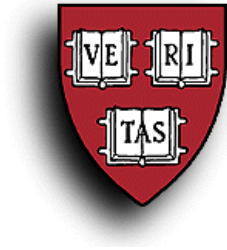


## **Information Technology – Infrastructure Services**

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### **IdM Import User Guide - Log File Errors and Warnings**

**Version 1.1**

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Title: **IdM Import Users Guide – Log File Errors and Warnings**

Synopsis: This document details the error and warning messages that are logged as part of the processing method for data imports to the IdDB.

Status: APPROVED



## Amendment History

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## 1 INTRODUCTION

At the completion of processing a XML data feed to the IdDB a log file is produced. The log file has been developed as a means for a file provider to verify that all records were processed. When a record errors the provider is advised and may determine the necessary action to take. Some actions may require technical intervention, some may be business decisions.

***It is not recommended that the log files be transmitted via e-mail. The file may contain sensitive data such as HUID, name and SSNs. Transmitting in those cases via e-mail would violate Harvard security policies.***

Log files are text files. It is recommended to open in WordPad or similar text editor. The log will contain a list of each error or warning as well as a summary of the processed file. Each error or warning will contain the following information:

- Severity
  - ERROR – the record was not processed – the data within the erring object was not stored.
  - WARNING – the record was processed however the data may be incomplete
- Timestamp – the time the record processed subsequently logging this error
- HUID – the HUID of the record where the error / warning occurred
- Detail of the error / warning

The summary will contain the following information:

- File name of the file processed
- Time the file started processing
- Time the file finished processing
- Number of person objects processed
- Number of errors reported
- Number of warnings reported

Regardless of successful or unsuccessful processing the log file will contain the summary of the file processed. Exception: if a file is delivered with an incorrect file name a log file will not be produced. For proper file naming please refer [IdMImportDevelopersGuide\\_FileNamesAndDelivery.doc](#).

## 2 LOCATION

Log files will be available in the reciprocal outbox to where the file was dropped.

File delivered from provider will be dropped here:

Server: ITIS-APPROD1.HARVARD.EDU  
Directory: /u03/ftp/<customer-abbr>/idm/inbox

Log file post processing will be available here:

Server: ITIS-APPROD1.HARVARD.EDU  
Directory: /u03/ftp/<customer-abbr>/idm/outbox

And

Server: ITIS-APPROD1.HARVARD.EDU  
Directory: /u03/ftp/<customer-abbr>/idm/outbox/rw

Where <customer-abbr> is a predefined name used for each import provider. Please contact [directory\\_services@harvard.edu](mailto:directory_services@harvard.edu) if you are unaware of your assigned <customer-abbr>.



### 3 FILE NAMING

The log file name will be named appropriately for easy matching to the files delivered. It will also be clear from the log file name whether the file processed error / warning free or contained errors or warnings. Should the file process error and warning free the PROCESSFLAG will read 'OK'. Should the processing encounter errors or warning with PROCESSFLAG will read 'NOK'.

The file naming format is as follows:

```
<CUSTOMERNAME>.<DATETIME>.<FLOW>.<FILETYPE>.<DATABASE>.<SEQUENCE>.<PROCESSFLAG>.<format>
```

Example of the file name delivered - CFADEF.200611200939.IMP.INC.DEV.00001.xml

Example of the corresponding log file name error & warning free –  
CFADEF.200611200939.IMP.INC.DEV.00001.OK.log

Example of the corresponding log file name containing error or warnings –  
CFADEF.200611200939.IMP.INC.DEV.00001.NOK.log

### 4 CONTENT

The following section outlines each error and warning message that may be encountered in a log file. Each message has a given set of parameters that correspond to where the error / warning was encountered in the given XML file. In the below example the parameters would be as follows:

- object name - **person**
- field name – **birthDate, gender, effectiveDate, effectiveStatus, updateBy, updateDate** or **updateSource**
- object's key value – these cannot be determined by examining the XML. Please refer to the given import's functional specification for the object key values.
- Value – **2000-01-06, F**, etc

```
= <pd:person action="update" univId="XXXXXXXX">  
  <pd:birthDate>2000-01-06</pd:birthDate>  
  <pd:gender>F</pd:gender>  
  <pd:effectiveDate>2007-07-03T16:10:31-05:00</pd:effectiveDate>  
  <pd:effectiveStatus>A</pd:effectiveStatus>  
  <pd:updateBy xsi:nil="true" />  
  <pd:updateDate>2007-06-11T12:06:00-05:00</pd:updateDate>  
  <pd:updateSource>ABC</pd:updateSource>
```

#### 4.1 XML parsing/XSD validation messages

- [????????] XSD validation errors found in the XML element:  

```
<pd:person action="update" univId="XXXXXXXX">
```

  - All files / records must pass XSD validation. This error message indicates a given record did not pass validation. After the above message the log will include the entire record that did not pass validation. The next error message will give the exact line that did not pass validation. For example: Error at line 257, column 46: (1) The value '' of element 'pd:roleStartDate' is not valid. (2) '' is not a valid value for 'dateTime'. Technical assistance may be required to correct.



