Creating Files to Upload into EvaluationWeb: A Primer for Programmers
User Guide

Version 1.6

Luther Consulting, LLC

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Getting Help

For technical assistance, including username and password help, contact the Luther Consulting Help Desk at:

Toll-free telephone: 866-517-6570, option 1
Email: help@lutherconsulting.com

Introduction

General Information

This guide provides helpful information to programmers and technical specialists from health departments and agencies who submit HIV prevention data to EvaluationWeb via file upload.

This data includes:

- HIV Testing data
- Partner Services data
- Risk Reduction Activities (RRA) data

The types of files (Excel, XML, CSV) you can upload are described in the remainder of this guide, along with details for the various file versions that are available.

Uploading Updated Records

When you update a record for any data type (HIV Testing, Partner Services, RRA), be sure to include the entire record, not just the updated portion of the record.

This is because when you commit a record to the database, EvaluationWeb completely overwrites the record in the database with the record you're uploading.

Therefore, if you only include the updated portion of a record in an upload, the only data that will remain in the database after you commit the data is the updated information.

⚠ Warning

When you update a record, include the **entire** record in the upload, not just the updated portion of the record. Otherwise, you risk losing data, as explained in this section.

Entities and Local Identifiers

Agencies, sites, programs, and interventions (collectively referred to as "entities") must be set up in EvaluationWeb before you upload a data file. (Exceptions to this rule are noted in later sections.) Entity setup can be done by either:

- Uploading a completed AgencyInfo.xml file
- Using the Manage Agencies feature in the EvaluationWeb admin interface.
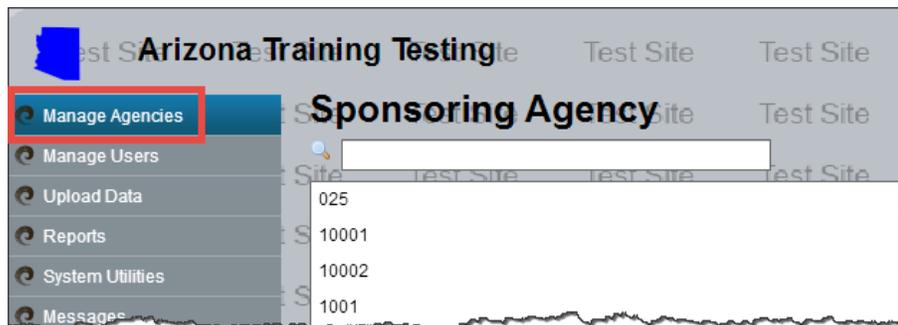
Note

Agencies, sites, programs, and interventions are collectively referred to as "entities" in this guide.

- An Agency ID corresponds to a single agency, but not to a single data type. So, if you have Agency ID "1000" set up as "My HIV Prevention Agency," and then you upload a Partner Services or RRA file having data for Agency 1000, the uploaded data will be associated with My HIV Prevention Agency.

  - It is not possible to configure a single Agency ID into separate agencies based on different data types (HIV Testing vs. Partner Services vs. RRA).

EvaluationWeb Help Page Resources

Luther Consulting has made several File Upload resources available on the EvaluationWeb Help Page.

Access these resources by clicking the blue question mark on almost any page in EvaluationWeb. Then click the appropriate link.

Help Page Link	Resources
"Upload" Link	• 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 video • Uploading Files to EvaluationWeb User Guide: General training that details how file uploading works in EvaluationWeb • Excel Notes Technical information about the Excel file upload format
"Resources" Link	• System requirements • NHM&E Data Variables and Values (DVS) document, DVS updates and revision Contains all variable descriptions and valid values for Excel and XML formats

Templates

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. Some resources on how to read and use an XSD are:
  - ο The *Extensible Markup Language (XML) 1.0 (Fifth Edition)* page at w3.org
  - ο The *XML Tutorial* page at w3schools.com

- In order to upload the newer schema types (CTv3/v3.1, RRA), entities must already be set up in EvaluationWeb (agencies, sites, interventions, and programs). To set up and manage entities, either:
  - ο Use the AgencyInfo.xml file
  - ο Use the Manage Agencies feature in the EvaluationWeb system administrator interface.

