

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT

Electronic Official Personnel Folder (eOPF) Interface Control Document

Index Data Feed (IDF)



Change Page

Version	Date	Revision Description
5.0.4	10/31/2017	This document replaces all prior versions Index Data Feed (ICD) and is a rewrite of the prior versions. Changes that may require updates to the provider file submissions include: • Removed option to use “E/S by:” and “Employee self-service Election” for designation of the employee signature. OPM Policy staff and guidance indicates this is not acceptable. Signature is required on all forms • Added signature requirement for other than the employee • When sending large amounts of data, providers are directed to send multiple files sized at approximately 100 MB each and increment the submission indicator in the filename • Expansion of the XML instructions • NARA has revised guidance regarding the formation of PDFs • Updated Agency Code definition used in the file naming format Other changes include: • OPM OCIO reorganized. The EHRI organization is now the Data Warehouse Program. “EHRI” removed from this document and replaced with “eOPF” or appropriate terminology. • A citation on the use of electronic signatures in Federal Government. • Updated the eOPF contacts • Added “When the eOPF is digitally imaged, it is critical to preserve the integrity of the signed record just as if it was the OPF filled with paper documents” • Added and clarified Agency responsibilities for requirements, testing, validation, etc. • Added “Types of Information Transmitted to eOPF” • Added “Data Quality and its Impact” • Clarified the Unique Identifier Code • Added “The implementation of the IDF 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.”
5.1	08/21/2019	• Data Provider Identifier - Removed Lockheed Martin and added IBM. • Added Error Code 922 Doc_Retention_Date Error. • Added the minimum PDF requirements from the NARA guidance - PDF version 1.4, images must be black and white, 300 dots per inch and contain no security settings. • Added Doc_Retention_Date for each form • Clarified responsibilities for the Data Provider and agencies. • 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 • Added responsibilities for eOPF Operations team.
5.2	11/05/2019	• Added Error Code 921 Data feed zip file does not exist when trying to recover from last unsuccessful job.

Version	Date	Revision Description
5.2	12/12/2020	• Removed references to DWP and replaced with eOPF • Removed references to Data Warehouse Production Support team • Updated eOPF Points of Contact • Removed references to virtual folders other than Permanent, Temporary and Performance • Corrected invalid XML tags for Retention Date.
5.3	3/13/2025	• Changed Batch File Name Agency Code to Subagency Code. • Updated DeliveryID to contain the Employee's Subagency Code. • Corrected invalid XML
5.4	09/19/2025	• Updated transfer protocol references from Connect:Direct to SFTP • Updated Table.2.4 to reflect modern process and tools • Removed Modify/Delete functional language as those functions are no longer supported by eOPF • Removal of Modify/Delete references with explanation
5.5	06/02/2026	• Updated and added new Error Codes (Document, Batch, and Environment related) • Updated file size limit to 350 MB each and increment the submission indicator in the filename

Contents

1.0	OVERVIEW	1
1.1	Purpose.....	1
1.2	Scope.....	1
1.3	eOPF Points of Contact	1
2.0	REPOSITORY OF INFORMATION	0
2.1	electronic Official Personnel Folder (eOPF)	0
2.2	Interfacing with eOPF	0
2.3	eOPF Security and Privacy Safeguards	0
2.4	File Transmission Process.....	1
3.0	ROLES AND RESPONSIBILITIES.....	6
3.1	Participants in the Transfer of Information	6
3.2	Types of Information Transmitted to eOPF	7
4.0	GETTING STARTED	1
4.1	OPM Master Forms List.....	1
4.2	Transmission Protocol	1
4.3	Transmission Schedule.....	1
4.4	Notifications	1
4.5	Required Documentation	2
4.6	Electronic Signature.....	2
5.0	STANDARDS FOR IDF TRANSMISSIONS TO EOPF.....	1
5.1	Transaction File Transmissions to Host Provider	1
5.2	Globally Unique Identifier for Each Document (DocGUID)	1
5.3	Field Sizes and Truncating	2
5.4	Field Type	2
5.5	Data Quality and its Impact.....	2
5.6	Data Provider Identifier for Each Data Provider	2
5.7	XML – Supported File Format.....	2
5.8	Supported Compression Format.....	4
5.9	PDFs	4
6.0	BATCH DESCRIPTION AND REQUIRED FORMAT	1
6.1	Batch Description.....	1
6.2	Batch File Structure	1
6.3	Formats for Naming Files.....	2
6.3.1	Batch Name File Format.....	2
6.3.2	XML and ZIP File Name Format.....	4
6.3.3	PDF Name Format	5
6.3.4	Field Formats.....	5
6.4	Formats for Building Files	7
6.4.1	Delivery Batch Transaction Indexing Data Format	11
6.4.2	Sample XML Delivery Transaction	11
6.4.3	Modify Batch Transaction Indexing Data Format	12
7.0	BATCH TRANSACTION FLOW.....	16
7.1	Data Accuracy, Completeness, and Correctness	16
7.2	Reconciliation Using Transaction Receipts.....	16
7.3	Confirmation Receipts.....	16
7.3.1	Confirmation File Structure.....	16

7.3.2	Sample Confirmation Receipt.....	17
7.4	Error Receipts.....	17
7.4.1	Error File Types.....	17
7.4.2	Error File Structure.....	17
7.4.3	Sample Error Receipt.....	18
7.4.4	Transmission/Environment Errors.....	19
7.5	Error Codes for IDF Service.....	19
8.0	TEST PROCEDURES.....	34
8.1	Objective and Goals.....	34
8.2	Scope.....	34
8.3	Roles and Responsibilities.....	35
9.0	ACRONYM LIST.....	37
	APPENDIX A. DELIVERY TEST PLAN.....	39

List of Tables

Table 1. eOPF PMO Contact List	1
Table 2. Batch Name Format.....	3
Table 3. XML and ZIP File Name Format.....	4
Table 4. PDF File Name Format.....	5
Table 5. Field Format.....	5
Table 6. Structure of Batch Transaction XML File.....	7
Table 7. Structure for Confirmation XML File	17
Table 8. Structure of Error Receipt XML File.....	18
Table 9. Error Codes for the IDF Service	20
Table 10. Test Procedure Roles and Responsibilities	35

List of Figures

Figure 1. PDF File and Indexing Data Ingestion Process.....	1
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1.0 Overview

The electronic Official Personnel Folder (eOPF) solution supports a variety of methods to capture personnel forms. This document addresses the Index Data Feed Service (IDF) method of document ingestion which supports the loading of Portable Document Format (PDF) files and associated index data fields. PDF files that are submitted for processing by the eOPF IDF are rasterized (converted to 300 dot per inch [dpi], black and white images) to a standard format to resolve current and future issues with digital signatures, embedded smart form logic, and use of adobe extensions. The various eOPF users search for one or more forms in an eOPF instance using the index data fields.

1.1 Purpose

This document focuses on the eOPF IDF Service and the specification a Data Provider must meet to deliver documents 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 Host Provider, Agency and Data Provider to ensure accurate and complete ingestion of data into OPM's eOPF solution.

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 Host Provider—ensures the OPM eOPF solution ingests the data.

1.3 eOPF Points of Contact

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

2.0 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. OPM's Division for Strategic Human Resources Policy (SHRP) formally approved the eOPF as the Official Personnel Folder for federal employees on March 9, 2009. eOPF is 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. 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 an OPF is 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 documents filed in an employee's eOPF on the Permanent and Temporary sides.

eOPF functionality enables HR Specialists to digitize, index, and store hard copy personnel documents in an electronic format from a designated point in time, known as *day forward*, thus eliminating the need for paper filing and storage while improving access to eOPFs for HR personnel and employees. After the completion of conversion of an employee's paper OPF, eOPF is the repository for any data related to a federal employee's career.

2.2 Interfacing with eOPF

Most agencies use a personnel or payroll provider that cross-services multiple agencies. This requires the establishment of an interface between eOPF and the personnel and/or payroll providers to routinely update employee records with employee data, SF-50 transactions, and benefits data. Some agencies do not use an outside provider and provide the same data from agency systems. Entrance on Duty (EOD) systems transmit information collected as part of the hiring of new federal employees.

2.3 eOPF Security and Privacy Safeguards

eOPF works within a multi-level secure environment established in accordance with the Federal Information Processing Standards Publication (FIPS PUB 199), Federal Information Security Management Act of 2002 (FISMA, Public Law 107-347, 44 U.S.C. 3531-3536) and the Office of Management and Budget's (OMB) Circular A-130, Appendix III Security of Federal Automated Information Systems.

The eOPF system is categorized with a High security level because the system as a whole is subject to stringent security controls to accommodate the sensitive but unclassified (SBU) data.

eOPF complies with the Privacy Act of 1974 to safeguard the system from unauthorized use. Transport Layer Security (TLS) software authenticates the connection between client and server. The system encrypts / decrypts data traversing the connection using FIPS 140-2 compliant encryption algorithms after authentication. The eOPF system monitors access and restricts it to a need-to-know basis. The system also logs and reports all activity performed in the eOPF application. The eOPF provides an audit trail, including a mandatory log to document when and why an authorized user reviewed an eOPF.

2.4 File Transmission Process

The process for transmitting data from the Data Provider to a Host Provider and staging the transaction files to be processed by the eOPF IDF Service is shown in **Figure 1**.

