4 Payroll Data Feed

4.1 Revision Sheet

Chapter Release No.	Date	Payroll Revision Description
1.0	01/23/2004	Initial version released to OPM EHRI Program Office
1.0-a	04/30/2004	Initial version released for delivery team review
1.1	06/14/2004	Added table D-2 (old Table 2-2), Operational Contact List. Added section 3.3 (old 3.1), Reporting Requirement. Added list of providers to section 3.4 (old 3.2). Added text to section 3.6.2 (old 4.2) to indicate that values must be provided for all mandatory fields. Added section 6.3 to describe edits performed on individual records. Redefined data format types in section 3.7.1 (old A.). Added explanation of mandatory and optional in section 3.7.2 (old A.2). Reformatted Record Specification in section 3.7.2 (old A.2). Added section 3.9 (old Appendix B), containing individual field and relational edit rules.
1.2	06/18/2004	Updated record specification in Section 3.7.2 (old A.2). Added Sections 3.8 (old A.3) and (?) (old A.4) for state and country codes.
1.3	06/23/2004	Added data element for Retirement Voluntary Contribution Amount.
1.4	06/29/2004	Deleted Adjusted Basic Pay Amount data element. Renamed Basic Pay Amount as Basic Pay Pay Period Amount. Renamed Locality Pay Amount as Locality Pay Pay Period Amount. Changed definitions for as Basic Pay Pay Period Amount, Adjusted Basic Pay Pay Period Amount, Locality Pay Pay Period Amount, and Locality Pay Year to Date YTD Amount.
2.0	10/11/2004	Updated Appendix D (old 2.0) to include OPM Connect:Direct point of contact information that was once found in this chapter.

Updated Section 5.1 to provide more detail on the file transfer process.

Updated old Section A.1 to correctly specify the DATE format to not include zero in the day range.

Modified old Appendix A to reflect the latest Record Specification. Please refer to Appendix C (old Appendix E) for the specification release notes detailing the difference in the file format for this release.

Added Section 3.7.2 (old A.2) to explain the new Reporting Criteria column in the file format specification table. This column replaces the previous "Mandatory/Optional" column and includes the third criteria of "Critical."

Updated Appendix A (old Appendix C) with the new valid values for all the training reference values that were once found in this chapter.

Added Appendix C (old Appendix E) to detail all the changes to the file format specification. This revision sheet and Appendix C should be updated in tandem. |

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Chapter Release No.	Date	Payroll Revision Description
2.1	02/18/2005	Updated with the new Payroll file format. Updated document to be more specific about what ASCII character set should be used to create the file. Updated document to explain and define the Policy and Record Identifying Requirements. Updated document to rename the section headings differentiating between the record identifying fields and the non-record identifying fields.

