

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT

Electronic Official Personnel Folder (eOPF) Interface Control Document

Employee Data Feed (EDF)



Change Page

Version	Date	Revision Description
1.0	6/15/2012	This document is one of three separate documents that replaced the Interface Control Document (ICD).
2.0	12/9/2016	This document replaces the Employee Data Feed ICD issued in June 2012. Updates that may require changes by the providers include: • Added Middle Name • Added Agency Sub-Agency – code must be assigned by OPM • Added Source Identifiers • Changed description of Email • Clarified description of Status • Changed POID field length to “4” characters – code must be assigned by OPM • Updated the Field Type to Mandatory for First-Name, Address1, City, and Zip • Updated the edit rules • Clarified supported format for Date • When sending large amounts of data, providers are directed to send multiple files sized at 100 MB or less each and increment the submission indicator in the filename • Added section on Data Quality and Its Impact • Added an XML Declaration requirement • Added description of DOLLAR Amount to Field Formats • Added a statement indicating providers must send a record containing all XML tags as specified even if the tag is null. • Added test responsibilities for agency representatives. • Added a statement indicating “The implementation of the EDF files and transmission of data to eOPF must occur within 45 – 60 days after testing is completed. If it does not, the PMO will not accept any transmissions until a review is completed.” • Updated the Description for Status • Removed references to EHRI and replaced with DWP • Clarified submission indicator format
2.1	1/31/2017	• Updated Field Type to Optional for Middle-Name • Updated the example for the File Name Format • Updated the definitions for the Status values
5.0.4	10/31/2017	• Updated eOPF PMO Contact List • Updated description of Agency Code • Updated description for sending empty files

Version	Date	Revision Description
5.1	8/21/2019	- Updated description and example for ORG-CODE. - Prioritized the order of the Name Segments in the File Name Format. - Added Data Provider Identifier for IBM. - Added data format for percentages. - Added NOTE that email addresses will be updated beginning with eOPF v5.2. - Updated description for ACTIVITY-CODE to indicate special characters cannot be used. - Updated description for AGENCY-SUBAGENCY to indicate Non-Title 5 and non-Federal organizations cannot use the Agency codes assigned to Title 5 organizations and vice versa. Each organization must have a unique code assigned by OPM based on the type of organization and group of individuals serviced by the organization. - Updated description for PO-ID to indicate Non-Title 5 and non-Federal organizations cannot use the POI codes assigned to Title 5 organizations and vice versa. Each organization must have a unique code assigned by OPM based on the type of organization and group of individuals serviced by the organization. - Clarified the need for agencies and data providers to notify DWP eOPF when software changes are made to data or the files submitted to OPM. - Clarified the need for agencies and data providers to test with OPM when software changes are made that affect data or the files submitted to OPM. - Clarified responsibilities for the Data Provider and agencies. - Added responsibilities for eOPF Operations and eOPF Production Support teams. - Added responsibilities for the EOD Providers.
5.2	11/05/2019	- Changed field size for Last Name, First Name and Middle Name to comply with OPM Data Standards and EHRI submissions. - Updated the Description for Last Name, First Name and Middle Name to comply with OPM guidance. - Changed field size for ORG-CODE to comply with the OPM Data Standards and EHRI submissions.
5.2	4/16/2020	Removed default value definition for ACTIVITY-CODE
5.2	12/12/2020	- Removed references to DWP and replaced with eOPF - Removed references to the eOPF Production Support team - Updated eOPF Points of Contact - Removed references to virtual folders other than Permanent, Temporary and Performance - Removed error message -118, All transaction types, eOPF API Environmental Error, Unable to add to Admin CPO ID, Unable to read or insert into SUPER_USER.
5.3	12/6/2021	Corrected file naming definition / example.
5.4	09/24/2025	- Updated references to Connect:Direct to SFTP - Updated POID max data length from 4 to 10
5.5	11/04/2025	- Updated transfer protocol language from Connect Direct to SFTP - Updated Figure 1 workflow diagram - Updated POID character length and data format XML standard - Updated ZIP code XML standard to mandatory
5.6	06/02/2026	- Updated Employee-ID to no longer request use of SSN in the event that the agency does not use a unique identifier for Employee-ID. - Updated file size limit to 350 MB each and increment the submission indicator in the filename

Version	Date	Revision Description
5.7	09/15/2026	- Updated ICD to better describe the Error Reconciliation Process - Updated Error Codes for EDF Service to match what is written to the ".errors" file in the SFTP Data Provider Account /EDFErrors directory - Added error conditions observed in production ".errors" files (Oct 2025 – Sep 2026) that were not documented: "Personnel Office Identifier is invalid", "SSN:<value> is not valid", "Zip Code is invalid", "Last Name is invalid", "Agency/Subagency is missing", "Source Identifiers is invalid", "There are multiple root elements", "Cannot access a disposed object". - Moved "User has more than one Active employment with the provided Agency" from Environmental Errors to Employee Record Errors and added a resolution. - Aligned Table 5 (Edit Rules) log-entry text with the messages actually written to the ".errors" file; corrected HttpClient timeout value (180 seconds) and 409 Conflict description.
5.8	09/16/2026	- Aligned the specification with the EDF service code (internal team review): name fields limited to 35 characters; ADDRESS1, CITY, STATE, ZIP and EMAIL are Optional; PO-ID must be 4–10 characters; AGENCY-SUBAGENCY must be exactly 4 characters; BIRTH-DATE cannot be a future date; STATUS values other than the uppercase literal 'ACTIVE' are treated as INACTIVE (case-sensitive); SUPERUSER/SUPERVISOR accept only an uppercase 'Y'. - Documented that ZIP format, Country, Org Code, Activity Code and Source Identifiers content (there is no Source Identifier lookup table), and the PO-ID / Agency-Subagency combination are not validated by the service. - Rebuilt Table 5 (Edit Rules) and the Employee Record Errors section of Table 6 (Error Codes) so every message matches the text written to the ".errors" file; added previously undocumented messages (Agency Code, Record Number, Birth Date future date, Phone, Country, Login, Status Date is missing, no data to validate). Removed the LOGIN max-length row and the unused DECIMAL, DOLLAR AMOUNT and PERCENTAGE formats. - Appendix A: corrected Round 3 test scenarios (field lengths, Login ID and Middle Name null scenarios removed, SSN format, Org Code special characters, Country), removed the repeating first row and added a header row to the scenario table, reformatted the Test Rounds table and replaced its duplicated Round 3 list with a reference to A.4.3.1, and aligned the test narrative with the .errors reconciliation process, LOGIN (NULL) and STATUS values. - Corrected table numbering references (Tables 1–7), Figure 1 reference on the 5.5 change entry, 5.1 encoding and tag-naming rules, 5.6.1 <EMPLOYEE> element description, 6.2 empty-file example, cover effective date, page-i footer, and typographical errors. - Replaced Figure 1 with the updated EDF Service Process diagram (eOPF System swimlane, reconciliation flow). - Round 1 testing now requires all mandatory fields to be populated (with Data Provider enforcement logic) and demonstration of the ACTIVE (onboarding) and INACTIVE (separation) STATUS events. Standardized INACTIVE and Superuser terminology; noted that the Superuser flag is displayed as "Elevated Permissions" in the eOPF UI. - Removed references to legacy eOPF EDF configuration screens and service configuration settings (Login ID generation, Email Address Setting options); the current EDF service has no such options.

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1.0 Overview

The electronic Official Personnel Folder (eOPF) solution supports a variety of methods to capture employee data and documents. This document addresses the Employee Data Feed (EDF) service which supports the creation and maintenance of employee eOPF accounts and information. This includes the establishment of the Official Personnel Folder (OPF) within the eOPF solution. The information is used to uniquely identify an individual and contains organizational, contact, and personal data. The data provided via the employee feed are used by eOPF users to search, manage security access, and contact an individual in an eOPF instance.

1.1 Purpose

This document focuses on the eOPF EDF service and the specifications a Data Provider must meet to deliver personnel data into the Office of Personnel Management's (OPM) eOPF solution. It addresses the entire delivery, testing, and reconciliation process. It defines the roles for the EOPF System, Agency and Data Provider to ensure accurate and complete ingestion of data into the eOPF system.

1.2 Scope

The intent of this document is to delineate transaction flow, file naming conventions, file formats, error handling, testing procedures and reconciliation processes needed to exchange data between the Data Provider's system and the OPM eOPF solution. This common framework—used by both the Data Provider and the eOPF System—ensures data are ingested and reconciled into the OPM eOPF System.

1.3 eOPF Points of Contact

Please submit a helpdesk request at eopfhelpdesk@eopf.opm.gov

Please use the eOPF Operations (eopfOperations@opm.gov) distribution list for general communications related to data feeds

2.0 A Repository of Information

2.1 Electronic Official Personnel Folder (eOPF)

The eOPF is a comprehensive repository for employee and Human Resources (HR) data for the entire life cycle of a federal employee. On March 9, 2009, OPM's Division for Strategic Human Resources Policy (SHRP) formally approved the eOPF solution to house the Official Personnel Folder for federal employees. The eOPF solution contains the official record for an employee.

The purpose of the eOPF is to provide a consolidated image and data view to digitally document the employment actions and history of individuals employed by the federal government. The OPF maintained in eOPF is a digitally imaged version of an employee's paper personnel folder with documents housed on the virtual Permanent (right) and Temporary (left) sides of the eOPF. When the documents in the OPF are digitally imaged, it is critical to preserve the integrity of the signed record just as if it was the OPF filled with paper documents. The OPM Guide to Personnel Recordkeeping (GPR) provides guidance on the forms filed in an employee's OPF on the Permanent and Temporary sides. This guidance and other federal guidance govern the filing of documents in the eOPF system.

