

ACCELERATING DISCOVERY WITH A LITIGATION-READY NUIX DATA WAREHOUSE

Using innovative eDiscovery technology to build a single repository of up-to-date data you can instantly search for legal discovery, investigation, and regulatory response.

01 Executive Summary	, 1
02 The Curse of Serial Discovery	. 2
03 Building a Litigation-ready Nuix Data Warehouse	. 5
04 Benefits of a Litigation-ready Nuix Data Warehouse	. 6
05 Customer Success Stories	. 6
06 Contributors	. 7
07 See It for Yourself	. 7
08 References	. 7



Using Nuix's innovative eDiscovery technology, you can process data once and retain the results and work of human reviewers to eliminate costly and inefficient double-handling.

EXECUTIVE SUMMARY

Organizations incur exorbitant costs collecting, processing, analyzing, and reviewing data triggered by each regulatory or legal matter. Under the current reactive approach to discovery, organizations must repeat this entire process for every event, requiring human beings to comb through thousands of documents that the organization may have already seen and made decisions over many times before.

As data volumes and the frequency of litigation and regulatory oversight have increased, organizations have only been able to cope by hiring more people, internally and externally. However, the exponential growth of data will always outpace the ability to throw more people at the problem. The only solution requires an entirely different approach that leverages a scalable, robust, and modern technology stack to futureproof your litigation and information governance workflows.

Using Nuix's innovative eDiscovery technology, you can eliminate costly and inefficient double-handling. Instead, you can process data once and retain the resulting text and metadata for all future litigation and regulatory events. You can also retain the work product of human reviewers, such as coding and redaction, to avoid having to make the same decisions matter by matter.

By building a litigation-ready Nuix data warehouse, you can:

- Pool your entire corpus of electronically stored information (ESI) into a single index and ensure it remains up to date for your most frequently litigated custodians
- Conduct real-time global searches across this corpus in response to compliance, regulatory, and legal matters, with instantaneous results to analyze, review, and act on
- Eliminate inefficient and costly workflows for collecting, indexing, and reviewing the same data over and over
- Save money and improve response times with "always-on early case assessment" where you can build case strategies in hours or days compared to the weeks and months it currently takes.

THE CURSE OF SERIAL DISCOVERY

Lawsuits can be like buses—you wait around forever and then a bunch of them come all at once. For example, at the time of writing, sterilization company Sterigenics was facing more than 75 separate lawsuits over emissions of toxic gas from its production plant in Willowbrook, Illinois.¹ For a more extreme example, global pharmaceutical company Johnson & Johnson was facing claims from 21,000 plaintiffs over an anticoagulant drug; 20,600 over contaminated body powders; 15,600 over pelvic meshes; 10,600 over a schizophrenia treatment; and 8,600 over a prosthesis used in hip replacement surgery—and that's just in the United States.² While many of these plaintiffs would have joined class actions, the company would easily face hundreds of lawsuits in different jurisdictions.

Organizations facing regulatory scrutiny must also handle repeated requests for information, each needing the same process and degree of effort as a discovery request from a court. A large government inquiry such as Australia's Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry might send literally hundreds of "notices to produce" to organizations under investigation. A single notice (see Figure 1) would contain several requests each requiring a discovery search, sometimes across multiple systems or locations. Typical deadlines for these requests are less than a week.

Over the course of Australian banking royal commission, one bank received more than 100 notices to produce.³ Little wonder, then, that each of the major banks investigated in the inquiry faced legal bills totaling tens of millions of dollars.

Early responses to the COVID-19 pandemic slowed down the need for eDiscovery as some courts closed⁴ and some regulators focused their enforcement on the immediate impacts of the pandemic.⁵ As courts reopen, there will be a backlog of legal cases to work through,⁶ and governments will conduct many inquiries and appoint special investigators to examine the effects of the pandemic and the trillions of dollars they are spending to address it and mitigate its effects.⁷ Australian bank Westpac, for example, recruited an additional 200 people to its financial crime and compliance team following the virus outbreak.⁸ In short: Get ready for a lot more demand for discovery.

