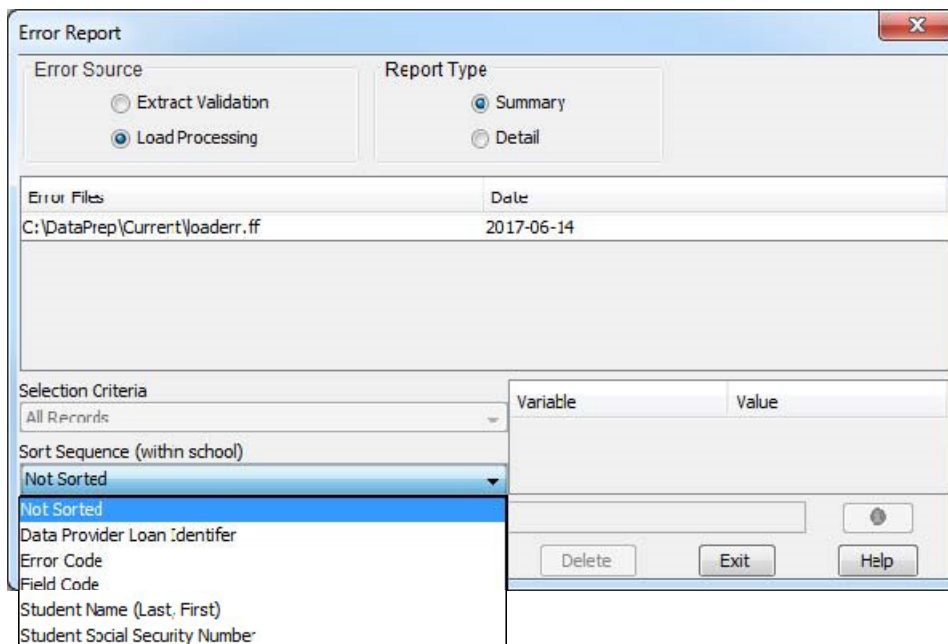


Figure 5-31: Sort Sequence for Load Process Error Report

4. Highlight the Load Process Error file (**C:\DataPrep\Current\loaderr.ff**), and Click Generate.

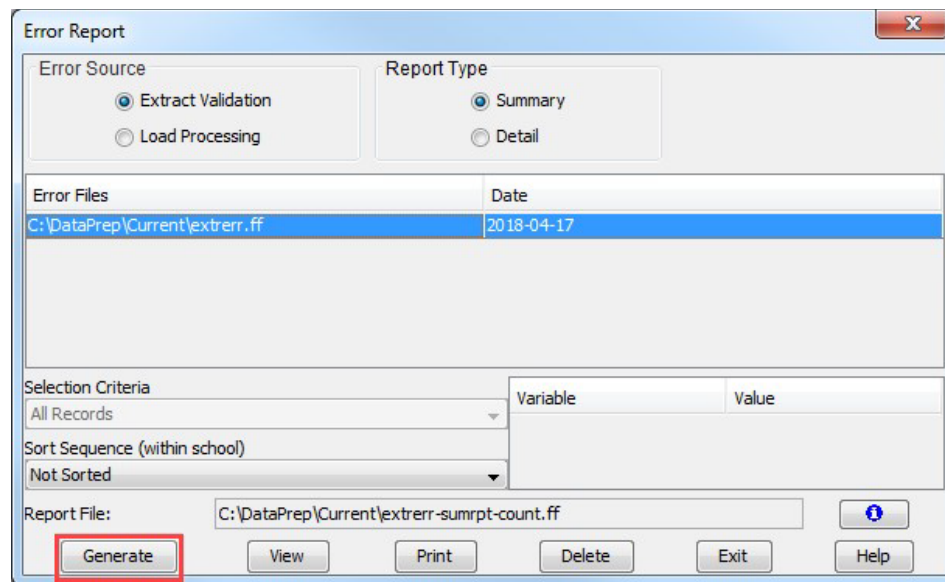


Figure 5-32: Error Report Dialog Box for Load Process Error Report

5. The Load Summary Error Report dialog box displays when the report has been generated and is ready to be viewed.

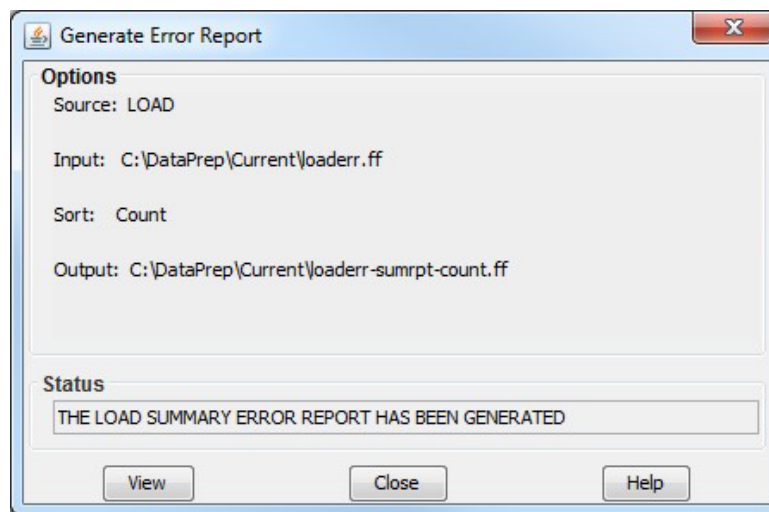


Figure 5-33: Load Summary Error Report Box

5. Click View. The viewer displays the Load Process Error report.

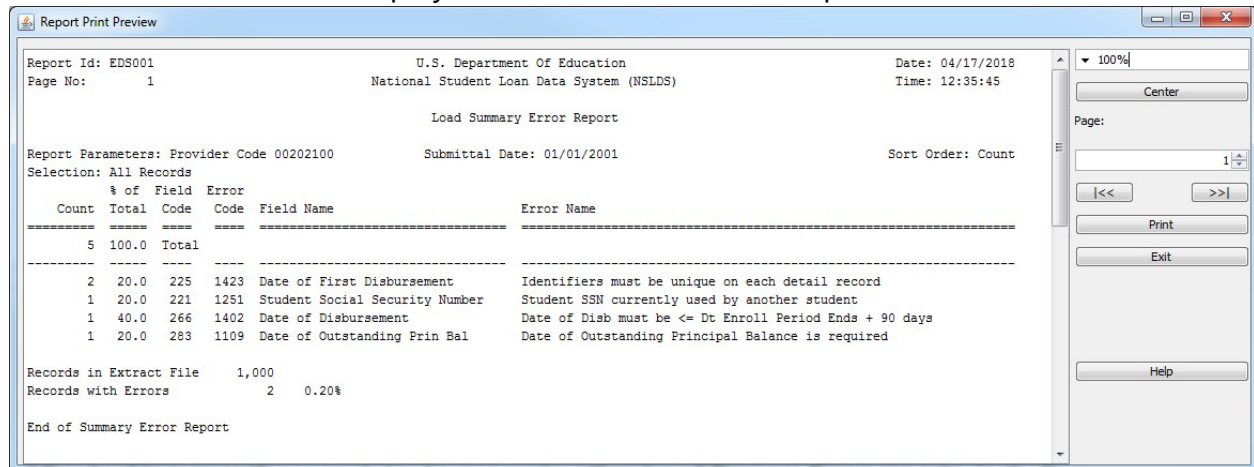


Figure 5-34: Testing Load Process Error Report

After looking over the report, try to generate other Load Process Error reports, including detail reports with different sort options. Refer to Section 10.2 for more information about generating error reports.

#### 5.4.4 Testing Error Submittal Notification Report

Now you are ready to generate a sample Error Submittal Notification report. First, use Windows Explorer or My Computer to move files from the Sample folder into the Current folder.

To generate the report, follow these steps:

1. On the Report menu of the DataPrep Main Menu, click Notification.

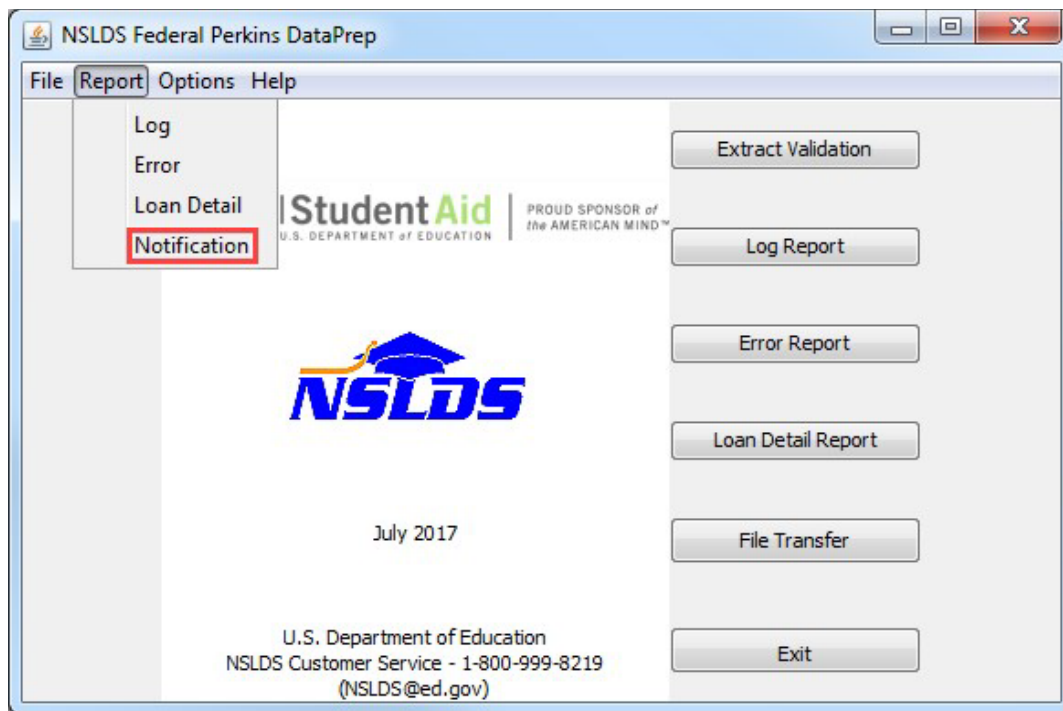


Figure 5-35: Main Menu -Report 2.

The Notification Report dialog box appears.

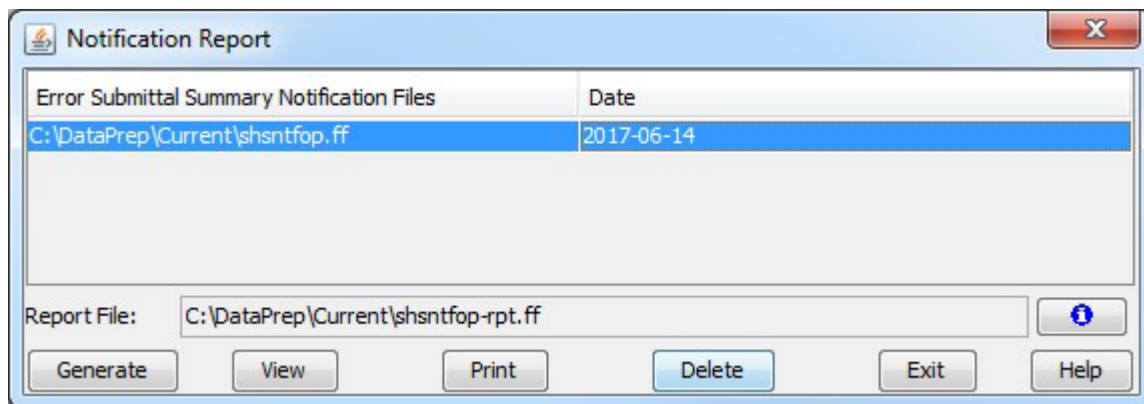


Figure 5-36: Notification Report Dialog Box



### Reports

Creating reports is a three-step process:

1. Copy the file containing data for the report into the Current folder (C:\DataPrep\Current).
2. Generate the report.
3. View the report.

3. Select the Error Submittal Summary Notification file (**C:\DataPrep\Current\shsntfop.ff**) and click Generate.

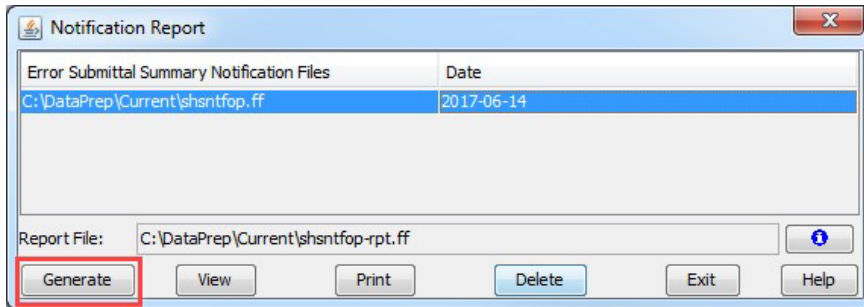


Figure 5-37: Notification Report Dialog Box

4. The Generate Error Report dialog box displays a Status message saying, "The Error Submittal Summary Notification Report has been generated!"

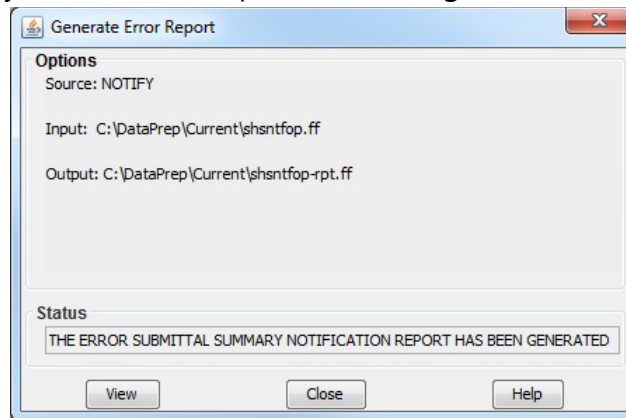


Figure 5-38: Generate Notification Report Box 5.

To view the report, click View. The viewer displays the report.

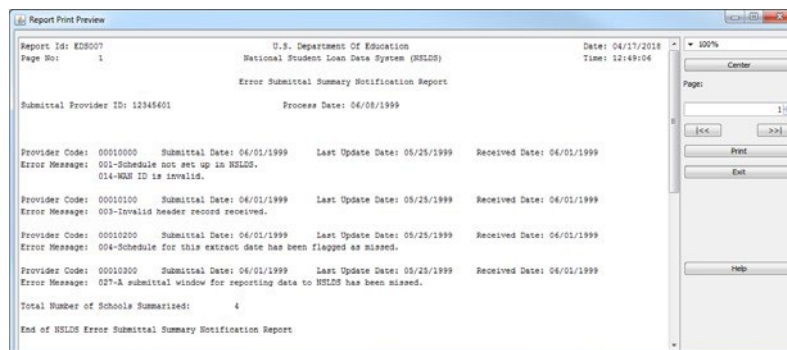


Figure 5-39: Error Submittal Summary Notification Report

**Delete All Sample Files**

Once you are finished testing DataPrep, you should delete them from DataPrep's working folders (C:\DataPrep and the corresponding subfolders) *all* the sample files you used and reports you created during testing. That way, you won't confuse them with real data once you begin processing your institution's Database Extract file.

**Do not delete TEF File nor the sort and selection files (that is, files with .srt, \*.sel, and \*.var type).**

Leave the TEF file (TEF.ff) as well as the sort and selection files in the Current folder (C:\DataPrep\Current) because you will need them to process your first live Submittal file.

**And Remember**

You may need the sample files for later testing or diagnostic purposes, so make sure that you have copies of them in the Samples folder (C:\DataPrep\Samples). If necessary, copy sample files back from the working folders to the Samples folder before deleting them from the working folders.

## 5.5 Deleting Test Files

Before you start using DataPrep to process live data, you should delete from DataPrep's working folders (C:\DataPrep and its folders) all the sample files you used and reports you created while testing DataPrep. You can use Windows Explorer to delete them by going to the directory on your computer and deleting the files. Do NOT delete the folders.

You are now ready to begin using DataPrep to process your real data. If you have any problems, remember to call the CSC at 800-999-8219.

## 5.6 Sample Files z/OS LE Version 3.1

The JCL for mainframes (IBM or fully compatible CPU) running z/OS LE Version 3.1 or higher performs the Extract Validation Process and error file generation. Appendix G contains the JCL for these functions. It can be referenced from the library created with JCLLIB as part of the name. The library member name is PRBB1000.

The JCL references 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 report, the Detail Extract Error Report, and the Summary Extract Error Report.

A second sample Database Extract file contains 100 student/loan records. Eight are in error, which causes the file to exceed the ED-established error threshold. When you run this sample file, no Submittal file should be created. To use the second sample, you must change the JCL to reference the sample extract containing DBEXTERR as part of the name.

The JCL also references a sample Load Process Error file containing 36 student/loan records for 3 different schools, all in one Database Extract file. School 002021 has 11 errors, school 003554 has 7 errors, and school 004920 has 2 errors. This should be reported in the Detail Error Report and the Summary Error Report.

**Problems?**

If you have any problems with installation or testing, call the CSC at 800-999-8219 between the hours of 8 a.m. and 8 p.m. Eastern Time, Monday through Friday excluding Federal holidays.



## Chapter 6: The Database Extract File

The first step in the NSLDS update process is for you to create a Database Extract file that accurately reflects the contents of your school's database(s) at the time of the extract. The Database Extract file you create must follow the standards defined by this chapter and the record layouts in the Federal Perkins Loans Data Dictionary (Appendix A). Remember that the Database Extract file must be named **extract.ff** for DataPrep to work properly. DataPrep does not create a Database Extract file, so you are responsible for determining how to create the file from your school's records or database(s). The Database Extract file you create is subject to audit by ED.



### School Requirements

You must create a Database Extract file once a month and no more than 14 days prior to the load date scheduled by NSLDS. The file must be an exact reflection of your database.

### 6.1 Business Rules

As a data provider, you must observe these business rules:

- Report all Federal Perkins loans that were open or closed on or after October 1, 1989. An edit will reject any loan closed before October 1, 1989. You can prevent unnecessary rejects by not extracting such loans.
- Do not report closed loans already reported and successfully loaded into the NSLDS database. For example, suppose a borrower makes the final payment on a loan in March 1999. You report the loan as paid in full (PF) with your April submittal; the record contains no errors and updates NSLDS. Because the loan was loaded into the NSLDS database, you should not extract this loan record again when you create future Database Extract files. If an error was made in closing the loan and you need to reopen it, add the loan to your next Database Extract file with the new information. If the loan record passes all edits, NSLDS will load it and update the loan accordingly.
- Continue to report loans you assign to ED until you receive notice that the loan has been accepted by ED. Once you receive such notice, do not report the loan.
- Report new loans or updates to existing loans **monthly** on a schedule established by NSLDS. The data you report must be current and not extracted earlier than shown

on your established reporting schedule (that is, no more than 14 days before the scheduled load date).

- Create Database Extract files that meet the detailed specifications contained in Appendix A. You are responsible for coding and testing your software as needed to properly format the Database Extract file.
- If you report a loan with an open status, it must have a positive Outstanding Principal Balance. If the loan has a balance of less than \$1, but not zero, you should report the Outstanding Principal Balance as \$1. If the loan is being maintained in an open status because of a negative balance on the account (that is, a credit balance), you should also report a balance of \$1 until the loan is closed.
- The Date of Outstanding Principal Balance reflects the date of the most recent change in the principal balance. The Outstanding Principal Balance may change due to a disbursement, loan payment, or cancellation. Since you submit all loans in your database every month, the requirement to update Outstanding Principal Balance on a quarterly basis is eliminated. Instead, you must update the dollar amount and the date of the Outstanding Principal Balance using the current remaining amount and the date of the most recent change in Outstanding Principal Balance. If you have been reporting the last day of the month as the Date of Outstanding Principal Balance regardless of when the balance actually changed, you must modify your extract procedure to provide the actual date when the balance changed.

## 6.2 Record Types

The Database Extract file contains three types of records:

1. **Header Record**
2. **Detail Records**
3. **Trailer Records**

The Database Extract file must not have a Trailer record, as DataPrep will create a Trailer record during the Validation process. All 3 record layouts are found in the Data Dictionary, Appendix A section of this DPI.



### Version and Release Number

DataPrep will automatically insert its version and release the number in the header record, so you should leave this field blank when creating the Header record for your Database Extract file.

## 6.2.1 Header Record

The Header record is for identification and tracking purposes. It contains your school code; the submittal, initial load, and submittal receive dates; the software version and release number; and the record type. The capital letter H must appear in position 48 of the Header record as the record type.

## 6.2.2 Detail Records

The Database Extract file must contain a separate Detail record for each loan record in your school's database(s) that belongs to one of the following categories:

- Loans that are currently open
- Loans that were closed on or after October 1, 1989, but not successfully reported as closed to NSLDS

Individual Detail records must reflect the exact contents of your database without editing or other changes.

Continue extracting and reporting loans to NSLDS until one of the following occurs:

- The loan is closed and successfully reported to NSLDS with a Closed loan status. If you report the loan to NSLDS but the loan record is not accepted because of error conditions, you must continue reporting the loan until it is accepted. Valid closed loan status codes are listed in Table B–2 in Appendix B.
- Your school has assigned a loan to ED, received notice from ED that it has accepted the loan, and you have successfully reported the loan to NSLDS (that is, contains no errors).

Once either of these events occur, you should no longer extract that particular record when you create your Database Extract file.

Let us look at an example. When a borrower makes the final payment on a Perkins loan, perform the following actions:



### Initial Population

If you are a data provider submitting data to NSLDS for the first time, that submission is referred to as the Initial Population. During that submission, you must report to NSLDS not only all outstanding (open) loans, but also any loans

1. Extract the record from your database.
2. Report the activity with a valid closed loan status code (see Appendix B–2).
3. Include the record in your next submission to NSLDS.

You should continue reporting this loan until it is accepted without errors by NSLDS. Then your school should stop reporting on this loan and no longer include it in future Database Extract files.

Loans that were nullified because they were incorrectly reported, and loans that were awarded but the borrower did not go through with them, should be reported with a Loan Status Code of CA (Cancelled).

**Loans Erroneously Reported as Closed**

If a loan was erroneously reported as closed, you must include this loan in your next Database Extract file with the correct loan status and date.

## 6.3 File Standards

Each record in the Database Extract file must be in a 300-byte layout without carriage returns and line feeds between records. However, if you are a Windows user, you can leave carriage return and line feed combinations in the Database Extract file because DataPrep will strip them out before creating a Submittal file.

Database Extract files should be in the following formats:

- **Fixed-Length EBCDIC** for mainframes running z/OS LE Version 3.1 or higher
- **ASCII** for PCs running Windows

You must combine all loan records you report on into a single Database Extract file, even if you have loan data stored in multiple databases or are reporting for several campuses or branches in the same extract.

As you create Detail records for your Database Extract file, keep in mind the following considerations:

- Once you create your Database Extract file, you must use the DataPrep software to validate it for submittal to NSLDS. Use the Extract Error report generated by DataPrep to correct any errors in your database before the next time you create your Database Extract file. Do *not* correct errors by editing or otherwise altering the Database Extract file or any subsequent files created by DataPrep.

**Multiple Databases**

All data must be combined into a single Database Extract file, even if you have loan data stored in multiple databases or are reporting for several campuses or branches in the same extract.

- All data (including identifiers) must be reported until the record containing that data passes all associated NSLDS edits. Verify that a record has been loaded onto NSLDS by checking the Load Process Error report for errors against that record.
- Because the Detail records in the Database Extract file concern individual loans, you must report (and update) all information at the loan level. This means, for example, that if you report on three loans for the same student and the loans were first reported with the wrong Date of Student's Birth, you must update the New Date of Student's Birth on each of the three loans. Updating the New Date of Student's Birth on only one loan will *not* update the erroneous date of birth on the other two loan records.

**Several Schools or Branches**

If you report for several schools or branches, see Section 4.7 for additional information.

## 6.4 Field Standards

The standards for populating the fields of your Database Extract file are as follows:

- Character fields can contain letters, numbers, or blanks.
- Numeric fields must contain numbers only. Blanks, alpha, or other characters will cause errors.
- Date fields must contain 8 digits, be valid dates, and appear in the format CCYYMMDD (for example, 19990131 for January 31, 1999), where:
  - o CC = 2 digits for the century
  - o YY = 2 digits for the year
  - o MM = 2 digits for the month
  - o DD = 2 digits for the day

**Negative Numbers**

NSLDS does not handle negative numbers. If the outstanding balance on a loan becomes negative (that is, a credit balance), you must report the balance as \$1 and keep the status open until you can set the balance to zero.

If you report the Amount of Outstanding Principal Balance as negative, NSLDS will read it as a positive value.

- A valid date is any acceptable calendar date. Invalid dates would be dates such as February 30, February 29 of a non-leap year, or September 31. The default value of 00000000 can be used in certain specifically identified fields.
- NSLDS does not accept cents in amount fields. Dollar and cents amounts should be rounded to the nearest dollar.

Appendix B contains a complete account of the various codes you will need to fill some fields in the Database Extract file.

### 6.5 Updating Identifier Data

After NSLDS has successfully loaded data from your school for the first time, thus completing the Initial Population, processing rules apply to any subsequent attempts to update or change the data that were loaded. These rules are designed to maintain the integrity of the data in NSLDS.

There are two sets of rules governing changes to data in NSLDS. One governs changes to the fields that contain loan identifier data; the other governs changes to the fields that contain non-identifier data.

### 6.5.1 Loan and Student Identifiers

**Loan identifiers** are the values contained in positions 1–47 of Detail or PPC records. They uniquely identify a loan, distinguishing it from the millions of other loans stored in NSLDS. Although loan identifiers appear on both Detail and PPC records, you must use a Detail record to change them.

A particularly important subset of loan identifiers is made up of **student identifiers**, which uniquely identify a student just as loan identifiers uniquely identify a loan.

Figure 6-1 lists the fields that constitute the loan identifier portion of a Detail record and which of them also serve as student identifiers.

Field	Position	Type
Code for Original School	1–8	Loan Identifier
Student's Social Security Number	9–17	Loan/Student Identifier
Date of Student's Birth	18–25	Loan/Student Identifier
Student's First Name	26–37	Loan/Student Identifier
Type of Loan/Other Aid	38–39	Loan Identifier
Date of First Disbursement	40–47	Loan Identifier

*Figure 6-1: Loan and Student Identifiers*

Section 9.4.1 presents an overview of how NSLDS goes about matching the identifiers for newly submitted loan records against student and loan information already in the NSLDS database. The Identifier Match Criteria used in that process are described in detail by the entry for the Student's Social Security Number field in the Data Dictionary (Appendix A).

### 6.5.2 The Identifier Change Process

You must use the identifier change process to update loan identifier data already loaded on NSLDS. Failure to follow this process can create duplicate loan records that

compromise the data integrity of NSLDS and cause students to be denied Title IV aid to which they are entitled.

Because the entire string of information contained in the identifier fields is needed to singularly identify a loan, loan identifiers are processed as a block. When you update one identifier, you must reconfirm the values of the other identifiers. To this end, you must supply a complete set of new identifiers. This becomes especially important if a school merges with another school and wishes to take over and report on the previous school's Perkins portfolio. For more information on school mergers, see section 13.2.

To update identifiers, the Detail record must contain the identifier values currently loaded on NSLDS in the original identifier fields (positions 1–47). Then use the new identifier fields (positions 50–96) on the same record to report changes. Whenever you update one or more identifiers, you must fill in *all* the new identifier fields, regardless of whether the values in them are new ones or ones that you have been reporting all along.

