Mutual Knowledge Systems:

Web3 Enabler for Salesforce

User Guide

V1.0

Overview

Mutual Knowledge Systems' Web3 Enabler for Salesforce enables Sales Cloud and Service Cloud users to accept payments in popular Stablecoin cryptocurrencies on the Ethereum, Polygon, Arbitrum, and Optimism networks.

Web3 Enabler is safe and secure by design. Neither your Salesforce Org nor Mutual Knowledge Systems has access to your private key. Using secure third parties, including Okta's Auth0 and Sign In With Ethereum, we safely connect your wallet to our network, and monitor for transactions on the blockchain.

Your users do not need to be Web3 knowledgeable to accept cryptocurrency payments. With a few button clicks, they can invite your clients to connect their wallets and begin sending payments. Cryptocurrency standards like QR codes are natively supported. We also provide easy to reference URL fields for inclusion in your existing workflow. You can add a Payment Link to your existing Invoices and begin accepting payments immediately, clients just need to connect their wallet through our secure URL to provide their Wallet Address, and we track all the payments.

We urge Salesforce Administrators to read through this entire document at least twice. If you are new to Web3, some of the details may be unfamiliar to you. If you are experienced with Web3, you may find some of the simplifications we make in the interface shocking. We have focused on making the process as simple as possible.

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Quick Start Guide

For security reasons, we recommend a limited access Integration User with Web3 Enabler Integration Permissions. Because of the sensitive nature of Blockchain Financial Transactions, a clear paper trail of this user is recommended. We recommend using an Integration User, but a Standard User with Admin Profile and the Integration Permission set will also work.

Installation Instructions (Quick Start):

Before installation, decide whether or not your organization is going to be multi-currency aware. If you are a single currency organization, you will likely want to create policies around which crypto assets you accept. If you are a multi-currency organization, you will likely want to accept stable coins from currencies you accept. See "Best Practices" below.

The Integration User needs the following Permissions:
- Salesforce Integration or Full Salesforce License
- Permission to the Connected App: MuKn Web3 CA
- Authorization via the "Authorize my Org" link on the Web3 Enabler Setup App

Step By Step Instructions:
1. Install the Package from the AppExchange available to All User or Selected Group of Users
2. Grant the Salesforce Admin that is configuring Web3 Enabler the Web3 Enabler Admin Permission Set.
3. Create a User for Integration
    a. Create a New Permission Set -
        i. Name: Web3 Enabler Integration Access
        ii. Permissions
            1. Assigned Connected Apps: MuKn Web3 CA
    b. Create a Salesforce Integration User
    c. Grant a Web3 Enabler License to the Integration User
    d. Assign the **Web3 Enabler Integration (Managed)** permission to the Integration User
    e. Assign the **Web3 Enabler Integration Access** Permissions to the Integration
4. Launch Web3 Enabler Setup in the Application Launcher (Steps 3 and 4 are explained in Post Install Setup)
5. Open the Authorize my Org link in a Private or Incognito Browser. **Grant Permission as the Integration User you created in Step 2.**
6. Upon Success, it will tell you that the Integration User cannot view the Salesforce UI. Refreshing the Screen as your Admin user should so that it is connected.

Detailed explanation for the Integration User: Create the Integration User - We highly recommend the use of a Salesforce Integration user for this program. Requirements of this User are as follows:

        a. Enter Setup, and Create Users.
        b. Give your new Integration User reasonable names and logins.
        c. Use an email you can monitor.
        d. Salesforce License: Salesforce Integration.
        e. Salesforce Profile: Salesforce API Only System Integrations.
        f. After saving, Edit Permission Sets for this user and assign:
                i. Web3 Enabler Integration User (Managed).
                ii. Web3 Enabler Connected App

Usage Settings (Quick Start):

Any users that need access to Web3 Enabler should have a Web3 Enabler license. You can assign this in the Salesforce Setup "Installed Packages Screen".

