

A woman with dark hair in a ponytail, wearing a blue and white striped shirt, is sitting at a desk and smiling. A man with glasses and a beard, wearing a dark blue sweater, is sitting next to her, also smiling and holding a pen. They are both looking at a laptop screen. The background is a blurred office environment with a lamp and some shelves.

Stop Wasting Time with Track Changes. It's Time to Merge.

EBOOK

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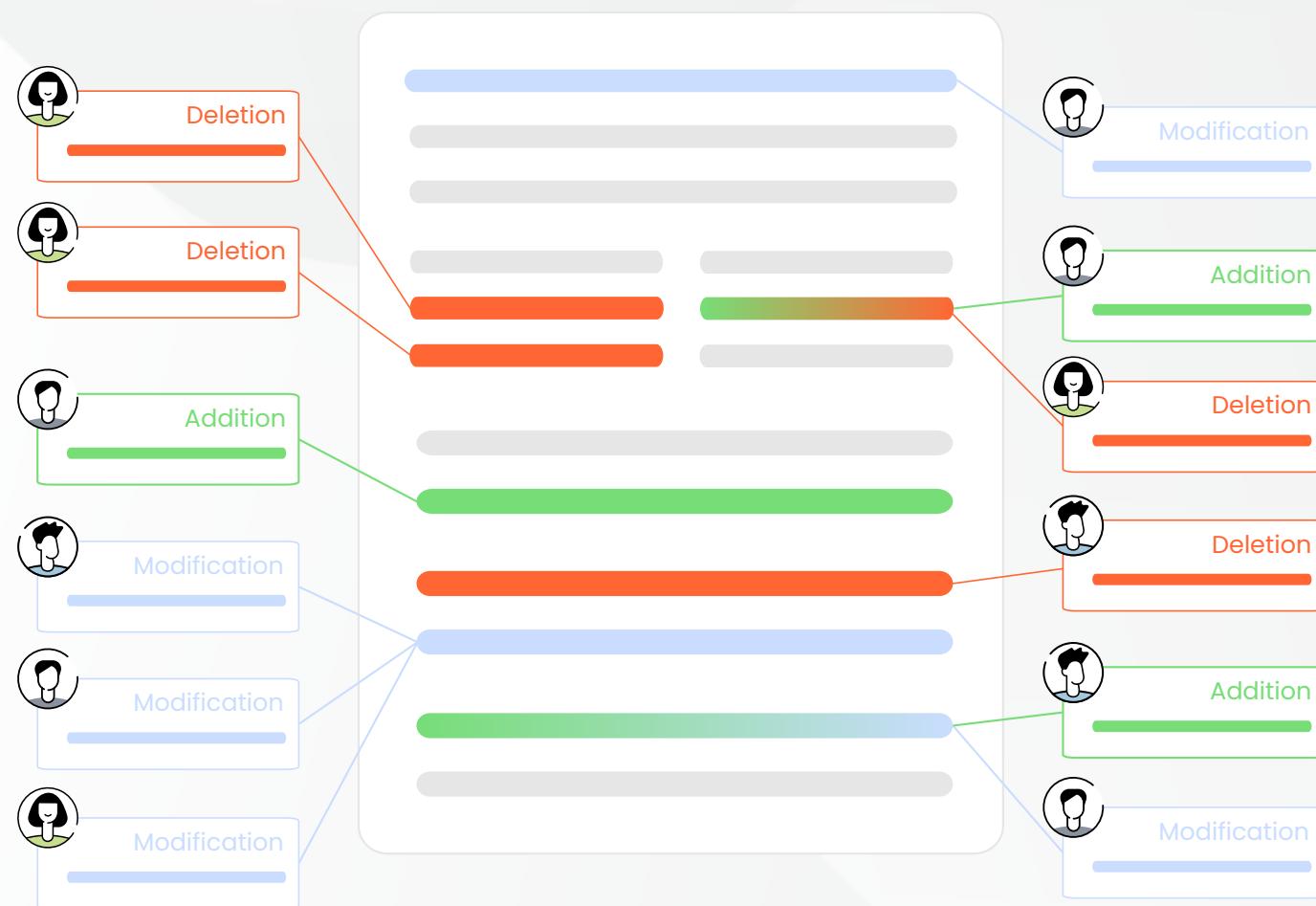
Introduction

If you're still using track changes to edit documents, you might be wasting valuable time and effort. Track changes is a handy tool for highlighting edits and keeping a record of who made what changes and when. Yet it has its limitations, especially when you're working with multiple contributors.

Document merging is proven to be a better alternative. By combining different versions of a document into a single, cohesive file, document merging can streamline your editing process, reduce errors, and save time. Whether you're working in a collaborative environment or dealing with regulatory documents that require a clear audit trail, document merging offers a more efficient and reliable solution.

What is Track Changing?

Track changes is a feature in word processing software, like Microsoft Word, that allows you to monitor edits made to a document. It's commonly used when multiple people are working on the same file, as it provides a visual record of changes, including additions, deletions, and formatting tweaks. This feature can be useful for reviewing edits and keeping track of who made what changes.



Limitations in Collaborative Work

While track changes is great for individual edits, it falls short in collaborative settings. Here's why:

- **Complexity with Multiple Editors:** When several people are making changes at the same time, the document can quickly become cluttered with conflicting edits. This makes it difficult to see the overall progress and can lead to confusion.
- **Linear Review Process:** Track changes require each edit to be reviewed one by one. This linear approach slows down the review process, especially with large documents or tight deadlines.
- **Risk of Overlapping Changes:** When different contributors work on the same section of a document, their changes might overlap, leading to confusion and conflicts that are time-consuming to resolve.

