

Creating Files to Upload into EvaluationWeb: A Primer for Programmers

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Getting Help

For technical assistance, including username and password help, contact the Luther Consulting Support Services help desk at:

- help@lutherconsulting.com
- 866.517.6570 option 1 (toll-free)

Change History

History

The table below logs the changes that have been made to this document over time.

Version	Changes	Author	Date completed
n.a.	Combined documents “ExcelNotes.pdf” and “Guidelines for Programmers” (http://schemas.lutherconsulting.com/tips.html) with additional content	JL	03/28/2014
n.a.	Added warning for uploading files with IDs 15 or greater characters for Excel files	TM	09/29/2015
n.a.	Added information about the PSv2 1 Excel.zip template	TM	10/19/2015
1.4	Minor corrections	TM	02/08/2016
1.5	<ul style="list-style-type: none"> • Added new versions to the list of schemas/templates • Added info about including the entire record to avoid losing data (when updating a Form ID for HIV testing or a Local Client ID for client-level RRA and partner services) • Modified formatting/minor changes • Added a section on using the PS v2.1 multi-sheet file 	TM	09/20/2016

Introduction

General Notes

- When modifying or updating an HIV Testing data record (formID) or a Client-level RRA or Partner Services record (localClientID), be sure to upload all historical data in the record, not just the modifications.

When you commit a record to the database, all data previously uploaded for that record is overwritten in the database.

Therefore, if you only include modifications and updates in an upload record, that is the only data that will remain in the database for that record after you commit it.

Warning

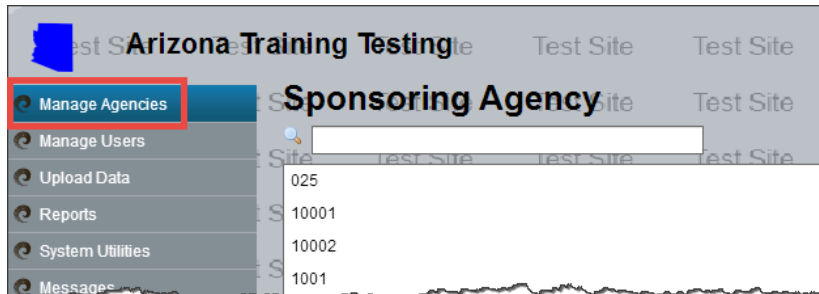
You may lose data from the database when modifying or updating an upload record if you do not include the entire history of the record, as explained in this section.

Resources

- [EvaluationWeb PS v2.1 XML Records: Using Case Numbers Correctly Job Aid](#)
- [EvaluationWeb PS v2.1 Excel Records: Using Case Numbers Correctly Job Aid](#)
- [EvaluationWeb File Upload Tips and Tricks II training video- August 2015](#)
- [Uploading Files to EvaluationWeb User Guide](#)
General documentation that details how upload functions work in EvaluationWeb.
- [EvaluationWeb Help page, Upload section](#)
Technical information about upload file formats.
- [EvaluationWeb Help page, Resources section](#)
Data requirements and system requirements.
- [NHM&E Data Variables and Values \(DVS\)](#)
Contains all variable descriptions and valid values for Excel and XML formats.

Local Identifier Notes

- Agencies, Sites, and Interventions must all be created in EvaluationWeb prior to uploading data to the system. This can be done via the AgencyInfo.xml file or by using the Manage Agencies feature in the EvaluationWeb system administrator interface.



- Note that Agency IDs are shared across all data types. So if Agency ID 1001 is “My HIV Prevention Agency,” then using “1001” for Agency ID in a Partner Services or RRA file indicates that those services were performed by “My HIV Prevention Agency.”
 - You cannot use the same Agency ID to indicate different agencies based on the type of data collected (HIV Testing, Partner Services, RRA)

XML Notes

- Creating an XML data file requires knowledge of the database structure in which the data is stored, and requires basic to intermediate computer programming skills.
- Knowing how to read and validate against an XSD is a key skill for successfully completing an XML upload. You can find information on how to read and use an XSD at:
 - The W3C XML Recommendation page [Extensible Markup Language \(XML\) 1.0 \(Fifth Edition\)](#)
 - [The w3schools XML Tutorial](#)
- For the newer schema types (CTv3/v3.1, Aggregate and Client level), the entities (agencies, sites, interventions, and programs) must already exist in EvaluationWeb. To create and manage these entities, use the AgencyInfo.xml file, or use the Manage Agencies feature in the EvaluationWeb system administrator interface.
- Aggregate level, Client level, and Partner Services XSD rules are generally very strictly enforced (almost all rule violations trigger an error).
- Each file format has a core record level. For example:
 - Partner Services uses "client"
 - HIV Testing uses "HivForm"
 - Aggregate-level data formats use "aggregateData"
 - Client-level formats use "client"

