



**Part II:**

**Modern Musings &  
Present-Day Pitfalls  
for  
ESI Protocols**

**Thursday, April 18, 2024**



# A Four-Part Series

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# Leaping Forward

## Evolving ESI Protocols

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<https://wisconsin.aceds.org/aceds-midwest-chapters-esi-protocol-series/>





# A Four-Part Series

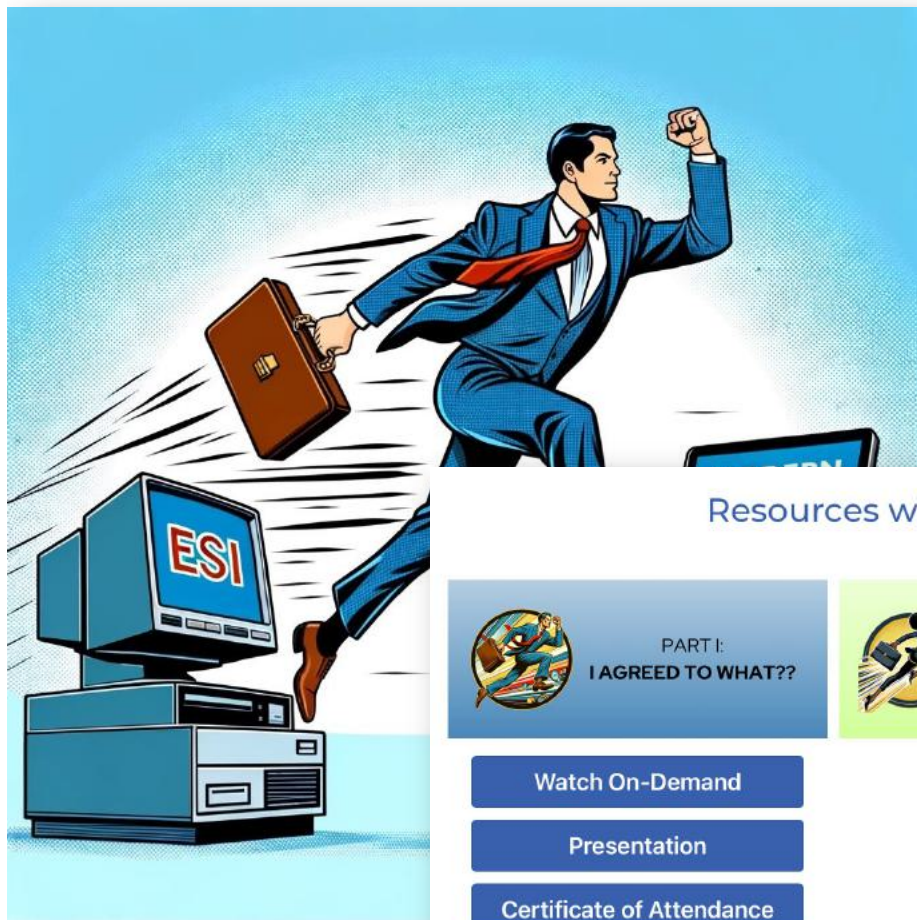
# **Leaping Forward**

## Evolving ESI Protocols

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# A Four-Part Series **Leaping Forward** Evolving ESI Protocols

Resources will be listed below after each event has concluded



PART I:  
I AGREED TO WHAT??



Part II:  
Modern Musings &  
Present-Day Pitfalls for  
Protocols



Part II:  
The Judicial Panel



Part IV:  
ESI Protocol Workshop

Watch On-Demand

Presentation

Certificate of Attendance

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# A Four-Part Series

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# Leaping Forward

## Evolving ESI Protocols

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eDiscovery  Assistant



<https://wisconsin.aceds.org/aceds-midwest-chapters-esi-protocol-series/>





**ACEDS**  
ASSOCIATION OF CERTIFIED  
E-DISCOVERY SPECIALISTS

This series is brought to you by the collective ACEDS chapters of: **Detroit, Ohio, Wisconsin, Chicago, Denver**



# LEAPING FORWARD: EVOLVING ESI PROTOCOLS

**PART II:** MODERN MUSINGS & PRESENT-DAY PITFALLS FOR PROTOCOLS

**PART II:**  
**APRIL 18, 2024**  
**12:00 NOON CDT**  
**REGISTER FREE TODAY!**



**BRETT BURNEY**  
MODERATOR



**CRAIG BALL**



**ANDY KECK**  
PANELISTS



**ANNE COSTELLO**

**Andy Keck**  
Chief Technology Officer  
**ProFile Discovery**



Andrew Keck, Chief Technology Officer, is a Co-Founder and Equity Partner of ProFile Discovery, a litigation support company based in Columbus, Ohio. Developing and leading the electronic discovery practice for ProFile Discovery for the last twelve years and has over eighteen years working in the litigation support profession, a background in electronic discovery, and holds a MS in Cybersecurity. He continues to serve as an expert witness for court cases involving forensics and other technical issues with complex IT infrastructures.

