

# Guidelines for Contribution to Artefacts Canada

Last updated: June 29, 2009

## Table of Contents

I - Introduction.....	3
II - Establishing Access .....	3
a) Software .....	3
b) A database administrator or someone in your institution with similar skills.....	3
c) A signed Agreement for Contributing Institutions. ....	4
d) Contributor User Name and Password .....	4
e) Data file format .....	4
f) Artefacts Canada Database .....	4
g) The fields in the Artefacts Canada databases .....	5
h) Unique Record Identifiers .....	5
i) Field mapping .....	6
III - Adding Images to Artefacts Canada.....	9
a) Imaging Strategies .....	9
b) Image Display Formats .....	10
c) Image File Formats.....	10
d) Image Storage.....	11
e) Linking digital image files to object records .....	11
f) Image Fields.....	12
IV - The Data Transfer Process .....	14
a) Selecting records to be contributed to Artefacts Canada.....	14
b) Excluding records or fields .....	14
c) Creating the data file(s) to upload .....	14
d) Uploading the data file .....	16
e) Uploading Image files .....	16
f) E-Mail Reports.....	17
g) Deleting Records.....	17
V - Test Procedures .....	18
1) Advise CHIN at service@chin.gc.ca.....	18
2) Create test data .....	18
3) Create file to upload .....	18
4) Upload file.....	18
5) Review database.....	20
6) Modify mapping if necessary .....	20
7) Change test data .....	20
8) Review database.....	20
9) Advise CHIN when you are finished your test.....	20
Appendix A - Copyright Issues Associated with Digitizing Images and Contributing them to Artefacts Canada .....	22
Appropriate Copyright Clearances .....	22
Modifying the Image .....	22
Protecting Museum Copyright and the Copyright of Others .....	23
Rights Management and Protection Technologies .....	23
Appendix B - Artefacts Canada Fields and Field Mapping Worksheets.....	24

B.1 - Artefacts Canada: Humanities .....	24
Required fields.....	24
Optional fields .....	24
B.2 - Artefacts Canada: Natural Sciences .....	28
Required fields.....	28
Optional fields .....	28
Appendix C - File Format Specifications .....	34
C.1 ASCII Tab Delimited Format .....	34
C.2 Microtext File Format .....	34
Appendix D - Test Team .....	37

## I - Introduction

CHIN has developed the tools necessary for you to contribute both data and images to Artefacts Canada (AC) via the World Wide Web. This document is meant to help you contribute your important collections information to this unique resource. It is strongly recommended that you print out and read this documentation as a first step in the process of contributing to Artefacts Canada. Should you have questions, telephone support is always available at 1-800-520-2446.

## II - Establishing Access

Before you begin the process of contributing data and images, you will need the proper software and background information including the following:

### a) Software

A recent web browser, such as Firefox or Internet Explorer.

If contributing images you will also need an FTP client software. We suggest the following Windows, MAC and Unix utilities:

- Windows users:  
WinSCP is an open source SFTP- and SCP-client for Windows which uses SSH. Please visit <http://winscp.net/eng/download.php>  
The Multilanguage Installation Package includes a French version of the GUI (graphical user interface), command line and scripting usage.
- MAC users:  
Please visit <http://www.fetchsoftworks.com/>
- Unix users:  
scp is a standard Solaris utility.  
Eg.  

```
scp -rp /localdir/WebPages username@hostname:/home/username/WebPages  
scp -rp username@hostname:/home/username/WebPages /localdir/WebPages
```

### b) A database administrator or someone in your institution with similar skills

Certain aspects of the procedure for contributing data and images will require some specialized technical knowledge of your system; skills which are typically possessed by a database administrator. This person is often responsible for the initial set up of an in-house system.

A person with these skills will be needed to:

- assign record identifiers,
- define field mapping,
- create data and image export programs and other computerized and non computerized procedures,
- create procedures to select data and images for contribution,
- create data files for upload to AC,
- ensure links between digital image files and object records,
- exclude sensitive data,
- manage the deletion of records from AC, and
- use an FTP client to send images

#### **c) A signed Agreement for Contributing Institutions.**

Institutions wishing to contribute to Artefacts Canada must be members of CHIN. Please see <http://www.chin.gc.ca/English/Join/index.html> for more information. Once you are a CHIN member, you may then submit by fax or E-mail a copy of the *CHIN Agreement with Contributing Institutions*, available at [http://www.chin.gc.ca/English/Join/membership\\_contributing.html](http://www.chin.gc.ca/English/Join/membership_contributing.html).

#### **d) Contributor User Name and Password**

Before you can contribute data and images you must sign the above agreements and fill out the “Contributor Registration Form” available online under [http://www.chin.gc.ca/English/Artefacts\\_Canada/Contribute/index.html](http://www.chin.gc.ca/English/Artefacts_Canada/Contribute/index.html) Point #3.

Submit this information by clicking on the "Submit" button. Please note that you need only register for contribution to Artefacts Canada once. You will receive a phone call or an E-mail from CHIN to indicate and verify your contributor user name and password.

#### **e) Data file format**

Your data will need to be in one of the following file formats:

- ASCII Tab Delimited
- Microtext

(Please see *Appendix C File Format Specifications* for details)

Determine in which file format you will be sending data. Most collections management software packages should be able to export in ASCII Tab Delimited format. If you are not aware of the file format in which your system can contribute you may need to contact your vendor.

#### **f) Artefacts Canada Database**

Determine to which Artefacts Canada database you will be contributing, whether it be the Humanities or Natural Sciences or a combination of the two.

### **g) The fields in the Artefacts Canada databases**

The list of accepted fields for the Artefacts Canada databases can be viewed in Appendix B: *Artefacts Canada Fields and Field Mapping Worksheets*.

Some of these fields are mandatory and represent a minimum amount of data that must be supplied for each record. Records that do not contain data in the mandatory fields cannot be accepted by the system. Besides these mandatory fields, you should consult the document *Required and Recommended Fields for Contribution to Artefacts Canada* to learn more about the other fields required and/or recommended for upload. We encourage you to contribute as much information as possible.

### **h) Unique Record Identifiers**

#### **What are they?**

Each object or specimen that you submit to Artefacts Canada will need to have a unique record identifier attached to it in order to distinguish it from other records in your collection. A unique record identifier is used to uniquely identify and store a record in a database.

