

DigixCore 2.0 Components and Libraries (The Lego Pieces)

Component	Description	Dependencies	Status	Medium Post that is relevant to each component
Digix Directory (needs UI)	Solidity based contract for managing accounts, roles, and groups in the DigixCore platform. Each role defines valid state machine actions that can be taken on digix gold assets.	CDAP, solidity-collections	Completed + UI in progress	New
Digix Trusted Price Oracle (DTPO)	Ruby on Rails based microservice to provide trusted price feeds to Marketplace contracts	ruby-eth (vault fork)	Completed	https://keepingstock.net/dev-update-31st-july-2017-540eb57aea31
Product Catalog (needs UI)	Solidity based catalog contract containing a database of allowed Digix Gold products (refinery and bars)	CACP, Digix Directory, solidity-collections	Completed (needs testing)	New
Assets Explorer (needs UI)	Solidity based contract that allows end users to list all of the registered gold bars in the system. This is also the UI that allows users to	Digix Directory, CACP, solidity-collections	In Progress + UI Blocked	https://medium.com/@Digix/digix-dev-update-22-august-2017-16ecf07f6665

	recast their gold tokens into gold bars			
Assets Storage	Solidity based storage contract that stores details about registered gold bars, their status, as well as other information.	Digix Directory, CACP, solidity-collections, solidity-state-machine	Completed	Core 2.0 related posts/spectrum related posts/state-machine posts/collections library
Digix Admin (needs UI)	Solidity based interactive contract for managing the system including transaction fees, demurrage fees, global values, and access control.	CACP, solidity-collections	In Progress (80% completed) + UI Blocked	Core 2.0 related posts/spectrum related posts/state-machine posts/collections library
PoA Interactive (needs UI)	Solidity based interactive contract for authorized roles to manage the entire PoA Lifecycle	Solidity-collections, CACP, Digix Directory	In Progress (30% completed) + UI Blocked	Core 2.0 related posts/spectrum related posts/state-machine posts/collections library
Marketplace (needs UI)	Solidity based interactive contract allowing approved users to purchase DGX tokens directly from Ether.	CACP, ERC20 Token Standard	Completed + UI Completed	https://medium.com/@Digix/digix-dev-update-22-august-2017-16ecf07f6665
Marketplace Service	Solidity based service contract that verifies DTPO signed price data.	CACP, ERC20 Token Standard, DTPO signature algorithm	Completed	Price oracle related posts

DGX Tokens (needs UI)	The Digix Gold tokens. 1 token = 1 gram divisible up to 1 nanogram unit.	DigixMath (demurrage and TX fee calculation), ERC20 Token Standard, Statemachine	Completed + UI Completed	https://medium.com/@Digix/digix-dev-update-10th-july-2017-ab6838fae2c3
Digix Pricefeed	Rails based application that publishes nonce and block number locked price data for Marketplace	DTPO signature algorithm, ruby on rails	Completed	https://medium.com/@Digix/digix-dev-update-17th-july-2017-6997918d0dcd
Spectrum	Frontend for Digix Contracts UI	Web3-redux, redux-priceticker, react-ledger-container, Dijix, Digix Contracts	Ready + Ongoing Roadmap	https://medium.com/@Digix/spectrums-significance-to-dgx-2-0-6f4f39cd47ab
Doxity	Solidity Documentation Generator		Completed	https://medium.com/@Digix/digix-dev-tool-release-doxity-429f545ff46c
Dijix + Plugins	Immutable File Format	dijix-image, dijix-pdf, dijix-attestation, dijix-pinning-plugin	Completed	https://hackernoon.com/digix-dev-update-12-sept-2017-a81e00b5b5a5
Misc CLI tools + Scripts	Command line tools for batch processing of DGX assets and PoA.	Dijix, poa-genesis, truffle-lightwallet-provider, sigmate, ipfs-pinning-registry, tempo, web3-console	Completed	https://medium.com/@Digix/digix-dev-tool-release-tempo-f78d03aaae4e https://medium.com/@Digix/digix-dev-tool-release

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Unit Testing Status

Component	Test Coverage	Description	
Solidity Core Libraries	100%	Common math functions such as demurrage calculation and TX fee calculation	https://medium.com/@Digix/dev-updates-c940e5203c9d
CACP Contracts	100%	Contracts to allow service oriented architecture of Solidity contracts for modularity and upgradeability	https://medium.com/@Digix/digix-dev-update-22-august-2017-16ecf07f6665
Solidity State machine	100%	Role based rules engine	https://medium.com/@Digix/dev-updates-c940e5203c9d
Contract Directory Access Protocol (CDAP)	0%	Allows us to define Groups, Roles, and Users that can be used in statemachine, and other access control. CDAP Service allows us to resolve an address to their group and role.	
Solidity Collections Library	100%	Doubly Linked List with CACP based pagination support, open sourced	https://medium.com/@Digix/digix-dev-update-6th-sept-2017-a49a7c7078ba
Core2	35%	The entire lego project	https://medium.com/@Digix/digix-dev-update-aug-29-2017-274f10ee0d8f

Marketplace	100%	Solidity contracts that allow the swapping of Ether to DGX gold based on the Digix Trusted Price Oracle, KYC	https://medium.com/@Digix/digix-dev-update-24th-july-201-3dc1e2f1455
Marketplace Service	100%	Solidity service contract to verify DTPO prices	

Repositories (some are private):

- <https://github.com/digixglobal/solidity-core-libraries>
- <https://github.com/digixglobal/cacp-contracts>
- <https://github.com/digixglobal/solidity-statemachine-library>
- <https://github.com/digixglobal/ruby-eth>
- <https://github.com/DigixGlobal/cdap>
- <https://github.com/DigixGlobal/solidity-collections-library>
- <https://github.com/DigixHoldings/core2>