

SWGFAST

Friction Ridge Digital Imaging Guidelines

1. Friction Ridge Impression (Latent Print) Digital Image Guidelines

These guidelines refer to the digital recording and depiction of friction ridge impressions that are present or developed on evidence.

Policies and procedures must be in place for the digital capture, storage, retrieval, display and transmission of friction ridge images retained as evidence. These guidelines are recommended procedures to preserve identity, authenticity, integrity, and security of friction ridge digital images.

1.1 Agencies should establish policies to determine which friction ridge digital images will be retained as evidence.

1.2 Friction ridge digital image documentation - Friction ridge digital images, case notes, or associated data shall include the following:

1.2.1 A unique case identifier. This association may be accomplished by one or more of the following methods:

1.2.1.1 As part of the digital image

1.2.1.2 As part of the file name

1.2.1.3 As data associated with a digital image within an imaging database

1.2.1.4 As data associated within a standardized record (i.e., ANSI NIST, Record Level 2)

1.2.2 Date and initials or date and personal marking

1.2.3 Description or identifier of the item bearing the friction ridge impression

1.2.4 Significant information about the orientation and/or position of the friction ridge impression on the object through description and/or diagram(s)

1.2.5 Scene location or address

1.2.6 Scale information

1.2.7 Make and model of capture device

- 1.3 Friction Ridge Impression Digital Image Quality
 - 1.3.1 Friction ridge impressions should be captured (color or grayscale) at 1000 ppi or higher resolution. Grayscale digital imaging should be at a minimum of 8 bits. Color digital imaging should be at a minimum of 24 bits.
 - 1.3.2 Friction ridge impression digital images shall be stored and transmitted without compression or with lossless compression.
- 1.4 Friction Ridge Impression Digital Image Integrity
 - 1.4.1 Each original digital image shall be stored in a manner which permits authentication.
 - 1.4.1.1 Original digital images are accurate replicas (pixel for pixel value) of the primary image.¹
 - 1.4.1.2 Subsequent images resulting from digital processing techniques shall not replace, or be considered, original images.
 - 1.4.1.3 Digital images captured from lifts, or from conventional photographs or negatives, shall not replace the lift or photograph as original images.
- 1.5 Casework Documentation
 - 1.5.1 Procedures must be in place to ensure accuracy and completeness of documentation.
 - 1.5.2 Casework documentation shall distinguish friction ridge impression (latent print) digital images from lifts or photographs.
 - 1.5.3 The application of digital image processing (enhancement) techniques to a copy of an original digital image for comparison purposes shall be documented. This documentation must be sufficient to enable evaluation or replication of the digital image processing techniques.
 - 1.5.3.1 Digital images prepared for other purposes do not require digital image enhancement documentation, i.e., demonstrative court exhibits.
 - 1.5.3.2 If only minor digital image adjustment are made to the entire image, similar to conventional photography/darkroom adjustment to brightness, contrast and color shift, etc., documentation is not required.