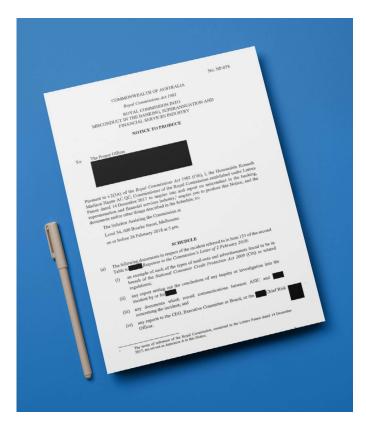


Figure 1: A notice to produce from Australia's financial services royal commission.



A notice to produce could contain multiple requests each requiring a discovery search across several systems or locations. Typical deadlines are less than a week.

THE DISCOVERY PROCESS

Next, consider the typical process for handling a discovery, as detailed in the Electronic Discovery Reference Model (Figure 2).

For each discovery, once an organization can reasonably anticipate litigation and has a duty to preserve relevant electronically stored information, a legal team must go through the phases of:

- Identification—identifying all potentially relevant sources of ESI
- Preservation—notifying the custodians of that ESI that they must not delete or destroy it and take steps to preserve that ESI
- Collection—forensically collecting the ESI
- Processing—processing the ESI to make it available for analysis and review
- Analysis—analyzing the ESI to establish the facts of the matter and eliminate irrelevant items
- Review—reviewing each item for relevance and legal privilege—or preferably use artificial intelligence to do some of this work—and redact privileged, commercially sensitive, and privacy information from the items selected for production
- Production and presentation—delivering the selected items to the court, regulator, or other parties in the appropriate format.

SERIAL CUSTODIANS

Now imagine a company was subject to four lawsuits or regulatory requests with the relevant dates and custodians shown in Figure 3.

DISCOVERY 1	Hailee Acker, research and development
Aug 2019– Nov 2019	Thyra Bengtsson, research and development Zhengqiu Chang, customer support Klara Hansen, CEO Abdurrahim Samara, IT Asya Terzi, finance Masako Yamada, chief scientist
DISCOVERY 2	Kwesi Adebayo, IT
Aug 2019– Jan 2020	Zhengqiu Chang, customer support Klara Hansen, CEO Björn Sigurdsson, IT Asya Terzi, finance Masako Yamada, chief scientist
DISCOVERY 3	Hailee Acker, research and development
Sep 2019– Mar 2020	Kwesi Adebayo, IT Penelope Collingwood, human resources Klara Hansen, CEO Masako Yamada, chief scientist
DISCOVERY 4	Penelope Collingwood, human resources
Nov 2019-	Klara Hansen, CEO
May 2020	Klaudiusz Kozłowski, human resources
	Björn Sigurdsson, IT
	Asya Terzi, finance
	Masako Yamada, chief scientist

Figure 3: Four discovery requests with relevant dates and custodians.

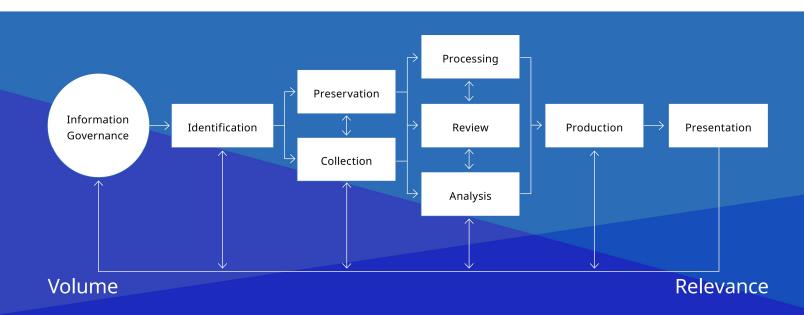
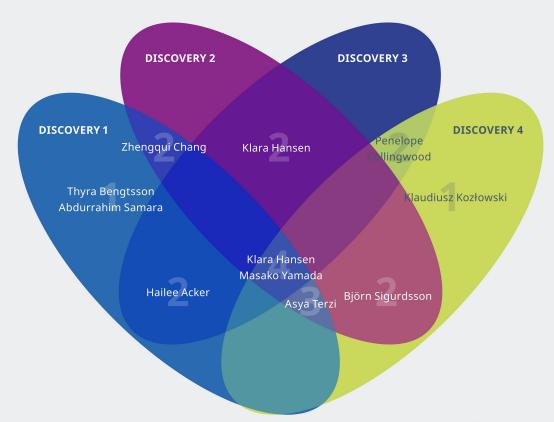


