Dexage
Smart Contract Audit Report

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#ETH #Blockchain
#SmartContracts #CTO #Architec...

Introduction

This is a technical audit report for Dexage (DXG) token smart contract.

This audit is purely technical and is not any investment advise.

Only thing it will tell is, Dexage smart contract is safe to make transactions.

Smart Contract Audit goals

Consensys ethereum smart contract security best practices

- Whether the code is written in a simple, readable and security mindset
- Checked the code whether its able to protect against all smart contract known attacks like re-entrancy, race conditions, time stamp dependence, underflow and overflow, DoS attacks like unexpected revert, block gas limit etc
- Checked against gas optimization
- OpenZepplin safeMath library
- Analyze smart contract with various Consensys recommended tools like Mythril, Securify, Smartcheck to name a few. Also used some proprietary developed tools

Primary architecture review

- In depth architecture review
- Code correctness
- Documentation
- Code analysis for syntax errors

Testing against Dexage requirements

- Testing smart contract against the specified customer requirements which are described in Dexage White paper and website
- Evaluating the smart contract on Ethereum test network

About Dexage ICO

DexAge is a Decentralized Exchange platform, enabling P2P crypto to crypto exchange, crypto to fiat trading, P2P lending and chat on DAPP, using a user-centric approach where the whole platform would be driven by social web.

To create a trust less, permission less P2P crypto exchange and trading platform that is autonomously driven by a synergetic web of traders, users and investors.

DexAge strives to make our P2P platform an autonomous ecosystem where our users, traders and investors would serve as the fuel and not just as the nuts and bolts of our platform. The real growth and development of DXG lies in the empowerment of its stakeholders, which we endeavor to achieve through the multipurpose functionality of our DexAge tokens. By enabling our users to stake, vote, pay loans and manage their assets in a decentralized exchange, trading and lending marketplace, our end-game is for DXG and its stakeholders to thrive with the proliferative potential of cryptocurrencies.

Our DXG trading infrastructure is fortified by the fusion of a distributed blockchain with a decentralized social web and heralds a socio-economic paradigm shift in the current crypto trading landscape. A financial system which equips its members to manage their money at their volition without the interference of an inter-agent, is the future that DexAge envisions.

For more information, visit website and read Whitepaper

About DXG Token

Dexage platform will be powered with DXG token.

DXG is ERC-20 compatible token

The amount of DXG tokens is limited to 5,000,000,000

Tokens that are left in the sale will be burned

DXG token is Ownable, Pausable and Burnable

```
Token Name     : Dexage
Token Symbol   : DXG
Token Decimals : 18
Total Supply   : 5,000,000,000
```

Audited Smart contract location

Dexage ERC20 Token Sale Smart Contract

Performed Tests

Performed the following tests on the given smart contract

- Crowdsale is properly initialized with given parameters in the code
- Tested onlyOwner modifier requirement
- pauseCrowdsale and resumeCrowdsale functionality
- Burning functionality
- Buyer cannot transfer tokens before ICO is completed
- DXG token satisfies ERC-20 interface as this is required for crypto exchange listing
- ERC-20 compatible transfer() is available
- Tokens can be transferred with ECR-20 allowance approval
- One cannot transfers more than approved allowance
- transferOwnership functionality
- increaseApproval and decreaseApproval functionality

Limitations

Security auditing can’t bare all existing vulnerabilities, and even an audit in which no vulnerabilities are found is not a guarantee for a secure smart contract.

However, auditing is there to find out vulnerabilities that are not seen during development and areas where additional security measures are necessary.

We for that reason carry out a source code review to determine all locations that need to be fixed.

Independent consultant has performed wide spread auditing in order to find out as many vulnerabilities as possible.

Risk

Dexage Smart Contract has no risk of losing any amounts of ethers in case of external attack or a bug, as contract does not takes any kind of funds from the user.