Users will also need appropriate permissions based on their use cases.

Permission Levels: User, Manager, Admin

User level settings: Web3 Enabler User (Managed) Permissions grant access to the tools a typical Salesforce Salesperson or Customer Service Representative needs to manage Web3 exchanges. They can access the QR Codes, create the Account Wallets for connection and otherwise enable sales to occur.

Manager level Settings: Web3 Enabler Manager (Managed) Permissions grant access to modify the non-blockchain data in the Salesforce Organization. This user is likely to work in Accounting, Finance, or Sales Management, and can work with the transaction data to correct user errors and credit the payments appropriately.

Admin level Settings: Web3 Enabler Admin (Managed) Permissions. This user should be familiar with Web3 concepts like blockchains, tokens and contracts. The Admin User can edit any of these settings. If nobody in your organization has this knowledge, the defaults are probably sufficient for your needs.

Best Practices (Cryptocurrencies)

As you and your organization become more comfortable with the world of digital assets, you may branch out. However, for most organizations new to accepting cryptocurrencies, a few simple operations will alleviate risk and simplicity.

Understand the Basics of Public Key Encryption

Public key encryption relies on a series of mathematical equations that connects a private and public key. Anyone with access to your public key can send a message to you and only you can decode it. You can "digitally sign" a message with your private key, and anyone with your public key can verify it. This key pairing is among the foundations of cryptocurrencies.

As a result, your organization can publish its public key to receive payments. However, only the possessor of the private key can authorize the "spending" of those coins, by sending a signed message to the network. In common usage, the private key is managed by the "wallet holder".

Web3 Enabler only stores public keys. For EVM networks, this is the public key to the "Account" you are using with Web3 Enabler. For UTXO networks, this is the "extended public key" that creates transactional addresses. In all circumstances, Web3 Enabler relies upon publicly available information to report transactions. Only the "wallet holder" with the private keys can "spend those coins" - including transferring them to a fiat off-ramp.

Choose a Limited Number of Currencies you Accept

A US Company that operates in dollars will have the most success with early adoption by accepting USDT (Tether) and USDC (Circle) Stablecoins. These cryptocurrencies maintain a 1:1 peg to the USD and are easily redeemable for dollars. You can set up accounts with Tether or Circle to "convert to fiat" where you use an ACH transaction to receive US Dollars. Evaluate each company's offerings to see what works for you.

Create Policies around Wallet Access

Whoever controls the private keys controls the coins. You should generally have at least two people with access to the wallet to avoid losing your coins. You should decide how much crypto exposure you want to have, and convert to fiat when your coins on hand exceed it. Web3 Enabler uses your public key only, and does not have access to your coins.

Develop your Exchange Rate and Accounting Rules

Accepting cryptocurrencies requires agreement between accounting and finance. If you start with Stablecoins, you generally accept them at 1:1 with fiat currency, setting the exchange rate of 1 USDT to 1 USD and 1 USDC to 1 USD. When you redeem the currency for fiat, you will generally pay a transaction fee of 0.5% to 1%. European companies may similarly accept EUROC, EURT, or EURS, with an exchange rate of 1 EUR. Multi currency companies may accept stable coins in their various currencies.

Web3 Enabler, by default, includes popular stable Dollars, Euros, Pounds, and Yen. If you are not multi-currency aware, you will likely want to disable the other currencies or set their exchange rates.

A small amount of cryptocurrency on the networks is necessary for "Gas" fees, the cost of recording the transactions. Most companies will treat this as a finance charge, but you should make a decision about this with your accounting department.

Generally, the "Wallet Holder" should be someone in the corporate treasury that coordinates with accounting and finance. This is important as you decide how to record these transactions in your company Account Package, General Ledger, or ERP - Web3 Enabler for ERPs will make this easy.

If you accept other cryptocurrencies, you will have to develop your policies. The best practices of this depend on what role cryptocurrencies will play in your business operations.