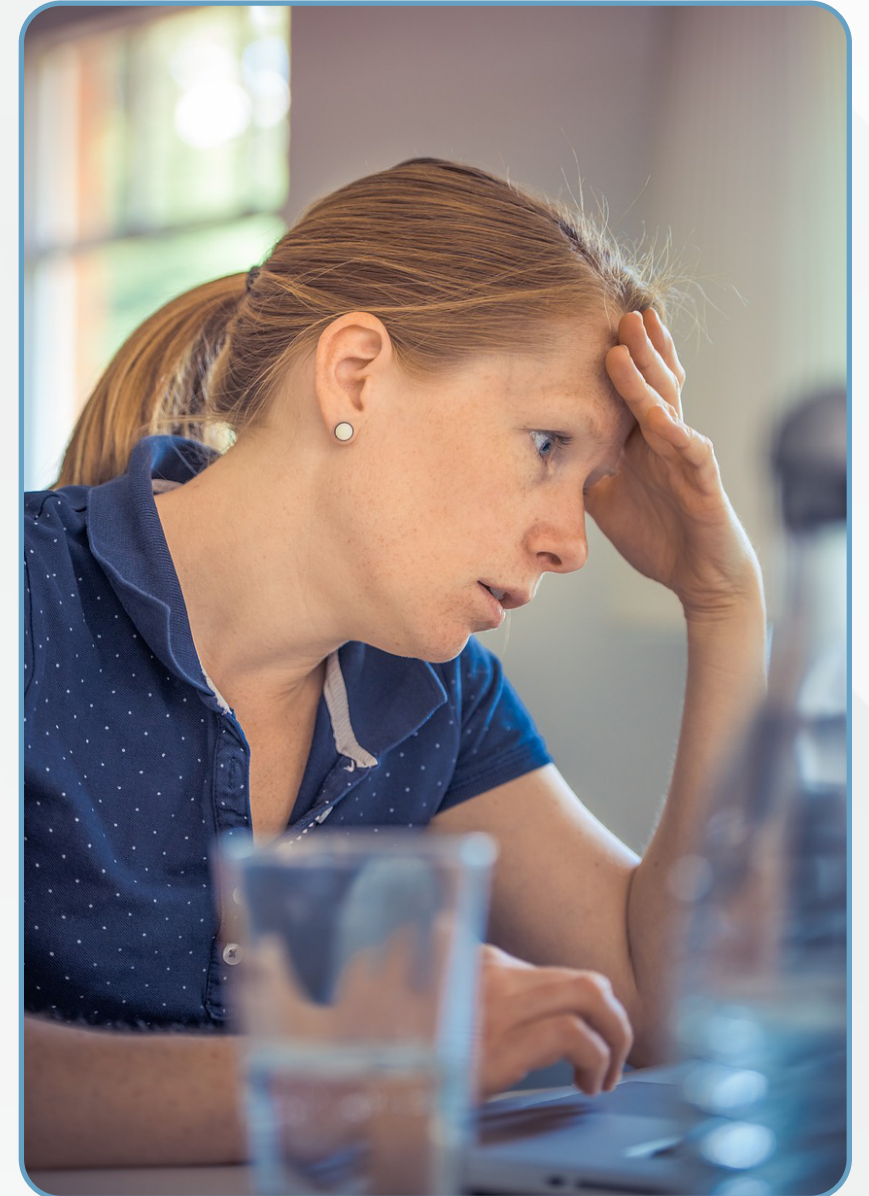


Impact on Productivity

The inefficiencies of track changes can take a toll on productivity:

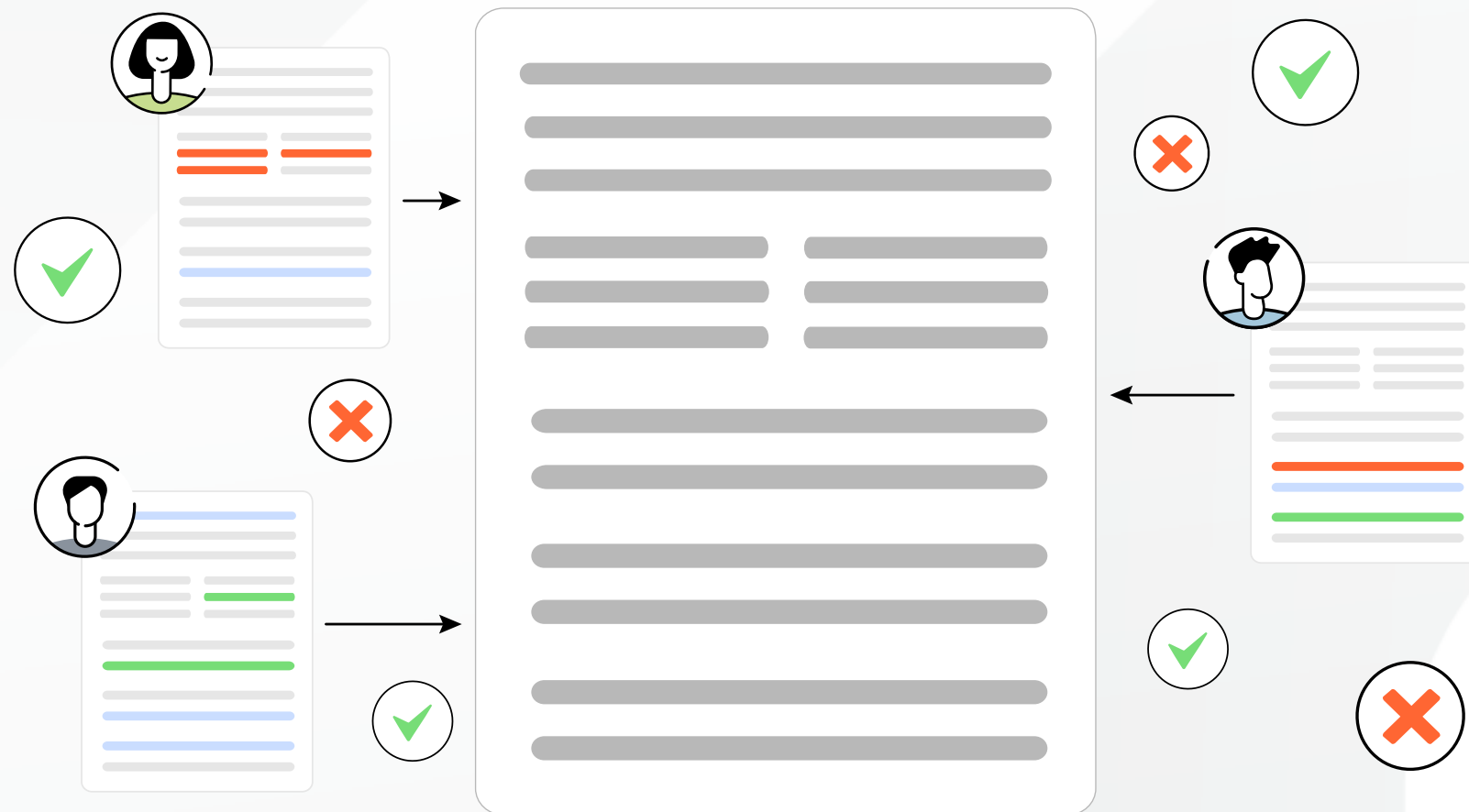
- **Time-Consuming:** Reviewing and resolving edits one by one can be tedious, especially if you're dealing with a high volume of similar changes.
- **Increased Potential for Errors:** With so many changes to track, it's easy for something to slip through the cracks, leading to mistakes that could have been avoided.
- **Cost Implications:** The time spent on managing track changes, especially in complex documents, can translate into higher costs, both in terms of time and resources.