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Chapter Release No.	Date	Payroll Revision Description
3.0	8/31/2005	Several changes to the Record Specification in Section 3.8: - *Updated the following elements:* Renamed Alternate Work Schedule Indicator to Alternate Work Schedule Code (ICD Seq #17) and changed the indicators to coded values; Renamed Pay Period Earnings to Total Earnings in Pay Period (ICD Seq #23) and alter definition; Altered definition of Total Hours Worked (ICD Seq #41), Regular Hours Worked (ICD Seq #42), Intermittent Service Days (ICD Seq #43), and Part-Time Hours per Bi-Weekly Pay Period (ICD Seq #46); Changed name and definitions for Holiday and Sunday "Pay" to "Premium" (ICD Seq #49-52); Combined Regular and Irregular Overtime into one Overtime group (ICD Seq #47,48); Removed "Differential" term from name and definition of Hazardous Duty elements (ICD Seq #63,64); Altered definition of Night Differential (ICD Seq #67,68) to specify only FWS employees; Change Post Cost of Living Allowance Amount to Cost of Living Allowance – Foreign Area (ICD Seq #79); Retention Allowance renamed Retention Incentive (ICD Seq #81); Danger Allowance renamed Danger Pay (ICD Seq #83); Changed Annual Leave YTD Current Balance Hours to Annual Leave Accrued Current Balance Hours (ICD Seq #91); Modified Restored Annual Leave fields to track hours expiring in Year 1 (ICD Seq #99-101) and added new fields for additional years (ICD Seq #102-110); Renamed pay elements (ICD Seq #28,30,32,33); Changed definitions of premium and pay elements (ICD Seq #49-60); Renamed Credit Leave to Credit Hours and added to the definition of these elements (ICD Seq #133-137); Modified existing Military Leave buckets to track 5 U.S.C. 6323 breakouts (ICD Seq #142-144) and added new elements (ICD Seq #145-153); Renamed Bone Marrow, Organ Donor, and Jury Duty from Administrative to Leave (ICD Seq #157,159,160) and renamed Jury Duty to Court (ICD Seq #160); Leave fields renamed to Annual (ICD Seq #169-171); Fixed misspelling of Lump Sum (ICD Seq #178-188); AWOL/LWOP name and definition changes (ICD Seq #197,198, 201-206); Combined FICA and OASDI (ICD Seq #218-221) ; Renamed Check Mailing Address to Correspondence address and changed attribute names accordingly (ICD Seq #6-15) - *Added the following elements:* Overtime (ICD Seq #47,48); Other Allowance (ICD Seq #86); Cost of Living Allowance – Non Foreign Area (ICD Seq #80); Three new categories of Restored Annual Leave (ICD Seq #102-110); Special Rate Supplement Amount by Pay Period and YTD (ICD Seq #34,35); Total Earnings YTD Amount (ICD Seq #36); Night Pay Amount and Hours (ICD Seq #61,62); Post Differential Foreign and Non-Foreign Areas Amounts and Hours (ICD Seq #71-74); Cost of Living Allowance – Non Foreign Area (ICD Seq #80); Relocation and Recruiting Incentives (ICD Seq #82,83); Post Allowance (ICD

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Chapter Release No.	Date	Payroll Revision Description
3.0 cont.	8/31/2005	Seq #85); Military Leave buckets for 5 U.S.C. 6323 breakouts (ICD Seq #145-153); Administrative and Bone Marrow Leave Hours Used YTD (ICD Seq #156,158); Renamed Annual Leave Donation fields and clarified meanings (ICD Seq #161-168); Annual Leave Accrual Rate valid values (ICD Seq #169); Leave Ceiling Hours and Reason Code definition and values changed (ICD Seq #174,175); Part TimeAnnual and Sick Leave Hours Earned (ICD Seq #176,177); Sick Leave Abeyance and Carryover (ICD Seq #172,173); Lump Sum fields (ICD Seq #185-188); AWOL/LWOP fields (ICD Seq #199,200,207-210); New award elements (ICD Seq #38-40); - *Deleted the following elements:* Removed Home Address fields (Release 2.1 ICD Seq #6-15) and will only track Check Mailing Address fields going forward; Removed State Tax Filing Status Type Code, Exemption Claimed, and Additional Withholding Amount (Release 2.1 ICD Seq#33-35); Removed Irregular and Regular Overtime fields and replaced with one Overtime group (Release 2.1 ICD Seq #54-57); Removed Staffing Differential amounts and hours (Release 2.1 ICD Seq #78,79); Removed Horse, Foreign Transfer, Living Quarters, Reassignment, Education, Foreign Language, Educators Extracurricular, Dorm Supervisor Extra Duty, and Temporary Quarters Subsistence Allowances (Release 2.1 ICD Seq #81-84, 89,90,93-95), which will be tracked in the new Other Allowance element (ICD Seq #86); Removed Restored Annual Leave Hours Earned (Release 2.1 ICD Seq #110); Removed Voting, Personal, Family Care, Birth, Adoption, and Religious Administrative Leave elements (Release 2.1 ICD Seq #141-143, 145-147) which will be tracked as Administrative Leave (ICD Seq #155) going forward; Leave for Civil Disturbance Used Days to Date (Release 2.1 ICD Seq #158); Removed OASDI breakout (Release 2.1 ICD Seq #197-200) and combined into FICA; Thrift Savings Plan Loan fields removed (Release 2.1 ICD #205-207); Office of Workers Compensation Program fields removed (Release 2.1 ICD #212-215) *NOTE:* As a result of these changes, the ICD Sequence numbers have been recoded. The order of most existing elements has remained the same; new elements have been inserted into the record where they make sense logically. Changed the System Reporting Requirement column to Record Identifying Requirement in the Record Specification table to be consistent with other Record Specifications in the Guide. Values now include "Y" and blank. This is also reflected in Section 3.7.2.2.

