



# DRS Web Admin User Guide

The DRS Web Administrative Interface (DRS Web Admin) allows Harvard collection managers, their local surrogates and their designated DRS depositors to create, view, and manipulate digital objects and their administrative metadata in DRS.

**Need help?** To report a problem or ask a question about DRS Web Admin, contact the DRS Support team in OIS (<http://nrs.harvard.edu/urn-3:hul.ois:drshelp>). If you are reporting a problem, please provide a detailed description of the problem, including activity that led to the problem and any error messages. If appropriate, provide the DRS ID of objects that illustrate the problem.

<b>1. DRS Web Admin Registration.....</b>	<b>2</b>
<b>2. Connect to DRS Web Admin .....</b>	<b>2</b>
<b>3. DRS Web Admin Functions Summary .....</b>	<b>2</b>
<b>4. Working with Individual Objects.....</b>	<b>3</b>
4.1 Search for object in DRS .....	3
4.2 View an object .....	4
4.3 Change or update object metadata .....	4
4.4 Update / replace an object.....	5
4.5 View and change object relationships.....	7
4.6 Add a persistent identifier.....	7
4.7 Add an object to DRS .....	8
4.8 Delete object relationships.....	8
4.9 Delete an object from DRS .....	8
<b>5. Working with Groups of Objects .....</b>	<b>8</b>
5.1 Search for group of objects in DRS .....	9
5.2 Search for batch deposits .....	9
5.3 Create an object set .....	9
5.4 Transactions that can be performed with an object set .....	9
5.5 Download metadata about objects in a set.....	10
5.6 Download a set of objects .....	10
5.7 Deleting a PDS object.....	10
<b>6. MD5 Applications .....</b>	<b>12</b>

November 17, 2009

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[http://hul.harvard.edu/ois/systems/drs/drs\\_webadmin\\_help.pdf](http://hul.harvard.edu/ois/systems/drs/drs_webadmin_help.pdf)

## 1. DRS Web Admin Registration

In order to begin using DRS Web Admin, Harvard collection managers, their local surrogates and their designated DRS depositors should submit a DRS Web Admin Access request ([http://hul.harvard.edu/ois/systems/drs/f-drspds\\_operator\\_reg.html](http://hul.harvard.edu/ois/systems/drs/f-drspds_operator_reg.html)). Access to test and production versions of DRS Web Admin requires a valid Harvard ID and PIN.

As part of the registration process, each user will be assigned a role in the system associated with a requested level of access. There are five roles available:

Role	Level of Access
Manager	ability to update existing DRS Billing Code metadata (Name, 33 digit CoA, billing contact email); ability to add, update, delete objects and object relationships, and create reports
Depositor	ability to add, update, delete objects and object relationships, and create reports
Restricted Depositor	ability to add and update objects, object relationships, and create reports
Maintainer	ability to update some metadata
Report	read all data and create some reports

Roles are assigned to an entire DRS owner code. At this time it is not possible to provide DRS Web Admin access to a specific billing code, specific objects or collections.

## 2. Connect to DRS Web Admin

Production Web Admin: <http://nrs.harvard.edu/urn-3:HUL:drs-admin>

Test Web Admin: <http://nrs.harvard.edu/urn-3:HUL:drs-admin-qa>

## 3. DRS Web Admin Functions Summary

- **View jobs in DRS Loader queue:**  
Enables one to view batches that are currently in DRS Loader queue (deposited by all DRS depositors).
- **View recent batch deposits:**  
Enables one to view recent batch deposits to DRS (deposited by all DRS depositors).
- **View DRS objects previously deposited:**  
Enables a DRS operator to search for and view objects previously deposited.
- **Online deposit:**  
New objects can be added to the DRS by uploading the files and providing the required metadata. Note that audio files cannot be added to DRS using DRS Web Admin.
- **Online update:**  
Change security flags, billing information, contact information for objects.