By understanding the limitations of track changes, you can begin to see why a more streamlined approach, like document merging, could be a game-changer for your workflow.



What is Document Merging?

Document merging is the process of combining multiple versions of a document into a single, unified file. Instead of tracking individual changes line by line, document merging allows you to integrate updates from different sources efficiently. The end result is a cohesive document that incorporates all the necessary edits without the clutter of tracked changes.



Benefits of Document Merging

Switching to document merging can bring several key advantages:

- **Streamlined Workflow:** While merging changes all at once can significantly speed up the process, it doesn't mean you have no control over reviewing edits. In fact, document merging allows you to handle large volumes of changes more efficiently. Although you might still need to review certain edits—particularly in cases of conflict—custom rules can be created to automatically accept or reject changes based on specific criteria. This reduces the manual workload and ensures that the document is processed according to your team's standards, making the editing process faster and more efficient, especially in complex projects with multiple contributors.
- **Reduced Errors:** Document merging helps minimise the risk of errors that can occur when multiple people are working on a document at the same time. By automatically integrating changes, the process reduces the likelihood of missed edits or conflicting updates.
- **Improved Collaboration:** When working in a team, document merging allows multiple contributors to work on different parts of the document simultaneously. This promotes better collaboration and ensures that everyone's input is smoothly integrated into the final version.
- **Enhanced Document Management:** With document merging, you can keep a clean and organised document, free from the visual clutter that often accompanies track changes. This makes it easier to read and review the final document.

Key Merging Techniques

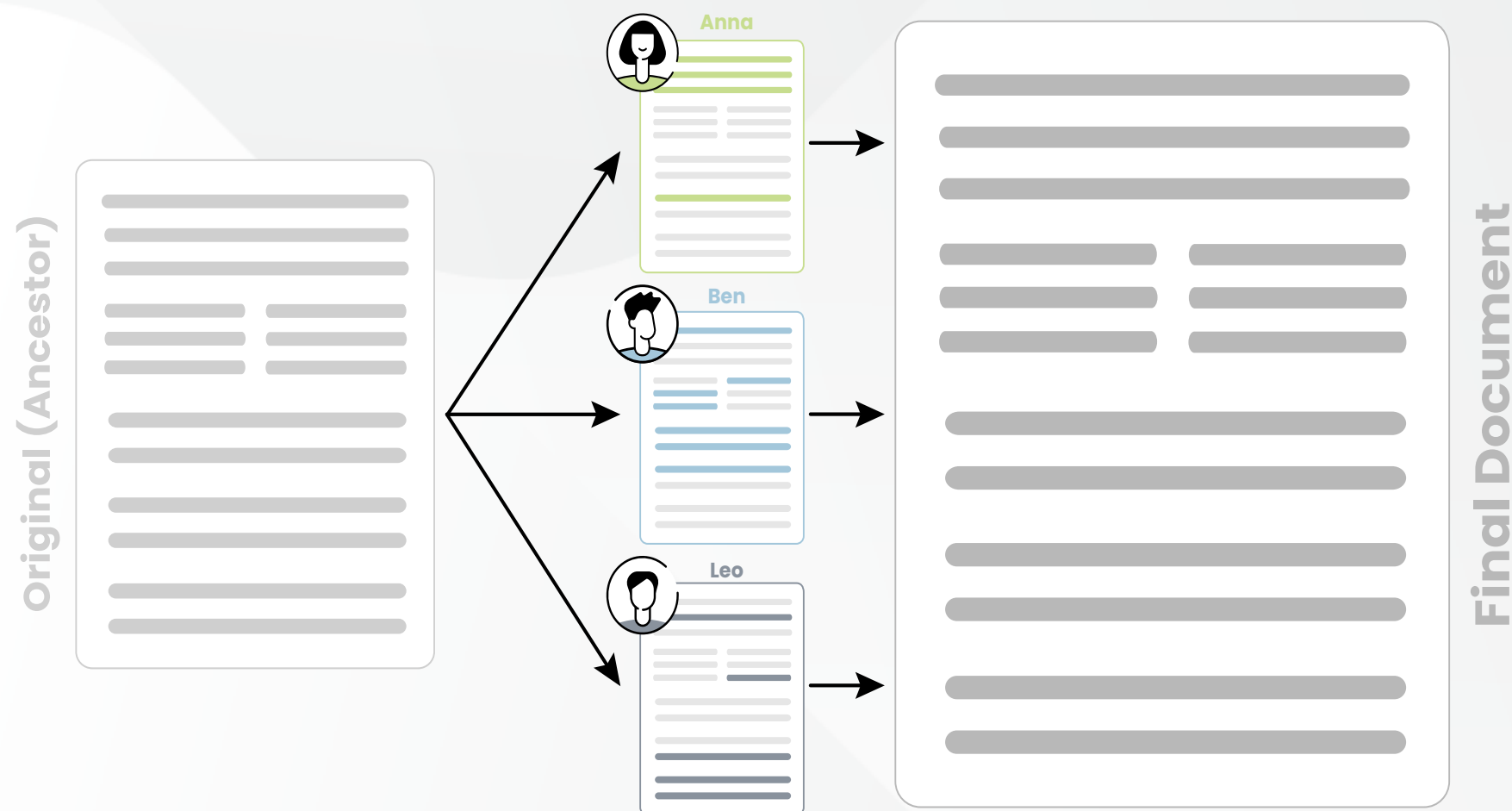
There are two main techniques for document merging that you should be aware of:
concurrent merging and **sequential** merging.