#### **Where do they come from?**

This unique record identifier must be defined by you. It is crucial that this identifier be unique and unchanging for the life of the record because changes to or deletions of your information will be based on matching the unique record identifier in the file being uploaded by you to the unique record identifier already in the Artefacts Canada database.

Most collections management software packages will automatically generate a "system key" which you may wish to use as your Unique Record Identifier. Other alternatives like accession number or catalogue number can be used as long as they are unique values that will not change for that object or specimen.

You will likely wish to discuss the creation of unique record identifiers with your database administrator or with your vendor. The unique record identifier cannot be generated by CHIN. CHIN will however prefix every unique record identifier with a value unique to your institution and, if necessary, to various departments within your institution. The addition of this prefix will ensure that data from each institution contributing to Artefacts Canada is unique.

## **i) Field mapping**

### **What is it?**

Before you can contribute data to Artefacts Canada you will need to know which fields you will be contributing to which Artefacts Canada database. You will also need to create a field mapping table of your fields to the Artefacts Canada fields. A field mapping table is a list of the field names in your in-house database that correspond to Artefacts Canada field names. You may wish to use *the Artefacts Canada Fields and Field Mapping Worksheets* in Appendix B to assist you as you map your fields to those in Artefacts Canada. Please note that a map is required for each Artefacts Canada database to which you will be contributing.

A field mapping table must be created before you can upload data files to Artefacts Canada. When you have defined a map of your data fields to the Artefacts Canada fields, CHIN will convert your field names to the Artefacts Canada field names for storage, indexing and access.

### **How do I do it?**

We have tried to make contribution to the Artefacts Canada as easy as possible by creating a field mapping process that can be done online through the Contributor Interface at the CHIN web site under Artefacts Canada.

You will be required to enter your contributor user name and password as well as to indicate to which Artefacts Canada database you are contributing. At this point you can choose one of the following two options.

- **Using a predefined map**

To make the process of creating field mapping easier for you, CHIN has prepared a predefined field mapping table. This means that, if the names of the fields you will be contributing match the CHIN field names in English to any extent you could choose the option "CHIN" as the standard that most closely matches your data. If the fields you will be contributing match the CHIN field names in French to any extent you could choose the option "RCIP" as the standard that most closely matches your data.

If you choose this standard, CHIN Artefacts Canada field names will be entered under "Your field name" automatically. You are then free to modify and edit any of your field names to exactly match the field names within your own in-house system. Default field values for Institution name and/or other fields can be added, if applicable. You may wish to consult your vendor to determine if this standard best matches your data.

- **Creating your own map**

You are not required to use the predefined CHIN field mapping standard. It is also possible to enter your field names manually by simply entering them under "Your field name" next to the corresponding CHIN field name. Please consult the document *Required and Recommended Fields for Contribution to Artefacts Canada* to determine what fields should be mapped. You are encouraged to add data for as many fields as possible.

### Specifying unique record identifiers

During the mapping process you will need to map the unique record identifiers you assigned to the UNIQUE RECORD IDENTIFIER field, which is CHIN's field name for the unique record identifier in Artefacts Canada.

- If your unique record identifier is created from information in one field, simply map the field name for your unique record identifier to the IDENTIFIER field.

For example:

Field Name	Your Field Name	Default value for this field
UNIQUE RECORD IDENTIFIER	FIELDNAME	

- If your unique record identifier is created from information in more than one field it is essential that you enter the name of all your fields under "Your field name" mapped to the UNIQUE RECORD IDENTIFIER field. For example:

Field Name	Your Field Name	Default value for this field
UNIQUE RECORD IDENTIFIER	FIELDNAME1; FIELDNAME2	

Please note that only semicolons are acceptable field separators under "Your field name".

### Mapping from Multiple Fields

It is also possible for you to map many of your fields to one CHIN field. This is done by entering multiple fields from your in-house database into the "Your field name" box separated by semicolons. For example, if your data for works of art that have multiple creators is separated into numerous fields you may complete the mapping process as follows:

Field Name	Your Field Name	Default value for
------------	-----------------	-------------------

		<b>this field</b>
Artist/Maker	FIELDNAME1; FIELDNAME2	

Please note that only semicolons may be used as field separators under "Your field name".

### **How often do I have to map my fields to Artefacts Canada?**

Once you have defined the field mapping for your data it will be stored by CHIN. This means that the field mapping process only has to happen once for each institutional database from which and Artefacts Canada database to which you are contributing. You can easily modify an existing mapping table by selecting "Modify mapping" for a particular database.

Be aware that if you do modify the map you created it may affect records previously uploaded to Artefacts Canada and these records may need to be uploaded again. For example, if you change a map and exclude a field that was previously uploaded the field will not automatically be deleted in records previously submitted. A contributed record completely replaces an existing record in AC so to delete a particular field in your data in Artefacts Canada you must resend all records that contained that field.

## **Default values**

During the mapping process you may want to define some default values, meaning values that will be automatically inserted in every record. These are particularly useful for fields like "Institution Name" where the data are static and not likely to be included in your institutional database. You are then freed from sending repetitive data and only need to enter this information once. This is easily done by entering the default information for any specific field under "Default value for this field" in the mapping table.

Default values will be overwritten if you upload different information in that field, so you need only include data in that field when it differs from the default value. Try not to use field labels or names as default values.

The field mapping tables that you create will be validated automatically to ensure that a field name has been mapped to all mandatory fields. You will receive immediate feedback indicating any errors that are detected in the field mapping table.

## **Important!**

1. It is essential that the field name or names that will contain the unique record identifier be included in the field mapping for each Artefacts Canada database to which you wish to contribute. This information should be linked to the UNIQUE RECORD IDENTIFIER field.
2. Typographical errors in the field names or default values that you enter cannot be automatically detected by the system. Carefully review your mapping table for spelling and other errors.
3. Mandatory fields must contain data. If records are sent to Artefacts Canada without data in these mandatory fields an error message will be sent to you via E-mail and the record will not be accepted into Artefacts Canada.

## **III - Adding Images to Artefacts Canada**

### **a) Imaging Strategies**

Images of part or all of your collection can readily be added to Artefacts Canada. The following are some of the potential sources of digitized images in your institution:

1. You may already have images available in Web display format. These images may be available on the institutional Web site, in virtual exhibits or other Web projects. These images likely do not require any reformatting and can be linked with the textual information on the object in your collections management system by adding specific fields to deal with images. See Section III f) Image Fields for more details.
2. Digital images may already have been produced for digital presentation, on-line publications, on-line or digital exhibits, electronic research papers, CD-ROM projects, or imaging projects for archival purposes. These images may require

reformatting for Web display. The images can be linked with the textual information on the object in your collections management system by adding specific fields to deal with images. See Section III f) Image Fields.

