
athena-ide-atom

2020 07 14

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athena ide atom wiki . [aergo smart contract](#) IDE (Integrated Development Environment) , , . , , .

CHAPTER 1

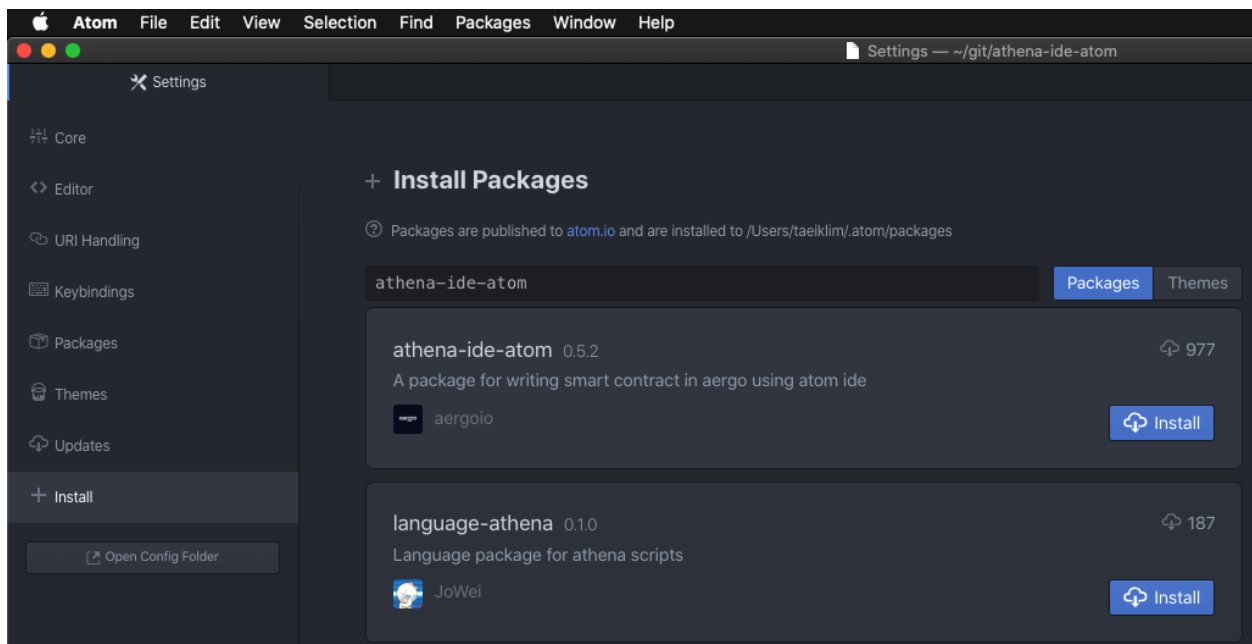
1.1

Athena ide atom atom atom .

1.1.1 Apm

Athena ide atom apm (atom package manager) .

Atom -> Preferences -> Install



cli . cli git bash .

```
> apm install athena-ide-atom
```

1.1.2

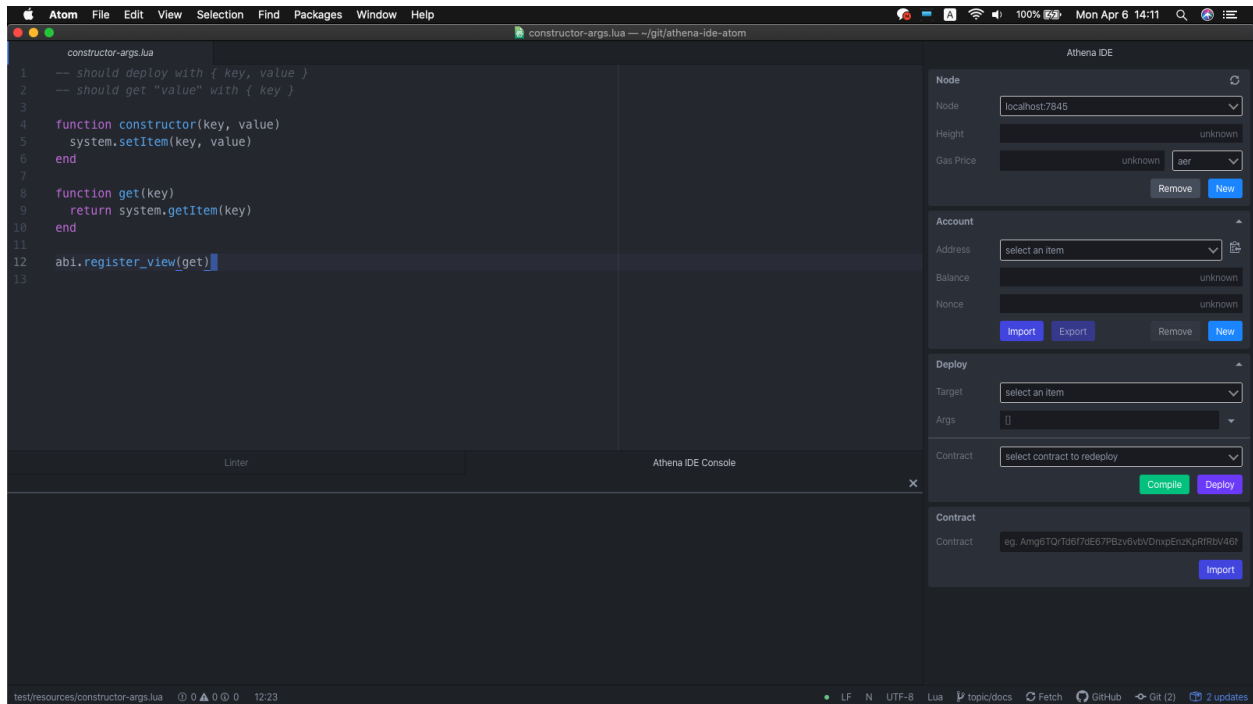
Network apm . releases athena-ide-atom-x.x.x-installer.bin cli . cli git bash .

```
> ./athena-ide-atom-x.x.x-installer.bin
```