Figure 2: The Electronic Discovery Reference Model.



Custodian	# of Requests
Klara Hansen	4
Masako Yamada	4
Asya Terzi	3
Hailee Acker	2
Kwesi Adebayo	2
Zhengqui Chang	2
Penelope Collingwood	2
Björn Sigurdsson	2
Thyra Bengtsson	1
Klaudiusz Kozłowski	1
Abdurrahim Samara	1

Figure 4: Overlapping discovery requests—numbers show custodians' data that must be handled a second, third, or even fourth time

Within this organization, there are serial custodians, also known as frequent flyers—the CEO, the chief scientist, and a member of the finance team—who are included in many or all of the lawsuits.

Figure 4 shows that for these custodians, the discovery team would need to run through the entire process described above, over the same data, multiple times. This would include:

- ESI for these custodians within the overlapping dates would need to be re-collected, re-processed, re-analyzed, and re-reviewed each time.
- Objectively irrelevant items eliminated from the first discovery—such as duplicates, email lists, and lunch invitations—would need to be weeded out of the review set again. This can easily make up half the entire corpus.
- Items coded as privileged would need to be reviewed and coded again. Items that are privileged in one case are typically privileged in another.
- Redacted items such as private information, trade secrets, and intellectual property would need to be reviewed and redacted all over again, which can lead to mistakes and cross-matter inconsistency.

Finally, imagine instead of four overlapping lawsuits, you had 75 like Sterigenics or hundreds like Johnson & Johnson. As data volumes and the frequency of litigation and regulatory oversight have increased, organizations have only been able to cope with this difficult situation by hiring more people, internally or externally. However, the exponential growth of data will always outpace the ability to throw more people at the problem. The only solution requires an entirely different approach.

REDEFINING "END TO END"

Organizations involved in all parts of the litigation process have long recognized the inefficiencies of this situation. For this reason, among others, many organizations have put a lot of effort into information governance, often called the left-hand side of the EDRM (see Figure 2 on page 3). With information governance, an organization uses policies, processes, and technology to manage stored information from creation to disposal. When done well, information governance mitigates litigation risks and reduces the volume of ESI that feeds into the discovery process following a trigger event. Less data in means less time and cost through the rest of the process.

Just as an end-to-end approach to litigation doesn't start at the trigger event, it also doesn't end with production and presentation of the ESI. Unless we stop handling each discovery matter as a discrete process, we will need to collect, process, analyze, review, and make decisions over the same data many times.

In addition, the discovery process needs to become much less linear. Due to the limitations of legacy eDiscovery technology, ESI must be processed fully before you can search and analyze it, and it can't be searched or reviewed while you're exporting it for production. This only makes sense if discovery happens one case at a time but not in a world where the same data could be relevant to multiple concurrent cases.

What if you could operationalize the data—collect it once and reuse it multiple times? What if you could preserve the work product of a previous litigation and avoid all the costly repetition? Sounds great, you're probably thinking, but how?

