JPEG 2000
Profile for 1000ppi
Fingerprint Compression

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www.mitre.org/work/tech_papers/tech_papers_04/lepley_fingerprint/
Compression Requirements

- Efficiency – Image Quality
- Backward Compatibility (500 ppi)
- Independent compression ratios
  (500 @ 15:1 & 1000 @ 15:1)
- Certification procedure
Wavelet Transform
Wavelet Transform
5-level
JPEG 2000

• Excellent image quality
• Similar to WSQ
• Already a standard
• Includes required functionality
• Quality and resolution scalability
• COTS support
Profile for 1000 ppi Fingerprint Images

Restricted subset of the JPEG 2000 parameter settings

- Insure image quality
- Interoperability
- Transcoding to 500 ppi WSQ
- Certification criteria
1000ppi J2K < 15:1
J2K 5-level 5:1
500ppi Image