1.2

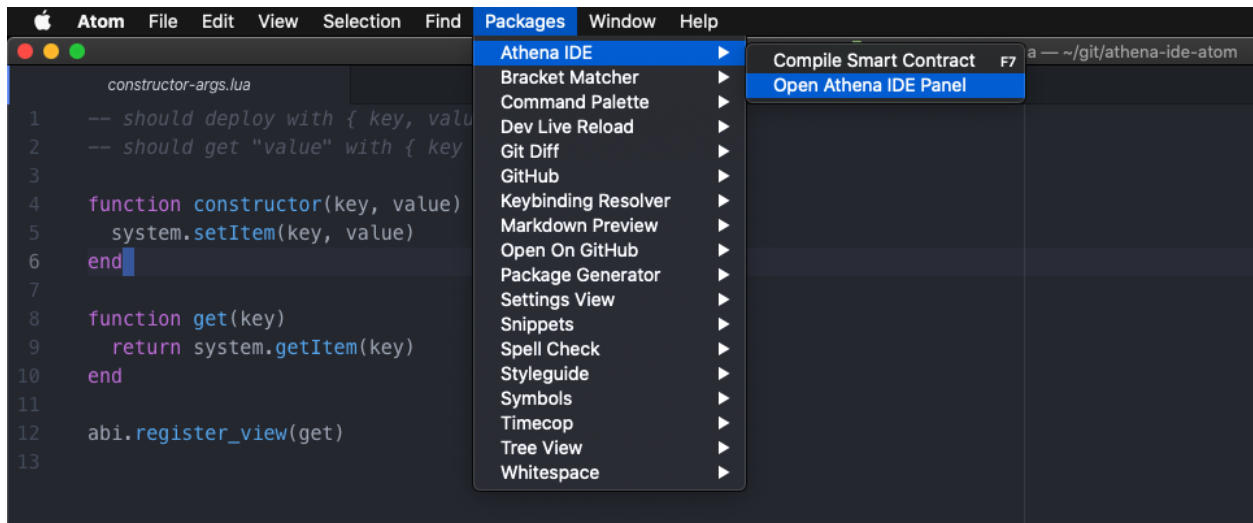
1.2.1

- Mac : Option + Shift + L
- Windows : Alt + Shift + L



1.2.2 Menu bar

Packages -> Athena IDE -> Open Athena IDE Panel



1.3

Athena ide atom lua .

```
3
4  function constructor(key, value)
5      system.setItem(key, value)
6  end
7
8  function get(key)
9      system.|
10     re m  getSender()      function
11     end m  getBlockheight() function
12         m  getTxhash()     function
13     abi. m  getTimestamp()  function
14         m  getContractID()  function
            m  setItem(key, value) function
            m  getItem(key)    function
            m  getAmount()      function
            m  getCreator()     function
            m  getOrigin()      function
```

1.4

Athena ide atom lua .

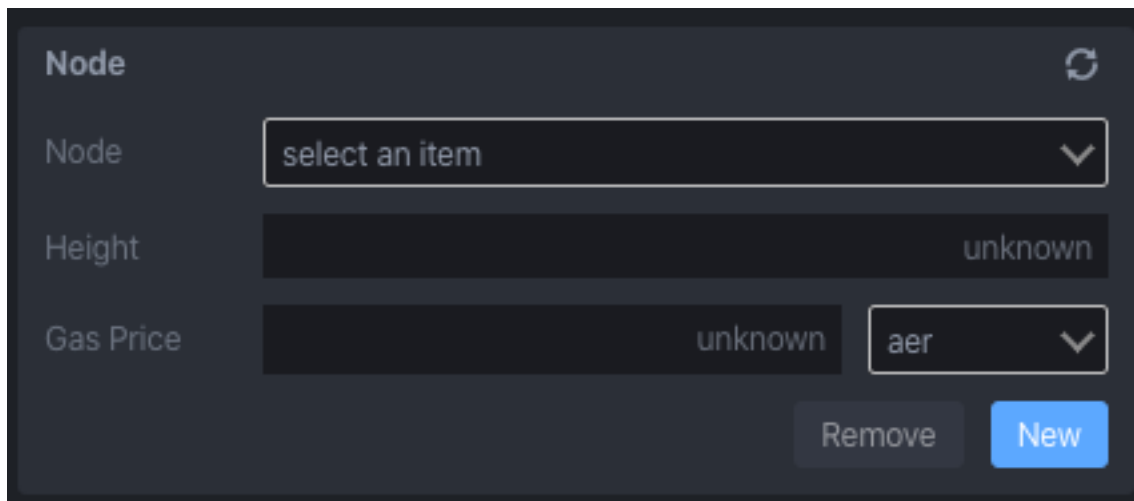
```
3
4  function constructor(key, value)
5      system.setItem(key, value)
6  end
7
8  function get(key)
9      system.
10     • return system.getItem(key)
11     end [10:2] <name> expected near 'return'
12
13     abi.register_view(get)
14
```


CHAPTER 2

. gas price . localhost:7845.