- **Online object delivery:**  
In order for users to ‘get their objects back’, DRS can send a set of objects to another computer. This is a background, asynchronous process that, depending on the number and sizes of the objects, may take anywhere from several minutes to many hours.
- **Relationship maintenance:**  
View, add, or delete relationships for any object.
- **Online naming:**  
Assign persistent identifiers to individual objects.
- **Transaction audit:**  
All change transactions will be logged and will generate email to the owner contact. Only functions and systems available to the user will be displayed.
- **Batch transaction size limits:**
  - max # of objects in an object set: 10,000
  - max # of objects in a set to download (delivered as a ZIP file): 10,000
  - max file size in an object set to download (delivered as a ZIP file): 5GB
  - max # of objects to delete in one set: 500

## 4. Working with Individual Objects

This section describes functions that can be performed on individual DRS objects. For more information, consult any of the following pages:

[4.1 Search for object in DRS](#)

[4.2 View an object](#)

[4.3 Change or update object metadata](#)

[4.4 Update / replace object](#)

[4.5 View or change object relationships](#)

[4.6 Add a persistent identifier](#)

[4.7 Add an object to DRS](#)

[4.8 Delete object relationships](#)

[4.9 Delete an object from DRS](#)

### 4.1 Search for object in DRS

The search option allows the user to find either a single object in the DRS or a group of objects that meet a user defined criteria. To find an individual object:

- Search using the DRS Object ID. The ID number can be found in a DRS report for deposited objects or in the URL of a PDS delivered object. For instance, in <http://pds.lib.harvard.edu/pds/view/2574320> ‘2574320’ is the DRS ID of the METS file that contains the structure of this PDS object.

- Search using a combination of object metadata elements from the drop-down menus. Object metadata choices include:
  - Owner code
  - Billing code
  - Metadata type
  - Mime type
  - Usage Class
  - Owner supplied name \*
  - Role
  - Purpose
  - Quality
  - Insertion date

Search criteria marked with a \* can be searched using a wildcard '\*'

## **4.2 View an object**

View an object by clicking on the individual object link. The object format (i.e.: JPEG, JPEG2000, TIFF, GIF, etc) will determine if the object will either be displayed within the web browser or downloaded. If the object is downloaded the object name will NOT reflect the DRS ID or object owner supplied name.

## **4.3 Change or update object metadata**

To change object metadata, search for the object by DRS Object ID or metadata profile. Select the individual object. The update function offers a series of drop-down menus and text boxes. The current information for each field is displayed and can be changed. Optional fields are marked with an asterisk \*. Changes and updates will be immediately visible through the DRS Web Admin.

The following object metadata fields can be updated in DRS Web Admin:

- Owner Supplied Name
- Billing Code
- Metadata Type
- Mime Type
- Role
- Purpose
- Quality
- Access Flag
- Usage Class

- bitspersample
- compression
- photointerp
- xres \*
- yres \*
- resunit \*
- imageheight \*
- imagewidth \*
- orientation \*
- displayorient \*
- targetnotes \*
- history \*
- source \*
- system \*
- producer
- optres \*
- qualitylayers \*
- reslevels \*
- prosoftware \*
- enhancements \*
- methodology \*

#### ***4.4 Update / replace an object***

To update / replace the object (file) in the DRS, search for the object by DRS Object ID or metadata profile. Select the individual object. Use the “update object/metadata in DRS” function to update / replace the object.



Click through the object metadata update pages until you see the last page called “Upload File.”

**> Update Object: Upload File (Page 3 of 3)**

Select the file you wish to upload.

Owner Supplied Name  use full filename including extension  
 use filename without extension  
 enter supplied name here

Do you want to update the file?

File Signature

Signature Type

Upload File:

Select Signature Type MD5 (it's the only option). Now create an MD5 checksum for the file you want to upload. To do that you must have MD5 software installed locally on your computer.