BUILDING A LITIGATION-READY NUIX DATA WAREHOUSE

Nuix recognizes the frustrations many of our customers have felt dealing with costly, time-consuming, and repetitive discovery process. This has led us to developing a 360° approach to the litigation lifecycle, allowing you to preserve and reuse the efforts of collecting, processing, searching, analyzing, reviewing, culling, coding, and redacting ESI. We have blown away the assumption that each matter needs to happen in a silo. Instead, you can store the results of each discovery process in a litigation-ready Nuix data warehouse for rapid, efficient reuse.

HOW DOES IT WORK?

Many eDiscovery technologies can cope with relatively small volumes of simple ESI—say a few dozen mailboxes and a few thousand office documents. However, when a single discovery can involve hundreds of custodians, thousands of mailboxes, millions of documents, and all kinds of complex evidence sources, the list of capable discovery software narrows very quickly. How could you possibly combine the results of multiple discoveries into a pool that may be hundreds of terabytes in volume?

Building a litigation-ready Nuix data warehouse (see Figure 5) has two distinct technological advantages:

- The Nuix Engine. Nuix's patented parallel processing technology extracts in-depth information—including metadata, words, images, logs, and communication patterns—faster than competing technologies. It handles more than 1,000 data types and file formats.
- Elasticsearch. This database platform is designed for scale and redundancy across multiple servers, making it an ideal back end for a litigation-ready Nuix data warehouse. You can add hardware to your Elasticsearch cluster at any time, using multiple high- or low-powered machines to improve its capacity, resilience, and performance.

FILL THE WAREHOUSE

Once you've built your warehouse, how do you start stocking the shelves with useful goods? And how can you prevent it from filling up with junk?

A good place to start is with the Nuix case files from a recent litigation or regulatory matter—or a set of related matters—where you anticipate further development. This gives you an initial cache of processed and culled data, coding decisions, redaction markups, and more.

Next, examine your situation to identify the most frequently targeted custodians, data sources, and data types. Rather than waiting for the next litigation, you can create an ongoing process for regularly collecting new ESI from these custodians, processing it, automatically culling obviously irrelevant material, and adding the remaining potentially relevant data to the warehouse. Many of our customers have worked with advisory firms and service partners to build this workflow (see Customer Success Stories on page 6).

CLEAR OUT OLD STOCK

To prevent the litigation-ready Nuix data warehouse from filling up with old—and potentially discoverable—ESI, you can set up information governance processes to release any data whose legal hold and other preservation requirements have expired. You could even make adding new data and removing ESI that has been released from legal hold part of the same regular process. This ensures you are only examining ESI that is under active litigation hold and discoverable.

KEEP IT IN THE WILD

In many situations, it may be impractical to make a copy of the ESI for preservation in a Nuix data warehouse. The data may be stored in the cloud or with an external provider, or there may simply be too much of it. With a litigation-ready Nuix data warehouse, the ESI can remain in the wild—only the index of text and metadata are stored within the Nuix database. As long as the data sources remain online and in the same place, you can always access them if they become relevant to a subsequent case.

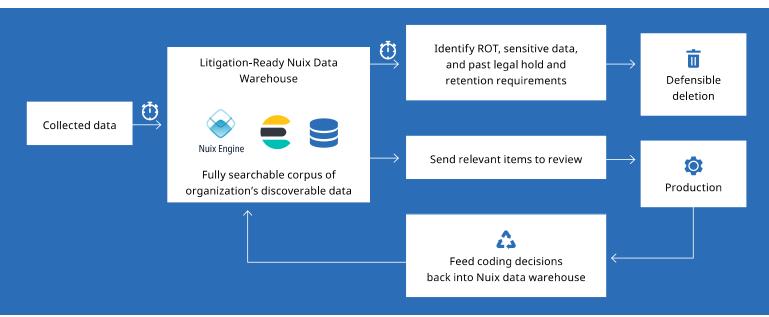


Figure 5: Workflow overview of a litigation-ready Nuix data warehouse.

Copyright ©2020 Nuix. All rights reserved.