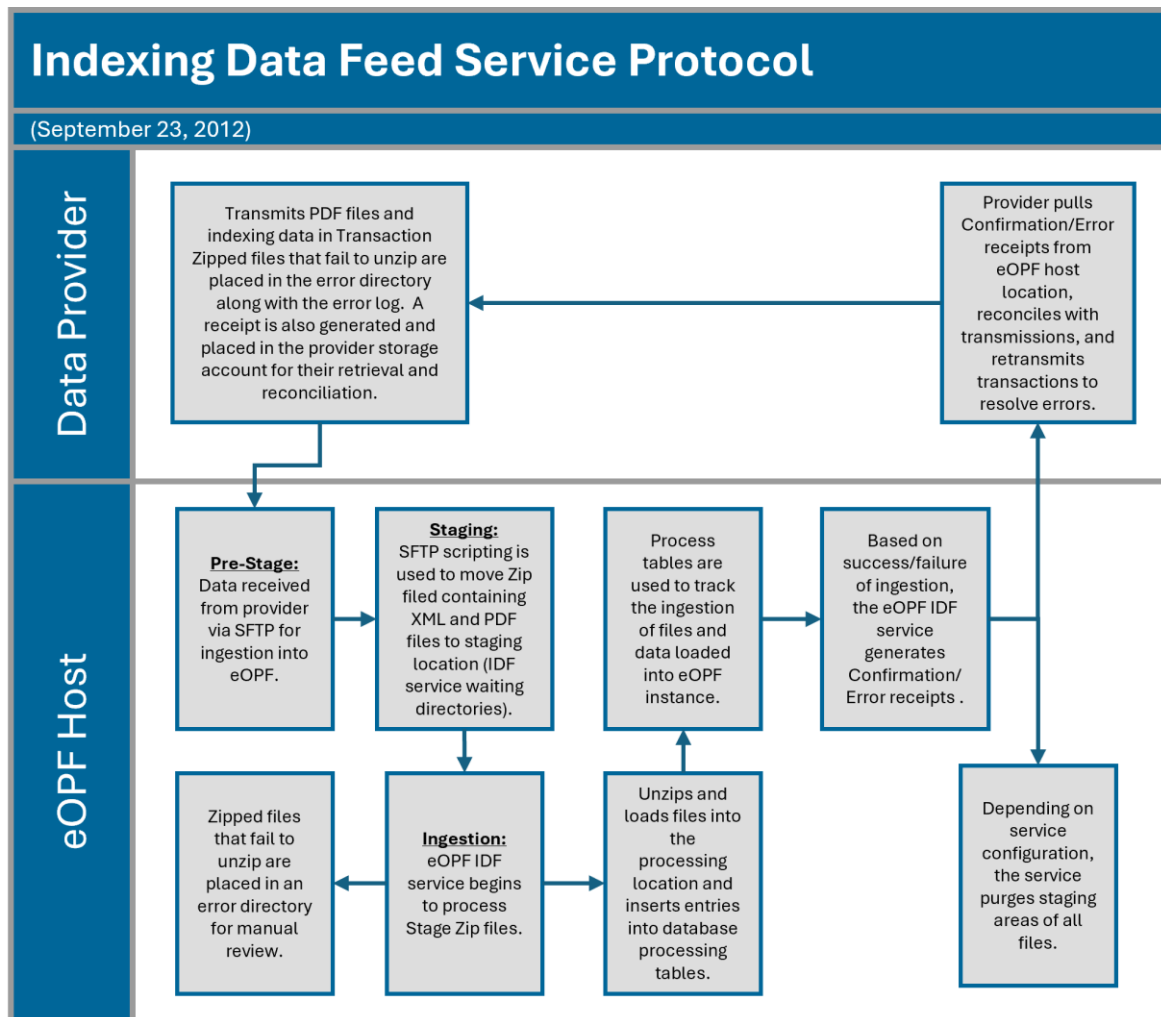


Figure 1. PDF File and Indexing Data Ingestion Process

All transactions follow the same process flow.

The process begins with receipt of a Data Provider-generated transaction file (i.e., Delivery transaction) to populate documents into an eOPF. The Data Provider sends this transaction file to the Host Provider. After eOPF processes the initial Delivery transaction, a Data Provider may send additional transaction files. There are three transaction types for data sent by a Data Provider to eOPF to add or change documents in eOPF.

- **Modify/Insert Transaction** – Adds a new document to an existing eOPF

- **Modify/Update Transaction** – Updates image PDF or index for a previously delivered file in an existing eOPF
- **Modify/Delete Transaction** – Deletes a document from an existing eOPF

There are also two output transaction types produced by the eOPF IDF Service in response to the transaction files sent from the Data Provider:

- **Error Receipt** – Records an error event encountered when processing a Data Provider's transaction file. The error receipt can address an error at the batch file level, such as an invalid SSN, or at an individual document level, such as an invalid effective date, form type or form number, etc.
- **Confirmation Receipt** – Records confirmation of successful processing of a Data Provider's batch file. Produced after all entries in the batch file successfully process.

The eOPF system places the confirmation and error receipts in the Host Provider-designated location for retrieval by the Data Provider. Based on the confirmation and error receipts, it is the responsibility of the Agency and Data Provider to analyze and correct as necessary. Submitting corrections for error receipts may generate additional errors, so the Data Provider must review the confirmation/error receipts after each submission.

The agency provider cannot deviate from the configured and tested format. When a provider changes the file or the contents of the file for an agency, the provider must work with the eOPF PMO to test the changes to ensure the service processes the new/updated feed and loads.

3.0 Roles and Responsibilities

The eOPF PMO works with numerous organizations, both government and commercial, to maintain the eOPF application.

3.1 Participants in the Transfer of Information

Throughout this document the following terms are used to identify the roles of the multiple organizations participating in the transfer of information to eOPF:

- **eOPF PMO** – provides program management oversight 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.
- **eOPF Host Provider** – provides a managed hosting solution for the eOPF application. The host is responsible for the hardware, software, maintenance, upgrades, backup/disaster recovery and day-to-day operations for the environment.
- **Agency/sub-agency** – 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 Portable Document Format (PDF) images, and form data to eOPF. The provider is responsible for:
 - the accuracy and completeness of the transmittal file
 - ensuring correct XML formatting with NO additional white space in the data element tags
 - reconciling data
 - working with the serviced agencies and correcting the root causes of data errors
 - coordinating software and hardware changes that affect the data and files submitted to OPM with the serviced agencies and eOPF PMO

Different types of Data Providers include:

- **Conversion Vendor/Scan Provider** – works with 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. This includes managing data from various Data Providers, maintaining the eOPF interface, and managing the day-to-day operations of the eOPF production environment. It also includes scanning and indexing paper OPFs to create ZIP files with PDFs and indexing data resulting from back file and day forward conversion, which is the ongoing scanning and

indexing of new records not available during back file conversion, such as OPFs for new hires. A Scan Provider is either a contractor or a government agency.

- **Personnel/Payroll Provider** – provides data feeds for an agency or multiple agencies, including data feeds for employee data such as SF-50 or SF-52 and employee self-service elections. Personnel/Payroll Providers include the National Finance Center (NFC), the Interior Business Center (IBC), the General Services Administration (GSA) and the Defense Consolidated Personnel Data System (DCPDS).
- **Agency Data Provider** – provides data for its own agency. For example, the Department of Energy (DOE) sends employee data to eOPF rather than using an external Data Provider to transmit the data.
- **Employee Self Service Provider** – provides self-service elections in an automated system. Examples are Employee Express and the Employee Benefits Information System (EBIS).
- **Entry on Duty (EOD) Provider** – provides EOD data for a specific agency or for multiple agencies to eOPF.
- **Other Provider** - provides documents for a specific agency or for multiple agencies. An example is one that provides Performance documents.
- **Form Owner** – The office that owns a form, including the right to approve and publish form updates, manage the policy affecting the form and approve or deny the completion of the form. The eOPF PMO can provide specific contact information for the Form Owners. The agency obtains all unlocked versions of forms from the Form Owner.

3.2 Types of Information Transmitted to eOPF

The role of an organization that transmits information to eOPF determines the types of information it sends to eOPF. Various Data Providers send PDF files and indexing data to the eOPF Host Provider for ingestion into an eOPF agency instance. A PDF file may be a scanned image, a text-based document, or a template with populated fields. An agency's specific system, such as an EOD system, may also act as a Data Provider submitting documents for a new employee. Other HR solutions may generate documents relevant to an employee's personnel folder and therefore act as a Data Provider submitting PDF handled by the eOPF IDF Service. A Data Provider must follow the specifications found in this document.

4.0 Getting Started

4.1 OPM Master Forms List

Data transmitted to eOPF is for forms listed on the OPM Master Forms List. Form numbers, types and virtual folder sides shown in the XML must appear exactly as they appear on the OPM Master Forms List. An Agency Forms List includes the OPM Master Forms List, which includes forms that reside in the Permanent virtual folder side, forms that reside in the Temporary virtual folder side and forms that reside in the Performance folder side. The OPM Master Forms List is located on the OPM website <http://www.opm.gov/egov/e-gov/ehri/masterformslist/>.

In addition to the OPM Master Forms List, some documents identified as personnel actions require the identification of Nature of Action (NOA) Codes shown on those documents (i.e., SF 50, SF 50B, SF 52 to name a few). The date ranges and folder sides are included on the IDF file so the personnel actions sent to eOPF are filed in the correct folder. For example, NOA code 897 represented 'ADM PAY DEC' from 6/1/1930 to 1/1/1982. As of 1/1/2007 NOA Code 897 represents 'PAY REDUCT'. If a document with NOA Code of 897 and the effective date value is outside the valid timeframes, the document rejects. The Data Providers must incorporate the NOAs into their processes for creating documents so personnel actions load into eOPF. The OPM's Data Standards lists all NOA codes. NOTE: Not all Data Providers are authorized to send personnel action documents.

4.2 Transmission Protocol

Data Providers use SFTP as the primary mechanism for transmitting data files to the eOPF Host Provider. The Data Provider is responsible for establishing a Virtual Private Network (VPN) connection to the eOPF hosting site to secure the data during transmission. Depending on the source of HR-related data, one Data Provider may submit data for many agencies. While the data file format and content may vary by Provider, all Data Providers are required to submit data, as specified in this document, to the eOPF hosting site using SFTP with a VPN connection.

When a Data Provider does not have an established SFTP capability, the Data Provider must contact the eOPF PMO point of contact for SFTP to determine the appropriate software and connectivity to the eOPF hosting site. Contact the eOPF PMO point of contact (Table 1) for a schedule of Host Provider maintenance periods.

Data Providers are expected to maintain their SFTP software and infrastructure with current patches and maintenance activities to ensure ongoing connectivity with the eOPF Host Provider.

4.3 Transmission Schedule

The agency, working with its Data Provider and the eOPF PMO Operations Team, establishes a schedule for testing its transmissions and a schedule for the initial transmission, subsequent transmissions, and the frequency of recurring transmissions.

4.4 Notifications

The agency and Data Provider are required to coordinate the testing and transmission of data to eOPF and provide the schedule for any subsequent transmissions to the eOPF PMO prior to the initial transmission.

The agency and Data Provider must notify the eOPF PMO Technical Lead of the intent to transmit data, type of data, agency, start date, and frequency when the agency and its Data Provider plan to transmit data feeds for non-EOD data.

The agency and Data Provider must also notify eOPF PMO 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 Required Documentation

The agency, the Data Provider, and eOPF PMO must complete the following documentation before the Data Provider transmits data for the first time. These documents 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.
- **EOD System Certification** – A list of requirements an agency must meet before transmitting EOD data to eOPF. The agency must test the functionality of the EOD system and provide a certification indicating the EOD requirements in this document and the HRLOB EOD CONOPS are met.
- **Terms of Reference (TOR) Addendum** – Agencies must obtain approval to use an electronic signature in lieu of personally signed paper SF-50s in accordance with the GPR, Ch. 1 and the Guide to Processing Personnel Actions (GPPA), Ch. 3. The agency must complete a TOR and provide it to the eOPF PMO when the agency uses an electronic signature on its SF-50s without OPM approval.
- **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. Any two systems that share a connection, VPN or otherwise, requires an ISA in place. The caveat is when two OPM systems interconnect, security only requires a MOU.
- **Authority to Operate (ATO)** – A letter or memorandum from the agency's senior official indicating the successful completion of the C&A process, including a plan to continue to mitigate problems and sustain operations.

4.6 Electronic Signature

Although the eOPF IDF Service does not place signature(s) on a document received from a Data Provider, this section provides guidance to those Data Providers who may be using Electronic Signature on the PDF files transmitted to the Host Provider.

Agencies must conduct an assessment of data sensitivity and available electronic signature technologies, as well as the federal policy and regulations supporting the use of electronic signatures. The following sections of the Government Paperwork Elimination Act (GPEA) provide guidance for the use of electronic signatures:

- Section 1703: Procedures for Use and Acceptance of Electronic Signatures by Executive Agencies
- Section 1706: Study on Use of Electronic Signatures

- Section 1707: Enforceability and Legal Effect of Electronic Records

Additional guidance can be found in the Use of Electronic Signatures in Federal Organization Transactions developed by General Services Administration (GSA) and Federal Chief Information Officers (CIO) Council at the request of the Office of Management and Budget (OMB).

Most form owners allow their forms to be signed electronically if the agency deems the security and reliability of its electronic approval process to be equivalent to or greater than a wet signature, and the collection of an electronic signature is practical.

