

Vega: A Technical Overview

Vega, an academic publishing system, offers a range of customizable features and workflows to interact with data and multimedia to take editorial management and academic publishing into the 21st century. Learn more about the project, which will be released in December 2017, at <http://vegapublish.com>.

Extensibility

Vega provides for system extensibility through a flexible plug-in system that allows journal publishers to configure the editing environment and through API coverage that allows Vega to be integrated into other systems.

Plug-Ins

Flexible plug-ins allow developers to inject custom functionality into all layers of the system or provide new interfaces. These plug-ins can be easily dropped into or removed from existing Vega installations and can be built to customize the system's visual appearance or create widgets to accept content types specific to the journal.

Vega API

Vega's application programming interface (API) is a headless, public application that can be shared with other systems, making it simple to integrate Vega content and editorial processes with existing systems. The API provides access points for server side or custom-built client technologies to interact with Vega in a safe manner, maintaining both security and data-integrity.

Gradient

Gradient is the heart of Vega's back-end. Built on PostgreSQL, Elasticsearch, and NATS and written in Go and Node.js, Gradient stores everything related to Vega (users, article content, editorial workflows, messaging, etc.). It was developed specifically to support real-time collaboration on highly-connected, structured documents.

Journal Website

The front-end component of Vega is an open-source, customizable application. Journal publishers can build upon default templates or create their own publications in the programming language of their choice.

Institutional Hosting Options

The Digital Publishing Institute (DPI), housed within West Virginia University Libraries, is the institutional home of Vega and will provide fee-based, online hosting services. Additionally, the DPI will offer editorial and layout services. Interested editors and publishers can contact the DPI at <http://dpi.lib.wvu.edu>.