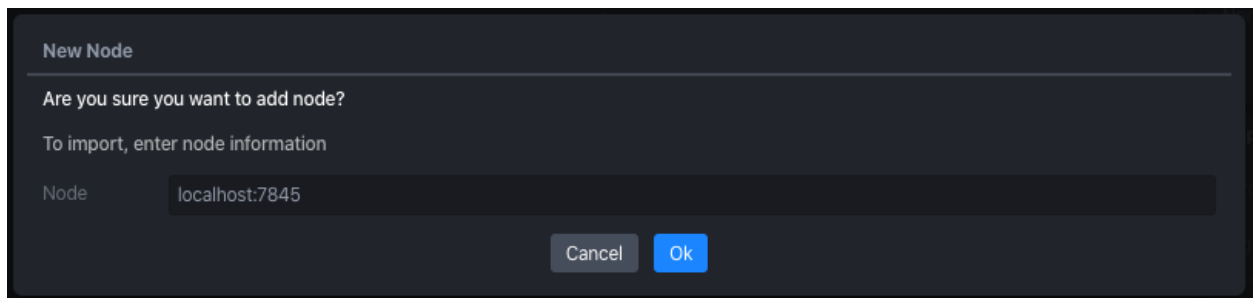
2.1

New



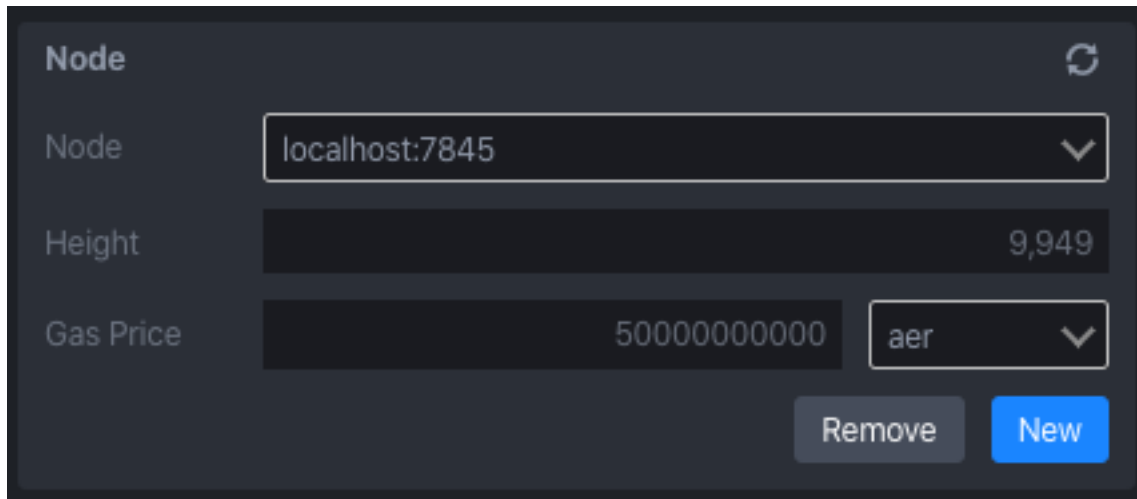
A dark-themed dialog box titled "Node" with a refresh icon in the top right corner. It contains three input fields: "Node" with a dropdown menu showing "select an item", "Height" with a text input showing "unknown", and "Gas Price" with a text input showing "unknown" and a dropdown menu showing "aer". At the bottom right, there are two buttons: "Remove" and "New".

Endpoint ok



A dark-themed dialog box titled "New Node". It contains the text "Are you sure you want to add node?" and "To import, enter node information". Below this is a text input field labeled "Node" containing the text "localhost:7845". At the bottom, there are two buttons: "Cancel" and "Ok".

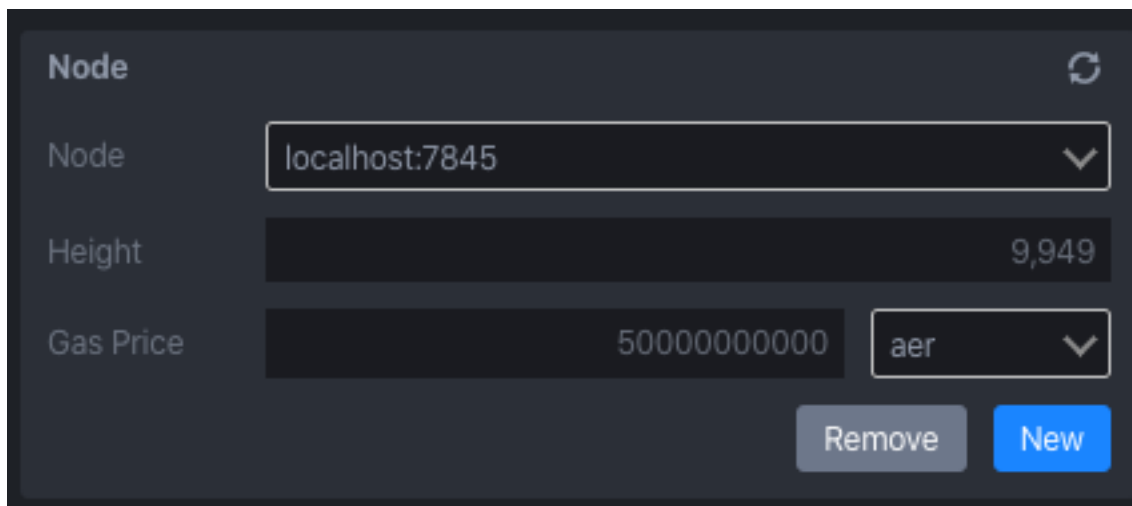
gas price



The screenshot shows a dark-themed configuration panel titled "Node" with a refresh icon in the top right corner. It contains three input fields: "Node" with the value "localhost:7845", "Height" with the value "9,949", and "Gas Price" with the value "50000000000". The "Gas Price" field also has a dropdown menu set to "aer". At the bottom right, there are two buttons: "Remove" (disabled) and "New" (active).