For forms transmitted to eOPF, the employee signature block on an electronically signed form must contain the text "Electronically signed by <Signer Name>." Alternate signature blocks (Witness, Agency Official, etc.) must contain "Electronically signed by <Signer Name>", with the signer's title, regardless of whether or not the signee title is present in a separate field.

In accordance with the GPR, Ch. 1, and the GPPA, Ch. 3, agencies must request approval to use an electronic signature in lieu of personally signed paper SF-50s. If an agency uses an electronic signature on its SF-50s and has not requested approval to do so, the agency must complete a Terms of Reference (TOR) Addendum with the eOPF PMO.

5.0 Standards for IDF Transmissions to eOPF

The eOPF IDF Service supports the ingestion of PDF files and associated index attributes into an eOPF repository.

5.1 Transaction File Transmissions to Host Provider

Files are transmitted to eOPF via secure file transfer using SFTP, which is a National Institute of Standards and Technology (NIST) requirement. Data Providers are required to submit their data feeds, as specified in this document, to the Host Provider using SFTP with a VPN connection. SFTP is a software product that supports the secure transmission of files between two parties. This product requires a license and configuration that the Data Provider and Host Provider tests and verifies. The agency and provider should contact the eOPF PMO point of contact when the Data Provider does not currently have SFTP capability.

The Data Provider establishes a Virtual Private Network (VPN) connection to the Host Provider to secure the data during transmission. At the Host Provider, the SFTP File Agent moves files from the Host Provider SFTP server to the correct eOPF staging area for processing by the eOPF IDF Service.

One Data Provider may submit data for many agencies; however, the Data Provider must uniquely identify each submission. This document provides the specifications to ensure uniquely named files.

SFTP is used because it ensures rigorous security and shortened processing windows. It ensures the following:

- **Predictability** – Ensures delivery via automated scheduling, checkpoint restart, and automatic recovery/retry
- **Security** – Ensures the information remains private and file transfers are auditable for regulatory compliance via a proprietary protocol, authorization, and encryption (FIPS 140-2 and Common Criteria certified)
- **Performance** – Ensures transfer of high volumes of small files to multi-gigabyte files

Contact the eOPF PMO to determine what documentation is required from a Data Provider with SFTP capability. An Interconnection Security Agreement (ISA) is only necessary if the VPN connection is LAN-to-LAN. A client VPN connection does not need an ISA.

5.2 Globally Unique Identifier for Each Document (DocGUID)

The eOPF IDF Service requires a Document-specific Globally Unique Identifier (GUID), known as the DocGUID, in the document transaction record permanently identifies a document generated by a Data Provider and transmitted for ingestion into an eOPF instance at the Host Provider. This document transaction record is defined in section 7.0 of this document. A GUID is a 128-bit integer number whose format is a well-defined sequence of 32 hex digits. The DocGUID references information comparing documents delivered with the documents loaded in the eOPF repository.

An example is 08dd65f7-c862-4908-96c9-0103edf98c01.

If a Data Provider does not have an application for generating DocGUIDs, there are software utility programs to generate these numbers, such as the Microsoft utility program called “UUIDgen” to generate Universal Unique Identifiers (UUIDs). The “UUIDgen” utility generates the UUID in IDL file format or C-

language format. Since no centralized authority is required to administer GUIDs, generation on demand can be completely automated.

5.3 Field Sizes and Truncating

The Data Provider must truncate any data that exceed the maximum field size before transmitting the data to the Host Provider for ingestion into an eOPF instance. The Data Provider truncates any beginning or trailing white space on a value contained in an XML element. The eOPF system reads a value as provided including the white space in the XML element.

5.4 Field Type

The field type indicates when data in a field is mandatory or optional. A mandatory field indicates the Data Provider sends data to eOPF. An optional field indicates the Data Provider sends data when certain conditions exist. An optional field may become mandatory based on the population of another related field.

5.5 Data Quality and its Impact

The eOPF system reads and stores data 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.

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 validates the contents of the folders after the file processes.

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. When this occurs, the eOPF PMO works with the provider to determine the best course of corrective action, however, no actions are taken until the Data Provider notifies the customer agencies of the issue and the corrective steps to be taken. Depending on the complexity of the issue caused by improper/incomplete provider data, the eOPF PMO may assess additional charges to an agency to resolve the issues. **If a data provider transmits a data feed file that partially processes, the data provider must be able to resubmit only the portion of the file that needs to be processed.**

5.6 Data Provider Identifier for Each Data Provider

The Data Provider Identifier is the OPM assigned Agency Code and is used to identify the provider that is sending the records contained within a file. Each transmission must include the Data Provider Identifier. The Data Provider Identifier for a federal government organization is the four-character code defined in the Guide to Personnel Data Standards (GDS) in which the first and second positions indicate the agency and the third and fourth positions indicate the administrative subdivision, i.e., sub-element.

5.7 XML – Supported File Format

XML is the standard for the IDF Service index files. The index file is the part of the data feed containing the document attributes associated to the delivered PDF files. The file must be a well-formed XML document as defined in the World Wide Web Consortium (W3C) XML 1.0 Specification (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:

- Use character set encoded “ENCODING=ISO-8859-1”.
- XML predefines the following five entity references for special characters that would otherwise be interpreted as part of markup language:

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

- The Character References stated above must be substituted with the Entity References accordingly.
- The element tags are case-sensitive; the beginning and end tags must match exactly.
- The element tags are CamelCase with underscores.
- The beginning and end tags must match exactly.
- The XML must be correctly formatted with NO additional white space in the data element tags.
- There is a single “root” element that contains all the other elements.
- The file must be an American Standard Code for Information Interchange (ASCII) formatted text file.
- A record must contain all XML tags even if the tag is null.

Providers must include a XML declaration instruction 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 a XML declaration.

Declaration Instruction Rules:

- 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" ?>
```

5.8 Supported Compression Format

The IDF Service is using #ZipLib Version 0.85.5 an Open source Zip, GZip, Tar and BZip2 library written entirely in C# for the .NET framework. It is implemented as an assembly (installable in the Global Assembly Cache [GAC]) and can easily be incorporated into other projects using any .NET language.

Reference: <http://www.icsharpcode.net/OpenSource/SharpZipLib/Default.aspx>.

Any method used to compress the file by the Data Provider must be supported by this Library to decompress the file for processing. If the WinZip application is used to produce the transaction file, then the “Deflate” compression method must be used.

The following compression methods are NOT supported:

- Advanced Encryption Standard (AES) encryption
- Zip64
- Deflate64

5.9 PDFs

Data Providers must ensure all PDF Images comply with the guidance concerning the transfer and maintenance of permanent electronic records issued by the National Archives and Records Administration (NARA) found at <https://www.archives.gov/records-mgmt/initiatives/pdf-records.html>. At a minimum, **PDF version 1.4**, images must be black and white, 300 dots per inch and contain no security settings.

A Data Provider and agency must test the PDF files it plans to deliver into eOPF with the Host Provider before beginning production delivery. The test should incorporate not only importing the PDF, but all features of eOPF, including printing the PDF.

6.0 Batch Description and Required Format

A Data Provider can send a variety of transaction types to the Host Provider for ingestion by the eOPF IDF Service. These transaction types support the initial delivery of a document and any follow-up activities to modify or delete a document after initial delivery. **It is the responsibility of the Data Provider to track and establish a record of deliveries to the Host Provider so reconciliation of all transactions can be made at any time. The retention of all DocGUIDs used and their disposition is critical to the reconciliation process.**

A Data Provider transmits:

- **Delivery Batch Transaction** – The initial submission of a batch of documents to a specific SSN in an eOPF at the Host Provider is called a Delivery transaction. Every Delivery batch transaction consists of a single ZIP file, a folder structure, one or more PDF files, and an XML file containing the indexing data for the eOPF. A Delivery batch transaction delivers documents into a single SSN. It is a one-to-one relationship. One delivery batch transaction file contains documents for a single SSN.

AND

- **Modify Transaction** – When attempting to load a Delivery Transaction, the eOPF system may generate an error which requires the Data Provider to produce follow-up batch transaction files using Modify Transaction for an existing Batch Name. Every Modify batch transaction consists of a single ZIP file, a folder structure, one or more PDF files, and an XML file containing the indexing data for the eOPF.

6.1 Batch Description

A transaction file contains a combination of documents and document indexing data associated to a single SSN, called a “batch.” The Data Provider sends the file to eOPF as a single ZIP file containing PDF files with associated indexing data in an XML formatted file that makes up a single batch. The XML file must follow the defined layouts.

When sending large amounts of data, providers are directed to send multiple files sized at approximately 350 MB each and increment the submission indicator in the filename.

6.2 Batch File Structure

The batch transaction consists of the following:

<Level 1>

The ZIP file is a wrapper for the components (PDF and XML files) which make up the transaction file.

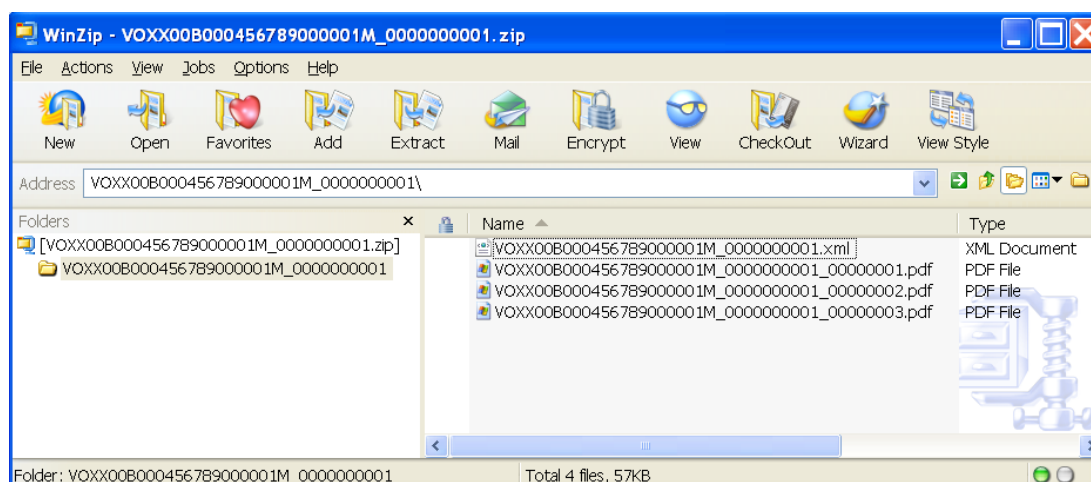
<Level 2>

The folder (directory name) in the ZIP file must be in the form of Batch Name Transmittal Number.

<Level 3>

One or more PDF files along with the XML file are placed into the folder (directory) within the ZIP file. The XML File has an indicator for the type of transaction file (Delivery or Modify).

The following graphic shows the makeup of the contents found in a transaction ZIP file.



6.3 Formats for Naming Files

6.3.1 BATCH NAME FILE FORMAT

A Batch Name is a unique name given the group of PDF files and XML files containing the document attributes associated to a single SSN and combined into a single transmission as a transaction ZIP file. The Batch Name is:

- Used as the folder name in the ZIP file
- Part of the ZIP, PDF and XML file names to ensure they are related to the same batch
- Contains components used to identify the source of the batch transaction file and the type of data it contains.

The file iteration uniquely identifies the PDF(s) within the batch transaction file. This ensures all components of the batch transaction file align.

The Batch Name uses the following format:

<Data Provider Identifier><Agency Code><Process Type><Unique Identifier><Batch Iteration Number><Batch Designator>

The following table provides the Batch Name format. The "Field Type" column indicates if a component of the Batch name is mandatory ('M') or optional ('O'). In this case, all fields are mandatory.

Table 2. Batch Name Format

Name	Data Length	Description	Field Type	Data Format	Example or Note
Data Provider Identifier	4	A series of alpha characters that uniquely identify the Data Provider. The Data Provider code is assigned by the eOPF PMO.	M	Character	• Interior Business Center = IN00 • U. S. Department of Veterans Affairs= VA00 • Smithsonian Institution Trust = SI00 • Office of Personnel Management – USAPerformance/ USASTaffing = OM00 • U.S. Department of Commerce – National Technical Information Service = CM57 • Anacomp/scanning vendor = 99AC • IBM = 99IB
Subagency Code	4	The four digit subagency code of the employee.	M	Character	Assigned by eOPF PMO based on the Subagency codes in the Guide to Personnel Data Standards.
Process Type	1	Process Type values include: B = Backfile D = Day Forward Folder L = Day Forward Loose Paper E = Entrance on Duty (EOD) P = ePerformance	M	Character	B
Unique Identifier	9	An employee specific unique identifier.	M	Character	000456789
Batch Iteration Number	6	A zero-padded number that increases for every transmission and uniquely identifies batches sent for the same SSN.	M	Character	000001 Start at 000001 for the 1 st transaction file and increment by one for each transaction file sent using the batch name.
Batch Designator	1	The Batch Designator is always "M" (mandatory).	M	Character	M

Example for using Batch Iteration Number within the Batch Name:

The Batch Iteration Number uniquely identifies batches sent for the same employee. For example, a day forward Data Provider may process documents in January 2010 for Unique Identifier = 000456789 and send a delivery transaction file. Later in the year, the day forward Data Provider processes additional documents for Unique Identifier = 000456789 and must create a new batch for the new transaction file containing these new documents. At this point, all attributes of the Batch Name are identical except the Batch Iteration number, which increments to the next number. When the Data Provider uses the same Batch Iteration Number, an error indicates the transaction file is a duplicate to one previously processed.

If sending Modify transactions for a batch, the Data Provider must use the pre-existing Batch Name.
Example of a Batch Name: VO00XXXXB000456789000001M

6.3.2 XML AND ZIP FILE NAME FORMAT

6.3.2.1 **The XML and ZIP files have identical names except for the file extension. The folder within the ZIP file uses the same name as the ZIP file minus the file extension value.**

6.3.2.2 ZIP File

The XML file contains the batch and indexing data used to process the batch. The XML file structure in section 7.0 of this document defines each transaction type supported by the eOPF IDF Service.

The name of the ZIP file (transaction file) is used by SFTP scripting to route the file to the appropriate staging directory for processing. The file name identifies which agency the transaction file is to be processed against. Every ZIP file name must be in this format:

<Batch Name>_<Transmittal ID>.zip

6.3.2.3 XML File

The XML file contains the batch and indexing data used to process the batch. Every XML file name must be in this format:

<Batch Name>_<Transmittal ID>.xml

The following table provides a detailed description of the ZIP and XML File Name components. The “Field Type” column indicates if a component of the ZIP or XML File Name is mandatory (‘M’) or optional (‘O’). In this case, all fields are mandatory for both types of files.

Table 3. XML and ZIP File Name Format

Name	Data Length	Description	Field Type	Data Format	Example
Batch Name	25	The Batch Name of the transaction file the ZIP or XML file belongs in.	M	Character	VO00XXXXB000456789000001M
Transmittal ID	10	A 10 position, zero padded number incremented or increased for every transmission.	M	Number	0000000001 Start at 0000000001 for the 1 st transaction file and increment by one for each subsequent file sent by a data provider.

The file name ends with either a “ZIP” extension or a “XML” extension.

Example:

VO00XXXXB000456789000001M_0000000001.zip
VO00XXXXB000456789000001M_0000000001.xml

6.3.3 PDF NAME FORMAT

The Data Provider uniquely names each PDF document in a batch transaction file. Every PDF file name must use the following naming convention:

<Batch Name>_<Transmittal ID>_<File Iteration #>.pdf

The following table provides a detailed description of the PDF File Name components. The “Field Type” column indicates if a component of the PDF File Name is mandatory (‘M’) or optional (‘O’).

Table 4. PDF File Name Format

Name	Data Length	Description	Field Type	Data Format	Example
Batch Name	25	Batch name structure is defined in Table 2. The PDF file name contains the name of the batch to which it belongs.	M	Character	VO00XXXXB000456789000001M
Transmittal ID	10	The Transmittal ID is a number that is incremented or increased for every transmission	M	Number	0000000001 Start at 0000000001 for the 1st transaction file and increment by one for each subsequent transaction file sent by a data provider.
File Iteration #	8	The file iteration number is a zero padded 8 position number. Within a specific batch is a unique number, assigned to a specific document, starting at 00000001 and increments or increases for each additional document in the batch.	M	Number	00000001 This ensures each file is uniquely named and traceable to a specific batch and transaction file.

Example:

In this example, the transaction file (Zip File) contains three documents as PDF files. Each PDF file is uniquely listed below with the File Iteration # incremented from one to three. The remainder of the file name matches the Batch Name and Transmittal ID.

VO00XXXXB000456789000001M_0000000001_00000001.pdf

VO00XXXXB000456789000001M_0000000001_00000002.pdf

VO00XXXXB000456789000001M_0000000001_00000003.pdf

6.3.4 FIELD FORMATS

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

Table 5. Field Format

Data Format	Description	Examples
CHARACTER	One or more alphanumeric and special characters, not including the vertical bar character (‘ ’) that represents a field value.	000456789 125 Main St., S.W. Y OM00

Data Format	Description	Examples
NUMBER	One or more numeric characters that represents a number.	0 180
DECIMAL	A series of numeric characters with up to "n" positions to the right of the decimal point. The decimal point should appear in the field value if required. A decimal point is neither required nor implied, e.g., 400 represents 400 not 4.00.	For a format of Decimal (9,2): 0 1500 1234567.89 1234.0 0.75
DATE	A precise calendar date. Dashes are required. Format is YYYY-MM-DD.	2011-05-22

6.4 Formats for Building Files

The following table provides the Delivery Transaction XML format. 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 are included with either a value or null.

Table 6. Structure of Batch Transaction XML File

Structure of Batch Transaction XML File						
Name	Length	Format	Description	Values	Requirement	
					Delivery	
					Insert	Insert
Status	8	Character	Status is the batch processing standing.	Delivery Modify	Delivery	Modify
Batch Name	25	Character	The Batch Name is the batch to which the XML file belongs.	NA	Mandatory	Same as Delivery – Batch Iteration Number is incremented for the batch.
SSN	9	Character	The social security number of the employee to whom the OPF belongs.	Without dashes. Format is XXXXXXXXXX.	Mandatory	Same as Delivery
DeliveryID	18	Character	The DeliveryID is an identifier for the transaction. The identifiers match the Batch Name values and are provided by the eOPF PMO.	Format is <Data Provider Identifier>-<Subagency Code>-<YYYYMMDD>. Include the dashes.	Mandatory	Same as Delivery
Type	3	Character	The Type indicates how the document is to be treated.	INS UPD DEL	INS	INS
DocGUID	50	Character	DocGUID is a unique alphanumeric sequence that permanently identifies the document generated by the Data Provider.		Mandatory	Same as Delivery
Path	100	Character	Path is the relative path and file name representing the PDF file associated to the child node (document). The file path structure for the PDF file when extracted from the transaction ZIP file.		Mandatory	It may be NULL for an update when the transaction is only updating the document index attributes
FormNumber	40	Character	FormNumber is a valid OPM/Agency form number found on the eOPF Master Forms List.	Refer to the eOPF Master Forms List	Mandatory	Same as Delivery

Structure of Batch Transaction XML File						
			NOTE: When a form is not on the eOPF Master Forms List, the system defaults the FormNumber to "Other". "Other" form types will no longer be accepted by eOPF	DO NOT submit forms that are not on the eOPF Master Forms List		
FormType	100	Character	FormType is a valid OPM/Agency form type found on the eOPF Master Forms List and required for Non-NOA Code forms. NOTE: When a NOA Code is provided for a form that does not require a NOA, the system defaults the Type to "Exception". Exception = a problem document that must be reviewed and removed or re-indexed by HR.	Refer to the eOPF Master Forms List DO NOT submit forms that are not on the eOPF Master Forms List	Mandatory	Same as Delivery
EffDate	10	Date	The EffDate is the effective date of the form. NOTE: When a NOA code is used, the effective date must be within the authorized date range for the NOA.	Valid date format is <YYYY-MM-DD> 0000-00-00 is not a valid date All dates must be within 18 years of the employee's birth date. DO NOT submit forms with 1901-01-01.	Mandatory	Same as Delivery
Merge	1	Character	The Merge indicator is used when employment records created under OPM's general recordkeeping authority are mixed in the same file with employment records created outside OPM. They are generally kept in a Merged Records Personnel Folder or approved electronic equivalent.	T = True (folder is merged) F = false (folder is not merged)	Mandatory	Same as Delivery
NOA1	3	Character	Required on forms that include a NOA Code field/block. NOA Codes are validated against the OPM-approved list of NOA Codes.	NOA1 code or NULL. Refer to the OPM GPPA for a list of the codes. The NOA Codes are sent as numeric	Optional	Same as Delivery

Structure of Batch Transaction XML File						
				values with no zero padding.		
NOA2	3	Character	Required on forms that include a NOA Code field/block containing a NOA Code 2 value. NOA Codes are validated against the OPM-approved list of NOA Codes.	NOA2 code or NULL. Refer to the OPM GPPA for a list of the codes. The NOA Codes are sent as numeric values with no zero padding.	Optional	Same as Delivery
SourceSide	15	Character	In the paper world, permanent documents are filed on the right side and temporary documents are filed on the left side. The SourceSide is the folder side in which this document is physically located.	Left side = Temporary Right side = Permanent	Optional	Same as Delivery
DeliverySide	15	Character	DeliverySide is the folder the form will reside in.	Permanent Temporary Performance Overseas Training DO NOT submit documents for filing in a "Deleted" folder.	Optional	Same as Delivery
Duplex	1	Character	Duplex refers to a paper form with information on both sides when printed.	T = True (has information on both sides) F = false (has information on one side)	Mandatory	Same as Delivery
ErrCode	3	Number	ErrCode is for eOPF internal use only.	Data Provider creates NULL tag.	NULL	NULL
ImageCount	4	Number	ImageCount is the number of pages found in the delivered PDF.	Set to specific value of Zero when no PDF is sent.	Mandatory	Same as Delivery
DOC_Retention_Date	10	Date	The date after which the document is no longer a valid document.	Valid date format is <YYYY-MM-DD> 0000-00-00 is not a valid date	Optional	Same as Delivery
DOC_Retention_Comment	255	Character	Any desired comments for the retention		Optional	Same as Delivery

6.4.1 DELIVERY BATCH TRANSACTION INDEXING DATA FORMAT

The Delivery indexing data file is a text file in XML format, consisting of a root OPF node and child document nodes.

The root node contains specific information about the transaction, including the SSN and the type of transaction.

The child node contains both the document level transaction-specific information and the document indexing data. Document indexing data includes the following fields, captured at the document level to assist with document identification and retrieval, after the transaction is ingested into the eOPF repository:

- Form Number
- Form Title
- Form Type Nature of Action (NOA) Code 1
- NOA Code 2
- Effective Date
- Delivery Side
- Source Side
- Merge Folder Flag
- File Path

6.4.2 SAMPLE XML DELIVERY TRANSACTION

The following is an example of an XML Delivery transaction file containing two documents. The first child node provides an example of a document where NOA1 and NOA2 elements populate and the FormType element is NULL. The second child node provides an example of a document where the FormType element populates and NOA1 and NOA2 elements are NULL. The required encoding is highlighted in the examples below.

