

Java



Introduction to annotations



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Compare PDF annotation formats: XFDF and Instant JSON

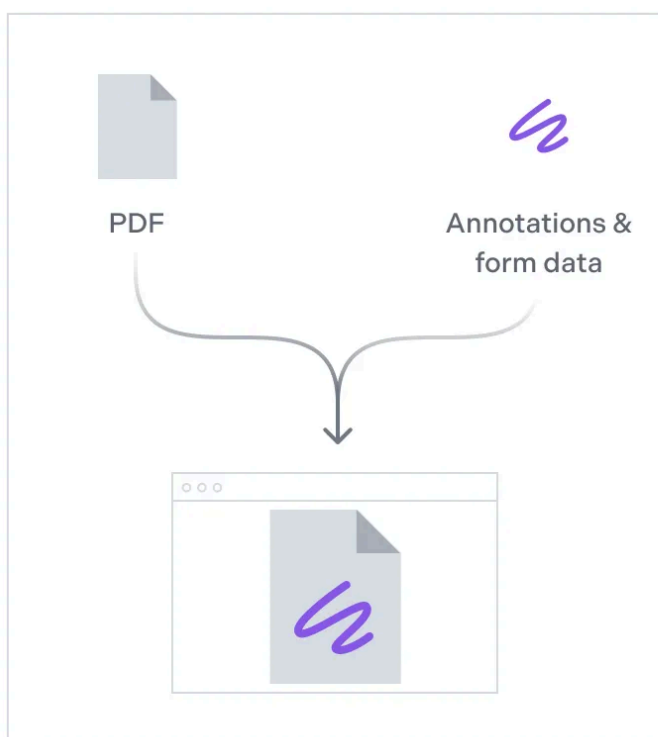


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In addition to reading and writing annotations embedded into a PDF, Nutrient Java SDK enables you to use external files to manage annotations.

A Separated from PDF Document



B Combined with PDF Document



ASK AI

Nutrient Java SDK supports reading and writing annotations in the following external data file formats:

- ✧ XML Forms Data Format (XFDF)
- ✧ Instant JSON

For most use cases, we recommend Instant JSON because, unlike XFDF, it can store deleted annotations. It also has build-in support for comparing (diffing) changes to annotations. This makes it ideal for synchronizing annotations to a server, or across users, devices, or sessions. Instant JSON can be converted to XFDF. XFDF is best suited for importing data into the system or exporting it for integration with third-party PDF applications.

Comparing data formats

CRITERIA	XFDF	INSTANT JSON
Compatible with third-party PDF applications	✓	*
ISO-standard format	✓	
Built-in support for comparing changes		✓
Can store deleted annotations		✓
Syntax	Verbose	Minimal
File size	Larger	Compact
Fully documented	✓	✓

** Can be converted to XFDF for use in third-party applications.*

XML Forms Data Format (XFDF)

Nutrient Java SDK has full support for reading and writing XFDF.

XFDF is an XML-based standard from Adobe XFDF (ISO 19444-1:2016) for encoding annotations and form field values. It's compatible with Adobe Acrobat and many other

third-party PDF applications.

XFDF is a representation of all annotation and form data inside a PDF document at a point in time. It doesn't have a concept of differentials (diffs) for managing changes made by multiple users annotating the same PDF simultaneously, and it cannot store deleted annotations. This makes XFDF a challenging format to use for comparing changes, managing conflicts, and synchronizing annotations across users, devices, or sessions.

Instant JSON

Instant JSON is a format we created for bringing annotations and bookmarks into a modern format while keeping all important properties to make the Instant JSON spec work with PDF. It's not directly supported by other frameworks; however, it can be converted to XFDF to make it interoperable.

Instant JSON is fully documented and supports persistent storage. It's designed for synchronizing annotations to a server, and across users, devices, or sessions.

Was this helpful?

✓ YES

✗ NO



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