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Chapter Release No.	Date	Payroll Revision Description
3.1	10/20/2005	Clarified formatting of negative numbers in Section 3.7.1.
		Added new section (3.7.2.3) to describe in more detail the different action types that are allowed on the interface, and how to send the various types. The section includes details about how to handle back payments/adjustments.
		Changes to the Record Specification in Section 3.8. *NOTE:* As a result of these following changes the ICD Sequence numbers have been recoded. The order of existing elements has remained the same.
		Added Pay Period End Date (ICD Seq #25) to the list of key fields required in the transmission. This will allow records to be identified when changes or deletion records are provided. Also added this field to Section 3.9.1 describing edits on key fields.
		Clarified the intent of the Record Action (ICD Seq #1) to better describe what correction and deletion record actions are used for.
		Expanded codes/definition of SSN and Birth Date fields (ICD Seq #2, 3).
		Clarified Total Earnings definition (ICD Seq #23, 36).
		Provided detail regarding the components of total salary (ICD Seq #26, 27).
		Deleted Total Hours Worked (Release 3.0 ICD Seq #41) as the components that make up the total hours are available elsewhere in the record.
		Deleted Standby Duty Hours Worked, AUO Hours Worked, Availability Hours Worked, Supervisory Differential Hours, and Post Differential Hours - Foreign/Non-Foreign Area fields (Release 3.0 ICD Seq #54, 56, 58, 70, 72, 74), as these hours are not broken out.
		Clarified definition of Night Pay and Night Differential data elements (ICD Seq #57, 58, 63, 64).
		Deleted Cost of Living Allowance – Foreign Area Amount (Release 3.0 ICD Seq #79) since this is part of Post Allowance (ICD Seq #77).
		Renamed Other Allowances to Miscellaneous Payments (ICD Seq #78) and updated definition.
		Deleted Settlement Amount (Release 3.0 ICD Seq #87), as settlements are manual.
		Renamed Annual Leave Accrued YTD Current Balance Hours to Annual Leave Balance Hours (ICD Seq #82) since the current balance is all that is needed. Also clarified definition. Made the same change for Sick Leave Balance Hours (ICD Seq #86).
		Modified Annual Leave Accrual Rate (ICD Seq #160) to be a numeric field instead of a code (the datatype is now DECIMAL(9,2) instead of VARCHAR(4)). The field will store the actual number of hours that the employee is accruing leave instead of a code value.