3. Archival photographs, transparencies and slides in your collection can be scanned and converted into digital image format by an electronic scanning process and then linked to object records.
4. You may also consider using a digital camera to create directly digitized images of all or parts of your collections.
5. Whenever you are photographing artifacts using a conventional camera, have the images scanned into digital format as well. Most film processing shops can do this for you. However, it is very important to retain the original photograph; if you want to make new copies in other digital formats, it is much easier (and, therefore, cheaper) to work from the original slide, negative or print.

Creating the original image is the most expensive and time-consuming part of the imaging process and requires the handling of the original object. Some institutions use traditional photography to produce a 35 mm slide or better, and then scan the photographic images into digitized formats as required. Others begin with digital photography and create a digitized image in the highest quality feasible for archival purposes. Derivatives or copies can then readily be made for purposes such as publications, a Web site, Artefacts Canada and other digital projects.

More information and resources about digitization project planning are available on CHIN's Professional Exchange website.

### **b) Image Display Formats**

Artefacts Canada accepts two different image display formats. These are:

- thumbnail (small display)
- full (large display)

The thumbnail and full images must be recorded in separate fields. See Section III f) Image Fields. The thumbnail images must be no larger than 125 pixels on the longest side or they will interfere with the image display format. The full images can be any size. We recommend a size of 500 pixels on the longest side taking into consideration both the display technology users may have and the file size. The file size should be limited to 30-40K or less. Thumbnail images appear on screen quickly due to their small file size but generally lack in quality. Larger images appear on screen more slowly because of their large file size especially when being accessed via a modem, but are generally of higher quality.

### **c) Image File Formats**

Images contributed to Artefacts Canada are accessed via the World Wide Web (WWW) and, therefore, must be in a digital format that can be displayed by a browser, i.e.: Firefox or Internet Explorer, and be accessible from a server accessible through the Internet.

Acceptable digital image formats include JPEG, GIF and PNG. The display quality of the images is dependent on the type of computer and monitor and on the format and quality of the digital image. Some factors that affect quality of the digital image are the number of colours in the image, the compression ratio, the image capture technology (scanner), the imaging software used to create the image, image file format, etc. An image in GIF file format is limited to 256 colours (8 bit), whereas digital images in JPG or PNG file formats can be displayed in 16 million colours (24 bit) or more, thereby providing a much higher quality image. Generally, digital images are rendered at 72 DPI (Dots Per Inch). At this quality, digital images are of sufficient quality to be easily viewed but are not of sufficient quality to be used for reproduction in printed format - perhaps your greatest safeguard against improper use.

The size (height and width) of the image is measured in pixels for display. Although there is no restriction on the size of an image linked to Artefacts Canada, it should be kept to a size that can readily be viewed on a computer monitor with minimum scrolling. Remember that Artefacts Canada is accessed by a wide audience from school children to journalists to researchers, all with varying levels of equipment. Older 14" (or smaller) monitors will be able to display a maximum resolution of 640x480 or 800x600, whereas 15" monitors or larger can display at a higher resolution of 1024x768. The newer 19" (or larger) monitors are able to display at much higher resolutions.

#### **d) Image Storage**

Your digital images must be stored on an Internet accessible server. An Internet accessible server may be your own institution's Internet server or a server provided by an Internet Service Provider (ISP). If your institution does not have an Internet accessible server or an Internet Service Provider, your images can be located on a CHIN server. CHIN can establish limited facilities for institutions to use a CHIN server to allow you to manage your digital image files (i.e. add, replace and delete). If you should choose to do this, you will be provided with an account with a user id and password to manage your image files. Please contact CHIN for further details at 1-800-520-2446 or at [service@chin.gc.ca](mailto:service@chin.gc.ca).

#### **e) Linking digital image files to object records**

It is essential that you assign image file names to all digital images in order to link them to the appropriate object textual record. You must provide different names for the thumbnail and full image, and these must be entered in your collections management database with each object record. In many cases the accession or catalogue number or a variation can be used to create the image file names.

CHIN has added a common set of fields to each Artefacts Canada Database to facilitate contribution of images (See Section f, Image Fields). These fields should be administered in the same way as all other data in your collections management system. If this information is not updated regularly and maintained properly, the links to the digital images will not be consistent in the collections management information or in Artefacts Canada. For example:

Field Name	Field Mnemonic	Value for this field
Image Thumbnail	IMTHUMB	T1998-1-2.JPG
Image Full Size	IMFULL	1998-1-2.JPG

Though the maintenance of these fields is time consuming, it is essential to maintain data integrity and to ensure that the correct image is linked to the correct textual information.

**\*\*Note:** The names of the image files in your mapping table and the names of the image files you upload **MUST BE IDENTICAL**.

For the purposes of this file upload:

**‘T1998\_1\_2.JPG’ is NOT identical to ‘T1998-1-2.jpg’**

Pay close attention to the file names of your image files to avoid contribution errors.

## **f) Image Fields**

Contributing image data to Artefacts Canada can be done in one of three ways. As mentioned, CHIN has added a common set of fields to each Artefacts Canada Database to facilitate contribution of images.

Please note that when including data in image fields, images must exist and be accessible via the web at the url specified before this data can be accepted into Artefacts Canada. If images are not found based on the information in the image field, no image will appear in Artefacts Canada or the Image Gallery for that record. Instead, an error message will be displayed. For more information please call 1-800-520-2446.

In order to link to your images, images added to Artefacts Canada are stored by CHIN as fully qualified URLs.

ie. a URL in the following format: “<http://www.anymuseum.ca/directory/filename>”

Depending on your current in-house methods for storing image data you may choose one of the following two options for storing image data sent to Artefacts Canada.

## Option #1

Enter fully qualified URL's into the following fields. This URL provides a pointer to the digital image file.

**Image URL Thumbnail(IMTHUMBURL)** - contains the fully qualified URL of the thumbnail image file. For example: <http://www.anymuseum.ca/directoryname/T1998-1-2.JPG>

**Image URL Full Size(IMFULLURL)** - contains the fully qualified URL of the full size image file. For example: <http://www.anymuseum.ca/directoryname/1998-1-2.JPG>

## Option #2

The following fields are entered only if the above fields are not used. CHIN will concatenate these fields with a server or user name depending on the location of the image to make up the URL of the image.