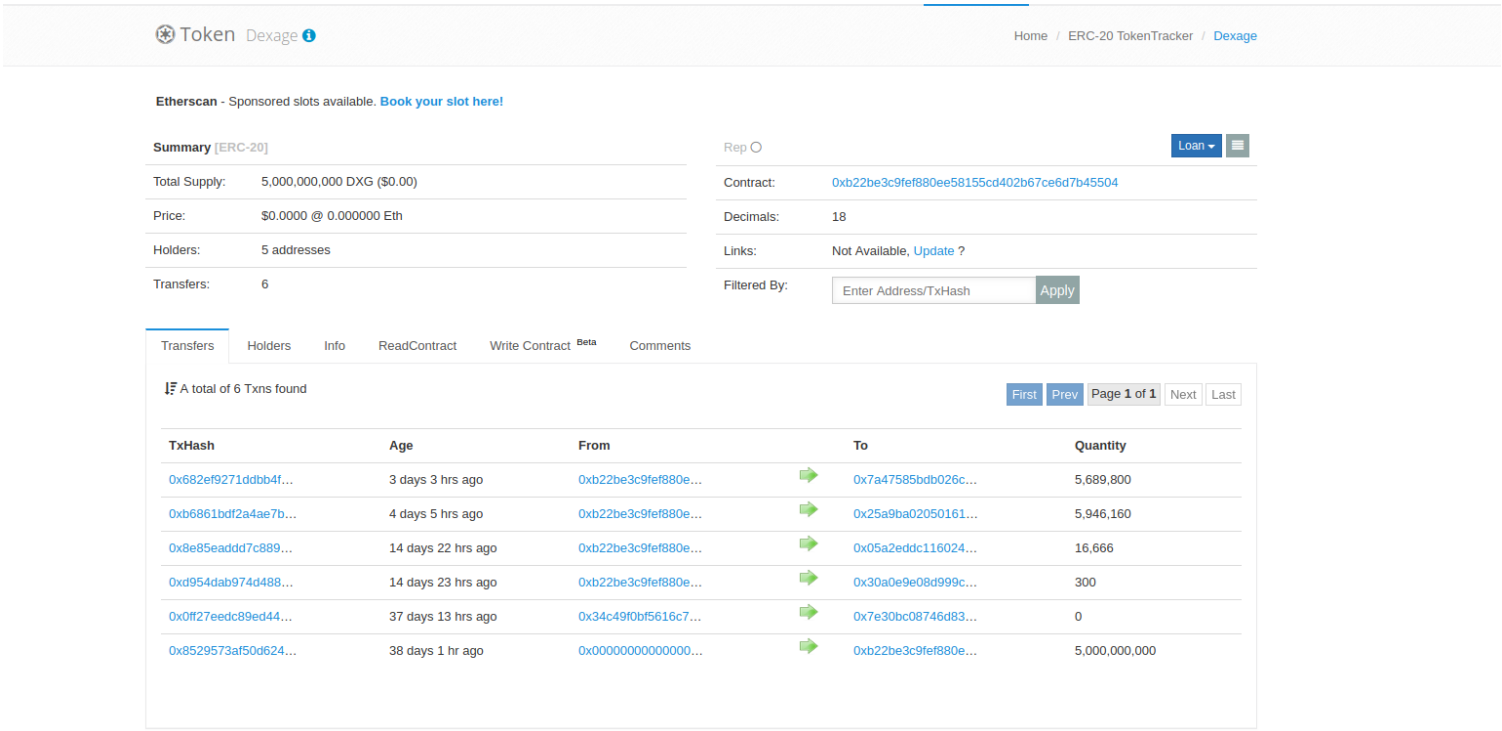
If anyone tries to send any amount of ether to the contract address, the transaction will cancel itself and no ether comes to the contract.

Dexage Smart Contract Audit

Transfer of tokens from smart contract can be controlled by using a script running on back end and can be seen through [EtherScan.io]

DXG tokens will be transferred according to the investment you made after the main ICO sale is completed.