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Chapter Release No.	Date	Payroll Revision Description
3.1 cont.	10/20/2005	Changed datatype of Part-Time Sick Leave Hours Earned (ICD Seq #168) to DECIMAL(9,2) from VARCHAR2(20). Added definition to this field and the corresponding Annual Leave field (ICD Seq #167). Changed "advanced" to "authorized" in Leave YTD Advance Balance Hours (ICD Seq #180). FMLA Indicator field changed to FMLA Hours Used in Pay Period (ICD Seq #187). The old field would not work if some hours were taken as FMLA and others were not. The new field will track the total FMLA hours in the period. Several modifications to LWOP/AWOL fields to make the data elements more clear and accurate. Deleted Absence Without Leave Start and End Dates (Release 3.0 ICD Seq #197, 198) as they could not support non-consecutive leave within the same pay period. Also deleted the corresponding Leave Without Pay Start and End Date fields (Release 3.0 ICD Seq #206, 207) for the same reason. Deleted Leave Without Pay 12 Month Period (Release 3.0 ICD Seq #210) since it was used for OWCP calculations and the remaining OWCP fields were removed in the last revision. The OWCP data will be analyzed for a future release. The Absence Without Pay Excess Days and Months fields (ICD Seq #190, 191) were changed to store Credit Reduction Hours in the Pay Period and YTD as this was the intent of the original fields. Changed the ICD Seq #192 to store AWOP in Pay Period instead of Calendar Year, which was already tracked in ICD Seq #194. Also clarified definitions of the remaining LWOP/AWOL fields. Clarified that Medicare is to be included in the FICA and OASDI fields (ICD Seq #204-207). Clarified definition of TSP Employee Pay Period Contribution Amount (ICD Seq # 210). Added a new field, Retroactive Adjustment Indicator (ICD Seq #254), to the record specification. Added note on treatment of null values in numeric fields to section 3.7.1.
3.2	8/11/2006	Minor wording edits in sections 3.2 and 3.5 to improve clarity. Added details about covered population in section 3.3. Removed listing of providers from section 3.4. Added a new placeholder with a default value of zero ("0") in the payroll file name, section 3.6.1. Added the description of this new element in the table in that section. This change makes payroll files more consistent with other files and allows providers to submit multiple files for a pay period as needed. Added a suffix to the payroll file name to support versioning of the interface. This version of the Guide is 3.4 therefore the version suffix should be "_3.4". Removed the ASCII character set file format requirement in section 3.6.2 and replaced it with a description of the Connect:Direct functionality that will manage any necessary character set translation.

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Chapter Release No.	Date	Payroll Revision Description
3.2 cont.	8/11/2006	Added text in 3.6.2 regarding delimiters not being required before the first field in the record.
		Added trailer record requirement in section 3.6.3.
		Added requirements for an email notification of file transmissions in section 3.6.4.
		Described proper treatment of negative values in section 3.7.1.
		Added "Dup" to valid values for the Record Identifying Requirement described in section 3.7.2.2.
		Added additional description in section 3.7.2.3 about record actions related to correcting nulls or key fields.
		Changed column headers in section 3.7.3 from "Codes" to "Notes" as the column contains more than code values.
		Added "Dup" to the Record ID Requirements for Record Action (ICD Seq #1), Social Security Number (ICD Seq #2), Birth Date (ICD Seq #3), Agency Subelement Code (ICD Seq #5), and Pay Period End Date (ICD Seq #25).
		Updated the notes for Record Action (ICD Seq #1) and Birth Date (ICD Seq #3).
		Renamed several pay related fields, and added note with the previous field names:
		- Salary Total Amount is now Total Salary (ICD Seq #26,27) - Locality Pay Amount is now Standard Basic Pay Supplement (ICD Seq #32,33) - Special Rate Supplement is now Special Basic Pay Supplement (ICD Seq #34,35)
		Updated definitions and made minor name changes for several pay related fields including Total Earnings – Pay Period (ICD Seq #23), Total Salary – Pay Period (ICD Seq #26), Total Salary – YTD (ICD Seq #27), Basic Pay – Pay Period (ICD Seq #28), Basic Pay – YTD (ICD Seq #29), Adjusted Basic Pay – Pay Period (ICD Seq #30), Adjusted Basic Pay – YTD (ICD Seq #30), Adjusted Basic Pay – YTD (ICD Seq #31), Standard Basic Pay Supplement – Pay Period (ICD Seq #32), Standard Basic Pay Supplement – YTD (ICD Seq #33), Special Basic Pay Supplement – Pay Period (ICD Seq #34), Special Basic Pay Supplement – YTD (ICD Seq #35), and Total Earnings – YTD (ICD Seq #36).
		Added note for Title 38 Pay Amount (ICD Seq #55).
		Corrected datatype for Absence Without Pay Credit Reduction Hours YTD (ICD Seq #191). This was incorrectly listed as NUMBER(4) in previous versions of the chapter.
		Added nine new elements to the end of the data record:
		- Pay Period Number (ICD Seq # 255). - Eight new Union Official Time fields (ICD Seq #256-263).
		Changed edit on all numeric checks to store "zero" vs. "null" if a value is not numeric.

