

Blockchain Made Simple: No-Code Apps with Hyperledger Fabric and Joget

Hyperledger Fabric and Joget

Making it easy to create blockchain application using
Hyperledger Fabric and Joget





Blockchain Adoption

Is Blockchain adoption a technical problem or business problem?



Blockchain *Adoption Barriers*

While blockchain is a great technology, it has its own challenges for adoption across any industry

- Usage complications
- Resistance to change
- Absence of regulation
- Engagement of multiple parties
- Perception of immaturity

**Lack of ability to demonstrate and creating business
Proof of Concepts**

A background image for the right side of the slide. It features a close-up of a metal padlock with a combination dial, resting on a laptop keyboard. The padlock is partially open, and the dial shows the numbers 1 through 9. The keyboard keys are visible in the background, and the overall image has a blue-tinted, semi-transparent overlay.

SLOW ADOPTION

BLOCKCHAIN ADOPTION BARRIERS



INNOVATION

UNDERSTANDING HOW PEOPLE INNOVATE IS CRITICAL

Acceptance/Adoption of new capabilities and concepts are directly proportional to your ability to demonstrate via Proof of Concept.

CREATE SOMETHING TO SHOW IN ACTION

A person is rappelling down a rock face, silhouetted against a sunset sky. The person is wearing a red shirt and dark pants, and is holding onto ropes. The background shows a large body of water and a distant landmass under a warm, orange and yellow sky.

What is the #1 factor

CRITICAL TO ENABLE YOUR TEAMS TO

CONSISTENTLY DELIVER AND BE INNOVATIVE

#1

Empowerment is your key
to success





All new technologies working towards empowering
end-users to leverage technology to accomplish
and deliver results

Empower Your Teams







What is a No-Code/Low-Code Platform

No-Code/Low-Code Platforms are platforms that minimize or eliminate the need to code by **empowering non-coders or coders** by providing visually intuitive buildout capabilities including creating screens and workflow and other views of application.

-  Build complete and full-fledged apps, not just processes
-  Speed to Market with our simple-to-learn platform
-  Deploy and customize ready-made apps from marketplace
-  Web-based, drag-and-drop, wizard-style approach to build apps



-  Increased efficiency and productivity across enterprises
-  Easy to-change and maintain based on enterprise needs
-  Improved process control and visibility with SLAs and deadlines
-  Reduced Total Cost of Ownership with resources and technology

No-Code/Low-Code for building blockchain applications

Four major capabilities to build **Applications**



FORM BUILDER

Drag and drop to visually build and configure forms



PROCESS BUILDER

Drag and drop to visually build and configure process workflows



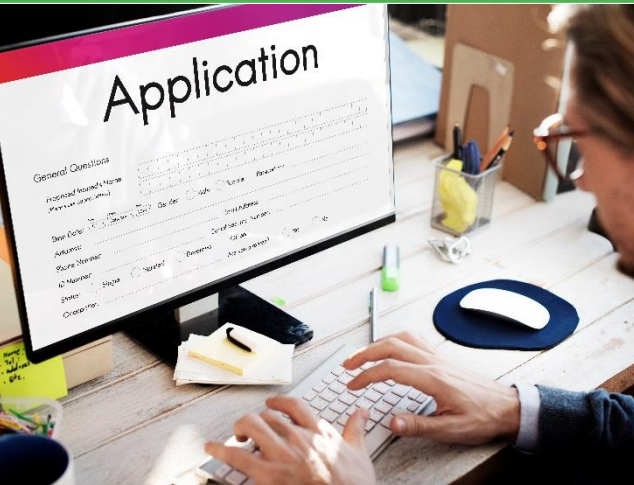
REPORT/DATA VIEW BUILDER

Drag and drop to visually build tabular lists and reports



USERVIEW BUILDER

Drag and drop to build user navigation menu interfaces and app themes





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BLOCKCHAIN

GET STARTED WITH BLOCKCHAIN APPLICATIONS

Hyperledger Fabric plugin accelerates the integration with Hyperledger Network

Visually build **Blockchain** applications with **Hyperledger Fabric** and **Joget**

Originally contributed by IBM, Fabric is emerging as the de-facto standard for enterprise blockchain platforms, with commercial implementations and support from major vendors including IBM, Oracle and SAP.