**Anne Costello**  
Senior Information  
Governance Consultant  
**Epiq**



Anne Costello joined Epiq in 2021 and is a Senior Information Governance Consultant. At Epiq she provides Microsoft 365 Information Governance consulting, training, and best practices solutions to corporations and government entities. Anne has over 30 years of experience supporting technology in litigation practice. Anne has broad and deep experience with many commonly used legal software applications and litigation practice support. She believes that technology is key to the efficient delivery of legal services today and to successfully support a legal practice, a technology leader must endeavor to understand the business and practice strategy of the organization and use that understanding to set the IT direction for the firm.



## Craig Ball

Texas Attorney and  
Forensic Technologist  
**University of Texas School  
of Law**



Craig Ball hails from Texas, works in Austin and happily calls the Big Easy home. A graduate of Rice University and the University of Texas School of Law, Craig is a trial lawyer and certified computer forensic examiner. Licensed in Texas since 1982, Craig is an Adjunct Professor at the University of Texas School of Law and at Tulane Law School, teaching Electronic Evidence and Digital Discovery. Craig is an expert in digital forensics, emerging technologies, visual persuasion, electronic discovery, and trial tactics, limiting his practice to service as a court-appointed Special Master in Electronically-Stored Information. Craig's articles frequently appear in the national media. For nine years, he wrote the award winning column on computer forensics and eDiscovery for American Lawyer Media called "Ball in your Court," and still pens a popular blog of the same name at [ballinyourcourt.com](http://ballinyourcourt.com). Craig Ball is the 2019 recipient of the Texas Bar's Gene Cavin Award for Lifetime Achievement in Education.

FREE  
at  
craigball.com

The image shows a document titled "Exemplar ESI Protocol (TIFF+)" with version "Ver. 20230106". The document text is partially obscured by blue callout bubbles containing the following terms: Definitions, Forms of Production, Unitization, Processing, Privilege Logs, DeNIST, TIFF+, Hash, Preservation, Redactions, Deduplication, OCR, Native, Metadata, Load Files, Hard Copy, Structured Data, and Craig Ball. The document text includes sections like "A. Definitions" and "7. 'Metadata' is the term used to describe the structural information of the file, as opposed to describing the content of a file."

Exemplar ESI Protocol (TIFF+)  
Ver. 20230106

The Parties hereby agree to the following protocol for production of electronically stored information ("ESI") and paper ("hard copy") documents. This protocol governs all production in the matter.

**A. Definitions**

1. "ESI" is defined to be synonymous with the term "electronically stored information" as defined in the Federal Rules of Civil Procedure. ESI existing in any medium, including but not limited to, but not limited to: processing documents, spreadsheets, graphics, presentations, image files, text messages, transaction logs, audio and video files, voicemail, internet e-mail, computer logs, text messages, backup materials. The term "Documents" shall include Hard Copy Documents, Electronic Documents, and Electronic Documents. The term "Documents" shall include Hard Copy Documents, Electronic Documents, and Electronic Documents.

2. "Hard Copy Documents" means documents existing in physical form, including but not limited to: e-mail or other means of electronic communication (e.g., Microsoft Word), computer presentations (e.g., PowerPoint slides), spreadsheets, and images (e.g., PDF).

3. "Electronically stored information" or "ESI" means information that is stored electronically as text documents, or other electronic files, on computers, servers, mobile devices, online repositories, disks, USB drives, tape or other real or virtual storage devices or digital media.

4. "Hard Copy Documents" means Documents existing in physical form at the time of collection.

5. "Hash value" is a numerical identifier that can be determined from a file, a set of files, or a portion of a file, and on a system of mathematics or algorithm that calculates a value for a set of data, serving as a unique identifier for that data to ensure its integrity. Hashing is commonly used for ensuring that data has not been modified and to facilitate duplicate identification. Unless otherwise specified, all files shall be hashed using the MD5 hash algorithm.

6. "Load File(s)" means a file or files that contain the scanned images or processed images of the original documents, including attachments, and with each image or processed image, the data relevant to that image or processed image, including extracted and user-created Metadata, coded data, as well as OCR or other data relevant to that image or processed image. Load file linking corresponding images is used for productions of static images.

7. "Metadata" is the term used to describe the structural information of the file, as opposed to describing the content of a file.

8. "Native Format" means the file format associated with the original or source application and as stored on the custodian's system. For example, a native file format includes .xlsx or .xlsx file.

9. "Optical Character Recognition" or "OCR" means a technology process that captures the content of a scanned image and creates an ancillary text file that can be associated with the image and searched. The software evaluates scanned data for shapes it recognizes as letters or numbers.