Each of these types has unique identifying information:

- formId (CT)
- clientId (CL)
- localClientId (Partner Services)
- period and organization for Aggregate

These are generally considered unique at the agency level, so for example, two test records with the same Form ID from the same agency are considered to be the same event, while two records with the same Form ID from different agencies are not.

- In order to update records, the unique identifier in the uploaded file must exactly match a record already in the system. For example, to update information on client 123 in agency ABC using the v2 schema:

```
<agency agencyId="ABC">
  ...
  <client status="U" localClientId="123">
  ... Put actual updated record here ...
  </client>
  ...
</agency>
```

- When updating a record, you must include the full record every time you upload it. This is because there is no guaranteed unique identifier for the subentry components. For example, in order to add another session to a client's record, all sessions for that client must be included in the updated record because there are no IDs associated with client sessions.
- If a section lists optional data that is often not collected, it might not be included in the sample files. For example, worker information is not included in the Partner Services v1 sample file.
- Since uploads match existing entities (agencies, sites, interventions, and programs) based on IDs, we require that all entities in the system have an assigned ID in order to prevent duplication. This is announced when you enter the upload window, and records with missing IDs will prevent you from uploading. IDs can be added by using the AgencyInfo.xml schema or by using the Manage Agencies feature in the EvaluationWeb system administrator interface.

Excel and CSV Notes

- The following file formats are accepted:
 - .xlsx (Excel 2003–)
 - .xls (Excel 1997-2003)
 - .csv (comma-separated values)
- The sheet containing data to be processed must have an identifier in cell A1, and it must be an exact match with one of the identifiers in the table below.

Identifier to Be Entered in Cell A1	Sheet Type
<i>Important:</i> The identifier is case sensitive, and spaces matter.	
CTR v2.1	For the Excel version of CTR v2.1
CTR V3.1 Tests	CTR v3.1 Excel format (all but Deletion section)
CTR v3.1 Deletion	CTR v3.1 Excel format for the Deletion section
HIV Testing v3.2 Tests	CTR v3.2 Excel format (all but Deletion section)
HIV Testing v3.2 Deletion	CTR v3.2 Excel format for the Deletion section
HDAG v1	Health Department Aggregate Variables
CBOAG v1	Directly Funded CBO Aggregate Variables
PS V2.1 Client	For the Excel version of Partner Services v2.1

- For categories having more than one valid sheet type, you may upload a .zip file containing one file for each sheet type, or you may include them as separate sheets in a single file.
- The grouping line is not required in submitted files (present in non-Partner Services templates for clarity, in row 2)
- The header row must be in row 2 or 3.
 - The header row is in row 2 in the Partner Services template, but is in row 3 in the other templates. The extra row may be used for grouping headings logically to make the data more readable to humans, but is ignored in upload processing.
- You may use whatever formatting you desire for fonts, colors, borders, etc. It will be ignored by the upload processor.
- The Status column must be populated with one of the following:
 - N - New record
 - U - Updated Record
 - D - Delete Record*
 - R - Resubmitted Record

A - Add to (Aggregate Only)

*Sufficient information to uniquely identify the record must be included in the row. For example, in CT data, either the full system Form ID (something like ST01234X000000000_123456789) or the originally submitted Form ID and the Agency ID are needed. For Aggregate-level data, the year and month/period, Agency ID, Intervention ID (if specified in the existing record), and Program Announcement must all be specified. Details are provided in the sections below pertaining to the specific file types.