The new loan identifier fields are:

- New Code for Original School
- New Student's Social Security Number
- New Date of Student's Birth
- New Student's First Name
- New Type of Loan
- New Date of First Disbursement

**Identifier Change Process**

Changing identifier information without submitting full sets of both original loan identifiers and new loan identifiers can create duplicate loan records that compromise the data of NSLDS and cause students to be denied Title IV aid to which they are entitled.





**New Loan Identifiers**

- New Code for Original School
- New Student's Social Security Number
- New Date of Student's Birth
- New Student's First Name
- New Type of Loan
- New Date of First Disbursement

Figure 6-2 gives an example of how to update identifier information on a loan that currently exists in the NSLDS database.

Assume that the following loan information currently exists on the NSLDS database (values in position 1-47):

- Code for Original School = 00876500
- Student's Social Security Number = 111223333
- Date of Student's Birth = 19600508
- Student's First Name = Robert
- Type of Loan/Other Aid = NU
- Date of First Disbursement = 19910903

**Then you discover that the Type of Loan/Other Aid code is incorrect. To update the erroneous identifier, submit the data exactly as shown above in positions 1-47 of the record and, *at the same time*, also report the following values in positions 50-96 of the record:**

- New Code for Original School = 00876500
- New Student's Social Security Number = 111223333
- New Date of Student's Birth = 19600508
- New Student's First Name = Robert
- New Type of Loan/Other Aid = PU (only item changed)
- New Date of First Disbursement = 19910903

**Note: Only the Type of Loan/Other Aid was changed. All other values must be resubmitted as before.**

*Figure 6-2: How to Update Loan Identifier Data*

### 6.5.3 Updating Identifiers on Multiple Records

Remember that all information on NSLDS, including identifier information, must be updated at the loan level. This means that your Database Extract file must contain a separate Detail record, with full sets of old and new identifier data, for each loan record whose identifiers you want to update. This is the case even if you are making the same change—typically a change to student identifiers—to several loans.

After you submit the updated information to NSLDS, review the Load Process Error report to see that all the Detail records containing the updates were loaded into NSLDS.

If any records erred out, correct and resubmit them with both the original loan identifiers and new loan identifiers until they load successfully.

## 6.6 Updating Non-Identifier Data

The process for updating loan identifier data is described in Section 6.5. A completely different set of rules applies when you report new data in fields that are not part of the loan identifier.

To follow those rules, you must answer two questions:

1. Is the field you want to update one for which NSLDS keeps history?
2. If NSLDS keeps history for the field, are you trying to update the current value of the field or an earlier historical value? (See Figure 6-7: for the list of fields for which history is kept.)

Depending on how you answer these two questions, you face three possible scenarios:

- 1. History Is Not Kept for the Field**—In this case, the new data should be captured by your normal extract process and included in your regular submission as part of the Detail record for that loan. You do not have to do anything special to report the new value to NSLDS. As long as the new value passes all applicable edits, it will be loaded onto NSLDS.
- 2. History Is Kept for the Field, and You Are Updating the Current Value for That Field**—In this case, the new data should be captured by your normal extract process and included in your regular submission as part of the Detail record for that loan. You do not have to do anything special to report the new value to NSLDS. As long as the new value passes all applicable edits, it will be loaded onto NSLDS.
- 3. History Is Kept for the Field, and You Are Trying to Update a Historical Value for That Field**—In this case, create a PPC record to -report the new data.

### 6.6.1 What NSLDS Does

#### How NSLDS Creates History

When NSLDS updates a field for which history is not kept, the updated value becomes the current value and the old current value is discarded by the system. When NSLDS updates a field for which history is kept, the updated value becomes the current value *and* the old current value becomes the historical value. As further updates occur, each

current value becomes, in turn, a historical value, and all the historical values are stored, in order, as history for that field.

Figure 6-3 and Figure 6-4 will help illustrate how history is created as part of the update process.

In Figure 6-3, the NSLDS database contains a record for Loan X that has been loaded into the database but never updated. Each data element for the loan (A, B, C, and D) has the same value it did when the loan was first loaded onto the database; those are the current values A1, B1, C1, and D1.

The data provider then sends NSLDS a Submittal file that contains updates to two of the fields for Loan X. Those updates are denoted by B2 and D2. The updates pass all the relevant edits and are loaded onto the database. Because history is kept for field D but is not kept for field B, the following occurs:

- The current value of field B is updated to B2, and the old current value B1 is discarded.
- The current value of field D is updated to D2, and the old current value is stored in history as D1.

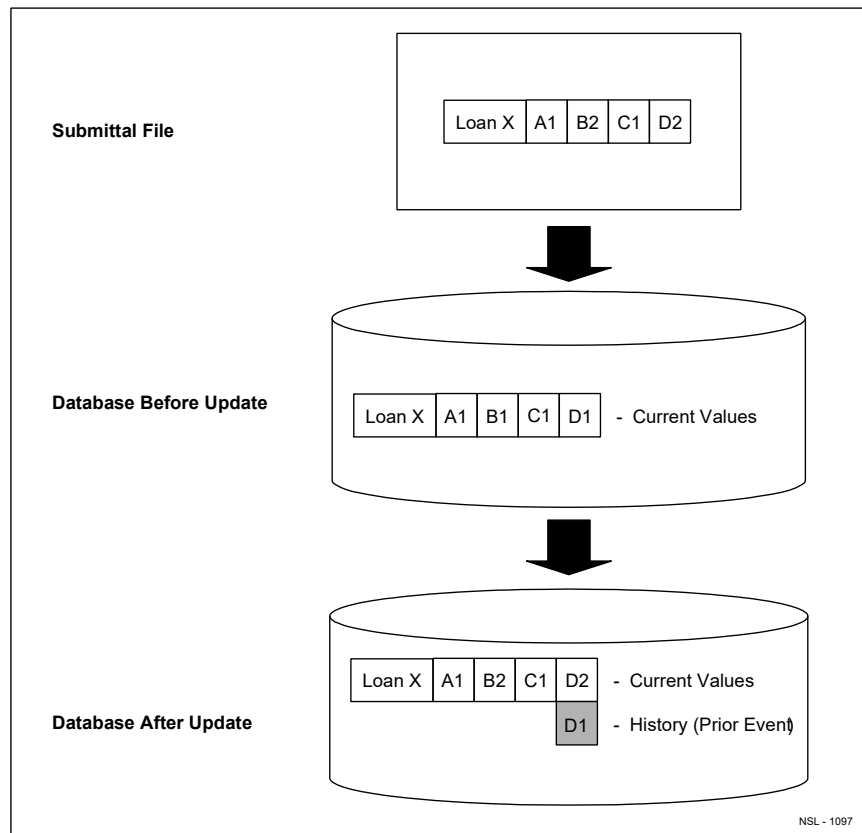


Figure 6-3: NSLDS Update (1 of 2)

In Figure 6-4, the data provider sends another Submittal file to NSLDS. This time, the Submittal file contains updates to fields A, C, and D. Those updates are denoted by A2, C2 and D3. The updates pass all the relevant edits and are loaded onto the database. Because history is kept for fields A and D but not for C, the following occurs:

- The current value of field A is updated to A2, and the old current value is stored in history as A1.
- The current value of field C is updated to C2, and the old current value is discarded.
- The current value of field D is updated to D3, the old current value is stored in history as D2 (which is also part of the prior event), and the original current value is stored in history as D1.

D1 is now strictly history and can only be changed by a PPC record.

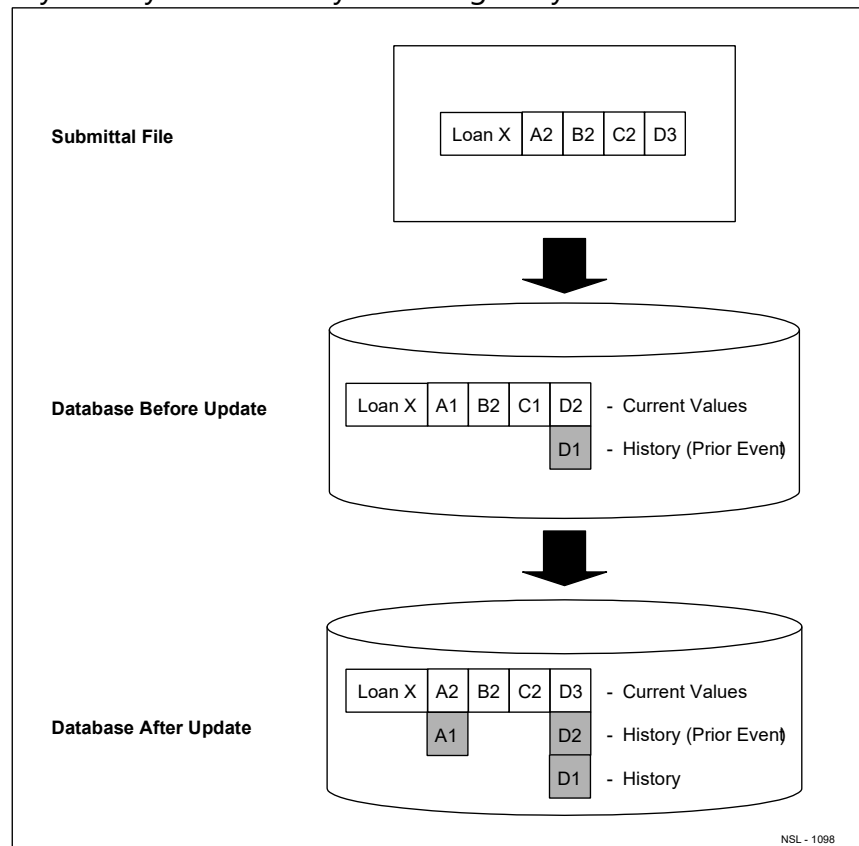


Figure 6-4: NSLDS Update (2 of 2)

## Events

The following events can be updated by a PPC record:

- Cancellation
- Deferment
- Disbursement
- Loan Status
- School Servicer

An **event** is made up of a **key**, usually a date, and one or more associated **values**. The key and values are linked together because they give each other meaning. For example, a Date of Loan Status is not meaningful without an accompanying Code for Loan Status. Together they constitute a discrete event, Loan Status.

Notice in Figure 6-3 and Figure 6-4 that the event immediately preceding the event that created the current value in a field for which history is kept is known as the **prior event**. It can be updated either by a PPC record or by a Detail record, but only if the purpose of the Detail record is to delete the current value for the field and reinstate the value of the prior event as the current value.



### Events

Events are made up of keys and associated values. Keys and values are treated as if they were linked because they give each other meaning. For example, a Date of Loan Status is not meaningful without an accompanying Code for Loan Status. Together they describe a discrete Loan Status event.

Events can be classified as current, prior, or history.

## How NSLDS Updates Current Events

Figure 6-5 shows what happens when you attempt to update a current event (key and values) using a Detail record.

Case	When the Key (Usually Date)	When Value(s)	NSLDS Does This
1	Stays the same.	Changes to new value.	Updates the value associated with the current event.
2	Changes to earlier date not before the date of the prior event.	Stays the same.	Updates the date associated with the current event.

Case	When the Key (Usually Date)	When Value(s)	NSLDS Does This
3	Changes to a later date.	Stays the same.	Updates the date associated with the current event.
4	Changes to a date before the date of the prior event.	Stays the same.	Returns a date sequence error and does not update the record.
5	Changes to an earlier date, but one still after the date of the prior event.	Changes to new value.	Updates the date and value fields associated with the current event.
6	Changes to the same date as the prior event stored on NSLDS.	Stays the same.	Deletes the current event, and the prior event becomes the current event. Updates with value.
7	Changes to the same date as the prior event stored on NSLDS.	Changes to a new value.	Deletes the current event, and the prior event becomes the current event. Updates with values.
8	Changes date to default value (zeros), where there is no previous event in history, and the field being changed is not part of a loan.	Changes to default value (zeros for numeric field, blanks for character field).	Deletes the current event.

9	Changes date to default value (zeros), and there is a previous event in history.	Changes to default value (zeros for numeric field, blanks for character field).	Returns a date sequence error and does not update the record.
10	Changes date to default value (zeros), where there is no previous event in history, and the record being changed is a loan or student status event.	Changes to default value (zeros for numeric field, blanks for character field).	Returns an error and does not update the record. (Deletion of last loan or student status is not allowed.)
11	Changes to a later date.	Changes to new value.	Creates a new event on NSLDS, which becomes the current value. What had been the current event now becomes prior event/history.

*Figure 6-5: Updating a Current Event*

Notice what happens if, as in Case 4, you attempt to change a current key (date) so it is earlier than the key (date) of the prior event. This illustrates one of the two things you must keep in mind when updating events, whether you are updating their current values or historical values:

1. You cannot change the chronological order of events stored in history. That is, you cannot re-date an event (for example, the event of which data element D2 in Figure 6-4 is part) so that it predates an event that occurred before it (D1) or postdates an event that occurred after it (D3).
2. You cannot re-date events, so they overlap in time.

Cases 6 and 7 illustrate the **prior event exception**. Because NSLDS wants to make it easy for you to undo your most recent change to the database, it allows you to delete a current event and update the values of what was the prior event using a Detail record.



Do this only when you want to delete the current event and make the old prior event the current event

## 6.6.2 What You Do

### Does NSLDS Keep History for the Field?

To update a loan record on NSLDS successfully, you must be able to answer the two questions posed in Section 6.6:

1. Is the field one for which NSLDS keeps history?
2. If NSLDS does keep history for the field, are you trying to update the current value for the field or a historical value?

To answer the first question, check Figure 6-7: or the History Kept box for the field in the Data Dictionary (Appendix A).

Fields for Which History Is Kept	Fields for Which History Is Not Kept
Amount of Cancellation	Amount of Loan
Amount of Disbursement	
Amount of Outstanding Principal Balance	
Code for Current School	Data Provider Identifier
Code for Enrollment Status	Code for Original School
Code for Loan Status	Date Enrollment Period Begins
Code for Servicer	Date Enrollment Period Ends
Date Deferment Starts	Date Entered Repayment
Date Deferment Stops	Date Grant Overpayment Repaid
Date Enrollment Status Effective	
Date of Cancellation	Date of Student's Birth
Date of Disbursement	Interest Rate

Date of First Disbursement	New Code for Original School
Date of Loan Status	New Date of First Disbursement
Date of Outstanding Principal Balance	
Date of Servicer Responsibility	New Date of Student's Birth
Indicator of Grant Overpayment	New Type of Loan/Other Aid
New Student's Social Security Number	Student's Academic Level
New Student's First Name	Student's Last Name
Student's First Name	Student's Middle Initial
<b>Fields for Which History Is Kept</b>	<b>Fields for Which History Is Not Kept</b>
Student's Social Security Number	Type of Loan/Other Aid
Student's Social Security Number Indicator	
Type of Cancellation	
Type of Deferment	

Figure 6-7: Fields and History

If history is not kept for the field you want to update, the update should be caught by your normal extract process and submitted to NSLDS on a Detail record without any special effort on your part. As long as the update passes all edits, it will be loaded onto NSLDS.

If, on the other hand, history is kept for the field you want to update, you must know whether you are updating a current value or a historical value.

### Are You Updating a Current Value or a Historical Value?

Most of the updates you submit to NSLDS will be to current values. This is as true for fields for which history is kept as it is for fields for which history is not kept. So even if

history is kept for the field you want to update, you will normally be updating the current value for that field. If that is the case, the update should be caught by your normal extract process and submitted to NSLDS on a Detail record without any special effort on your part.

On the other hand, you will sometimes know you want to update a historical value because you are aware that a mistake was made when reporting on an event prior to the event that supplied the current values for a field.

More often, you will discover that you want to update a historical value because of the following sequence:

1. You submit a change to a current value on a Detail record, but it errs out of NSLDS.
2. When you check your Load Process Error report, you discover that the change you submitted was valid, but that it conflicted with some other value stored in history on NSLDS.

Depending on the nature of the change you want to make, you may need to know more about the historical values 6.7  
Copy Your Database Extract File to the Extract Directory

When you have created a Database Extract file that meets the standards outlined in this chapter, you must copy it to PC DataPrep's Extract folder (C:\DataPrep\Extract) and name it **extract.ff**. Extract Validation will fail if PC DataPrep does not find a file named **extract.ff** in the Extract folder.



#### Changing History

When data are submitted to NSLDS, the system first processes Detail records, then PPC records. For this reason, if you want to change historical information on a loan whose identifiers are also being modified at the same time, the PPC record must refer to the new identifiers, not the old ones.

## Chapter 7: Extract Validation

Once you have created your Database Extract file and copied it to the Extract folder (C:\DataPrep\Extract), you are ready to run Extract Validation. This task is performed entirely by DataPrep.

### 7.1 What Happens in Extract Validation?

In the Extract Validation process, DataPrep first examines your Database Extract file to make certain its format is acceptable. DataPrep checks for proper header record(s), 300byte record lengths, and matching school code(s). These are called **file-level edits**.

If the header format is not correct, DataPrep cannot continue the process, and an error message appears informing you that there was a header error and that processing was aborted.

The Extract Validation process will also abort if any Detail record has a school code that does not match the school code on its Header record.

If your Database Extract file passes the file-level edits, DataPrep performs **domain-level edits** by examining all Detail in the file to ensure that each data element meets domain requirements. If the percentage of domain errors is below the maximum threshold levels established by NSLDS, DataPrep creates a Submittal File that you then send to NSLDS. If the percentage of domain errors exceeds the threshold levels set by ED (see box), DataPrep will issue an error message informing you that you have exceeded the threshold and that no Submittal file was created. All errors are noted in an Extract Error file from which you can generate an Extract Error report. Use this report to correct your database or extract program. Then create a new Database Extract File and rerun Extract Validation.

If your Database Extract file passes the file-level edits and the percentage of domain errors is below the maximum threshold levels established by NSLDS, DataPrep creates a Submittal file that you then send to NSLDS.



#### Domain-Level Errors

There are four kinds of domain-level errors:

1. **Numeric Field Errors**—A character other than a number is in a field requiring all numbers
2. **Invalid Date Errors**—Date specified does not exist on a calendar or is not zeros
3. **Missing Identifiers** in one or more loan identifier fields
4. **Missing New Identifiers** on records with identifier changes

Extract Validation process produces three output files:

1. **Extract Validation Log File**—A file containing a log report that summarizes the results of the Extract Validation Process and counts of records processed.
2. **Extract Error File**—A file from which you can generate a report listing all domain errors. It is created only if the Database Extract file passes file-level edits.
3. **Submittal File**—The file you transmit to NSLDS. It is created only if the Database Extract file passes file-level edits and remains below ED-established thresholds for domain-level errors.

**Successful Extract Validation**

For Extract Validation to create a Submittal file, your Database Extract file must not contain any file-level errors, and the percentages of domain-level errors must be below the threshold levels established by ED.

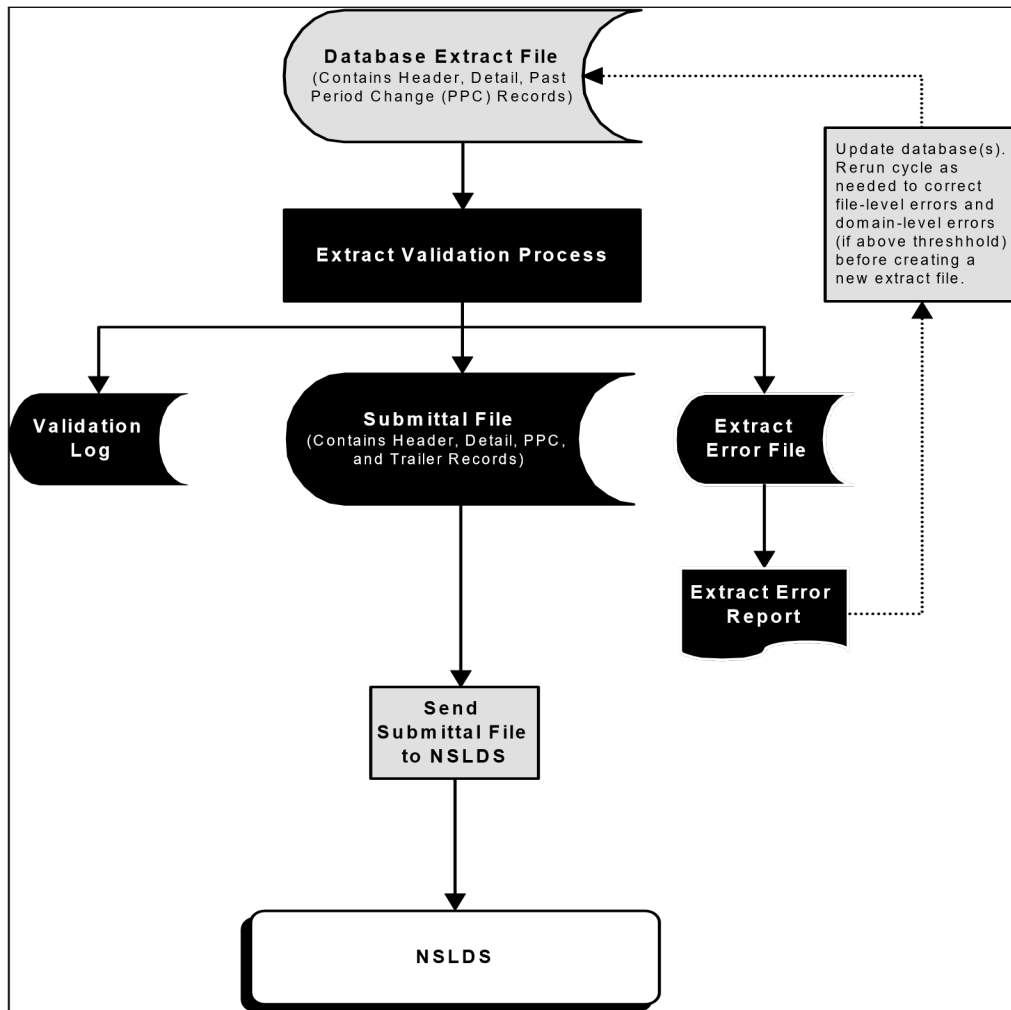


Figure 7-1: Extract Validation Process

## 7.2 DataPrep Error Path

DataPrep performs two sets of edits during the Extract Validation process:

1. File-level edits
2. Domain-level edits

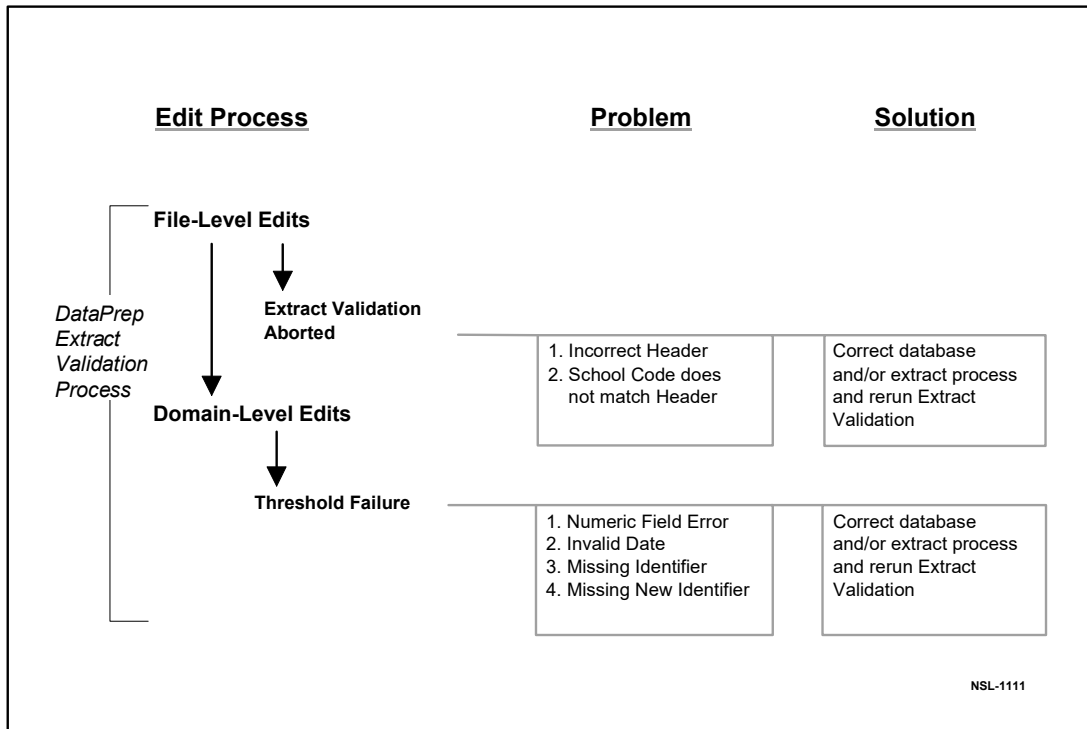


Figure 7-2: DataPrep Edit Process

## 7.3 File-Level Edits

File-level edits check whether the Database Extract file is a legitimate file with the correct header, 300-byte records, and a school code in each record that matches the code in the header. If DataPrep detects any one of these file-level errors, the Extract Validation process aborts and an error message, with a description of the error, appears on screen. If this happens, you must correct your database and/or extract process and create a new Database Extract file. You would then rerun Extract Validation. See Appendix B–10 (PC users) or B–11 (z/OS LE users) for a complete list of all the file-level and header errors that cause the Extract Validation process to abort.

### 7.3.1 Domain-Level Edits

Domain-level edits check for four kinds of errors:

- **Numeric Field Errors**—A character other than a number in a field requiring all numbers
- **Invalid Date Errors**—A date that does not exist on a calendar and is not all zeros
- **Missing Identifiers** in one or more loan identifier fields
- **Missing New Identifiers** on records with identifier changes

If the percentage of the records with these errors exceeds the threshold levels established by ED, DataPrep will not create a Submittal file. You must then correct your database or extract process, create a new Database Extract file, and rerun Extract Validation.



#### Domain Error Rates

DataPrep validates the entire record and can detect multiple domain-level errors on a single input record. The error rates are calculated by DataPrep based on the number of records with one or more errors, not on the total number of errors detected.

## 7.4 Running Extract Validation on a PC

Before you can run Extract Validation, you must perform the following tasks:

- Download DataPrep executable “JAR” file from <https://fsadownload.ed.gov>, launch, and define the directory paths for DataPrep’s data files (Section 5.2)
- Create a Database Extract file named **extract.ff** and copy it to the Extract folder (Chapter 5)
- Copy the most recent TEF file to the Current folder.



#### Naming the Extract File

Remember that your Database Extract file must be named **extract.ff** in order for DataPrep to locate and process it.

Ensure that you have the latest TEF file by going to FSAdownload. Once you have a current TEF file, use the software’s File Transfer option (Section 5.3.3) to help with placement and naming of the file.

Once you have performed these tasks, you are ready to run Extract Validation.