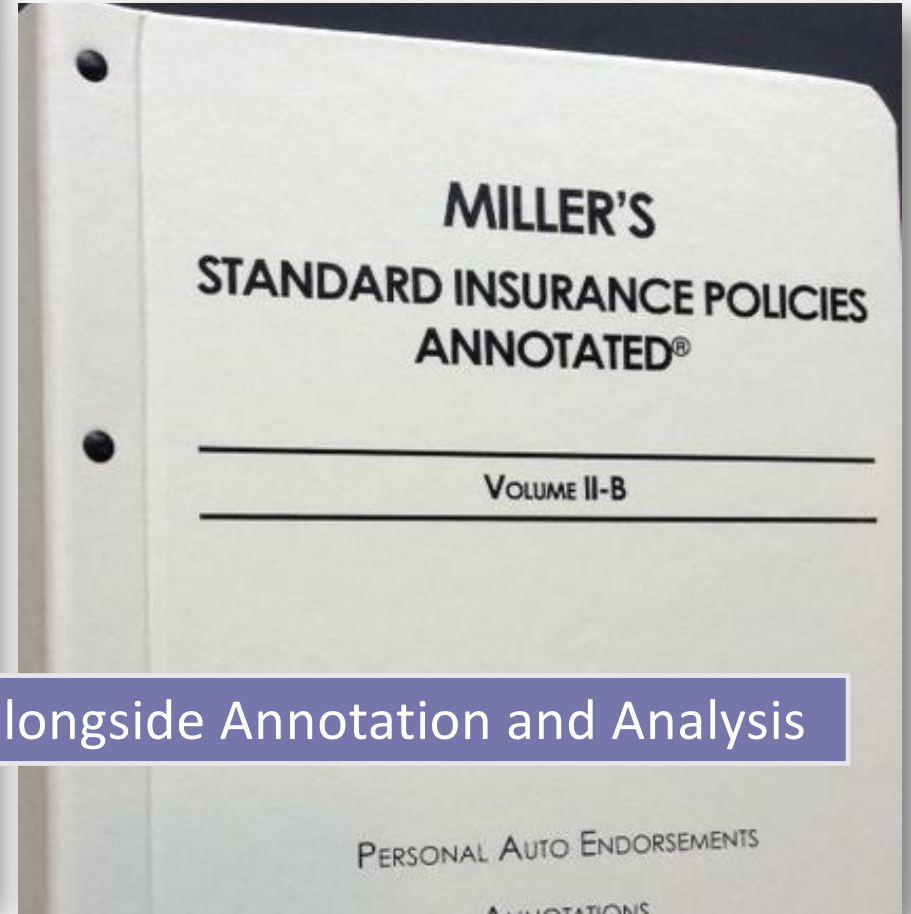
Craig Ball

1982

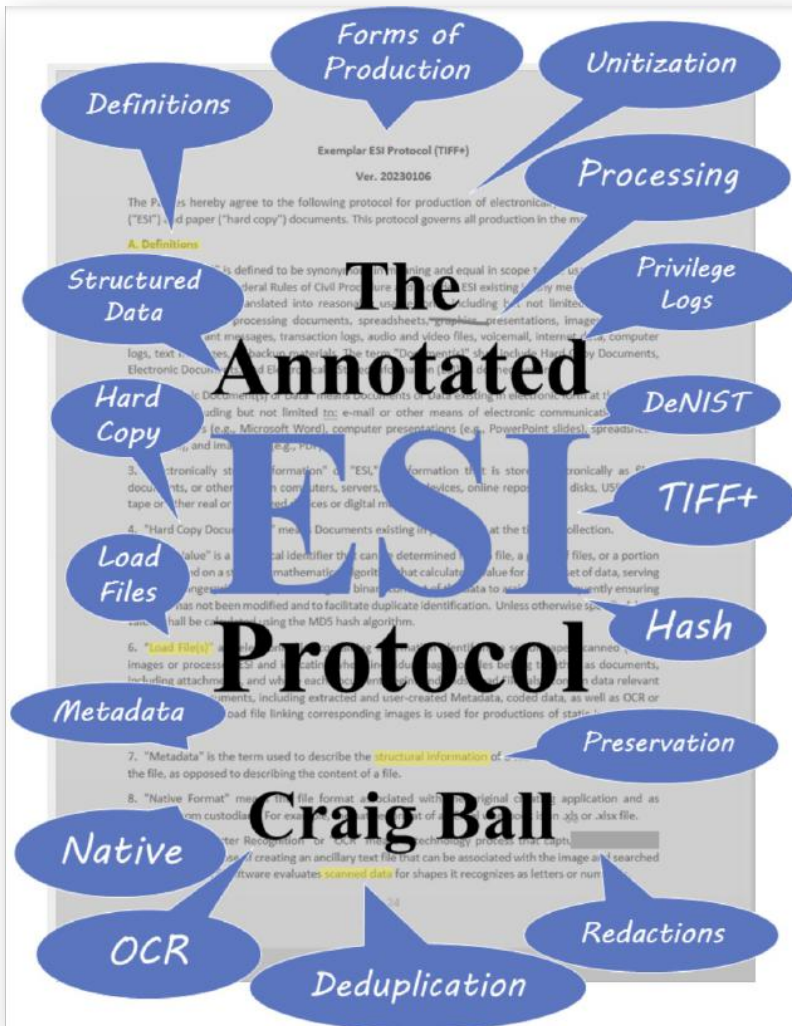




42  
years  
ago...



Policy Clause alongside Annotation and Analysis



	<p>Bates numbering and careful attention paid to avoid reusing sequences from prior productions.</p> <p><b>Comment:</b> This provision is as close to an enduring, industrywide standard as exists despite serious shortcomings. We are captive to 80's era technology when it comes to scanned hard copies. TIFF images tend to be much larger files than the same document supplied as a PDF image, making TIFF productions more expensive to host online and slower to appear onscreen. Unlike PDFs, TIFFs convert color data to black and white, sometimes serious downgrading of the evidence. The 300-dpi resolution works well enough for letters and reports but may be insufficient to adequately display technical drawings and fine details.</p>
<p><b>Unitizing Documents.</b> In scanning Hard Copy Documents, distinct documents should not be merged into a single record, and single documents should not be split into multiple records (i.e., paper documents should be logically unitized). For example, Hard Copy Documents stored in a binder, folder, or similar container should be produced in the same order as they appear in the container. The front cover of the container should be produced immediately before the first document in the container. The back cover of the container should be produced immediately after the last document in the container. The Parties will undertake reasonable efforts to, or have their vendors, logically unitize documents correctly, and will commit to address situations of improperly unitized documents.</p>	<p>"Unitization" refers to the organization of pages into a document, chapter or volume. Paper documents are physically unitized by means of, e.g., clips, staples, bindings and folders. Multiple documents may comprise a "family" unit; for example, a transmittal and its attachments or a report and its exhibits/appendices comprise a parent/child relationship. When unitized paper records are scanned, metadata supplies a logical unitization of files mirroring the physical unitization of the physical document or volume scanned.</p> <p>For documents that contain affixed notes, pages may be scanned once with the notes as they appear on the page and again without the notes, so all content is captured. The relationship of documents in a document collection should be maintained throughout scanning, and processing (e.g., cover letter and enclosures, e-mail and attachments, binder holding multiple documents, folder and other compilations where a parent-child relationship exists between the documents).</p> <p>For ESI, the keys to preserving unitization lie in both the ordering of documents by Bates numbers and the metadata supplied in load files.</p>