```
<?xml version="1.0" encoding="iso-8859-1"?>
<Batch xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Status="Delivery">
  <Name>VO00XXXXB000456789000001M</Name>
  <SSN>000456789</SSN>
  <DeliveryID>VO00-XXXX-20051006</DeliveryID>
  <DocumentList>
    <Document Type="INS">
      <DocGUID>08dd65f7-c862-4908-96c9-0103edf98c01</DocGUID>
      <Path>\VO00XXXXB000456789000001M_0000000001\
VO00XXXXB000456789000001M_0000000001_00000001.pdf</Path>
      <FormNumber>SF 50</FormNumber>
      <FormType>CORRECTION</FORMTYPE>
      <EffDate>2003-02-22</EffDate>
      <Merge>F</Merge>
      <NOA1>002</NOA1>
      <NOA2>760</NOA2>
      <SourceSide>Right</SourceSide>
      <DeliverySide>Permanent</DeliverySide>
      <Duplex>F</Duplex>
      <ErrCode />
      <ImageCount>2</ImageCount>
    </Document>
    <Document Type="INS">
```

```
<DocGUID>09ef65f7-c862-1111-96c9-0103edf98c02</DocGUID>
<Path>\VO00XXXXB000456789000001M_0000000001\
VO00XXXXB000456789000001M_0000000001_00000002.pdf</Path>
<FormNumber>DG 15</FormNumber>
<FormType>EMPLOYEE</FormType>
<EffDate>2011-03-15</EffDate>
<Merge>F</Merge>
<NOA1/>
<NOA2/>
<SourceSide>Right</SourceSide>
<DeliverySide>Permanent</DeliverySide>
<Duplex>F</Duplex>
<ErrCode />
<ImageCount>2</ImageCount>
<Doc_Retention_Date/>
</Document>
</DocumentList>
</Batch>
```

6.4.3 MODIFY BATCH TRANSACTION INDEXING DATA FORMAT

The Modify Transaction file contains one or more of the following types of document level transactions:

- **Modify/Insert Transaction** – adds a new document to an existing eOPF
- **Modify/Update Transaction** – updates image PDF and/or index of an existing document in an eOPF
- **Modify/Delete Transaction** – deletes an existing document from an eOPF

6.4.3.1 Modify/Insert Batch Transaction Indexing Data Format

The Modify/Insert transaction insert a new document into an existing eOPF for a previously delivered batch. The need for this occurs when the XML does not have a matching PDF, or a PDF is sent but the XML is missing. This functionality also processes individual documents missed during backfile conversion or for documents scanned during day forward processing.

The Modify/Insert Batch Transaction is the same as the Delivery Batch Transaction. The Data Provider generates a separate transaction file using the same batch name as the Delivery/Insert batch. The Batch iteration number increment for the batch and the STATUS is "Modify".

6.4.3.2 Sample XML Modify/Insert Transaction

The following is an example of an XML Modify/Insert Transaction File containing two documents. The first child node provides an example of an SF 50 document where NOA1 and NOA2 elements populate and the FormType element is NULL. The second child node provides an example of a DG 15 document where the FormType element populates and NOA1 and NOA2 elements are NULL.

```
<?xml version="1.0" encoding="iso-8859-1"?>
<Batch xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Status="Modify">
<Name>VO00XXXXB000456789000001M</Name>
<SSN>000000001</SSN>
<DeliveryID>VO00-XXXX-20051006</DeliveryID>
<DocumentList>
<Document Type="INS">
<DocGUID>08dd65f7-c862-4908-96c9-0103edf98c01</DocGUID>
```

```
<Path>IVO00XXXXB000456789000001M_0000000001\
VO00XXXXB000456789000001M_0000000001_00000001.pdf</Path>
<FormNumber>SF 50</FormNumber>
<FormType>CORRECTION</FormType>
<EffDate>2003-02-22</EffDate>
<Merge>F</Merge>
<NOA1>002</NOA1>
<NOA2>760</NOA2>
<SourceSide>Right</SourceSide>
<DeliverySide>Permanent</DeliverySide>
<Duplex>F</Duplex>
<ErrCode />
<ImageCount>2</ImageCount>
<Doc_Retention_Date/>

</Document>
<Document Type="INS">
<DocGUID>09ef65f7-c862-1111-96c9-0103edf98c02</DocGUID>
<Path>IVO00XXXXB000456789000001M_0000000001\
VO00XXXXB000456789000001M_0000000001_00000002.pdf</Path>
<FormNumber>DG 15</FormNumber>
<FormType>EMPLOYEE</FormType>
<EffDate>2011-03-15</EffDate>
<Merge>F</Merge>
<NOA1 />
<NOA2 />
<SourceSide>Right</SourceSide>
<DeliverySide>Permanent</DeliverySide>
<Duplex>F</Duplex>
<ErrCode />
<ImageCount>2</ImageCount>
<Doc_Retention_Date>2020-02-02</Doc_Retention_Date>
</Document>
</DocumentList>
</Batch>
```

6.4.3.3 Modify/Update Batch Transaction Index Data Format

This transaction updates the document index attribute(s) and/or the originally delivered PDF file loaded into eOPF.

The Data Provider generates a Modify/Update transaction file to correct indexing or replace a PDF. The Modify/Update transaction file uses the same batch name as the original delivery transaction file to replace the previous index data with the updated document indexing information and/or replace the previous PDF with the PDF included in this transaction. The new transaction file status is Modify and the document transaction TYPE is UPD for update. The UPD Transaction allows the PATH field to be null or blank as it is not mandatory.

- a. If a file name is in the XML Path element, the original delivered file is replaced with the new PDF file.
- b. If the XML Path element is blank, the originally delivered PDF remains untouched. The ImageCount element is NULL value.

NOTE: When a Data Provider sends an invalid page count during the initial transaction the document fails to load because the PDF page count does not match the count provided in the XML file. Do not use a

Modify/Update to fix the page count element. An insert transaction inserts the document into the eOPF repository.

6.4.3.4 Sample XML Modify/Update Transaction

The following is an example of an XML Delivery transaction file containing two documents. It is updating existing documents in the eOPF repository. These documents previously processed using an insert transaction. The first child node provides an example of an SF 50 document where NOA1 and NOA2 elements populate and the FormType element is NULL. The Path element is NULL indicating only the index data updates and there is no PDF file in the transaction file for this document. Also, the ImageCount is set to 0 (zero). The second child node provides an example of a DG 15 document where the FormType element populates and NOA1 and NOA2 elements are NULL and the PATH element contains a value indicating the specified file replaces the original PDF file. In both instances the effective dates change. For the SF 50 the effective date inserts as '2003-02-22' and is now updated to '2003-02-11'. The DG 15 example has the effective date updated from '2011-03-15' to '2011-03-11'.

To see the original effective date, review the insert transaction examples provided previously.

```
<?xml version="1.0" encoding="iso-8859-1"?>
<Batch xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" Status="Modify">
<Name>VO00XXXXB000456789000001M</Name>
<SSN>000000001</SSN>
<DeliveryID>VO00-XXXX-20051006</DeliveryID>
<DocumentList>
<Document Type="UPD">
<DocGUID>08dd65f7-c862-4908-96c9-0103edf98c01</DocGUID>
<Path/>
<FormNumber>SF 50</FormNumber>
<FormType>CORRECTION</FormType>
<EffDate>2003-02-11</EffDate>
<Merge>F</Merge>
<NOA1>002</NOA1>
<NOA2>760</NOA2>
<SourceSide>Right</SourceSide>
<DeliverySide>Permanent</DeliverySide>
<Duplex>F</Duplex>
<ErrCode />
<ImageCount/>
<Doc_Retention_Date/>
</Document>
<Document Type="INS">
<DocGUID>09ef65f7-c862-1111-96c9-0103edf98c02</DocGUID>
<Path>\VO00XXXXB000456789000001M_0000000001\
VO00XXXXB000456789000001M_0000000001_00000001.pdf</Path>
<FormNumber>DG 15</FormNumber>
<FormType>EMPLOYEE</FormType>
<EffDate>2011-03-11</EffDate>
<Merge>F</Merge>
<NOA1 />
<NOA2 />
<SourceSide>Right</SourceSide>
<DeliverySide>Permanent</DeliverySide>
<Duplex>F</Duplex>
<ErrCode />
```

```
<ImageCount>2</ImageCount>
<Doc_Retention_Date>2020-02-02</Doc_Retention_Date>
</Document>
</DocumentList>
</Batch>
```

6.4.3.5 **Modify/Delete Batch Transaction Index Data Format**

Modify/Delete batch transactions will no longer be supported in

6.4.3.6 **Sample XML Modify/Delete Transaction**

Modify/Delete batch transactions will no longer be supported in eOPF

7.0 Batch Transaction Flow

7.1 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 sender (i.e., Data Provider), not the receiver (i.e., Host Provider and eOPF solution), as defined below:

- **Accuracy** = Data matches Source System Values
- **Completeness** = Data contains all characters found in the source system
- **Correctness** = Data values are appropriate for the record

7.2 Reconciliation Using Transaction Receipts

The Data Provider must track and maintain a record of all transactions with the Host Provider to perform reconciliation. The retention of all DocGUIDs transmitted to eOPF and their disposition are critical to the reconciliation process.

For each file the Data Provider submits, the eOPF's IDF Service generates error and confirmation receipts when processing Data Provider transaction files. Data Providers are required to retrieve the error receipts analyze the data and take appropriate action to resolve any errors or issues which may include resubmitting the files. The eOPF IDF Service processes the Data Provider's corrected transaction file submissions and generates error/confirmation receipts until corrected transaction file submissions are accomplished.

The eOPF PMO and the Host Provider do not have access to the Data Provider information; therefore, the Data Provider is solely responsible for the timely review of confirmation and error receipts to assure an accurate and complete eOPF record.

7.3 Confirmation Receipts

Confirmation receipts are generated by the eOPF IDF Service to confirm a transaction file processed successfully. This includes Delivery, Modify and Delete transactions. The eOPF IDF Service creates and copies the confirmation receipts to a location assigned by the Host Provider. This location is a directory structure constructed using the Data Provider, Agency, Receipt type as attributes. For example:

```
//<Server>/<share>/<Data Provider ID>/Confirmed
```

The location is defined prior to testing and is assigned by the eOPF PMO Operations team.

7.3.1 CONFIRMATION FILE STRUCTURE

The confirmation receipt file is a text file in XML format, containing a Status field and Name field. The Status and Name fields are system generated.

The file name of the confirmation receipt matches the name of the transaction file with an extension of XML.

Example: VO00XXXXB000456789000001M_0000000001.XML

Table 7. Structure for Confirmation XML File

Structure for Confirmation XML File					
Field Name	Data Length	Description	Field Type	Data Format	Example
Root OPF Node					
Batch Status	8	Processing status of a given transaction. For a confirmation transaction, the value is always "Confirmed".	M	Character	Confirmed
Name	25	Batch name for the transaction file confirmed as successfully processed.	M	Character	VO00XXXXB000456789000001M

7.3.2 SAMPLE CONFIRMATION RECEIPT

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<Batch Status="Confirmed">
<Name>VO00XXXXB000456789000001M</Name>
</Batch>
```

7.4 Error Receipts

An error receipt is provided for a batch transaction file after all document level transactions are processed. The eOPF IDF Service loads the error receipts to a location assigned by the Host Provider. This location is a directory structure constructed using the Data Provider, Agency, Receipt type as attributes. For example:

```
//<Server>/<share>/<Data Provider ID>/Errors
```

The location is defined prior to testing and is assigned by the eOPF PMO.