Download Plugin

<https://dev.joget.org/community/display/KBv6/Blockchain+Hyperledger+Fabric+Plugins>





Simple steps to *Try Yourself* Visually build with Hyperledger Ledger and Joget

- ❑ Ensure that a Hyperledger Fabric network is up and running
- ❑ Ensure that an instance of Joget Enterprise Edition is up and running
- ❑ Download the Hyperledger Fabric Plugins JAR file, and upload the downloaded jar file through Manage Plugins under System Settings
- ❑ Example -- Download the Joget jwa app and import it
- ❑ Configure the fabric_host environment variable to point to the appropriate IP/hostname
- ❑ Publish the app and access it from the App Center

Detailed Article

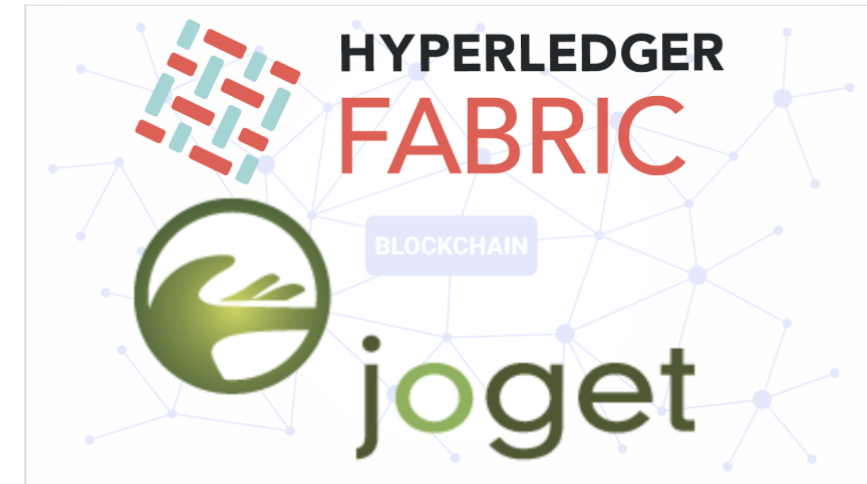
<https://blog.joget.org/2019/01/blockchain-made-simple-no-code-apps.html>

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By **Julian** - January 07, 2019

1. Introduction

Joget is an open source low-code/no-code application platform for faster, simpler digital transformation. In this article, we will look at using a no-code approach to integrating blockchain technology, specifically a **Hyperledger Fabric** network, into a full-fledged web application.



1.1 Blockchain and Digital Ledger Technology (DLT)

In recent times there have been many predictions on **blockchain technology revolutionizing the world**, transforming everything from banking to supply chains and even government. Even if you are not familiar with the term, you would probably have heard of the rise of cryptocurrency like **Bitcoin** which utilizes blockchain technology. So what exactly is a blockchain?

To start, it's best to understand a broader term called **digital ledger technology (DLT)**. DLT is simply a decentralized database, where data is stored by a network of computers with no central authority. **Blockchain** is a specific type of DLT, where records in the network are linked using cryptography and cannot be changed. This lends itself to solving problems where there are issues with trust and inefficiencies due to centralized authorities.

There are many blockchain implementations, which are broadly categorized as either **permissionless or permissioned**. Permissionless blockchain networks are essentially public so anyone can participate, while permissioned ones are for

Plugin Configuration

PLUGIN CONFIGURATION - INVOKE FABRIC TRANSACTION (INVOKE_TRANSACTION) [Close]

Hyperledger Fabric User [Refresh]

Hyperledger Fabric User > Channel > Transaction > Store To Form > Store To Workflow Variable

User ID *

Affiliation *

Membership Service Provider (MSP ID) *

User Enrollment
 Existing User
 Register New User

Certificate Authority (CA) URL *

Admin ID *

Admin Secret *

< Prev Next >

PLUGIN CONFIGURATION - INVOKE FABRIC TRANSACTION (INVOKE_TRANSACTION) [Close]

Channel [Refresh]

Hyperledger Fabric User > **Channel** > Transaction > Store To Form > Store To Workflow Variable