	<p><b>Relationships</b></p> <p>agree that if any part of a parent-child relationship is severed, the entire document collection will be produced, including attachments that must be produced in privilege or work-product protection.</p> <p>The Parties shall take reasonable care to ensure that parent-child relationships are preserved within a document collection. The Parties shall not require a parent-child relationship to be severed, and its parent-child relationship should be preserved. The Parties shall not require a parent-child relationship to be severed, and its parent-child relationship should be preserved.</p> <p>For further information, the Parties shall not require a parent-child relationship to be severed, and its parent-child relationship should be preserved.</p>	<p>Few things are as frustrating in a production review as being unable to pair a "parent" transmittal with its "child" attachments. This provision reflects the custom of extracting child attachments from the parent transmittal and supplying them <i>in situ</i>. Too, it touches on potentially-fractious scope of discovery issues by requiring producing parties to treat a document family as a single item to be produced if any component is responsive (although any part may be withheld or redacted on claim of privilege). A producing party may resist, arguing that discovery allows for granular treatment of the family and does not require production of non-responsive attachments or transmittals.</p> <p>Note that the exemplar language obliges the parties to produce hyperlinked files or so-called "modern attachments." The parties must appreciate what this obligation entails in the context of their messaging environment. Some Cloud systems (e.g., Microsoft 365) make it easy to collect documents transmitted as hyperlinked files versus embedded attachments, whereas others may demand manual collection with attendant uncertainty as to whether the item collected remains faithful to the item transmitted. As phrased, the operative distinction is whether the hyperlink in the transmittal points to a resource readily available to anyone with the link (that is, "documents merely referenced") or whether the modern attachment item is unavailable to the requesting party if not produced with the transmittal.</p>
<p><b>Document Metadata</b></p> <p>When producing metadata fields, the Parties should provide for Hard Copy Documents when reasonably available:</p> <ol style="list-style-type: none"> <li>1. Beginning Bates number</li> <li>2. Ending Bates number</li> <li>3. First attachment Bates number</li> <li>4. Last attachment Bates number</li> <li>5. Source location/custodian</li> <li>6. Confidentiality designation</li> </ol>		<p>Paper documents have metadata, too, some of it essential for proper unitization and management. In the example, note that the eight data points required are not usually found within a document. Instead, these metadata values are either collected (like source location/custodian) or (like Bates numbers), assigned as part of an ESI processing and production workflow.</p>