1. From the DataPrep Main Menu, click Extract Validation.

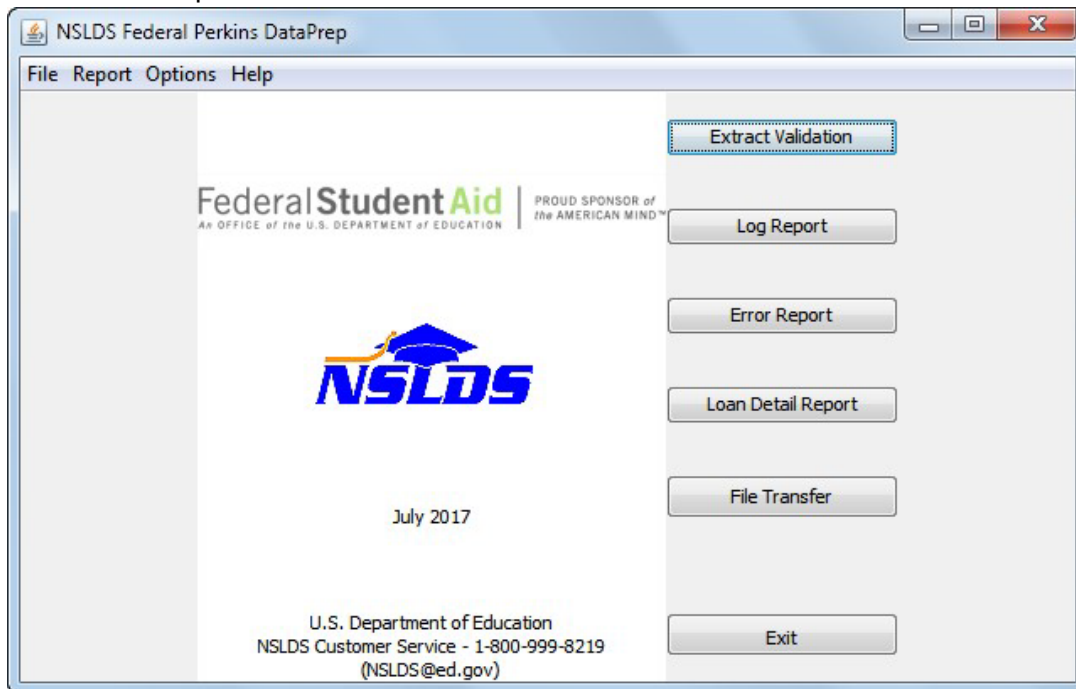


Figure 7-3: DataPrep Main Menu with Extract Validation Selected

The Extract Validation dialog box appears.

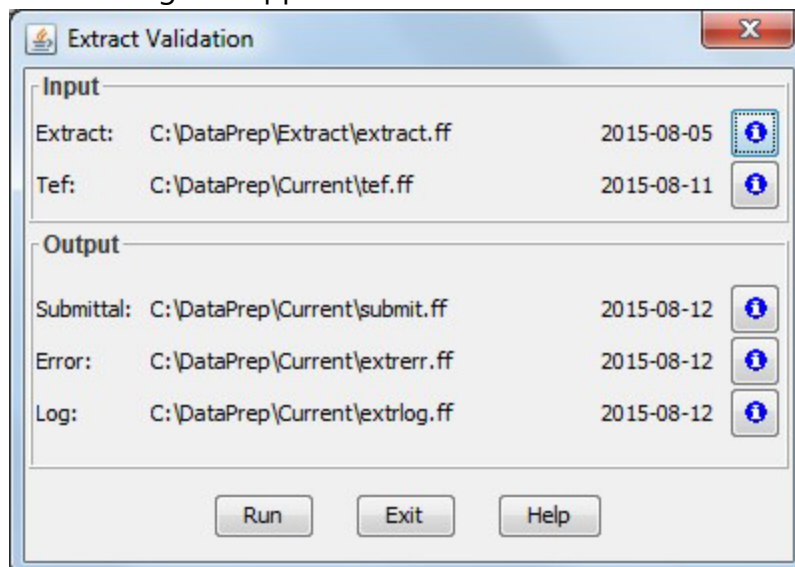


Figure 7-4: Extract Validation Dialog Box

**File Date**

Note that the date a file was last modified or created appears on the right side of the Extract Validation dialog box. This is to help you make sure you are using the right Database Extract file.

If you click on the plus sign next to the file date, the File Information Dialog Box appears, showing the date and time the file was last modified and the number of bytes in the file.

- 
2. If you click any of the Information Icons on the far right next to the file date, the File Information dialog box appears. This box shows the file name, the date and time the file was created or last modified (whichever is more current), and the number of bytes in the file.

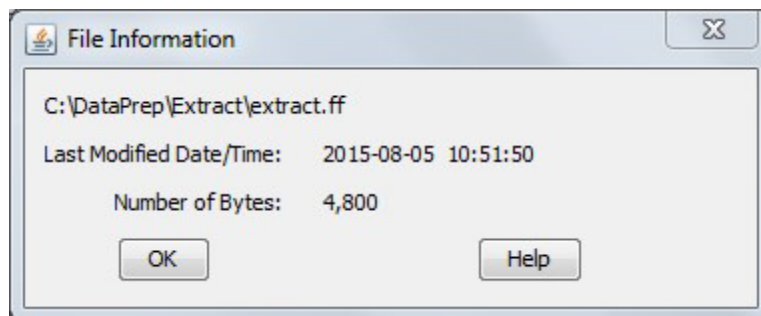


Figure 7-5: File Information Box

- 
- 
3. Click Ok to return to the Extract Validation dialog box.
4. Click Run. Once Extract Validation begins, the Extract Validation Process dialog box appears, with a green bar at the bottom which indicates how much of the process is complete. While Extract Validation is in progress, you can close the Extract Validation dialog box and perform other DataPrep tasks. In addition, you can use other software to perform tasks while Extract Validation runs. If you decide to terminate Extract Validation before it is complete, return to the Extract Validation dialog box and click Stop.

When processing is complete, the Extract Validation Process dialog box shows a green bar complete across the

**While Extract Validation Is in Progress**

While Extract Validation is in progress, you can use DataPrep or other software to perform tasks. When Extract Validation is done, the Extract Validation Process dialog box will show that 100 percent of the process was completed.

bottom of the window and displays information about the Extract Validation process that is repeated in the Extract Validation Log report (Section 7.4.2).

Once you have started to run Extract Validation, you cannot stop it from the Extract Validation Process dialog box. If you want to stop the Extract Validation process before it has completed, you must return to the Extract Validation dialog box and click Stop.

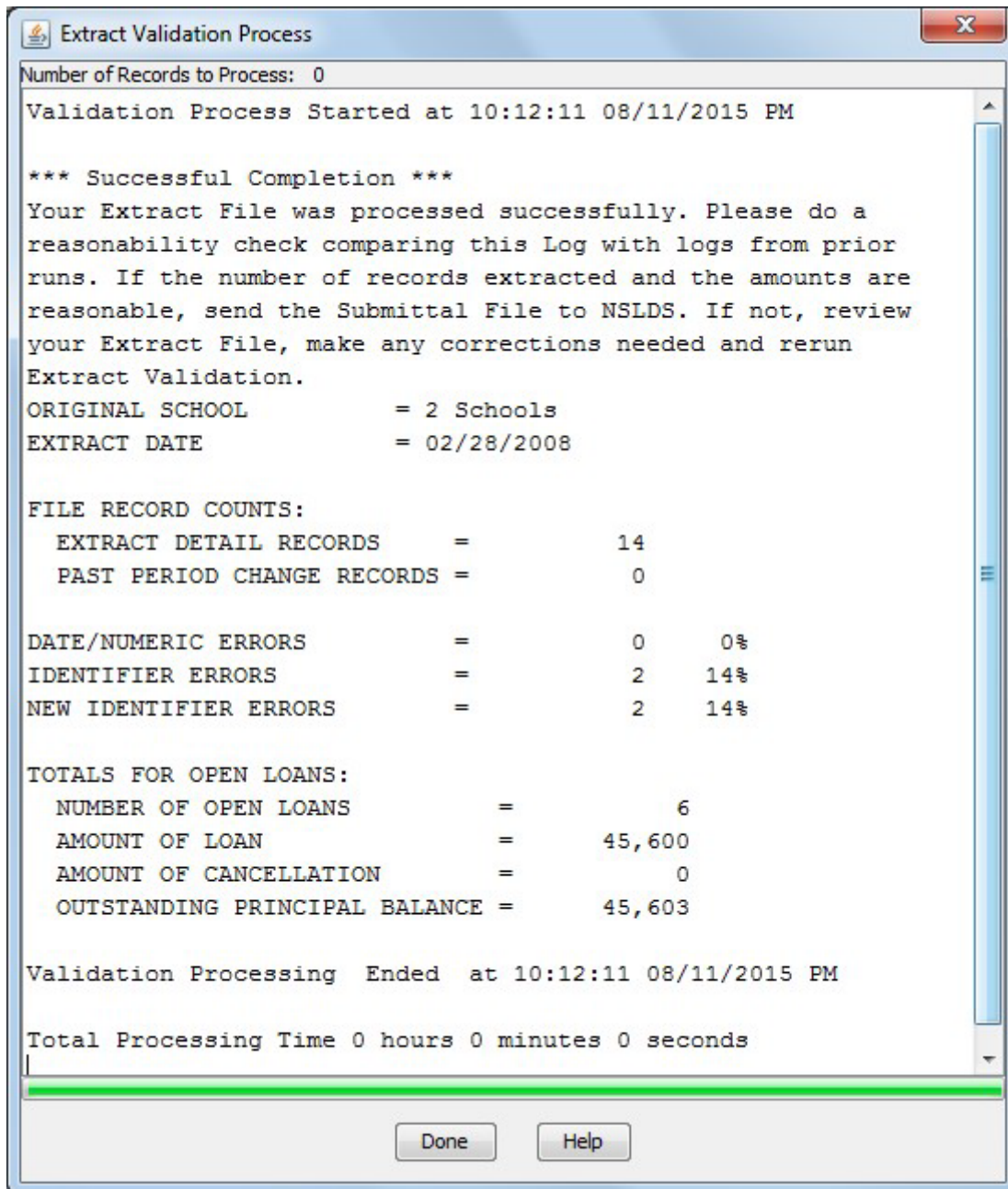


Figure 7-6: Extract Validation Process Dialog Box

Once you are satisfied that Extract Validation has run successfully, click Done to return to the Extract Validation dialog box. Then click Exit to return to the DataPrep Main Menu. From there you have several options, including generating reports.

### 7.4.1 Output

The successful Extract Validation process produces three files:

1. Extract Validation Log File (**C:\DataPrep\Current\extrlog.ff**)
2. Extract Error File (**C:\DataPrep\Current\extrerr.ff**)
3. Submittal File (**C:\Dataprep\Current\submit.ff**)

### 7.4.2 Using the Extract Validation Log Report

Section 10.1 explains how to view and print the Extract Validation Log report. This report repeats the information displayed by the Extract Validation Process dialog box when Extract Validation is complete. You must check this report to verify that the Submittal file created by Extract Validation contains valid data that will load onto the NSLDS database.

The Extract Validation Log report contains the following information:

- Version and release numbers for DataPrep
- When Extract Validation began
- Whether Extract Validation was successful and what to do next
- Original School
- Extract Date
- Record counts for the Database Extract file
  - Number of Detail records
- Counts and percentages of domain-level errors
  - Date/numeric errors
  - Identifier errors
  - New identifier errors

**Error Numbers**

Remember that DataPrep calculates the number of records containing errors if there are multiple errors in a single record, *not* the total number of errors (which could be considerably higher).

- Totals for open loans
  - Number of open loans

Original School is the school's OPEID if the Database Extract file contains only record for a single school. If the file contains records from multiple schools, the number of schools reporting on the file appears instead.

The record counts for the Database Extract file are useful when you do reasonability checks. Look, in particular, for unusually large changes in the number of Detail records from one submittal to the next.

DataPrep totals the number of records that contain domain-level errors and the percentage they represent of the records in the Database Extract file. If you have exceeded the error threshold levels defined by ED, DataPrep does not create a Submittal file. In this case, you must correct your database and/or extract process, create a new Database Extract file, re-start the extract process, and re-validate until your error rate is below the threshold levels.

### Extract Validation Is Successful

If your Database Extract file processes successfully, the Log states: Your Database Extract file was processed successfully. Please do a reasonability check comparing this Log with Logs from prior runs. If the amounts and number of records extracted are reasonable, send the Submittal file to NSLDS.

If not, review your Database Extract file, make the needed corrections, and rerun Extract Validation.

Compare this log to the logs for prior Validation

Extracts to make sure the numbers in the Submittal file DataPrep has just produced are reasonable.

In particular, look at the following:

- Number of open loans
- Number of Detail records
- Amount of loan
- Amount of cancellation
- Outstanding balance



#### Checking Reasonability

The Extract Validation Log will tell you whether the Extract Validation process was successful. If it was, compare the Log with others from prior Validations to make sure the number of Detail records and totals for open loans are reasonable.

Large increases in the number of Detail records or numbers for open loans could indicate that you have duplicated records or extracted some records incorrectly.

Large, unexplained changes in any of these figures could indicate that your Database Extract file contains flawed data, even though it processed successfully.

**Extract Validation Fails Because of File-Level Errors**

If DataPrep detects a file-level error, it stops Extract Validation and does not create a Submittal file. The Extract Validation Log report announces that DataPrep has detected a file-level error and terminated Extract Validation. It also describes the error and suggests possible remedies.

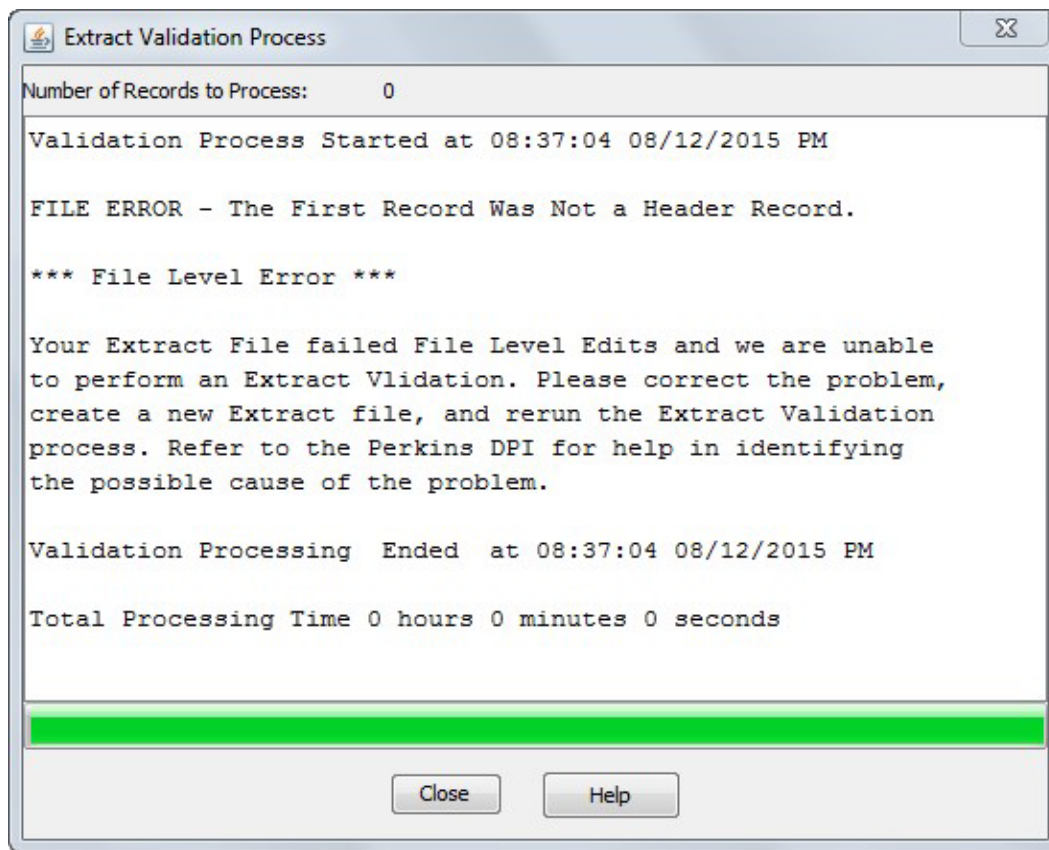


Figure 7-7: Extract Validation Process Box

Among the possible causes for a failed Extract Validation are the following:

- No Header record
- An incorrect format
- Data that shifted because you inserted a space or a character
- Records were not the required 300-byte length
- Mismatch between the Code for Original School in a Detail record and the school code in the Header record



**What to Do When Extract Validation is Halted**

If Extract Validation failed because a file-level error caused the process to abort, verify that you have used the correct Database Extract file, that it has a Header record, is in the proper format, and that the records are all 300 bytes in length.



## Extract Validation Fails Because of Domain Errors

If the percentage of domain-level errors in your Database Extract file exceeds the allowable threshold levels, the Log will state that no Submittal file was created, will report the error rate, and will explain the reason for the failure (excessive date/numeric, identifier, or new identifier errors). The Extract Validation Log will state:

The percentage of domain errors exceeds the allowable tolerances. Therefore, no Submittal File has been created. You can use the Loan Detail Error Report to help determine the cause. Please correct your database, create a new Database Extract file, and rerun the Extract Validation process. Refer to the Perkins DPI for help in identifying the possible cause of the problem.

When you receive this message, you must correct the domain-level errors on your

database so that the percentage of errors is acceptable. Use the Extract Error report to see what corrections must be made. But remember that the Database Extract file must be an exact reflection of your database, so you should correct all errors by updating your database, *not* by editing the Database Extract file or any file created by DataPrep.

There are a number of possible reasons for domain-level errors. Some of the following causes and corrections might explain yours:



### Domain Error Threshold Levels

ED has set the threshold levels for domain errors at:

- Combined Date and
- Numeric Field Errors 10%
- Missing Identifier 5%
- Missing New Identifier 5%

These percentages are subject to change at ED's discretion.

- **Your Data Is Stored Incorrectly on Your Database—**  
The solution is to correct the appropriate fields on your database. For example, if your database accepts 6-digit dates, correct it so it stores the 8-digit dates required by NSLDS or make sure your extract process converts 6-digit dates to 8 digits.
- **Your Extract Process Calculates Fields Incorrectly—**Review and correct any programming logic in your extract process. For example, when you calculate Date Entered Repayment by adding 1 day to the end of the enrollment period, make sure you are not producing invalid dates such as February 29, 1999, rather than the valid March 1, 1999.
- **Your Extract Process Only Picks Up Changed Fields—**Change your process to populate the other fields with the current data for those fields.

**What to Do When your Domain Errors are in Excess of the Threshold**

If the number of domain errors (date/numeric field errors, identifier errors, or new Identifier errors) Extract Validation finds in the Detail and PPC records exceeds the threshold defined by ED, it rejects the *whole* Database Extract file.

The Extract Validation Log report contains your error rates. To learn more detail about what caused the errors, generate an Extract Error report.

**TEF File Is Out of Date**

If your TEF file is more than 90 days old, DataPrep will display a message warning that the threshold error values it contains may be out of date. However, DataPrep will perform Extract Validation and create a Submittal file, assuming that your Database Extract file meets the standards described in this manual. Update your TEF file by downloading the latest version from FSADownload.

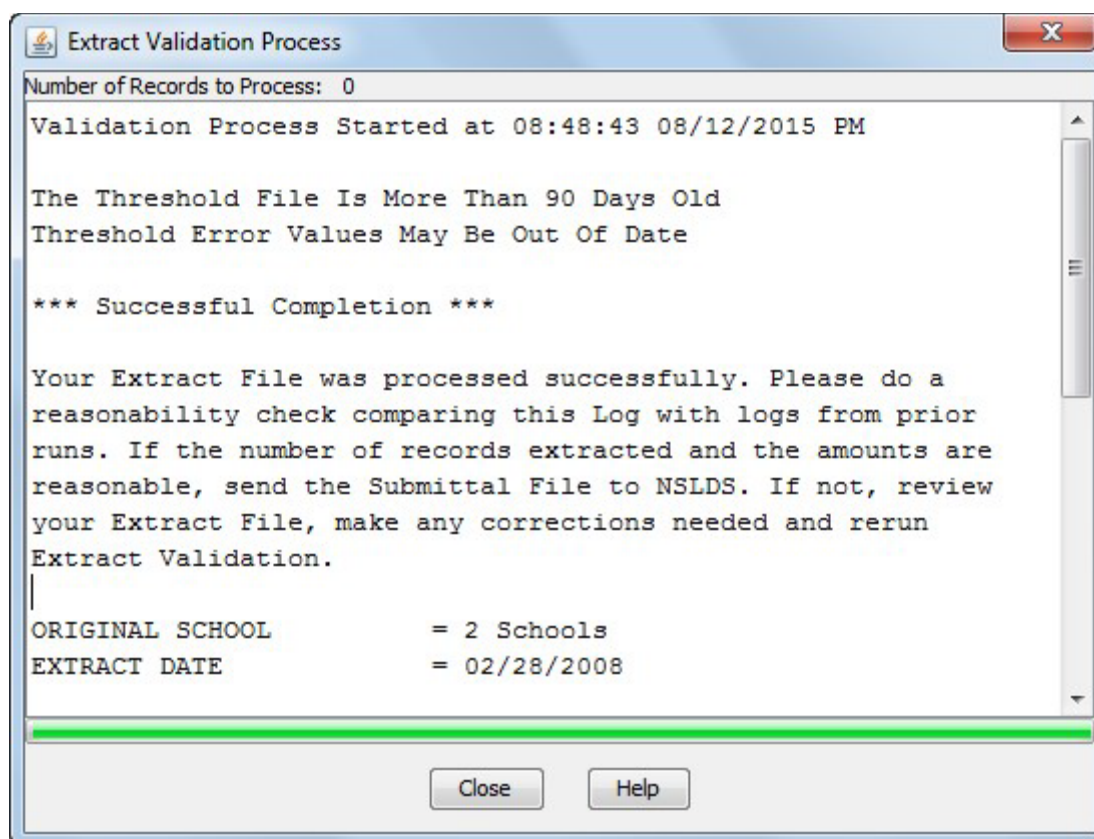


Figure 7-8: Extract Validation Process Box

## 7.5 Running Extract Validation on a z/OS LE Version 3.1 or Higher Mainframe

The JCL for z/OS LE Version 3.1 or higher mainframes executes Perkins DataPrep procedures that perform Extract Validation and creates an error file. Appendix G contains the JCL for these functions. It can be referenced from the library created with JCLLIB as part of the name. The library member name is PRBB1000.



### Previous Data Sets

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

## Chapter 8: Sending and Receiving Files

### 8.1 Sending the Submittal File

You are required to transmit a current Submittal file to NSLDS each month on the schedule assigned to you by ED. Because of the number of data providers and the size of some Submittal files, it is critical that you submit your data according to the schedule established by NSLDS. All files are transmitted using the SAIG network.

Make sure that the file you send meets the following standards:

- It is a Submittal file (named **submit.ff**) transmitted in the correct message class, not a Database Extract or some other file.
- It was created no more than 14 days before your scheduled load date. If you are not sure, use Windows Explorer to check when the file was created or check the submittal date in the header record.



#### Meeting Your Scheduled Submittal Date

Schools and other data providers have specific submittal windows within which they must transmit their Submittal files to NSLDS. If you do not transmit within your window, your submittal will be rejected by NSLDS, and you'll receive a message instructing you to submit a new Submittal file on your next scheduled date.

ED keeps track of all missed submissions as well as error rates in determining an institution's ability to properly manage Title IV student aid programs.

#### 8.1.1 Submittal Schedule

NSLDS will assign a submittal schedule to you each year, usually in December. You can check your schedule at any time by selecting the Data Provider Schedule link on the Organization page of the NSLDS Professional Access Web site (<https://nslsdfap.ed.gov>).

Your Submittal file should arrive at NSLDS no later than 1 p.m. Central time the day before it is scheduled for Load processing. The data it contains cannot have been

extracted from your database more than 14 days before your scheduled load date.

Submittal files received more

than 15 days after your scheduled load date will not be processed. The period from 14 days before your scheduled load date until 15 days after your scheduled load date is your **submittal window**.

Submissions outside this window could result in a file level error and identified in the corresponding message class sent to you by NSLDS.

It is the **school's responsibility** to ensure that its required reporting to NSLDS is completed in a timely and accurate manner. Schools that use a third-party servicer must ensure that its servicer complies with the schedule and data accuracy necessary, as schools are responsible for any non-compliance by the servicer.

**Submittal Schedules on the Web**

You can check your submittal schedule at any time on the Organization page of the NSLDS Professional Access Web site (<https://nslsdfap.ed.gov>).

### 8.1.2 Submittal File Format

If you are reporting for a single campus, the Submittal file created by DataPrep contains:

- Header Record
- Detail Records
- Trailer Record

If you are reporting for multiple campuses, the Submittal file contains records in the same sequence (Header, Detail, ~~PPC~~, Trailer) by campus. Each campus has its own Header and Trailer record, and all the records for the first campus appear together, followed by all the records for the second campus, and so on. The sequence looks like this:

- Header record for Campus 1
- Detail records for Campus 1
- Trailer record for Campus 1
- Header record for Campus 2
- Detail records for Campus 2
- Trailer record for Campus 2

- Header record for Campus N
- Detail record for Campus N
- Trailer record for Campus N

The Trailer record, which is created by DataPrep, marks the end of the submittal and contains basic information about the number of records processed and the number of records in error at each level of validation.

### 8.1.3 Submitting by Student Aid Internet Gateway

Once the DataPrep software has created the submittal file (submit.ff), you are ready to transmit from the EDConnect software using **message class SHSLDSIN and searching for C:\Dataprep\Current\submit.ff**.

The DataPrep's File Transfer utility allows users an easy way to manage files by placing the submit.ff file in the appropriate directory and naming it for EDConnect transmission over SAIG.

For full instructions transmitting a file using SAIG, see the EDConnect User's Guide or TDClient Host Communications Guide available on the FSA Partner Connect Knowledge Center (<https://fsapartners.ed.gov/knowledge-center/library/tdclient/2021-09-10/tdclient-host-communications-guide>).

If some problem with DataPrep or NSLDS prevents you from transmitting your Submittal file successfully, contact the NSLDS CSC at 800-999-8219.

If your problem is with the EDConnect software or SAIG transmission connectivity, contact the CPS/SAIG Technical Support at 800-330-5947



#### Message Classes

Use this message class to send Submittal files to NSLDS:

- **SHSLDSIN**—the Submit.ff file produced by DataPrep  
NSLDS uses these message classes to send files to you:
- **SLDERROP**—Load Process Error File
- **SHSNTFOP**—Error Submittal Summary Notification File
- **SCHRECOP**—Perkins Extract by Parameters Report

## 8.2 Receiving Files

### 8.2.1 Receiving Files by Student Aid Internet Gateway

Users can utilize DataPrep's File Transfer utility to copy files received over SAIG. The File Transfer utility allows users an easy way to manage files by placing them in the appropriate software's directory and naming each file for DataPrep use.

NSLDS sends you files by SAIG using the following message classes:

- **Message Class SHSNTFOP**—Error Submittal Summary Notification File. NSLDS sends you this file if it fails to receive your Submittal file, or the file you send contains file-level errors that prevent NSLDS from processing it.
- **Message Class SLDERROP**—Load Process Error File. NSLDS sends you this file within 48 hours after successfully loading your Submittal file onto the database.
- **Message Class SCHRECOP**—NSLDS Loan Detail File. NSLDS sends you this file when the Perkins Extract by Parameters Report is requested by the ad-hoc report (REC005) or monthly as a scheduled report. (See appendix J, NSLDS Perkins Report File Layout for more information.)

Note: The Thresholds, Error Codes and Field Codes File (TEF) can be downloaded into the DataPrep subfolder from the FSA website located at <https://fsadownload.ed.gov>. The file should be saved into the DataPrep\Current directory with the file name TEF.ff. You can also download the TEF file and use DataPrep's File Transfer utility (Section 5.3.3) to help with placement and naming of the file. This file is updated any time NSLDS includes a new or removal of error code(s).



#### HELP!

If you have problems with **NSLDS**, contact the NSLDS Customer Support Center (CSC) at 800-999-8219.

## Chapter 9: The NSLDS Load Process

The day before your Submittal file is scheduled for loading onto NSLDS, NSLDS checks whether it has received your Submittal file. If it has not, it sends you an Error Submittal Summary Notification file reminding you that your submission is due and that it will still be processed if it is received within your submittal window. If NSLDS does not receive a Submittal file from you within that window, it sends you another Error Submittal Summary Notification file informing you that your Submittal file cannot be processed that month and that you must send a new Submittal file the following month.