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Chapter Release No.	Date	Payroll Revision Description
4.0	06/08/2007	Corrected file naming convention to use an underscore ("_") instead of a period (".") between the Version (V) number and Release (R) number in Section 3.6.1. Added requirement for a 'negative report' email in section 3.6.4. Changed the contents of 3.7.2 to describe the new interface requirements table layout which contains new record identifier, priority, and retirement columns. Added details about correction record usage related to RSM in Section 3.7.3. Updated the data requirements in Sections 3.8.1 based on the GHRR ICD Version 4.0 requirements approved on 6/5/2007: - Changed priority ratings to 1-4 scale. - Added "Retirement" column and flags. - Updated notes and record identifier flags for several existing fields. - Updated the existing Retention, Relocation, and Recruitment Incentive fields (ICD Seq #73-75) to include on Title 5 employees, and added three new non-Title 5 fields (ICD Seq #278-280). - Added Student Load Repayment fields (ICD Seq #281,282). - Added fields for the Retirement Systems Modernization program.
4.1	03/01/2012	Document layout changed from previous versions to match the new organization of the HR section of this guide. Added new data element to capture reservist differential amount (ICD Seq #284). Added new data element to capture retention incentives for employees likely to leave for another Federal position (ICD Seq #285). Add four new data elements to capture telework usage (ICD Seq #286-289). Changed "definition" to "description" in record specification. Modified name and descriptions of several fields to match the Guide to Data Standards. Removed retirement and CPDF columns in record specification tables.
4.2	07/31/2013	Changed priority ratings from 4 to 1 in ICD Seq. #278-280.
4.3	08/31/2019	Removed the Payroll Record Specification table from this Chapter and placed separately as a PDF file. The table can also be found with the Raw Datasets found on the Data, Analysis & Documentation webpage. To access the webpage, go to: https://www.opm.gov/data/Index.aspx?tag=EHRI Made the following changes to the Payroll Record Specification table: - Added four new data elements to capture Disabled Veteran Leave created under the Wounded Warriors Act (ICD Seq #290-294). - Added ICD Seq #295 Weather and Safety Leave - Modified the descriptions of several ICDs to match the description in the Guide to Data Standards (ICD Seq #1, 5, 45, 62, 151, 178, 271, 278-280, 284). - Corrected misspelling of the word "leave" in description for ICD Seq #151.

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Chapter Release No.	Date	Payroll Revision Description
4.4	1/22/2021	Updated footers to reflect version 4.4 release Added the following new elements: - Paid Parental Leave (Birth of Child) – Hours Used in Pay Period - Paid Parental Leave (Adoption Related Placements) – Hours Used in Pay Period - Paid Parental Leave (Foster Care Placements) – Hours Used in Pay Period

4.2 Overview of Payroll Data Feed

The goal for Payroll Data Feed is to securely acquire pay data for all Federal Civilian employees by leveraging existing data extraction processes to the extent possible.

Depending on the source of pay related data, one provider may submit payroll data for many agencies. Payroll data submissions from providers to EHRI represent actual payroll records in a given pay period. When a payroll data provider makes major system changes, it is responsible for ensuring that data accuracy and completeness are maintained. The Office of Personnel Management should be notified when any major system changes are planned. Then, the Office of Personnel Management will decide whether the payroll data provider should submit test data or continue to submit production data.

The Office of Personnel Management uses an electronic mailing list to notify agencies of EHRI reporting requirements. To join the EHRI mailing list send an email to hrlob@opm.gov.

4.3 Employee Coverage

Providers should submit data for all employees serviced during the pay period. This includes employees in pay and non-pay status. Covered groups are consistent with agency HR data submissions, which includes all Federal civilian employees of the Executive Branch excluding employees in the following agencies:

- Central Intelligence Agency
- Defense Intelligence Agency
- Federal Reserve System - Board of Governors
- National Geospatial-Intelligence Agency
- National Security Agency
- Office of the Director of National Intelligence
- Office of the Vice President
- Postal Rate Commission
- Tennessee Valley Authority
- U.S. Postal Service
- White House Office

Submissions should also exclude: (1) non-U. S. citizens in foreign countries, (2) non-appropriated fund personnel, (3) commissioned officers in the Department of Commerce, Department of Health and Human Services, Department of Homeland Security, and the Environmental Protection Agency, (4) employees of the Judicial Branch, and (5) as of March 2006, foreign service personnel in the Department of State. Branch coverage is limited to the Government Printing Office, the U.S. Tax Court, and several small commissions.