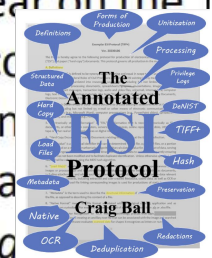


## Unitizing Documents

**In scanning Hard Copy Documents, distinct documents should not be merged into a single record, and single documents should not be split into multiple records (*i.e.*, paper documents should be logically unitized). For example, Hard Copy Documents stored in a binder, folder, or similar container should be produced in the same order as they appear in the container. The front cover of the container should be produced immediately before the first document in the container. The back cover of the container should be produced immediately after the**

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# Exemplar Protocol (pp. 24-31)

**Exemplar ESI Protocol (TIFF+)**  
Ver. 20231010

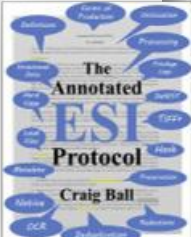
The Parties hereby agree to the following protocol for production of electronically stored information ("ESI") and paper ("hard copy") documents. This protocol governs all production in the matter.

**A. Definitions**

- "Document(s)" is defined to be synonymous in meaning and equal in scope to the usage of the term in Rule 34(a) of the Federal Rules of Civil Procedure and includes ESI existing in any medium from which information can be translated into reasonably usable form, including but not limited to email and attachments, word processing documents, spreadsheets, graphics, presentations, images, text files, databases, instant messages, transaction logs, audio and video files, voicemail, internet data, computer logs, text messages, or backup materials. The term "Document(s)" shall include Hard Copy Documents, Electronic Documents, and Electronically Stored Information (ESI) as defined herein.
- "Electronic Document(s) or Data" means Documents or Data existing in electronic form at the time of collection, including but not limited to e-mail or other means of electronic communications, word processing files (e.g., Microsoft Word), computer presentations (e.g., PowerPoint slides), spreadsheets (e.g., Excel), and image files (e.g., PDF).
- "Electronically stored information" or "ESI," is information that is stored electronically as files, documents, or other data on computers, servers, mobile devices, online repositories, disks, USB drives, tape or other real or virtualized devices or digital media.
- "Hard Copy Document(s)" means Documents existing in paper form at the time of collection.
- "Hash Value" is a numerical identifier that can be determined from a file, a group of files, or a portion of a file, based on a standard mathematical algorithm that calculates a value for a given set of data, serving as a digital fingerprint, and representing the binary content of the data to assist in subsequently ensuring that data has not been modified and to facilitate duplicate identification. Unless otherwise specified, hash values shall be calculated using the MD5 hash algorithm.
- "Load File(s)" are electronic files containing information identifying a set of paper scanned (static) images or processed ESI and indicating where individual pages or files belong together as documents, including attachments, and where each document begins and ends. Load Files also contain data relevant to individual Documents, including extracted and user-created Metadata, coded data, as well as OCR or Extracted Text. A load file linking corresponding images is used for productions of static images (e.g., TIFFs)
- "Metadata" is the term used to describe the structural information of a file that contains data about the file, as opposed to describing the content of a file.

24

<p>when extraction Copy Document</p> <p>s with data, and on then-current</p> <p>Following sources: ily accessible by ficult to preserve</p> <p>things, including</p> <p>for purposes of</p> <p>asonably usable, uch format.</p> <p>et and confer to and the content</p> <p>ity or better with esponding Bates correspond to the</p> <p>ngle record, and ould be logically ainer should be ainer should be</p>	<p>ntainer should ke reasonable nit to address</p> <p>ire Document ed and logged</p> <p>ocument family d document(s) rification, this ents; provided,</p> <p>ly available:</p> <p>well as Concordance A. All metadata will</p> <p>images, 300 dpi on or page size ng forms of ESI</p> <p>e production media.</p> <p>g., color coding and PG images with JPG age.</p>	<p>and revision marks and time thereof), to the user will be</p> <p>of that page with a zero-padded (e.g., d. If a Bates number in a cover letter or e entire production</p> <p>rrresponding Bates</p> <p>ided along with the of the first page of Electronic text must unless the document ould be produced in</p> <p>sub-folders named pages from a single</p> <p>es may, but are not ading technology to are wholly contained ading must not serve</p> <p>hard drive or secure suitable media. The rty, production date,</p>	<p>g been redacted and d document shall be s redacted does not e metadata withheld</p> <p>or redacted under a Receiving Party to</p> <p>rd not be placed on a</p> <p>or SHA-1 hash values within the collection duplicated against a uments may not be</p> <p>is of these duplicates process of creating the plication hash was</p> <p>to the NIST National</p>	<p>arty. At the time als to Receiving</p> <p>esolve exception iding encrypted, meet and confer tion issues.</p> <p>roduced. The fully</p> <p>es not limit the t the right of any t to promulgate,</p> <p>collected</p> <p>le name.</p> <p>was collected</p> <p>on media</p> <p>media</p>	<p>ent to the ent "child"</p> <p>icolons</p> <p>ge (will not y).</p> <p>more than atchments f a family).</p> <p>eparated by</p> <p>s</p> <p>ns</p> <p>icolons</p>	<p>aining privileged</p> <p>ected. "Yes" for uments.</p> <p>ontent/Embedded</p> <p>ential pursuant to (/N).</p> <p>y semicolons</p>
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The Annotated ESI Protocol  
Craig Ball