Once it receives your Submittal file, NSLDS performs the following edits:

- File-Level Edits
- Domain-Level Edits
- Record-Level Edits
- Load-Level Edits

NSLDS performs **file-level edits** to determine whether there are errors in the Submittal file that prevent it from being processed at all. Such errors can include:

- Sending the wrong file
- Files that are incorrectly formatted
- Data that were corrupted during transmission to NSLDS

If your Submittal file contains file-level errors, NSLDS sends you within 1 or 2 days an Error Submittal Summary Notification file, which contains an error message (or messages) explaining why NSLDS was unable to process your submittal. NSLDS then takes no further action, so it is up to you to create a successful Submittal file and send it to NSLDS within your processing window.



### Submittal Window

Your submittal window runs from 14 days before your Submittal file is scheduled for processing to 15 days after. If NSLDS has not received your Submittal file by 1 p.m. Central Time the day before the scheduled load, it sends you an Error Submittal Summary Notification file. It sends another if your submittal window expires without a Submittal file arriving. Your Database Extract file cannot have been extracted more than 14 days before the scheduled load date.



After it verifies that your Submittal file does not contain any file-level errors, NSLDS performs domain level and record-level edits on each record within the file. **Domain-level edits** check for records that contain non-numeric characters or spaces in a numeric field, invalid dates (other than all zeros), missing identifiers, or missing new identifiers. **Record-level edits** check for duplicate records and for records that violate reasonability rules or Perkins program regulations. If NSLDS detects either a domain-level error or a record-level error in a record, it writes the error to the Load Process Error file but does not perform any further processing on the record.

**Check Your Mailbox Early**

It is important that you check your SAIG mailbox a day or two after transmitting your Submittal file. If it encounters a problem reading the file or some other error that prevents an update, NSLDS will notify you through **message class SHSNTFOP** that you must correct and retransmit the Submittal file.

If records pass domain- and record-level edits, NSLDS performs **load-level edits** that check for invalid codes, and for any date sequence errors or identifier conflicts that would be caused by loading those records onto the NSLDS database. Records that pass the load-level edits are then loaded onto NSLDS and update the database.

For more information about edits, see the Federal Perkins Data Dictionary (Appendix A), which describes all the edits applied to each field in a Perkins record, and Appendix B, which lists all the error messages generated by DataPrep and the Load process.

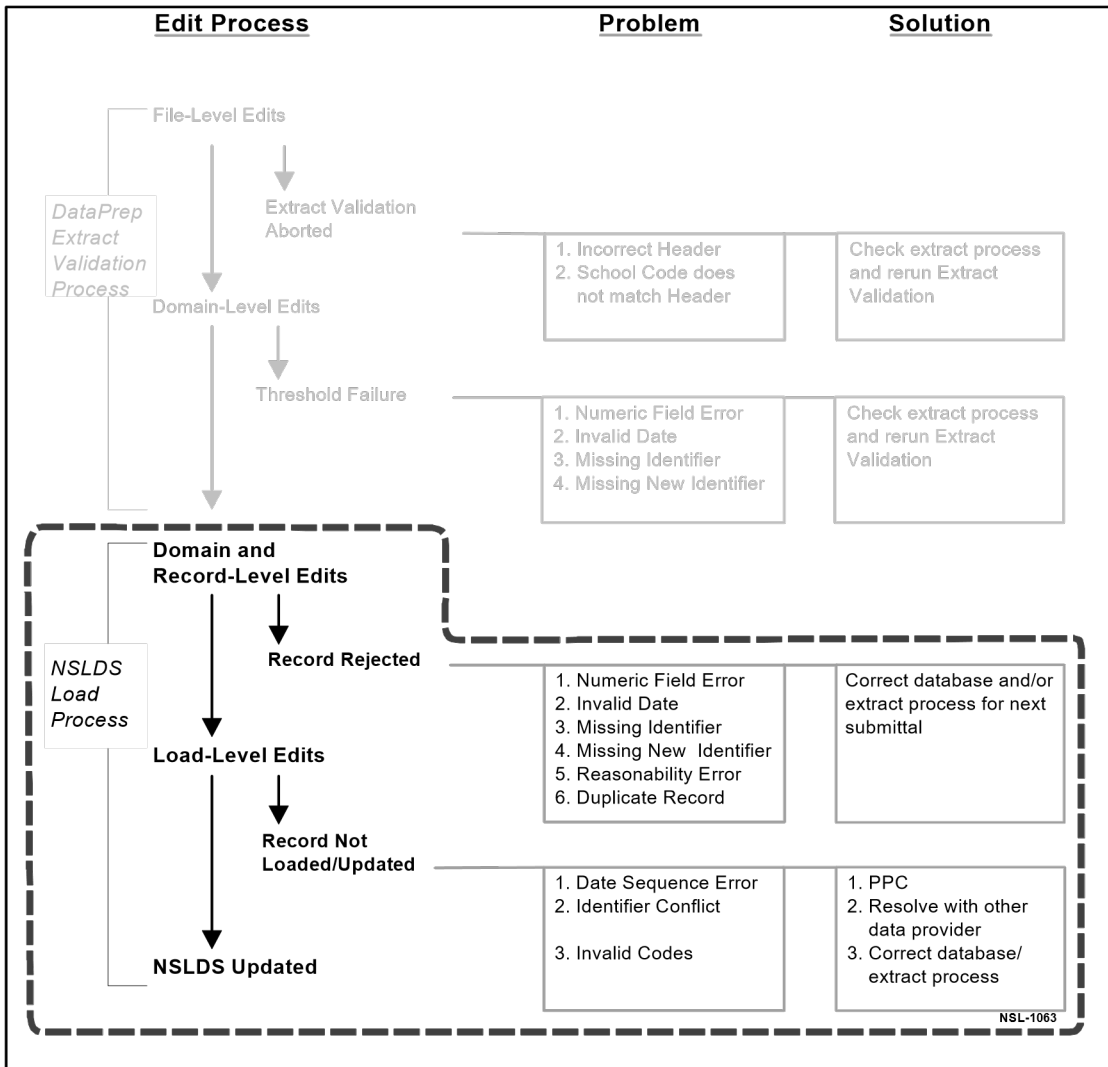


Figure 9-1: NSLDS Load Process

## 9.1 File-Level Edits

File-level edits check whether NSLDS has received a Submittal file on schedule, and whether it will be able to process that file as a whole. Among the errors NSLDS checks for are:

- File submittal date too early
- Submittal file not received
- File submittal date too late
- Invalid Header record
- No data in Submittal file
- Missing or invalid Trailer record
- Invalid OPEID
- Duplicate files
- Invalid date in Submittal Date field of Header record
- School Code in Detail record does not match code in Header record

If your Submittal file fails any file-level edit, NSLDS will not process the file and will, instead, send you an Error Submittal Summary Notification file.



### Why Perform Domain-Level Edits Twice?

If DataPrep has already performed domain-level edits as part of Extract Validation, why does NSLDS perform them again as part of the Load process? DataPrep performs domain-level edits to determine whether your Database Extract file exceeds the domain error thresholds established by ED. If it stays below those thresholds, DataPrep creates a Submittal file, even though some of the records in that file contain domain-level errors. The Load Process, on the other hand, performs domain-level edits to determine whether the individual records within the Submittal file meet NSLDS standards and should be loaded onto the database.

## 9.2 Domain-Level Edits

Domain-level edits check individual records for the following errors:

- Non-numeric characters or spaces in a numeric field
- Invalid dates (other than all zeros)
- Missing identifiers
- Missing new identifiers

DataPrep applies the same domain-level edits to your Database Extract file as part of Extract Validation, but it does so only to calculate your domain-level error rate and to determine whether that rate exceeds the threshold established by ED. As long as it stays below that threshold, DataPrep creates a Submittal file (Section 7.3.1) even though some of the records in the file contain domain-level errors.

The Load process, on the other hand, applies domain-level edits to determine whether individual records within your Submittal file should be loaded onto the

database. If a record contains a domain-level error, NSLDS writes it to the Load Process Error file but does not process it any further. This means that load-level edits are not applied to records that have failed domain-level edits.

Records that pass domain- and record-level edits are then edited for load-level errors before being loaded onto the database.

## 9.3 Record-Level Edits

Record-level edits check the Submittal file as a whole for duplicate records and then each individual record for reasonability errors. If a record contains a record-level error, NSLDS writes it to the Load Process Error file but does not process it any further. This means that load-level edits are not applied to records that have failed record-level edits.

Records that pass domain- and record-level edits are then edited for load-level errors before being loaded onto the database.

### 9.3.1 Duplicates

NSLDS sorts the records in the Submittal file and compares sequential rows to determine if the first 47 bytes of the record—the loan identifiers—match. If any two Detail records have the same loan identifiers it rejects both records as duplicate records. If you have populated the Data Provider Loan ID field for each record, you will be able to determine which record be reported under those identifiers for the next submission. No record will pass this duplicate edit process if another record on the same submission has the same loan identifiers. Neither duplicate record will update the database since NSLDS has no way of knowing which loan record is correct.



#### **Duplicate Records**

If two Detail Records have the same loan identifiers, both records will be rejected. You will have to resubmit the record in a later submission. Duplicate Loan records will have an Error Code of 1423.

### 9.3.2 Reasonability Edits

Reasonability edits check that data are contained in proper fields according to specific edit criteria. Such edits include checking that required fields have been filled, such as the Date Entered Repayment field or a Cancellation Amount on a loan that has a Cancellation type.

Reasonability edits also check all date and amount fields on each record to ensure that the data they contain are both reasonable and in compliance with Perkins program regulations. For example, if a loan is reported as a PU loan (Perkins Loan) with a Date of First Disbursement of 19820115 (January 15, 1982), it will be rejected since Perkins loans did not exist in 1982. Reasonability edits ensure data integrity within individual records.

## 9.4 Load-Level Edits

NSLDS only applies load-level edits to records that have already passed domain- and record-level edits. *Records that fail domain- or record-level edits are written to the Load Process Error file but not processed further by NSLDS.* This means that you cannot assume that records that failed domain- or record-level edits would otherwise have passed loadlevel edits and been loaded onto the database.

Records that pass both domain- and record-level edits, but fail load-level edits, are written to the Load Process Error file.

Records that pass domain-, record-, and load-level edits are loaded onto NSLDS and update the database.

### 9.4.1 Identifier Edits

NSLDS reviews the student and loan identifiers in the records you submit against those of records on the database. If the Student's SSN in an individual record does not match an SSN on NSLDS, either current or in history, the student is considered a new student. If the record then passes all the remaining edits, NSLDS creates a new student and assigns a new loan to that student on the basis of the data you submitted.

If the Student's SSN on a record you submitted matches an SSN on the NSLDS database, NSLDS uses Identifier Match Criteria to match the loan identifiers on the record to the identifiers for a loan currently on the system. If it matches an existing Perkins loan record on four criteria—Student's SSN, Original School, Loan Type, and Date of First Disbursement—the record you submitted is



#### **Correcting Student Identifier Conflicts**

Submitting records that match an existing record on Student's SSN but not on the other student identifiers (Date of Student's Birth and Student's First Name) causes an identifier conflict. To correct this error, you must resolve the conflict with the data provider whose data conflicts with yours.

considered an attempted update. If all other edits are successful, the record updates the NSLDS database.

If a record you submitted does *not* match on the loan identifiers (Original School, Loan Type, and Date of First Disbursement), but *does* match on the Student's SSN, NSLDS uses Identifier Match Criteria to match the student identifiers on the record to the identifiers for a student currently on the system. If a match is made and successive edits are passed, NSLDS creates a new loan record for the existing student on the basis of the data you submitted.

If the record you submitted does match a current Student's SSN but a student match cannot be made based on the Identifier Match Criteria, NSLDS rejects the record. If that occurs, you must resolve the identifier conflict by contacting the NSLDS Customer Support Center at 800-999-8219 or by e-mail to [nslds@ed.gov](mailto:nslds@ed.gov).

If you submit a record that causes a student identifier conflict, NSLDS writes a record to the Load Process Error file. The error record contains the following information from your Submittal file:

- Student's SSN you supplied
- Date of Student's Birth you supplied
- Student's First Name you supplied

In addition, the error record contains the following information for the student record that conflicts with yours:

- Error Code
- Data Provider Code
- Data Provider Name
- Existing Student's SSN
- Existing Date of Student's Birth
- Existing Student's First Name
- Existing Student's Last Name
- Data Provider City
- Data Provider State

This information will help you resolve the conflict with the data provider for the record already on NSLDS.

For a more detailed discussion of the Identifier Match Criteria for student matches, see the discussion of the Student's Social Security field (positions 9–17 in the Detail record) in the Federal Perkins Data Dictionary.

### 9.4.2 OPEID Edits

NSLDS reviews original and current school codes in the records you submit against the most current ED data. If the OPEID code on a record does not exist in the NSLDS database, NSLDS rejects the record and does not update the database.

### 9.4.3 Validate Codes

NSLDS reviews all code fields to ensure that the codes they contain are acceptable to NSLDS. See Appendix B for complete lists of the following codes:

- Loan Type
- Loan Status
- Enrollment Status
- Deferment Type
- Deferment Type Usage
- Cancellation Type
- Perkins Commercial Servicer



#### Correcting Invalid Codes

NSLDS rejects records submitted with invalid codes. To correct code errors, you must correct either your database or your extract process.

### 9.4.4 Date Sequence Edits

In addition to storing the current values for the individual fields that make up a loan record, NSLDS also stores historical (or past) values for selected fields. Often, those historical values are stored as part of the event. This is because changes to some fields are only meaningful if they are accompanied by a change to another field or fields. For example, a new Date of Loan Status is only meaningful if it is accompanied by a new Code for Loan Status. Together they constitute a Loan Status event. While you can update historical values, *you cannot change either current or*



#### Correcting Date Sequence Errors

Records you submit that do not conform to date sequence logic will not update NSLDS. To correct the records already on NSLDS that cause these errors, you may need to submit a PPC record (Section 6.6).

*historical values so that you change the chronological order of events stored in history.*

Therefore, NSLDS reviews records you submit against current and historical values already stored on NSLDS for the same record to ensure that any date changes do not alter the sequence of events. If they do, NSLDS writes the record to the Load Process Error file and does not update the database with it.

If a record you submit is rejected by NSLDS because it causes a date sequence error, first check that the data you have submitted are correct. If they are, you must submit a PPC record to update the historical data already on NSLDS that are making your record cause a date sequence error.



## Chapter 10: Generating Reports on Windows-Based PCs

From Extract Validation onward, the NSLDS update process creates a series of data files that you can use to generate reports. These reports will help you verify the contents of your database and of your submissions to NSLDS. If necessary, they will help you fix problems with your database or extract procedures, a topic discussed in detail in Chapter 12.

Using files produced by either the Extract Validation process or NSLDS, DataPrep can generate the following reports:

- **Extract Validation Log Report**—This report is generated from the Extract Validation Log report created by Extract Validation. It is identical in contents to the text displayed by the Extract Validation Process dialog box after Extract Validation is complete.
- **Extract Error Report**—This report is generated from the Extract Error file created by Extract Validation and is available in either summary or detail format.
- **Load Process Error Report**—This report is generated from the Load Process Error file returned to you by NSLDS after it has processed your Submittal file. It is available in either summary or detail format.
- **Extract Loan Detail Report**—This report is generated from the Extract Loan Detail file created by Extract Validation.
- **NSLDS Loan Detail Report**—This report is generated from the Loan Detail file NSLDS sends you when the Perkins Extract by Parameters Report is requested by the ad-hoc report (REC005) or the monthly scheduled report. It can be used to help reconcile data, identify and resolve error conditions within your database when comparing the data on NSLDS. It is recommended you request this file at least every six months to help with the reconciliation process.
- **Error Submittal Summary Notification Report**—This report is generated from the Error Submittal Summary Notification file that NSLDS sends you when your Submittal file is not received on schedule by the NSLDS Data Center or fails to load onto the database.

DataPrep for PCs offers advanced users a particularly rich set of selection and sort options for detail Error reports and Loan Detail reports. These options are discussed at the end of this chapter.

## 10.1 The Extract Validation Log Report

The information that appears in the Extract Validation Process dialog box after Extract Validation is complete (Figure 7-6) is also written to the Extract Validation Log file, where it is available to you for further examination or storage. From this file, you can view or print a report that provides a useful overview of Extract Validation. For a detailed discussion of the report's contents, see Section 7.4.2.

To view or print the Extract Validation Log report, follow these steps:

1. From the DataPrep Main Menu, click Log Report.

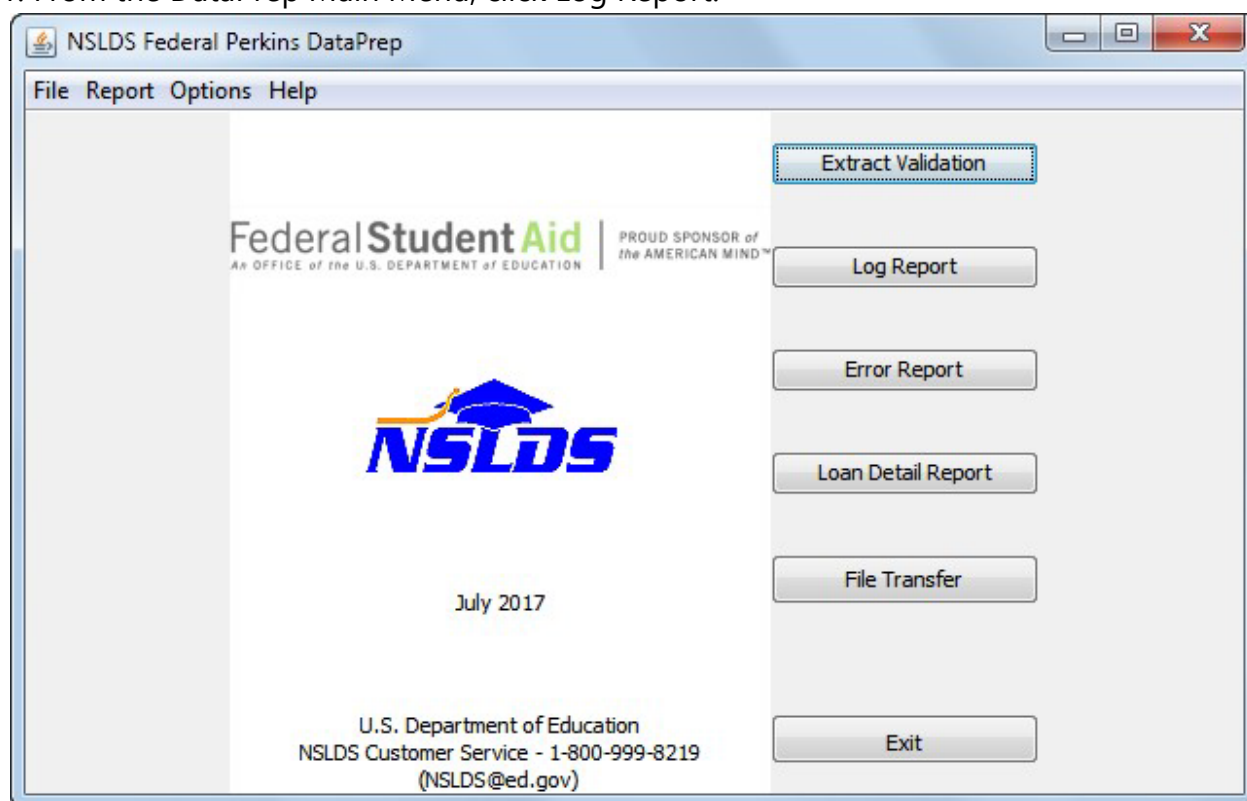


Figure 10-1: DataPrep Main Menu with Log Report Selected

2. The Log Report dialog box appears.

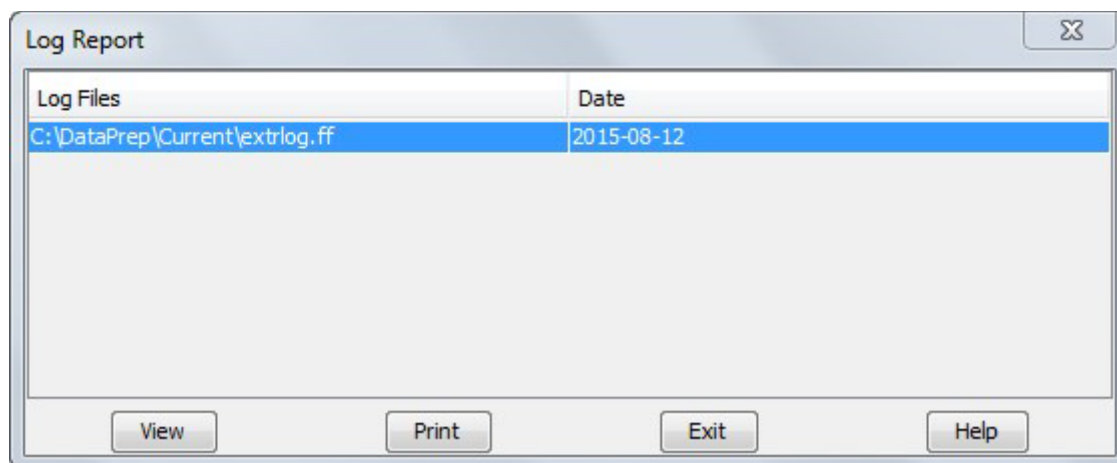


Figure 10-2: Log Reports Dialog Box



#### Extract Validation Log

The Extract Validation Log file created by DataPrep includes the following information:

- The number of domain-level errors detected
- Whether rejection thresholds have been exceeded
- The number of records in the Database Extract file

The log report can help you identify problems in your system or database.

3. Select the log file in your Current folder (**C:\DataPrep\Current\extrlog.ff**), and click View. DataPrep displays the log in your default viewer.

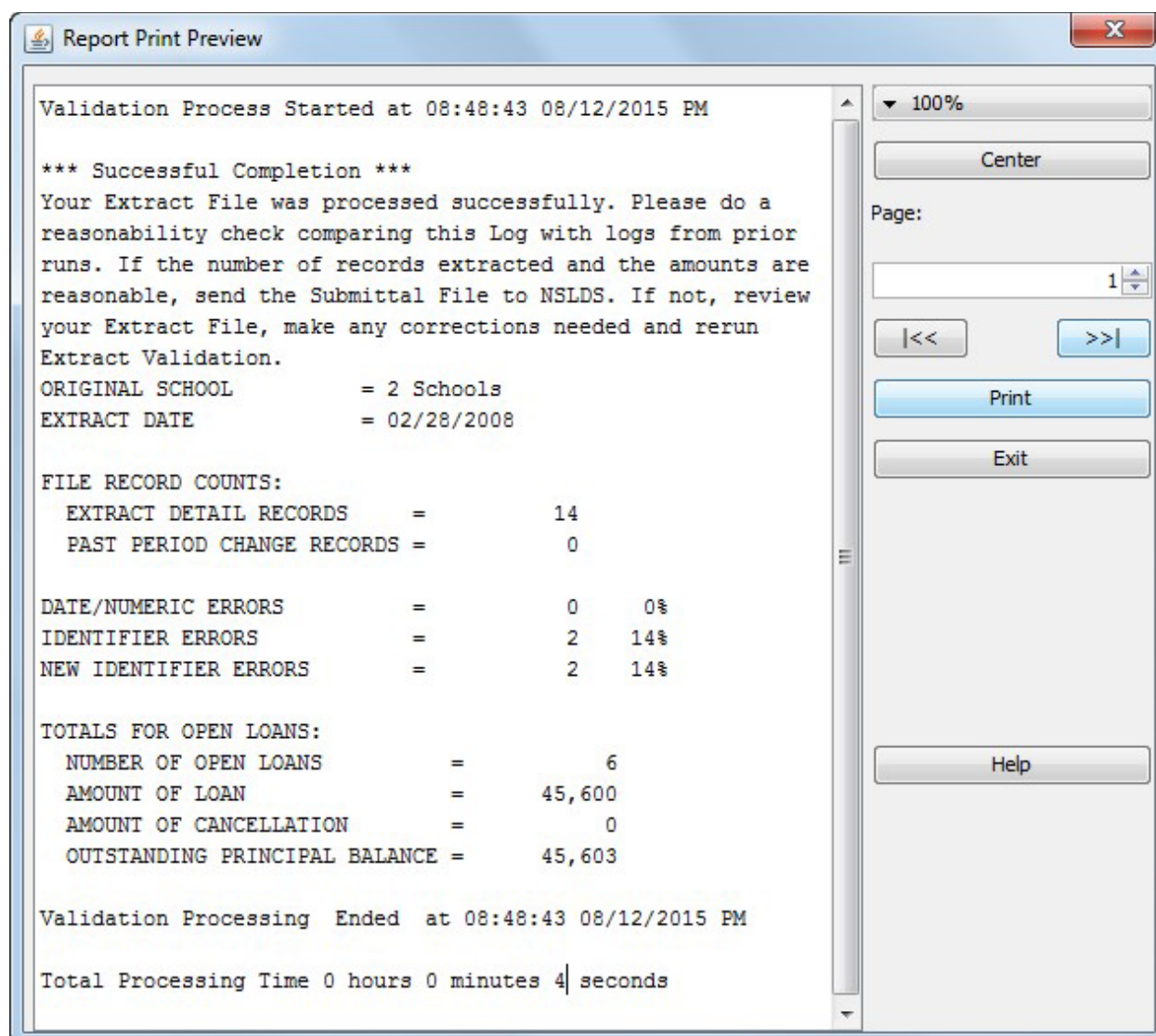


Figure 10-3: Extract Validation Log Report

If you want to print the report, you can do so directly from the viewer, or you can return to the Log Report dialog box and click Print.

## 10.2 Error Reports

The NSLDS update process includes two error reports:

- The **Extract Error report** identifies records that erred out of Extract Validation. It is generated from the Extract Error file produced by Extract Validation, and it will help you identify and correct errors in your Database Extract file.

- The **Load Process Error report** identifies records that erred out of the NSLDS Load process. It is generated from the Load Process Error file NSLDS sends you after it has loaded your Submittal file onto the database, and it will help you identify and correct errors in your Submittal file.

Both reports will help you to identify and correct errors in your database and in your extract process.

You can generate either error report in a summary or detail format. Both summary and detail reports can be sorted by preprogrammed sort parameters, and you can create your own additional sort parameters for detail reports. In addition, you can use selection criteria to limit which records are included in the detail error reports.

### 10.2.1 Error Files

DataPrep can only generate error reports from error files located in your Current folder. This does not present a problem in the case of the Extract Error file, which DataPrep automatically creates and places in your Current folder whenever a Database Extract files passes the file-level edits performed by Extract Validation.

However, before you can generate a Load Process Error report, you can use DataPrep's File Transfer utility (Section 5.3.3) to transfer two files into your Current DataPrep software folder:

- The Load Process Error File
- The TEF File

NSLDS will send you the Load Process Error file within 48 hours after your Submittal file is processed. The file will be sent via SAIG. The format of this file has not changed from DataPrep, Version 1, except to add your unique Data Provider Loan ID to the record. The SAIG message class for the Load Process Error file is SLDERROP.

### 10.2.2 Generating Summary Error Reports

To generate a summary error report, the following files must be in your Current DataPrep software folder (Section 10.2.1).

For the Summary Extract Error report:

- The Extract Error file created by DataPrep



#### Retrieving the Load Process Error and TEF File

We strongly suggest that you retrieve both files a day or two after your Submittal file is loaded into NSLDS. The Load Process Error file is sent from NSLDS. The TEF File is available for download from <https://FSADownload.ed.gov>. This will ensure you have the latest error codes and messages when you generate your Load Process Error report.