MD5 is an algorithm that creates a digital "signature" of a file. It is a reproducible number that will allow the DRS to be sure that the file loaded into DRS was not corrupted upon submission.

Links to MD5 software are available in the DRS Documentation Center (<http://hul.harvard.edu/ois/support/docs-drs.html>) and at the end of this document.

If you are using MD5 Summer:

- Start the application
- Click on the "Create Sums" button
- Select the folder which houses the file you need to create a checksum for
- Select the file from the list and add it to the queue
- Save the resulting checksum file as a text file
- Close the program
- Open the text file and cut and paste the checksum into the File Signature field in DRS Web Admin (don't paste the "\*" character – just the alphanumeric string)

Once the MD5 checksum is created cut and paste it into the File Signature field. Then click the Browse button to select the file to upload. Then click on the "click here to continue" button.

Do you want to update the file?	Yes - enter data in form below ▾
File Signature	87b66f35c57618f41a550e1fd0a2c138
Signature Type	MD5 ▾
Upload File:	U:\Downloads\1423770! Browse...
<input type="button" value="cancel"/> <input type="button" value="click here to continue"/>	

You will see a page called “Review Your DRS Object.” Click the “Update this object to DRS” button at the bottom of the page. If the update was successful you will see the following page:

<b>&gt; Object Updated in DRS</b>
Object data was successfully updated in DRS for object id 14237705
<input type="button" value="click here view object in DRS"/>

If you see an error instead, please contact drs support for help:

<http://nrs.harvard.edu/urn-3:hul.ois:drshelp>

## 4.5 View and change object relationships

It is possible to view and change object relationships within the DRS. A new object can be added to the DRS and then relationships to existing DRS objects can be created. To view or change object relationships, search for the object by DRS Object ID or metadata profile and then select the individual object.

Page Delivery relationships cannot be maintained from the DRS Web Admin. These must be done within use the PDS Maintenance System. More information about PDS Maintenance is available on the OIS web site:

<http://hul.harvard.edu/ois/systems/drs/maint.html>

## 4.6 Add a persistent identifier

If an object is already in the DRS but not named, you can use DRS Web Admin to assign a persistent identifier. An operator must have the “Depositor” or “Manager” role to use this feature and name creation will be limited to the authority path(s) for which the operator is authorized.

To name an object:

1. Search for the object by its DRS ID or another metadata value. If you retrieve a group of objects, click the DRS ID of the desired object from the result set to display the object’s DRS record.
2. Select “Add persistent identifier” from the left menu.
3. Select an authority path from the dropdown list and enter a resource name. Click the Add button to request the persistent identifier.

4. To view the new persistent identifier, click “Click here to view object metadata”.

For more information about NRS authority paths and the format of persistent identifiers, consult the [NRS User Guide](#).

#### **4.7 Add an object to DRS**

To add an object into the DRS the depositor must have MD5 software installed locally on their computer. MD5 is an algorithm that creates a digital "signature" of a file. It is a reproducible number that will allow the DRS to be sure that the file loaded into DRS was not corrupted upon submission. If the signature does not check as correct upon deposit, the object will not be deposited and an error message will be returned to the depositor.

Links to MD5 software are available in the DRS Documentation Center (<http://hul.harvard.edu/ois/support/docs-drs.html>) and at the end of this document. OIS does not support this software, it is the responsibility of the depositor to download and maintain their MD5 software.

#### **4.8 Delete object relationships**

Once object relationships have been deleted from the DRS they are completely purged out of the system. A list of deleted object relationships is not available.

#### **4.9 Delete an object from DRS**

You can delete objects and sets of objects from DRS using the “Delete object(s) from DRS” command in DRS Web Admin. Once objects have been deleted from the DRS they are completely purged out of the system. A list of deleted objects is only available on the Delete Confirmation page. Save the page or copy information from this page if you want to retain the list of deleted objects for your records.