2.2 Data Provider Interface with eOPF

Agencies use either a provider that cross-services multiple agencies to provide electronic data to the eOPF system or they provide the data from their own agency system. The process for submitting data to eOPF requires the establishment of an interface between eOPF and the providers to routinely update employee records.

The process for transmitting data from the Data Provider to the EOPF System and staging the data feed files to be processed by the eOPF EDF service is shown in Figure 1.

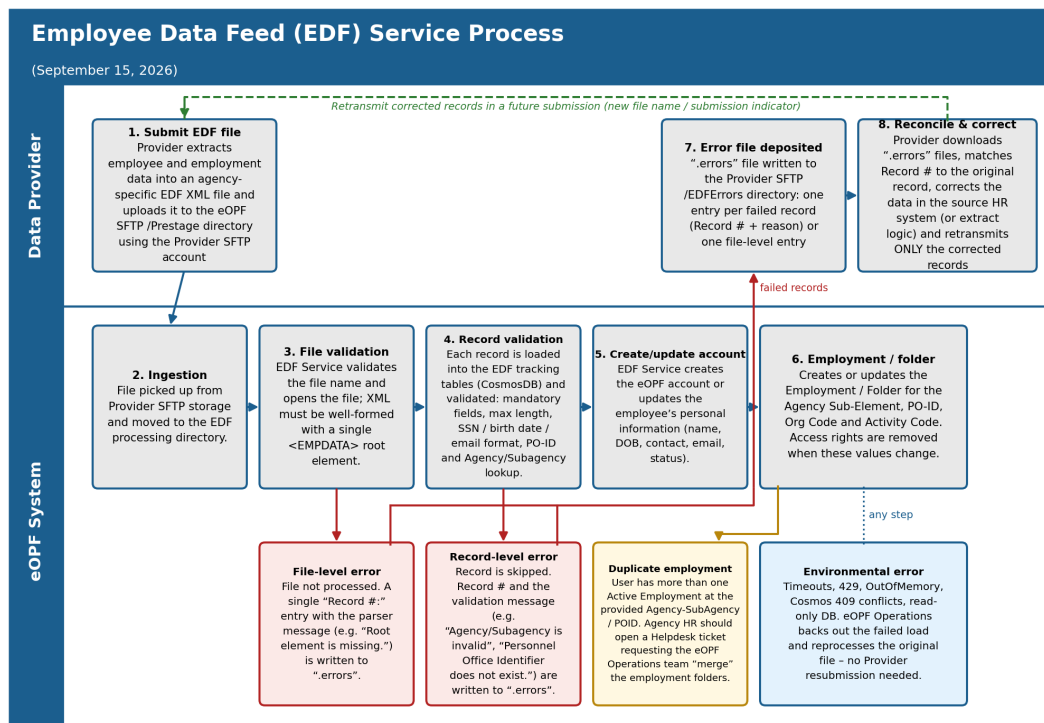


Figure 1. EDF Ingestion Process

The agency Data Provider sends an initial EDF to create all federal employee accounts. This EDF is sent from the Data Provider to the EOPF System. The process begins with receipt of a Data Provider-generated transaction file, i.e., EDF file, to create the OPF in an eOPF instance.

The EDF contains information to trigger the creation of a new employee record in an eOPF instance or update information in an existing federal employee record. After the account is established for a federal employee, the EDF updates:

- Employee organizational information
- Employee contact information (if elected by an agency)
- Employee status when separating from agency

When a Data Provider makes system changes that affect the EDF file and its contents for an agency, the Data Provider and agency must work with the eOPF Operations team to test the changes to ensure the EDF service processes the new data and the file loads.

When an EDF file fails to process by the service, it remains in a staging location for review. When an error occurs, individual records that fail to load are captured, and the error file is written to the Provider's SFTP directory for their review.

3.0 Roles and Responsibilities

The eOPF PMO works with numerous organizations, both government and commercial, to maintain the eOPF application. Throughout this document, the following terms are used to identify the roles of the multiple organizations participating in the transmission of information to eOPF:

- **eOPF PMO** - Provides program management for the eOPF System.
- **eOPF Operations (Ops) team** – Provides technical oversight for the eOPF System including the interfaces with key HR data systems to routinely accept, process and post personnel data received through electronic data feeds.
- **Agency/Subagency** – Obtains approvals for the submission of forms/data; provides requirements to providers; tests, reviews and approves the results of the test file submissions; assures compliance by the provider and agency personnel with the OPM guidance; and focuses on the day-to-day administration of the eOPF functions and the delivery of service and support to their employees. The agency is responsible for the entry and accuracy of data contained on the documents or forms filed in the OPF and must work with the Data Provider to assure eOPF PMO is notified of all software changes that affect data and files submitted to OPM.
- **Data Provider** – Transmits agency information in Extensible Markup Language (XML) format, scanned PDF images, and form data to the eOPF System. The provider is responsible for:
 - o The accuracy and completeness of the transmittal file
 - o Ensuring the XML is correctly formatted with NO additional white space in the data element tags
 - o Reconciling data
 - o Working with the serviced agencies to assure the root causes of data errors are corrected
 - o Coordinating with the serviced agencies notifications to eOPF PMO when making software or hardware changes that affect the data and files submitted to OPM

Different types of Data Providers include:

- o **Conversion Vendor/Scan Provider** – A scan provider is either a contractor or a federal government agency who works with federal agencies at the direction of the eOPF PMO to manage the process of converting agency documents from paper to electronic format and incorporating the data and images into eOPF. It includes scanning and indexing paper OPFs from back file and day forward conversion to create ZIP files with PDFs.
- o **Personnel/Payroll Provider** – This type of Data Provider supplies shared services in the area of payroll/personnel. These organizations transmit the data entered and created in their systems to eOPF. Examples of Personnel/Payroll Providers include the National Finance Center (NFC), Interior Business Center (IBC), the General Services Administration (GSA) and the Defense Manpower Data Center (DMDC).
- o **Agency HR Provider** – Some agencies use a shared service payroll provider and process their own HR data. These organizations transmit the HR data entered and created in their systems to eOPF. One example is the Department of Health and Human Services maintains a personnel system and sends data to eOPF and to a payroll provider.

- o **Employee Self Service Provider** – Provides self-service benefit elections in an automated system. Examples are Employee Express and the Employee Benefits Information System (EBIS).
- o **Entry on Duty (EOD) Provider** – Provides EOD data for a specific agency or for multiple agencies. Example is USA Staffing.
- o **Other Providers** – Provides documents for a specific agency or for multiple agencies. An example is one that provides Performance documents.

4.0 Getting Started

As indicated previously, this document focuses on the transmission of data elements necessary for the establishment and maintenance of an employee's OPF within the eOPF system.

4.1 Transmission Protocol

Data Providers use SFTP as the mechanism for transmitting data files to the eOPF System. All Data Providers are required to submit data in the format specified, to the eOPF hosting site using SFTP.

SFTP Accounts are configured for each provider in our TEST, UAT and PROD environments.

The TEST and UAT environments are expected to be used for testing new file submissions (for new agencies) or changes to the interfaces (ICD updates, new extract logic, etc.). Only dummy data is allowed in these non-production environments.

All authentication related to SFTP accounts is based on shared SSH Keys. The process is as follows:

1. Data Provider generates a **SSH Key Pair** on their SFTP server from each of their environments **(Please do not use the same SSH Key Pair for PROD vs. Non-PROD environments)**
2. Data Provider sends the Public Key portion of the **SSH Key Pair** to eOPF Operations (eopfOperations@opm.gov) to configure the SFTP Account and provides the public IP Address of their SFTP server to enable in the environment IP Allow List for SFTP Connections.
3. eOPF Operations team will configure the SFTP Account and provide details to the Data Provider on connection end-points for each environment requested.
4. Data Providers may request "dummy" SSNs to be created / staged in TEST and UAT for their specific test needs by submitting a Helpdesk request (eopfhelpdesk@eopf.opm.gov) or emailing the eOPF Operations Team (eopfOperations@opm.gov)

4.2 SFTP Account Directories

All SFTP Data Provider Accounts are configured with the following directories.

- **/Prestage** -- Directory for uploading Data Provider files
- **/EDFErrors** – Directory containing ".errors" file for EDF records that failed to load from an EDF file submission
- **/FDFErrors** -- Directory containing ".errors" file for FDF records that failed to load from a FDF file submission
- **/Confirmed** -- Directory for Index Data Feed (IDF) confirmation "success" receipts
- **/Errors** – Directory for Index Data Feed (IDF) error receipts

4.3 Required Documentation

Before production data is transmitted, the Agency, the Data Provider, and eOPF PMO completes required documentation. After discussing processing schedules and other criteria with the providers, the eOPF PMO instructs the provider to submit all or a combination of the following documents to ensure all parties comply with established conditions:

- **Memorandum of Understanding (MOU)** – A business-level agreement or contract between eOPF PMO and the agency. The MOU specifies the quality of data and requirements for adherence to eOPF standards and guidelines.

- **Interconnection Security Agreement (ISA)** – An agreement between two parties who plan to exchange data. The ISA specifies the technical and security requirements of the interconnection, and the MOU defines the responsibilities of the participating organizations.
- **Authority to Operate (ATO)** – A letter or memorandum from the agency's senior official indicating the successful completion of the Assessment and Authorization process, including a plan to continue to mitigate problems and sustain operations.
- **Test Plan** - The Agency and Data Provider must provide an eOPF XML development test plan that meets the approval of eOPF PMO. The plan must include the processing schedule and steps for reconciliation and accuracy analysis with feedback for all the Data Provider's test data submissions.

4.4 Testing and Transmission Schedules

The Agency and Data Provider coordinate the testing and transmission of data to eOPF with the eOPF Operations team. Prior to the initial transmission, they must provide the schedule for submitting:

- Test data to establish the initial file transmissions to eOPF
- Production data
- Test data for changes made to the files including the addition of forms or agencies

Each schedule must include the type of data transmitted, agency, start date, and frequency when the agency and its Data Provider plan to transmit data feeds.