**Image Thumbnail(IMTHUMB)** - contains a file name for a thumbnail image and is entered by the institution that provided the image. For example: T1998-1-2.JPG

**Image Full Size (IMFULL)** - contains file names for a full size images and is entered by the institution that provided the images. For example: 1998-1-2.JPG

**Image User Name (IMUNM)** - contains a user name to identify the institution and to provide image access. This information is provided by CHIN to institutions whose images will be located on a CHIN server and should be entered into this field as a default value when completing your field mapping.

**Image Server (IMSRV)** - identifies the location of the images, whether on the CHIN server or on a museum server and should include the full path (directory names) to access the images. Data should be entered into this field as a default value. For example: <http://media.rcip-chin.gc.ca/AC> or [www.anymuseum.ca/directoryname](http://www.anymuseum.ca/directoryname). Please note that this field is MANDATORY if using this option.

In addition, you may choose to enter data into the following text fields in your in-house system to send to Artefacts Canada to display with the image.

**Image Details (IMDET)** - describes details about the digitized images that illustrate the artifact or specimen. For example: A set of 100 images were provided by the donor. Images were digitized by students from the local high school.

**Copyright - Image** - contains the text of the copyright line that will be displayed with the full sized image. For example: National Gallery of Canada

**Credit Line Image** - contains the text of the credit line that will be displayed with the full sized image. For example: Credit - National Gallery of Canada

### **Option #3**

In cases where it is impossible to upload your image files over the Internet, you may send the files to CHIN by mail on a CD or DVD. Please consult the Help Desk if you wish to send your images this way at 1-800-520-2446 or [service@chin.gc.ca](mailto:service@chin.gc.ca).

## **IV - The Data Transfer Process**

### **a) Selecting records to be contributed to Artefacts Canada**

From your in-house collections management system you will need to be able to select and export the specific records and fields that you want to upload. These could be all the records in the database or all the records added or changed since the last time data was uploaded to Artefacts Canada.

It may be necessary to consult with your vendor to design a process that extracts the required information for upload to Artefacts Canada. Remember that each contributed record will overwrite the existing record in Artefacts Canada with the same unique record identifier. This means that all fields in a record that are being sent to Artefacts Canada must be recontributed each time a record is modified in your in-house system.

You may also need to talk to your vendor or database administrator about ways to exclude records that you are not yet ready to contribute.

**Recommendation:** Data should be contributed in batches. The number of records to include in each batch will depend on how large your records are. Begin with batches of maximum 20,000 records and adjust up or down depending on the length of time the actual file transfer takes.

Implement a regular schedule to select records to be added, changed or deleted in Artefacts Canada. This schedule will vary by institution but is generally on a monthly or quarterly basis.

### **b) Excluding records or fields**

If any of your data are considered sensitive you may consider developing a strategy in your in-house system to exclude sensitive records or fields from Artefacts Canada. You may wish to contact your vendor or database administrator for assistance.

### **c) Creating the data file(s) to upload**

After records and fields are selected for contribution, it is necessary to export this data into a text file format. Your database administrator will need to implement a process to generate this file in one of CHIN's interchange formats (ASCII Tab Delimited or Microtext). See Appendix B, *Artefacts Canada Fields and Field Mapping Worksheets* for file format specifications.

The character encoding can be in one of the following character sets including:

- ASCII
- ISO 8859-1 Latin-1 (Standard Windows encoding)
- DOS Code Page 437
- DOS Code Page 850
- Macintosh
- CSA\_Z243.4-1985-1

Other character sets may be added as required.

Contact your vendor if:

- your in-house system does not support exporting data from the database to a text file
- your in-house system does support exporting data to a text file but does not support one of CHIN's supported file formats.
- your in-house system does not support one of CHIN's supported character sets.

Please contact **service@chin.gc.ca** if you would like to suggest the addition of other file formats or character sets.

#### **d) Uploading the data file**

Once your files have been prepared for upload you will need to go to [http://www.chin.gc.ca/English/Artefacts\\_Canada/Contribute/index.html](http://www.chin.gc.ca/English/Artefacts_Canada/Contribute/index.html) (#4) to upload your files.

You will notice that the file format and character set have been highlighted based on your specifications outlined on the "Contributor Registration Form". This will remain as the default value but can be manually changed on a temporary basis at this point. To change your default file format and character set permanently, please contact CHIN.

You will be asked for the name of the text file on the "Upload File" page within the Contributor interface. You may search for the file using the "Browse ..." button or you may simply enter the file name in the box. The naming convention for your file is governed by your operating system.

**If you are contributing records to Artefacts Canada for the first time, or you have modified your mapping table follow the instructions below in section V) Test Procedures.**

#### **e) Uploading Image files**

Use an FTP (File Transfer Protocol) client software application to upload your image files to CHIN. If you cannot upload your image files using FTP, contact CHIN to arrange to send them by mail.

#### **f) E-Mail Reports**

You will receive an E-mail containing a summary of the records that have been processed. Please review any processing errors indicated in this summary. Contact CHIN at 1-800-520-2446 or at [service@chin.gc.ca](mailto:service@chin.gc.ca) if you have any questions about contribution errors.

#### **g) Deleting Records**

When a record is deleted from your in-house system, that record is no longer available in-house. However, if it has previously been contributed to Artefacts Canada it will remain there until a separate delete operation has been carried out to delete it.

You may wish to discuss this issue with your database administrator. Special effort must be made to track deleted records and to include delete transactions in the data files uploaded to Artefacts Canada. The syntax for indicating a record to be deleted within a data file differs depending on the file format you have selected. All file formats require that the unique record identifier be included in the delete transaction.

The following are scenarios for your consideration.

- 1) If the anticipated number of records to delete is small, say less than 10 a month, a manual log of deleted records could be created using a text editor. This log becomes a separate file to be uploaded to Artefacts Canada when other data are uploaded.

