



SmartAudit



TronApex Audit

Address TRON Main Network

TWehXUMJfpLduYrsqdhvnMQwBzHKPrmSv



**Conclusion:**

In the TronApex Smart-Contract were found no vulnerabilities and no backdoors.

CRITICAL ISSUES (critical, high severity):

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Bugs and vulnerabilities that enable theft of funds, lock access to funds without possibility to restore it, or lead to any other loss of funds to be transferred to any party; high priority unacceptable bugs for deployment at mainnet; critical warnings for owners, customers or investors.

ERRORS, BUGS AND WARNINGS (medium, low severity):

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Bugs that can trigger a contract failure, with further recovery only possible through manual modification of the contract state or contract replacement altogether; Lack of necessary security precautions; other warnings for owners and users.

OPTIMIZATION POSSIBILITIES (very low severity):

1

Possibilities to decrease cost of transactions and data storage of Smart-Contracts.



AUDIT RESULT:

Optimization possibilities

1. Recording statistical parameters in the blockchain (very low severity):

List of statistical parameters that also increase the cost of transactions and increase the amount of data stored in the blockchain:

- uint256 public TotalInvestors;
- uint256 public TotalInvested;
- uint256 public TotalWithdrawn;
- uint256 public TotalDepositCount;
- uint256 totalcommissions;
- uint256 lvlonecommissions;



Independent description of the smart-contract functionality:

The TronApex contract provides the opportunity to invest amount starting from 100 TRX up to 1,000,000 TRX in the contract and get a 320% return on investment, if the contract balance has enough funds for payment. Dividends are paid from deposits of users (Ponzi scheme).

You can create a Deposit by calling the "Invest" function and attaching the required amount of TRX (starting from 100 TRX up to 1,000,000 TRX) to the transaction and your upline address.

Each subsequent Deposit is kept separately in the contract, in order to maintain the payment amount for each Deposit.

You must have atleast 1 referral to call "WithdrawDividends" and receive dividends from your earnings once per 24 Hours (This action will reset your hold bonus).

— WithdrawDividends limits:

If user investment are less then 250,000 TRX	25,000 TRX
If user investment are greater then 250,000 TRX & less then 500,000	50,000 TRX
If user investment are greater then 500,000 TRX	100,000 TRX

You can call "WithdrawCommissions" (Max 50,000 TRX) to receive commisions from your referral deposits once per 48 Hours (This action will not reset your hold bonus).



The percentage of user earnings are dependent on following factors:

- For every 100 investors on the smart contract +0.04%. (This bonus is only for users who haven't made "WithdrawDividends" before reaching 320%)
- For every 10 days of non-withdrawal of dividends from the smart contract +0.5% until 2% (when creating repeated deposits, the percent keeps growing)

— Incentive Bonus table:

1,000 - 5,000 TRX	0.05 %
5,000 - 10,000 TRX	0.10 %
10,000 - 20,000 TRX	0.50 %
20,000 - 50,000 TRX	0.75 %
50,000+ TRX	1.00 %

Amounts provided in table counts only from first level referral



TronApex contract have referral pool

From each investment on smart contract 1% go to referral pool. When referral pool reach 100,000 TRX prizes are sent out to top 10 referrals from referral pool

1st place	30%
2nd place	20%
3rd place	15%
4th place	8%
5th place	7%
6th place	6%
7th place	5%
8th place	4%
9th place	3%
10th place	2%



Contract owners commission: part of the invested funds is sent to three addresses:

- Marketing fee address
- Marketing promo
- Project fee address

4%

4%

3%

Four-level referral program: in the “Invest” function, you can specify the address of the referrer. As a result, the referrer will get opportunity to withdraw % of the investor’s Deposit according to the following table:

1 Referral level	5.00%
2 Referral level	2.00%
3 Referral level	0.50%
4 Referral level	0.50%

Requirements for the referrer:

You cannot use your own address as referrer.

Referrer must have atleast 1 deposit.

You cannot change referrer once it have been set.

If no referrer was provided it will use Tron Desctruction address `addres(0)` (changeable).



The contract contains 14 statistical functions that do not require sending transactions:

- **TotalInvested** - Get total invested amount on smart-contract
- **TotalInvestors** - Get total investor amount on smart-contract
- **TotalWithdrawn** - Get total withdrawn amount on smart-contract
- **GetUserData** - Get specific user data (Upline, Total invested, Total withdrawn, Total commissions, LVL 1 Commissions, Available Commissions, Last checkpoint, Last dividends withdraw time, Last commission withdraw time, Active Bonus status)
- **GetUserDividends** - Get user Available dividends
- **GetUserDepositInfo** - Get user deposit info
- **GetUserCommission** - Get specific user referral commissions
- **ReferralCommissions** - Get specific user referral commissions
- **GetRefBonus** - Get specific user Referral bonus
- **GetHoldBonus** - Get specific user hold bonus
- **ContractBonus** - Get contract Percentage
- **GetUserTotalDeposits** - Get total count of specific user deposits
- **GetContractBalance** - Get contract current balance
- **ActiveClient** - Check if specific user have active deposit
- **RefPoolTopAddr** - Get address of specific place on referral pool
- **RefPoolTopValue** - Get referral amount invested of specific place on referral pool



Disclaimer

This audit is not a call to participate in the project and applies only to the Smart-Contract code at the specified address.
Do not forget that you are doing all financial actions at your own risk.