- Values submitted should be identical to those submitted in the equivalent XML format (and in the most recent DVS), with the exception that leading zeros may be safely omitted in the Excel format.
 - RaceValueCode#: You may specify up to 5 values for Race. If a client identifies just one race, report it in RaceValueCode1. If 2 races, report them in RaceValueCode1 and RaceValueCode2. Similarly, if an Additional Risk is indicated, report it in OtherRisk1. If 2 Additional Risks are indicated, report them in OtherRisk1 and OtherRisk2.
- For formats that allow (CTR) or require (Client-level, Partner Services) multiple sheets, the sheets may be either:
 - one file per sheet
 - one file, with each sheet a different tab, within a zip file

More than one instance of the same sheet type may not be included in a single upload. For example, in Health Department Client Level, you must have Client, Enrollment, and Risks sheets. These can be one file with 3 tabs, or 3 files. However, you cannot have two client sheets in a single upload.

- Excel will truncate 16-character IDs (or longer) entered into an Excel template, resulting in incorrect IDs being committed to the EvaluationWeb database when the file is uploaded.

To avoid this issue, format long IDs as 'Text' in the Excel file instead of as 'General' or 'Number,' and the ID will be uploaded and committed correctly.

 **Warning**

Excel will truncate IDs that are 16-characters or longer, resulting in incorrect IDs being committed to the database. To avoid this issue, format long IDs as 'Text' in the Excel file, as described to the left.

HIV Testing Data

Uploading HIV Counseling and Testing Data

- The CTData v2.1 XML schema still works in EvaluationWeb.
 - This schema will build out new agencies, interventions, and site locations and therefore, it does not require the use of the AgencyInfo.XML schema to add new agencies, interventions, and site locations.
- The CTData v3.0, v3.1, and v3.2 XML or Excel formats will **not** build out new agencies, interventions, or site locations included in the file. Therefore, prior to uploading a CT v3.x XML file, you can either upload an AgencyInfo.XML file to add new agencies, interventions, and site locations, or you can add them manually by using the Manage Agencies feature in the EvaluationWeb system administrator interface.
- The CTData v3.0 schema provides for the Housing Status variable in the original format, which allows the selection of more than one option. However, the CTData v3.1 and v3.2 files provide for the revised Housing Status variable, in which only one option may be selected.

Deleting HIV Counseling and Testing Data

- To delete data from EvaluationWeb, the system must know precisely which record in the system you intend to delete. There are two ways you can do this:
 1. By using the 'D' status (for Delete) in a standard record
 2. By using the specialized Delete section of the XML or Deletion sheet in Excel, which is available in Version 3 and higher.

The precise way to specify which record to delete will depend on whether you are using the 'D' status for a standard record or the specialized XML/Excel Delete format.

- In general, we recommend using the Version 3 Delete format. It allows the deletion of records entered either through file upload or direct data entry (DDE), and you can use a Version 3 Delete format even if records were uploaded using an earlier version of the XML (V1 or V2.1).
- To delete HIV Testing data from EvaluationWeb using the Version 3 format, use the expanded Form ID or the submitted Form ID and the Agency ID.
 - For a submitted Form ID that looks like “**3680122CBA2011**”, the expanded Form ID looks something like “**VT0200X00000_3680122CBA2011**”.
Note: The information to the left of the underscore starts with the jurisdiction abbreviation
 - The submitted Form ID and the expanded Form ID are available in Reflexx.

- In the XML XSD, the Deletion section is located near the top, and looks like the following:
 <!--

Records can be deleted either by including this section, or by marking it with a status of D in the HivForm section

```
-->
<xs:element name="deletions" minOccurs="0">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="form" minOccurs="unbounded">
        <xs:complexType>
          <xs:attribute name="agencyId" use="optional"/>
        </xs:complexType>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</!--
```

Either the FULL (up to 30 digit) EW form id or the agency id must be provided

```
-->
<xs:attribute name="formId"/>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<!-- xxxxxxxxxxxxxxxxxxxx -->
```

Note: The XML XSD is located at: http://schemas.lutherconsulting.com/CTData_v3.1.xsd

- In the Excel/CSV version, the Delete format is contained in the set of sample worksheets, and looks like the following:

| | A | B | C |
|---|--------------------------|----------|--------|
| 1 | CTR v3.1 Deletion | | |
| 2 | Form Info | | |
| 3 | formId | agencyId | Status |
| 4 | MKSS01 | 40921 | D |
| 5 | AZ0091X000000_0855497890 | | D |

Note: The set of sample worksheets containing the Excel/CSV version is located at: <http://schemas.lutherconsulting.com/samples/CTRTemplateV3.1.zip>

Special Notes for Using Status D in Upload Records

- To ensure data integrity and backward compatibility, there are some special rules for using the 'D' status in standard upload records (rather than the specialized Delete format described above). The special rules are:
 - For Version 2 (standard records, status "D") and Version 3 (standard records, status "D"), you must use the submitted Form ID and the correct Agency ID (matching the Agency Local ID for the record).