Concurrent Merging

Concurrent merging is ideal for collaborative environments where multiple people are working on a document at the same time. This technique allows different contributors to edit various sections of a document simultaneously. Once all the changes are made, they are merged into a single document.

Example: Imagine three team members—Anna, Ben, and Leo—are working on a report. Anna updates the introduction, Ben adds new content in the middle, and Leo revises the conclusion. Each person works on their section independently. When they're done, all their changes are merged into one document, creating a seamless final version.

Advantages: The main advantage of concurrent merging is its ability to save time. By processing multiple updates at once, the document is ready much faster, and contributors don't have to wait for others to finish before they can start their edits. This is particularly useful in fast-paced environments where deadlines are tight.

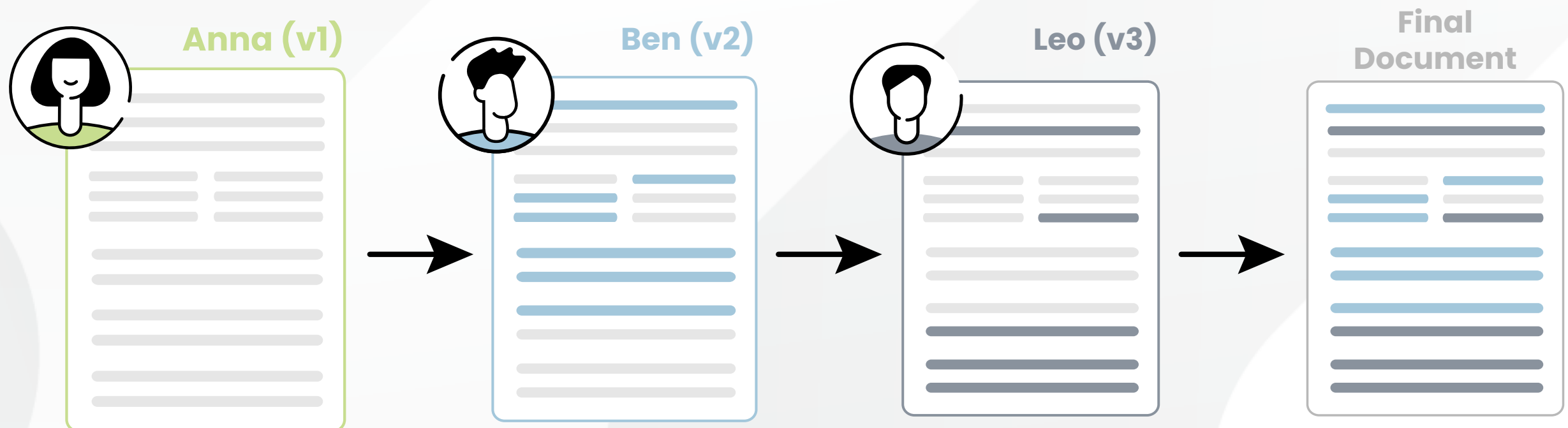


Sequential Merging

Sequential merging is best when you need a clear audit trail of changes. This technique is commonly used in regulated industries where every edit must be documented and reviewed in order.

Example: In sequential merging, changes are added to the document in a specific order. For example, Anna might work on the first draft, Ben would then add his changes to Anna's version, and finally, Leo would make his edits to Ben's updated version. Once everyone's done, the document is merged into a single file that clearly shows the order of changes.