- RRA 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:
  - ο Partner Services uses "client"
  - ο HIV Testing uses "hivForm"
  - ο Aggregate-level data formats use "aggregateData"
  - ο Client-level formats use "client"

- Each of these types has unique identifying information:
  - ο formId (HIV Testing)
  - ο localClientId (Partner Services)
  - ο clientId (Client level)
  - ο period and organization for Aggregate

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

> ♫ **Note**
>
> HIV Testing data was formerly referred to as Counseling & Testing data (CT, CTR). This former label is still seen as an identifier in some upload files and in various file names.

- 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 of the record. For example, in order to add a new 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 uploaded records are matched to entities in the system based on IDs, we require that all entities have an assigned ID in order to prevent duplication. Missing entity IDs will generate errors and prevent you from committing your uploaded file.

🔔 Reminder

IDs for entities can be added by uploading the AgencyInfo.xml schema or by using the Manage Agencies feature in the EvaluationWeb system admin interface.

Excel and CSV Notes

- The following Excel/CSV file formats are accepted for upload to EvaluationWeb:
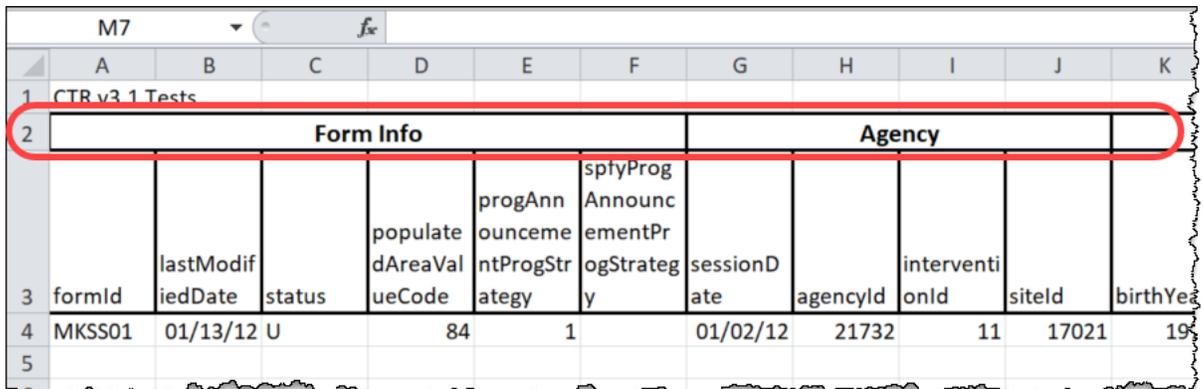
    o xlsx
    o xls
    o csv

The sheet 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
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
PS V2.1 Client, PS V2.1 Cases, PS v2.1 Deletion, etc. (depending on the sheet)	For the Excel version of Partner Services v2.1

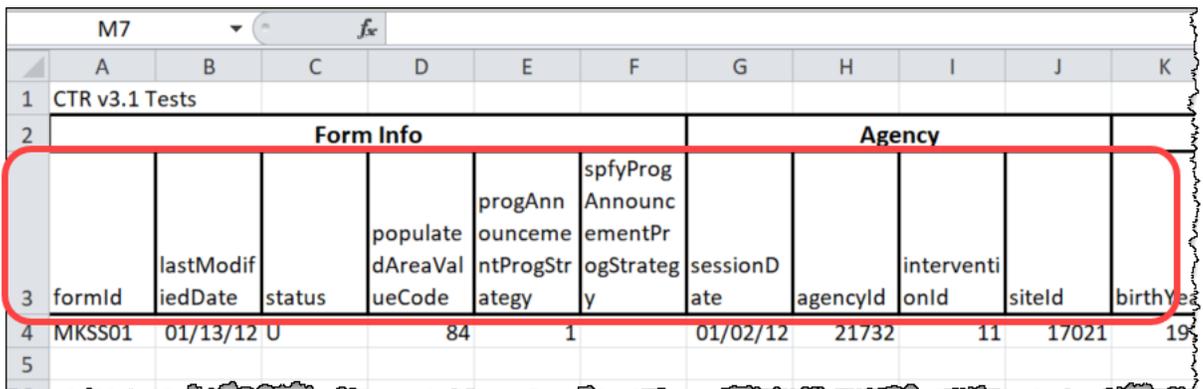***Important**: This identifier is case sensitive, and spaces matter.

- For data types having more than one sheet, you may upload a zip file containing one file for each sheet, or you may include them as separate sheets in a single file.