- The latest TEF file downloaded from FSADownload For the Summary Load Process Error report:

- The Load Process Error file sent to you by NSLDS
- The latest TEF file downloaded from FSADownload

Once these files are in your Current directory, follow these steps to generate a summary error report:

1. From the DataPrep Main Menu, click Error Report.

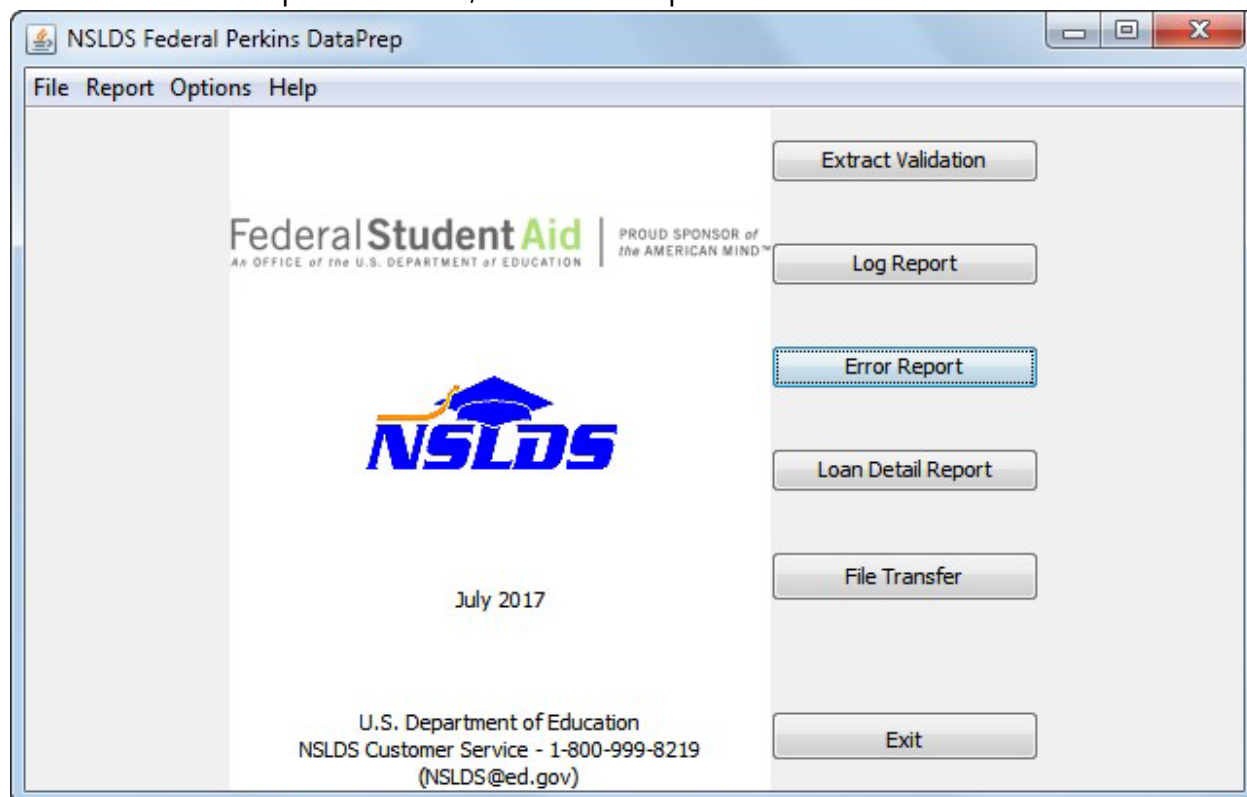


Figure 10-4: DataPrep Main Menu with Error Report Selected

2. The Error Report dialog box appears.

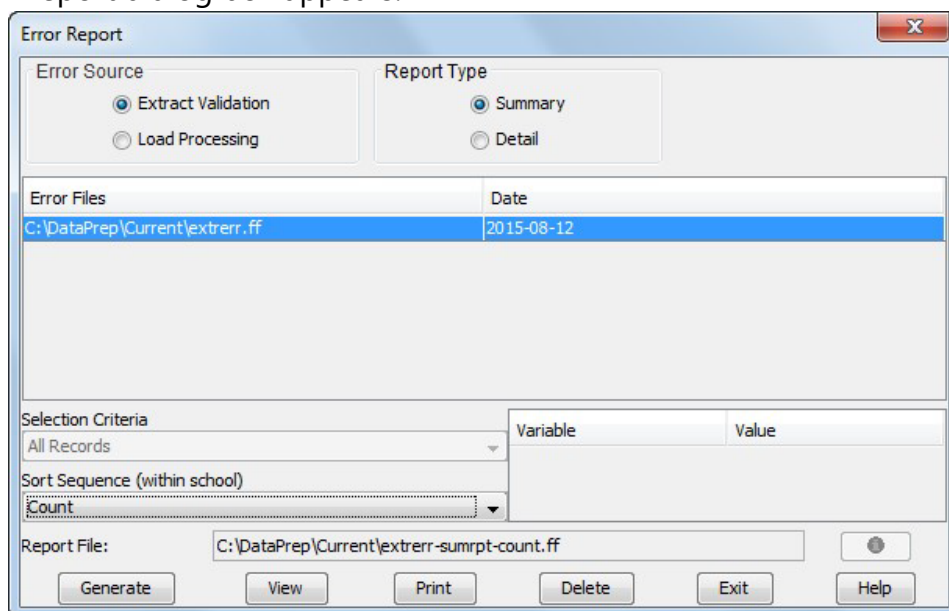


Figure 10-5: Error Report Dialog Box

3. Select Extract Validation or Load Processing as the Error Source.
4. Select Summary as the Report Type.
5. Highlight the error file from which you want to generate a report (here

**C:\DataPrep\Current\extrerr.ff**).

If you double-click on a file listed in the Error Files list, a File Information message box appears showing you the date and time the file was created or last modified.

6. Select a Sort Sequence. If you select No Sort, the report is sorted in the same order as the error file from which it is generated.
7. When you are satisfied with the options you have selected on the Error Report dialog box, click Generate. A status message appears informing you the report has been generated.



#### Extract Error Report or Load Process Error Report

The Error Report dialog box allows you to generate either an Extract Error report from your Validated Database Extract file or a Load Process Error report from the Load Process Error file NSLDS sends you after processing your Submittal file. Be sure to specify the correct Error Source for the report you request.



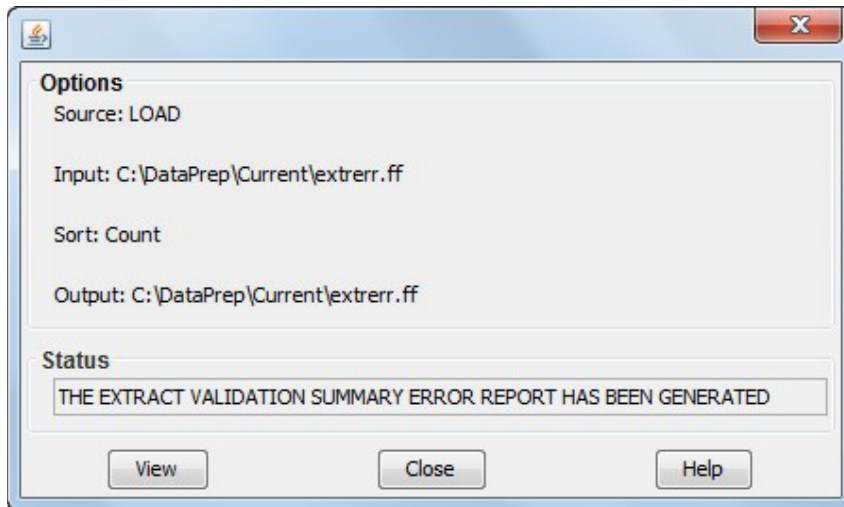


Figure 10-6: Generate Summary Error Rpt Dialog Box



### Viewers

Remember that DataPrep's built-in viewer produces a correctly formatted report, while other applications used to view a file may not. If you use another application to view or print a previously produced report, you may have to adjust the font and size to fit on a page or print your report using landscape rather than portrait format.

8. Click View. If you chose the options depicted in Figure 10-5, you should see a report that looks something like this:

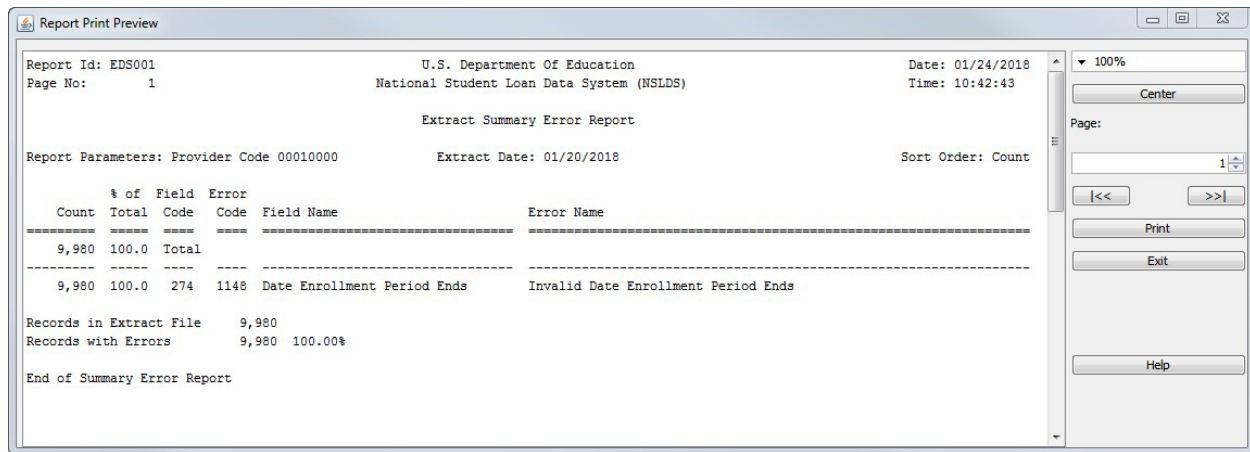


Figure 10-7: Summary Extract Error Report

### 10.2.3 Generating Detail Error Reports

To generate a detail error report, the following files must be in your Current DataPrep software folder.

For the Detail Extract Error Report:

- The Extract Error file created by DataPrep



- The latest TEF file downloaded from FSADownload

For the Detail Load Process Error Report:

- The Load Process Error file sent to you by NSLDS
- The latest TEF file downloaded from FSADownload

Once these files are in your Current directory, follow these steps to generate a detail error report:

1. From the DataPrep Main Menu, click Error Report.



Figure 10-8: DataPrep Main Menu with Error Report Selected



#### **Extract Error Report or Load Process Error Report**

The Error Report dialog box allows you to generate either an Extract Error report from your Validated Database Extract file or a Load Process Error report from the Load Process Error file NSLDS sends you after processing your Submittal file. Be sure to specify the correct Error Source for the report you want.

2. The Error Report dialog box appears.

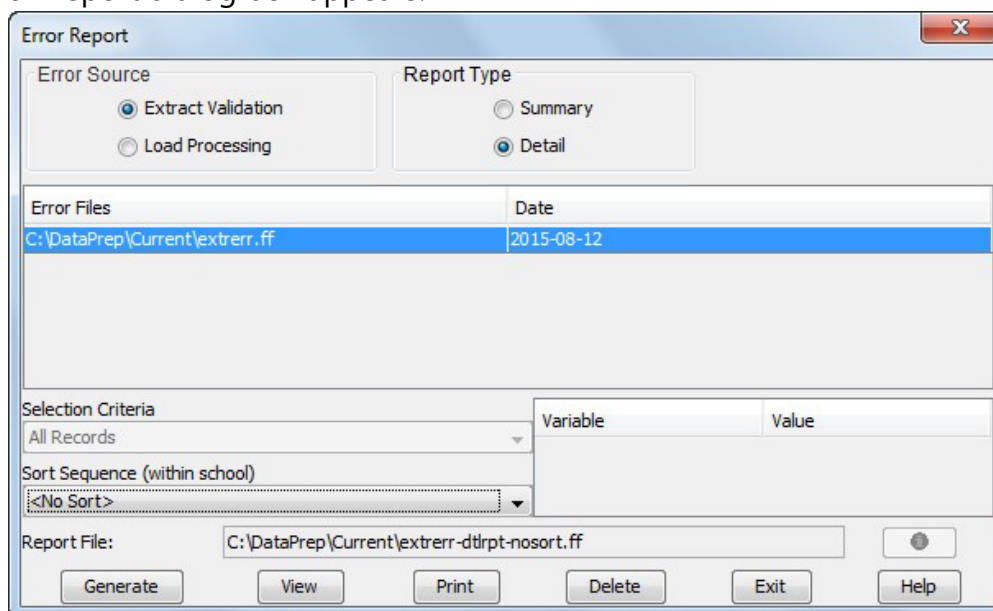


Figure 10-9: Error Report Dialog Box

3. Select Extract Validation or Load Processing as the Error Source.
4. Select Detail as the Report Type.
5. Highlight the error file from which you want to generate a report (here **C:\DataPrep\Current\extrerr.ff**).

If you double-click on a file listed in the Error Files list, a File Information message dialog box appears showing you the date and time the file was created or last modified and the number of bytes in the file.

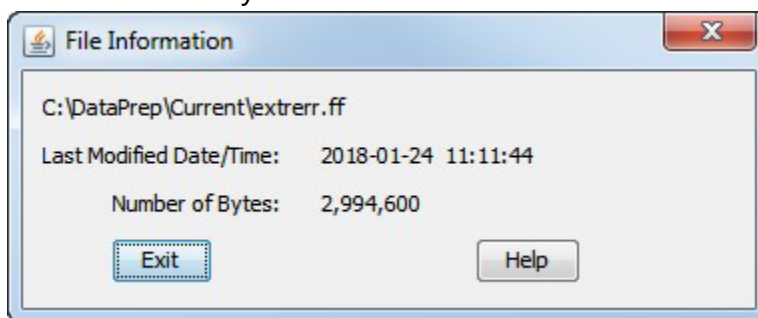


Figure 10-10: File Information Box

Click Exit to return to the Error Report dialog box.

6. Select a Sort Sequence. If you select Not Sorted, the report will be sorted in the same order as the Extract Error file or Load Process Error file from which it was generated.

7. Choose one or more Selection Criteria.

When you are satisfied with the options you have selected on the Error Report dialog box, click Generate. A status message appears informing you the report has been generated.

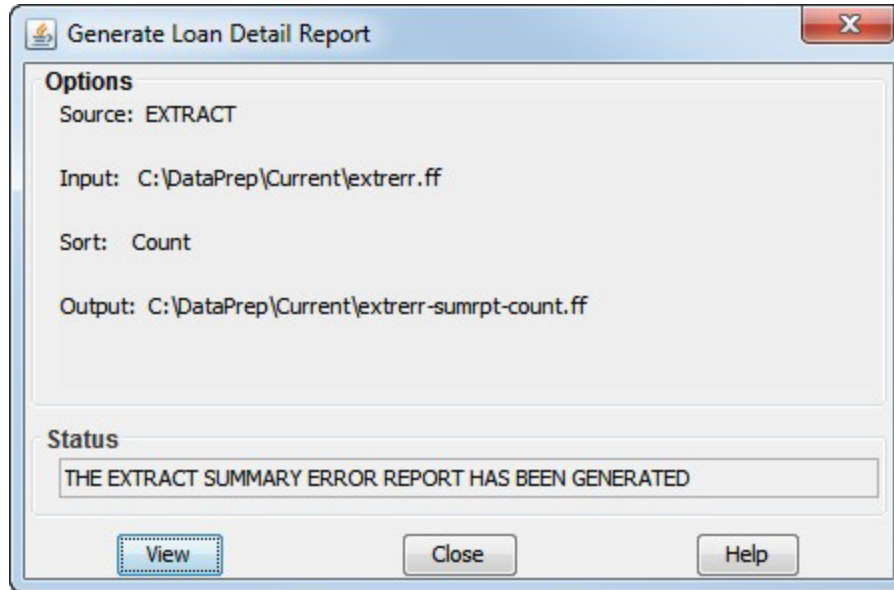


Figure 10-11: Generate Summary Error Rpt Dialog Box

8. Click View. If you chose the options depicted in Figure 10-5, you should see a report that looks something like this when viewed:

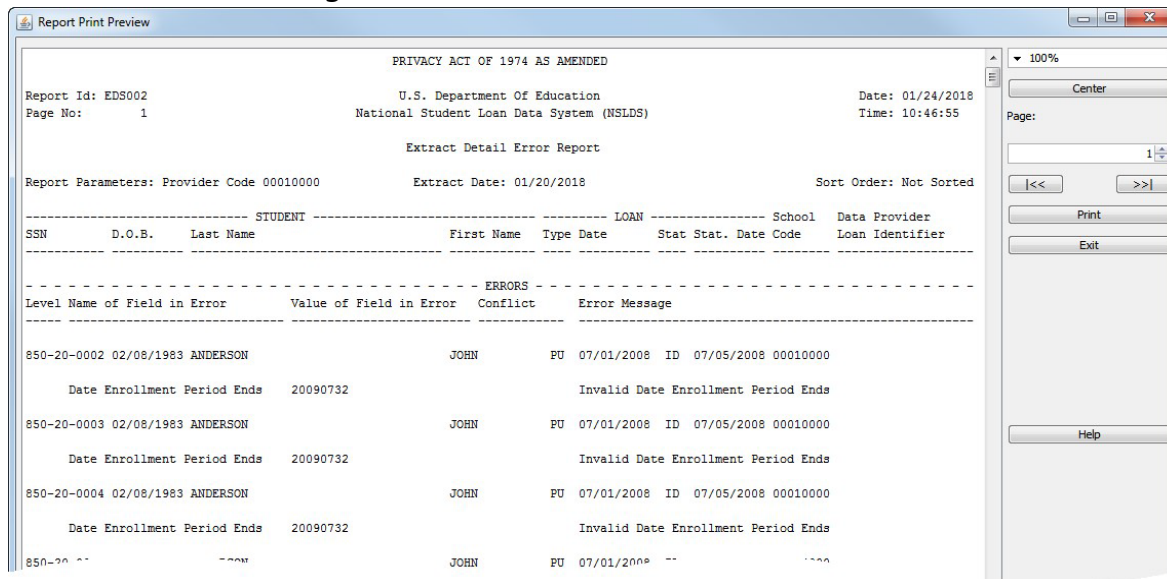


Figure 10-12: Extract Detail Error Report

Report Print Preview

PRIVACY ACT OF 1974 AS AMENDED

Report Id: EDS002      U.S. Department Of Education      Date: 08/12/2015  
Page No: 1      National Student Loan Data System (NSLDS)      Time: 10:29:36

Load Process    Detail Error Report

Report Parameters: Provider Code 00202100      Submittal Date: 01/01/2001      Sort: <No Sort>

STUDENT				LOAN		School	Data Provider
SSN	D.O.B.	Last Name	First Name	Type	Date	Status	Code
200-00-0003	03/17/1947	JOHNSON	SUSAN	NU	01/09/1986	ID	00202100

----- ERRORS -----

Level	Name of Field in Error	Value of Field in Error	Error Message
3	Date of Outstanding Prin Bal	00000000	Date of Outstanding Principal Balance is required
3	Student Social Security Number	048681095	Student SSN currently used by another student

----- START OF SSN CONFLICT DATA -----

KEY SSN:200-00-0003    KEY DOB:03/17/1947    KEY FIRST NAME:SUSAN

SUPPLIED SSN:200-00-0002    DOB:03/17/1947    FIRST NAME:1SUSAN    CODE/MSG:1251    Student SSN currently used by another student

EXISTING SSN:200-00-0001    DOB:02/05/1957    FIRST NAME:1BARBRA    LAST NAME:JOHNSON

REPORTING AGENCY/SCHOOL CODE:581    NAME:DEPT OF ED/GREAT LAKES    CITY:MADISON    STATE:WI

REPORTING AGENCY/SCHOOL CODE:556    NAME:DEBT MANAGEMENT AND COLLECTIONS SYSTEM    CITY:GREENVILLE    STATE:TX

REPORTING AGENCY/SCHOOL CODE:FEDGRANT    NAME:FEDERAL GRANT    CITY:    STATE:

----- END OF SSN CONFLICT DATA -----

200-00-0004	03/07/1987	MATHEWS	JEFFREY	PU	04/26/2010	DF	00202100
-------------	------------	---------	---------	----	------------	----	----------

Date of First Disbursement    20100426    Identifiers must be unique on each detail record

Date of First Disbursement    20100426    Identifiers must be unique on each detail record

Figure 10-13: Detail Load Process Error Report

## 10.3 Loan Detail Reports

Generating loan detail reports is not a routine step in the NSLDS update process. However, loan detail reports are useful for researching and resolving problems with individual loan records that you have already identified from the Extract

Error report or Load Process Error report. There are two loan detail reports:

- The Extract Loan Detail Report is generated from the Database Extract file, and it allows you to review all or selected records in your file.
- The **NSLDS Loan Detail report** is generated from the Loan Detail file that NSLDS sends you after requesting it on an ad-hoc or scheduled basis. The Loan Detail file can take the form of a Reconciliation file containing all the loans on NSLDS that you report on, or it can include only loans that meet certain



### Do Not Change the Database Extract File

If you view or review your Database Extract file, be certain you do not make any changes to it. The Database Extract file must be a mirror image of your database.

conditions. Like the Extract Loan Detail report, the NSLDS Loan Detail report allows you to view every field of each record it contains. Comparing the contents of the NSLDS Loan Detail report to the contents of your database will help you reconcile any conflicts between your data and that on NSLDS.

This file is requested from the NSLDS Professional Access website, <https://NSLDSFAP.ed.gov>, in the Team Content folder of the Reporting Tool on the Reports tab. See Appendix J for more information.

### 10.3.1 Loan Detail Files

DataPrep looks for Extract Loan Detail files in these folders:

- Extract

DataPrep looks for NSLDS Loan Detail files in these folders:

- Loan (or Current)

Unless you have transferred your Database Extract file out of your Extract folder, you will not have to transfer any files before creating the Extract Loan Detail file.

However, when you receive the NSLDS Loan Detail file off the SAIG network, you must load the file onto your computer or network and then use DataPrep's File Transfer utility (Section 5.3.3) to work with the data.

If you receive more than one Loan Detail file in a single month, you may want to give version names to the NSLDS Loan Detail files. If you give a version name to an NSLDS Loan Detail file, DataPrep will assign the file a name of the form *loandtlVersionname.ff*, where:

*loandtl* is the constant name for Loan Detail files

*Versionname* is the version name you assign to the file

*.ff* is the constant for DataPrep files

Do not change such names; doing so will prevent DataPrep from finding and processing the files.



#### **Loan (or Current)**

If you selected the default directory paths when you installed DataPrep, DataPrep looks for NSLDS Loan Detail files in the Loan folder. If you did not specify a directory path for Loan Detail files, DataPrep looks for them in the Current folder (C:\DataPrep\Current). For information about changing default directories, see Section 5.3.1.

### 10.3.2 Generating Loan Detail Reports

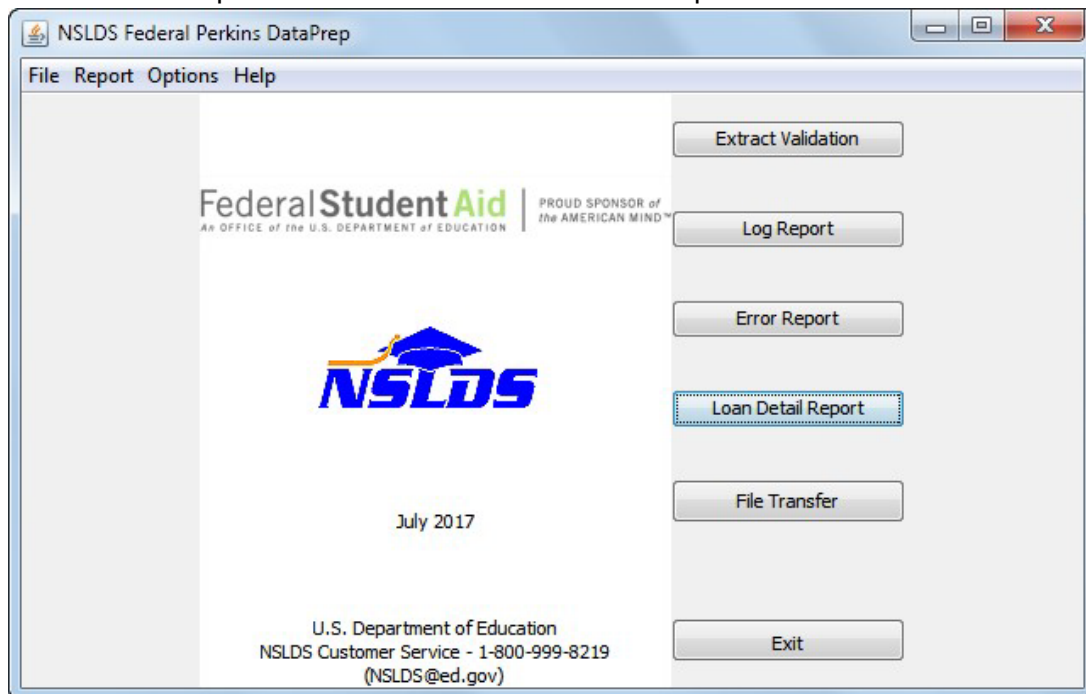
To generate a loan detail report, the following files must be in the following folders:

For the Extract Loan Detail report:

- A Database Extract file in the Extract folder For the NSLDS Loan Detail report:
- An NSLDS Loan Detail file in the Loan (or Current) folder

To generate a loan detail report, follow these steps:

1. From the DataPrep Main Menu, click Loan Detail Report.



*Figure 10-14: DataPrep Main Menu with Loan Detail Report Selected*

2. The Loan Detail Report dialog box appears.



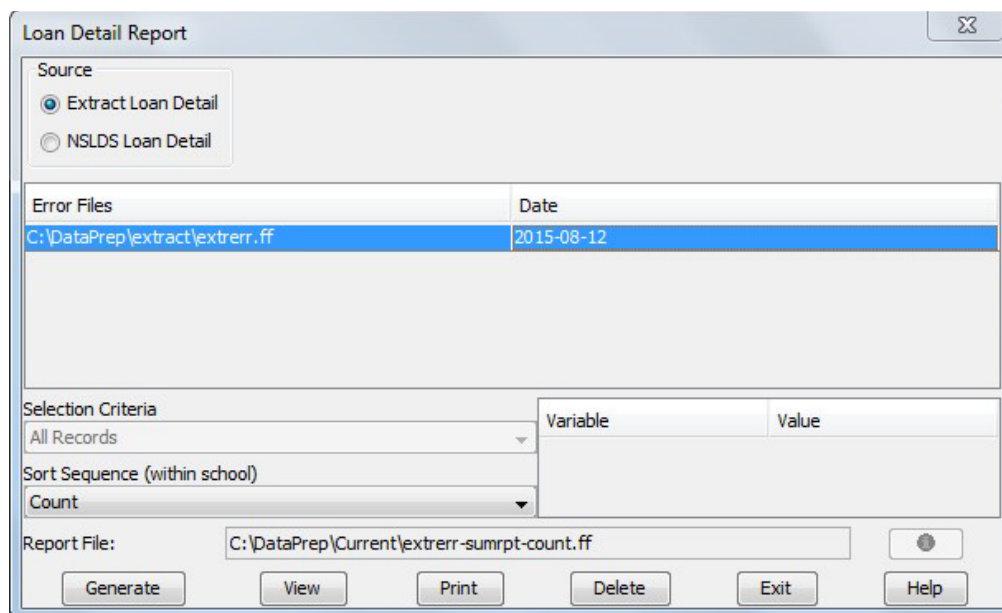
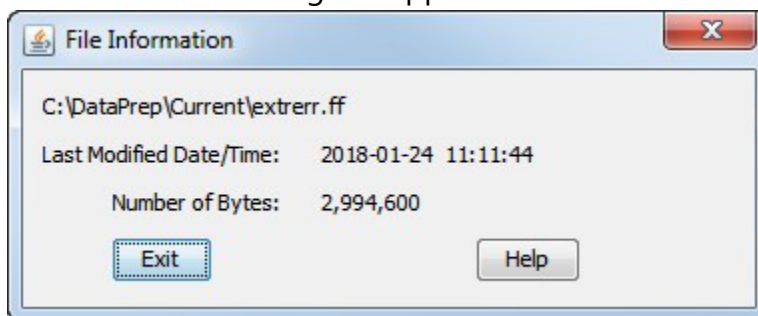


Figure 10-15: Loan Detail Report Dialog Box

3. Select Extract Loan Detail or NSLDS Loan Detail as the Source option.

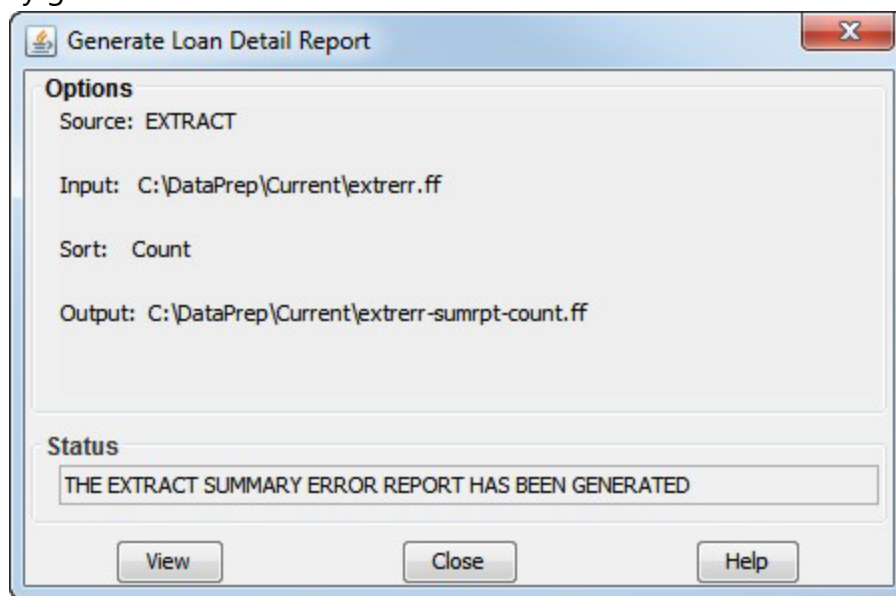
There are several ways to see the date and time a file in the Detail Files list was last modified and the number of bytes in the file. This can be useful if you have several Database Extract or NSLDS Loan Detail files and are not sure which one you want to view or print.