The following is an example of a transaction file to delete records with unique record identifiers 100 and 105 (assuming that the field name "ID" is mapped to CHIN's "UNIQUE RECORD IDENTIFIER" field)

In Microtext format, the file might look like this:

```
ID=100
DELETE=YES
/
ID=105
DELETE=YES
/
```

In Tab Delimited format, the file might look like this:

```
ID<Tab>DELETE
100<Tab>YES
105<Tab>YES
```

In this process no database changes or programming are required. However, the following problems may occur:

- records may be overlooked and not get deleted in Artefacts Canada, and
  - typographical errors can easily be made when the delete transaction file is created, thereby causing the wrong record to be deleted in Artefacts Canada.
- 2) If a larger number of deletes are anticipated a more sophisticated solution should be considered.

There are many possible options and the selection of the best one depends on the capabilities of your in-house system. Your system may be capable of executing an automated procedure, using the unique record identifier as a parameter, to automatically generate the file of records to be deleted. As shown above, the format of the external file is fairly simple. This file would then be uploaded to Artefacts Canada.

- 3) If your database application does not allow a simple programmed solution as described above, you may wish to seek assistance from the vendor, your database administrator or a programmer who is experienced with your software.

The advantage of the automated approach is that deleted records are logged automatically and the possibility of typographical errors is eliminated. The disadvantage is that consultation with a vendor or programmer could involve a cost to you.

## **V - Test Procedures**

Before you begin to upload full data files, it is mandatory to test the procedures you have put in place to this point.

- 1) Advise CHIN at service@chin.gc.ca**  
that you are planning to do a test. Until testing is complete, your data will be sent to a test database and not directly to Artefacts Canada.
- 2) Create test data**  
Create 3-5 test records in your database. Make sure that every field you will be contributing to the Artefacts Canada test database(s) contains data in order to ensure that your mapping structure is complete. Please note that this is necessary for test purposes only.
- 3) Create file to upload**  
Select the test records and export the records to a text file.
- 4) Upload file**

### **a) Select the file(s) to upload**

Some tips:

- to erase a file sent you can send a blank file with the same file name or call CHIN for assistance
- be careful not to send empty files unless you intend to delete previously sent data in that file
- watch out for typographical errors in the file names you send
- make sure that all required fields contain data
- make sure that the file you are sending is in the format you specified
- make sure that the file you are sending is in the character set you specified
- if you create files in a word processing format, remember to save the file in the appropriate file format for uploading to Artefacts Canada. Do not send files in XLS, DOC, FPx or MDB formats
- note that if you send a file with the same name as a file sent previously, the previously sent file will be overwritten in the Artefacts Canada database(s) to which you chose to contribute
- if in your in-house system you have two occurrences of the same field (ie. Object Name or Description fields), please note that the second occurrence of the field is the only occurrence that will be saved in Artefacts Canada

Please be aware that it is unlikely that your browser will indicate the progress of the data that is being transferred.

### **b) Upload Image Files**

You can use a FTP (File Transfer Protocol) client software application to upload your image files to CHIN. Many such applications are available for download on the web. Some examples mentioned earlier in *Section II* include WinSCP (Windows), scp (Unix) and Fetch (MAC).

### **c) E-Mail Reports**

After your file has been uploaded to Artefacts Canada you will receive an E-mail containing a summary of the records that have been processed. It will also contain a report of any errors that were detected when the records were processed. Contact

CHIN at 1-800-520-2446 or at [service@chin.gc.ca](mailto:service@chin.gc.ca) if you have any questions about contribution errors.

### **5) Review database**

Use the links below to access the Artefacts Canada test database to which you have uploaded records.

Humanities

[http://daryl.chin.gc.ca:8000/BASIS/humqa/user/object/sac?f=insfull&c=\\*](http://daryl.chin.gc.ca:8000/BASIS/humqa/user/object/sac?f=insfull&c=*)

Natural Sciences

[http://daryl.chin.gc.ca:8000/BASIS/sciqa/user/object/sac?f=insfull&c=\\*](http://daryl.chin.gc.ca:8000/BASIS/sciqa/user/object/sac?f=insfull&c=*)

Find your test records. Look at each record you contributed to assure that the field mapping is correct. Verify that default field values are present where appropriate.

You can also access the Artefacts Canada test databases through Step #5 at the URL [http://www.chin.gc.ca/English/Artefacts\\_Canada/Contribute/index.html](http://www.chin.gc.ca/English/Artefacts_Canada/Contribute/index.html).

### **6) Modify mapping if necessary**

If problems have occurred with the field mapping you can modify your mapping table through Step #4 at the URL

[http://www.chin.gc.ca/English/Artefacts\\_Canada/Contribute/index.html](http://www.chin.gc.ca/English/Artefacts_Canada/Contribute/index.html).

### **7) Change test data**

Once you are satisfied that your field mapping is complete change 2 or 3 of your test records in some way. Delete one following the procedures outlined in Section IV g). Select and save the test records that have been changed or deleted to a text file as in Step 2 above. Upload the file to the test database as outlined above in Step 4.

### **8) Review database**

After receiving the processing summary via E-Mail go to Number 5) above and choose the appropriate Artefacts Canada test database(s). Find the remaining test records. Look at each of the records to assure that the changes you made are reflected. Verify that the deleted record is no longer available. If errors are detected, correct your database procedures or field mapping as required and repeat the test until no errors are detected.

Delete the remaining test records and repeat the test to verify that the records have been deleted in Artefacts Canada test database(s).

If you have questions, contact CHIN at [service@chin.gc.ca](mailto:service@chin.gc.ca).

### **9) Advise CHIN when you are finished your test.**

You **MUST** inform CHIN that you are finished testing and ready to upload your data to the 'Live' Artefacts Canada database. Changes will be made at CHIN to allow future file

uploads to be automatically updated in the appropriate 'Live' Artefacts Canada database(s).

## **Appendix A - Copyright Issues Associated with Digitizing Images and Contributing them to Artefacts Canada**

The protection of museum copyright and the copyright of artists/creators for which museums may be responsible is of paramount importance when contributing digitized images to publicly accessible databases. With current technologies, digitized images that are made available on the Internet can be reproduced quickly and easily so that, more than ever, copyright protection is at issue.

### **Appropriate Copyright Clearances**

1. Prior to contributing a digitized image to Artefacts Canada, a museum should ensure that where the work being photographed and then digitized is not in the public domain, then authorization should be obtained from the artist/creator of the work that is the subject matter of the digitized photograph. If the work at issue is in the public domain, then such authorization is no longer needed.
2. Since the digitization of an existing photograph is a reproduction, museums should also ensure that they hold the rights to digitize the photograph. Such rights can be obtained in two ways: by ensuring that the museum holds the copyright on the photograph through an agreement with the photographer or by negotiating these rights when the photograph is being subsequently digitized. If the photograph that is being digitized falls into the public domain, then such authorization is no longer needed.
3. In either case, rights should also be obtained to contribute the digitized photograph to a publicly accessible database such as Artefacts Canada.