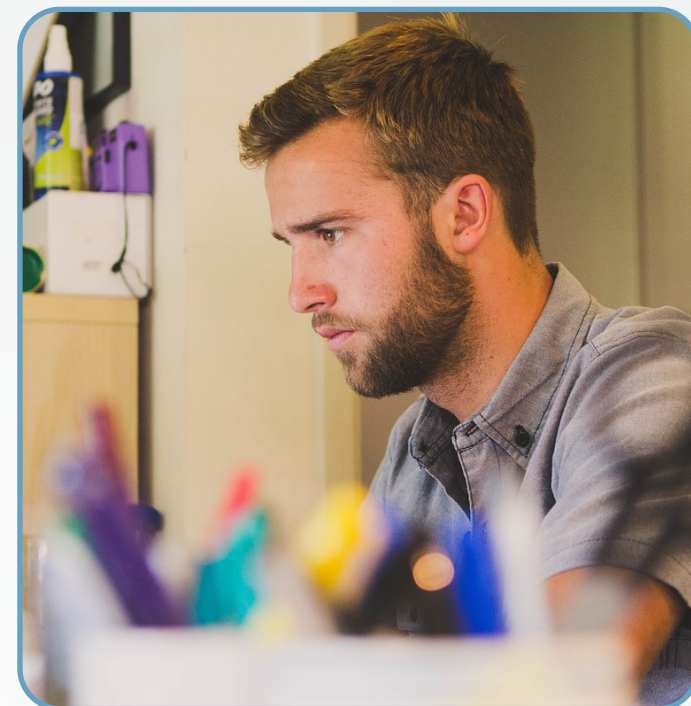
Advantages: Sequential merging provides a detailed record of who made what changes and when. This is crucial for compliance and regulatory documents where it's important to track every modification. It ensures that all updates are documented in a way that's easy to review and audit.



Choosing the Right Merging Technique

The choice between concurrent and sequential merging depends on your specific needs:

- **Use Concurrent Merging** if your priority is speed and efficiency, and you're working in a collaborative environment where multiple people need to contribute simultaneously.
- **Use Sequential Merging** if you need a detailed audit trail of changes, particularly for compliance or regulatory documents, where the order of edits matters.

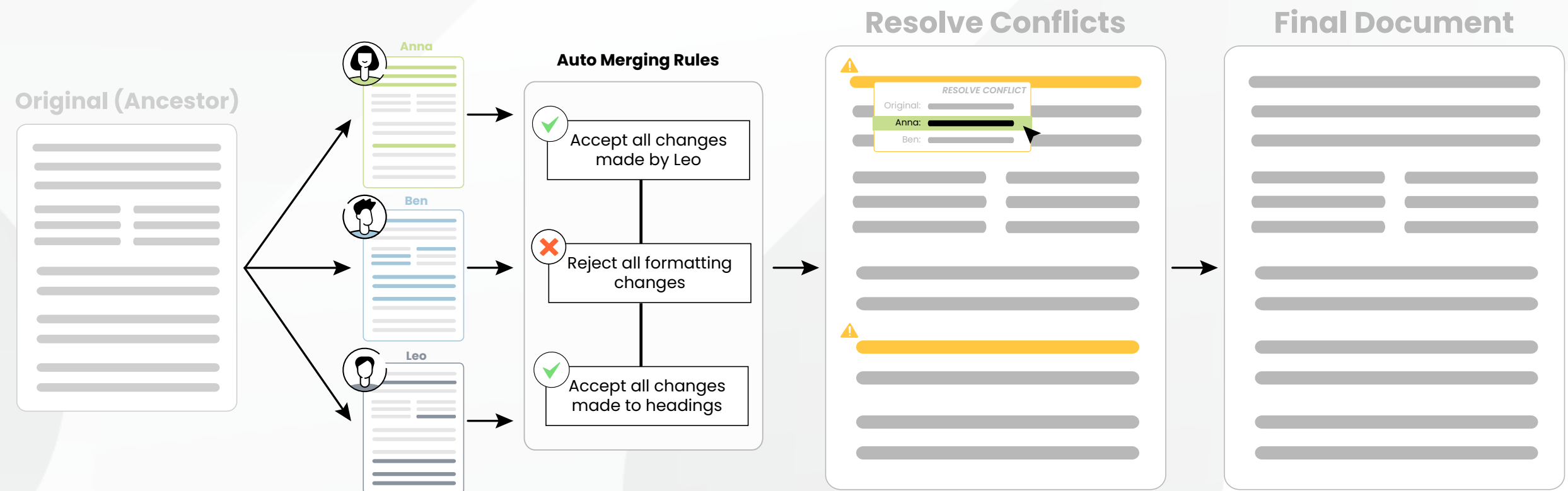


Concurrent Merging - Boosting Collaboration and Speed

Expanding on Concurrent Merging

As stated, concurrent merging allows multiple contributors to work on a document simultaneously, each focusing on different sections or tasks. Once everyone has completed their edits, the merging process combines all these changes into a single, unified document.

This process is powered by algorithms that automatically integrate changes. If there's any overlap or conflicting edits, these are flagged for manual review or resolved based on predefined rules set by your team.



Advantages of Concurrent Merging

- **Enhanced Collaboration:** Concurrent merging is ideal for teams where multiple people need to work on the same document at the same time. It allows everyone to contribute without waiting for others to finish, which speeds up the process and keeps the project moving forward.
- **Time-Saving:** By merging all contributions at once, concurrent merging eliminates the need for a lengthy back-and-forth between team members. This is particularly beneficial in fast-paced environments where deadlines are tight, and there's no time to waste.
- **Reduced Confusion:** With traditional change tracking, managing multiple edits can quickly become overwhelming. Concurrent merging simplifies this by consolidating all changes into a single document, making it easier to see the bigger picture and avoid getting bogged down by individual edits.
- **Flexibility in Conflict Resolution:** While conflicts can arise when multiple people edit the same section, concurrent merging gives you the tools to handle these efficiently. Custom rules can be set up to automatically accept or reject certain changes, or you can review conflicts manually to ensure the final document meets your standards.