- A. Use the horizontal scroll bar to scroll to the right on the Detail Files list.
- B. Double-click the file name, or select a file name in the Detail Files list and then click the blue star to the right of the file name in the Report File section. Either action causes a File Information message to appear.



*Figure 10-16: File Information Box*

4. When you know which Database Extract or NSLDS Loan Detail file you want to create an Extract Loan Detail report for, select it in the Detail Files list of the Loan Detail Report dialog box.
5. Choose a Selection Criteria.
6. Select a Sort Sequence. If you select Not Sorted, the report will be sorted in the same order as the Database Extract file or NSLDS Loan Detail file from which it was generated.
7. Click Generate. DataPrep displays a message notifying you that the report has been successfully generated.

*Figure 10-17: Generate Loan Detail Report Box*

8. Click View to view the Extract or NSLDS Loan Detail report. Viewed in DataPrep, it resembles Figure 10-18:



Report Print Preview

PRIVACY ACT OF 1974 AS AMENDED

Report Id: EDS018 U.S. Department Of Education Date: 03/01/2018  
Page No: 1 National Student Loan Data System (NSLDS) Time: 05:31:39

Extract Loan Detail Report

Report Parameters: Provider Code 00155400 Extract Date: 02/28/2015 Sort Order: Not Sorted

CUR SSN: 850-10-0001	ORIG SCH: 001554t0	CUR DOB: 1983-02-08	CUR FN: JOHN	CUR LT: FU	CUR DT: 2008-07-01
NEW SSN: - -	NEW SCH: 00000000	NEW DOB: 0000-00-00	NEW FN:	NEW LT:	NEW DT: 0000-00-00
SSN IND: R	PROV ID:	LN: ANDERSON	MI: M		
LN AMT: 006601	LN ST CD: FX	LN ST DT: 2008-07-05	DER: 2010-01-01	RT: AC:	
OPB AMT: 000000	OPB DT: 2008-07-30	CUR SCH: 00226800	CODE ENRL STAT: G	ENRL EFF DT: 2008-07-30	
DISB AMT: 001800	DISB CD: 2008-07-30	INT RATE: 05.000%	SVR CD: 000000	SVR RESP DT: 0000-00-00	
ACA LVL: 1	LN PD BEG: 2008-07-30	LN PD END: 2009-07-30			
DEF TYPE:	DEF BEG: 0000-00-00	DEF END: 0000-00-00			
CAN TYPE:	CAN DT: 0000-00-00	CAN AMT: 000000	OVERPAY IND:	OVERPAY DT: 0000-00-00	
CUR SSN: 850-10-0002	ORIG SCH: 00155400	CUR DOB: 1983-02-08	CUR FN: JOHN	CUR LT: FU	CUR DT: 2008-07-02
NEW SSN: - -	NEW SCH: 00000000x	NEW DOB: 0000-00-00	NEW FN:	NEW LT:	NEW DT: 0000-00-00
SSN IND: R	PROV ID:	LN: ANDERSON	MI: M		
LN AMT: 006600	LN ST CD: FX	LN ST DT: 2008-07-05	DER: 2010-01-01	RT: AC:	
OPB AMT: 000000	OPB DT: 2008-07-30	CUR SCH: 00226800	CODE ENRL STAT: G	ENRL EFF DT: 2008-07-30	
DISB AMT: 001800	DISB CD: 2008-07-30	INT RATE: 05.000%	SVR CD: 000000	SVR RESP DT: 0000-00-00	
ACA LVL: 1	LN PD BEG: 2008-07-30	LN PD END: 2009-07-30			
DEF TYPE:	DEF BEG: 0000-00-00	DEF END: 0000-00-00			
CAN TYPE:	CAN DT: 0000-00-00	CAN AMT: 000000	OVERPAY IND:	OVERPAY DT: 0000-00-00	
CUR SSN: 850-10-0003	ORIG SCH: 00155400	CUR DOB: 1983-02-08	CUR FN: JOHN	CUR LT: FU	CUR DT: 2008-07-03
NEW SSN: - -	NEW SCH: 00000000	NEW DOB: 0000-00-00	NEW FN:	NEW LT:	NEW DT: 0000-00-00
SSN IND: R	PROV ID:	LN: ANDERSON	MI: M		
LN AMT: 009601	LN ST CD: FX	LN ST DT: 2008-07-05	DER: 2010-01-01	RT: AC:	
OPB AMT: 000000	OPB DT: 2008-07-30	CUR SCH: 00226800	CODE ENRL STAT: G	ENRL EFF DT: 2008-07-30	
DISB AMT: 001800	DISB CD: 2008-07-30	INT RATE: 05.000%	SVR CD: 000000	SVR RESP DT: 0000-00-00	
ACA LVL: A	LN PD BEG: 2008-07-30	LN PD END: 2009-07-30			
DEF TYPE:	DEF BEG: 0000-00-00	DEF END: 0000-00-00			
CAN TYPE:	CAN DT: 0000-00-00	CAN AMT: 000000	OVERPAY IND:	OVERPAY DT: 0000-00-00	
CUR SSN: 850-10-0004	ORIG SCH: 00155400	CUR DOB: 1983-02-08	CUR FN: JOHN	CUR LT: FU	CUR DT: 2008-07-04
NEW SSN: - -	NEW SCH: 00000000	NEW DOB: 0000-00-00	NEW FN:	NEW LT:	NEW DT: 0000-00-00
SSN IND: R	PROV ID:	LN: ANDERSON	MI: M		
LN AMT: 009600	LN ST CD: FX	LN ST DT: 2008-07-05	DER: 2010-01-01	RT: AC:	
OPB AMT: 000000	OPB DT: 2008-07-30	CUR SCH: 00226800	CODE ENRL STAT: G	ENRL EFF DT: 2008-07-30	
DISB AMT: 001800	DISB CD: 2008-07-30	INT RATE: 05.000%	SVR CD: 000000	SVR RESP DT: 0000-00-00	
ACA LVL: A	LN PD BEG: 2008-07-30	LN PD END: 2009-07-30			
DEF TYPE:	DEF BEG: 0000-00-00	DEF END: 0000-00-00			
CAN TYPE:	CAN DT: 0000-00-00	CAN AMT: 000000	OVERPAY IND:	OVERPAY DT: 0000-00-00	

PRIVACY ACT OF 1974 AS AMENDED  
PRIVACY ACT OF 1974 AS AMENDED

Report Id: EDS018 U.S. Department Of Education Date: 03/01/2018  
Page No: 2 National Student Loan Data System (NSLDS) Time: 05:31:39

100%

Center

Page:

1

...

Print

Exit

Help

Figure 10-18: Extract Loan Detail Report

## 10.4 The Error Submittal Summary Notification Report

### 10.4.1 The Error Submittal Summary Notification File

If you fail to send NSLDS a Submittal file or send one that cannot be processed, NSLDS will distribute a notification that your Submittal file was not processed. This Notification file will be sent via SAIG message class SHSNTFOP within 1 or 2 days from your scheduled load date. If this occurs, you must make the necessary corrections and resubmit as soon as possible. If the time frame within which you are scheduled to submit your data has passed, the submittal will be considered missed for the month. You must

then include the corrections and appropriate updates with your next scheduled transmission.

Causes that can prompt NSLDS to send you an Error Submittal Summary Notification file include:

- You sent some file other than a validated Submittal file, such as your Database Extract file. (The Submittal file will be labeled submit.ff, while the Database Extract file will be called extract.ff.)
- You sent a file in an invalid format. For example, the file you sent has no valid header, no 300-byte records, or no trailer record.
- The file got corrupted during the SAIG transmission process.
- NSLDS did not receive your Submittal file during the time frame in which NSLDS can load your data.

The Error Submittal Summary Notification file consists of a Header record, one or more Detail records containing error messages, and a Trailer record. See Appendix F for the complete layout description.

The Detail record(s) will indicate why the Submittal file was rejected and will give you a brief description of the problem through a message code that can be found in Appendix F. Appendix F also lists the actions you must take to correct the error(s).

### **10.4.2 Generating the Error Submittal Summary Notification Report**

If NSLDS sends you an Error Submittal Summary Notification file, copy the file into your Current folder. The SAIG message class for the Error Submittal Summary Notification file is SHSNTFOP.

To generate the Error Submittal Summary Notification report, follow these steps:

1. On the Report menu of the DataPrep Main Menu, click Notification. The Notification Report dialog box appears.

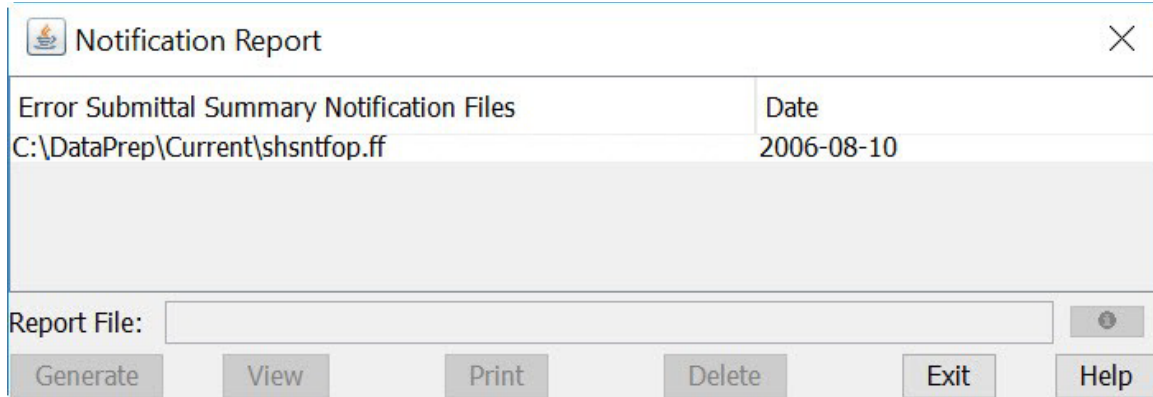


Figure 10-19: Notification Report Dialog Box

2. Select the Error Submittal Summary Notification file (**C:\DataPrep\Current\shsntfop.ff**) and click Generate. The Generate Notification Rpt dialog box displays a Status message telling you the Error Submittal Summary Notification report has been generated.

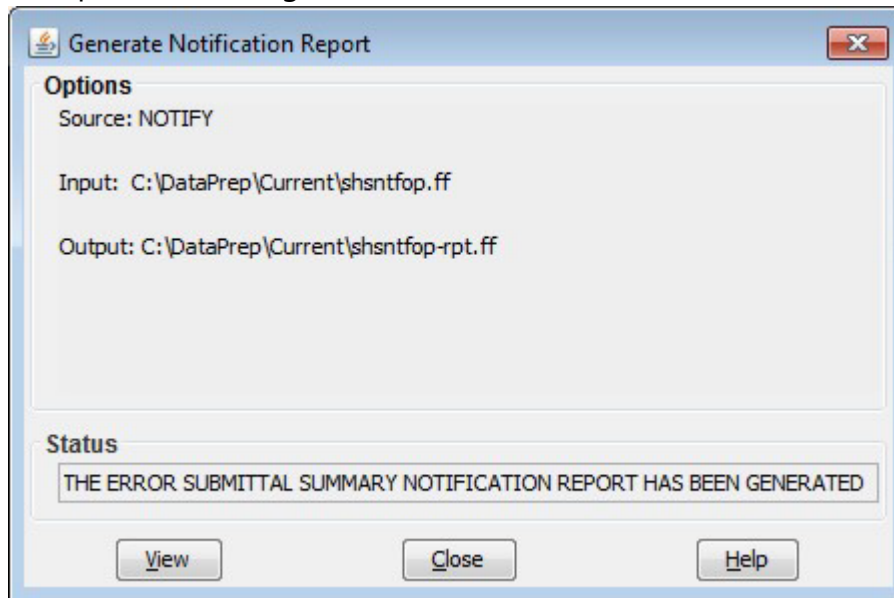


Figure 10-20: Generate Notification Report Box

3. To view the report, click View. Your default viewer displays the report.

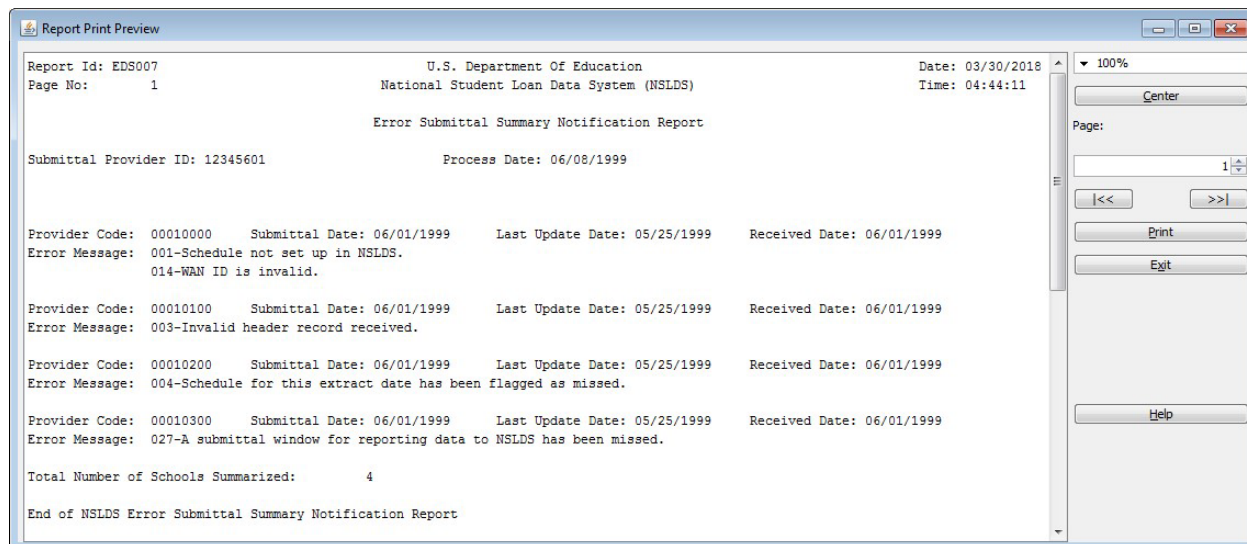


Figure 10-21: Error Submittal Summary Notification Report

## 10.5 Selection Criteria

DataPrep gives you the option of generating detail error reports and loan detail reports using different selection criteria. Several selection options have been preprogrammed:

- Data Fields in Error
- Identifier Fields in Error
- New Identifier Fields in Error
- No SSN Conflict Records
- Only SSN Conflict Records
- Selected Code for Original School
- Selected Error Code
- Selected Error and Field Code
- Selected Field Code

DataPrep allows you to create new selection criteria, and to change or delete existing selection criteria.

To update selection criteria from the DataPrep Main Menu, begin by clicking Selection Criteria on the Options drop-down menu.

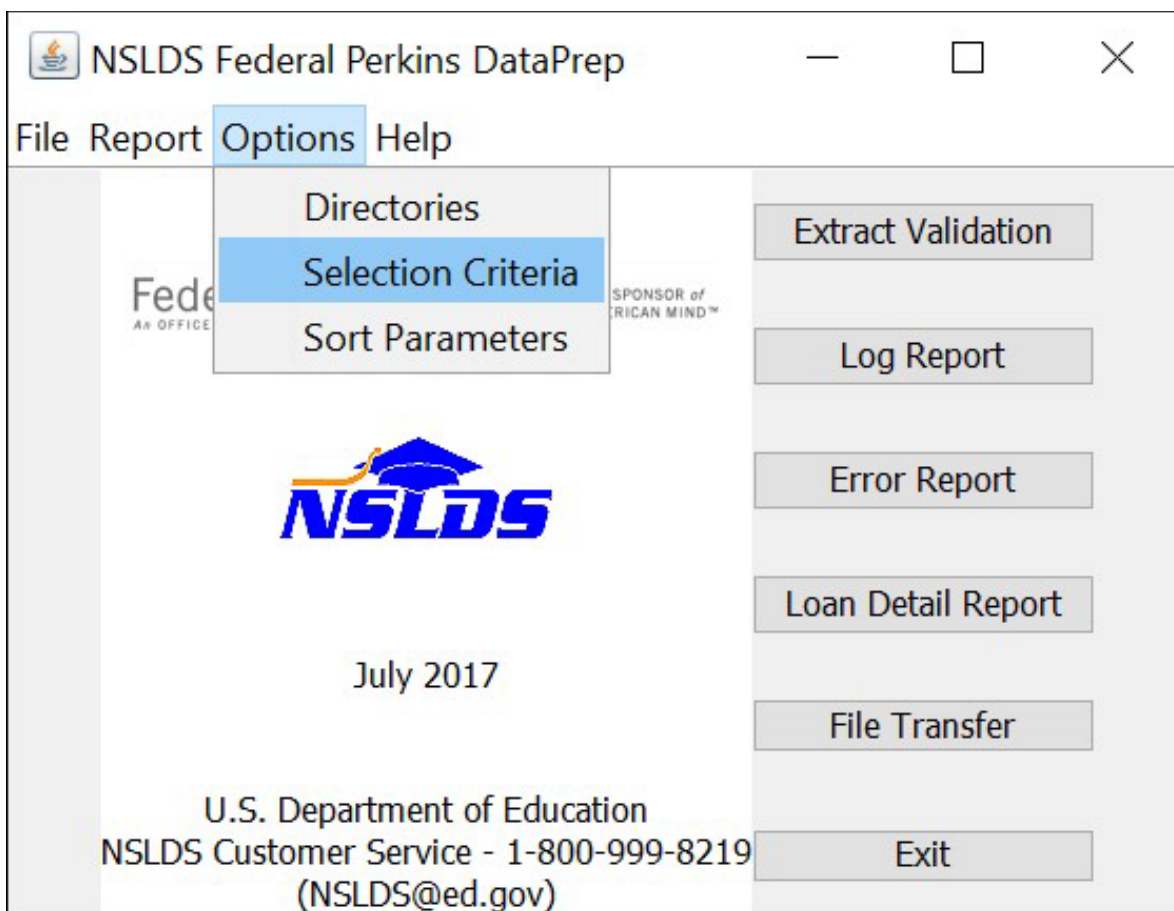


Figure 10-22: DataPrep Main Menu with Selection Criteria Selected on the Options Menu  
The Selection Criteria dialog box displays.

### 10.5.1 Adding Selection Criteria

To create new selection criteria, follow these steps:

1. From the Selection Criteria dialog box (Figure 10-23), click Add. The Selection Criteria Edit dialog box appears.



**Greater than sign ">"**

Use caution when using the > sign in the **Sel Key** and **Description** fields. If using it, a space must precede the > sign. Used correctly it successfully works. Another way to represent > is "GT", for >= try "GE".

Variable Name	Length	Description	Value
---------------	--------	-------------	-------

Figure 10-23: Selection Criteria Edit Dialog Box

2. Enter up to 10 characters that name the selection criteria in the Sel Key box. The Sel Key generally includes the field name; for example, if you want to select for all loans with an in repayment status, you could use "LoanStatRP" as the Sel Key.
3. Enter up to 35 characters that describe the selection criteria in the Description box, for example, "Loan Status in Repayment." If you select the Available for selection option, this description appears in a drop-down list on the Error Report or Loan Detail dialog box when you go to run a report.
4. Enter the codes that specify which records are to be included in the report:
  - Field Position (Refer to Appendix A for field positions)
  - Comparison Operator (for example, less than, equal to, greater than)
  - Comparison Value
5. Click OK.

**Use of Spaces**

Do not insert any spaces after position numbers. If you do, the program will assume the selection criterion you have specified has ended. If you want to add any comments (for example additional description) you can put comments after a space.

## One Criterion

To add a selection criterion for all loans with loan status in repayment, enter these values:

**Sel Key**                LoanStatRP  
**Description**        Loan Status in Repayment  
**Comparison**        119–120,EQ,RP  
 Note: Loan Status is position 119–120.

Variable Name	Length	Description	Value
---------------	--------	-------------	-------

Figure 10-24: Selection Criteria Edit Dialog Box

## Two Criteria

To add selection criteria for all loans with loan status in repayment *and* a date of first disbursement after January 1, 1998, enter these values:

**Sel Key**                RP-Jan1998  
**Description**        Loan in RP and Disburse >=Jan 1998  
**Comparison**        (119–120,EQ,RP,&,40–47,GE,'19980101')

Notes: 119–120 is the Loan Status position, 40–47 is the Date of First Disbursement position, an ampersand (&) is the AND connector, and GE is greater than or equal to. You must surround the comparison with parentheses when including an ampersand (&) sign.



Select Criteria Edit

Sel Key: PR-Jan19 ☒ Available for selection

Description: Loan in RP and Disburse >=Jan 1998

Comparison: (119-120,EQ,RP&40-47,GE,'19980101')

Variable Name	Length	Description	Value
---------------	--------	-------------	-------

OK Add Edit Delete Cancel Help

Figure 10-25: Selection Criteria Edit Dialog Box

### 10.5.2 Editing Selection Criteria

To edit an existing selection criterion, follow these steps:

1. From the Selection Criteria dialog box (Figure 10-30), choose the selection criterion you want to change and click Edit. The Selection Criteria Edit dialog box appears populated by the criterion you selected.

Select Criteria Edit

Sel Key: LoanStatR ☒ Available for selection

Description: Loan Status in Repayment

Comparison: 119-120,EQ,RP

Variable Name	Length	Description	Value
---------------	--------	-------------	-------

OK Add Edit Delete Cancel Help

Figure 10-26: Selection Criteria Edit Dialog Box

2. Edit the criterion values as necessary and click OK to return to the Selection Criteria dialog box.



### 10.5.3 Deleting Selection Criteria

To delete a selection criterion, choose it on the Selection Criteria Dialog box (Figure 10-3026) and click Delete.

### 10.5.4 Adding Variable Selection Criteria

Perhaps you want to create an Error report that selects all loans equal to a given value. But rather than establishing that value in advance, you want to set it each time you run the report. You need a report with a variable selection criterion.

To create one, start from the Selection Criteria Edit dialog box (Figure 10-26) and follow these steps:

1. Fill in the fields of the Selection Criteria Edit dialog box described in Section 10.5.1.
2. Click Add. The Selection Variable Edit dialog box appears.

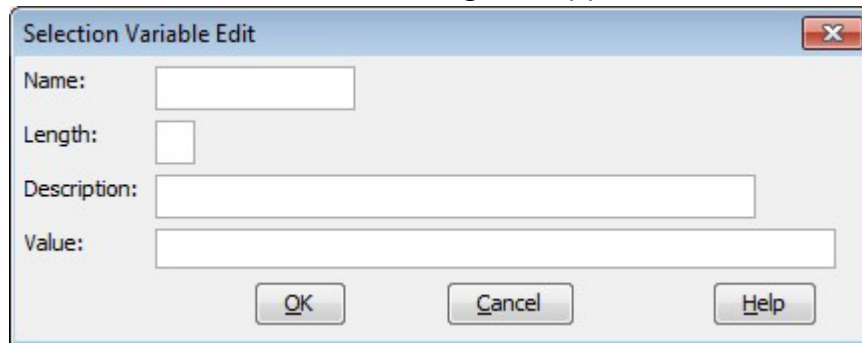
The image shows a Windows-style dialog box titled "Selection Variable Edit". It has a standard title bar with a close button (X). The dialog contains four labeled text input fields: "Name:" (a single-line text box), "Length:" (a small spinner box), "Description:" (a multi-line text box), and "Value:" (a single-line text box). At the bottom of the dialog, there are three buttons: "OK", "Cancel", and "Help".

Figure 10-27: Selection Variable Edit Dialog Box

3. Enter a name of up to 10 characters in the Name field.
4. Enter the length of the data element to which the selection variable is to be compared in the Length field.
5. Enter up to 35 characters that describe the variable in the Description field.
6. Enter the initial value of the selection variable in the Value field. The initial value must be a valid value for that field, for example 'RP' for the Loan Status field (positions 119–120).
7. Click OK to return to the Selection Criteria Edit dialog box.



#### Adding a Variable Criterion

To create a report with a criterion that varies each time you run the report, fill in the upper portion of the Selection Criteria Edit dialog box. Then click Add to access the Selection Variable Edit dialog box. Fill in its fields to define the variable criterion.

## One Variable Criterion

First, enter the following values in the Selection Criteria Edit dialog box:

<b>Sel Key</b>	SelLoanSt
<b>Description</b>	Selected Loan Status
<b>Comparison</b>	119-120,EQ,*LoanStat

Notes: Position 119-120 is the Loan Status field, EQ is equal to, and \* indicates that the following is the name of the variable you will set when you select the specific report (for example, RP or FB).