The Agency and Data Provider must notify eOPF Operations team and coordinate the testing and transmission of data to eOPF when software changes are made that affect the data or files submitted to OPM.

4.5 Data Quality and its Impact

Data is read and stored in eOPF as delivered, including any white space at the beginning or ending of a value. The provider is responsible for providing valid data and eliminating any initial or trailing unwanted characters/white space. Any mandatory/optional date field when populated must contain a real date. The use of 00/00/00 is not a valid date and results in a rejected/error record.

The agency is responsible for the accuracy of data and the Data Provider is responsible for accuracy and completeness of the transmittal file. Both the agency and the Data Provider must work together to ensure compliance with federal regulations and requirements. The Data Provider should validate the contents of the file before transmitting to eOPF. The agency should validate the contents of the folders after the file is processed.

Poor data quality can result in the failure to process a record at best and at worse gets processed, but results in the need to back out the transactions from the eOPF repository.

5.0 File Description and Format

The EDF file contains the employee attributes associated with the employee and employment records that must be created or updated in eOPF for a specific Agency. .

5.1 XML – Supported File Format

XML is the standard for the EDF service files. The eOPF EDF file is supported as a single large XML file containing multiple transactions. The XML file must follow the defined layouts.

Each file must comply with the following rules:

- The data feed file must be a text file encoded ISO-8859-1 (an 8-bit superset of ASCII), matching the ENCODING declared in the XML declaration.
- The data feed file must be formatted according to the eOPF XML specification provided in this document.
- The data feed file validates successfully against the eOPF XML specification.
- The data feed file type delivered must match the file type setup of the agency's Employee Feed service. At this time, XML is the only acceptable option.
- When sending large amounts of data, providers are directed to send multiple files sized at less than 350 MB each and increment the submission indicator in the filename.
- The data feed file must be a well-formed XML document as defined in the W3C XML Specification 1.0 (Fifth Edition). The XML 1.0 Specification defines an XML document as a text file, which is well-formed; i.e., it satisfies a list of syntax rules provided in the specification. Some key points are:
 - o Use character set encoded "ENCODING=ISO-8859-1"
 - o XML predefines the following five entity references for special characters that would otherwise be interpreted as part of markup language:

Table 1. XML Entity Reference

Character Name	Entity Reference	Character Reference
Amperсанд	&	&
Left angle bracket	<	<
Right angle bracket	>	>
Straight quotation mark	"	"
Apostrophe	'	'

- o The Character References stated above must be substituted with the Entity References accordingly
- o The element tags are UPPERCASE with hyphens (for example <LAST-NAME>, <PO-ID>)
- o The beginning and end tags must match exactly and the XML must be correctly formatted with NO additional white space in the data element tags
- o There is a single "root" element that contains all the other elements
- o The file must be an American Standard Code for Information Interchange (ASCII) formatted text file

5.2 XML Declaration Instruction Rules

Providers must include XML declaration instructions in each XML file submission. The XML declaration is a processing instruction that identifies the document as being XML. All XML documents must begin with an XML declaration.

- Declaration must be situated at the first position of the first line in the XML document
- Declaration must contain the version number attribute
- XML declaration must be placed in the order shown below
- The XML declaration must be in lower case (except for the encoding declarations)

eOPF Declaration Requirement:

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes" ?>
```

5.3 File Name Format

The file name conforms to the following naming convention. This file name specification is used to identify the purpose of the file and the agency it represents in the transmission, staging, and processing of the employee feed data file.

Convention:

FILETYPE PROVIDER NAME FORMAT YYYY MM DD AGENCY NN.SUFFIX

Example: MIN00EMPLX20190822NN0000.XML

Description: IBC (IN00) as a provider submitted first XML EDF file on AUGUST 22, 2019, containing data for the NASA (NN00).

Each portion of the file name is explained in the following table. Each transmission must include each portion of the file name.

Table 2. File Naming Convention for Employee Data Files

Name Segment	Convention Abbr.	Description	Example or Note
File Type	FILE	Indicates when a file contains more than one record.	For the EDF, file type is a constant value of 'M'.
Data Provider Identifier	PROVIDER	The OPM assigned code for the submitting provider. Contact eOPF PMO when a value is missing from the list.	National Finance Center = AG90 Interior Business Center = IN00 U. S. Department of Energy = DN00 Bonneville Power Administration = DN03 General Services Administration = GS00 U. S. Department of Health and Human Services = HE00 U. S. Courts = JL02 U. S. Department of Veterans Affairs= VA00 Defense Civilian Personnel Advisory Service = DD75 Smithsonian Institution Trust = SI00 IBM = 99IB

Name Segment	Convention Abbr.	Description	Example or Note
Name of Data File	TYPE	The employee data file type.	For the EDF, name of data file is a constant value of EMPL .
File Format	FORMAT	The format of the file.	X for XML files
Century	YYYY	For file “as of” date, indicates century (19 to 20) and year (01 to 99)	2016 = Year
Month	MM	For file “as of” date, indicates month (01 to 12)	02 = Month of February
Day	DD	For file “as of” date, indicates day (01 to 31)	22 = Day 22
Agency Code	AAAA	The agency code for the servicing agency that the data is being submitted for.	Agency/Subagency codes must match the Guide to Personnel Data Standards.
Submission Indicator	NN	The first submission for each “as of” date is a numeric zero value When multiple files are submitted for the same “as of” date, the value of N increases by 1	00, 01, 02
.SUFFIX	.SUFFIX	Use the file suffix .XML for XML format files.	.XML, .xml .XML is preferred.

5.4 Field or Data Format

The following table lists the various data formats, descriptions and examples for fields transmitted to eOPF.

Table 3. Field Format

Data Format	Description	Example or Note
CHARACTER	One or more alphanumeric and special characters that represents a field value.	000456789 125 Main St., S.W. Y OM00
NUMBER	One or more numeric characters that represents a number.	0 180
DATE	Values that contain a precise calendar date. Slashes are required. Format is MM/DD/YYYY.	02/22/2016 Any field with a Date format must contain a valid date. 99/99/9999 and 00/00/0000 are not valid dates.

5.5 Truncating and White Space

The Data Provider must truncate any data that exceeds the maximum field size, as specified in this document, before transmitting the data to the EOPF System for ingestion into an eOPF instance. The provider must truncate any beginning or trailing white space on a value contained in an XML element. When a value is processed by eOPF, it reads the value as provided including the white space in the XML element.

5.6 Record Structure for the File

Providers must send a record containing all XML tags as specified in this ICD. The order of the XML elements/tags does not matter; however, all elements/tags must be included with either a value or null.

The following table presents the structure for the EDF files. The transactions are separated by the record tag. The XML record tags are defined below.

The field type indicates if data in a field is mandatory or optional. A mandatory field indicates data must be sent to eOPF. An optional field indicates data may be submitted. An optional field may become mandatory when another related field is populated. For example, when the agency elects to automatically generate Login ID for new employees within eOPF, the Login information is required.

Table 4. XML Record Structure for Employee Data

XML Tag Name	Data Length	Field Type	Description	Data Format	Example or Note
EMPDATA		M	Identifier for the EDF Batch. Mandatory tag that indicates the start and end of an EDF consists of 2 mandatory attributes.	N/A	Complete EMP DATA parent tag: <EMPDATA AGENCY="ZZ00" RECORD-COUNT="000002">
	4	M	Identifier for EDF Batch. The mandatory attribute AGENCY="XXXX" is assigned by OPM and used to identify an agency.	Character	AGENCY="ZZ00"
	6	M	Identifier for EDF Batch. The mandatory attribute RECORD-COUNT="XXXXXX" identifies the total number of records contained in the transaction file.	Numeric	000002
EMPLOYEE	6	M	Identifier for EDF. Record consisting of a mandatory tag that indicates the start and end of an Employee Record in a Data Feed. The attribute RECORD="XXXXXX" is used to uniquely identify a record in the Data Feed.	Character	000001
LAST-NAME	35	M	Last Name of employee including any Suffix. Do not use abbreviations when entering "no last name" on a personnel document. Name on all forms submitted via FDF and IDF should match the name on the EDF and the employee's PIV or CAC card. Follow guidance provided in the GPPA.	Character	No Last Name Smith Jr
FIRST-NAME	35	M	First Name of employee. Do not use abbreviations when entering "no first name" on a personnel document. Name on all forms submitted via FDF and IDF should match the name on the EDF and the employee's PIV or CAC card. Follow guidance provided in the GPPA.	Character	No First Name
MIDDLE-NAME	35	O	Middle Name of employee. Follow OPM guidance.	Character	Joe

XML Tag Name	Data Length	Field Type	Description	Data Format	Example or Note
LOGIN	20	O	Login Identifier. No longer used – submit NULL value A value longer than 20 characters is rejected.	Character	<LOGIN></LOGIN>
SSN	11	M	Social Security Number. Format is 000-00-0000.	Character	000-00-0001
EMPLOYEE-ID	20	O	Employee Id. A unique user number that either eOPF or the agency assigns to an employee to identify employee records. Leave this field blank if your agency does not use a unique identifier for Employee-ID. DO NOT send SSN values as the Employee Id.	Character	EI123456
PO-ID	10	M	Personnel Office Identifier. A numeric code assigned to each agency by OPM. An agency has at least one PO ID but may have multiple PO IDs assigned to it. NOTE: Non-Title 5 and non-Federal organizations cannot use the POI codes assigned to Title 5 organizations and vice versa. Use only valid Personnel Office IDs assigned by the OPM Data Standards teams (data.opm.gov) The value must be 4 to 10 characters long.	Character	4002
AGENCY-SUBAGENCY	4	M	Agency/Sub-agency. An alpha and/or numeric code assigned by OPM. The agency and, where applicable, the administrative subdivision (i.e., sub-element) in which a person is employed. The first and second positions of the code indicate the agency. The third and fourth positions indicate the administrative subdivision. If no sub-element or sub-agency is assigned to an agency the third and fourth positions are zeros (xx00). For a listing of assigned codes and explanations, see The Guide to Data Standards. Use only valid Agency / SubAgency Codes assigned by the OPM Data Standards teams (data.opm.gov) NOTE: Non-Title 5 and non-Federal organizations cannot use the Agency codes assigned to Title 5 organizations and vice versa. Each organization must have a unique code. The value must be exactly 4 characters long.	Character	DJ06

XML Tag Name	Data Length	Field Type	Description	Data Format	Example or Note
ORG-CODE	22	M	Organizational Code. The lowest administrative subdivision of an agency to which an employee is assigned. Name and location shown in "To" position on the last SF 50 processed for the employee. The first four characters of each code are the OPM assigned AGENCY/SUBELEMENT code identified in the OPM Data Standards.	Character	DJ063401000000 The value is stored as sent; only the maximum length (22) is validated. NOTE: The ORG CODE in the EDF must match the ORG CODE in the FDF and the ORG CODE in EHRI submissions.
ACTIVITY-CODE	15	M	Activity Code. A code assigned by an agency to the organizational component in which the employee works.	Character	0 The value is stored as sent; only the maximum length (15) is validated.
SUPERUSER	1	M	Superuser Indicator. Identifies the employee as an eOPF Superuser. Value must be an uppercase 'Y' for YES. Any other value (including 'y', 'YES' or 'N') is treated as NO; the check is case-sensitive. The Superuser flag is displayed as "Elevated Permissions" in the eOPF application UI.	Character	N
SUPERVISOR	1	M	Supervisor Indicator. Identifies the employee as an eOPF Supervisor User. Value must be an uppercase 'Y' for YES. Any other value (including 'y', 'YES' or 'N') is treated as NO; the check is case-sensitive.	Character	N
ADDRESS1	50	O	Address Line 1. Employee's mailing address. PO Box or first line of street address. Use USPS abbreviations. Optional. Only the maximum length is validated.	Character	123 Main St
ADDRESS2	50	O	Address Line 2. Employee's mailing address. Second line of street address. Use USPS abbreviations.	Character	Apt 1
CITY	50	O	City. Employee's mailing address. Use USPS abbreviations. Optional. Only the maximum length is validated.	Character	Hometown
STATE	50	O	State. Employee's mailing address. Use USPS abbreviations. Optional. Only the maximum length is validated.	Character	TX
ZIP	10	O	ZIP Code. Employee's mailing address. Optional. Only the maximum length (10) is validated; the ZIP code format is not validated.	Character	99999-9999

XML Tag Name	Data Length	Field Type	Description	Data Format	Example or Note
COUNTRY	50	O	Country. Required for an international address and is the full Country Name in UPPERCASE. The value is stored as sent; eOPF does not validate the Country against a code list. Only the maximum length is validated. When the Country is not needed, the field is NULL.	Character	EGYPT
PHONE	50	O	Home or work phone number. Employee contact number. Agency determines number to use. Only the maximum length is validated.	Character	(555) 555-5555
STATUS	25	M	Status of the employee within an organization. Valid values are: - ACTIVE – all employees with a current appointment – Title 5 employees with NOA 1XX or 5XX and non-Title 5 employees with equivalent appointments - RETIRED – Title 5 employees with NOAs 300, 301, 302, 303, 304, 307, 308 and non-Title 5 employees with equivalent separation codes - TERMINATED – Title 5 employees with 3XX NOAs not designated as Retired and non-Title 5 employees with equivalent separation codes - INACTIVE – Designation used by providers who do not distinguish separated employees as those who are Retired or Terminated Any value other than the uppercase literal 'ACTIVE' is treated as INACTIVE by the eOPF EDF service (the comparison is case-sensitive); the employee is considered Active in eOPF only when the value is 'ACTIVE'. Values must be sent in UPPERCASE; the service compares the value case-sensitively.	Character	ACTIVE The employee status of 'Active' is one employee attribute considered when determining if an eOPF user account is included in an agency's eOPF License count. If the employee status is 'Active', the employee is included in the count unless other filters that are also used in determining inclusion in the count result in excluding the user account. For example, an OPM Investigator account is 'Active' but excluded. If the employee status on an eOPF user account is 'Retired', 'Terminated' or 'INACTIVE' the employee is not included in the agency's eOPF License count.

XML Tag Name	Data Length	Field Type	Description	Data Format	Example or Note
STATUS-DATE	10	O	The Status Date. Required for any non-active Status value. For the "ACTIVE" status the Status-Date value is always NULL. Format is MM/DD/YYYY . A Status Date is required when the Status is not 'ACTIVE'.	Date	02/22/2016 Currently, this value is used as the initial effective date on the employee folder when created. If no date is provided and employee is active, the default is current date. 00/00/0000 and 99/99/9999 are not valid dates.
BIRTH-DATE	10	M	Birth Date of the employee. Format is MM/DD/YYYY . The date must not be in the future.	Date	01/27/1948 00/00/0000 and 99/99/9999 are not valid dates.
EMAIL	255	O	Work email address of eOPF User. The official government assigned email address of the employee. Optional. When provided, the value must be a valid email address format.	Character	john.doe@agency.gov The email must be a valid email format.
SOURCE-IDENTIFIERS	14	M	Source System Identifiers (SSI). Codes are assigned by the eOPF PMO. Consists of the following three identifiers: • Data Source Identifier (DSI) - The DSI refers to the Agency that collected the information. The DSI is the Agency/Sub-agency code that is assigned by OPM to the agency that is collecting the information. • Data System Source Identifier (DSSI) -- The DSSI refers to the name of the system that collected the information. Valid values are assigned by the PMO. • File Source Identifier (FSI) -- The FSI refers to the agency/provider/vendor that submits the file to OPM or other federal organization. Valid values are assigned by the PMO. • Only presence and maximum length (14) are validated; the value is stored as sent and is not checked against a lookup table.	Character	DJ06AG90AG90

5.6.1 SAMPLE XML FOR EMPLOYEE DATA FILE

The following is an example XML EDF file layout, containing two actions. Each action begins and ends with the <EMPLOYEE> element; RECORD is an attribute of that element (for example <EMPLOYEE RECORD="000001">).

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<EMPDATA AGENCY="OM00" RECORD-COUNT="000002">
  <EMPLOYEE RECORD="000001">
    <LAST-NAME>Smith</LAST-NAME>
    <FIRST-NAME>John</FIRST-NAME>
    <MIDDLE-NAME>Joe</MIDDLE-NAME>
    <LOGIN></LOGIN>
    <SSN>000-00-0001</SSN>
    <EMPLOYEE-ID>John J. Smith</EMPLOYEE-ID>
    <PO-ID>4002</PO-ID>
    <AGENCY-SUBAGENCY>AG01</AGENCY-SUBAGENCY>
    <ORG-CODE>DJ0612000000000000</ORG-CODE>
    <ACTIVITY-CODE>12345</ACTIVITY-CODE>
    <SUPERUSER>N</SUPERUSER>
    <SUPERVISOR>N</SUPERVISOR>
    <ADDRESS1>123 Majestic Ln</ADDRESS1>
    <ADDRESS2>Apt 123</ADDRESS2>
    <CITY>Hometown</CITY>
    <STATE>VA</STATE>
    <ZIP>99999-9999</ZIP>
    <COUNTRY/>
    <PHONE>(555) 555-5555</PHONE>
    <STATUS>ACTIVE</STATUS>
    <STATUS-DATE/>
    <BIRTH-DATE>02/22/1950</BIRTH-DATE>
    <EMAIL>john.smith@agency.gov</EMAIL>
    <SOURCE-IDENTIFIERS>DJ06AG90AG90</SOURCE-IDENTIFIERS>
  </EMPLOYEE>
  <EMPLOYEE RECORD="000002">
    <LAST-NAME>Smith</LAST-NAME>
    <FIRST-NAME>Jane</FIRST-NAME>
    <MIDDLE-NAME>Joe</MIDDLE-NAME>
    <LOGIN></LOGIN>
    <SSN>000-00-0002</SSN>
    <EMPLOYEE-ID>Jane J. Smith</EMPLOYEE-ID>
    <PO-ID>4002</PO-ID>
    <AGENCY-SUBAGENCY>AG01</AGENCY-SUBAGENCY>
    <ORG-CODE>DJ0612000000000000</ORG-CODE>
    <ACTIVITY-CODE>1</ACTIVITY-CODE>
    <SUPERUSER>N</SUPERUSER>
    <SUPERVISOR>N</SUPERVISOR>
    <ADDRESS1>123 Majestic LN</ADDRESS1>
    <ADDRESS2>Apt 123</ADDRESS2>
    <CITY>Hometown</CITY>
    <STATE>VA</STATE>
    <ZIP>99999-9999</ZIP>
    <COUNTRY/>
    <PHONE>(555) 555-5555</PHONE>
    <STATUS>INACTIVE</STATUS>
    <STATUS-DATE>01/01/2015</STATUS-DATE>
    <BIRTH-DATE>10/22/1953</BIRTH-DATE>
    <EMAIL>jane.smith@agency.gov</EMAIL>
    <SOURCE-IDENTIFIERS>DJ06AG90AG90</SOURCE-IDENTIFIERS>
  </EMPLOYEE>
</EMPDATA>
```

5.6.2 EDIT RULES EMPLOYEE DATA

Table 5. Edit Rules for Employee Data

The following validations are performed on employee data transmitted to eOPF.

Error messages are shown exactly as written by the EDF service to the “.errors” file. Field content (for example ZIP code format, Country, Org Code, Activity Code and Source Identifiers values) is not validated beyond the maximum length; values are stored as sent.