7.4.1 ERROR FILE TYPES

Every error receipt consists of an XML file containing the indexing data identifying the processed transaction with an error event and is generated for each step of the ingestion process: at the batch level and the document level. When the error occurs at the batch transaction file level, the error receipt contains an error code, but does not contain a DocGUID value as an individual document is not the cause of the error.

An example: "SSN is not found" in the eOPF instance resulting in an error code of 911.

7.4.2 ERROR FILE STRUCTURE

The file name of the error receipt matches the name of the transaction file with an extension of XML.

```
VO00XXXXB000456789000001M_0000000001.XML
```

<Level 1>

The XML file for the receipt is sent an XML file. No ZIP file process is involved.

The error receipt XML file contains the batch and document level information pertaining to an error transaction file and indexing data used to process the batch. The following table lays out the XML file structure for an eOPF IDF Service error receipt.

Table 8. Structure of Error Receipt XML File

Structure of Error Receipt XML File				
Name	Data Length	Description	Data Format	Example
Batch				
Status	8	The processing standing. For an error transaction, the value is always "Error."	Character	Error
Batch Name	25	Batch Name of the batch for which the error was received.	Character	VO00XXXXB000456789000001M
Document(s)				
Type	3	Action to take on the document. For a Modify/Delete Transaction, the value is always "ERR" for Error.	Character	ERR
ErrCode	3	Error code. See Table 9 for a list of error codes.	Number	

7.4.3 SAMPLE ERROR RECEIPT

The error receipt XML file contains the batch and document level information pertaining to an error transaction file and indexing data used to process the batch. The following two examples show the contents of an error receipt when an error occurs for a transaction file (batch) level and when an error occurs for a single document. When an error for a document occurs, processing stops, and eOPF system creates an error receipt. When a document has multiple issues, the eOPF system only reports the first issue.

The example uses Batch VO00XXXXB000456789000001M. In the case of a document level error, the eOPF system provides the unique Data Provider DocGUID so the Data Provider can identify the document in its system. An error code is provided to identify the issue.

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<Batch Status="Error">
<Name>VO00XXXXB000456789000001M</Name>
<Document Type="ERR">
<ErrCode>911</ErrCode>
</Document>
</Batch>
```

The error code 911 indicates the SSN provided for transaction file was not found at the Host Provider location. This results when the Data Provider transaction file contains an invalid SSN or the eOPF User Account/Folder does not exist in eOPF. The Data Provider works with eOPF Operations staff to determine the issue and resends the transaction as a Modify/Insert transaction after making corrections.

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<Batch Status="Error">
<Name>VO00XXXXB000456789000001M</Name>
<Document Type="ERR">
```

```
<ErrCode>16</ErrCode>  
</Document>  
</Batch>
```

Error code 16 indicates an invalid folder side. The folder side was not found in the eOPF instance into which the eOPF IDF Service was trying to place the document. The Data Provider works with eOPF Operations staff to determine the issue and resends the transaction as a Modify/Insert transaction containing a valid folder side entry.

7.4.4 TRANSMISSION/ENVIRONMENT ERRORS

Events that occur outside the control of the IDF service may cause errors. 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. Table 9 provides the error codes associated with environment errors. When these conditions occur, the eOPF Operations team notifies the eOPF PMO and the Data Provider point of contact of the problem(s). The Agency, 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 IDF Service.

7.5 Error Codes for IDF Service

When the eOPF IDF Service processes a transaction file, the transaction file goes through a series of validations. There are two general validation levels: transaction or batch and document. Transaction file level error(s) generate error receipts consisting of the batch name and error code. Transaction file level error(s) are severe and result in no processing of documents into the eOPF instance.

After the transaction file level validation is successful, the eOPF IDF Service processes each document contained in the transaction file and reports a single error per document for documents not passing validation. The processing stops when an error occurs. The eOPF IDF Service ingests documents without errors into the eOPF instance.

Table 9 lists the error codes generated by the eOPF Data Feed Service with possible resolution. Table 9 also indicates the part of the transaction file in error, specifically the XML file, PDF file, eOPF indexing data, or other (e.g., environment).

Table 9. Error Codes for the IDF Service

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
ENVIRONMENTAL ERROR CODES (for example, occurs if agency eOPF database is unavailable)								
5	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Database insert error	eOPFAPI:::Failed to create document. Unable to insert into EOPF_DOCUMENT				X	Environment error... the eOPF Operations team notifies the eOPF PMO and the Data Provider point of contact of the problem(s). The Agency, Data Provider and eOPF Operations team determine the appropriate resolution, which may include retransmission with increased monitoring.
7	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Not enough space on the disk	eOPFAPI:::Failed to copy files				X	Environment error... the eOPF Operations team notifies the eOPF PMO and the Data Provider point of contact of the problem(s). The Agency, Data Provider and eOPF Operations team determine the appropriate resolution, which may include retransmission with increased monitoring.
8	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Not enough space on the disk	eOPFAPI:::Failed to create directory				X	Environment error... the eOPF Operations team notifies the eOPF PMO and the Data Provider point of contact of the problem(s). The Agency, Data Provider and eOPF Operations team determine the appropriate resolution, which may include retransmission with increased monitoring.
301	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Empty source files list.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after correcting the issue.. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
309	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to get Folder ID.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after correcting the issue. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
310	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to get Doc Type ID.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
311	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to insert into EOPF_DOCUMENT_FOLDER table.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
312	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to update EOPF_FOLDER document count.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
316	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to update EOPF_FOLDER document count.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
317	Delivery/ Insert Modify/ Insert	Internal eOPF environment error	Failed to create document. Unable to insert into ITEM.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
330	Modify/Delete Only	Internal eOPF environment error	Failed to delete document. Unable to get Folder ID.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
331	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to delete from EOPF_DOCUMENT_FOLDER.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
332	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to delete from FILE_LAYER.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
333	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to delete from EOPF_DOCUMENT.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
334	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to read FILE_LAYER.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
335	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to get ImageIDs from IMAGE.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
336	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to read file names from IMAGE.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
337	Modify/Delete Only	Internal eOPF environment error	Failed to delete document. Unable to delete clip page files from disk.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
338	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to delete document files from disk.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
341	Modify/Delete Only	Internal eOPF environment error	Failed to delete document.Unable to delete from ITEM.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
410	Modify/Delete Only	Internal eOPF environment error	Failed to Delete Document. Unable to Get All Pages From Clip.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
411	Modify/Delete Only	Internal eOPF environment error	Unable to Delete Document. Unable to Update Count in CLIP.				X	Environment error...Data Provider works with Agency to notify eOPF Help Desk of error. Data Provider resends document after the issue is corrected.
918	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	An issue with a folder id used to link documents to a folder occurred in the eOPF repository	Invalid EDLF_ID				X	eOPF Operations team researches. Environment error.... Data Provider works with Agency to notify eOPF Help Desk of error.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
921	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	IDF Service shutdown in middle of processing	Data feed zip file does not exist when trying to recover from last unsuccessful job.				X	Environment error...Data Provider resends files that were not processed.
BATCH ERROR CODES								
909	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Batch Name size	Error 909: ValidBatch Error:Invalid batch name		7.5.1.1	X		The provider corrects and resends the transaction file. Data Provider must update XML. Example of error: <u>Sending:</u> <Name> </Name> <DeliveryID>GOV-NAR-20080225</DeliveryID> <SSN>000456789</SSN> <u>Should be:</u> <Name>VOXX00B000456789000001M</Name> <DeliveryID>GOV-NAR-20080225</DeliveryID> <SSN>000456789</SSN> On Delivery Transactions Data Provider increments the batch iteration number and resends Transaction ZIP file.
910	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Delivery Id	XML must contain Delivery ID in the format specified above			X		A required field the provider changes and resends in the batch. Data Provider must update XML. On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.
914	Delivery/Insert Only	Duplicate batch An original Delivery file is only loaded once per batch name	Duplicate Batch				X	Delivery/Insert batches are unique. Data Provider verifies the batch and makes sure any additional batches for the original eOPF have unique names. If batch is needed, Data Provider resends as Modify/Insert or increments batch iteration number on Delivery Transaction ZIP file.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
915	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Multiple index files found	Multiple xml files Error 915: Multiple xml file			X		Each Transaction ZIP File only contains one index file. The Data Provider corrects and resends the Transaction ZIP File. On Delivery Transactions, Data Provider increments batch iteration number and resends Transaction ZIP file.
916	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Folder name and index file name in the Transaction ZIP file do not match (Index file not correctly generated)	Mismatch between folder name used for the Transaction ZIP file contents and the files names that make up the contents in the ZIP file folder Mismatch between folder name Error 916: Mismatch between folder name			X		Data Provider corrects and resends the Transaction ZIP File. <u>Incorrect format:</u> Folder: VOXX00B000456789000001M XML File: VOXX00B000456789000001M_0000000001.xml <u>Correct format:</u> Folder: VOXX00B000456789000001M_0000000001 XML file: VOXX00B000456789000001M_0000000001.xml On Delivery Transactions Data Provider increments batch and resends.
917	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Bad ZIP Most often the ZIP was not properly generated	Could not unzip Transaction ZIP File Error 917: Could not unzip batch.				X	The PMO Ops team must research the problem and notifies the provider of the issue. Data Provider corrects and resends Transaction ZIP File as Modify Insert On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
919	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	The folder name does not match batch name when the Transaction ZIP file is unzipped	Batch name does not match with folder name Error 919: XML batch name does not match					Data Provider verifies the transmittal id is included in the folder name when the transaction is packaged. The Data Provider corrects and resends. <u>Incorrect:</u> Zip File: VOXX00B000456789000001M_0000000001.zip Folder: VOXX00B000456789000001M <u>Correct:</u> Zip File: VOXX00B000456789000001M_0000000001.zip Folder: VOXX00B000456789000001M_0000000001 <u>Incorrect:</u> Zip File: VOXX00B000456789000001M_0000000001.zip Folder: VOXX00B000456789000001M <u>Correct:</u> Zip File: VOXX00B000456789000001M_0000000001.zip Folder: VOXX00B000456789000001M_0000000001 On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.
923	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Delivery ID does not match provider code	Invalid Delivery Id - does not match Provider Code in Batch Number					
924	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Delivery ID does not match agency code	Invalid Delivery Id - does not match Agency Code in Batch Number					
999	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Occurs when no other specific error code applies; occurs rarely; can occur at document or batch level	eOPF API Errors (Generic)	X	X	X	X	Data Provider contacts eOPF Point of Contact (Table 1) to determine corrective action.

