“Publish” function to upload data

DataBase

https://data.enigma.co/marketplace/publish

**web3:**

**Interface to Smart Contract**

contract = web3.eth.contract( contract\_address, contrac\_ABI)

* http://raw.githubusercontent.com/enigmampc/catalyst/master/catalyst/marketplace/contract\_marketplace\_address.txt
* http://raw.githubusercontent.com/enigmampc/catalyst/master/catalyst/marketplace/contract\_marketplace\_abi.json
* http://raw.githubusercontent.com/enigmampc/catalyst/master/catalyst/marketplace/contract\_enigma\_address.txt
* http://raw.githubusercontent.com/enigmampc/catalyst/master/catalyst/marketplace/contract\_enigma\_abi.json

Smart Contract MarketPlace

(register, subscribe, etc.)

deployed in Ethereum network

address: 0xa64927358a82254be92eb1f1cb01de68d1787004

Enigma Token (ERC20 Standard; ‘ENG’; 150 million)

(transfer, approve, allowance, etc.)

Deployed in Ethereum network

Address: 0xf0ee6b27b759c9893ce4f094b49ad28fd15a23e4

**Solidity:**

**Use smart contract to do service control**

**Python:**

**User Interface to web3 and upload data**

Catalyst has two components:

* Trading algorithms based on Zipline python library
* DApps to interact with Marketplace to register and upload data
* Use Web3 and artifacts (contractABI and address) to interact with deployed smart contracts on Ethereum network.
* Data is uploaded to the centralized database in Enigma website.