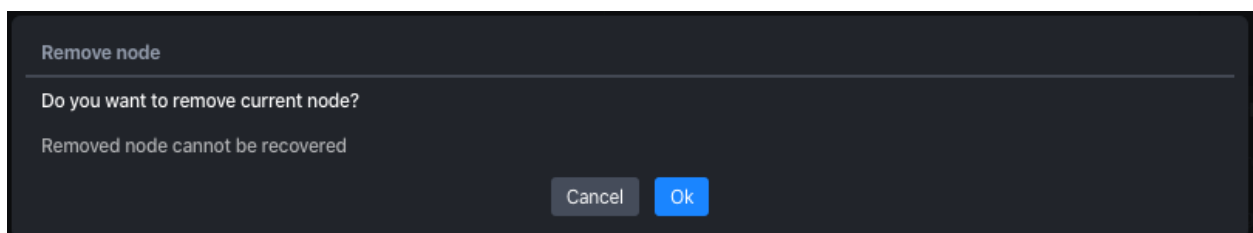
2.2

Remove



This screenshot is identical to the one above, showing the "Node" configuration panel with the same values and buttons.

Ok



The screenshot shows a dark-themed dialog box titled "Remove node". It contains the text "Do you want to remove current node?" and "Removed node cannot be recovered". At the bottom, there are two buttons: "Cancel" (disabled) and "Ok" (active).

Node 

Node

select an item 

Height

unknown

Gas Price

unknown

aer 

Remove

New

CHAPTER 3

,, . transaction aergo .

3.1

New

Account

Address

select an item

▼

📋

Balance

unknown

Nonce

unknown

Import

Export

Remove

New

Ok

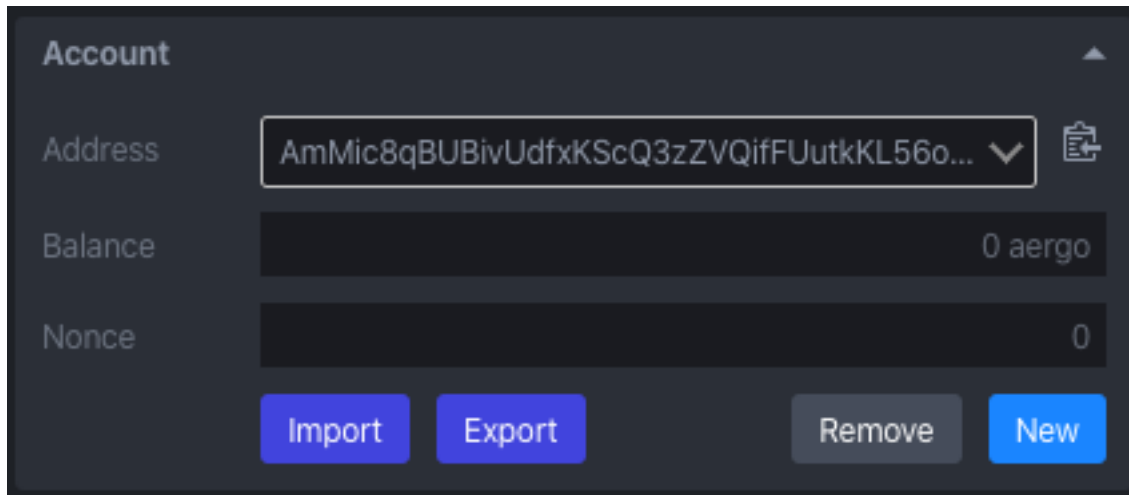
New Account

Do you want to make a new account?

WARNING: IDE DOES NOT keep created account.

Cancel

Ok



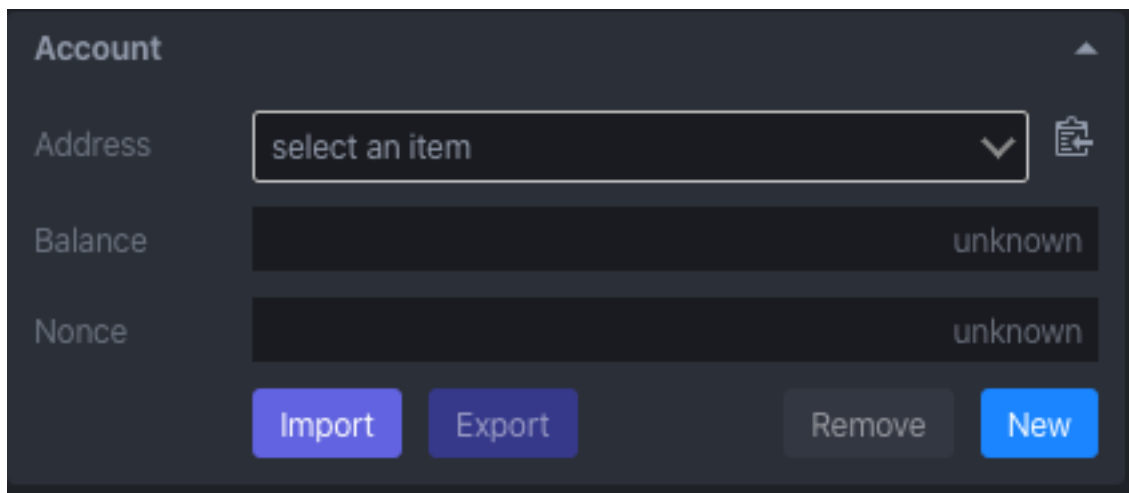
The screenshot shows the 'Account' form in aether-ide-atom. The 'Address' field is a dropdown menu with the value 'AmMic8qBUBivUdfxKScQ3zZVQifFUutkKL56o...' and a copy icon to its right. The 'Balance' field is a text input with the value '0 aergo'. The 'Nonce' field is a text input with the value '0'. At the bottom, there are four buttons: 'Import' (blue), 'Export' (blue), 'Remove' (grey), and 'New' (blue).

3.2

Aergo keystore format wallet import format . Aergo keystore . aergo keystore proposal.