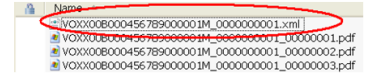
Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
DOCUMENT ERROR CODES								
2	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Incorrect Form Number	eOPFAPI:::Failed to create document. Unable to get Form ID.	X		X		Form Number does not exist in eOPF instance. Verify Form Number matches a form number found on eOPF Master Forms List for the agency instance. Data Provider resends document as Modify/Insert transaction using a valid form number. If match not found add the form to the agency form list within the eOPF application and reprocess submission. On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.
4	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	NOA Code >3 characters or code has invalid date range.	eOPFAPI:::Failed to create document. Unable to get Type ID using NOA1 and type description.	X		X		NOA1 is not associated with Form Number in eOPF Data Provider and Agency confirm NOA1 is correct. Using PMO instructions agency takes appropriate action regarding NOA1. On Delivery Transactions Data Provider increments the batch iteration number and resends Transaction ZIP File.
6	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Incorrect NOA2 Unable to find TYPE_ID in the TYPE table for the given NOA2	eOPFAPI:::Failed to create document. Unable to get Type ID using NOA2.	X		X		Form Type does not exist in eOPF. Data Provider and Agency confirm form type is correct. Agency corrects NOA2 according to PMO instructions. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
11	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Incorrect PDF file name	Invalid File Pointer; File does not exist			X		Cannot find the PDF file using the <PATH> information in the XML Transaction ZIP File. A PDF file is provided but the name does not match the filename provided in the XML file. Data Provider verifies XML and resends. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
12	Delivery/ Insert Modify/ Insert	Unitization problem – Multiple <PATH> entries in the XML file are pointing to the same PDF file in the Transaction ZIP file	Multiple Docs pointing to single PDF file			X		Data Provider verifies XML. When additional documents are required Data Provider resends documents in a new Transaction ZIP file. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
13	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Incorrect Image (page) count in PDF files Image count tag value does not match the images (page) count in the PDF file	Page Count Mismatch – the PDF file and the XML page count value do not agree	X	X			Data Provider verifies XML and resends. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
14	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	PDF is password protected. An error occurred while reading PDF file. An error occurred while generating images from PDF. File uses an unsupported security scheme.	Invalid PDF file		X			Data Provider verifies PDF does not have security preventing process from opening the file and is a properly formatted and resends. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
15	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid PDF Portfolio file or extended adobe file	Invalid PDF Portfolio file or extended adobe file		X			Data Provider verifies PDF does not have security preventing process from opening the file and is a properly formatted and resends. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
16	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Virtual folder is not established in agency eOPF instance Folder side does not exist in eOPF instance	Invalid Folder Side			X	X	Data Provider and Agency confirm folder side is correct. After agency corrects eOPF and/or the Data Provider's database, Data Provider resends. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
17	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Unable to find form-type link in FORML_TYPE table. Form type not associated to form Form number and form type are not associated in eOPF instance	eOPFAPI::Failed to create document. Unable to get Form-Type link.			X	X	Data Provider and Agency confirm form-type link is correct. Agency provides information to Data Provider. The Data Provider resends the transaction. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
801	Modify/Update Only	Doc ID is missing for GUID document with the type of INS Trying to update a document not in the system	Null Doc ID EXCEPTION::MISSING EOPF DOC ID				X	Modified document does not exist in eOPF with specified DOC GUID. Data Provider contacts eOPF PMO point of contact (Table 1) to verify the identified document exists in eOPF (may have been deleted by the agency or by previous batch). Error only occurs with Modify/Update Transaction ZIP files.
802	Modify/Update Only	Trying to update a document in a folder but the folder does not exist	Folder not found in the eOPF Instance. MISSING EOPF FLDR ID FROM EOPF_DOCUMENT TABLE				X	Data Provider contacts eOPF PMO point of contact (Table 1) to verify the missing folder exists in eOPF. There may be a change in identifying information. Data Provider verifies Transaction ZIP file contents and resends as Modify Update.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
901	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Transaction ZIP file contains one or more documents missing valid GUID values	Null GUID			X		GUID is a required field on all documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
902	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Form Number	Null Form Number			X		Form Number is a required field on all documents within a Transaction ZIP File. If match not found then correct the form on the agency form list within the eOPF application and then reprocess submission. Data Provider verifies XML and resends batch. On Delivery Transactions Data Provider increments the batch iteration number and resends Transaction ZIP File.
903	Delivery/Insert Modify/Insert	No Merge value	Null Merge Flag			X		Merge is a required field on all documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
904	Delivery/Insert Modify/Insert	No Duplex value	Null Duplex Flag			X		Duplex is a required field on all documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
905	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Source Side value	Null Source Side			X		Source Side is a required field on all documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resend Transaction ZIP File.
906	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Delivery Side value	Null Delivery Side			X		Delivery Side is a required field on all documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
907	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Form Type value	Null Type			X		TYPE is a required field on all NON NOA code indexed documents within a Transaction ZIP File. Data Provider verifies XML and resends batch. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
908	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Effective Date	Invalid Effective Date			X		The load process requires effective dates to be in a valid date format. The date must be within the valid NOA date range when a NOA code is present. Data Provider verifies effective date is later than 18 years after the employee's data of birth and before current date. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
911	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	No SSN or invalid SSN SSN in XML does not match an existing folder in eOPF This includes the following scenarios: - null value (911) - not 9 chars long (911) - employee not found (911)	Invalid/Null SSN Error 911: Invalid/Missing SSN!			X		A required field. The provider changes and resends the batch. If the SSN is sent correctly and this error is received the SSN is not in the database. Data Provider and Agency verify SSN contained in file has a folder in eOPF. Once confirmed or corrected by the Data Provider, Data Provider resends batch. On Delivery Transactions Data Provider increments the batch iteration number and resends Transaction ZIP file.
912	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	No index file found in the Transaction ZIP file	Error 912: Missing Index File			X		The XML file containing the indexing information for the documents contained in the transaction ZIP file is a required element within the ZIP file. The Data Provider corrects and resends transaction ZIP file.  On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.
913	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Index file format is incorrect	Error 913: Invalid XML	X		X		The index file is the XML file that contains the indexing information matching the PDF files in the Transaction ZIP file. Verify the XML tags and XML file are correctly formatted. The Data Provider corrects and resends Transaction ZIP File. On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
920	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Does not have at least one <Document> tag within the <DocumentList> tag	No Document List found in the XML Index file that is part of the Transaction File delivery No document list			X		Data Provider corrects and resends the batch. On Delivery Transactions Data Provider increments batch iteration number and resends Transaction ZIP file.
922	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Retention Date, >10 characters, or not prior to effective date	Doc Attrib Validation Invalid Retention Date			X		The load process requires retention dates to be in a valid date format. On Delivery Transactions the Data Provider increments the batch iteration number and resends Transaction ZIP File.
929	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Agency Code (Error: 929)	Invalid Agency Code – null, not = 4 chars, not found in db.					
930	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Filename(invalid Process Type) (error:930)	Invalid Process Type - must be in (B, D, L, E, P)					
931	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Filename(invalid Unique Identifier) (error:931)	Invalid Unique Identifier – null, not = 9 chars					
932	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Filename(invalid Batch Iteration Number) (Error:932)	Invalid Batch Iteration Number – null, not = 6 chars, not numeric					
933	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Add Invalid Batch Designator (Error:933)	Invalid Batch Designator - not = "M"					
934	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Transmittal ID – null, not = 10 chars, not numeric	Invalid Transmittal ID (Error: 934)					
935	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid File Iteration Number – null, not = 8 chars, not numeric	Invalid File Iteration Number (Error: 935)					

Error Code	Transaction Type	Description	eOPF Data Load Error Condition (as it appears in the code)	XML	PDF	Index Data	Other	Resolution
936	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Status – null, > 8, status not = 'Delivery' or 'Modify'	Invalid Status (Error: 936)					
937	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid Document Type	Invalid Type (Error : 937)					
938	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Invalid DocGUID – already exists	“Duplicate DocGuid” (Error code : 938)					
999	All transaction types (Delivery/Insert, Modify/Insert and Modify/Update)	Occurs when no other specific error code applies; occurs rarely; can occur at Transaction ZIP File level (e.g., Transaction ZIP file is 0 bytes in size) or document level where a document fails to process because of an error that is not corrected	eOPF API Errors (Generic)	X	X	X	X	Data Provider contacts eOPF Point of Contact (Table 1) to determine necessary corrective action.

8.0 Test Procedures

This section describes the eOPF IDF 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 transaction files prior to any production ingestion of data. These tests should be completed in a test environment prior to the Data Provider's transmission of production files. The testing process validates the connectivity between Data Provider and Host Provider, educates responsible parties of the activities involved for a successful 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 configured and tested format. When a provider changes the file or the contents of the file for an agency, the provider must work with the eOPF PMO to test the changes to ensure the service is configured to process the new/updated feed and loads.

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

8.1 Objective and Goals

The objective of testing is to ensure the successful processing of a Data Providers data feed by the eOPF IDF Service and the retrieval of processing receipts by the Data Provider to ensure complete reconciliation of the data feed transactions. The Data Provider must comply with the eOPF PMO's specifications for the eOPF IDF Service transaction files.

These are the goals for the test process:

- Communications between the Data Provider and Host Provider are working;
- All environmental configuration settings are correctly configured;
- Data Provider can receive and process the generated confirmation and error receipts;
- Agency has established processes for validating data after the IDF files process;
- 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 tests all types of transaction files available to the IDF Service; and Data Provider can support reconciliation of data feeds.
- 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.

8.2 Scope

The Agency and the Data Provider develop a test plan for review and approval by the eOPF PMO for all applicable processing software that needs 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 and Data Provider agreed upon process for eOPF confirmation/error receipts;

- Compliance with eOPF Agency Specific Forms List;
- Agency test results summary including test scenarios and test results; and
- Test environment with valid test accounts.

8.3 Roles and Responsibilities

The roles and responsibilities are in the following table.

