



## The Universal Latent Workstation/Version 6.6

The Universal Latent Workstation (ULW) is an interoperable and interactive software tool developed for latent print examiners. With a single encoding, the software improves the ability to exchange latent friction ridge images involving various Automated Fingerprint Identification Systems - including the FBI's Next Generation Identification (NGI) System. While the software itself does not establish connectivity to these systems, the ULW translates a latent image into a neutrally compatible digital format for search purposes. The ULW software is provided at no cost to authorized criminal justice agencies.

### ULW Enables a Latent Print Examiner to:

- Upload a latent print image file from a scanner, digital camera, or disk
- Automatically assess the quality of and enhance latent print images
- Create an EBTS compliant Latent Friction Ridge Features Search (LFFS) or Latent Friction Ridge Image Search (LFIS) file
- Compare the latent print against candidate images within a Search Result Latent (SRL) response
- Manage the search, image request, response, and delete transactions
- Read and display American National Standards Institute/National Institute of Standards and Technology (ANSI/NIST) formatted biometric records

### NEW CAPABILITIES included in this release of the ULW:

- Enforce a minimum and maximum size for a Region of Interest (ROI)
- Removed "Use entire image as ROI" check box from ROI dialog
- Corrected an issue in Comparison Tool where the center toolbar was positioned left or right of center
- Corrected an issue in Comparison Tool where the image displayed didn't correspond to the selected row
- Corrected an issue in Comparison Tool where images would not stay zoomed in or out when switching between candidates
- When more than 20 candidates are returned in an SRL response (i.e., some without images), both Transaction Manager and Latent Editor order/rankings will now match
- Require the specification of a Finger/Palm Position in Latent Editor instead of defaulting to "Unknown Finger"
- Provided an option eliminating the requirement to enter a Finger/Palm Position before saving a file in Latent Editor
- Changed the default setting for Request Feature Records (RFR) from "Always" to "Never"
- Changed the default setting for submitting a Biometric Decision (BDEC) file to "Off" by default
- CreateImages utility can now be used to generate palm print cards
- Added a Candidate Name column to Comparison Tool and made it visible by default
- When generating a tenprint or palm print card, additional descriptive data (when available) is displayed on the printouts
- Latent Quality Metrics (LQM) are enabled by default

The FBI's NGI System includes automated palm print matching capabilities. This enables criminal justice agencies to search latent palm prints obtained from crime scenes against centralized repositories, enhancing law enforcement's ability to solve crime. ULW Version 6.6 will support the expanded latent search services and improved matching accuracy provided by NGI's Increment 3 deployment. Users are encouraged to upgrade to ULW Version 6.6 to maximize the benefits provided by NGI.

The **NGI CAPABILITIES** included in the latest release can be enabled by first coordinating with FBI CJIS and then selecting the "Enable NGI Functionality" check box within ULW's Latent Editor Program Settings. NGI capabilities and enhancements include:

- Increased file penetration limit to 50% average for fingerprints\*
- Removal of the ridge counting requirement
- Improved Unsolved Latent File (ULF) management based on automated notifications of ULW user's decisions

- Automated ULW feedback that will enable NGI System performance tuning
- Implementation of Extended Feature Sets
- Submitted latent prints (finger, palm, supplemental) can be searched against the centralized National Palm Print System (NPPS)
- Search criminal, civil, and ULF records
- User may request NGI return of Type-9 EFS formatted features and matching minutiae records associated with the returned images
- User may request images from specific arrest cycles by including Biometric Set Identifier (BSI) in Image Retrieval Request (IRQ) transactions

*\*File penetration restriction is completely lifted in extreme cases where no filter parameters (i.e., pattern class, gender, finger number, etc.) are known; however, it is recommended that filters be applied when known/appropriate.*

### ULW Installation and Support:

To download the latest version of the ULW software, please visit [www.fbibiospecs.cjis.gov](http://www.fbibiospecs.cjis.gov). Click on the 'Latent Print Services' tab and then click the 'Download ULW Software' button to submit your request. Once approved, a link will be sent via e-mail to initiate the download. The file is a self-installing executable requiring Administrator privileges for software installation. ULW Help Files provide the encoding steps and show examples of friction ridge features placement. To request assistance for the first encoding via teleconference, please contact: [ulw@leo.gov](mailto:ulw@leo.gov).

### Connectivity:

Latent connectivity is coordinated through the Customer Service Group of the **FBI/CJIS** Biometric Services Section. To request connectivity, please contact the Customer Service Group at [liaison@leo.gov](mailto:liaison@leo.gov) or **(304) 625-5590**.

### ULW Training:

The **FBI/CJIS** Division offers an array of ULW training opportunities, including a hands-on 8-hour course, conference workshops, and special request training designed to meet specific needs of the requesting agency. For inquiries regarding ULW software training, please contact the Biometric Technology Training Team at [BTTT@leo.gov](mailto:BTTT@leo.gov) or **(304) 625-4980**.

### System Resources:

ULW Software can be downloaded (CD available upon request) at no cost by an authorized requestor; however, the user must possess a computer, scanner/camera, and Internet access.

### Recommended:

- Microsoft Windows 7 with Service Pack 1 (or greater) Operating System (OS)
- 2 GHz dual-core (or faster) processor
- 4 GB of RAM
- Video card & monitor capable of displaying "true color" or 65 K colors with minimum resolution of 1280 x 1024
- TWAIN-compliant scanner and/or digital camera capable of 1000 ppi

### Minimum:

- Internet access
- Microsoft Vista with Service Pack 2 or Microsoft Windows XP with Service Pack 3
- .NET Framework 4.0 Client Profile
- 2 GHz processor
- 2 GB of RAM
- 700 MB of available hard disk space for ULW install only (1 GB including Ground Truth files)
- Video card/monitor displaying 65 K colors with minimum resolution of 1024 x 768
- TWAIN-compliant scanner and/or digital camera capable of 500 ppi

*NOTE: All Microsoft Windows users are encouraged to update their OS with any available Service Pack due to the enhanced security, functionality, and features provided.*

### Latent Services Support:

For assistance with latent services, please contact the Latent and Forensic Support Unit at [IST@leo.gov](mailto:IST@leo.gov) or **(304) 625-5868**.



For additional information, please visit [www.fbibiospecs.cjis.gov](http://www.fbibiospecs.cjis.gov) or email [ulw@leo.gov](mailto:ulw@leo.gov)

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