By using [EtherScan.io], smart contract code can be verified which will lead the compiled code getting matched with the byte code of deployed smart contract in the block chain. It indicates, there is no deviation in Dexage smart contract



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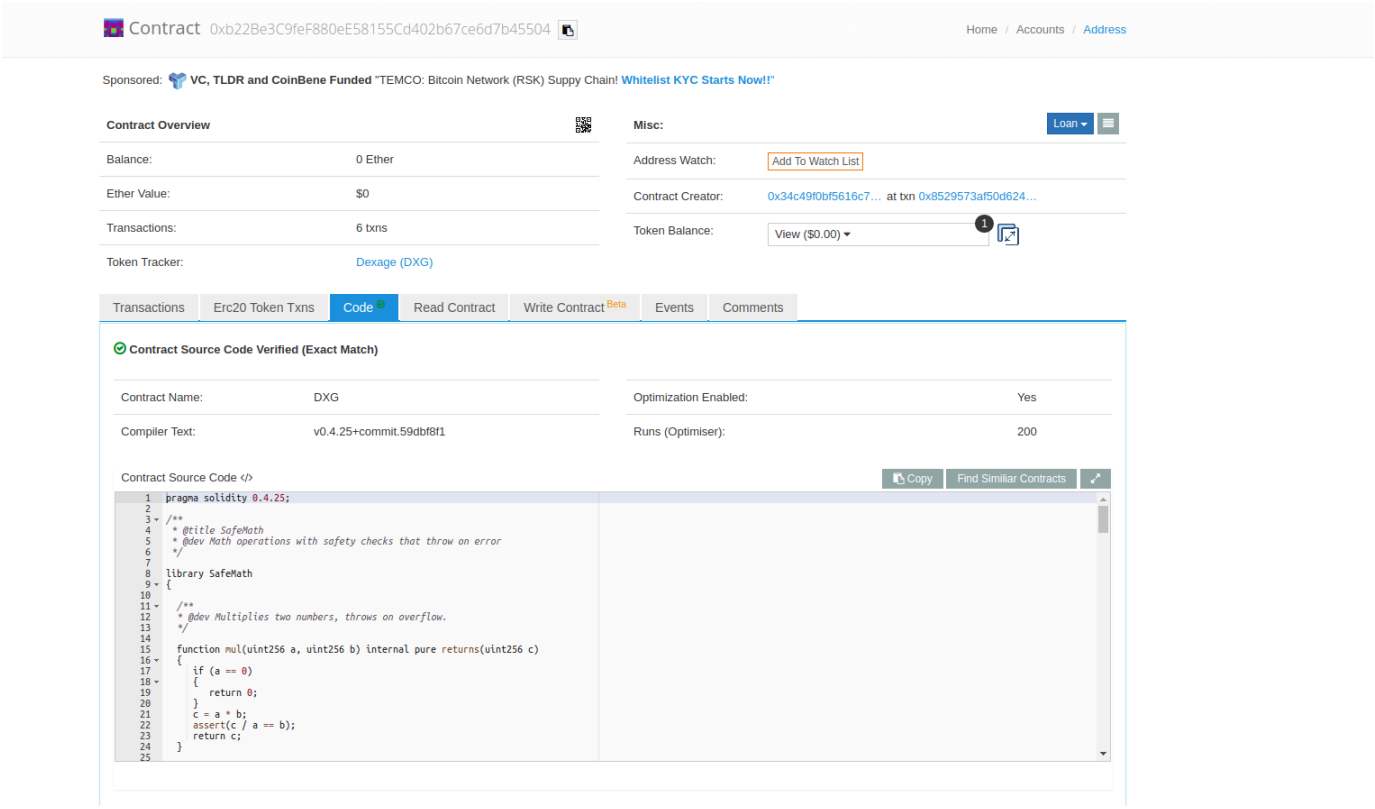

Summary

The smart contract has been analyzed using different manual and automated tools.

Code quality is very good and well documented.

Smart Contract logic was checked and compared with White paper description.

Didn't find any inconsistency.

Safe for transactions and to list on crypto exchanges.

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