Field Name	Edit Rule	Action Taken If Edit Rule Fails
EMPDATA AGENCY attribute	Does value exist?	Error Log entry = 'Agency Code is missing' and record is skipped.
	Is the value a valid 4-character agency code?	Error Log entry = 'Agency Code is invalid' and record is skipped.
EMPLOYEE RECORD attribute	Does value exist?	Error Log entry = 'Record Number is missing' and record is skipped.
	Is the value numeric?	Error Log entry = 'Record Number is invalid' and record is skipped.
Employee record	Does the record contain any data elements?	Error Log entry = 'no data to validate' and record is skipped.
Last Name	Does value exist?	Error Log entry = 'Last Name is missing' and record is skipped.
	Is the value 35 characters or less?	Error Log entry = 'Last Name is invalid' and record is skipped.
First Name	Does value exist?	Error Log entry = 'First Name is missing' and record is skipped.
	Is the value 35 characters or less?	Error Log entry = 'First Name is invalid' and record is skipped.
Middle Name	Is the value 35 characters or less? (optional field)	Error Log entry = 'Middle Name is invalid' and record is skipped.
Social Security Number	Does value exist?	Error Log entry = 'SSN is missing' and record is skipped.
	Is SSN formatted as ###-##-####?	Error Log entry = 'SSN is invalid' and record is skipped.
	Is the value a real SSN (not a placeholder such as “TBD”)?	Error Log entry = 'SSN:<value> is not valid' and record is skipped.
Employee ID	Is the value 20 characters or less? (optional field)	Error Log entry = 'Employee Identifier is invalid' and record is skipped.
Login	Is the value NULL or 20 characters or less?	Error Log entry = 'Login is invalid' and record is skipped.
PO-ID	Does value exist and is it 4 to 10 characters long?	Error Log entry = 'Personnel Office Identifier is invalid' and record is skipped.
	Does the value exist in the eOPF PO-ID lookup table?	Error Log entry = 'Personnel Office Identifier does not exist.' and record is skipped.
Agency Subagency	Does value exist?	Error Log entry = 'Agency/Subagency is missing' and record is skipped.
	Is the value exactly 4 characters long?	Error Log entry = 'Agency/Subagency is invalid' and record is skipped.
	Does the value exist in the eOPF Agency/Subagency lookup table?	Error Log entry = 'Agency/Subagency Code does not exist.' and record is skipped.
Org Code	Does value exist?	Error Log entry = 'Organizational Code is missing' and record is skipped.
	Is the value 22 characters or less? (content is not validated)	Error Log entry = 'Organizational Code is invalid' and record is skipped.

Field Name	Edit Rule	Action Taken If Edit Rule Fails
Activity Code	Does value exist?	Error Log entry = 'Activity Code is missing' and record is skipped.
	Is the value 15 characters or less? (content is not validated)	Error Log entry = 'Activity Code is invalid' and record is skipped.
Superuser Indicator	Does value exist?	Error Log entry = 'Superuser is missing' and record is skipped.
	Is the value an uppercase 'Y'?	Y = Superuser. Any other value is treated as NO (case-sensitive); no error is logged.
Supervisor Indicator	Does value exist?	Error Log entry = 'Supervisor is missing' and record is skipped.
	Is the value an uppercase 'Y'?	Y = Supervisor. Any other value is treated as NO (case-sensitive); no error is logged.
Address1	Is the value 50 characters or less? (optional field)	Error Log entry = 'Address Line 1 is invalid' and record is skipped.
Address2	Is the value 50 characters or less? (optional field)	Error Log entry = 'Address Line 2 is invalid' and record is skipped.
City	Is the value 50 characters or less? (optional field)	Error Log entry = 'City is invalid' and record is skipped.
State	Is the value 50 characters or less? (optional field)	Error Log entry = 'State is invalid' and record is skipped.
ZIP	Is the value 10 characters or less? (optional field; format is not validated)	Error Log entry = 'Zip Code is invalid' and record is skipped.
Country	Is the value 50 characters or less? (optional field; not validated against a country list)	Error Log entry = 'Country is invalid' and record is skipped.
Phone	Is the value 50 characters or less? (optional field)	Error Log entry = 'Phone is invalid' and record is skipped.
Status	Does value exist?	Error Log entry = 'Status is missing' and record is skipped.
	Is the value the uppercase literal 'ACTIVE'? (case-sensitive)	ACTIVE = employee is Active in eOPF. Any other value (including 'Active') is treated as INACTIVE and the Employment is end-dated; no error is logged.
Status Date	Is a value present when the Status is not 'ACTIVE'?	Error Log entry = 'Status Date is missing' and record is skipped.
	Is the value a valid date in MM/DD/YYYY format?	Error Log entry = 'Status Date:<value> is an invalid date' and record is skipped.
Birth Date	Does value exist?	Error Log entry = 'Birth Date is missing' and record is skipped.
	Is the value a valid date in MM/DD/YYYY format?	Error Log entry = 'Birth Date:<value> is an invalid date' and record is skipped.
	Is the date on or before today?	Error Log entry = 'Birth Date:<value> is a future date' and record is skipped.
Email	Is the value NULL or a properly formatted email address? (optional field)	Error Log entry = 'Email:<value> is an invalid email address' and record is skipped.
Source Identifiers	Does value exist?	Error Log entry = 'Source Identifiers is missing' and record is skipped.
	Is the value 14 characters or less? (content is not validated; there is no Source Identifier lookup table)	Error Log entry = 'Source Identifiers is invalid' and record is skipped.

Field Name	Edit Rule	Action Taken If Edit Rule Fails
Employment	Does the employee have a single Active employment for the Agency-SubAgency / PO-ID?	Error Log entry = 'User has more than one Active employment with the provided Agency' and record is skipped.

6.0 Reconciliation

6.1 Data Accuracy, Completeness, and Correctness

The integrity of data transmitted into eOPF, including the accuracy, completeness, and correctness of the data, is the responsibility of the Data Provider, not the EOPF System and eOPF solution, as defined below:

- Accuracy = Data matches Source System Values
- Completeness = Data contains all characters found in the source system that can be accepted in eOPF
- Correctness = Data values are appropriate for the record being sent

When any error results in a file partially processing, the data provider must be able to resubmit only the portion of the file that needs to be processed.

6.2 Data Provider Transmissions

Data providers send EDF files based on an agreed upon frequency. When there is no data to report, the provider may elect to either not send a file, or send a file indicating that there is no data to be sent. This would look as follows:

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="yes" ?>
<EMPDATA RECORD-COUNT="000000" AGENCY="AgencyCode">
</EMPDATA>
```

This indicates the file intentionally contains no employee records.

6.3 Reconciliation

The Data Provider must track and maintain a record of all EDF files sent to the EOPF System and reconcile the records that failed to load due to data errors. The retention of all data feed files transmitted to eOPF is critical to the reconciliation process when needed. The record count value submitted in the feed is intended to validate that the number of records submitted matches the number of records processed.

The eOPF System generates a “.errors” file in the Data Provider’s SFTP /EDFErrors directory to support record level reconciliation for records that failed to load due to data validation errors. The “.errors” file contains the record number from the original EDF submission file that failed to load and the reason for the failure. Below is an example of the “.errors” file generated for a record that did not provide a value for the mandatory “PO-ID” Field

```
Record #001926: {
  "success": false,
  "statusCode": 400,
  "messages": [
    "Personnel Office Identifier is invalid"
  ]
}
```

The record was submitted as...