BENEFITS OF A LITIGATION-READY NUIX DATA WAREHOUSE

This approach to managing frequent litigation and regulatory response has already saved Nuix customers millions of dollars and thousands of hours of time in ESI collection, processing, analysis, and review. Perhaps more importantly, it has helped them breed consistency across repeated reviews and productions. A litigation-ready Nuix data warehouse improves with age as the intelligence layer of searches, analysis, coding decisions, and redactions grows thicker over time.

FIND ANSWERS FASTER

By eliminating the repeated collecting, processing, and culling of ESI; a Nuix data warehouse approach exponentially reduces response times for discovery requests. Nuix customers say discovery processes that used to take weeks or months can now be completed in days or hours.

As soon as a question arises from a court, a regulator, or the legal team, you can immediately search the Nuix data warehouse to conduct an early case assessment and promote the relevant ESI to our analytics workspace for analysis and review. What's more, you can be guided by previous coding and redaction decisions to avoid sharing privileged or other sensitive information.

REDUCE DISCOVERY COSTS

Coding decisions are the most expensive component of legal and compliance matters because they mostly require human beings, paid by the hour, to read each document. Artificial intelligence technologies such as predictive coding and Continuous Active Learning in Nuix Discover® can, of course, go a long way toward reducing these costs. However, eliminating the need for a person to review the same documents for each subsequent discovery request results in dramatic cost savings.

COLLABORATE CONCURRENTLY

A litigation-ready Nuix data warehouse is designed for the new reality where an organization may run multiple cases simultaneously on the same data. Using Elasticsearch overcomes the limitations of legacy database technology, making it possible for you to add new data, review and analyze it, and export the items you need, all at the same time. Further, Nuix's browserbased review technology allows external reviewers, remote workers, outside counsel, and subject matter experts to examine the ESI at the same time.

SHOW THE WHOLE PICTURE

With all your ESI in a single repository, you can conduct early case assessments and generate reports across the entire corpus of data. This was simply not possible under legacy discovery technology where data was locked within multiple case files and search results or statistics had to be tallied manually.

CUSTOMER SUCCESS STORIES

Customers in many countries have used our litigation-ready Nuix data warehouse approach to reduce their litigation costs and dramatically speed up response times for legal and regulatory information requests.

TOP US FINANCIAL SERVICES CORPORATION ACCELERATES LITIGATION AND REGULATORY RESPONSE

One of the largest banks in the United States had archived all the correspondence of its roughly 10,000 brokers and financial traders for compliance purposes. Searching these emails to handle repeated litigation and regulatory queries took a long time, and the workflow and underlying platform was becoming unreliable.

Working with Nuix and one of our partners, the bank consolidated tens of millions of emails into a litigation-ready Nuix data warehouse containing more than 30 terabytes of data. As a result, the bank has:

- Created a system where a single, universal search will return results across all broker communications in a matter of seconds
- Considerably reduced the time it takes to search, analyze, deduplicate, and retrieve data for litigation and regulatory requests
- Reduced software costs by closing its legacy email archive system

HEALTHCARE COMPANY BOOSTS REGULATORY COMPLIANCE WITH NUIX DATA WAREHOUSE

One of Nuix's advisory firm partners needed to analyze and remediate a massive volume of data for its client—among more than 175 terabytes were suspected instances of personally identifiable information (PII) that were not stored in compliance with privacy regulations.

The advisory firm built a litigation-ready Nuix data warehouse to index all 175 terabytes of data and regularly update as new data came in. The healthcare company can now:

- Remove non-compliant PII from its legacy data
- Identify any new PII stored incorrectly and remediate it to meet compliance and regulatory concerns
- Instantly search, analyze, and review relevant ESI in response to litigation or regulatory questions.

MEDICAL DEVICE COMPANY TAKES A HEALTHIER APPROACH TO REPEAT LITIGATION

A global medical device manufacturer faced frequent litigation and had to handle the same data from the same custodians many times. This inefficient process drove up litigation costs and slowed its ability to respond to discovery requests. Nuix worked with a partner to build a 70-terabyte Nuix data warehouse of ESI that was under active litigation hold. This allowed the medical device company to:

- Triage extremely large data volumes through a single Nuix case
- Support simultaneous litigation matters without re-processing the data
- Save time and money by sending much smaller volumes of data to legal review for each case.