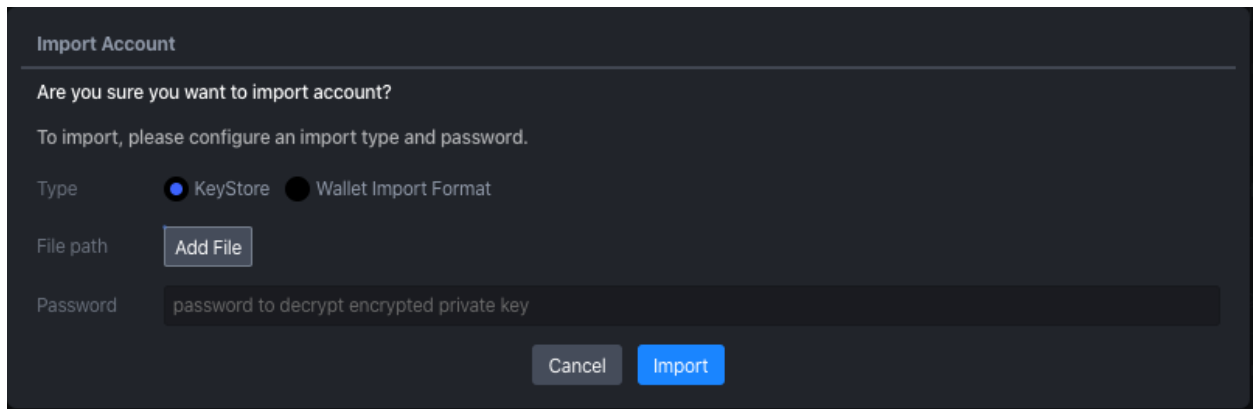
3.2.1 KeyStore

Import

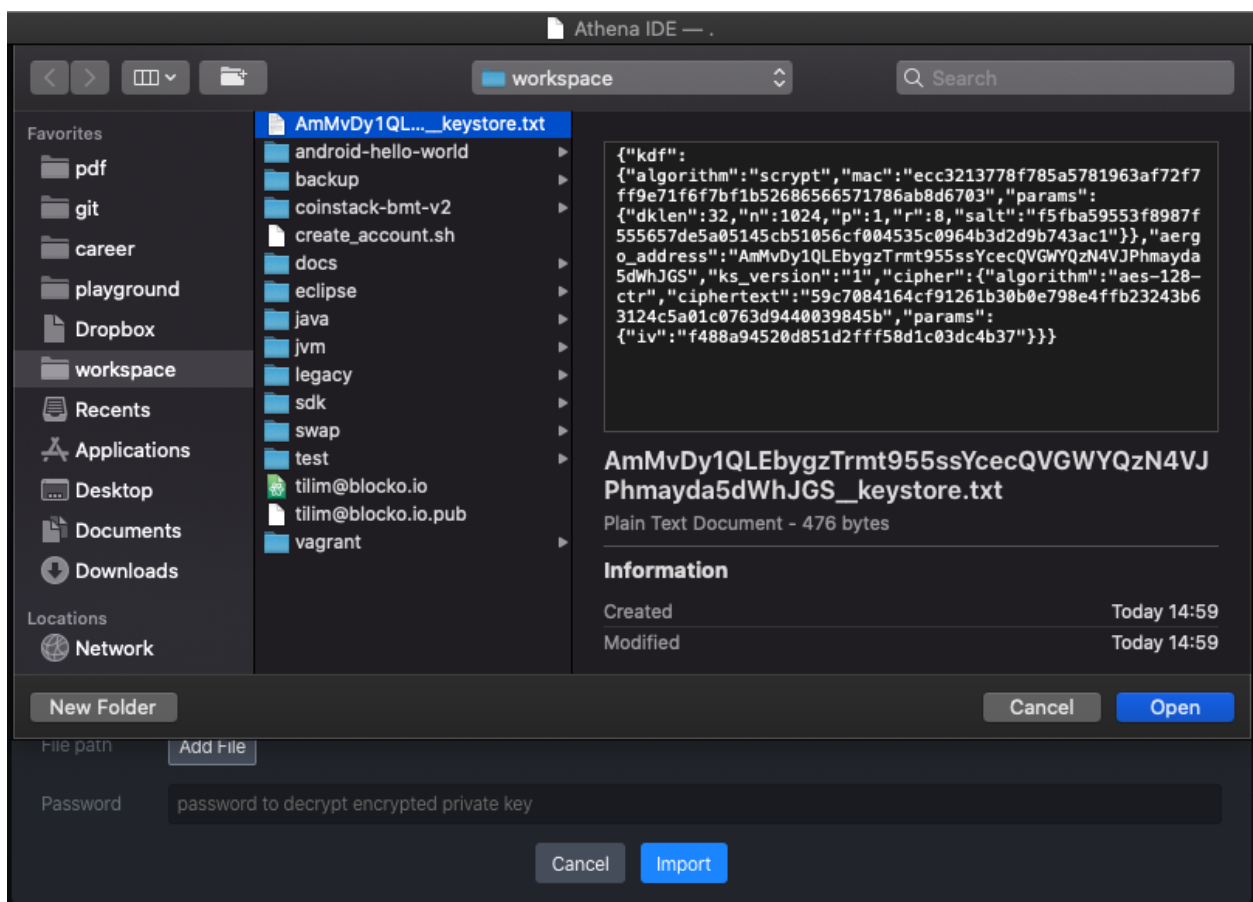


The screenshot shows the 'Account' form in aether-ide-atom. The 'Address' field is a dropdown menu with the value 'select an item' and a copy icon to its right. The 'Balance' field is a text input with the value 'unknown'. The 'Nonce' field is a text input with the value 'unknown'. At the bottom, there are four buttons: 'Import' (blue), 'Export' (blue), 'Remove' (grey), and 'New' (blue).

Add file



Keystore



Keystore

Import Account

Are you sure you want to import account?

To import, please configure an import type and password.

