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# KeyRecoverable

# KeyRecoverable

# **Constant functions**

## keyRecoverer

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0 address			keyRecoverer

#### owner

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		owner

# State changing functions

# recoverKey

Recover key

## Inputs

#	Param	Туре	TypeHint	Description
0	_oldAddress	address		An Ethereum address
1	_newAddress	address		An Ethereum address

## setKeyRecoverer

Set key recoverer

# Inputs

#	Param	Туре	TypeHint	Description
0	_newKeyRecoverer	address		An Ethereum address

### transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

## Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

#### **Events**

## OwnershipTransferred

#### **Params**

#	Param	Type	TypeHint	Description
0	previousOwner	address		
1	newOwner	address		

## KeyRecovererChanged

Log entry on key recoverer changed

#### **Params**

#	Param	Туре	TypeHint	Description
0	newKeyRecoverer	address		An Ethereum address

## KeyRecovered

Log entry on key recovered

### **Params**

#	Param	Туре	TypeHint	Description
0	oldAddress	address		An Ethereum address
1	newAddress	address		An Ethereum address

**Enums** 

**Structs** 

KeyRecoverer

SicosToken

**Constant functions** 

indices

Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	mapping		indices

owner

Inputs

none

**Returns** 

#	Param	Туре	TypeHint	Description
0	return0	address		owner

#### tokens

## Inputs

#	Param	Type	TypeHint	Description
0	index	uint		

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		

# State changing functions

#### addToken

Register a key recoverable token

### Inputs

#	Param	Туре	TypeHint	Description
0	_token	address		Ethereum address of token contract instance

### checkTokens

Check if this instance is the keyRecoverer of all registered tokens.

## Inputs

none

#### containsToken

Check if a token is registered here

# Inputs

#	Param	Туре	TypeHint	Description
0	_token	address		Ethereum address of token contract instance

# recoverKey

Recover key for an investor in all tokens that are registered here

## Inputs

#	Param	Туре	TypeHint	Description
0	_oldAddress	address		Old Ethereum address of the investor
1	_newAddress	address		New Ethereum address of the investor