User Guide

Working with Accounts and Opportunities

Web3 Enabler tracks payments to and from your Organization and your Accounts. The nomenclature we use is as follows:
- Org Wallet: Your company's wallet(s)
- Account Wallet: The third party Vendor or Customer wallet

Account Wallets are connected to Accounts and link all transactions to those Accounts.

The Account Wallet features a Lookup reference to a Contact, which may be important for automations in your organization.

Transactions

Transactions are referred to as Inbound Blockchain Transactions or Outbound Blockchain Transactions. If a transaction is sent from the address in an Account Wallet (i.e. a customer payment) to your Org Wallet, that is an Inbound Blockchain Transaction. If the transaction starts from your Org Wallet and goes to the Account Wallet, that is an Outbound Blockchain Transaction.

Your Salesforce Admin may further add custom fields to connect Opportunities, Orders, or other Salesforce Objects to transactions.

Connecting a Web3 Wallet

Create a New Account Wallet and it will feature a link for the Wallet Address labeled "Connect".

Most of the time, the Account Wallet holder is outside your company. You can email the Connect link to the Account / Contact and invite them to connect their wallet. We allow Account Wallets to be linked to Contacts, making it easier to automate the email and SMS notifications to get wallets connected.

After your client uses Signin With Ethereum, they will get to the Save Wallet Screen:

After they Save Wallet Address, they will be eligible to make payments. Your Admin can set up notifications based upon the Wallet connecting.

Requesting / Receiving a Payment

Your Web3 Enabler Admin should have set up one or more Org Wallets for you to receive payment.

They will have a QR Payment URL on the Org Wallet that you may be given read access to. Once your client has connected their account wallet, you can send them the QR Link for any Org Wallet.

The URL will feature a QR Code and an Ethereum link, both of which will allow your account to send a payment your way.

Accounting/Finance Guide

If you are closing transactions via Blockchain and your transactions are not integrated with your accounting and/or ERP systems, you can export them from Salesforce and import them into your systems.

Currency Rules

Web3 Enabler is multi-currency aware but does not require it. If your organization is set up for multiple currencies, then the use of Stablecoins is easily mapped to the appropriate currency. By default, Web3 Enabler is set up to accept Stablecoins in a multi-currency setup at par. If you are only accepting a subset of Stablecoins, or accepting them at a different rate, you may edit the appropriate asset tokens.

A variety of Stablecoins are provided by default. Here is an example of a company working with USDC. The default is a multi-currency org. The modified version is a single currency (EUR) that accepts USDC/USDT as 0.9 EUR.

Currency Rules are set in the Object "Asset Token."
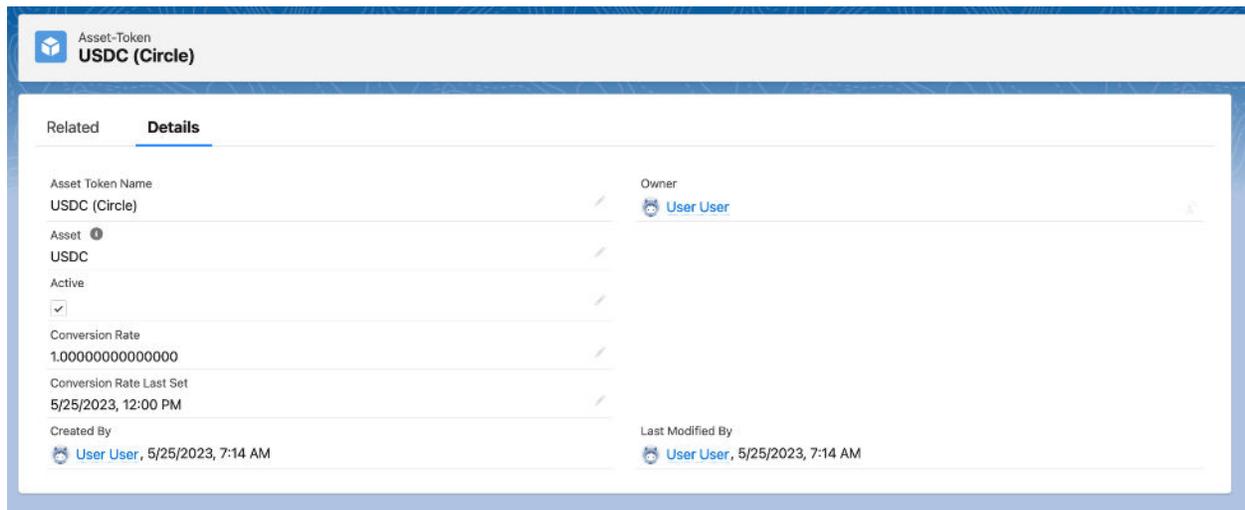
By Default:
USDC = 1 USD
USDT = 1 USD
EURS = 1 EUR
EUROC = 1 EUR