Peer Name *

Peer URL *

Orderer Name *

Orderer URL *

Channel Name *

< Prev Next > **Submit**



Plugin Configuration

PLUGIN CONFIGURATION - INVOKE FABRIC TRANSACTION (INVOKE_TRANSACTION)

Transaction

Hyperledger Fabric User > Channel > **Transaction** > Store To Form > Store To Workflow Variable

Chaincode ID *

Function Name *

Function Arguments

FUNCTION ARGUMENTS

<input type="text" value="#form.fabcar.Key#"/>	⬅️ ⬇️ ❌
<input type="text" value="#form.fabcar.make#"/>	⬆️ ⬇️ ❌
<input type="text" value="#form.fabcar.model#"/>	⬆️ ⬇️ ❌
<input type="text" value="#form.fabcar.colour#"/>	⬆️ ⬇️ ❌
<input type="text" value="#form.fabcar.owner#"/>	⬆️ ⬇️ ❌

Transaction Type Query Update

Debug Mode

< Prev Next >

PLUGIN CONFIGURATION - INVOKE FABRIC TRANSACTION (INVOKE_TRANSACTION)

Store To Form

Hyperledger Fabric User > Channel > Transaction > **Store To Form** > Store To Workflow Variable

Store Success Status (true or false)

Form ❌ ↗️

Field Mapping ❌

< Prev Next >

Submit



Application View

HYPERLEDGER FABRIC FABCAR SAMPLE Home 0

- Cat Grant +
- Welcome
- Fabcar Listing** 10
- Fabcar Approval Process +

HYPERLEDGER FABRIC FABCAR SAMPLE Home > / Fabcar Listing Home 0

- Cat Grant +
- Welcome
- Fabcar Listing** 10
- Fabcar Approval Process +

Fabcar Details

HYPERLEDGER FABRIC FABCAR SAMPLE Home > / Fabcar Listing Home 1

- Admin Admin adminx@joget.org +
- Welcome
- Fabcar Listing 10
- Fabcar Approval Process** -
- Inbox 1
- Create New Fabcar

[Back](#)

FABCAR FORM APPROVAL PROCESS - APPROVAL

Fabcar Details

Key * CAR10
Make * Mazda
Model * CX5
Colour * Blue
Owner * Jack

Approval

Status * Approved

Remarks

Rich text editor toolbar with options: Undo, Redo, Bold, Italic, Text Color, Background Color, Bulleted List, Numbered List, Indent, Outdent, Link, Image, Table, and a floating edit icon in the bottom right corner.

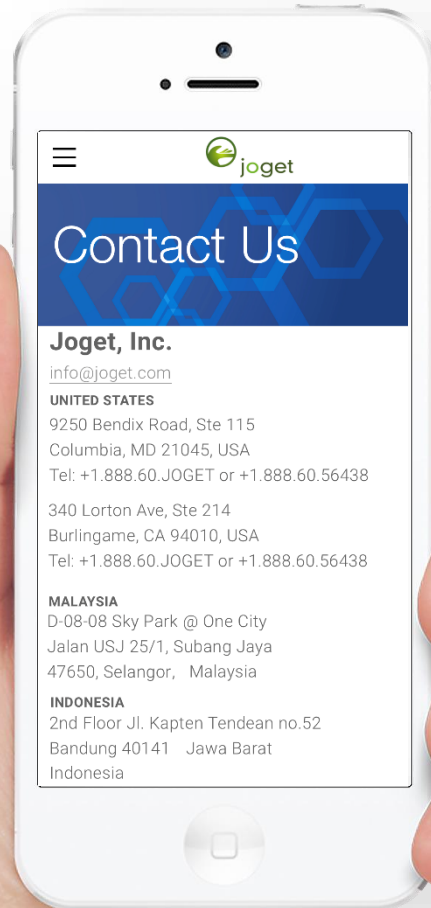




Demo Plugin and App Demo



Contact Us



Get in touch with us

Want to try out Joget there are plenty of ways to do it

- ✓ Download and try on your premise
- ✓ Cloud
- ✓ AWS Marketplace
- ✓ RedHat OpenShift online
- ✓ Azure – Coming Soon



DOWNLOAD

If you want to try it out On-Premise



Try Online

On our On-Demand for free

DIGITAL

TRANSFORMATION

We are here to support

THANKS