CONTRIBUTORS

- Alex Chatzistamatis, Senior Principal Enterprise Architect
- Jason Purcell, Account Director Strategic Partners
- Eric Rodriguez, VP Strategic Partners
- Josh Mehlman, Content Lead

SEE IT FOR YOURSELF

Get a personalized demo of our industry-leading solutions and see for yourself how our innovative software can transform data into actionable intelligence and help solve your biggest litigation and regulatory challenges.

www.nuix.com/warehouse-demo

REFERENCES

- 1. Kimberly Fornek, <u>76 lawsuits have been filed over ethylene oxide</u>
 emissions at Sterigenics plant in Willowbrook and more may be
 coming, attorney says, Chicago Tribune, January 30, 2020
- Johnson & Johnson, <u>Quarterly Report</u> (filing to United States Securities and Exchange Commission), July 24, 2020
- 3. Misa Han and Joanna Mather, <u>Banks spend hundreds of millions</u> on <u>Hayne</u>, Australian Financial Review, September 27, 2018
- 4. Tom Cowie, <u>Jury trials suspended in Victoria to slow spread of coronavirus</u>, The Age, March 14, 2020
- Australian Securities and Investments Commission, <u>20-086MR</u>
 <u>Details of changes to ASIC regulatory work and priorities in light of COVID-19</u>, April 14, 2020
- Clairissa Baker, <u>Facing massive backlog amid pandemic</u>, <u>Minnesota courts work to reopen</u>, St. Cloud Times, August 5, 2020
- 7. William T. Edgar and Ben Wilhelm, <u>Congressional Oversight</u>

 <u>Provisions in the Coronavirus Aid, Relief, and Economic Security</u>

 (CARES) Act, Congressional Research Service, April 17, 2020
- 8. Aimee Chanthadavong, <u>NAB to take AU\$1.14 billion hit to its</u> <u>first-half net profit</u>, ZDNet, April 20, 2020

nuix

Nuix (www.nuix.com) creates innovative software that empowers organizations to simply and quickly find the truth from any data in a digital world. We are a passionate and talented team, delighting our customers with software that transforms data into actionable intelligence and helps them overcome the challenges of litigation, investigation, governance, risk, and compliance.

APACAustralia: +61 2 8320 9444

MORTH AMERICA

UK: +44 203 934 1600

USA: +1 877 470 6849

Nuix (and any other Nuix trademarks used) are trademarks of Nuix Ltd. and/or its subsidiaries, as applicable. All other brand and product names are trademarks of their respective holders.

Any use of Nuix trademarks requires prior written approval from the Nuix Legal Department. The Nuix Legal Department can be reached by e-mail at Legal@nuix.com.

THIS MATERIAL IS COMPRISED OF INTELLECTION PROPERTY OWNED BY NUIX LTD. AND ITS SUBSTITUTION FOR THE LIBERTY AND ITS SUBSTITUTION FOR THE SUBSTITUTION OF THE PROPERTY OF THE PR

THIS MATERIAL IS COMPRISED OF INTELLECTUAL PROPERTY OWNED BY NUIX LTD. AND ITS SUBSIDIARIES ("NUIX"), INCLUDING COPYRIGHTABLE SUBJECT MATTER THAT HAS BEEN NOTICED AS SUCH AND/OR REGISTERED WITH THE UNITED STATES COPYRIGHT OFFICE. ANY REPRODUCTION, DISTRIBUTION, TRANSMISSION, ADAPTATION, PUBLIC DISPLAY OR PUBLIC PERFORMANCE OF THE INTELLECTUAL PROPERTY (OTHER THAN FOR PREAPPROVED INTERNAL PURPOSES) REQUIRES PRIOR WRITTEN APPROVAL FROM NUIX.