Table 10. Test Procedure Roles and Responsibilities

Role	Responsibilities
eOPF PMO Operations Team	• Review and approve Data Provider's test plan • Direct Host Provider to create the necessary file agent scripts for purposes of testing • Provide troubleshooting to resolve issues • Provide management oversight to testing process • Establish the test date(s) with the Data Provider and Host Provider • Ensure appropriate agency personnel (e.g., HR Specialists) have training and access to testing facility to participate in validation steps of the testing procedure • Provide Test Environment – Configures all environmental settings • Assist with the testing criteria • Coordinate receiving the test data with the Data Provider • Provide feedback and analyze results during test runs • Ensure files delivered to the correct agency's staging directory • Ensure communications between the Data Provider and Host Provider are working • Verify Data Provider: can receive and process the generated confirmation and error receipts; can resolve errors; understands the required formatting for data feeds; tests all types of transaction files available to the IDF Service; can support reconciliation of data feeds; and, transaction file can be decompressed and read.
eOPF Host Provider	• Ensure infrastructure in place to process test data submitted • Locate, report, and track confirmation and error receipts • Troubleshoot any environmental errors • Analyze results and provide to DWP eOPF PMO, agency, and Data Provider

Role	Responsibilities
Agency	- Submits approved test plan to DWP eOPF PMO - Assures security and reliability of the provider's electronic approval process – must be equivalent to or greater than a wet signature - Tests, reviews and approves test results - Assures 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, etc. - Validates Agency specific requirements or custom specifications - Assures every form is tested and a form is submitted for each transaction file type: Delivery, Modify - Validates the eOPF accounts are updated with new documents and are viewable and printable in the test environment. Print all forms to determine: - Is the data correct? - Form number/form type - Source System Identifier (must appear on each form) - Indexing date - Effective date - Source side and delivery side - Merge folder - Duplex or two sided form - Do forms requiring an NOA contain an NOA? Vice versa? - Confirm version of the form is current version - Does the data in eOPF match the data in the file transmitted by the provider? - Does the data in eOPF match the data in the provider system? - Does the printed form in eOPF match the printed form in the provider system? - Completion of fields – - Does each form contain the minimum data that must be completed on all forms? Do all required fields contain data? - Is all data truncated appropriately? - Are optional fields formatted as null/blank? - Are the forms 508 compliant? - Does the data match the OPM guidance? Master Forms List? Agency Forms List? - Does the signature block contain the text "Electronically signed by <Signer Name>?" - Are all forms captured?
Data Provider	- Provide Connect:DirectSFTP connectivity which requires a license and must be configured, tested and verified by the Data Provider, agency and OPM - 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 the correct instance/directory - Reconcile files to assure the data loaded into an agency's eOPF instance matches the sent data - Assure delivery of a data feed file and content that matches the specifications found in the ICDs - 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

9.0 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
DHS	Department of Homeland Security
DOB	Date of Birth
DocGUID	Document's Globally Unique Identifier
DOE	Department of Energy
EEOC	Equal Employment Opportunity Commission
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
ICD	Interface Control Document
IRS	Internal Revenue Service
ISA	Interconnection Security Agreement
MOU	Memorandum of Understanding
NARA	National Archives and Records Administration
IBC	Interior Business Center
NFC	National Finance Center
NIST	National Institute of Standards and Technology
OMB	Office of Management and Budget
OPF	Official Personnel Folder
OPM	Office of Personnel Management
PDF	Portable Document Format

Acronym	Definition
PMO	Program Management Office
POC	Point of Contact
POID	Personnel Office Identifier
SBU	Sensitive But Unclassified
SDD	System Design Document
SFTP	Secure File Transmission 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

Appendix A. Delivery Test Plan

A.1 Test Design

The Agency and the Data Provider work with eOPF PMO to test the data feed file transmission to the Host Provider's environment and ensure it is delivered to the correct agency's staging directory. The test data feed file(s) are validated against the eOPF IDF Service in the Host Provider's test environment. Some of the feed files must contain errors that are used to validate the Data Providers ability to handle an error condition. This testing is an opportunity for the Agency, Data Provider, Host Provider, and eOPF PMO to become familiar with the IDF Service processes. It also allows the eOPF PMO to review the resulting IDF Service output with the agency.

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. For the IDF Service testing, a data provider must provide a test file for each form submitted in production. Each data feed is unique to a Data Provider and is used for reconciliation to assure the data loaded into an agency's eOPF instance matches the sent data. The test plan should include the following:

- Overview
 - Agency and Data Provider Information
 - Transmission Overview
 - Intended Schedule for Test Transmission to eOPF
 - Type of Data
 - Frequency of Transmissions
- Test Items
 - What To Test
 - What Not To Test
- Test Strategy/Approach
 - Types of Testing
 - Test Techniques
 - Test Environment Pass/Fail Criteria
 - Stress Testing
 - Any Special Tests Based on Custom Agency Requirements
- Validation Criteria and Process
- Resolution of Defects, Variances, and Incidents

A.2.1 TEST DATA

Test data submitted during this effort consists of IDF files in correct file formats.

Prerequisite:

- All tests create new forms in pre-stage employee folders in the agency's eOPF test instance.
- Test data must be agreed upon by all parties involved in the testing.
- Some data feed files contain errors and others contain no errors.
- Test files must be created and submitted using the information in this guidance which includes following the XML format previously 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.3 Test Rounds

The test rounds are described in the following table. Each round must be completed.

Round #	Test Description	Scenarios
1	Demonstrates Data Provider can construct a valid IDF file in XML format	Create, process, and ingest delivered file.
2	Successfully Process Various Records	- Scenario 1, verify the Data Provider can populate every element in the XML value with a value that meets the maximum number of characters defined in the specification. Insert the records to ensure no data is truncated and the resulting output is correct. - Scenario 2, verify the Data Provider can properly send a form record that has only mandatory elements populated and properly generates null elements in the XML file.
3	This section provides the steps to validate the data provider is able to correct a corrupt form data feed file. This round is coordinated with the eOPF Operations team so the errors can be communicated to the Data Provider for file modification and re-submission. Typically, a data provider may only need to resend form data feed files during the initial form data feed service setup and validation. Based on experience errors encountered in a mature IDF process are corrected on an individual basis by edits to the original data feed file as errors are typically limited to an individual record.	- Send file with missing file header element. - Send file with records missing mandatory fields. - Send file with no ending tag. - Send non-XML file with proper name but no content. - Send XML file without proper naming convention.
4	Test Agency Custom Specifications	Custom to agency.

A.3.1 ROUND 1

A.3.1.1 Scenario

This test round validates the data provider can construct a valid IDF file in XML format. The data feed file must contain all required tag elements and required fields. The test also verifies the Data Provider is delivering a data feed file and content that matches the specifications found in this document. This initial test round is conducted using error free data. Subsequent test rounds simulate error conditions using faulty delivery data to verify error handling by both the data provider and host provider. One or more form(s) (SF-50, SF-52, TSP-1, etc.) must be selected and agreed upon.

- Using an agreed upon test set of SSNs, the data provider creates one IDF file containing at least four form records. The IDF file must use the correct file naming convention and conforming file structure. It also must contain values that match the IDF service configuration settings.
- The Data Provider transmits the form data feed file using the SFTP software process established with the host provider. This test validates the connection is working between the Data Provider and the Host provider. It also validates the Host Provider can successfully route the file to the agency's dedicated IDF Service for processing.

- The IDF Service successfully ingests all four records into the eOPF test instance. If the ingestion fails, the problem is reviewed, solved and data is rolled back for another attempt. The form data feed file is resent until complete ingestion is successful. If any of the records fail, only the failed records are resent.
- The Agency validates four employee accounts and folders contain the ingested forms and can be viewed in the agency's test environment.

A.3.1.2 Data

This initial test round is conducted using error free data. All data elements are present and in the correct XML form data feed file format.

A.3.1.3 Expected Results

- The IDF file uses the correct file naming convention and conforming file structure.
- Pass the form data feed file with four form records. This validates the ability to send multiple forms in a single file.
- Pass all XML data elements and required data fields.
- The Agency can confirm the data in the file/established eOPF matches the data in the provider's data base.

Note: This test should be repeated for each form the Data Provider plans to send for an agency.

A.3.2 ROUND 2

A.3.2.1 Scenario

This test round demonstrates the Data Provider can produce form records that comply with the specification of the document. Depending on the form chosen, the Data Provider produces a combination of records to validate it can meet a variety of production scenarios.

- Using agreed upon test SSNs in the targeted eOPF test instance, the Data Provider creates form data feed files for the two scenarios bulleted above. For the first scenario, the form data feed file contains valid record entries for the target form. Each field of the form spec must be populated with the maximum length value. For the second scenario, the form data feed file contains valid record entries for the target form however only the mandatory elements are populated. The remaining elements are null. The Data Provider sends Form Data feed files in XML file format for both scenarios.
- The files are properly staged using SFTP File Agent Scripts which places the IDF file into the appropriate waiting folder to be ingested.
- The IDF Service successfully ingests all records into the eOPF test instance. If the ingestion fails for a record, the record is place in an XML file in the service's reprocess directory where the problem is reviewed, solved and the service attempts to process the record again. If necessary, the Data Provider resends the IDF file until complete ingestion is successful. If any of the records fail, only the failed records are resent.

- The Agency validates the eOPF accounts were updated with new documents and are viewable in the agency's test environment.
- Repeat steps based on scenarios described above until all parties agree the test is successful.

A.3.2.2 Data

This test round is conducted using error free data. All data elements are present and in the correct XML form data feed file format.

A.3.2.3 Expected Results

- All record elements are populated. Review generated form to verify output results in all fields populated.
- All record elements meet maximum allowed length. Review generated form to verify output results in all fields populated, are not truncated and the data fits in allocated space on the form. Review Import_<Form> table to ensure all records are captured.
- The Agency can validate all mandatory elements are populated and optional fields are formatted as null. The Agency can review form record sent by Data Provider to verify mandatory and optional fields are correct.

A.3.3 ROUND 3

A.3.3.1 Scenario

- The Data Provider creates IDF files containing test data that rejects based on malformed XML. (for example, sending invalid special characters):

Action	Expected Error
Send file with missing file header element.	Unable to process file. - File is sent to reprocess directory for troubleshooting. Data provider corrects and resubmits file.
Send file with records missing mandatory fields.	File is processed until encountering bad record. - File with remaining records is sent to reprocess directory for troubleshooting. Data provider corrects the bad records and resubmits.
Send file with no ending tag.	File cannot be processed. - File is sent to reprocess directory for troubleshooting. Data provider corrects the tag and resubmits file.
Send non-XML file with proper name but no content.	File cannot be processed. - File remains in the waiting folder/directory. Data provide provides an XML file.
Send XML file without proper naming convention.	File cannot be processed. - File remains in the waiting folder/directory. Data provider corrects the XML and resubmits file.

- The files are properly staged (using SFTP File Agent Scripts) and ingested by the eOPF IDF Service into the eOPF test instance.
- The eOPF Operations team provides the data provider with information on the rejected records or files.

- The Data Provider reviews the errors provided by the eOPF Operations team.
- The data provider creates a new Index data feed file containing only the rejected records that were corrected. The corrected form data feed files are properly staged (using SFTP File Agent Scripts) and ingested by the eOPF IDF Service into the eOPF test instance.
- This step is repeated until all records are tested and validated by the Agency.

A.3.3.2 Data

This initial test round is conducted using data containing errors. This round must be coordinated with the eOPF Operations team so the generated errors can be communicated to the data provider for modifications and resubmission.

A.3.3.3 Expected Results

- The IDF file uses the correct file naming convention and conforming file structure.
- File is sent to reprocess directory for troubleshooting. Data provider corrects and resubmits file.
- The data provider corrects the erroneous data files, data loads and the agency is able to validate the results.

A.3.4 ROUND 4

A.3.4.1 Scenario

This test round provides a template to support any agency specific requirements.

- The Data Provider creates a form data feed file(s) that meets the agency specific requirements, i.e., DA-3434, AO-52.
- The Data Provider sends the form data feed file(s) for processing.
- The form data feed file(s) are properly staged (using SFTP File Agent Scripts) and ingested by the eOPF Form Data Feed Service into the agency eOPF test instance.

- The Agency evaluates the results and if errors are identified then the Data Provider must correct the data feed file and resend.

A.3.4.2 Data

The test round is conducted using data appropriate to the agency specific custom requirements. All data elements are present and in the correct XML form data feed file format. Any specific error testing must be designed into the test data.

A.3.4.3 Expected Results

- The IDF file uses the correct file naming convention and conforming file structure.
- All record elements are populated. Review generated form to verify output results in all fields populated.
- The Agency is able to validate the results meet the agency specific custom requirements.

A.4 Test Completion

The completion date for testing and approving the Data Provider's test submissions is determined by the eOPF PMO. The number of times the tests are executed is determined by the eOPF PMO.

The implementation of the IDF files and transmission of forms to eOPF must occur within 45 – 60 days after testing is completed and approval received. If it does not, the PMO will not accept any transmissions until a review is completed.



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