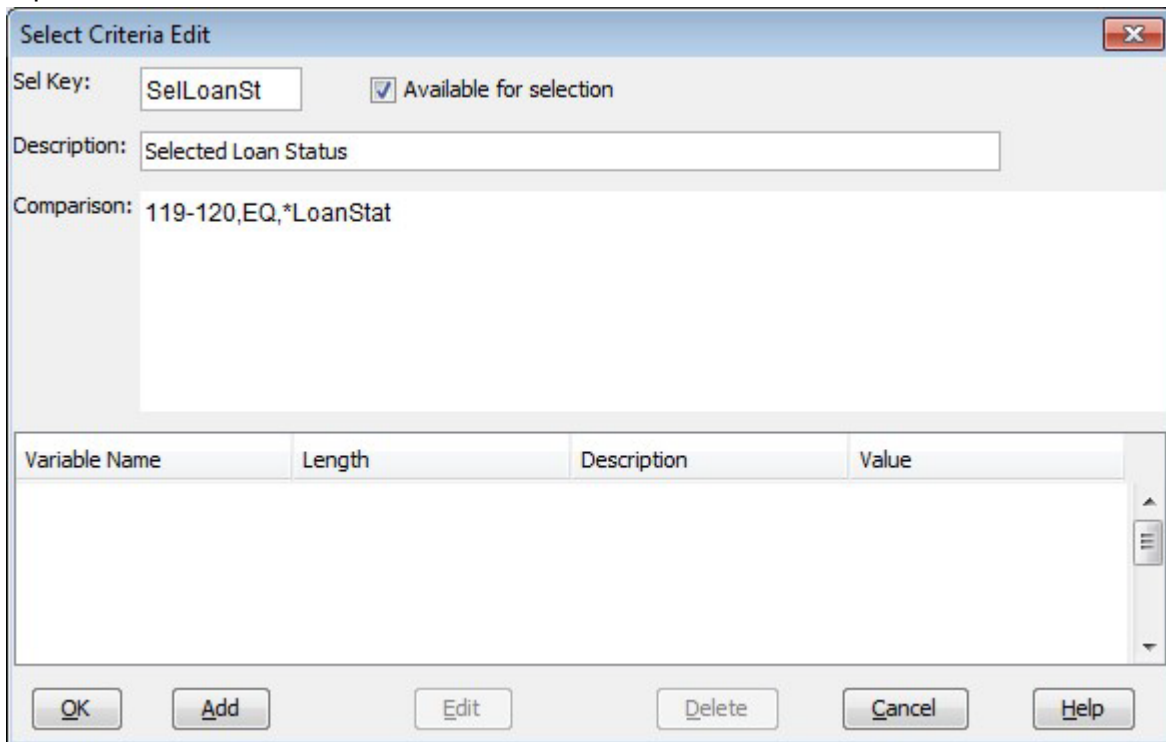


Figure 10-28: Selection Criteria Edit Dialog Box

To add the variable, click Add to bring up the Selection Variable Edit dialog box. Enter the following values:

<b>Name</b>	LoanStat
<b>Length</b>	2
<b>Description</b>	Loan Status Code
<b>Value</b>	'RP'

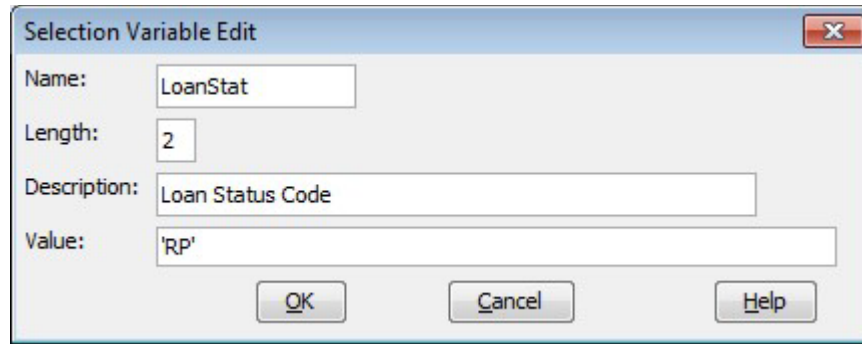


Figure 10-29: Selection Variable Edit Dialog Box

For more information about adding, editing, and creating your own selection criteria, refer to the Help for the Selection Criteria and Selection Criteria Edit dialog boxes and to the discussion of Comparison Syntax that follows.

### 10.5.5 Selection Criteria Comparisons Syntax

#### Comparisons

Comparisons are made up of one or more comparison parameters linked using the AND connector within commas (&,) or the OR connector within commas (|), and grouped using parentheses ().

Square brackets ([]) indicate optional items.

*[([comparison1D])[[,connector2,[([comparison2D]]...[,connectorN,[([comparisonND]]))]D]*

*[comments]*

*( ) pairs*      Balanced pairs of parentheses that enclose comparison parameters in order to clarify or to alter the order in which the comparisons are done.

Without parentheses, the comparisons 'A,|,B,&,C,|,D' would be interpreted as '((A,|,B),&,C),|,D', but you will need to use parentheses if the intent is either '(A,|,B),&,(C,|,D)' or 'A,|(B,&,C),|,D' or 'A,|,((B,&,C),|,D)'.

*comparison1*      First comparison parameter.

*connector2*      Second compare parameter connector. (optional)  
Use ampersand (&) for the AND connector, and use bar (|) for the OR connector.

*comparison2*      Second comparison parameter (optional)

*connectorN*      Nth compare parameter connector. (optional)

---

	Use ampersand (&) for the AND connector, and use bar ( ) for the OR connector.
<i>comparisonN</i>	Nth comparison parameter. (optional)
<i>comments</i>	Comments. (optional)
	At least 1 space between last compare parameter and start of comments.

### ***Comparison Parameters***

A comparison parameter is made up of one or more compare parameters linked using the AND connector within commas (,&,) or the OR connector within commas (,|,).

Square brackets ([]) indicate optional items.

*compare1*[[*connector2*,*compare2*]...[*connectorN*,*compareN*]]

<i>compare1</i>	First compare parameter
<i>connector2</i>	Second compare parameter connector (optional) Use ampersand (&) for the AND condition, and use bar ( ) for the OR condition.
<i>compare2</i>	Second compare parameter (optional)
<i>connectorN</i>	Nth compare parameter connector (optional) Use ampersand (&) for the AND connector, and use bar ( ) for the OR connector.
<i>compareN</i>	Nth compare parameter (optional)

### ***Compare Parameters***

A compare parameter is made up of a record character position, a compare condition, and a compare value linked by commas (,). Square brackets ([]) indicate optional items.

<i>compare</i>	=> <i>start</i> [- <i>end</i> ][: <i>length</i> ][:1], <i>condition</i> , <i>string</i> [ <i>position</i> ]* <i>variable</i>
<i>start</i>	Data Element starting position. A number from 1 to 640.
<i>end</i>	Data Element ending position (optional). A number from starting position to 640.

---

<i>length</i>	<p>Data Element length (optional).</p> <p>A number from 1 to 1 + 300 - starting position. Defaults to a length of 1 when neither the ending position nor the length is given.</p>
<i>condition</i>	<p>The code identifying the compare condition.</p> <p>One of the following 2-character compare conditions—not case sensitive:</p> <ul style="list-style-type: none"><li>EQ = Equal to</li><li>NE = Not Equal to</li><li>GT = Greater than</li><li>GE = Greater than or Equal to</li><li>LT = Less than</li><li>LE = Less than or Equal to</li></ul>
<i>string</i>	<p>The character string that is to be compared with the Data Element.</p> <p>A string of characters whose length is equal to that of the Data Element.</p> <p>If a string's first character is a number, an asterisk (*), pound sign (#), or its last character is a space, then the string must be enclosed in single quotation marks ('string').</p> <p>When a quoted string is less than the length of the Data Element, the string is padded out to the correct length using the last character in the string. {You can use ' ' to check for spaces and '0' to check for zeros.}</p> <p>When a pound sign (#) prefixes a quoted string that is less than the length of the data element, the string is shifted to the right and padded with zeroes. {You could use #'500' to check for the number 000500 in a 6-character field or for the number 00000500 in an 8character field.}</p> <p>If you want to include a single quote (') in the comparison string, then you will need to enter two single quotes (").</p>
<i>position</i>	<p>The starting position of a second Data Element within the record that is to be compared with the first Data Element.</p> <p>A number from 1 to 1 + 300 - length of Data Element.</p>

*variable*                The variable name that is replaced with a value at report generation time.  
                              The variable name must be prefixed with an asterisk (\*) and defined in  
                              the Variable Name list.

### *Examples*

*105-110,gt,'0'*                                Amount of Loan is greater than zero.

*(58-66,NE,' ','&,58-66,NE,4)*                New SSN is not spaces, and it is not equal to current SSN.

## **10.6 Sort Options**

Summary Error reports can be sorted by count, error code, or field code. Detail Error reports, however, can be sorted by any sort parameter you select. Sorting allows you to focus on specific types of errors or to distribute sections. DataPrep has provided the following pre-programmed sort parameters:

- Data Provider Loan Identifier
- Error Code
- Field Code
- Student Name (Last, First)
- Student Social Security Number

For the Detail report, you can also select No Sort, which means the records in the report will be listed in the same order as they were in the Database Extract file from which the report was generated.

DataPrep allows you to create new sort options, and to change or delete existing sort options.

To update sort options from the DataPrep Main Menu, begin by clicking Sort Parameters on the Options menu.

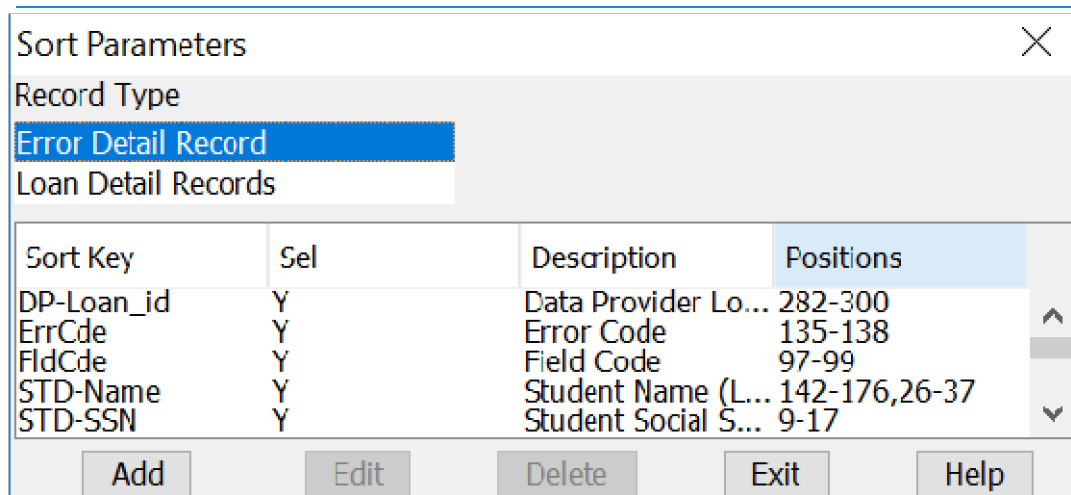


Figure 10-30: Selection Criteria Dialog Box

From this dialog box you can Add, Edit, or Delete any selection criterion for the following detail reports:

- Extract Error Report
- Load Process Error Report
- Loan Detail Report

Select Error Detail Records or Loan Detail Records as the Record Type to add, edit, or delete selection criteria for that report type.

See Section 10.5.5 for a description of the Selection Criteria Comparison Syntax.



Figure 10-31: DataPrep Main Menu with Sort Parameters Selected on Options Menu

The Sort Parameters dialog box appears.

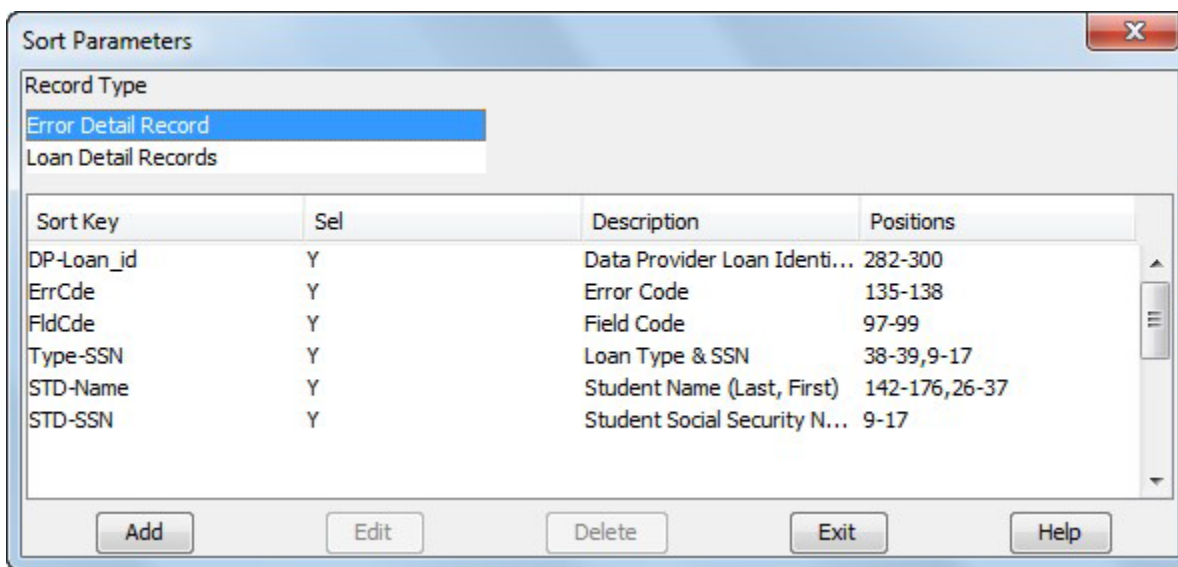


Figure 10-32: Sort Parameters Dialog Box

From this dialog box you can add, edit, or delete any sort option for the following reports:



- Detail Extract Error Report
- Load Process Error Report
- Loan Detail Report

Select Error Detail Records or Loan Detail Records as the Record Type to add, edit, or delete sort options for that report type.

See Section 10.5.4 for a description of the Sort Parameter Positions' Syntax.

### Adding a Sort Option

To create a new sort option, follow these steps:

1. From the Sort Parameters dialog box (Figure 10-32), click Add. The Sort Parameter Edit dialog box appears.

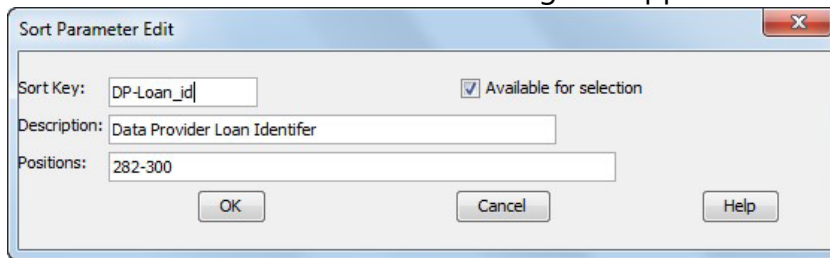


Figure 10-33: Sort Parameter Edit Dialog Box

2. Enter up to 10 characters that name the report in the Sort Key box. The Sort Key generally includes the field name, for example "Field Code."
3. Enter up to 35 characters that describe the sort sequence in the Description box. If you select the Available for selection option, this description appears in the drop-down list on the Error Report or Loan Detail Report dialog box when you go to run a report.
4. Enter up to 60 characters that define the positions in the record by which the report will sort in the Positions box. Use commas between fields. Refer to the Federal



#### Sorting Reports

Summary Error reports can be sorted by count, error code, or field code. Detail reports can be sorted by any parameters you choose. DataPrep has provided preprogrammed sort parameters. When you sort by count (summary reports only), the report is organized in descending order, so the field with the largest number of errors appears first. If you select No Sort (detail report only), the report will be sorted in the same order as the file from which it was created.



#### Use of Spaces

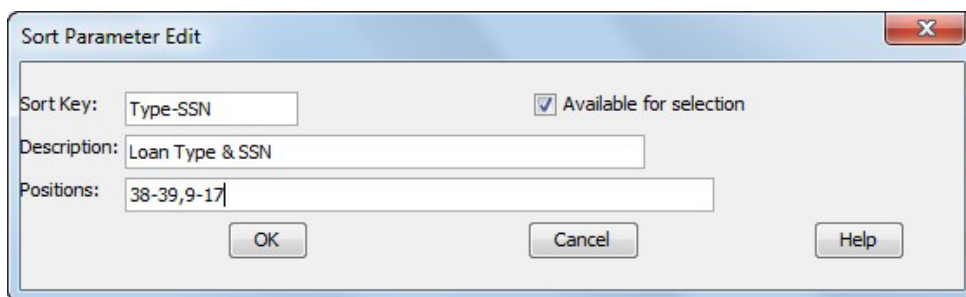
Do not insert any spaces after position numbers. If you do, the program will assume the sort parameter you have specified has ended. If you want to add any comments (for example additional description), you can put the comments after a space.

Perkins Data Dictionary (Appendix A) for a complete account of data fields and the positions they occupy.

5. Click OK

For example, if you want a report that sorts by Loan Type and Social Security number, follow these steps:

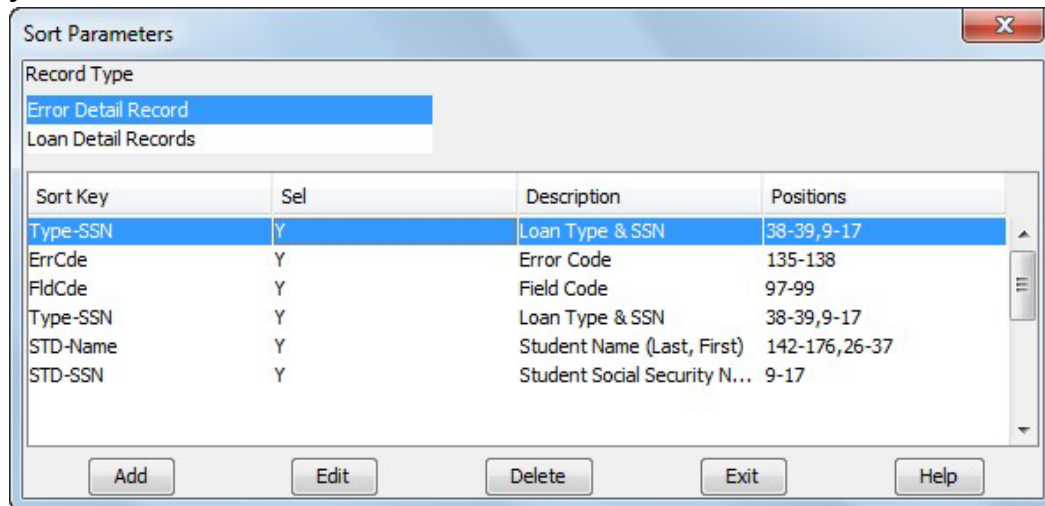
1. Enter Type-SSN in the Sort Key box of the Sort Parameter Edit dialog box.
2. Enter Loan Type & SSN in the Description box.
3. Enter 38-39,9-17 in the Positions box.



The 'Sort Parameter Edit' dialog box contains three text input fields: 'Sort Key' with the value 'Type-SSN', 'Description' with the value 'Loan Type & SSN', and 'Positions' with the value '38-39,9-17'. There is a checked checkbox labeled 'Available for selection'. At the bottom are three buttons: 'OK', 'Cancel', and 'Help'.

Figure 10-34: Sort Parameter Edit Dialog Box

4. Click OK. The Sort Parameters Dialog Box displays with the new sort parameter that you have just created.



The 'Sort Parameters' dialog box shows a list of record types: 'Error Detail Record' (selected) and 'Loan Detail Records'. Below is a table of sort parameters:

Sort Key	Sel	Description	Positions
Type-SSN	Y	Loan Type & SSN	38-39,9-17
ErrCde	Y	Error Code	135-138
FldCde	Y	Field Code	97-99
Type-SSN	Y	Loan Type & SSN	38-39,9-17
STD-Name	Y	Student Name (Last, First)	142-176,26-37
STD-SSN	Y	Student Social Security N...	9-17

At the bottom are five buttons: 'Add', 'Edit', 'Delete', 'Exit', and 'Help'.

Figure 10-35: Sort Parameters Dialog Box

This sort parameter will now be listed as a sort sequence option on the Error Report or Loan Detail dialog box.

### 10.6.1 Editing a Sort Option

To edit an existing sort option, follow these steps:

1. From the Sort Parameters dialog box (Figure 10-32), select the sort option you want to edit and click Edit. The Sort Parameter Edit dialog box appears populated by the sort option you selected (in this case, the Type-SSN sort created in Section 0).

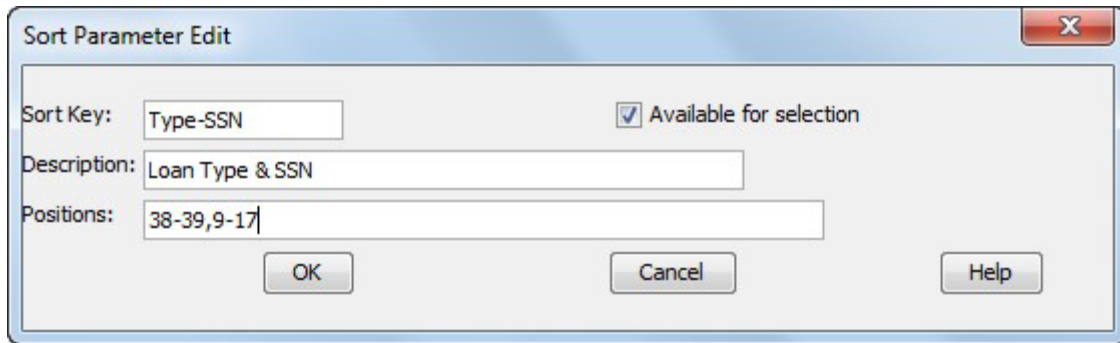


Figure 10-36: Sort Parameter Edit Dialog Box

2. Edit the sort values as necessary and click OK to return to the Sort Parameters dialog box.

### 10.6.2 Deleting a Sort Option

To delete a sort option, select it on the Sort Parameters dialog box (Figure 10-32) and click Delete.

### 10.6.3 Sort Parameter Positions' Syntax

Note: Parameters in brackets [ ] are optional.

Positions are made up of one or more position parameters linked together with commas (,).

positions => position1[[,position2]...[,positionN]]

[comments] position1 First data element position parameter

position2 Second data element position parameter (optional)

positionN Nth data element position parameter (optional)

comments Comments (optional) {At least one space between last position parameter and start of comments.}

A position parameter is made up of a data element's starting position, and optionally its ending position or length.

position => start[-end[:length]:1]

start Data element starting position {A number from 1 to 300.}

end Data element ending position (optional) {A number from starting position to 300.}

length Data element length (optional) {A number from 1 to 1+ 300 – starting position. Defaults to a length of one when neither the ending position nor length is given.}

Example: 39-73,21-32 Sort by 35-byte field starting in position 39, then by 12-byte field starting in position 21.

## Chapter 11: Generating Reports on z/OS LE Version 3.1 or Higher Mainframes

### 11.1 Extract Error Report

The JCL for z/OS LE Version 3.1 or higher executes DataPrep procedures that perform Extract Validation and generate the Extract Error report (Appendix G).

You have the following options for generating the Extract Error report:

- To generate both the summary and detail report, leave the Extract Validation JCL as it appears in Appendix G.
- To generate the detail report, remove the asterisk (\*) from the line immediately before this line in the JCL shown on page G-13. `PSTEP100 EXEC PGM=UTB300PB`

To generate the summary report as well as the detail report, comment out (that is, add an asterisk after the double slashes) on the line before this line in the JCL shown on page G-13:

```
PSTEP100 EXEC PGM=UTB300PB
```

- To prevent DataPrep from generating any report, remove the asterisk from the line immediately before this line in the JCL shown on page G-11:

```
PSTEP070 EXEC PGM=TIRIOVFI
```

#### 11.1.1 Summary Report Sorting

The sort JCL offers three options for sorting the Summary Extract Error report:

- By Error Count
- By Error Code
- By Field Code

Error count is the default, which is why the other two options are commented out by the addition of an asterisk (\*) after the two slashes at the beginning of the lines on which they appear.



#### Main Frame Users: Extract Report Sorting

The Summary Extract Error Report for mainframes can be sorted by count, error code, and field code. However, the Detail Extract Error Report for mainframes is *only* sorted by Social Security number.

```
//*  
//*      ERROR COUNT ORDER  
//      SET  SORTPARM=PUTB4001  
//*  
//*      FIELD CODE ORDER  
//*      SET  SORTPARM=PUTB4002  
//*  
//*      ERROR CODE ORDER  
//*      SET  SORTPARM=PUTB4003  
//*
```

If you want to change this default, you must add an asterisk (\*) after the two slashes in the JCL line for the error count option

```
//      SET  SORTPARM=PUTB4001
```

 and delete the asterisk in the JCL

line for the sort option you want to use.

For field code order, remove the asterisk from this line:

```
//*      SET  SORTPARM=PUTB4002
```

For error code order, remove the asterisk from this line:

```
//*      SET  SORTPARM=PUTB4003
```

Whenever you change sort options, remember to select an option by removing the asterisk from that line of JCL and to deselect the other options by adding asterisks after the double slashes at the beginning of those lines of JCL.

**Data Sets Deleted**

The first step in the JCL will delete any data sets previously created. If you want to save your previous error files, you should rename them.

### 11.1.2 Detail Report Sorting

The Detail Extract Error report is automatically sorted by SSN within school. This is the only sorting option available for the Detail report.

If do not want to automatically produce a Detail Extract Error Report, you must change the JCL (see Appendix G).

### 11.1.3 Load Process Error Report

Appendix G contains the JCL used to generate the Load Process Error report from the Load Process Error file that you retrieve from NSLDS after each submittal. This JCL also generates the Extract Error Report.

This JCL can be found in the library created with JCLLIB as part of the name. The library member name is PRBB2000.

As with the Extract Error report, you can sort the Summary Load Process Error report in three different ways by changing the SET statement:

- By Error Count
- By Error Code
- By Field Code

See the in-stream documentation in Appendix G. Note that the Detail Load Process Error report can be sorted only by SSN.



#### Sorting the Summary Error Report

You can sort the Summary Error report in any of three ways: error count, error code, or field code. To select a sort option, use the SET statement.

## Chapter 12: Using Reports

### 12.1 Extract Validation Log Report

The Extract Validation Log report is discussed in detail in Section 7.4.2 as part of the Extract Validation process. Use it to verify that a successful Extract Validation has, in fact, produced a Submittal file that passes reasonability checks when compared to previous months' Submittal files.

### 12.2 Error Reports

#### 12.2.1 Summary Error Reports

Both the Summary Extract Error report and the Summary Load Process report list the following information for each field on your Submittal file containing one or more errors:

- The number of errors that occurred for that field
- The percentage those errors represent of the total number of errors in the file
- The field code
- The error code
- The field name
- The error message

There is one significant difference between the two summary error reports. The Summary Extract Error report summarizes all the domain-level errors in your Submittal file, while the Summary Load Process Error report summarizes all the domain-, record-, and load-level errors in your Submittal file. Thus, the Summary Load Process Error report offers a fuller picture of the types of errors that occur in your Submittal file. However, the Summary Extract Error report identifies domain-level errors earlier in the NSLDS update process, and it is invaluable if you need to lower your rate of domain-level errors beneath the ED-established threshold in order to create a Submittal file at all.