Type ☒ KeyStore ☐ Wallet Import Format

File path AmMvDy1QLEbygzTrmt955ssYcecQVGWY...

Password

Account

Address

Balance

Nonce

3.2.2 Wallet Import Format

Import

Account

Address

Balance

Nonce

Wallet import format

Import Account

Are you sure you want to import account?

To import, please configure an import type and password.

Type ☐ KeyStore ☒ Wallet Import Format

Private key

Password

Account

Address 

Balance

Nonce

3.3

Aergo keystore format wallet import format . Aergo keystore [aergo keystore proposal](#).

3.3.1 KeyStore

Export

Account

Address: AmMvDy1QLEbygzTrmt955ssYcecQVGWYQzN... 

Balance: 0 aergo

Nonce: 0

Export Account

Are you sure you want to export account?

To export, please configure an import type and password.

Type: ☒ KeyStore ☐ Wallet Import Format

Password:

Athena IDE — .

Save As: AmMvDy1QLEbygzTrmt955ssYcecQVGW

Tags:

workspace

Format: Keystores

Password:

3.3.2 Wallet Import Format

Export

The screenshot shows a dark-themed dialog box titled "Account". It contains the following fields and controls:

- Address:** A text field with the value "AmMvDy1QLEbygzTrmt955ssYcecQVGWYQzN..." and a dropdown arrow. A clipboard icon is to the right.
- Balance:** A text field with the value "0 aergo".
- Nonce:** A text field with the value "0".
- Buttons:** At the bottom, there are four buttons: "Import" (blue), "Export" (blue), "Remove" (grey), and "New" (blue).

The screenshot shows a dark-themed dialog box titled "Export Account". It contains the following fields and controls:

- Text:** "Are you sure you want to export account?" and "To export, please configure an import type and password."
- Type:** Two radio buttons: "KeyStore" (unselected) and "Wallet Import Format" (selected).
- Password:** A text field with masked characters "....".
- Buttons:** At the bottom, there are two buttons: "Cancel" (grey) and "Export" (blue).

Wallet import format console

The screenshot shows the "Athena IDE Console" window. It contains the following text:

```
14:59:39 Exported:  
14:59:39 47zupUDdgdY4YwqT5T5WUrhvVDuuChzZjutD43Grkbymaet2wERA8Panlymz2iazIT24BPHa
```

3.4

Remove

Account

Address

AmMic8qBUBivUdfxKScQ3zZVQifFUutkKL56o... ▼

Balance

0 aergo

Nonce

0

Import

Export

Remove

New

Ok

Remove Account

Do you want to remove current account?