- As this is a standard record, you must provide a complete record for it to pass XSD validation, even though you simply want to delete the record.
- You cannot delete records entered via DDE using this method.

Partner Services Data

- The following Partner Services sample files, schemas, templates, and XSD files are currently available for upload of Partner Services data:
 - [PS v2.0 XML](#) (for data collected before January 1, 2013)
 - [PS v2.1 XML](#)
 - [PS v2.1 Excel/CSV](#) template and sample data
 - [XML Sample File](#) (for version 2.0)
 - [Partner Services XSD](#) (for version 2.0)
 - [Partner Services XSD](#) (for version 2.1)
- Uploading a PSv2.0 or v2.1 file will not add new agency information automatically to the database.
 - If you need to add new agencies to the system for Partner Services, prior to uploading Partner Services XSD files, you can either upload the AgencyInfo XML file or you can add the agencies through direct key entry by using the Manage Agencies feature in the EvaluationWeb system administrator interface.
- A Partner Services Excel format template is available as PSv2 1 Excel.zip.
 - As the filename implies, all the worksheets in the file must be included and then zipped in order to upload the file. Further details about this version:
 - When submitting records, the entire record must be uploaded, not just additions, updates, or modifications to a record. The new record will overwrite the old record completely, so if updates only are included in the upload record, then all other data previously uploaded for the record will be lost.
 - Update statuses are no longer used for records.
 - The following variables are no longer used:
 - Variable A02 <populatedAreaValueCode>
 - Variable X503 <totalNumberOfPartnersClaimed>
 - Variable PCR202a <localPartnerServiceId>
 - Variable X303a <specifyReasonUnsuccessAttempt>

Special Notes for PS v2.1 Excel Format

PS v2.1 Excel file is a multi-sheet file and therefore is different from other Excel upload files:

- The Partner Services database is made up of multiple relational data tables--and the PS v2.1 Excel file reflects the relational nature of this data as it has multiple worksheets, which are:
 - As An Index
 - As A Partner
 - Attempt to Locate
 - Client
 - Elicit Partner

- Exposure Notification
 - Partner Service Cases
 - Referral
 - Risk Profiles
 - Sessions
 - Sites
- Every PS v2.1 Excel file uploaded must contain all of these worksheets (even if a worksheet is blank), because the data on the different worksheets is related to each other, and if you don't include all the worksheets, you will get an upload error.
 - You may upload files in .xls or .xlsx format, or you make use .csv format.
 - The Excel worksheet has 11 worksheets, but the .csv version has 12 .csv files in a zip file. (The .csv zip file has a Deletions file that the Excel file does not have.)
 - EvaluationWeb can process .csv files more quickly than Excel files.
 - The Sites and Client worksheets are the primary worksheets and as such they contain the primary record identifiers, which are siteID and localClientID respectively.
 - You cannot repeat a particular siteID or localClientID in either of these worksheets. (However, this rule does not apply to the other worksheets, in which you may sometimes need to repeat an ID.)



The training video [EvaluationWeb File Upload Tips and Tricks II](#) has been made available on the EvaluationWeb Help page. It includes technical details, including screenshots and explanations for each sheet of the PS v2.1 Excel file. Look for the section on Partner Services towards the end of the video.

Risk Reduction Activities Data

- The following [RRA schemas, templates, and XSD files](#) are currently available for upload of Risk Reduction Activities data
 - Health Department Aggregate v1.0 (XML)
 - Health Department Aggregate v1.0 (Excel/CSV)
 - Health Department Client Level v1.0 (XML)
 - Directly Funded CBO Aggregate v1.0 (XML)
 - Directly Funded CBO Aggregate v1.0 (Excel/CSV)
 - Directly Funded CBO Client Level v1.0 (XML)
- Similar to Partner Services uploads, you must create new agencies, sites, and interventions for both Aggregate-level and Client-level data.

To add new agencies, interventions, and site locations, you can either upload the AgencyInfo.xml file or you can add these entities manually by using the Manage Agencies feature in the EvaluationWeb system administrator interface.