Use the summary error reports to help you quickly spot problem areas in your Database



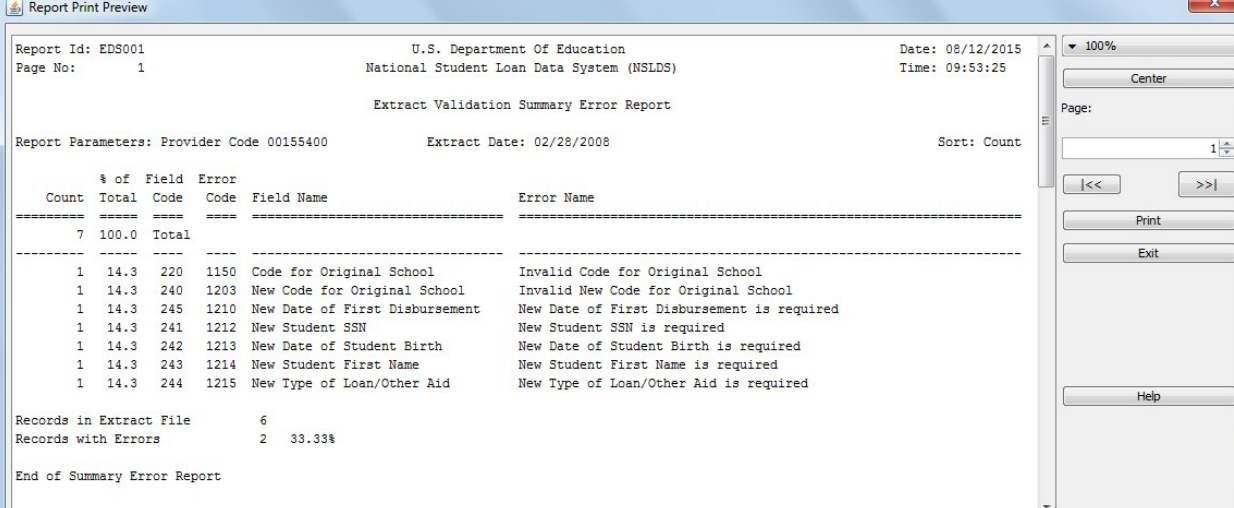
#### Using Summary Error Reports

You can use summary error reports to focus quickly on the types of errors your Submittal file contains.

If a large portion of your errors come from the DOB field, for example, that will show up in the summary error reports. You can then generate detail error reports to show individual records that need to be corrected.



Extract file. Then use detail error reports to research how those problems affect individual loan records. Once you have diagnosed problems in this fashion, you should be able to attack them at the source by updating your database or extract procedures.



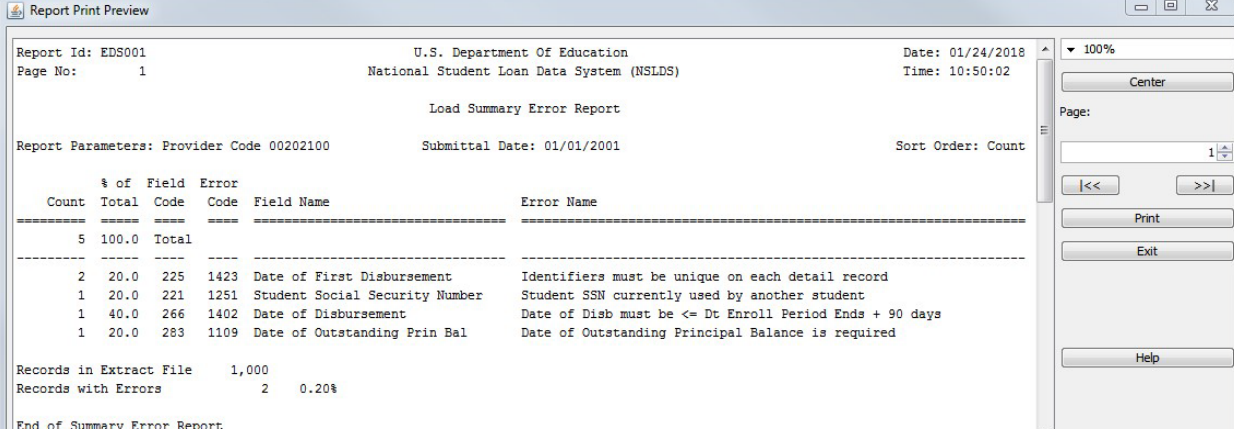
Report Id: EDS001  
Page No: 1  
U.S. Department Of Education  
National Student Loan Data System (NSLDS)  
Date: 08/12/2015  
Time: 09:53:25  
Extract Validation Summary Error Report

Report Parameters: Provider Code 00155400  
Extract Date: 02/28/2008  
Sort: Count

Count	% of Total	Field Code	Error Code	Field Name	Error Name
7	100.0	Total			
1	14.3	220	1150	Code for Original School	Invalid Code for Original School
1	14.3	240	1203	New Code for Original School	Invalid New Code for Original School
1	14.3	245	1210	New Date of First Disbursement	New Date of First Disbursement is required
1	14.3	241	1212	New Student SSN	New Student SSN is required
1	14.3	242	1213	New Date of Student Birth	New Date of Student Birth is required
1	14.3	243	1214	New Student First Name	New Student First Name is required
1	14.3	244	1215	New Type of Loan/Other Aid	New Type of Loan/Other Aid is required

Records in Extract File: 6  
Records with Errors: 2 33.33%  
End of Summary Error Report

Figure 12-1: Summary Extract Error Report



Report Id: EDS001  
Page No: 1  
U.S. Department Of Education  
National Student Loan Data System (NSLDS)  
Date: 01/24/2018  
Time: 10:50:02  
Load Summary Error Report

Report Parameters: Provider Code 00202100  
Submittal Date: 01/01/2001  
Sort Order: Count

Count	% of Total	Field Code	Error Code	Field Name	Error Name
5	100.0	Total			
2	20.0	225	1423	Date of First Disbursement	Identifiers must be unique on each detail record
1	20.0	221	1251	Student Social Security Number	Student SSN currently used by another student
1	40.0	266	1402	Date of Disbursement	Date of Disb must be <= Dt Enroll Period Ends + 90 days
1	20.0	283	1109	Date of Outstanding Prin Bal	Date of Outstanding Principal Balance is required

Records in Extract File: 1,000  
Records with Errors: 2 0.20%  
End of Summary Error Report

Figure 12-2: Summary Load Process Error Report

## 12.2.2 Detail Error Reports

Both the Detail Extract Error report and the Detail Load Process Error report supply the following information for each error in your Submittal file: Student's SSN

- Date of Student's Birth
- Student's Last Name

- Student's First Name
- Type of Loan
- Date of Loan
- Loan Status
- School Code
- Data Provider Loan Identifier
- Error Level
- Name of Field in Error
- Value of Field in Error
- Error Message

In addition, the Detail Load Process Error report provides the following information for each SSN conflict caused by a record on your Submittal file:

- Student's SSN you supplied
- Date of Student's Birth you supplied
- Student's First Name you supplied
- Error Code
- Error Message
- Existing Student's SSN
- Existing Date of Student's Birth
- Existing Student's First Name
- Existing Student's Last Name
- Data Provider Code
- Data Provider Name
- Data Provider City
- Data Provider State

**View the Summary Reports First**

We suggest that you generate and view summary error reports before viewing detail reports. The summary reports will quantify the types of errors in your Database Extract file, making it easy for you to spot large problems.

There is one significant difference between the two detail error reports. The Detail Extract Error report contains all the domain-level errors in your Submittal file, while the Detail Load Process Error report contains all the domain-, record-, and load-level errors in your Submittal file. Thus, the Detail Load Process Error report offers a fuller picture of the types of errors that occur in your Submittal file. However, the Detail Extract Error report identifies domain-level errors earlier in the NSLDS update process, and it is

invaluable if you need to lower your rate of domain-level errors beneath the ED-established threshold in order to create a Submittal file at all.

Use detail error reports to research how problems in your database or extract procedure affect individual loan records. DataPrep's range of selection and sort options (Sections 10.5 and 10.6) will help you zero in on how general types of problems affect specific loan records. Once you have diagnosed problems in this fashion, you should be able to update your database or extract procedures.

It is essential that you *correct your database or extract procedures* rather than editing or otherwise massaging the Database Extract file. If you do not, the errors will remain in your database and reappear in your next Database Extract file, which will then be out of sync with the correct data loaded onto NSLDS as a result of your previous submittal.

Appendix B contains a detailed list of all error messages, a cross-reference to the fields to which they refer, and the error message associated with each edit applied against a data element. You can also refer to the Field Code and use Appendix A to review the requirements for reporting on the specific field.



### Correct Your Database

Use error reports to correct your database or extract procedures, *not the Database Extract file itself*. Editing your Database Extract file to correct errors violates ED policy, which requires your Database Extract file to be an exact image of your database, and perpetuates errors, since any errors that remain on your database get reported to NSLDS again the next month.

Report Id: EDS002  
Page No: 1

U.S. Department Of Education  
National Student Loan Data System (NSLDS)

Date: 01/24/2018  
Time: 10:51:53

Extract Detail Error Report

Report Parameters: Provider Code 00010000      Extract Date: 01/20/2018      Sort Order: Not Sorted

STUDENT	LOAN	School	Data Provider
SSN	D.O.B.	Last Name	First Name
Type	Date	Stat	Stat.
Date	Code	Loan Identifier	
850-20-0002	02/08/1983	ANDERSON	JOHN
Date Enrollment Period Ends	20090732		
Invalid Date Enrollment Period Ends			
850-20-0003	02/08/1983	ANDERSON	JOHN
Date Enrollment Period Ends	20090732		
Invalid Date Enrollment Period Ends			
850-20-0004	02/08/1983	ANDERSON	JOHN
Date Enrollment Period Ends	20090732		
Invalid Date Enrollment Period Ends			

Level Name of Field in Error      Value of Field in Error      Conflict      Error Message

Figure 12-3: Sample Extract Detail Error Report

Report Print Preview

PRIVACY ACT OF 1974 AS AMENDED

Report Id: EDS002      U.S. Department Of Education      Date: 08/25/2015  
Page No: 1      National Student Loan Data System (NSLDS)      Time: 09:15:11

Load Detail Error Report

Report Parameters: Provider Code 00202100      Submittal Date: 01/01/2001      Sort: <No Sort>

STUDENT				LOAN		School	Data Provider
SSN	D.O.B.	Last Name	First Name	Type	Date	Code	LOAN IDENTIFIER
----- ERRORS -----							
Level	Name of Field in Error	Value of Field in Error	Error Message				
-----							
200-00-0003	03/17/1947	JOHNSON	SUSAN	NU	01/09/1986	ID	00202100
3	Date of Outstanding Prin Bal	00000000	Date of Outstanding Principal Balance is required				
3	Student Social Security Number	048681095	Student SSN currently used by another student				
----- START OF SSN CONFLICT DATA -----							
KEY SSN:200-00-0003		KEY DOB:03/17/1947		KEY FIRST NAME:SUSAN			
SUPPLIED SSN:200-00-0002 DOB:03/17/1947 FIRST NAME:1SUSAN CODE/MSG:1251 Student SSN currently used by another student							
EXISTING SSN:200-00-0001 DOB:02/05/1957 FIRST NAME:1BARBRA LAST NAME:JOHNSON							
REPORTING AGENCY/SCHOOL CODE:581		NAME:DEPT OF ED/GREAT LAKES		CITY:MADISON		STATE:WI	
REPORTING AGENCY/SCHOOL CODE:556		NAME:DEBT MANAGEMENT AND COLLECTIONS SYSTEM		CITY:GREENVILLE		STATE:TX	
REPORTING AGENCY/SCHOOL CODE:FEDGRANT		NAME:FEDERAL GRANT		CITY:		STATE:	
----- END OF SSN CONFLICT DATA -----							
200-00-0004	03/07/1987	MATHEWS	JEFFREY	PU	04/26/2010	DF	00202100
	Date of First Disbursement	20100426	Identifiers must be unique on each detail record				
	Date of First Disbursement	20100426	Identifiers must be unique on each detail record				
200-00-0005	11/16/1974	SMITH	JOHN	PU	08/18/2009	RP	00202100
	Date of Disbursement	20100608	Date of Disb must be <= Dt Enroll Period Ends + 90 days				

110%  
Center  
Page:  
1  
Print  
Exit  
Help

Figure 12-4: Sample Detail Load Process Error Report

## 12.3 Loan Detail Reports

Both the Extract Loan Detail report and the NSLDS Loan Detail report list in a readable format the value for every field of every record they contain. In the case of the Extract Loan Detail report, the records are those contained in your own database. In the case of the NSLDS Loan Detail report, the records are contained in the NSLDS database. Together, the two reports are useful for researching discrepancies between the data on your database and the data on the NSLDS database.

While error reports are useful for identifying types of errors and specific records with errors in your database, loan detail reports are useful for establishing the full contents of those records that contain errors. DataPrep's select and sort options will help you identify and categorize the records that appear in loan detail reports.

## 12.4 Error Submittal Summary Notification Report

The Error Submittal Summary Notification report informs you that NSLDS has not received your Submittal file, or that it cannot process the Submittal file it did receive

because of some file-level error. Since Extract Validation will not create a Submittal file at all if it detects any file-level errors in your Database Extract file, most file-level errors that can be remedied by correcting your database or extract process will be caught by Extract Validation and will never appear on an Error Submittal Summary Notification report.

The file-level errors that cause NSLDS to send you an Error Submittal Summary Notification file usually result from one of the following:

- Some problem with your submittal schedule
- Transmitting the wrong file or wrong Submittal file to NSLDS
- Data corruption while the file was being transmitted

The remedies to these types of errors usually involve meeting your submittal schedule, modifying your file-handling procedures, or simply retransmitting your Submittal file. They do not normally involve correcting your database or extract procedures.

## 12.5 Error Types

### 12.5.1 File-Level Errors

File-level errors that result from faulty data in your database or flawed extract procedures should be caught by Extract Validation and prevent DataPrep from creating a Submittal file. Such errors will cause Extract Validation to generate an error message that identifies what went wrong and suggests how you might be able to correct it. You must remedy such errors and rerun Extract Validation in order to create a Submittal file.

File-level errors that prevent NSLDS from processing your Submittal file are normally the result of faulty file handling or data corruption during transmission. Often, these problems can be resolved by re-sending your Submittal file or by sending the correct Submittal file to NSLDS.

### 12.5.2 Domain-Level Errors

There are four types of domain-level errors:

1. Numeric Field Errors
2. Invalid Date Errors

3. Missing Identifiers
4. Missing New Identifiers

DataPrep checks for domain-level errors as part of Extract Validation, and NSLDS checks for them again as part of the Load Process.

If the rate of domain-level errors in your Database Extract file exceeds the threshold established by ED, DataPrep will not create a Submittal file. However, it will create an Extract Error file that you can use to generate Extract Error reports and correct your database before creating a new Database Extract file and re-running Extract Validation. Even if your error rates are below the thresholds, you can still generate Extract Error reports and get a head start on correcting any domain-level errors Extract Validation does identify in your Submittal file. While Extract Validation will process records with domain-level errors as long as your error rate remains below the threshold, the Load Process will not load such records onto NSLDS. Instead, it will write them to the Load Process Error report, which you should use to correct your database or extract procedure.

### Numeric Field Errors

A numeric field error occurs when a field requiring all numeric characters is populated by some other character or space. This type of domain error can indicate extraction of the wrong data, an incorrect result in a calculated field, truncated data, incorrect field length, or some other type of data problem. The Extract Error report will identify the data that erred, and you can use either the Summary Report or the Detail Report to identify the data in your system needing correction or to trace it back to the source of the corruption. You can also use the Extract Loan Detail report to review the entire record.

### Invalid Date Errors

An invalid date error occurs when an invalid date appears in a field requiring a date. This can be caused by an incorrect character in the date field (for example, a non-numeric character) or a date that is not a calendar date (for example, 19980230—February 30<sup>th</sup> is not a valid date).

An invalid date error will *not* occur if the date is valid, regardless of whether or not it is reasonable. For example, a student date of birth of 19980228 will pass this domain-level



#### Domain Error Threshold Levels

ED has set the threshold levels for domain errors at:

- Combined Date and Numeric Field Errors 10%
- Missing Identifier 5%
- Missing New Identifier 5%

These percentages are subject to change at ED's discretion.



edit, although clearly 1998 is not a reasonable birth date for a current student. That record-level error will be picked up later when NSLDS processes your Submittal file.

You should note that a date field with all zeros will pass the domain edit, but it may err in the load process if a date is required.

## Missing Identifiers

Identifier errors occur when one or more loan or student identifier fields are left unpopulated. Examples of identifier errors are Loan Type with spaces or Date of Student's Birth with zeros. These create a loan record with an invalid format. Identifier errors often occur either when there are data missing from your database or when your extract process is not working properly. It is essential you review the cause of this error so it does not continue to occur.

## Missing New Identifiers

New Identifier errors occur when one or more of the loan or student new identifiers are populated by valid data, but the remaining new identifiers are not. This occurs if you try to perform an Identifier change but fail to fill in all of the New Identifiers. New identifier errors indicate an identifier change process that is not occurring properly, so it is essential you review the cause of the error.

### 12.5.3 Record-Level Errors

NSLDS first checks for record-level errors as part of the Load process. Individual loan records that contain record-level errors are not loaded onto the database and are, instead, written to the Load Process Error report. You can then use that report to correct your database or extract procedure before extracting the records again the following month.

There are two types of record-level errors:

1. Duplicate Records
2. Reasonability Errors



#### Correcting Record-Level Errors

There are two types of record-level errors: duplicate records and reasonability errors.

To correct them, you must correct the data in your database. When you next extract the data using DataPrep, the new Submittal file should have the corrected information. Once the data have passed the edits described in Chapter 8, NSLDS will load it onto the database.

## Duplicate Records

If two Detail records in the same Submittal file have the same loan identifiers, NSLDS rejects them both because it has no way of telling which is correct. Remedy problems with duplicate records by removing duplicates from your database or by checking your extract process for any step that may be creating duplicate records even though they do not exist in your database. The Loan identifier that DataPrep allows you to assign to individual loans can help you track duplicate records and identify their cause.

## Reasonability Errors

Reasonability errors result from data that do not make logical sense. To correct these errors you must correct the information in your database. When you next run Extract Validation, the Submittal file produced by DataPrep should contain the corrected data. Once the data have passed the edits, NSLDS updates its database to reflect the corrected, and reasonable, data.

The following are two examples of Reasonability Errors:

- 1. Loan Type equals PU (Federal Perkins Loan). Date of First Disbursement submitted equals 19810120 (January 20, 1981)**—This is not reasonable since the Perkins Loan Program did not exist until 1987. (Date of First Disbursement must be at least 19870101.) Therefore, you must correct your database to reflect that either the loan type equals NU, National Direct Student Loan (NDSL), or the date.
- 2. Date of First Disbursement equals 19950905. Date of Birth submitted for student equals 19910713**—A student cannot have received a Perkins loan and be only 4 years old. Correct the information in your database as needed. (Date of birth must be at least 12 years before Date of First Disbursement.)

Reasonability errors usually require that you make changes to the respective field(s) in your database before your next extract.

For example, the Load Process Error report might contain a record with the typographical error 20960125 (January 25, 2096) in the Date of Disbursement field instead of the correct 19960125 (January 25, 1996). NSLDS would reject this date as being in the future. In your next Submittal file, you must resubmit the record that contained the error with a valid Date of Disbursement.

However, they can also require changes to your extract process.



For example, you might extract a record with a valid Cancellation Date but a Cancellation Amount of zeros, even though the correct Cancellation Amount is in your database. Although the Cancellation Date is valid, it will err out of NSLDS because the record that contains it fails the companion field edit on Cancellation Amount. To fix this error, you must change your extract process so it extracts Cancellation Amount along with Cancellation Date.

### **12.5.4 Load-Level Errors**

Load-level errors occur when records in your Submittal file contain data that conflict with the data already in NSLDS. When there is a load-level error, the entire record is rejected. NSLDS checks for load-level errors during the Load process and writes records that contain them to the Load Process Error report.

To correct load-level errors, you must correct the information in your database before you create your next Submittal file. Normally, you must resubmit corrected data in Detail records. However, if you need to change historical (rather than current data) in NSLDS, you must re-submit corrected data in a PPC record.

There are four types of load-level errors:

1. Identifier Conflicts
2. OPEID Code Errors
3. Invalid Code Errors
4. Date Sequence Errors

#### **Identifier Conflicts**

Identifier conflicts occur when a new loan record is submitted for a Student's SSN already on the NSLDS database, but a student match cannot be made based on the Identifier Match Criteria (Section 9.4.1). This kind of error can be caused by a number of factors: typos, a student reporting two different first names to two different data providers, (for example, a student who uses a middle name as a first name), two different students mistakenly using the same SSN, or even fraud. Regardless of the reason for the conflict, you must resolve the conflict for the record to load successfully onto NSLDS.

Loan records erring due to identifier conflicts should be compared with the data the record erred against in the load process. The Load Process Error report will show the

conflicting identifiers and the data provider that supplied them. You should check to see what the conflict is and if it results from something that should be corrected on your database.

If it appears your data are accurate but they conflict with data from another data provider anyway, you must resolve the conflict before NSLDS can be updated. Call the NSLDS Customer Support Center at 800-999-8219 to negotiate identifier conflicts with other data providers.

## OPEID Errors

NSLDS reviews original and current school codes in the records you submit against the most current ED data. If the OPEID code on a record does not exist in the NSLDS database, NSLDS rejects the record and does not update the database. OPEID codes can be found at the NSLDS Professional Access website, <https://nslidsfap.ed.gov>, under the ORG tab by searching on the school name.

## Invalid Codes

NSLDS reviews all code fields to ensure that the codes

they contain are acceptable to NSLDS. See Appendix B for complete lists of the following codes:

- Loan Type
- Loan Status
- Enrollment Status
- Deferment Type
- Deferment Type Usage
- Cancellation Type
- Perkins Commercial Servicer



### Correcting Invalid Codes

NSLDS rejects records submitted with invalid OPEID codes. To correct code errors, you must correct either your database or your extract process. Correct OPEID codes can be found at <https://nslidsfap.ed.gov> under the School tab by searching on the school name.

## Date Sequence Edits

In addition to storing the current values for the individual fields that make up a loan record, NSLDS also stores historical (or past) values for selected fields. Often, those historical values are stored as part of an event. This is because changes to some fields are only meaningful if they are accompanied by a change to another field or fields. For example, a new Date of Loan Status is only meaningful if it is accompanied by a new Code for Loan Status. Together they constitute a Loan Status event. While you can update historical values, *you cannot change either current or historical values so that you can change the chronological order of events stored in history.*



Therefore, NSLDS reviews records you submit against current and historical values already stored on NSLDS for the same record to ensure that any date changes do not alter the sequence of events. If they do, NSLDS writes the record to the Load Process Error file and does not update the database with it.

If a record you submit is rejected by NSLDS because it causes a date sequence error, first check that the data you have submitted are correct.

## Chapter 13: Reporting Reminders

Included in Perkins reporting is information about the student's enrollment and information necessary to ensure successful transfer. Although there are other processes which provide some of this same information to NSLDS, it is still required to be provided as a part of Perkins reporting.

### 13.1 Enrollment Information

Perkins Loan reporting includes enrollment data for each loan. Although funding for the loan program may occur at the main location of the school's 8-digit OPEID, NSLDS requires that the actual location where the student is attending classes is to be reported. This may be the same as the main location, or it may be at a location other than the '00' location. This ensures that the student is placed on the correct enrollment reporting roster and eliminates misreporting when the student is not attending classes at the main location.

In order to report this information, use the NSLDS Code for Current School - Field Code #286 for each loan record in the data extract file submitted to NSLDS. Reference Appendix B, Table B-4 - Enrollment Status Codes, for the precise codes to report in the field.

### 13.2 School Mergers and Closures

Occasionally locations or schools will merge into a single entity. During the merger process, typically one entity is maintained and the other entity is closed. One of the necessary steps to a successful merger is updating the loan portfolio for all open loans. Schools must update the Code for Current School – NSLDS Field code 286 from the old current School Code to the School Code of the new entity.

For Example:

00123400 is being purchased by 00678900 and will continue reporting on 00123400's Perkins portfolio.

1. The portfolio of open Perkins loans for 00123400 currently shows 00123400 as the Code for Current School in NSLDS Field Code 286.
2. All loans in the portfolio for 00123400 must be updated to show 00678900 in the Code for Current School in NSLDS Field Code 286.

Assume that the following loan information currently exists on the NSLDS database (values in positions 1-47):

- Code for Original School = 00123400
- Student's Social Security Number = 111223333
- Date of Student's Birth = 19600508
- Student's First Name = Robert
- Type of Loan/Other Aid = PU
- Date of First Disbursement = 19910903

**The merged into school, as the new Origination School Code, will need updated. To update the new OPEID identifier, submit the data exactly as shown above in positions 1-47 of the record and, *at the same time*, also report the following values in positions 50-96 of the record:**

- New Code for Original School = 00678900 (only item changed)
- New Student's Social Security Number = 111223333
- New Date of Student's Birth = 19600508
- New Student's First Name = Robert
- New Type of Loan/Other Aid = PU
- New Date of First Disbursement = 19910903

**Note: Only the Type of Loan/Other Aid was changed. All other values must be resubmitted as before.**

*Figure 13-1: How to Update Loan Identifier Data for a School Merger*

The Old and New identifiers, in this case school code, must be completed prior to PEPS making the merger change in their system. Once the old school is closed in FSA systems, no further updates to records related to the old school are allowed. So the timing of updating the loans is crucial. Contact the NSLDS Customer Support Center for further assistance with Perkins questions regarding mergers. See Section 6.5.2 for the ID change process.

## 13.3 Loan Transfer Information

There may come a point when it becomes necessary to transfer a loan to the Department for servicing. This may occur in the following instances:

- Extreme default by the borrower which requires Department intervention

- Total and Permanent Disability of the borrower requiring additional tracking by the Department
- School is ending participation in the Perkins program
- School is merging or closing

When these circumstances occur, it is imperative that the record be reported to the Department accurately and concisely in for the receiving servicer to be able to receive the loan. If this is not done, the receiving servicer will be unable to report on the loan, leaving the school responsible for reporting on the loan until the loan can be properly received.

The receiving Federal Servicer will attempt to match information found on the loan with information received on the Federal Perkins Loan Program/NSLDS Assignment Form completed by the school. The information provided on this form **MUST** match that which is provided to NSLDS in order for the federal Perkins servicer or TPD to successfully receive the loan into their portfolio.

To ensure the successful transfer of a loan from the school to a Federal Servicer, the following items must be reported accurately to ensure the match:

- *Institutional Certification*, Item 12 from the Federal Perkins Loan Program/NSLDS Assignment Form. This is commonly referred to as the "Certification Date" ○ Certification Date is to be reported in NSLDS Field Code 262 – Date of Loan Status.
  - NSLDS Field Code 263 – Code for Loan Status **MUST** be equal to 'AE' for the servicer to be allowed to receive the loan. Any other value in this field is NOT allowed for transfer.
  - The above two fields (Date of Loan Status – Field Code 262 and Code for Loan Status – Field Code 263) **MUST** be supplied in the same reporting to ensure transfer to the Federal Servicer.

Reference Appendix B, Table B-3 – Perkins Loan Transfer Codes, for detailed instruction about reporting transfer information.

## 13.4 Ending Perkins Participation

When a school is nearing the end of participation in the Perkins program, it is necessary to liquidate the loan portfolio. This is done by ensuring that all loans in the portfolio are

closed, all borrower loan accounts are fully retired, accepted by the Department, or purchased by the school. In order to facilitate this process, schools must ensure that the NSLDS database reflects this. Timely reporting and reconciliation verification must continue until NSLDS shows that the schools portfolio is empty. School users should utilize the Perkins Extract By Parameters (REC005) report to determine if any transfers are pending before discontinuing the reporting process in the Perkins loan program. For more information on this report see Appendix J (NSLDS Perkins By Parameters Report record layout).

## **Chapter 14: Final Thoughts**

We hope this Data Provider Instructions manual has helped you learn how DataPrep functions. We also hope its description of how DataPrep interacts with NSLDS gives you a useful overview of the entire NSLDS update process.

If you have any questions, use the full-featured Help system. The Help system documents all DataPrep's functions and includes material not contained in this manual. It is your best source for detailed information about specific DataPrep functions.

If you still have questions about using DataPrep or about the NSLDS update process, please call the Customer Support Center at **800-999-8219** between the hours of 8 a.m. and 8 p.m. Eastern Time, weekdays except Federal holidays.

In addition, if you have any suggestions about how this manual can be improved, please call the Customer Support Center and let us know.