# Exemplar Protocol (pp. 24-31)

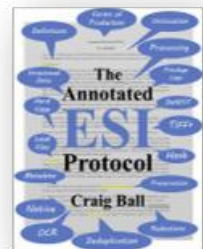
## Exemplar ESI Protocol (TIFF+)

Ver. 20231010

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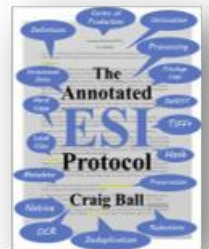


## ESI Protocols

ESI Protocols set out the routine obligations of the parties respecting preservation, identification and forms of production of ESI

*Generally*, agreement between parties;  
*occasionally*, imposed as a court order.

Protocols may also address search, TAR validation and/or confidentiality.



ESI Protocols

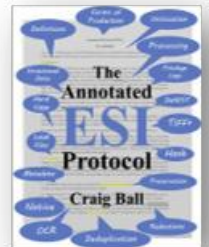
Keep It Simple!

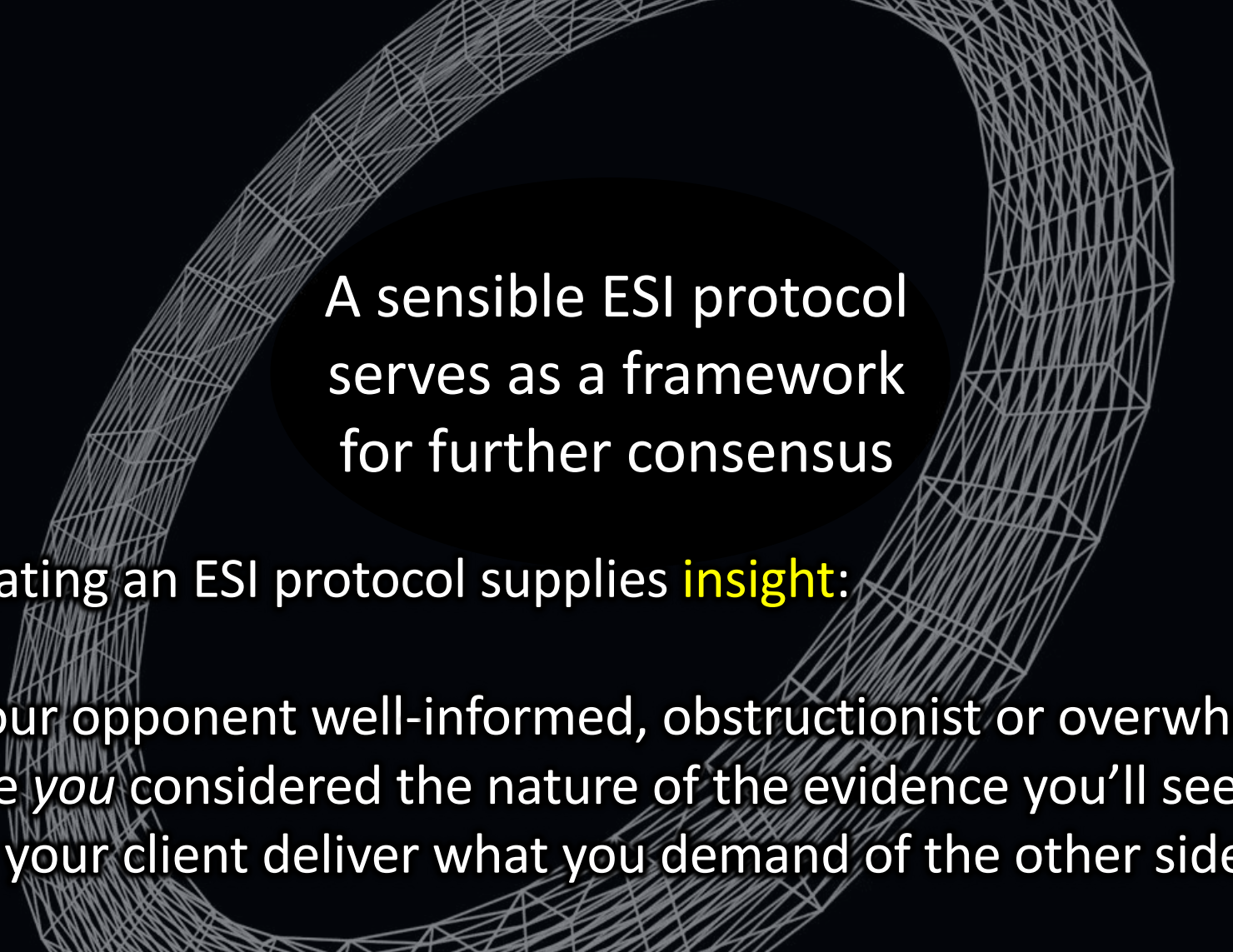
Stick to the Core!