If you are a European company willing to accept USDC and USDT for 0.9 EUR, you would update them to the following:

USDC = 0.9 EUR
USDT = 0.9 EUR
EURS = 1 EUR
EUROC = 1 EUR

If you are doing extensive international Stablecoin business, it is recommended that you enable multiple currencies and use a Currency Exchange Rate product from the app exchange. If you are primarily working in a singular currency but wish to accept other currencies, you might want to set the exchange rate at a discount as above.

Transaction Logs

Transactions are viewable via Inbound Blockchain Transactions and Outbound Blockchain Transactions.

Most commonly, Inbound transactions are revenue and Outbound transactions are refunds, but each transaction and business is unique. Web3 Enabler will match live transactions as best it can, but your Salesforce Administrator will need to work with you for detailed mappings that match your business usage.

Exporting Transactions

Transaction Reports are included that are exportable as CSV or XLS for import into your accounting and ERP systems.

Administrators Guide

Installation - Step by Step

1. Choose your integration user
    a. Recommended case - a dedicated Web3 Integration User
        i. User License: Salesforce Integration
        ii. Profile: Salesforce API Only System Integration
        iii. Permission Set: Web3 Enabler Integration (Managed)
        iv. Enter Setup, Search for Permission Sets and create 2 following permission sets:
            1. Create a new Permission Set named 'Web3 Enabler Connected App Access'.
                a. Choose 'Assigned Connected App', Add 'MuKn Web3 CA'.
            2. Create a new Permission Set named 'Web3 Enabler Accounts Access' with license 'Salesforce API Integration'.

a. Choose Object Settings, Accounts, Check: View All, Modify All.
3. Assign to the integration user.
b. Alternative - Use a normal Salesforce User, grant the Web3 Enabler Admin (Managed) Permission. Grant Access to that user to the Connected App (via Profile or Permission Set).
2. In App Selection, choose "Web3 Enabler Setup".
3. Authorize my Organization - It is recommended that you use an Incognito/Private Browser.
4. As the User from Step 1, Login, authenticating your user information.

