Guideline

Records & Archives Management Services (RAMS)

University of
Western Sydney

Bringing knowledge to life

TRIM:
Scanning Standards

Background

The purpose of this document is to set out standards that staff can use when scanning documents for capture into TRIM.

Before scanning a document you should determine how the image will be used in the future. Is the image going to replace the 'hard copy' or is it going to be used as a back-up only? The end product must satisfy the needs of the users, without putting undue strain on IT resources.

Legislative Requirements

The State Records Act allows for records to be scanned and the paper originals destroyed. The electronic copy then becomes the 'official' copy of the document.

To be able to legally destroy records that have been imaged (ie scanned), the University must ensure that the following conditions are met:

- all requirements for retaining originals have been assessed and fulfilled
- copies are made which are authentic, complete and accessible
- copies are kept for the authorised retention period, and
- originals are kept for quality control purposes for an appropriate length of time after copying.

[Ref. *General Retention & Disposal Authority – Imaged Records (GDA36)*, State Records Authority of NSW, 2009]

Once original documents are destroyed the scanned electronic copy must be kept for the full retention requirement as identified under the State Records Act and other relevant legislation.

Exceptions

There are some records where you MUST NOT DESTROY the paper originals once scanned. These include:

- Legal Documents (ie contracts, MOU's, etc);
- Staff Timesheets;
- Records required as archives (ie permanent retention);
- Records that are subject to current or pending legal proceedings; and

- Records that are subject to an application for access under the *Government Information (Public Access) Act (NSW), 2009* or the *Privacy & Personal Information Protection Act (NSW), 1998*.

Recommended Scan Settings

Scan settings will vary depending on the nature of the document being scanned. The following are recommendations only. However, it is strongly suggested that documents are not scanned at a resolution lower than 200dpi.

Type of Document	Resolution	Colour Level	Output Format
Text Only‡	200dpi	B/W	PDF
Text + Images/ Drawings	300dpi	Greyscale	PDF
*Text + Colour Annotations/Colour Images**	200dpi	Colour	PDF
Photographs – For print quality	600dpi	Colour	TIFF

‡ These are the default settings on UWS multi-function devices (MFDs) – ie the photocopiers with scanning capabilities.
* Where it is important to capture the annotations in colour to understand the document.

Note: If you are scanning on UWS photocopiers you are limited to a file size of 10MB (due to email size limits). If you are regularly scanning documents with a larger output file you may want to investigate purchasing a scanner. If you are unsure please contact RAMS for advice.

Quality Control

Once you have scanned a document, and before filing it in TRIM you should check that the document has scanned accurately.

You should always open the scan copy and check:

- First page
- Last page
- Both sides of double sided pages have been copied
- number of pages in the scan and compare with number of pages in the original
  (remember to count both sides of double sided documents)
- pages have been fully scanned
  (ie there have been no parts of the page have been missed in the scan, particularly where text is close to the edge of the page)
- the scan is clear and the text can be easily read
  (particularly if there is faint print or annotations)

The Scanner

Most scanning in the University is conducted on photocopiers (known as multi-function devices (MFD's) due to their ability to scan, print and photocopy). When scanning on these devices there are a limited number of changes you can make to settings.

Settings for the UWS MFD's include:

- colour depth (b/w or greyscale),
- resolution (100, 200, 300, 400 or 600 dpi),
- image density (ie contrast … default setting is auto),
- scan size (ie size of the paper you are scanning … default is set to auto detect).

If scanning on stand-alone scanners you will find that most scanning software offers at least some of the following basic functions:

- Pre-scanning
- Cropping
- De-skewing
- Resolution
- Colour depth (colour, grayscale, b&w, lineart, etc)
- Brightness & contrast
- Colour balance

In most cases it is best to use software to modify scans using the above functions as little as possible. The aim of scanning is to have an electronic copy that matches the paper original as closely as possible.

Resolution / File Size

If you set the resolution too low, the image becomes coarse and pixelated. If you set the resolution too high, the file size can be larger than necessary, thus taking longer to scan and print, and costing more to store.

There is generally no need to scan above 300dpi unless you are scanning for publication quality.

Format

The recommended format for scanning multi-page documents at UWS is **PDF**. Photographs should be scanned as TIFF.

What to do with the Paper Originals

Paper originals should be kept for a period of time to ensure appropriate quality control checking can take place. A recommended minimum is 3 months but you can keep originals longer if you like. A good approach is to place scanned documents in a box labelled with the date documents were scanned.

OCR

Once you have scanned a document to PDF you can run OCR on the document if you have Adobe Professional. Running OCR identifies text on the page and allows full text searching. The better the quality of the scan the more accurate the identification of text characters.

Common Problems

Problem	Solution/Action
Multiple pages go through the scanner at the same time	This often happens when staples are removed from a document or when a large document is being scanned. Flick through pages before scanning to ensure pages are not stuck together. Ensure you check the number of pages in the scan and compare to the original.
The email containing the scan has a .dat extension	This occurs when the document contains too many pages to fit into an email (ie the scan was larger than 10MB). The solution is to divide the document into smaller sections and scan separately. Then use Adobe Professional or similar to merge the parts together before saving to TRIM.
Signatures or annotations are unclear and difficult to read	Often signatures or annotations in coloured pens are not picked up very well in scans. Solutions include scanning in greyscale (or colour if available) and you may need to increase the resolution to 300dpi.

Scanning Flowchart

Scan

Open doc to check scan OK

Catalogue into TRIM

Store Paper Originals
(recommend 3 months)

Delete Electronic Copy
(from your mailbox or network drive)

Destroy Paper Originals