Building Graph-Based Web Applications with Structr 1.0
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structr

Open Source
structr

Open Source Content Management System
structr

Open Source Content Management System Application Framework
First release: May 2011
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On Maven Central: Nov. 2013
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History and Background

A new CMS? Why the hell…
Finally released

There's a new, free, open source CMS, released under the GPLv3. We call it structr.

What is structr?

And why should you use it?

structr is a free, open-source CMS under the GPLv3, written in Java, based on the fantastic NoSQL graph database Neo4j.

History and Status

The current version is v0.3.

On May 31, 2011, structr was released to the public. Check out https://github.com/structr/structr

News

31-May-2011: structr github release

30-May-2011: structr.org is live
First Iteration: CMS

- Standalone web application
- Trees (Sites, Groups, Data)
- HTML code in templates and content nodes
- Apache Click, Freemarker template engine
Scope Change: Backend

REST backend, no frontend

Bi-directional JSON-to-Graph mapping

Advanced Search

Schema definition: Type safety, constraints, cardinality enforcement, cascading delete
New CMS UI

Synchronous UI

Websockets

Drag’n’Drop

In-page editing

Real-time, cacheless page rendering
Architecture

- structr-ui

\[ \text{JSON REST/Websocket} \]

- structr-rest

- structr-core

Neo4j
240,000 LoC
8,000 Commits
~ 12,000 Hours
Content Management

(Demo)
How does it work?
Page Data Model and Rendering (Demo)
Runtime Schema and Data Binding
(Demo)
Widgets and User Interaction
(Demo)
Summary

Powerful REST/Websocket Backend

CMS, Schema Editor, Data Editing UI

Fast page rendering by graph traversal

Data integration: REST, Cypher, XPath
Documentation

The Structr Frontend User Guide

This document is intended to be the primary resource for Structr users. Please note that this manual is far from complete. As Structr is an open-source product under constant development, this document is subject to frequent changes. You can help us improving the documentation by giving us feedback. We do our best to include it and to expand and update the contents on a regular basis.

Getting started

This section will guide you on the first steps with the Structr User Interface. It's not intended to be a complete reference for everything you can do with Structr, but should give you at least an overview of the most important parts of the application.

http://docs.structr.org
Features

http://structr.org/about
Availability

Current version: 1.0RC2

Open Source (GPL/AGPL, commercial licenses planned)

Hosting
Hosting

https://structr.com

Structr and Neo4j Enterprise

Dedicated cloud servers, hosted in Germany

2-32 GB RAM, 25-700 GB HDD, 3-6 CPU cores, SSD option
We love…

Feedback

Ideas

Projects

Contributors
What’s next?

- Runtime schema behavior
- Context-aware code editor
- Widget Exchange/Store
- WebDAV/CIFS
- CMIS
Thank You!