When to Use Concurrent Merging

Concurrent merging is best suited for scenarios where collaboration is key and time is of the essence. Here are some common use cases:

- **Content Management:** In environments where content is being updated frequently—such as technical documentation, knowledge base updates, or software development documentation—concurrent merging allows multiple editors to work on different sections at once, streamlining the update process.
- **Data Integration:** When dealing with large datasets from various sources, concurrent merging enables simultaneous processing of updates, ensuring that records stay accurate and up to date without delays.
- **Project Management:** For complex projects involving multiple stakeholders, concurrent merging allows everyone to contribute their expertise without the bottleneck of sequential edits, ensuring a smoother and quicker path to completion.



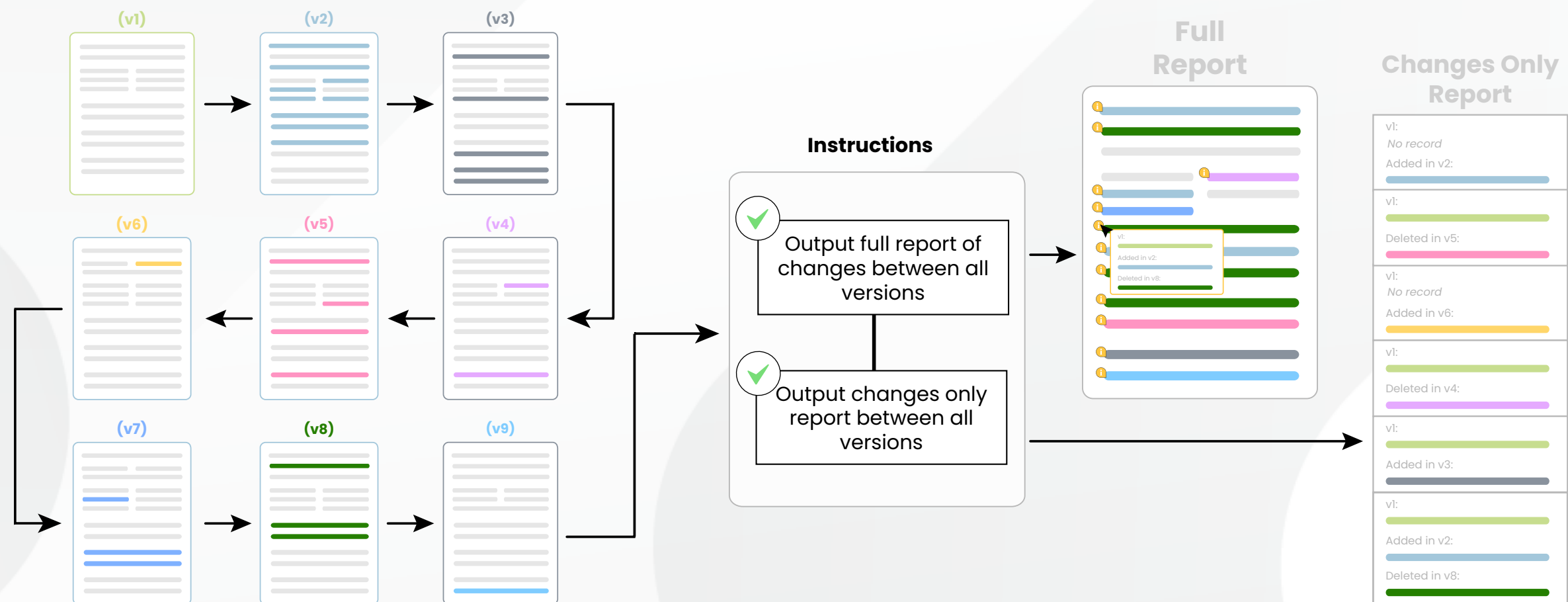
Concurrent Merging

Concurrent merging is a powerful tool for teams that need to collaborate efficiently. By allowing multiple contributors to work simultaneously and integrating their changes into a single document, it boosts productivity and reduces the time spent on document management especially when utilising custom rules that automatically handle common conflicts. When used effectively, concurrent merging can transform the way your team handles collaborative projects, making your workflow smoother and more efficient.

Expanding on Sequential Merging

While concurrent merging is excellent for speeding up collaboration, there are situations where you need to keep a close eye on every change made to a document. Sequential merging combines different versions of a document by integrating changes in a specific, predefined order. This process allows you to track who made what changes, and when, ensuring that you have a complete history of the document's evolution.

This method creates a clear and comprehensive audit trail, making it easy to review the document's history and verify that all changes align with the project's requirements.