- The grouping row (row 2 in the templates) is not required in submitted files. It is present in non-Partner Services templates for clarity. You can include this row to group headings logically and for readability, but it is ignored in upload processing.
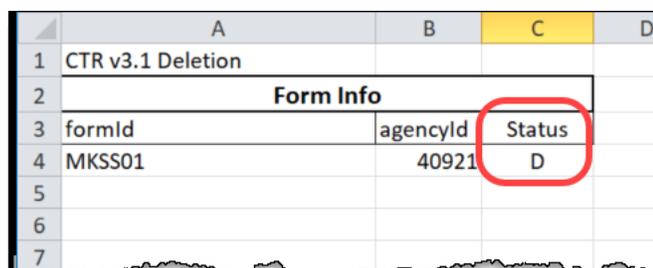

- The header row must be in row 2 or 3.

  o The header row is in row 2 in the Partner Services template, but is in row 3 in the other templates.

- You may use whatever formatting you desire for fonts, colors, borders, etc. It will be ignored by the upload processor.

- The following templates must have a status in the Status column:
  o HIV Testing v2.1
  o HIV Testing v3.1
  o Health Department Aggregate v1

- The possible statuses are:
    - A - Add to (Aggregate Only)
    - N - New record
    - U - Updated Record
    - R - Resubmitted Record
    - D - Delete Record

- For Delete Record, you must provide sufficient information in the row to uniquely identify the record. For example, for HIV Testing data, provide either:

    1 The originally submitted Form ID plus the Agency ID
    2 The full system Form ID
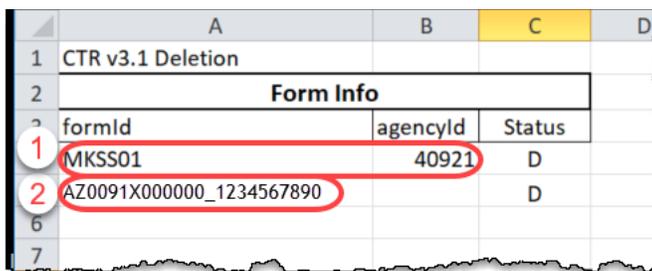
- For Aggregate Level data, the year and month/period, Agency ID, Intervention ID (if specified in the existing database record), and Program Announcement must all be specified. Details are provided in the sections below pertaining to the specific file types.

- Variable values submitted should be identical to those submitted in the equivalent XML format, with the exception that leading zeros may be safely omitted in the Excel format. All values are provided in the most recent DVS.
    - 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 (HIV Testing) or require (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

You cannot have more than one instance of the same sheet type in a single upload. For example, you cannot have two Client sheets in a single Health Department Client-Level file.

- 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 "General" or "Number." 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 in this section.

Notes for Specific Data Types

HIV Testing Data

Uploading HIV Testing Data

- The CTData v2.1 XML schema will build out new entities that you includ in the file. Therefore, when using this schema, you do not need to use the AgencyInfo.XML schema to add new entities.

- The CTData v3.0, v3.1, and v3.2 files will not build out new entities you include in the file. Therefore, prior to uploading one of these files, you can either:
  - ο Upload an AgencyInfo.XML file
  - ο Add entities manually by using the Manage Agencies feature in the EvaluationWeb system admin interface.

> **Reminder**
>
> HIV Testing data is sometimes labeled "CT" or "CTR." This is because HIV Testing data was formerly known as Counseling & Testing data.

- The CTData v3.0 schema has 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 have the revised Housing Status variable, in which only one option may be selected.

Deleting HIV Testing Data

- To delete HIV Testing data from EvaluationWeb, the system must know precisely which record you intend to delete. There are two ways you can indicate this:

  1. By using the "D" status (for Delete) in a standard record

  2. By using the specialized Delete section in an XML file or the Deletion sheet in an Excel file. These are available in v3 files and higher.

- The precise way to specify which record to delete depends on whether you are using the "D" status in a standard record or in the specialized XML Delete section/Excel Deletion sheet.
  - ο In general, we recommend using a v3 (or higher) delete format. It allows the deletion of records that were entered either through file upload or direct data entry, and you can use a v3 Delete format even if records were uploaded using an earlier XML file version (v1 or v2.1).

- To delete HIV Testing data from EvaluationWeb using the v3 format, use the expanded Form ID or the submitted Form ID plus the Agency ID.

o For a submitted Form ID that looks something like "3680122CBA2011", the expanded Form ID will look something like "VT0200X00000_3680122CBA2011".