```
<EMPLOYEE RECORD="001926">
.....
<EMPLOYEE-ID>49835</EMPLOYEE-ID>
<PO-ID/>
<AGENCY-SUBAGENCY>DN00</AGENCY-SUBAGENCY>
</EMPLOYEE>
```

Each Data Provider must decide how records that failed to load are handled for reconciliation and correction.

Suggested process for working with the associated “.errors” files for your submissions is as follows:

EDF

1. Connect to SFTP Account
 - a. Change directory to **/EDFErrors**
 - b. **DOWNLOAD** all “.errors” files from directory (resulting from the previous submissions)
 - i. Delete “.errors” files from directory after successful download to clean out the directory
 - c. Change directory to **/Prestage**
 - d. **UPLOAD** “.XML” EDF submission files for the day
 - e. Close Connection

Process would be similar for the Form Data Feed Files

FDF

1. Connect to SFTP Account
 - a. Change directory to **/FDFErrors**
 - b. **DOWNLOAD** all “.errors” files from directory (resulting from the previous submissions)
 - i. Delete “.errors” files from directory after successful download to clean out the directory
 - c. Change directory to **/Prestage**
 - d. **UPLOAD** “.XML” submission files for the day
 - e. Close Connection

Once the “.errors” files are downloaded by the Data Provider, a secondary process would need to then match the Record # provided in the “.errors” to the original record submitted and provide the Agency or the appropriate team the ability to correct the missing data for that record in order to be resubmitted to eOPF in a future transmission for the agency. The specific reconciliation process adopted by each Data Provider will vary and be dependent on how data is corrected in the source HR System and flagged for retransmission to eOPF.

6.3.1 STEPS FOR HANDLING ERROR RECORDS

The eOPF EDF service loads the employee file into the agency's process tables. Any errors encountered are stored in the EmployeeLoadDetails table for a given agency. The eOPF Operations team verifies daily that employee feed files process and have not failed due to an environmental error within the processing environment. If environment errors occur during processing, the eOPF team will take the necessary steps to reprocess those records without requiring resubmission from the Data Provider. Examples of System or Environment errors are documented in Table 6 (Environmental Errors) . Those errors can be ignored by the Provider in reconciliation.

In addition, Agency HR should review/spot check and verify documents loaded to folders after the EDF files process to locate issues as quickly as possible. The earlier an issue is located the easier it is to correct. The Agency should be notifying the eOPF HelpDesk when it is determined there is missing eOPF Accounts or missing eOPF Documents.

When an error occurs, it is researched and reported to the appropriate party which may be Data Provider, Agency and/or EOPF System for correction and/or resubmission.

When a Data Provider and Agency are doing reconciliation of error records -- Only corrected records should be retransmitted to eOPF in future transmissions and not the full content of the file that had the original failed record. This eliminates the chances of duplicate documents being loaded to eOPF folders.

6.3.2 TRANSMISSION/ENVIRONMENT ERRORS

Events that occur outside the control of the EDF service may cause an error. Typical environmental errors occur when the agency eOPF instance is unavailable, connectivity is lost during transmission, or the data feed files to be loaded are inaccessible. For example, an EDF file may fail delivery because of an issue with SFTP. This is considered an environmental error. When these conditions occur, the eOPF Operations team contacts the Data Provider point of contact (as needed) to remediate the situation. The Data Provider and eOPF Operations team determine the appropriate resolution, which may include retransmission with increased monitoring to ensure successful transmission, staging and ingestion by the agency's EDF service.

6.4 Error Codes for EDF Service

When an EDF file is processed by the eOPF EDF service, the data feed file goes through a series of validations. There are two general validation levels: non-conforming XML and field level validation. A non-conforming XML data feed file level error(s) is severe and results in no processing of records from the XML-based EDF file into the eOPF instance. When the file level validation is successful, each record contained in the data feed file is processed. Records that pass the field level validations are ingested into the eOPF instance. Records that do not pass field level validation are stored in the EDF process record table and/or written to a log file.

The following table, Table 6., lists the error codes generated by the eOPF EDF service, shows the data feed file format that produces the error (e.g., environment) and provides a possible resolution to the error.

Table 6. Error Codes for the EDF Service

*** Denotes error logged in Employee Service error process table with no Error Code value**

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
		ENVIRONMENTAL ERRORS		

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
*	All transaction types	System Capacity errors Environmental errors or other non-data related errors.	Typical errors would appear as : • “An operation on a socket could not be performed because the system lacked sufficient buffer space or because a queue was full” • Exception of type 'System.OutOfMemoryException' was thrown. • Response status code does not indicate success: Conflict (409); Reason: Entity with the specified id already exists in the system. (The record was already loaded by a prior submission.) • TooManyRequests (429) • Status: 429 • Request was not processed because too many requests were received. Reason: VaultOperationLimitReached • The request was canceled due to the configured HttpClient Timeout of 180 seconds elapsing • Caller is not authorized to perform action on resource • Could not find a part of the path. • Operation cannot be performed. Database in Read-Only mode. • Cannot access a disposed object. Object name: 'IServiceProvider'. • Record #nnnnnn: followed by no error message text (empty error body). Treat as a system error and open a Helpdesk ticket if the record is missing in eOPF.	The eOPF Operations team routinely reviews data loads and monitors for System Capacity errors. If these type of errors are identified the eOPF Operations Team will take action to • Backout failed data load • Reprocess original file If Provider or Agency reviewing .errors files determine that a system error during a load has not been addressed by the eOPF Operations team they are encouraged to open a Helpdesk Ticket for further investigation.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
		XML STRUCTURE ERRORS		
*	All transaction types	XML Structure Errors Resulting from: Missing XML Declaration Statement Missing XML <EMPDATA> root node More than one <EMPDATA> root node in the file Missing XML <EMPLOYEE xxxx> tag or </EMPLOYEE> closing tag XML Tag without corresponding closing tag File truncated / incomplete transfer (unexpected end of file)	Typical errors would appear as : • "Data at the root level is invalid. Line 1, position 1."} • "Root element is missing." • "There are multiple root elements. Line n, position n." • "Unexpected end of file has occurred. The following elements are not closed: EMPLOYEE, EMPDATA. Line n, position n." • "The 'EMPLOYEE' start tag on line n position n does not match the end tag of 'EMPDATA'. Line n, position n." • "'/' is an unexpected token. The expected token is '>'"	The eOPF Operations team routinely reviews data loads and monitors for errors that prevent the file from processing. If these type of errors are identified the eOPF Operations Team will take action to • Fix the error • Backout failed data load • Reprocess original file with a fix If the eOPF Operations Team is unable to fix the error or if the error is persistent in Data Provider file submissions, The eOPF Operations team will request the Data Provider correct the issue on their extracts and do additional validation testing in TEST and UAT environments before submitting additional files to Production.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
		EMPLOYEE RECORD ERRORS		
*	All transaction types	AGENCY attribute of the <EMPDATA> root element. Mandatory. Must be the 4-character agency code assigned by OPM.	Agency Code is missing Agency Code is invalid	The Data Provider corrects the file header and retransmits the file. No records in the file are processed until the agency code is valid.
*	All transaction types	RECORD attribute of the <EMPLOYEE> element. Mandatory. Numeric, uniquely identifies the record within the file.	Record Number is missing Record Number is invalid no data to validate (the <EMPLOYEE> element contains no data elements)	The Data Provider corrects the extract logic and retransmits the record.
*	All transaction types	PO-ID – Personnel Office Identifier. Agency HR servicing office. Mandatory field. Must be 4 to 10 characters and match a PO-ID assigned in the OPM Data Standards (data.opm.gov).	Personnel Office Identifier is invalid (blank, or not 4–10 characters) Personnel Office Identifier does not exist.	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	AGENCY-SUBAGENCY – Employing Agency/Subagency of the employee. Mandatory field. Must be exactly 4 characters and match a code assigned in the OPM Data Standards.	Agency/Subagency is missing Agency/Subagency is invalid (not exactly 4 characters) Agency/Subagency Code does not exist.	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	BIRTH-DATE – Birth Date of Employee. Mandatory field. Must be a valid date in MM/DD/YYYY format and must not be in the future.	Birth Date is missing Birth Date:<value> is an invalid date Birth Date:<value> is a future date	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	SSN – Social Security Number of the employee record. Mandatory field. Format ###-##-#### (hyphens required).	SSN is missing SSN is invalid SSN:<value> is not valid (placeholder value such as "TBD")	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
*	All transaction types	SSN – Social Security Number of the employee record.	SSN/DOB mismatch	The combination of SSN / DOB in the EDF record conflicts with the existing SSN/DOB of an eOPF account. Submit a Helpdesk ticket to research the legacy eOPF account and determine whether the previous account needs to be corrected.
*	All transaction types	EMPLOYMENT – Active employment of the employee at the AGENCY-SUBAGENCY / PO-ID combination. An eOPF account may have only one Active employment for a given Agency-SubAgency / PO-ID.	User has more than one Active employment with the provided Agency	The eOPF account has more than one Active Employment at the provided Agency-SubAgency / POID, so the record cannot be matched to a single employment. Agency HR should open a Helpdesk ticket (eopfhelpdesk@eopf.opm.gov) requesting the eOPF Operations team “merge” the employment folders. The Data Provider retransmits the record after the duplicate is resolved.
*	All transaction types	LAST-NAME – Last name of the employee. Mandatory field. Cannot exceed 35 characters.	Last Name is missing Last Name is invalid (exceeds 35 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	FIRST-NAME – First name of the employee. Mandatory field. Cannot exceed 35 characters.	First Name is missing First Name is invalid (exceeds 35 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	MIDDLE-NAME – Middle name of the employee. Optional field. Cannot exceed 35 characters.	Middle Name is invalid (exceeds 35 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	EMAIL – Email address of the employee. Optional field. When provided, the value must be a valid email address format.	Email:<value> is an invalid email address	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
*	All transaction types	SUPERVISOR – Identifies the employee as an eOPF Supervisor User. Mandatory field. Uppercase 'Y' = YES; any other value is treated as NO (case-sensitive). Send 'N' when not used by the agency.	Supervisor is missing	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	SUPERUSER – Identifies the employee as an eOPF Superuser. Mandatory field. Uppercase 'Y' = YES; any other value is treated as NO (case-sensitive). Send 'N' when not used by the agency.	Superuser is missing	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	ACTIVITY-CODE – Agency code of the activity to which the employee is assigned. Mandatory field. Cannot exceed 15 characters. The content is not validated.	Activity Code is missing Activity Code is invalid (exceeds 15 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	ORG-CODE – Agency organizational code of the component to which the employee is assigned. Mandatory field. Cannot exceed 22 characters. The content is not validated.	Organizational Code is missing Organizational Code is invalid (exceeds 22 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	LOGIN – eOPF User Account Login Id value. No longer used – submit a NULL value. A value longer than 20 characters is rejected.	Login is invalid	The Data Provider removes the value (submit <LOGIN></LOGIN>) and retransmits the record.