### **Modifying the Image**

1. If in the course of digitization or contribution, the image is somehow modified – either cropped or discoloured, rights associated with copyright, such as moral rights, may become an issue. Moral Rights are held by the artist/author of the original work that is the subject matter of the image. The photographer also holds moral right in his photograph. Moral rights run for the length of copyright and cannot be transferred. They can, however, be waived.
2. In either case, museums should ensure that it obtains a waiver of moral rights from the artist/creator and/or photographer if they intend to manipulate the image so as to prejudice the artist/creator and/or photographer in any material way.
3. If the work that is the subject of the image or the photograph that is being digitized is in the public domain then the moral rights of the artist/creator and/or the photographer are no longer an issue.

## **Protecting Museum Copyright and the Copyright of Others**

CHIN undertakes to do what is reasonable to protect the copyright of its contributing members. Copyright notices are posted on *Artefacts Canada* so that the viewer is aware that the content is protected by law. Furthermore, like many resources on-line, CHIN has developed Important Notices associated with its web-site that define clearly how viewers and users may use content. These notices can be accessed at the following URL:  
<http://www.chin.gc.ca/English/Notices/index.html>

## **Rights Management and Protection Technologies**

Images can also be protected and managed to some degree using current technologies. In CHIN's publication, **The Virtual Display Case: Making Museum Image Assets Safely Visible, (Third Edition)**, rights management systems and remote mounting are discussed. Protection technologies, such as visible and invisible watermarking and image encryption are also considered. This publication is archived on the CHIN website, but still provides a good introduction to this topic. It can be accessed at the following URL:  
[http://www.chin.gc.ca/English/Intellectual\\_Property/Virtual\\_Display\\_Case/index.html](http://www.chin.gc.ca/English/Intellectual_Property/Virtual_Display_Case/index.html)

## Appendix B - Artefacts Canada Fields and Field Mapping Worksheets

Please feel free to use the following worksheets as you go through the initial process of mapping your data to the Artefacts Canada fields before you go through the automated mapping process.

### B.1 - Artefacts Canada: Humanities

Humanities field names	Humanities field labels	User fields	User default values
<b>Required fields</b>			
INS	Institution		
INSCTY	Institution City		
INSPR	Institution Province		
OB	Object Name		n/a
IDENTIFIER	Unique Record Identifier		n/a
<b>One of these fields is required</b>			
AN	Accession Number		n/a
CN	Catalogue Number		n/a
<b>Optional fields</b>			
DOB	Date of Birth		n/a
DOC	Date of Change		n/a
RL	Record Language		
IMTHUMBURL	Image Thumbnail URL		
IMFULLURL	Image Full Size URL		
IMTHUMB	Image Thumbnail		
IMFULL	Image Full Size		
IMUNM	Image User Name		
IMSRV	Image Server		
IMDET	Image Details		
INSRECURL_ENG	Institution – English record URL		
INSRECURL_FRN	Institution – French record URL		
<b>Institution Fields</b>			
DA	Department		
DSC	Discipline		
<b>Identification Fields</b>			
CLSN	Classification		
CTGY	Category		

SCAT	Sub-category		
GRP	Group		
OBA	Alternative Object Name		
OT	Object Type		
CS	Military Service Component		
RK	Military Rank		
UNIT	Military Unit		
VN	Vessel Name		
QTY	Quantity		
COMP	Number of Components		
COMP	Component Part Names		
GDR	Gender Association		
ASSN	Additional Associations		
<b>Title Fields</b>			
TI	Title		
TITR	Title Translation		
TIV	Title Variation		
TIO	Original title		
<b>Natural Science Fields</b>			
GEN	Nat Sci – Genus		
SP	Nat Sci – Species		
SPECNM	Nat Sci – Common Name		
<b>Artist/Maker</b>			
AR	Artist/Maker		
A TEC	Other Artist		
A TECR	Other Artist Role		
MF	Manufacturer		
MFCTY	Manufacturer City		
MFPR	Manufacturer Province		
MFCRY	Manufacturer Country		
MR	Merchant		
MRCTY	Merchant City		
MRPR	Merchant Province		
MRCRY	Merchant Country		
<b>Date Fields</b>			
BPD1	Date of Object - From		
EPD2	Date of Object - To		
ABD	Absolute Date		
DTEC	Dating Technique		
PER	Period		
SA	School/Style		
STY	Style		
<b>Dimension Fields</b>			
HT	Height		

LEN	Length		
WI	Width		
DP	Depth		
ODIA	Outside Diameter		
IHT	Image Height		
IWI	Image Width		
UNL	Unit-Linear		
<b>Descriptive Fields</b>			
MA	Material		
MT	Technique		
IL	Integrity Level		
MED	Medium		
SUP	Support		
MKSL	Marks/Labels		
DECME	Decorative Motif Exterior		
DEL	Decorative Element		
DT	Decorative Technique		
PTN	Pattern Name		
SUB	Subject/Image		
ICON	Iconographic Meaning		
EPP	Events, places, people		
DE	Description		
HU	History of Use		
USER	User		
CAPU	Capacity Measurement Unit		
CAPMAX	Maximum Capacity		
CAPMIN	Minimum Capacity		
BSD	Service Begin Date		
ESD	Service End Date		
OPR	Operating Principle		
SIG	Signature		
NTRLT	Inscription		
NAR	Narrative		
<b>Location Fields</b>			
ORDT	Origin-District		
ORMU	Origin-Municipality		
ORPR	Origin-Province		
ORCRY	Origin-Country		
ORCT	Origin-Continent		
UDT	Use-District		
UMU	Use-Municipality		
UPR	Use-Province		
UCRY	Use-Country		