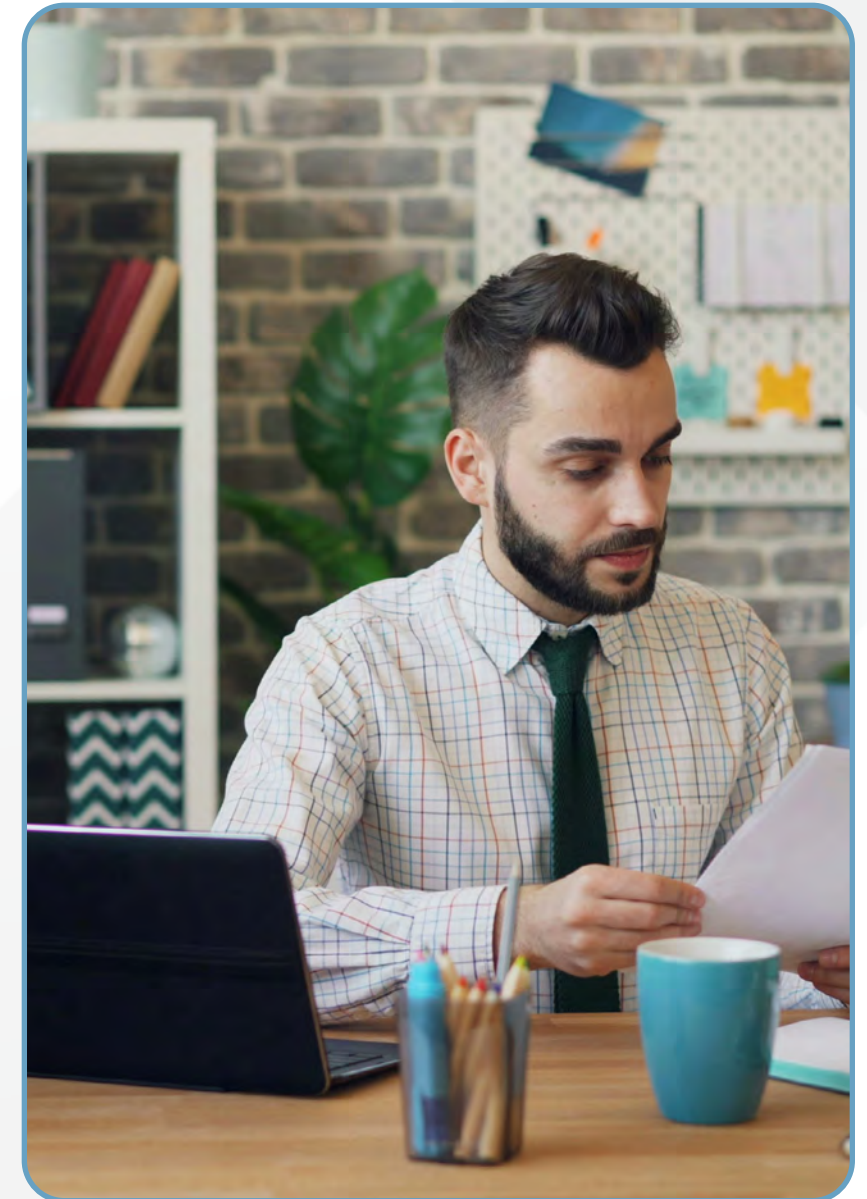
Advantages of Sequential Merging

- **Detailed Audit Trail:** One of the biggest benefits of sequential merging is the ability to maintain a thorough record of every change made to a document. This is crucial for industries where compliance and accountability are key.
- **Compliance and Regulatory Adherence:** Sequential merging is particularly useful in industries with strict regulatory requirements, such as healthcare, aviation, finance, and legal sectors. It ensures that all changes are documented in a specific order, making it easier to meet compliance standards and pass audits.
- **Controlled Document Evolution:** With sequential merging, you have greater control over the document's development. Since changes are integrated in a specific sequence, you can ensure that updates are made in the correct order, reducing the risk of errors or miscommunications.
- **Enhanced Review Process:** The clear record provided by sequential merging makes it easier to review the document's evolution. This can be especially important in projects where multiple revisions are made over time, as it allows for a more thorough and accurate final review.

When to Use Sequential Merging

Sequential merging is ideal for projects that require a precise record of changes. Here are some common scenarios where sequential merging proves invaluable:

- **Regulatory Documents:** In industries like pharmaceuticals or finance, creating documents that comply with strict regulations is a must. Sequential merging ensures that every change is documented, providing a clear audit trail that can be reviewed during inspections or audits.
- **Legal Contracts:** When drafting legal contracts, sequential merging allows you to track each modification made throughout the negotiation process. This ensures that all changes are clearly documented and can be easily reviewed if disputes arise later.
- **Quarterly Reports:** For reports that are updated regularly, such as financial or project status reports produced each quarter, sequential merging helps keep a detailed record of each update. This ensures that every version is accounted for and that the final document accurately reflects all changes made throughout the year.



Sequential Merging

Sequential merging is an essential tool for projects where accuracy, accountability, and compliance are key. By integrating changes in a specific order, it provides a detailed audit trail that helps ensure your documents meet all necessary standards. Whether you're dealing with regulatory filings, legal contracts, or technical documentation, sequential merging gives you the control and transparency you need to manage complex projects with confidence.

What is XML Merge?

XML Merge is a powerful tool designed to simplify the process of merging XML documents. Whether you're dealing with multiple contributors, complex documents, or tight deadlines, XML Merge offers a reliable solution that integrates seamlessly into your existing systems and workflows.

What sets XML Merge apart is its flexibility and precision. Unlike generic document merging tools, XML Merge is tailored for XML documents, offering a range of features that cater specifically to the unique challenges they present. With customisable options and advanced configuration settings, it's a standout choice for businesses that need robust document management solutions.

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An Example for DeltaXML Merge

DeltaXML Merge automatically merges edits from two or more editors/reviewers into a single document, so you can accept/reject changes from multiple authors all in one document. With DeltaXML Merge, you no longer need to have only one person working on a document.

It is relatively easy to work on a document which is reviewed by one other person. If there are two reviewers, then you need to compare two documents (or record changes) to see the changes. If there are two reviewers, then it becomes a lot more complicated, because you need to do two comparisons and then view three different documents (the original and two reviews) to produce a new version. For three or more reviewers, you soon run into problems.

Now, with DeltaXML Merge, this job becomes much, much easier, because DeltaXML Merge merges all the changes into a single document.

DeltaXML Merge has a number of different use cases:

- Add Comment...
- ✓ Accept Change(s)
- ✗ Reject Change(s)
- ⓐ Edit Attributes...
- Edit Profiling Attributes...
- 📋 Paste
- Paste special

Key Features

Customisable Merging Options

XML Merge supports both concurrent and sequential merging, allowing you to choose the method that best fits your project needs. Whether you're working on collaborative documents that require updates or need a detailed audit trail, XML Merge has you covered.

Advanced Configuration Settings

The tool offers extensive configuration settings, giving you full control over how your documents are merged. You can set custom rules to automatically handle conflicts, streamline the merging process, and ensure consistency across your documents.