Objects can be deleted by a DRS Web Admin user with a role of ‘depositor’ or ‘manager’. Only objects within the DRS Owner Code(s) for which the DRS operator is registered can be deleted. The DRS is designed to be a long-term storage system and items should not be removed without forethought.

### **5. Working with Groups of Objects**

This section describes functions that can be performed on groups of objects. For more information, consult any of the following pages:

[5.1 Search for a group of objects in DRS](#)

[5.2 Search for batch deposits](#)

[5.3 Create an object set](#)

[5.4 Transactions performed on an object set](#)

[5.5 Download metadata about objects in a set](#)

[5.6 Download a set of objects](#)

[5.7 Deleting a PDS object](#)

## **5.1 Search for group of objects in DRS**

To search for a group of objects select a combination of object metadata elements from the drop-down menus. Object metadata choices include:

- Owner code
- Billing code
- Metadata type
- Mime type
- Usage Class
- Owner supplied name \*
- Role
- Purpose
- Quality
- Insertion date

Search criteria marked with a \* can be searched using a wildcard '\*'.

The Result Set Summary will show how many objects met the search criteria. The objects in the result set can be viewed as a list and then individually selected. The objects in a search result set can also be added to an object set to perform group transactions on the whole set.

The total file size of the result set is also available in the search results.

## **5.2 Search for batch deposits**

You must have the batch deposit ID in order to search for batch deposits. The Batch ID can be found in a DRS Report email. You can also browse recent batch deposits.

## **5.3 Create an object set**

Objects sets in DRS allow a user to work with groups of objects rather than just one object at a time. Sets can be created by a user to view information about groups of objects or to make changes to characteristics of the set. One user can only have one active set of objects at a time. Be sure to clear the object set before selecting a new set.

A set of objects can be created by using the Search functions. An object set is usually created from a search results set by using “add to object set” command in DRS Web Admin. A user can perform multiple searches and each time add search results to the set.

## **5.4 Transactions that can be performed with an object set**

The following transactions can be performed on an object set:

- Change security flags and billing information

- Online object delivery. DRS will use ADS (asynchronous delivery) to deliver a set of objects as a zipped file.
- Delete objects in an object set from DRS

### **5.5 Download metadata about objects in a set**

To review a list of objects download the set as a text file. The file includes the following metadata for each object in a set:

- Filename
- Owner supplied name
- URN
- Object ID
- MIME type
- File size
- Insertion date
- Role
- Purpose
- Quality
- Owner
- Access Flag
- Usage Class
- MD5 signature

### **5.6 Download a set of objects**

Download sets of objects for viewing later on a local computer. A set of objects can be delivered as a ZIP file using DRS asynchronous delivery. After a request to download a set of objects is submitted by a user, a web page with a ticket number for set retrieval comes up. An email notification with a link to the set will be sent after the set is assembled and delivered. If a set of objects is larger than 2 GB in size DRS assistance should be requested.

Note that the files you will be getting back from DRS will not have the original file names with which there were deposited but will be named according to DRS ID of each file. In order to match these files to original filenames you can use the set download report which lists DRS IDs and corresponding Owner Supplied Names of each file. You can use a batch renaming program into which you feed the download report and rename files back to their original filenames.

### **5.7 Deleting a PDS object**

To delete a PDS object, you need to delete the METS file, all image and OCR/text files that represent pages in the object, and all relationships associated with these files. And since the

deletion procedure involves creating a set of objects, the DRS Web Admin limit on maximum number of files in a set (500) may be a factor.

**Deleting a PDS object consisting of fewer than 500 files.**

1. Search for the DRS ID of METS file associated with the PDS object.
2. Add the METS file and all associated page or text files to a set. To do this, select the option “Add all related files” from the METS file metadata display screen.