Screenshot 1: Go to App Manager in Setup

Screenshot 2: Choose Manage for MuKn Web3 CA

Screenshot 3: Go to Web3 Enabler Setup, Authorize in Private / Incognito Window

Screenshot 4: Login with either Standard or Sandbox Login
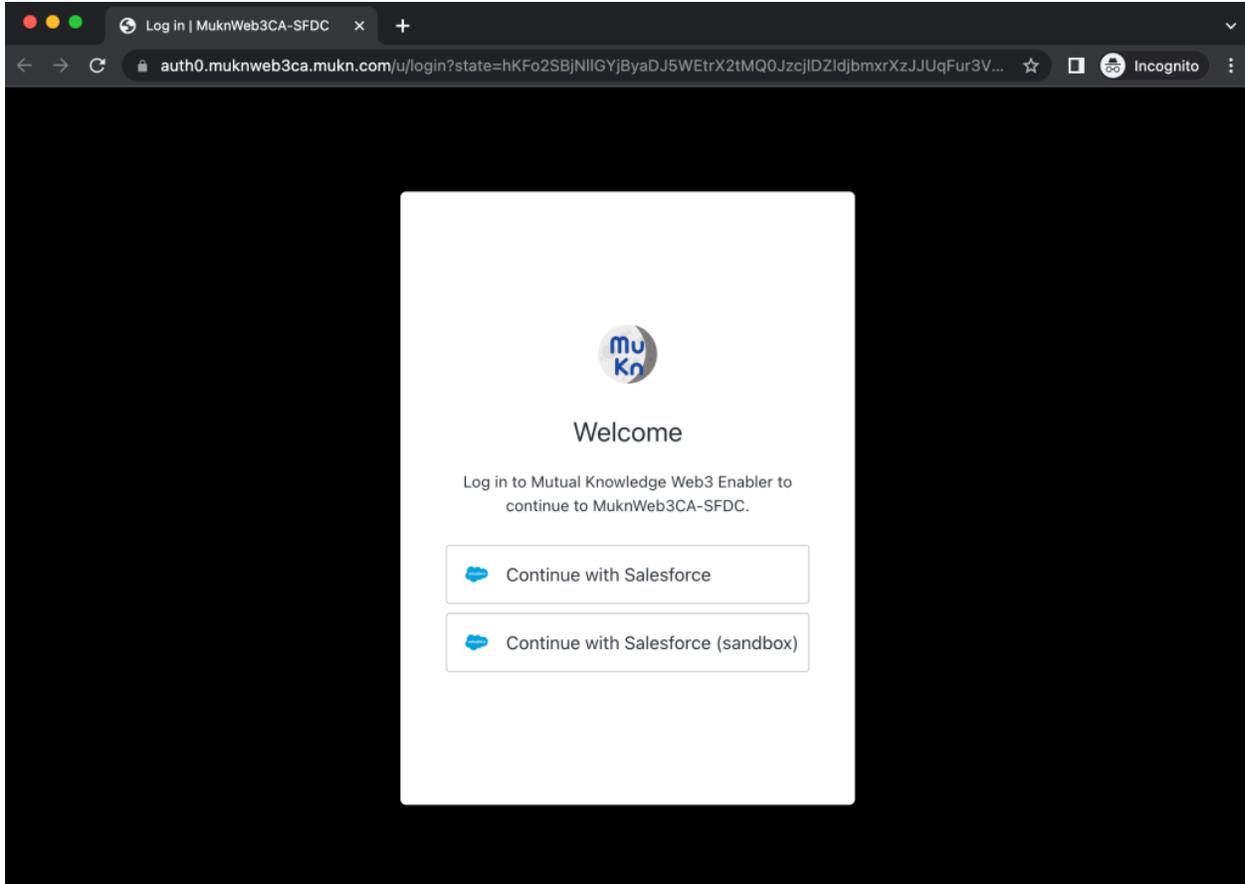
Screenshot 5: Grant any requested access and finish
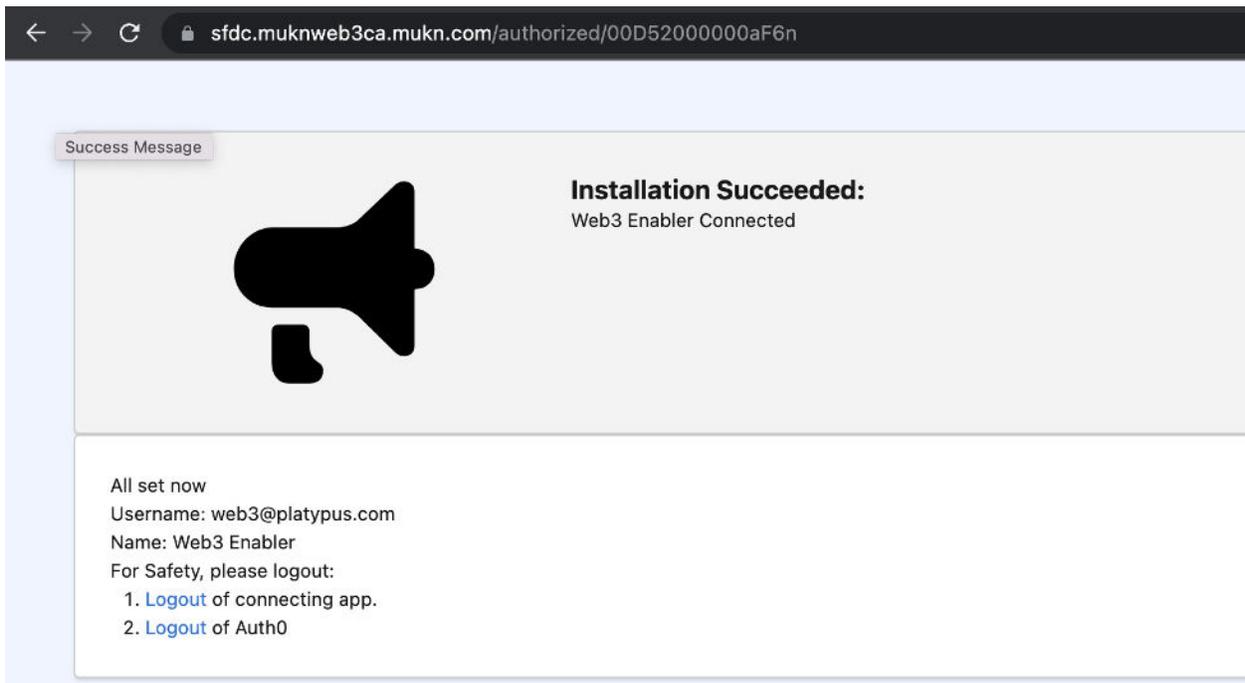
Close the Private/Incognito browser. Otherwise, make sure to Logout of the Connected App.