#### removeToken

Unregister a key recoverable token

## Inputs

#	Param	Туре	TypeHint	Description
0	_token	address		Ethereum address of token contract instance

### transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

## Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

#### **Events**

## OwnershipTransferred

#### **Params**

#	Param	Туре	TypeHint	Description
0	previousOwner	address		
1	newOwner	address		

### **Enums**

### **Structs**

# **Migrations**

# **Migrations**

#### **Constant functions**

## last\_completed\_migration

### Inputs

none

#### **Returns**

#	Param	Type	TypeHint	Description
0	return0	uint		last_completed_migration

owner

# Inputs

none

## Returns

#	Param	Туре	TypeHint	Description
0	return0	address		owner

# State changing functions

# setCompleted

# Inputs

#	Param	Type	TypeHint	Description
0	completed	uint		

# upgrade

# Inputs

#	Param	Туре	TypeHint	Description
0	new_address	address		

**Events** 

**Enums** 

**Structs** 

# **ProfitSharing**

# **ProfitSharing**

## **Constant functions**

accounts

# Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	mapping		accounts

owner

Inputs

none

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		owner

## profitDepositor

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		profitDepositor

### totalProfits

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	uint		totalProfits

# totalSupplyIsFixed

### Inputs

none

### Returns

#	Param	Type	TypeHint	Description
0	return0	bool		totalSupplyIsFixed

### State changing functions

## depositProfit

Deposit profit

## Inputs

none

## profitShareOwing

Profit share owing

### Inputs

#	Param	Туре	TypeHint	Description
0	_investor	address		An Ethereum address

## setProfitDepositor

Change profit depositor

## Inputs

#	Param	Туре	TypeHint	Description
0	_newProfitDepositor	address		An Ethereum address

## transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

### Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

# update Profit Share

Update profit share

# Inputs

#	Param	Туре	TypeHint	Description
0	_investor	address		An Ethereum address

### withdrawProfitShare

Withdraw profit share

## Inputs

none

### **Events**

# ${\bf Ownership Transferred}$

### **Params**

#	Param	Туре	TypeHint	Description
0	previousOwner	address		
1	newOwner	address		

### **ProfitDepositorChanged**

#### **Params**

#	Param	Туре	TypeHint	Description
0	newProfitDepositor	address		

# ProfitDeposited

Log entry on profit deposited

#### **Params**

#	Param	Туре	TypeHint	Description
0	depositor	address		An Ethereum address
1	amount	uint		A positive number

# ProfitShareUpdated

Log entry on profit share updated

#### **Params**

#	Param	Туре	TypeHint	Description
0	investor	address		An Ethereum address
1	amount	uint		A positive number

### **ProfitWithdrawal**

Log entry on profit withdrawal

#### **Params**

#	Param	Туре	TypeHint	Description
0	investor	address		An Ethereum address
1	amount	uint		A positive number

### **Enums**

### **Structs**

### InvestorAccount

### **Params**

#	Param	Type	TypeHint	Description
0	balance	uint		
1	lastTotalProfits	uint		
2	profitShare	uint		

# **SicosCrowdsale**

#### **SicosCrowdsale**

## **Constant functions**

cap

# Inputs

none

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	uint256		cap

# closingTime

# Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	uint256		closingTime

### isFinalized

# Inputs

none

### Returns

#	Param	Туре	TypeHint	Description
0	return0	bool		isFinalized

# openingTime

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	uint256		openingTime

owner

Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		owner

rate

Inputs

none

### Returns

#	Param	Туре	TypeHint	Description
0	return0	uint256		rate

token

Inputs

none

Returns

#	Param	Туре	TypeHint	Description
0	return0	ERC20		token

### wallet

# Inputs

none

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		wallet

#### weiRaised

## Inputs

none

### Returns

#	Param	Туре	TypeHint	Description
0	return0	uint256		weiRaised

# State changing functions

# buyTokens

low level token purchase DO NOT OVERRIDE

## Inputs

#	Param	Туре	TypeHint	Description
0	_beneficiary	address		Address performing the token purchase

### capReached

Checks whether the cap has been reached.

## Inputs

none

#### finalize

Must be called after crowdsale ends, to do some extra finalization work. Calls the contract's finalization function.

### Inputs

none

#### hasClosed

Checks whether the period in which the crowdsale is open has already elapsed.

### Inputs

none

fallback function DO NOT OVERRIDE

### Inputs

none

#### setRate

Set rate

# Inputs

#	Param	Type	TypeHint	Description
0	_newRate	uint		A positive number

# transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

## Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

### **Events**

#### **TokenPurchase**

Event for token purchase logging

### **Params**

#	Param	Туре	TypeHint	Description
0	purchaser	address		who paid for the tokens
1	beneficiary	address		who got the tokens
2	value	uint256		weis paid for purchase
3	amount	uint256		amount of tokens purchased

# ${\bf Ownership Transferred}$

#### **Params**

#	Param	Туре	TypeHint	Description
0	previousOwner	address		
1	newOwner	address		

## **Finalized**

#### **Params**

none

# RateChanged

Log entry on rate changed

#### **Params**

#	Param	Type	TypeHint	Description
0	oldRate	uint		A positive number
1	newRate	uint		A positive number

## **Enums**

### **Structs**

## Whitelist

### Whitelist

### **Constant functions**

### admins

# Inputs

none

### Returns

#	Param	Туре	TypeHint	Description
0	return0	mapping		admins

### isWhitelisted

# Inputs

none

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	mapping		isWhitelisted

owner

Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		owner

# State changing functions

### addAdmin

Add admin

## Inputs

#	Param	Туре	TypeHint	Description
0	_admin	address		An Ethereum address

### addToWhitelist

Add to whitelist

## Inputs

#	Param	Туре	TypeHint	Description
0	_investors	address		A list where each entry is an Ethereum address

#### removeAdmin

Remove admin

# Inputs

#	Param	Туре	TypeHint	Description
0	_admin	address		An Ethereum address

# Param Type TypeHint Description	
-----------------------------------	--

#### removeFromWhitelist

Remove from whitelist

### Inputs

#	Param	Туре	TypeHint	Description
0	_investors	address		A list where each entry is an Ethereum address

## transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

## Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

### **Events**

### OwnershipTransferred

#### **Params**

#	Param	Туре	TypeHint	Description
0	previousOwner	address		
1	newOwner	address		

#### AdminAdded

Log entry on admin added

#### **Params**

#	Param	Туре	TypeHint	Description
0	admin	address		An Ethereum address

#### AdminRemoved

Log entry on admin removed

#### **Params**

#	Param	Туре	TypeHint	Description
0	admin	address		An Ethereum address

#### InvestorAdded

Log entry on investor added

#### **Params**

#	Param	Туре	TypeHint	Description
0	admin	address		An Ethereum address
1	investor	address		An Ethereum address

#### InvestorRemoved

Log entry on investor removed

### **Params**

#	Param	Туре	TypeHint	Description
0	admin	address		An Ethereum address
1	investor	address		An Ethereum address

## **Enums**

### **Structs**

## Whitelisted

## Whitelisted

## **Constant functions**

owner

## Inputs

none

### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	address		owner

### whitelist

# Inputs

none

#### **Returns**

#	Param	Туре	TypeHint	Description
0	return0	Whitelist		whitelist

## State changing functions

#### setWhitelist

Set whitelist

## Inputs

#	Param	Туре	TypeHint	Description
0	_newWhitelist	address		An Ethereum address

## transferOwnership

Allows the current owner to transfer control of the contract to a newOwner.

## Inputs

#	Param	Туре	TypeHint	Description
0	newOwner	address		The address to transfer ownership to.

#### **Events**

### OwnershipTransferred

#### **Params**

#	Param	Туре	TypeHint	Description
0	previousOwner	address		

#	Param	Туре	TypeHint	Description
1	newOwner	address		

# WhitelistChanged

Log entry on whitelist changed

### **Params**

#	Param	Туре	TypeHint	Description
0	newWhitelist	address		An Ethereum address

### **Enums**

## **Structs**