Integration Through Java and REST APIs

XML Merge is designed to integrate easily with your existing systems. It supports Java and REST APIs, making it simple to embed the tool into your workflows and automate the merging process.

Industry-Leading Conflict Resolution

One of the most significant challenges in document merging is resolving conflicts. XML Merge excels in this area, offering industry-leading conflict resolution that minimises the need for manual intervention, saving time and reducing the risk of errors.

Customisable Output Processing

XML Merge provides the flexibility to process results in any way that suits your needs. Whether you're looking to enhance your content management system (CMS) with additional functionality or require custom post-processing steps, XML Merge allows you to tailor the output to fit your specific requirements. This feature ensures that the merged results can be seamlessly integrated into your existing workflows, enabling you to manage and utilise the data exactly as desired.

Benefits of Using XML Merge

Streamlined Document Management

By automating the merging process, XML Merge significantly streamlines document management. You can quickly combine multiple versions of a document into a single, cohesive file, reducing the clutter and confusion associated with traditional methods like track changes.

Flexibility in Handling Complex Documents

XML Merge is designed to manage complex document structures, including nested elements and intricate content. This flexibility allows you to handle sophisticated documents with ease, accommodating various types of content and ensuring that all changes are accurately merged.

Reduced Human Error and Increased Productivity

The automation and customisation features of XML Merge help reduce the risk of human error, making your document management process more reliable. This increased efficiency translates into higher productivity, allowing your team to focus on more critical tasks.



Conclusion

Track changes, while useful for small-scale edits, can become cumbersome and error-prone when multiple contributors are involved. The limitations in tracking individual edits and the linear review process can lead to inefficiencies and increased chances of mistakes.

Document merging, by contrast, offers a streamlined, more effective alternative. By using advanced merging techniques—whether concurrent or sequential—teams can manage edits from multiple contributors without the chaos that comes with conflicting changes. Concurrent merging is ideal for projects where different team members work on the same document independently, allowing for faster completion. Sequential merging, on the other hand, is crucial for projects that require a clear audit trail, ensuring that every change is documented in order.

XML Merge brings these powerful merging capabilities into a single, comprehensive solution. With its customisable options, advanced configuration settings, and seamless integration through Java and REST APIs, XML Merge empowers teams to handle even the most complex document management challenges efficiently and accurately.

Ready to transform your document management process? To dive deeper into the benefits of document merging [schedule a demo](#) to see XML Merge in action and discover how it can be tailored to your specific needs. Alternatively, if you're interested in the technology behind XML Merge, extend your education by downloading our white paper [“Varieties of XML Merge: Concurrent versus Sequential”](#).

Start exploring the possibilities of document merging in your own workflows today and experience firsthand the efficiency, accuracy, and peace of mind that XML Merge can bring to your team.

How to Tell If You're Using XML

XML (eXtensible Markup Language) is a versatile and widely used format for structuring data in a way that both humans and machines can read. However, it's not always obvious when you're working with XML, especially if you're a technical writer or editor who deals with documents rather than raw data. Here's how to recognise if you're using XML:

1. Look at the File Format

One of the easiest ways to identify XML is by checking the file extension. Files with extensions like **.xml**, **.xsd**, **.xslt**, or **.svg** are almost certainly XML-based. Even if you're working with a different file type, such as **.docx** or **.xlsx**, these are actually zipped packages containing XML files that define the structure and content of the document.

2. Check the Document's Structure

XML files are highly structured and usually contain nested tags enclosed in angle brackets (< >). Each element in an XML file is typically surrounded by a start tag (e.g., **<title>**) and an end tag (e.g., **</title>**), with the content in between. If you see this kind of structured, tag-based text when you view a document in a text editor, you're likely looking at XML.

3. Inspect the Source Code

If you're working in a content management system (CMS) or an integrated development environment (IDE), try to access the source code of the document. If you see a declaration like **<?xml version="1.0" encoding="UTF-8"?>** at the top of the file, that's a clear sign you're dealing with XML.

4. Understand Your Tools

Certain tools and software are specifically designed to handle XML. For example, if you're using tools like Oxygen XML Editor, Arbortext, or MadCap Flare, there's a good chance your documents are XML-based. These tools often include features that cater to the specific needs of XML editing, such as schema validation and DTD support.

5. Consult with IT or Development Teams

If you're still unsure, it can be helpful to ask your IT or development teams. They can confirm whether the documents you're working with are in XML format and explain how XML is used within your organisation. Often, technical writers may not directly interact with raw XML files, but the content they produce is stored or managed in XML behind the scenes.

Recognising when you're working with XML is crucial for understanding the capabilities and limitations of your document management processes. Knowing this can help you leverage powerful tools like XML Merge to streamline your workflows and ensure accuracy.

About DeltaXML

DeltaXML is a world leader in XML and JSON comparison and merging technologies, providing enterprise solutions for enhanced document management. With over two decades of experience, DeltaXML specialises in creating highly configurable comparison and merging pipelines that seamlessly integrate into any workflow, software, or system. Our tools are designed to handle the most complex document management challenges, offering precise control over content comparison, including the ability to ignore specific content, track changes in moving content, and identify modifications in tables, SVGs, and more.

Since launching our first product in 2001, DeltaXML has been at the forefront of change-control and version management. Our solutions are trusted globally by governments, banks, aircraft manufacturers, and the defence industry, where 100% accuracy is essential. While XML remains a core focus, we have also expanded our expertise to include JSON, reflecting our commitment to supporting structured data in all its forms.

DeltaXML continues to innovate, ensuring that our customers have the tools they need to manage, process and record change effectively.

[Learn More](#)

Connect with DeltaXML