ESI Protocols set out the routine obligations of the parties respecting preservation, identification and forms of production of ESI

### The Core Provisions:

- Elect Native, TIFF+ or Hybrid Production formats
- Specify metadata exchange & load file content
- Set parameters for scanning & text extraction/OCR
- Describe Bates numbering & medium of production
- Address deduplication, logical unitization & threading
- Pin down privilege logging process





A sensible ESI protocol  
serves as a framework  
for further consensus

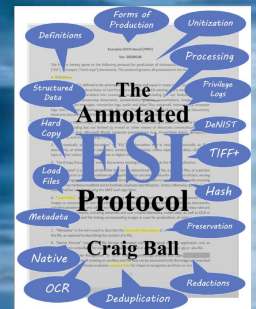
Negotiating an ESI protocol supplies **insight**:

- Is your opponent well-informed, obstructionist or overwhelmed?
- Have *you* considered the nature of the evidence you'll seek?
- Can your client deliver what you demand of the other side?



# Don't Boil the Ocean!

“Routine ESI protocols should focus on matters of technical consistency and expediency; that is, they should address the geeky details that ensure that what the parties exchange in discovery will be complete and utile.”



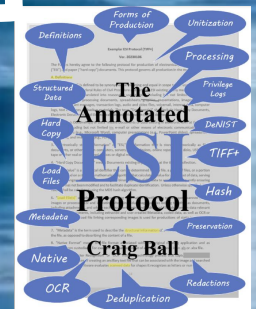



# Don't Boil the Ocean!

CAVEAT:

ESI Protocols don't set the SCOPE of discovery!

If parties fight over WHAT is discoverable,  
they've missed the point of a protocol





Don't expect too much  
from a protocol too  
soon in a case

Search terms?  
TAR Validation?  
Not at first...



# Searching & Collecting Data from Microsoft 365 / Purview



**Microsoft  
Purview**

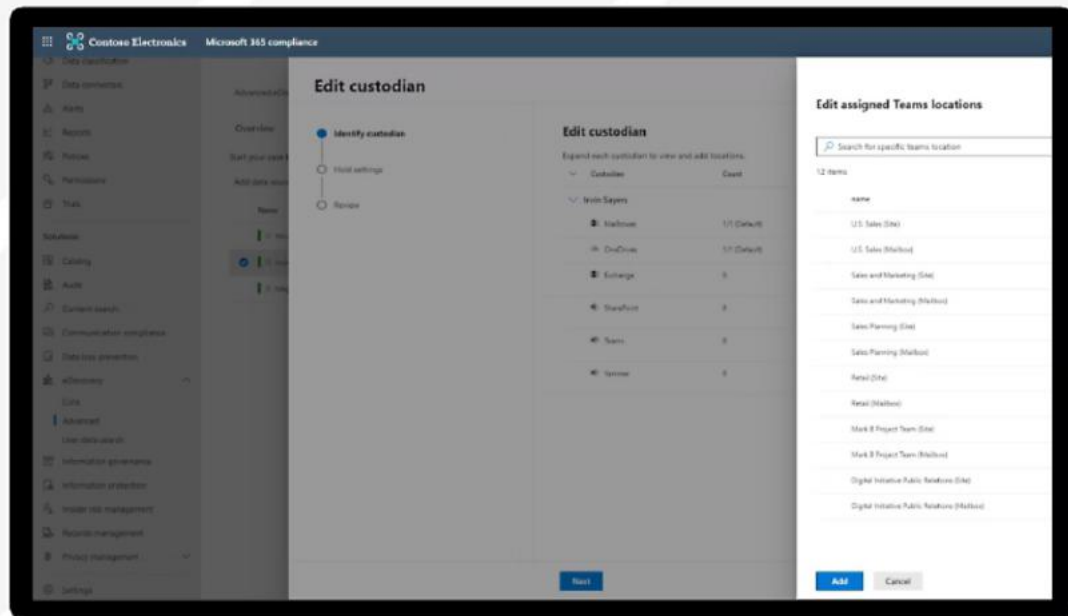
# Key features of Microsoft Purview eDiscovery