## 4.2 Field validation

- Message Parameters:
  - {0} = a field name
  - {1} = an object name
  - {2} = the object's key value
- Error Messages
  - A(n) {0} value is required in the {1}[[id:{2}]].
    - Each record has mandatory elements – this indicates that a mandatory element is missing.
  - The {0} value is invalid in the {1}[[id:{2}]].
    - Code elements must be within the defined IdM codes lists. The IdM codes can be found here: <http://xml.cadm.harvard.edu/idm-xml/>. If a new code is defined in a providers environment it must be coordinated with the Directory Services team prior to persons' records being sent with the new code included.
  - Import of the {0} field in the {1}[[id:{2}]] is not allowed.
    - Each provider has a defined set of codes which may be submitted. The defined set is listed in the given provider's import functional specification.
- Warning Messages
  - ~none~

## 4.3 Data Format

- Message Parameters:
  - {0} = an object name
  - {1} = the object's key value
- Error Messages:
  - ~None~
- Warning Messages:
  - The role end date must follow the role start date in the {0}[[id:{1}]].
    - It is logical in the majority of cases that the role end date follows the role start date. The record will be accepted however the warning is logged in case the dates are in err.
  - The telephone number must contain 10 digits for domestic and must start with 011 for foreign in the {0}[[id:{1}]]. Record imported with malformed data. Please take steps to prevent this in the future.
    - As directories rely on phone numbers being complete, a warning is issued when a phone number is not the proper length. The record is stored.
  - The telephone number should not contain any special characters in {0}[[id:{1}]]. Record may have been imported with malformed data. Please take steps to prevent this in the future.
    - IdDB stores all phone numbers without special characters. It is expected that customers remove special characters prior to submitting phone records. A warning is issued when a phone number is submitted without the proper formatting.
  - The username and domain should not contain the '@' symbol or any invalid characters in {0}[[id:{1}]]. Record may have been imported with malformed data. Please take steps to prevent this in the future.



- It is expected that customers provide well formatted email addresses. To ensure that e-mail addresses are properly formatted & reduce the incidents of sorting invalid email addresses this warning is logged prior to stripping out the bad data & storing.

## 4.4 Illegal Values

- Message Parameters:
  - {0} = the illegal value
  - {1} = an object name
  - {2} = the object's key value
- Error Messages:
  - Invalid source value, {0}, found in the {1}[id:{2}].
    - Each provider has a defined value to use as the source for a record. This error is logged when the defined value is not provided. The defined value is included in the provider's import specification.
  - The category/type, {0}, found in the {1}[id:{2}] is not allowed from this source.
    - Each provider has a defined set of category/types which may be submitted. The defined set is listed in the given provider's import functional specification.
  - The subcategory/subtype, {0}, found in the {1}[id:{2}] is not allowed for the given category/type.
    - Each provider has a defined set of subcategory/subtype which may be submitted. The defined set is listed in the given provider's import functional specification.
  - The action, {0}, specified for the {1}[id:{2}] is not allowed from this source.
    - This error is logged when the action, usually a delete, is not allowed per business rules from the given source or because it would leave the person's record in a poor state. For example, if a provider attempted to delete a person's OFFICIAL name.
- Warning Messages:
  - The location id, {0}, is not allowed for the CITYSTAT location type in {1}[id:{2}]. Record imported with malformed data. Please take steps to prevent this in the future.
    - Per the specifications of the location type of CITYSTAT type is submitted, the location identifier must be blank. The data is stored with this warning message logged so that the provider is advised that this is not appropriate.
  - A location of, {0}, is not allowed for an employee listing in {1}[id:{2}]. Record imported with malformed data. Please take steps to prevent this in the future.
    - Per the specifications, OFFICE is the only valid location type for employee (listing category = E) listings. If another location type is submitted this warning is logged. The data is stored with this warning message logged so that the provider is advised that this is not appropriate.
  - A location of, {0}, is not allowed for a student listing in {1}[id:{2}]. Record imported with malformed data. Please take steps to prevent this in the future.
    - Per the specifications, DORM, MAILSTOP and CITYSTAT are the only valid location types for student (listing category = S) listings. If another location type is submitted this warning is logged. The data is stored with



this warning message logged so that the provider is advised that this is not appropriate.