4.4 Payroll Data Submission Requirements

4.4.1 File Content

The providers are responsible for creating the payroll files. Each file must comply with the following rules:

- Each line of the file must contain one record.

- Each record will contain all of the fields listed in Payroll Record Specification, ordered by data element number, with each field separated by the vertical bar character ('|').

- Even if there is no value supplied for a field, the delimiter must still appear in the file.

- Values must be supplied for all mandatory elements.

- No delimiter is required before the first field or after the last field in the record.

4.4.2 Email Notification of File Transmission

Providers shall notify OPM of data submissions by sending an email to **ehri_files@opm.gov**. The email notification is required for a file to be processed, and must contain the name of the file and the record count of the file being transmitted. The email should indicate if the transmission is a resubmission, which is also denoted by the file name. The email should also include a "signature" consisting of the submitter's name, agency, and telephone number.   A "negative" report email should be transmitted to the above email address in the event there are no records to be reported for the period.

4.4.3 File Naming Convention

The file name will conform to the following naming convention.

> PCYYYYMMDD0AAAAN_V_R

Each portion of the file name is explained in the following table.

Name Segment	Description
PC	Constant value of "PC" indicating the Payroll Consolidated data file type.
YYYY	For file as of date, indicates century (19 to 20) and year (01 to 99)
MM	For file as of date, indicates month (01 to 12)
DD	For file as of date, indicates day (01 to 31)

Name Segment	Description
0	0 is a numeric zero, unless your submission contains only a portion of the total records. If that is the case, OPM will tell you what number to use.
AAAA	Indicates the agency code or agency/subelement code for the submitting agency.
N	Resubmission Indicator. On the first submission for each as of date, N is a numeric zero. If the data is resubmitted for the same as of date, the value of N is increased by 1.
V_R	Version (V) and Release (R) numbers for this Guide. This will allow the data warehouse load program to identify the correct file layout during transmission and loading of the file. **NOTE: Please refer to the Version and Release number in file Payroll Record Specification section of this document.**

4.4.4   Transmission Frequency

Payroll files should be transmitted on a bi-weekly basis. Files should be transmitted to EHRI no later than five (5) working days after the end of the required reporting period. If the data is not delivered by the expected date of transmission, the provider point of contact will be notified by EHRI. Providers are responsible for scheduling data transmissions to EHRI.

4.4.5   Quality Requirements

The Office of Personnel Management will accept a payroll submission if it meets the following criteria:

- The number of records submitted is reasonable in comparison with the previous quarter's submission. Overall, OPM will consider a variance within plus or minus 5 percent as reasonable.

- Errors on fields are within tolerances. EHRI edits submissions for compliance with data standards and internal consistency. Data that fail the edits are errors. Error rates are computed for each agency and for major subelements within selected agencies. Tolerances are error rates of 3%.

4.4.6   Explanation of Record Actions

There are three types of record actions in the specification: Add, Correct, and Delete. The majority of records will be sent as Add type (Record Action = "A"). This will satisfy the normal reporting requirements for each pay period. The record will include any and all pay amounts made in the pay period for each employee on the payroll. This includes the current pay (for most employees) plus any additional "back pay" amounts being paid out in the current pay period.

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Back pay dollars and hours are added to the current pay period fields, not sent as separate records. The "year to date" fields are sent as they are at the end of the pay period, including any adjusted amounts as necessary (unless the adjustment was for a period earlier than the year to date being tracked.)