Note: The information to the left of the underscore above starts with the jurisdiction abbreviation.

o The submitted Form ID and the expanded Form ID are available through 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" maxOccurs="unbounded">
                <xs:complexType>
                    <xs:attribute name="agencyId" use="optional"/>
                    <!--
                        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>
<!-- xxxxxxxxxxxxxxxx -->
```

Note: The XML XSD is available on the EvaluationWeb Help Pages in the Uploads link.

- In the Excel/CSV versions, the Delete worksheet is contained in the sample worksheets, and looks like the following:

	A	B	C	D
1	CTR v3.1 Deletion			
2	**Form Info**			
3	formId	agencyId	Status	
4	MKSS01	40921	D	
5	AZ0091X000000_1234567890		D	
6				
7				

   Note: The sample worksheets for Excel/CSV files are located on the EvaluationWeb Help Page under the Upload link.

Rules for Using Status "D" in Standard 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:

   o For versions 2 and 3, you must use the submitted Form ID and the Agency ID.

   o You must provide a complete record for it to pass XSD validation, even though you are just deleting the record.

   o You cannot use this deletion method for records that were originally entered via manual direct data entry.

Partner Services Data

- The following Partner Services sample files, schemas, templates, and XSD files are currently available for upload of Partner Services data:
   o PS v3.0 XML Sample file and XSD (PS18-1802 data format)
   o PS v2.0 XML Sample file and XSD
   o PS v2.1 XML Sample file and XSD
   o PS v2.1 Excel/CSV template and sample data

- Update statuses are not used for records in v2.1 and beyond Excel and XML files.

- The following variables are no longer used in v2.1 and beyond Excel and XML files:
   o Variable A02 <populatedAreaValueCode>
   o Variable X503 <totalNumberOfPartnersClaimed>
   o Variable PCR202a <localPartnerServiceId>
   o Variable X303a <specifyReasonUnsuccessAttempt>

- Uploading a PS v2.0 or v2.1 file will not add new entities automatically to the database.
  - o To add new entities, you can either upload the AgencyInfo XML file or you can add the agencies manually through the Manage Agencies feature in the EvaluationWeb system admin interface.

PS v2.1 Excel/CSV Format

- The Partner Services v2.1 file is available as an Excel or CSV .zip file.

- You can upload PS v2.1 files in .xls, .xlsx, or .csv format.

- The Partner Services database is made up of multiple relational data tables, and the PS v2.1 file has multiple worksheets, reflecting the relational nature of the data.

- The worksheets are:
  - o As An Index
  - o As A Partner
  - o Attempt to Locate
  - o Client
  - o Elicit Partner
  - o Exposure Notification
  - o Partner Service Cases
  - o Referral
  - o Risk Profiles
  - o Sessions
  - o Sites

> 🔑 **Tip**
>
> Luther Consulting provides several "Tips and Tricks" videos on the EvaluationWeb Help page to help you with uploading files.
>
> These videos include technical details, including screenshots and explanations for each sheet of the PS v2.1 Excel file. Look for the section on Partner Services toward the end of the Tips and Tricks II video.

- All the worksheets must be included in the upload file (even if a worksheet is blank) and the file must be zipped before uploading.
  - o If you don't include all worksheets, you will get an upload error.

- The Excel file has 11 worksheets, and the CSV version has 12 files.
  - o The CSV file has a Deletions file that the Excel file does not have.
  - o If you are only deleting records and not adding or updating records, you can upload the Deletions file on its own.

- The Sites and Client worksheets are the primary worksheets; as such they contain the primary record identifiers, which are:
  - o siteID
  - o localClientID

- You cannot repeat a siteID or localClientID in the Site/Client worksheet . (However, this rule does not apply to the other worksheets, in which you may sometimes need to repeat an ID.)

- When uploading an updated record, the entire record must be uploaded, not just the updated portion. This is because the updated record will completely overwrite the record in the database, so if you upload only the updated portion, that's all that will be in the database after you commit the upload.

- EvaluationWeb can process CSV files more quickly than Excel files.

Risk Reduction Activities (RRA) Data

- The following RRA schemas, templates, and XSD files are currently available for upload of Risk Reduction Activities data:
  - o Health Department Aggregate v1.0 (XML)
  - o Health Department Aggregate v1.0 (Excel/CSV)
  - o Health Department Client Level v1.0 (XML)

- Similar to Partner Services uploads, you must create new entities for both Aggregate-Level and Client-Level data before you upload a file. To add entities, you can either:
  - o Upload the AgencyInfo.xml file
  - o Add entities manually by using the Manage Agencies feature in the EvaluationWeb admin interface.