## 4.5 Illegal Objects

- Message Parameters:  
{0} = an object name
- Error Messages:
  - Import of {0} objects, present in the import file, is not allowed. Please take steps to prevent this in the future.
    - Each provider has a defined set of data which they are authorized to submit. If a data object outside this authorized set is submitted this error is logged. The data is not stored. The defined set of data which each provider is authorized to submit is outlined in the given import specification.
- Warning Messages:
  - ~none~

## 4.6 Person Errors

- Message Parameters:
  - ~none~
- Error Messages:
  - Unable to populate the necessary person, name, and/or role records to create a full person profile.
    - To ensure that the IdDB has enough data to build a person record the import process validates that it has the minimal acceptable data (official last name, date of birth & at least 1 role record). If not, this error is logged. When the error is corrected the entire record must be resubmitted. For example, if a person was initially submitted missing a date of birth. When this data is added the record must be resent with the person, name & role objects.
  - Unable to add new roles or extend role end dates for a person with a Persona Non Grata status.
    - The Persona Non Grata status indicates that this person has been issued a trespass letter. The IdDB will restrict systems from extending role dates or adding new roles to a person who carries this status. Please contact directory services to discuss options should this error arise.
- Warning Messages:
  - ~none~

## 4.7 Directory Listing

- Message Parameters:  
{0} = an object name  
{1} = the object's key value
- Error Messages:
  - Unable to add the {0}[[id:{1}]]. The maximum number of employee listings has already been reached.
    - There is a maximum of 4 current employee listings per person. This error is logged should more be submitted. The data is not stored.
  - Unable to add the {0}[[id:{1}]]. The maximum number of student listings has already been reached.



- There is a maximum of 1 student listing per person. This error is logged should more be submitted. The data is not stored.
- Unable to update the {0}[id:{1}] because a parent listing record does not exist.
  - The IdDB database requires that dirListingData or dirListingLocation objects have a corresponding dirListing parent record (listingID for each will be equal, this is how they are connected). Technical assistance would be required if the dirListing object is not being submitted with a dirListingData nor dirListingLocation object. The dirListing object need only be submitted when a new record is added, further updates do not need to have the corresponding dirListing object submitted as it already exists.
- Warning Messages:
  - ~none~

## 4.8 Code Validation

These errors / warnings are only logged for code file imports (not submitted by the majority of providers).

- Message Parameters:
  - {0} = a field name
  - {1} = an object name
  - {2} = the object's key value
- Error Messages:
  - A(n) {0} value is required in the {1}.
    - This error is logged when a field that is required per business logic (not the schema) has not been provided.
  - Invalid source value, {0}, found in the {1}.
    - Each provider has a defined value to use as the source for a record. This error is logged when the defined value is not provided. The defined value is included in the provider's import specification.
  - Unable to {0} the {1} because the record does not exist.
    - This error is logged when a delete action is provided for a code that does exist in the IdDB.
  - An unexpected error occurred while attempting to {0} the {1}.
    - This points to an issue on the IdM processing side. Please report to directory services (directory\_services@harvard.edu).
- Warning Messages:
  - ~none~

## 4.9 General

- Message Parameters:
  - {0} = an object name
  - {1} = the object's key value
- Error Messages:
  - Unable to delete the {0}[id:{1}] because the record does not exist.
    - Should a delete be received for a record that the IdDB does not have this error will be logged. It may be ignored unless there is a particular reason to believe that the record should have existed in the IdDB.
  - An unexpected error occurred while attempting to update the {0}[id:{1}].



- This points to an issue on the IdM processing side. Please report to directory services ([directory\\_services@harvard.edu](mailto:directory_services@harvard.edu)).
- A violation of import policy prevented a deletion of the {0}[id:{1}].
  - While other systems allow a person's record to be fully deleted, it is not permitted in the IdDB. Please contact directory services [directory\\_services@harvard.edu](mailto:directory_services@harvard.edu) to advise that a deletion of a person's record has occurred and it will be resolved using a business process.
- The Authorizer ID for {0}[id:{1}] is invalid because the HUID does not exist.
  - An Authorizer must have a valid HUID. If submitted without an HUID this error will be logged. It should be resubmitted with a valid HUID.
- The Authorizer ID for {0}[id:{1}] is invalid because the role is not active.
  - Per business rules, an Authorizer must have a current role at the University. If the Authorizer does not have a current role, this error will be logged. It should be resubmitted when the Authorizer's data has been corrected or another Authorizer is submitted.
- The Authorizer ID for {0}[id:{1}] is invalid because the official email is not set.
  - Per business rules, an Authorizer must have an official email address. If the Authorizer does not have an official email address, this error will be logged. It should be resubmitted when the Authorizer's data has been corrected or another Authorizer is submitted.
- The Authorizer ID for {0}[id:{1}] is invalid because the employee role requirement of the authorizer is not met.
  - Per business rules, an Authorizer must have an employee role of a specific employment class (A, F, G, I, J, N, O, Y, Z). If the Authorizer does not have an employee role record of one of these classes, this error will be logged. It should be resubmitted when the Authorizer's data has been corrected or another Authorizer is submitted.
- Import of future effective dates is not allowed for {0}[id:{1}]. Please take steps to prevent this in the future.
  - Per business rules, only employee & poi role objects may be submitted with future effective dates. This error will be logged should any other object be submitted with a future effective date.
- Warning Messages:
  - ~none~