<p><b>View</b></p> <p><a href="#">view all metadata</a>  <a href="#">view all relationships</a>  <a href="#">view/download object</a></p>	<p><b>Metadata</b></p> <p><b>DRS Object ID</b> 639989  <b>Supplied Name</b> 005024263-METS  <b>Persistent Identifier</b></p>
<p><b>Add</b></p> <p><a href="#">add relationship to DRS</a>  <a href="#">add persistent identifier</a></p>	<p><b>Owner Code</b> FHCL.MUSI  <b>Billing Code</b> FHCL.MUSI.MUS_0004  <b>Access Flag</b> P  <b>Usage Class</b> HIGHUSE</p>
<p><b>Delete</b></p> <p><a href="#">delete object from DRS</a>  <a href="#">delete relationships from DRS</a></p>	<p><b>Insertion Date</b> 2007-04-12 12:21:49.0  <b>Last Modified</b> 2007-04-12 12:22:02.0  <b>Mime Type</b> text/xml</p>
<p><b>Update</b></p> <p><a href="#">update object/metadata in DRS</a></p>	<p><b>File Path</b> /drsqa/drsfs/highuse/2007/04/12/0/639989.xml  <b>Relationship Count</b> 64  <b>In Object Set?</b> N</p>
<p><b>Object Set</b></p> <p><a href="#">add to object set</a>  <a href="#">add all related objects</a></p>	

3. Display the summary screen for the object set. To do this, select the “> Summary” option in the upper right corner of the screen.

 <p>HARVARD UNIVERSITY LIBRARY  <b>DRS Web Admin</b> <span style="float: right;"><a href="#">Home</a> <a href="#">Search</a> <a href="#">Logout</a> <a href="#">Help</a></span></p>	
<p>version: qa 1.0 <span style="float: right;">my set &gt; <a href="#">summary</a>  <span style="color: red;">[65 objects]</span> &gt; <a href="#">scroll set</a></span></p>	
<p>&gt; <b>Digital Object #639989 (text/xml)</b></p> <ul style="list-style-type: none"> <li>• This is the object's record in the DRS. To view all the metadata, click on "view all metadata".</li> <li>• Click <a href="#">here</a> for more information and help about this page.</li> </ul>	
<p><b>View</b></p> <p><a href="#">view all metadata</a>  <a href="#">view all relationships</a>  <a href="#">view/download object</a></p>	<p><b>Metadata</b></p> <p><b>DRS Object ID</b> 639989  <b>Supplied Name</b> 005024263-METS  <b>Persistent Identifier</b></p>

4. Delete the objects in the set. To do this, select the option “Delete objects from DRS”.

### > My Object Set

Object Set Attributes	
object count	65
total file size	431.816 megabytes
contains DRS owner code	FHCL.MUSI

5. Confirm the deletion when prompted.

Note that DRS Web Admin will display a warning and prevent deletion at Step 5 if any individual image or OCR/text files in the set have external relationships outside the PDS object. For example, deletion will be prevented if page images in the set have related archival master files that are not recorded in the METS file. To fix this error, you will need to separately delete those external relationships in DRS Web Admin before attempting the procedure outlined above.

#### **Deleting a PDS object consisting of more than 500 files.**

If the combined total number of files associated with a PDS object is above 500, you will not be able to easily delete the object using DRS Web Admin. If you need to delete a PDS object consisting of more than 500 files, contact the DRS support team for assistance, using the DRS feedback form: <http://nrs.harvard.edu/urn-3:hul.ois:drshelp>.

## 6. MD5 Applications

- **Windows:**

MD5 Summer. A nice 3rd party freeware that allows you to checksum a single file or entire directory. - ([www.md5summer.org](http://www.md5summer.org))

A homegrown JAVA application. This tool requires the Java Runtime Environment (version 1.2 or later) installed on your machine. - (<http://hul.harvard.edu/ois/systems/drs/md5/>)

- **Macintosh:**

MD5 utility for Mac – freeware

<http://mac.softpedia.com/get/Security/MD5.shtml>