*	All transaction types	EMPLOYEE-ID – An agency provided employee identifier. Optional field. Cannot exceed 20 characters.	Employee Identifier is invalid (exceeds 20 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
*	All transaction types	ADDRESS1 – Address line 1 of the employee's address. Optional field. Cannot exceed 50 characters.	Address Line 1 is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	ADDRESS2 – Address line 2 of the employee's address. Optional field. Cannot exceed 50 characters.	Address Line 2 is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	CITY – City of the employee's address. Optional field. Cannot exceed 50 characters.	City is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	STATE – State code of the employee's address. Optional field. Cannot exceed 50 characters.	State is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	ZIP – ZIP Code of the employee's address. Optional field. Cannot exceed 10 characters. The ZIP code format is not validated.	Zip Code is invalid (exceeds 10 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	COUNTRY – Country associated with the employee's foreign address. Optional field. Cannot exceed 50 characters. The value is not validated against a country list.	Country is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	PHONE – Employee contact number. Optional field. Cannot exceed 50 characters.	Phone is invalid (exceeds 50 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.

Error Code	Transaction Type	Description	eOPF Error Condition (as it appears in the code)	Resolution
*	All transaction types	STATUS – Status of the Employment at the AGENCY-SUBAGENCY / PO-ID combination. Mandatory field. The uppercase literal 'ACTIVE' = active employment; any other value (case-sensitive) is treated as INACTIVE.	Status is missing	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	STATUS-DATE – The date of the status of the Employment at the AGENCY-SUBAGENCY / PO-ID combination. Required when STATUS is not 'ACTIVE'. Must be a valid date in MM/DD/YYYY format.	Status Date is missing Status Date:<value> is an invalid date	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.
*	All transaction types	SOURCE-IDENTIFIERS – Identifies Data Source/Provider of the employee. Mandatory field. Cannot exceed 14 characters. The content is not validated against a lookup table.	Source Identifiers is missing Source Identifiers is invalid (exceeds 14 characters)	When data is incorrect or missing in the provider system, the agency corrects the data in the source HR system. When the value is dropped or malformed by the extract, the Data Provider corrects the extract logic. The Data Provider retransmits only the corrected records.

7.0 Test Procedures

This section describes the eOPF EDF service functional test procedures and their use. The test procedures provide detailed instruction for the execution of test cases. The test cases are created to test Data Provider employee files prior to any production ingestion of data. These tests are completed within a test environment prior to the Data Provider's transmission being processed in a production environment. The testing process validates the connectivity between Data Provider and EOPF System, educates responsible parties of the activities involved for a successful employee feed, and verifies all steps of the ingestion process work smoothly.

After an agency provider establishes a file which is tested and in production, the provider cannot deviate from the tested format. When a provider changes the file or the contents of the file for an agency, the provider must work with the eOPF Operations team to test the changes to ensure the service processes the new/updated feed and the file loads.

Appendix A of this document provides a variety of test scenarios that must be completed to ensure the Data Provider is producing EDF files that load into eOPF and prove the provider can resolve error conditions.

7.1 Objective and Goals

The objective of testing is to ensure the successful processing of a Data Provider's employee file by the eOPF EDF service and to ensure the Data Provider can reconcile the employee files being sent. The Data Provider must comply with the eOPF PMO's specifications for the eOPF EDF service employee files.

These are the goals for the test process:

- Communications between the agency, Data Provider and EOPF System are working
- The TEST/UAT environment (agency eOPF instance and Data Provider SFTP account) is ready
- Agency has established processes for validating data after the EDF files process
- Data Provider can generate XML file formats
- Data Provider understands errors can occur and must be resolved with the assistance of the serviced agencies
- Data Provider understands the required formatting for data feeds
- Data Provider can support reconciliation of employee files
- Data Provider sends complete files and they comply with the ICD guidance so that data is not missing or truncated erroneously
- Agency validation and approval of test results

7.2 Scope

The agency and Data Provider develop a test plan for review and approval by the eOPF PMO for all applicable employee feed files that need to comply with the specifications in this document.

Deliverables include:

- Agency and Data Provider's eOPF development test plan

- Agency and Data Provider's test data submissions
- Agency test results summary that includes test scenarios and test results
- Test environment with valid test accounts

7.3 Roles and Responsibilities

The roles and responsibilities are detailed here.

Table 7. Test Procedure Roles and Responsibilities

Role	Responsibilities
eOPF PMO / eOPF Operations Team	• Review and approve Data Provider's test plan • Create Data Provider SFTP Accounts and support in testing activities. • Provide troubleshooting to resolve issues • Provide management oversight of testing process • Establish the test date(s) with the Data Provider and EOPF System • Ensure appropriate agency personnel (e.g., HR specialists) have sufficient training and access to testing facility to participate in validation steps of the testing procedure • Provide Test Environment – the agency's TEST/UAT eOPF instance and the Data Provider's SFTP account are ready. • Assist with the testing criteria • Coordinate receiving the test data with the Data Provider • Provide feedback and analyze results during test runs
Agency	• Submit approved test plan to eOPF PMO • Assure security and reliability of the Data Provider's electronic approval process is equivalent to or greater than a wet signature • Assure Data Provider is only submitting forms under his/her purview: e.g., an EOD provider can only submit EOD forms; payroll/personnel provider can only submit documents in the database of record, only employee self-service systems transmit/load employee created records, etc. • Validate agency specific requirements or custom specifications • Validate the eOPF accounts are updated accurately - Does the data in eOPF match the data in the file transmitted by the Data Provider? Does the data match the OPM guidance? • Approve test results
Data Provider	• Validate SFTP connectivity to TEST and UAT environments • Only submit data under his/her purview. For instance, an EOD provider can only submit EOD forms; a payroll/personnel provider can only submit documents in the database of record, etc. • Review every file for accuracy and completeness of the transmittal file • Assure files delivered to SFTP /Prestage directory • Assure delivery of a data feed file and content that matches the specifications found in the ICDs • Reconcile ".errors" files to assure the data loaded into an agency's eOPF instance matches the sent data • Demonstrate ability to correct a corrupt data feed file • Demonstrate ability to retrieve the confirmation and error receipts, analyze the data and take appropriate action to resolve any errors or issues for each submitted file • Deliver complete builds of test data feed files that meet test criteria • Document test results and obtain agency approval of results

Appendix A. Testing

A.1 Test Design

The Agency and the Data Provider work with eOPF PMO and / or eOPF Operations to define the testing required and execute testing of data feed file transmissions to the EOPF System. The test data feed file(s) are validated against the eOPF EDF service in the EOPF System's TEST and UAT environments. Some of the feed files submissions should contain errors that are used to validate the Data Providers ability to handle error reconciliation conditions. This testing is an opportunity for the Agency, Data Provider, EOPF System, and eOPF PMO to become familiar with the EDF service processes.

A.2 Test Plan

The Agency works with the Data Provider to develop a test plan and submits the test plan to the eOPF PMO or eOPF Operations Team for review. Data feed testing is critical to ensure that all parties involved have a common understanding of the requirements, processing, and error reconciliation for failed records. The test plan must include the following:

- Overview
 - o Agency and Data Provider Information
 - o Scope of Testing
 - o Proposed Schedule for Test Transmissions to eOPF
 - o Type of Data
- Test Items
 - o Test Rounds
 - o What To Test
 - o What Not To Test
- Test Strategy/Approach
 - o Types of Testing
 - o Test Environment Pass/Fail Criteria
 - o Any special tests based on custom agency requirements
- Validation Criteria and Process
 - o Access Requirements to TEST and UAT environment
 - o HR Admin Users / Accounts Required
- Reconciliation Process
 - Retrieval of /EDFErrors ".errors" files
 - Error Reviews
 - Error Correction Strategy
 - Corrected Record Resubmission

A.3 Test Data

Test data submitted during this effort consists of EDF files in correct file formats. All testing must be done with "dummy" SSNs.

Prerequisite:

- All tests either create or update test employees in the eOPF TEST and UAT environments

- Test data must be agreed upon by all parties involved in the testing
- Some data feed files contain errors and others contain no errors and update the employee data
- Test files must be created and submitted using the information in this guidance which includes following the XML format defined in this document
- Agencies must have a means to validate the data in the test files matches the data in the test database after the files process

A.4 Test Rounds

The following table describes recommended test rounds for EDF.

Round #	Test Description	Scenarios
1	Demonstrates Data Provider can construct a valid employee data file in XML format	Create, process and ingest file with properly structured XML and all Mandatory values
2	Demonstrates Data Provider can update the employee's status and can send modifications to existing employee accounts	1. Send record with a change in the address, personnel office identifier and organizational code 2. Send record with a change in the status, street address, last name 3. Send record with a change in the email address
3	Demonstrates Data Provider is able to correct previously sent invalid data and reconcile records that failed from .errors files provided.	Send records that fail the edit rules in Table 5 – one employee record per edit rule. The complete list of error submissions and expected results is in the Round 3 scenario table (A.4.3.1).
4	Test Agency Custom Specifications	Agency-specific scenarios agreed in the test plan (Round 4).

A.4.1 ROUND 1

A.4.1.1 Scenario

- The test data provider creates one EDF file containing at least four employee records
- Every record must include values for ALL mandatory (M) fields listed in Table 4. The Data Provider must also build logic into its extract to enforce these required values before transmission, so that records missing mandatory data are corrected in the source system rather than rejected by the eOPF System.
- The Data Provider must demonstrate both employment events that trigger an EDF record: an employee onboarding with the Agency is sent with STATUS = ACTIVE, and an employee leaving the Agency is sent with STATUS = INACTIVE together with a valid STATUS-DATE. Both events must generate EDF records that are sent to the eOPF System.
- The data provider transmits the employee file