## Custodian management

Cloud attachments

Conversation threading

Predictive coding



## Custodian management

Identify and preserve data custodians and sources in your environment.

[Learn more >](#)

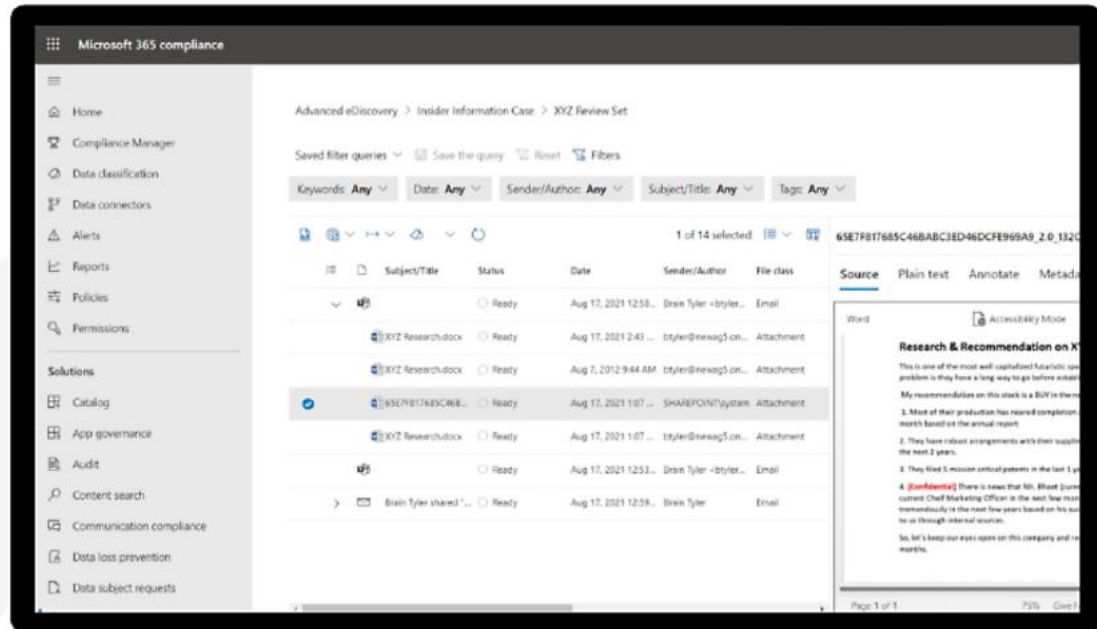
# Key features of Microsoft Purview eDiscovery

Custodian management

Cloud attachments

Conversation threading

Predictive coding



## Cloud attachments

Collect and identify which version of a document was shared in a cloud attachment.

[Learn more >](#)





# Collecting and Preserving Data from Mobile Devices



# Collecting and Preserving Social Media Data and Profiles

# Lessons From the Trenches

Case Links  
Provided to  
Attendees  
Courtesy of:  
 eDiscovery  
Assistant

*In re StubHub Refund Litig.*, 2023 WL 3092972, at \*1 (N.D.Cal. Apr. 25, 2023)

“Let’s get back to basics. **Litigants should figure out what they are able to do before they enter into an agreement to do something.** Litigants should live up to their agreements, especially when they are embodied in court orders, as the ESI protocol is here. And if for some reason a party learns that a so ordered discovery agreement has become impossible to **comply** with, the party should promptly move for relief with a good showing that despite its best efforts, compliance is impossible.





# A Four-Part Series

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# Leaping Forward

## Evolving ESI Protocols

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<https://wisconsin.aceds.org/aceds-midwest-chapters-esi-protocol-series/>



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This series is brought to you by the collective ACEDS chapters of: **Detroit, Ohio, Wisconsin, Chicago, Denver**



# LEAPING FORWARD: EVOLVING ESI PROTOCOLS

**PART III: THE JUDGES PANEL**

**PART III:**  
**JUNE 6, 2024**  
**12:00 NOON CDT**  
**REGISTER FREE TODAY!**



**DAVID HARRIGAN**

**MODERATOR**



**JUDGE  
ALLISON GODDARD**



**JUDGE  
JOEL RICHLIN**

**PANELISTS**