# Dynamsoft Document Viewer

Dynamsoft Document Viewer is a browser-based JavaScript SDK designed for viewing and editing images and PDFs. It provides a wide range of functionalities, including PDF annotation, page manipulation, image quality enhancement, and document saving.

### Security

Dynamsoft Document Viewer is independently developed and does not rely on any external third-party open-source software. All processing, such as rendering and editing, is securely performed within the browser using a web assembly module. This architecture eliminates the need for a server-side backend, ensuring security compliance and scalability.

### Browser and Platform Compatibility

Dynamsoft Document Viewer is designed to work seamlessly across different browsers and platforms. It is compatible with major browsers like Chrome, Firefox, Safari, and Edge, ensuring a consistent user experience. Additionally, it supports various operating systems, including Windows, macOS, Linux, iOS, and Android, allowing users to access documents from any device.

### Supported File Types

Users can open, edit, and save PDFs, as well as various image formats such as JPEG, PNG, BMP, TIFF, and GIF.

### **Annotation Types**

- text
- images
- signature
- shapes
- stamps
- freehand drawings

### **Features**

#### Data Management

Data management is to manage the data which is imported into DDV.

How does DDV implement data management? First of all, there are two concepts which need to be introduced, document and page.

Page can be understood as a page, currently an image, which is the smallest unit of managing data. Each page has a unique pageUid.

And the pages are placed in the document. Each document also has its unique docUid, one document after another makes up the whole data.

#### Viewers

Viewers are used to display the data. According to the different uses of viewers, DDV provides five different viewer types, which are implemented through five viewer classes.

- Edit Viewer
- Capture Viewer
- Perspective Viewer
- Browse Viewer
- Custom Viewer

#### Advanced

- How to configure image filter
- How to configure boundaries detection

### **Data Management Concepts**

Dynamsoft Document Viewer organizes data using two main concepts: "document" and "page." A document can contain one or multiple pages, and each page must belong to a single document.

- Page: The smallest unit of data management, currently represented as an image. Each page has a unique pageUid.
- Document: A collection of pages, each with a unique docUid. Documents collectively make up the entire data set.

Managing data, therefore, involves managing documents and pages.

- Document Management
- Page Management

#### **UI** Customization

The SDK offers extensive customization options, enabling developers to tailor the interface, toolbar, and annotation tools to meet specific application needs and branding requirements

### Designed with Camera Capture in Mind

Dynamsoft Document Viewer is designed for seamless integration with camera capture. It features five built-in viewer types, with the first three optimized for camera capture scenarios:

- Edit Viewer
- Capture Viewer
- Perspective Viewer
- Browse Viewer
- Custom Viewer

As part of the Mobile Web Capture solution, this viewer helps developers create efficient, accurate, and user-friendly workflows, from camera capture to document finalization.

#### **Annotation Management**

Starting from DDV 2.0, Annotation functionality is supported. This guide introduces some of the key Annotation features. The following functionalities can all be achieved through bulit-in Elements which are related to annotation functionality, this guide only focuses on programming methods.

It is important to note that annotations on the page can be displayed in the UI of either the EditViewer or the BrowseViewer, but they can only be processed through the UI in the EditViewer.Additionally, built-in Elements related to annotation functionality can only be configured within the UiConfig of the EditViewer.

#### **Document Management**

DDV manages document data through the DocumentManager class, which can implement functions such as creating, deleting, and merging documents.

### Page Management

- Load pages
- Save pages
- Move or switch pages
- Get/update page data
- Set/get custom data to page
- Delete pages

## **UiConfig**

First, we need to know how DDV creates the UI. DDV has an interface named UiConfig, which is used to configure the layout and the elements includes. And UiConfig can be nested to achieve a complex layout.