UCT	Use-Continent		
OGD	Other Geographic Data		
NR	Natural Region		
BN	Borden Number		
ACO	Archaeological Context		
ZNA	Site Name		
ZPR	Site Province		
ZCRY	Site Country		
<b>Ethnology Fields</b>			
CU	Culture		
GCUD	Geo Cultural Area		
ELG	Ethno-linguistic Group		
RG	Religious Group		
CUC	Cultural Context		
<b>Registration Fields</b>			
MUSCOL	Museum Collection		
EX	Exhibition Title		
<b>Image Fields</b>			
PHN	Photo Number		
PH	Photo Type		
IMTYP	Image Type		
IMFSZ	Image File Size		
<b>Publication Fields</b>			
PUB	Publication Citation		
<b>Rights/Permission Fields</b>			
CRL	Credit Line - Object		
CRLPH	Credit Line – Photo		
CRLIM	Credit Line – Image		
CRT	Copyright –Object		
CRTPH	Copyright – Photo		
CRTIM	Copyright – Image		
PCN	Patent/Copyright Nos		
BRN	Brand Name		
ML	Model Name/ Number		

## B.2 - Artefacts Canada: Natural Sciences

<b>Natural Sciences Field names</b>	<b>Natural Science field labels</b>	<b>User fields</b>	<b>User default values</b>
<b>Required fields</b>			
INS	Institution		
INSCTY	Institution City		
INSPR	Institution Province		
IDENTIFIER	Unique Record Identifier		n/a
<b>One of these fields is required</b>			
PH	Phylum/Division		n/a
FAM	Family		n/a
GEN	Genus		n/a
SP	Species		n/a
SPEL	Rock Name		n/a
LOT	Lot Details		n/a
<b>One of these fields Is required</b>			
ORCT	Origin-Continent		n/a
OROC	Origin-Ocean/Basin		n/a
ORCRY	Origin-Country		n/a
<b>One of these fields is required</b>			
AQN	Acquisition Number		n/a
AN	Accession Number		n/a
CN	Catalogue Number		n/a
LOCN	Locality Number		n/a
			n/a
<b>Optional fields</b>			
DOB	Date of Birth		n/a
DOC	Date of Change		n/a
IMTHUMBURL	Image Thumbnail URL		
IMFULLURL	Image Full Size URL		
IMTHUMB	Image Thumbnail		
IMFULL	Image Full Size		
IMUNM	Image User Name		
IMSRV	Image Server		

IMDET	Image Details		
<b>Institution fields</b>			
DA	Department		
DSC	Discipline		
HBC	Herbarium Code		
SRINS	Source-Institution		
<b>Taxonomic fields</b>			
KGD	Kingdom		
KGDS	Infrataxon 1		
PHS	Infrataxon 2		
CL	Class		
CLSS	Infrataxon 3		
ORD	Order		
ORDS	Infrataxon 4		
FAMA	Family Authority		
FAMD	Family Date		
SUBFAM	Subfamily		
GENA	Genus Authority		
GEND	Genus Date		
SUBGEN	Subgenus		
SUBGENA	Subgenus Authority		
SUBGEND	Subgenus Date		
SPA	Species Authority		
SPD	Species Date		
SSP	Subspecies		
SSPA	Subspecies Authority		
SSPD	Subspecies Date		
VAR	Variety		
VARA	Variety Authority		
VARD	Variety Date		
F	Forma		
FA	Forma Authority		
FD	Forma Date		
OTAXA	Other Taxonomic Ranks		
HYB	Hybrid		
HYBA	Hybrid Authority		
TYP	Type Status		
TYPNM	Type Name		
TYPA	Type Authority		
TYPD	Type Date		
TYPDET	Type Details		
TYPV	Type Verifier		

TYPVD	Type Verification Date		
GENF	Former Genus		
GENFA	Former Genus Authority		
SPF	Former Species		
SPFA	Former Species Authority		
TFN	Taxonomic File Number		
SYN	Synonyms		
SPECNMG	Common Name - Group		
SPECNM	Common Name		
<b>Identification fields</b>			
GENO	Associated Species		
IDR	Identifier		
IDD	Identification Date		
<b>Specimen fields</b>			
SPECL	Specimen Collection		
SPENA	Specimen Nature		
OB	Derived Object Name		
OT	Derived Object Type		
SPECA	Specimen Category		
SPEG	Specimen Group		
NAR	Narrative		
<b>Sample fields</b>			
QTY	Quantity Specimen		
QTYR	Quantity Replicates		
EGCSZ	Eggs - Quantity in Clutch		
EGIS	Eggs - Quantity in Set		
EGPNO	Eggs - Quantity Parasitic		
EGPTY	Eggs - Parasitic Species		
PRS	Parasites		
MCOL	Collector		
COLN	Collector Number		
CPM	Collecting Method		
CPDA	Date Collected		

CPDAF	Date Collected - End		
<b>Cataloging fields</b>			
MO	Acquisition Mode		
AD	Accession Date		
OCN	Other Catalogue Number		
MUSCLN	Museum Collection		
EX	Exhibition Title		
DNMO	Disposition Mode		
DNR	Disposition Recipient		
DND	Disposition Date		
<b>Descriptive fields</b>			
STATUS	Status/Occurrence		
SEX	Sex of Specimen		
AG	Age/Stage		
LET	Total Length		
WI	Width		
UNL	Unit-Linear		
IR	Iris Colour		
PLUM	Plumage/Pelage		
DE	Description		
BND	Band/Tag		
BNDNO	Band/Tag Number		
PPR	Physical Properties		
OPR	Optical Properties		
CLR	Colour		
CRD	Crystal		
CMPLC	Chemical Classification		
SCTYP	Specific Commodity Type		
<b>Date fields</b>			
DTEC	Dating Technique		
DTSPE	Date of Specimen		
DTISO	Absolute Date		
DTPER	Geological Period		
DTGEO	Geological Age		
BIO	Biozone		
<b>Habitat fields</b>			
HABTA	Environment		
HABEC	General Habitat		
HAB	Habitat/Gross Cover		

WBT	Water Body Type		
COMF	Community Form		
SBH	Substrate		
<b>Position fields</b>			
EL	Elevation		
UNEL	Unit-Elevation		
STL	Lithostratigraphic Levels		
STLG	Stratigraphic Group		
STLF	Stratigraphic Formation		
STLM	Stratigraphic Member		
STLB	Stratigraphic Bed		
<b>Location fields</b>			
ORCTR	Origin-Continental Region		
ORGP	Origin-Geological Province		
ORPR	Origin-Province or Territory		
ORDT	Origin-District		
ORCY	Origin-County		
ORSC	Origin-Section		
ORTP	Origin-Township		
ORRG	Origin-Range		
ORCLT	Origin-Concession and Lot		
MN	Mine		
WB	Water Body		
LOCNM	Locality Name		
LOCDE	Locality Description		
ZNA	Site Name		
ZBN	Site Borden Number		
LAT	Latitude		
LNG	Longitude		
UTME	UTM Easting		
UTMN	UTM Northing		
UTMZ	UTM Zone		
MPR	Map Reference		
<b>Image fields</b>			
PHN	Photo Number		
PHLOC	Locality Photo		