Removed account cannot be recovered

Cancel

Ok

Account

Address

select an item ▼

Balance

unknown

Nonce

unknown

Import

Export

Remove

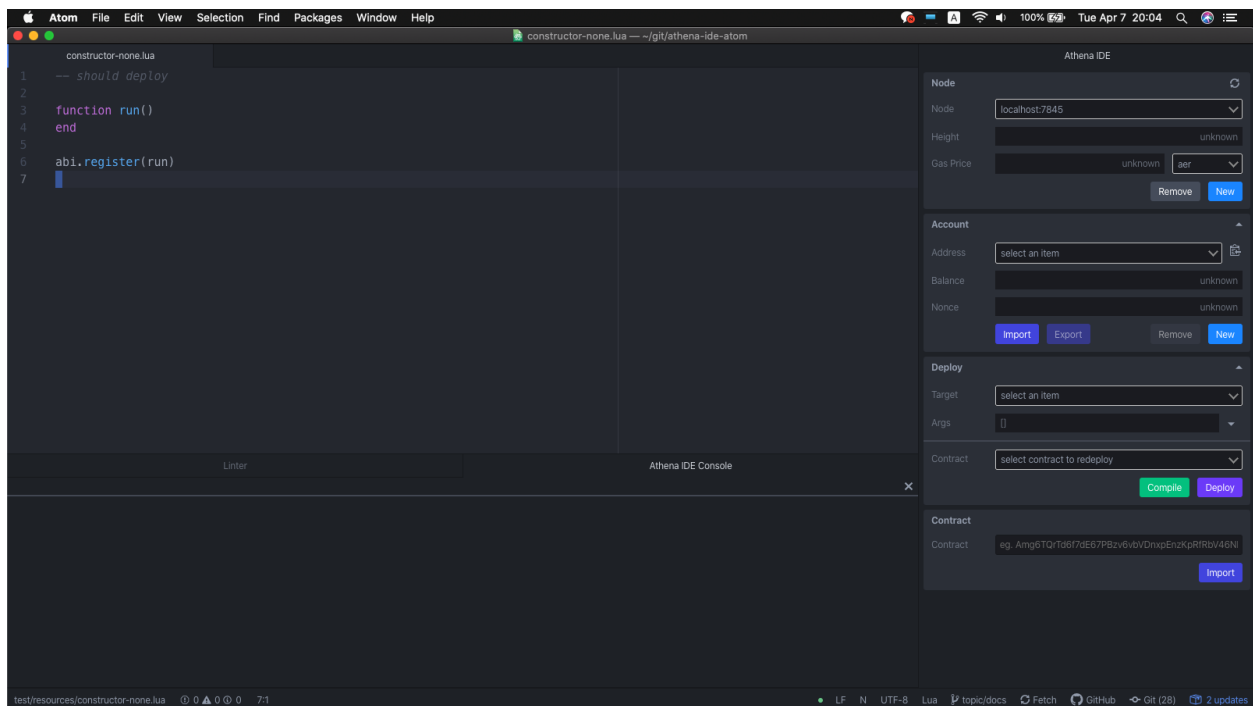
New

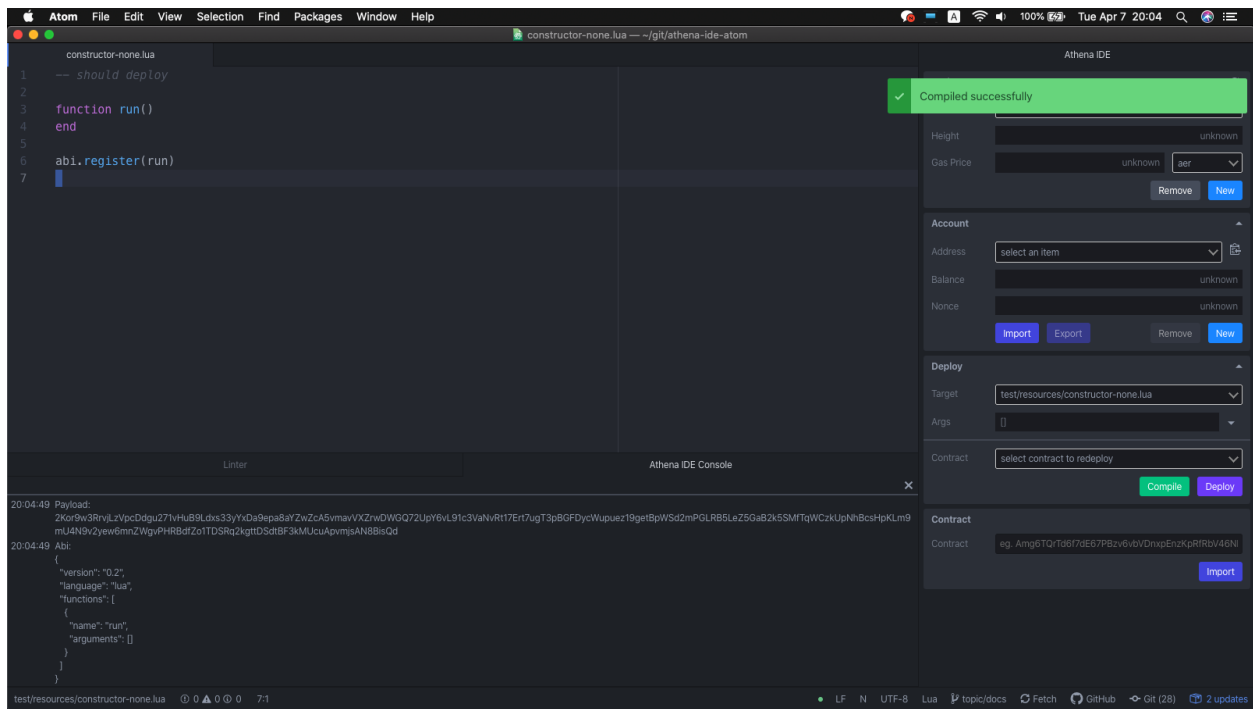
CHAPTER 4

// . aergo .

4.1

. Compile F7 .





4.2

.

4.2.1

.

```

-- no arguments
function constructor()
  system.setItem("k1", "v1")
end

...

```

Deploy

Target

test/resources/constructor-none.lua

Args

[]

Gas Limit

(default: 0)

Contract

select contract to redeploy

Compile

Deploy

4.2.2

.

```
-- arguments (key, value)
function constructor(key, value)
  system.setItem(key, value)
end
...
```

Deploy

Targettest/resources/constructor-args.lua

Args

[k1, v1]

keyk1

valuev1

Gas Limit(default: 0)

Contractselect contract to redeploy

CompileDeploy

4.2.3 Gas limit

Gas limit . 0 .

Deploy

Target

test/resources/constructor-args.lua

Args

[k1, v1] (Limit: 200000)

key

k1

value

v1

Gas Limit

200000

Contract

select contract to redeploy

Compile

Deploy

4.2.4 Token

aergo token . constructor payable .

```
function constructor()  
  system.setItem("k1", "v1")  
end  
  
...  
  
-- registered as payable  
abi.payable(constructor)
```

Deploy

Target

test/resources/constructor-payable.lua

Args

[] (Amount: 100 aergo)

Gas Limit

(default: 0)

Amount

100

aergo

Contract

select contract to redeploy

Compile

Deploy

4.3 &

4.3.1

.