For example, if an employee should have been paid $100.00 each pay period, but was underpaid by $5.00 for 10 pay periods, the current pay period would include the normal pay amounts ($100.00) plus the adjustment amount of $50.00 ($5.00 x 10 periods) for a total current payment of $150.00. The next payroll cycle record for this employee will show the corrected pay period amount only ($100.00). **There are no records that are sent to "correct" the previously transmitted data**; the previous payroll records reflect what was actually paid to the employee during the pay period.

The Correct and Delete record actions are only to be used to fix an error in the data transmission process. For example, if a record was sent in the interface and it was determined at a later point that the payment never occurred, a Delete record would be sent containing only the key fields of the record. A correction record would be sent to fix a field value that was sent in error. Only the corrected field and the key fields need to be sent in this case. To replace a field that was submitted with a null (empty) value, OR to correct one of the key fields in the file (for example, an SSN), a Delete record should be submitted for the original record and a new, complete Add record should be submitted in its place.

The Correct record actions also may be used frequently to retroactively correct data for specific pay periods.

4.5 Quality Control

The EHRI data load process loads submitted payroll data files into the EHRI data warehouse staging tables. As data is moved to the staging tables, no edits or audits are performed. The Extract, Transform and Load (ETL) process then moves the data from the staging tables to the EHRI data warehouse. During the ETL process, EHRI performs the required edits and audits and applies business rules as needed. The load process captures relevant metadata for reporting and debugging purposes.

Payroll data providers are responsible for assuring that the data submitted to EHRI is accurate and complete. For this purpose, agencies must do quality control tests of the data they provide to EHRI from their internal personnel data systems. To help agencies, an edit guide available on the OPM website describes the edits used to check the validity of individual data elements and the proper relationship of values among associated data elements. Agencies should incorporate the edits into their internal personnel data systems at a location in the system that will maximize the effectiveness of their quality control efforts. These edits constitute the minimum level of quality control. Agencies are encouraged to supplement them based on the specifics of their internal programs and operations.

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Submissions not meeting acceptance standards are returned to the agency for correction and resubmission. Agencies regularly receive summary reports of error patterns and detailed reports of specific edit failures for follow-up correction processing in later submissions.

Additionally, the Office of Personnel Management gives agencies a quality control report for each submission that shows the number and type of errors in their submissions, the number of records received and processed, and other quality control information. Agencies should correct the incorrect data and verify that the number of records recorded represents the complete submission.

4.6 Quality Control Reports

OPM makes information resulting from processing EHRI submissions available to data providers in the form of quality control reports and error files for each Payroll data submission. The EHRI data quality control reports and error files are available on the EHRI portal. These reports are particularly useful to submitters in monitoring their submission process. Deviations from previous norms should be carefully analyzed because they typically indicate that issues have arisen in the system that gathers and sends EHRI data from the agency to OPM. Quality Control Summary Reports are automatically emailed to Provider POCs at the end of each processing cycle. Error Records and Formatted Error Records Reports can be accessed / downloaded securely on the EHRI Portal. Provider POCs are given access credentials once access forms are submitted to EHRI.

Two types of quality reports are generated:

Quality Control Summary Report

- Provides information of the submission at a summary level (records processed, records rejected, error counts, edit codes and descriptions, etc.).

Error Records Reports

- Contains actual error records of the submission (PII data) in a text file.

- Pipe delimited format with error codes appended to each error record.

4.7 Edit Rules

4.7.1   Record Identifying Fields

Field Name	Edit Rule	Action taken if edit rule fails
Record Action	Check if code value is valid	Reject record

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Field Name	Edit Rule	Action taken if edit rule fails
Social Security Number	None	N/A
Birth Date	Check if valid date	Reject record
Agency/Sub-element Code	Check if code value is valid	Reject record
Pay Period End Date	Check if valid date	Reject record

4.7.2 Non-Record Identifying Fields

Data Type	Edit Rule	Action taken if edit rule fails
VARCHAR(n) – Codes Only	Check if code value is valid	Report error; If code is null, store "No Data Reported"; If code is invalid, store "Invalid Data"
NUMBER(n)	Check if value is numeric	Report error; If value is null or not a number, store zero
DECIMAL(n, m)	Check if value is numeric	Report error; If value is null or not a number, store zero
DATE	Check if valid date	Report error; If date is null, store "No Data Reported"; If date is invalid, store "Invalid Data"