PHT	Photo Type		
IMTYP	Image Type		
IMFSZ	Image File Size		
<b>Publication fields</b>			
PUB	Publication Citation		
<b>Rights/Permission fields</b>			
CRL	Credit Line - Object		
CRLPH	Credit Line - Photo		
CRLIM	Credit Line - Image		
CRT	Copyright - Object		
C RTPH	Copyright - Photo		
CRTIM	Copyright - Image		
PCN	Copyright Numbers		

## Appendix C - File Format Specifications

Please note that there is an overall record length limit of 16 KB, or 16,000 characters. If a single record in your file exceeds this length your upload will generate an error.

### C.1 ASCII Tab Delimited Format

1. The ASCII tab delimited file consists of two elements:
  - i) The first line consists of the field names that correspond with the data. Each field name must be separated only by a Tab. The end of a line is indicated by a carriage return.
  - ii) The second and subsequent lines are the data lines. Data fields in a delimited format are separated by a Tab. A carriage return indicates the end of a record.
2. There is no restriction on the length of tab delimited fields, i.e. fields can be longer than 256 characters.
3. If there is no data for a field, a tab character needs to be included to hold the column position.
4. To delete a record using the Tab delimited format include a field called "DELETE" where the content = YES. For example:

```
IDENTIFIER<Tab>DELETE
```

```
100<Tab>YES
```

#### Example of Tab Delimited file

```
IDENTIFIER<Tab>DELETE<Tab>INS<Tab>ObName<Tab>ObType<Tab>Title<cr>
FineArt1234<Tab><Tab>Ultimate Art
Gallery<Tab>painting<Tab>oil<Tab>Still Life on Table<cr>
Decorative Art5678<Tab><Tab>Ultimate Art
Gallery<Tab>sculpture<Tab><Tab>Wild Horse<cr>
Fine Art2525<Tab>YES<cr>
```

### C.2 Microtext File Format

1. A data field begins with the field name in column 1, followed by an equal sign "=", followed by the field contents.

```
1          2          3
1234567890123456789012345...
```

ObjectName=Painting

2. There is no line length limit. However it is recommended that line lengths be limited to 80 characters. Microtext lines are broken on a space. A leading space is optional on continuation lines. CHIN's system will add a single space when processing a continuation line. The CHIN system will remove multiple blanks when the data is reformatted for loading to a database.

The following is an example of a Description field formatted to the recommended 80 character line length.

```

1         2         3         4         5         6         7         8
1234567890123456789012345678901234567890123456789012345678901234567890

```

```

DESCRIPTION=THE HUMAN HEAD HAS A LANDSCAPE DEFINING THE FACIAL DETAILS. A
RAINBOW EXTENDS OVER THE HEAD FROM FRONT TO BACK, BEGINNING JUST ABOVE
THE POSITION OF THE LEFT EYE AND CONTINUING DIAGONALLY TO A POSITION BEHIND
THE RIGHT EAR. THE EYES ARE DEFINED BY FURROWS IN THE LANDSCAPE WHICH BEGIN
OVER THE TEMPLES AND LOOP AROUND WHERE THE EYE SOCKETS ARE SITUATED.

```

3. Field names can be a maximum of 25 characters in length.
4. No spaces are permitted on either side of the equal sign.
5. A slash "/" in column 1 denotes the end of a complete document. No other data can be present on this line.
6. To delete a record using the Microtext format, a record identifier needs to be identified followed by "DELETE=YES".

For example:

```

IDENTIFIER=100
DELETE=YES
/

```

NOTE: The presence of an equal sign on continuation lines in columns 1 through 25 inclusive will cause that line to be treated as a new data field. If an equal sign occurs in the data in column 1 through 25, entry can begin in column 26. The CHIN system will remove multiple blanks when the data is reformatted for loading to a database. A slash occurring on continuation lines in column 1 will automatically end the current document and start the creation of the next.

## Example of Microtext file

1            2            3            4            5            6            7            8  
 123456789012345678901234567890123456789012345678901234567890123457890

IDENTIFIER=5321Fine Art\*\*  
 INS=Ultimate Art Gallery  
 DA=Western Art  
 OB=Painting  
 OT=Oil  
 TI=Still Life on Table  
 AR=Nicholson, Ben  
 EPD=1950  
 CU=English  
 AD=19600000  
 SR=New York Fine Arts, Inc  
 DE=The image appears to be viewed through a window frame, although all elements are drawn on a two-dimensional surface. Green and light blue tones dominate the central portion of the composition. Signature is on back, lower left.

/

IDENTIFIER=6379Fine Art\*\*  
 INS=Ultimate Art Gallery  
 DA=Western Art  
 OB=Drawing  
 OT=Ink  
 TI=Self-portrait  
 SUB=Jacques Villon  
 AR=Villon, Jacques  
 MED=Ink on paper  
 AD=19670000  
 SR=Rogers, Fred  
 DE=Signed in script lower right-hand orner, "Jaques Villon '49"  
 CL=Gallery 5;

/

IDENTIFIER=100Fine Art\*\*  
 DELETE=Yes

/

\*\* The field name used here should match whatever field you have mapped to CHIN's "UNIQUE RECORD IDENTIFIER" field.

## **Appendix D - Test Team**

CHIN would like to thank the following individuals and institutions for testing the procedures for contributing data to Artefacts Canada over the Internet. Their helpful suggestions and the time taken to work through the process were invaluable in making this a simple way to contribute to a unique and valuable National resource.

Donalee Deck, University of Winnipeg, Museum of Anthropology

Serge Désaulniers, Musée Pierre-Boucher

Christine LaSalle, Musée d'art de Joliette

Marcel Parent, Biodôme de Montréal

Kathryn Rumbold, Canadian Museum of Health and Medicine at the Toronto Hospital

David Smith, Cuadra Associates

Linda Tanaka, Vancouver Museum

Jim Whittome, University of Alberta; Museums and Collections Services