Screenshot 6: Refresh of the Web3 Enabler Setup to see the settings

Permissions and Use Cases

The Web3 Enabler Package features four levels of permissions:
- Web3 Enabler Integration: Write Access to Transaction Logs
- Web3 Enabler Admin: Used by Administrators to add/edit/automate processes around Asset Tokens, including changing Conversion Rates
- Web3 Enabler Accountant: This Permission Set allows designated users to View all Transactions. It does not allow them to update Conversion Rates, by default only the Admin User can do that.
- Web3 Enabler User: This Permission allows normal users access to the appropriate fields/objects for their records

Integration and Admin

The Web3 Enabler Integration Permission Set is designed for a dedicated Salesforce Integration User, this is the recommended approach.

If you prefer to use a standard user for integration, the Web3 Enabler Integration permission is fine for a dedicated user. More commonly, a Web3 Enabler Admin permission is appropriate for an Administrator Integration user.

Usage and Reporting

Most users will just need the Web3 Enabler User permission, this allows normal usage and permissions to the system. If you have the need for a dedicated Accounting Resource with unlimited view access to the Blockchain Data but not necessarily full access to the underlying Accounts, the Web3 Enabler Accountant enables you to grant that permission.

Depending on data needed, a Platform or Full license is required for the Accountant User.

Configuring a Organization Wallet

Create a new Org Wallet. Use an easy to remember name that will help you track your wallet. If you would like to test the functionality with TestNet transactions, then enable Test Networks. Remember to disable this when you are done testing.

If Test Networks are enabled, transactions from the supported Test Networks will show up in the Inbound Blockchain Transactions and Outbound Blockchain Transactions. They will not have a transaction value, but they will risk causing confusion.

After you are comfortable with your setup, turn off Test Networks for the Wallet to stop these transactions from reaching your Salesforce Install.

After you create the Wallet, you will need to connect it.