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4.7.3 Relational Edits

Field Names	Edit Rule	Action taken if edit rule fails
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Pay Period End Date	If record action is "Add", the employee must not have an existing record with the same pay period end date	Reject record
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Pay Period End Date	If record action is "Correct", the employee must have an existing record with the supplied pay period end date	Reject record
Record Action, EHRI Employee ID, Social Security Number, Birth Date, Pay Period End Date	If record action is "Delete", the employee must have an existing record with the supplied pay period end date	Reject record

Additional edit rules will be added on to this section at a future date after more analysis has been completed on the Payroll data elements.

4.8 Overall Record Specification

4.8.1 Overview

The payroll file elements are described in tabular format, with the following column headers: ICD Seq #, EHRI Ref#, Data Element Name, Data Element Description, Data Concept, Datatype, Record Identifier, Priority, and Notes. The table below describes columns appearing in the record specification sections.

Column	Description	Valid Values
ICD Seq #	Sequential number to identify fields in this version of the record specification. Number assigned to a data element may change between versions.	
EHRI Ref #	Internal EHRI reference number assigned to data elements. Used to tie elements back to EHRI metadata repository.	
Data Element Name	Name of the data element.	

Column	Description	Valid Values	
Data Element Description	Description of the data element.		
Data Concept	Name of grouping for specific data elements in the record specification.		
Data Type	The data element data format and length.		
Record Identifier	Indicates how EHRI will handle incoming records during the data load process.	Y	Field must be present on the record or it will be rejected.
		Dup	Field will be used to determine if this record is a duplicate.
		<blank>	Will not reject or be used in duplicate check.
Priority	Indicates the criticality of fields being submitted to EHRI. All data elements are requested (with the exception of priority "4" fields) if they are available and applicable to the employee record. Note the priority scheme changed in version 4.0 of the GHRR to provide more clarity on what EHRI is expecting from providers.	1	Mandatory for Compliance
		2	High Priority
		3	Low Priority
		4	Priority TBD (Not required for submission at this time.)
Notes	Additional details or guidance about the data element.		

4.8.2   Data Element Format Types

This table describes data types appearing in the record specification table found in the record specification sections.

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Format	Meaning	Examples
VARCHAR(n)	A series of up to n alphanumeric and special characters, not including the vertical bar character ('|').	123-45-789 125 Main St., S.W. Y OM00
NUMBER(n)	A series of n numeric characters. Negative values can be sent in this field, and are submitted using a negative symbol ("-") immediately preceding the number being sent, with no leading or trailing spaces. For example, a negative days total is sent as -10. **NOTE: any null (empty) values passed into a number field will be translated by the interface into a "0" (zero).**	0 180 -10
DECIMAL(n, m)	A series of n numeric characters with up to m characters to the right of the decimal point. The decimal point should appear in the element value if required. A decimal point is neither required nor implied, i.e., 400 represents 400, not 4.00. Negative values can be sent in this field, and are submitted using a negative symbol ("-") immediately preceding the number being sent, with no leading or trailing spaces. For example, a negative one hundred dollar amount is sent as -100 or -100.00. **NOTE: any null (empty) values passed into a number field will be translated by the interface into a "0" (zero).**	For a format of Decimal(9,2): 0 1500 1234567.89 1234.0 0.75 -100 -5.00
DATE	A date consisting of a 4 character year, a 2 character numeric month (01-12), and a 2 character numeric day (01-31), separated by dashes.	1960-01-01 (= January 1, 1960) 2004-12-31 (= December 31, 2004)

4.9 Payroll Record Specifications

The Payroll Record Specification table has been removed from within this Chapter and placed as a separate PDF file. To access the PDF file, go to: https://www.opm.gov/policy-data-oversight/data-analysis-documentation/data-policy-guidance/hr-reporting/ghrr4-4_ch4_payroll.pdf