- The EDF service ingests the four records into the eOPF test instance
- The agency validates the four employee accounts and folders
- If any step fails, the problem is reviewed, solved and data is rolled back for another attempt
- The employee file is resent until complete ingestion is successful and the employee accounts are viewable by the agency

A.4.1.2 Data

This initial test round is conducted using error-free data.

A.4.1.3 Expected Results

- The employee file uses the correct file naming convention and conforming file structure.
- The file contains values that conform to the XML Record Structure in Table 4. The LOGIN element is no longer used and must be submitted as a NULL value (<LOGIN></LOGIN>).
- SFTP software connection works between the data provider and the EOPF System.
- The EOPF System can route the file to the agency's EDF service for processing.
- The employee accounts and folders are established and can be viewed in the agency's test environment by the agency representative.
- The agency can confirm data in the file/established eOPF matches the data in the provider's database.
- All mandatory fields are populated in every record. The ACTIVE record creates the employee account and employment; the INACTIVE record end-dates the employment as of the STATUS-DATE provided.

A.4.2 ROUND 2

A.4.2.1 Scenario

- The test data provider creates EDF files using the provided test accounts with changes to the fields listed in Table 4.
- The data provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- The agency validates the employee accounts and folders.
- The test data provider creates various EDF files using the provided test accounts with changes to employee attributes that update existing eOPF accounts. Files should include a change in:
 - o Employee status -- include at least one employee with an "INACTIVE" status and another employee with a "RETIRED" status; both must have a valid STATUS-DATE (required for any status other than ACTIVE)
 - o Superuser flag for an existing employee
 - o Supervisor flag for an existing employee
- The data provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- The agency validates the employee accounts and folders.
- The test data provider creates an EDF file using the provided test accounts. The file contains email address changes: at least one record with a new EMAIL value and at least one record with a NULL EMAIL value.
- The data provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- The Agency validates the employee accounts and folders.
- If any step fails, the problem is reviewed, solved and only the failed records are resent.
- The employee file is resent until complete ingestion is successful and the changes are viewable.

A.4.2.2 Data

This test round is conducted using error free data except for the testing of email address changes. The test accounts are supplied by the eOPF Operations team and must exist in the eOPF test instance.

A.4.2.3 Expected Results

- The employee file uses the correct file naming convention and conforming file structure.
- The file contains values that conform to the XML Record Structure in Table 4. The LOGIN element is no longer used and must be submitted as a NULL value (<LOGIN></LOGIN>).
- The files are properly staged (uploaded to the SFTP /Prestage directory) and ingested by the eOPF EDF service into the eOPF test instance.
- The agency can confirm:
 - o The EDF service successfully ingests all records into the eOPF test instance.
 - o The Employee Accounts for the RETIRED and INACTIVE employees are set to INACTIVE and their employments are end-dated with the STATUS-DATE provided.
 - o The Superuser flag is changed.
 - o The Supervisor flag is changed.
 - o Email addresses are updated for records that supply an EMAIL value; a NULL EMAIL value leaves the existing eOPF email address unchanged.

A.4.3 ROUND 3

A.4.3.1 Scenario

- The test data provider creates EDF files containing test data that fails the edit rules in Table 5 – one employee record per edit rule.

Error submissions include:

Error submission (record sent)	Expected result / error written to “.errors”
Send record with a valid country code in lower case.	Country is not validated against a code list; the value is stored as sent (maximum 50 characters). No error is expected.
Send record with a country code value not in the table.	Country is not validated against a code list; the value is stored as sent. No error is expected.
Send record with a null value in the Birth Date field.	Birth Date is a mandatory field. Error: 'Birth Date is missing'
Send record with a null value in the Supervisor field.	Supervisor is a mandatory field. Error: 'Supervisor is missing'
Send record with a null value in the Superuser field.	Superuser is a mandatory field. Error: 'Superuser is missing'
Send record with a null value in the Activity Code field.	Mandatory field. Error: 'Activity Code is missing'
Send record with a value that exceeds 15 characters in the Activity Code field.	Cannot exceed 15 characters. Mandatory field. Error: 'Activity Code is invalid'
Send record with a null value in the Organizational Code field.	Cannot be null. Mandatory field. Error: 'Organizational Code is missing'
Send record with a value that exceeds 22 characters in the Organizational Code field.	Cannot exceed 22 characters. Mandatory field. Error: 'Organizational Code is invalid'

Error submission (record sent)	Expected result / error written to “.errors”
Send record with a special character value in the Organizational Code field.	Escaped special characters (see Table 1) are accepted and the value is stored as sent; the record loads. No error is expected. Mandatory field.
Send record with a null value in the PO ID field.	Cannot be null. Mandatory field Error: 'Personnel Office Identifier is invalid'
Send record with a value that exceeds 10 characters in the PO ID field.	Must be 4 to 10 characters. Mandatory field. Error: 'Personnel Office Identifier is invalid'
Send record with a value that exceeds 20 characters in the Login Id field.	LOGIN is no longer used and should be submitted as a NULL value. A value longer than 20 characters is rejected with 'Login is invalid'.
Send record with a value that exceeds 20 characters in the Employee ID field.	Cannot exceed 20 characters Error: 'Employee Identifier is invalid'
Send record with a null value in the SSN field.	Mandatory field. Format is ###-##-#### (hyphens required). Error: 'SSN is missing'
Send record with a null value in the Last Name field.	Cannot be null. Error: 'Last Name is missing'
Send record with a null value in the First Name field.	Cannot be null. Error: 'First Name is missing'
Send record with a value that exceeds 35 characters in the Last Name field.	Cannot exceed 35 characters. Error: 'Last Name is invalid'
Send record with a value that exceeds 35 characters in the First Name field.	Cannot exceed 35 characters. Error: 'First Name is invalid'
Send record with a value that exceeds 35 characters in the Middle Name field.	Optional field. Cannot exceed 35 characters. Error: 'Middle Name is invalid'
Send record with a value that exceeds 4 characters in the Agency SubAgency field.	Cannot exceed 4 characters. Error: 'Agency/Subagency is invalid'
Send record with a value that exceeds 14 characters in the Source Identifiers field.	Cannot exceed 14 characters. Error: 'Source Identifiers is invalid'
Send record with a null value in the Agency-SubAgency field.	Cannot be null. Mandatory field Error: 'Agency/Subagency is missing'
Send record with a null value in the Source-Identifiers field.	Cannot be null. Mandatory field Error: 'Source Identifiers is missing'

- The Data Provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- The rejected records are written to the “.errors” file in the Data Provider's SFTP /EDFErrors directory (see Section 6.3); the Data Provider downloads the file and the eOPF Operations team assists with interpretation as needed.
- The Data Provider and agency review the errors.
- The Data Provider creates a new employee data feed file containing only the rejected records that were corrected.
- The Data Provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- This process is repeated until all edit rules are tested, complete ingestion is successful and the employee accounts are viewable by the agency.

A.4.3.2 Data

This initial test round is conducted using data containing errors. This round must be coordinated with the eOPF Operations team so the errors written to the “.errors” files can be reviewed with the data provider and agency for correction and resubmission.

A.4.3.3 Expected Results

- The employee file uses the correct file naming convention and conforming file structure.
- The file contains values that conform to the XML Record Structure in Table 4. The LOGIN element is no longer used and must be submitted as a NULL value (<LOGIN></LOGIN>).
- Each rejected record that appears in the “.errors” file with the message listed in Table 5 / Table 6, is reconciled and the Agency / Data Provider corrects the erroneous data and resubmits the corrected record.
- The agency validates the data is corrected in the agency test environment and is reflected in eOPF test environment after resubmission.

A.4.4 ROUND 4

A.4.4.1 Scenario

- The test data provider creates EDF files containing data that meets the agency specific requirements.
- The Data Provider transmits the employee file.
- The EDF service ingests the records into the eOPF test instance.
- The agency validates the employee accounts and folders.
- If any step fails, the problem is reviewed, solved and data is rolled back for another attempt.
- The employee file is resent until complete ingestion is successful.

A.4.4.2 Data

This initial test round is conducted using error-free data.

A.4.4.3 Expected Results

- The employee file uses the correct file naming convention and conforming file structure.
- The file contains values that conform to the XML Record Structure in Table 4. The LOGIN element is no longer used and must be submitted as a NULL value (<LOGIN></LOGIN>).
- The EOPF System can route the file to the agency’s EDF service for processing.
- The employee accounts and folders are established, updated and can be viewed in the agency’s test environment by the agency representative.

A.5 Test Completion

The completion date for testing and approving the Data Provider’s test submissions is determined by the eOPF PMO. The PMO has final determination on the success and completion of the testing.

Appendix B. Acronym List

Acronym	Definition
API	Application Programming Interface
ASCII	American Standard Code for Information Interchange
ATO	Authority to Operate
BAL	Benefits Administration Letter
C&A	Certification and Accreditation
CWISR	Center for Workforce Information and Systems Requirements
DCPDS	Defense Consolidated Personnel Data System replaced by DMDC
DHS	Department of Homeland Security
DMDC	Defense Manpower Data Center
DOB	Date of Birth
DocGUID	Document's Globally Unique Identifier
DOE	Department of Energy
EDF	Employee Data Feed
EEOC	Equal Employment Opportunity Commission
EHRI	Enterprise Human Resources Integration
EOD	Entrance On Duty
eOPF	Electronic Official Personnel Folder
FEHB	Federal Employee Health Benefits
FIPS	Federal Information Processing Standards
FISD	Federal Investigative Services Division
FISMA	Federal Information Security Management Act
FMS	Financial Management Services
GDS	Guide to Personnel Data Standards
GHRR	Guide to Human Resources Reporting
GPEA	Government Paperwork Elimination Act
GPPA	Guide to Processing Personnel Actions
GPR	Guide to Personnel Recordkeeping
GSA	General Services Administration
GUID	Globally Unique Identifier
HR	Human Resources
HRIS	HR Information System
IBC	Interior Business Center
ICD	Interface Control Document
IRS	Internal Revenue Service
ISA	Interconnection Security Agreement
MOU	Memorandum of Understanding
NARA	National Archives and Records Administration
NBC	National Business Center replaced by IBC
NFC	National Finance Center
NIST	National Institute of Standards and Technology

Acronym	Definition
OMB	Office of Management and Budget
OPF	Official Personnel Folder
OPM	Office of Personnel Management
PDF	Portable Document Format
PMO	Program Management Office
POC	Point of Contact
POID	Personnel Office Identifier
SBU	Sensitive But Unclassified
SDD	System Design Document
SFTP	Secure File Transfer Protocol
SHRP	Strategic Human Resources Policy
SSI	Source System Identifier
SSN	Social Security Number
TLS	Transport Layer Security
TOR	Terms Of Reference
TSP	Thrift Savings Plan
TSPB	Thrift Savings Plan Board
UUID	Universal Unique Identifier
VPN	Virtual Private Network
W3C	World Wide Web Consortium
XML	Extensible Markup Language



**U.S. Office of Personnel Management
1900 E Street, NW
Washington, DC 20415-1000**