If you have your wallet in your browser, just click on the Connect Link. If you are planning to use a Phone based or other external wallet, it is recommended that you right click on Connect and choose Incognito or Private Browser.

From there, choose Sign In With Ethereum and the appropriate connector.

Upon connection, you will be asked to "Save Wallet Address".

Which will update Salesforce and take you to the Success Screen.

Organization Wallet Connected
Thank you for using Web3 Enabler

You have successfully connected your wallet!
Salesforce Org: 00D52000000aF6n
Salesforce RecordId: a045200000AaW49
Public Wallet Address: 0x79c7612dB2b5C1610fe9530b1EAED0Be66E718c0
For Safety, please logout:
1. Logout of connecting app.
2. Logout of Auth0

Refresh your Salesforce Page and your Wallet Address will now be visible and your QR Payment link will be available.

Salesforce Admin Primer on Cryptocurrencies

Many Salesforce Admins may only have a cursory understanding of cryptocurrencies and digital assets when asked to embark on this process. This primer is designed to provide some basic terminology and understanding.

Definitions

Blockchain - A distributed ledger (series of transactions) stored in data elements called blocks. These blocks contain references to the prior blocks, creating a "chain" of data. The blockchain costs resources to maintain. The maintainers are compensated for validating or mining.

Coin - The native digital asset of a blockchain. It is used to pay for transactions (often called gas in Ethereum based systems). It is received as a reward for "mining" or "validating" data on the blockchain. Famous coins include Bitcoin (BTC), Ethereum (ETH), and Dogecoin (DOGE).

Fiat - Originally a term to separate currencies no longer backed by gold, it is used in the Web3 community to refer to currencies issued by central banks (i.e. US Dollars, Euros, Pounds, Yen).

Mining / Proof of Work - The process of maintaining and verifying blockchain operations generates small rewards for those doing the calculations. This is called "mining" and is done with a cryptographically complex operation. That "work" receives compensation, creating the correct incentives.

Stablecoin - A digital token that is "pegged" to an existing financial instrument, commonly US Dollars, Euros, or other major currencies. High quality stablecoins make conversion to fiat easy. Popular Stablecoins include (USDT, USDC, EURS).

Token - A non-native digital asset. The media talks about NFTs (non-fungible tokens) and cryptocurrencies (fungible tokens). Most financial digital assets are these tokens.

Transaction - An entry on the blockchain

Validating / Proof of Stake - The validators track the information. They prove their economic incentives by having proof of a "stake" of the coins from the blockchain.

Best Practices

Initial Cryptocurrency Rollout - Stablecoins

Web3 Enabler abstracts the differences between digital assets and wallets from end users. The distinction between Coins and Tokens is technologically significant but economically irrelevant. Web3 Enabler maps all transactions to "Asset-Tokens", which include both digital asset types.

For initial use, we recommend only accepting Stablecoins in the currency or currencies you already use. This simplifies your business process.

For example, a US based company that only works in dollars should disable all currencies except USDT and USDC. You should accept those tokens at a conversion rate of 1.

A multinational firm running multicurrency in Salesforce that does business in Europe, US, and UK, should enable:

 USDC and USDT with a conversion rate of 1 USD
 EURT, EURS, and EUROC with a conversion rate of 1 EUR
 GBPT with a conversion rate of 1 GBP

Work with your Accounting/Finance team to set up one or more Web3 EVM Wallet that will accept all these tokens, and develop your offramp strategy to convert to fiat.

More Cryptonative: Popular Major Coins

Develop a conversion strategy for popular coins like Bitcoin (BTC), Ethereum (ETH), including off-ramping. More aggressively, accept close Bitcoin derivatives like Dogecoin (DOGE), Litecoin (LTC), and Dash (DASH). Your strategy involves how you mark the payments to market and set conversion rates.

Integration with the Bitcoin, Dogecoin, Litecoin, and Dash blockchains is planned for v2.0.