

## Novice to Know-How Module Text

### Course 4: Select and Transfer Digital Content

# Module 4: Transferring Digital Content

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## 1. Introduction.

In the previous modules in this course we have covered selecting digital content for preservation, and working with both external depositors and internal records creators. Now it is time to consider how we actually get the digital content from them to us!

There are numerous different transfer methods available, each with their own pros and cons. We may decide to use one, a few, or many, depending on a number of factors including available resources, content types, sensitivity of the data, and access to support from colleagues in IT.

No matter which method you choose to use, the most important to do is make sure you have a clear, and well-documented, workflow for the transfer process. Before we look at that in more detail let us take a quick look at two different types of transfer.

## 2. Manual vs Automated Transfers.

In his book "Practical Digital Preservation", Adrian Brown starts by describing the transfer process as either "push" or "pull", i.e. either a process that is started by the content creator/depositor or by the preservation repository, respectively. He then goes on to state that both push and pull transfers can come in a Manual or Automated form.

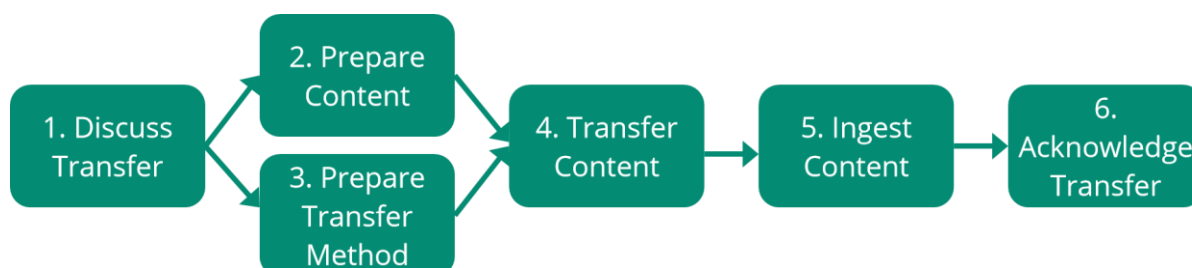
Manual transfers are initiated each time by an action from either the content creator/depositor or staff at the repository. This might be via a visit, an email, phone call, or other communication. The content is then transferred by one of a number of methods that may include physical transfer of storage media, use of FTP (File Transfer Protocol), via an online storage service like DropBox, or attached to an email. We will talk more about these methods later!

Automated transfers have limited human input and are mostly auto-initiated and processed by systems, usually within an organization. These can also be push and pull, e.g. initiated by an EDRMS system or by a preservation repository system, respectively. Automated transfers usually require some custom development to link between systems.

When first starting out we will more than likely begin with manual transfers.

### 3. Transfer Workflow.

Having clear workflows for transferring digital content from external depositors or internal content creators will help ensure consistency and adherence to good practice. In the following sections we will describe the basic steps of a simple transfer workflow. This can be used at the basis for developing your own workflow which meets the needs of your particular context(s).



#### 4. Discuss Transfer.

The first step covers discussions with external depositors and internal content creators as laid out in previous modules.

By the completion of this step we should know what content (including accompanying metadata and documentation) to expect. We should have any required agreements in place. And everyone involved should understand the transfer process and the role they will play in it.

#### 5. Prepare Content.

Preparation of the content for transfer will likely be mostly the responsibility of the content creator or depositor, although repository staff may help if needed.

Preparation will include gathering together the digital content as well as assembling and/or creating the required documentation and metadata according to repository guidance. Ideally this will include a file manifest (with checksums) and some high-level contextual information. You may wish to provide a pro forma for the latter.

We must be realistic about the amount of metadata and documentation we can expect, especially from external depositors. It may also vary from depositor to depositor. A tech savvy depositor may find it easy to use DROID to create a file manifest with checksums, while others may find this too challenging.

#### 6. Transfer Content.

Once the preparations have been completed the next step will be the actual transfer of content. The following are some of the most common methods used:

- On physical storage media – depending on the age of the content this may include floppy disks, CDs, DVDs, magnetic tape cartridges, memory cards, hard drives, or USB

drives. If you are going to be transferring data using your own hard drives it may be worthwhile investing in some that allow for encryption, especially if it will be transferred in the post.

- File transfer protocol – there are online FTP services that can be used but they may not be secure and often have limits on the amount of data that can be sent. You can also work with colleagues from the IT department to set-up your own FTP service.
- Online file hosting services such as DropBox and Google Drive - these will allow depositors to upload digital content to cloud storage that you will then be able to access. While relatively user-friendly there may be issues around size limits and security.
- By email – while this is a possible option it is not recommended and should perhaps only be used as a last resort. Issues of security apply and size limits are very small.

## 7. Ingest Content.

Once the digital content has been transferred, we will then process it for preservation. This process is called ingest and will be covered in detail in the next course.

It is important to note, however, that at this point the depositor/content creator should be notified of the successful completion of the transfer, but advised not to delete their copy of the content (if one exists) until they receive a final acknowledgement that the content has been processed.

## 8. Acknowledge Transfer.

It is essential to provide the depositor/content creator with a final acknowledgement when processing the content into the repository has been completed.

This should indicate that the repository now formally assumes responsibility for the management and preservation of the digital content. Also, it indicates that the depositor/content creator can delete any copies of the content they have retained if they wish to do so.

It can be useful to prepare a standard acknowledgement that can then be tailored for individual situations.

## 9. Wrap-Up.

So, having a clear workflow for transfer of digital content will ensure that everyone is sure of their responsibilities and that the transfer is carried out in a consistent and appropriate manner.

The steps in the transfer process may include:

1. Discuss transfer
2. Prepare content
3. Prepare transfer method
4. Transfer content
5. Ingest Content

## 6. Acknowledge Transfer