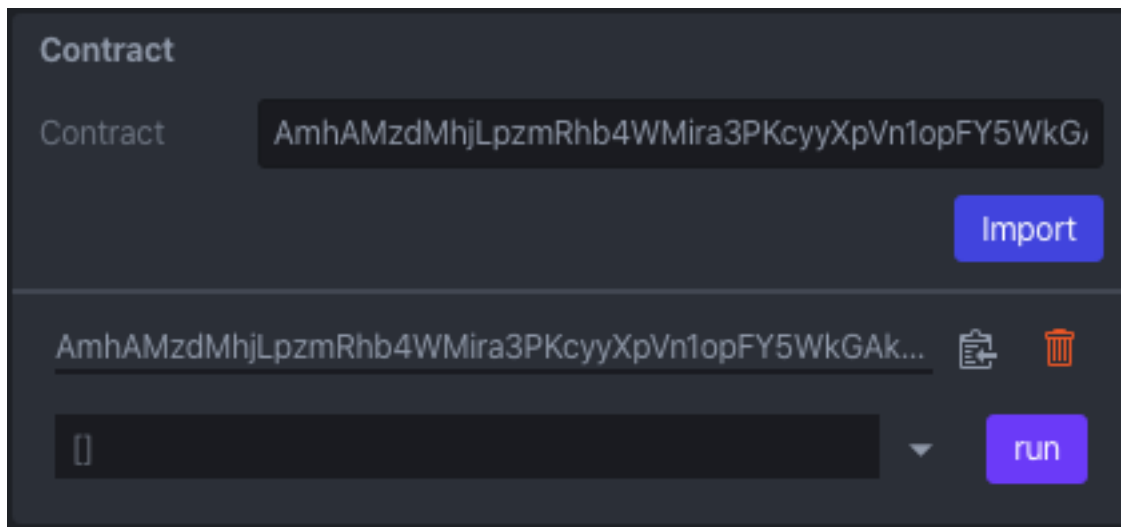
Contract Import

Contract

Contract

AmhAMzdMhjLpzmRhb4WMira3PKcyyXpVn1opFY5WkG,

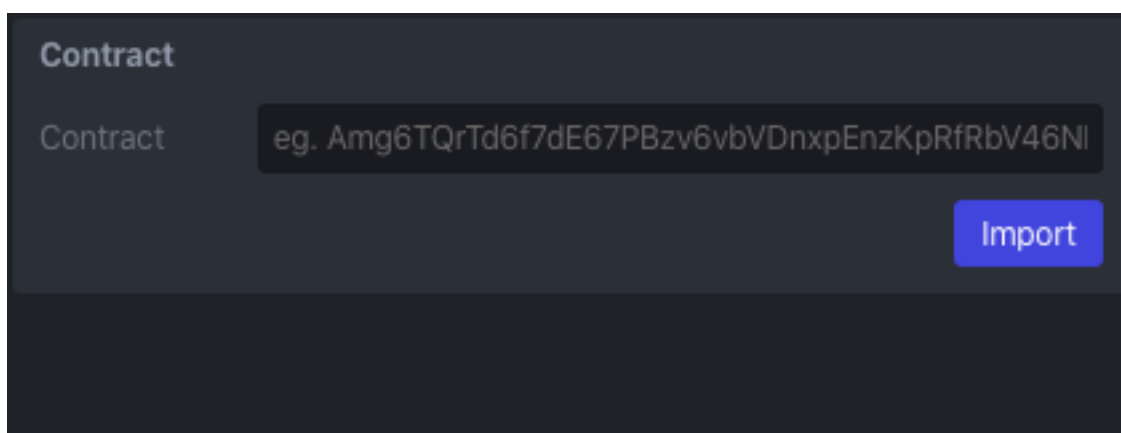
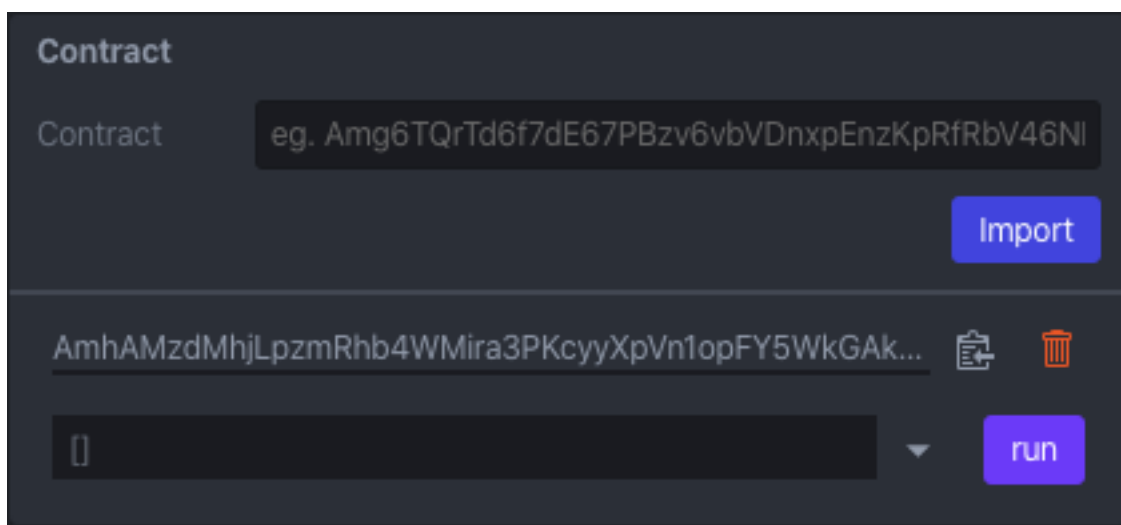
Import



4.3.2

Contract IDE .

Trash



4.4

state db . register .

4.4.1

```
...
-- no arguments
function setDefault()
  system.setItem("k1", "v1")
end
...
-- register as execution
abi.register(setDefault)
```

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnxpEnzKpRfRbV46NI

Import

AmhQWGAuYzMqPBRK4LPGDHuNLKQizpSSLy8CM3KGHZ...

▲

setDefault

Gas Limit

(default: 0)

▼

get

▼

set

4.4.2

```
...
-- arguments (key, value)
function set(key, value)
  system.setItem(key, value)
```

(continues on next page)

()

```
end  
  
...  
  
-- register as execution  
abi.register(set)
```

Contract

Contract

Import

▼

▼

▲

key

key

value

value

Gas Limit

(default: 0)

4.4.3 Gas limit

Gas limit . 0 .

Contract

Contract

Import

AmfyetWzgzYTRkM8XfGqBbgQUZsPWafQD16xis4vejqbM...  



setDefault

Gas Limit



get



set

4.4.4 Token

Aergo . payable .

```
...  
function run()  
end  
  
...  
-- registered as payable  
abi.payable(run)
```

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnxpEnzKpRfRbV46NI

Import

AmgUekxBfpwKBKVrt77hphLSdkrRexuK6RH7yKaL3JU3W...




[] (Amount: 100 aergo)

run

Gas Limit

(default: 0)

Amount

100

aergo▼

4.4.5

. fee_delegation aergo .

```
...
function run()
end

-- registered as fee delegation
abi.fee_delegation(run)

-- register as execution
abi.register(run)
```

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnXPenzKpRfRbV46NI

Import

AmgoSEPjheXVornZjkdiwxzshAHFhLDpKvxm9ofiyS148uKJ...



[] (FeeDelegation: true)

run

Gas Limit

(default: 0)

☒ Delegate fee

4.5

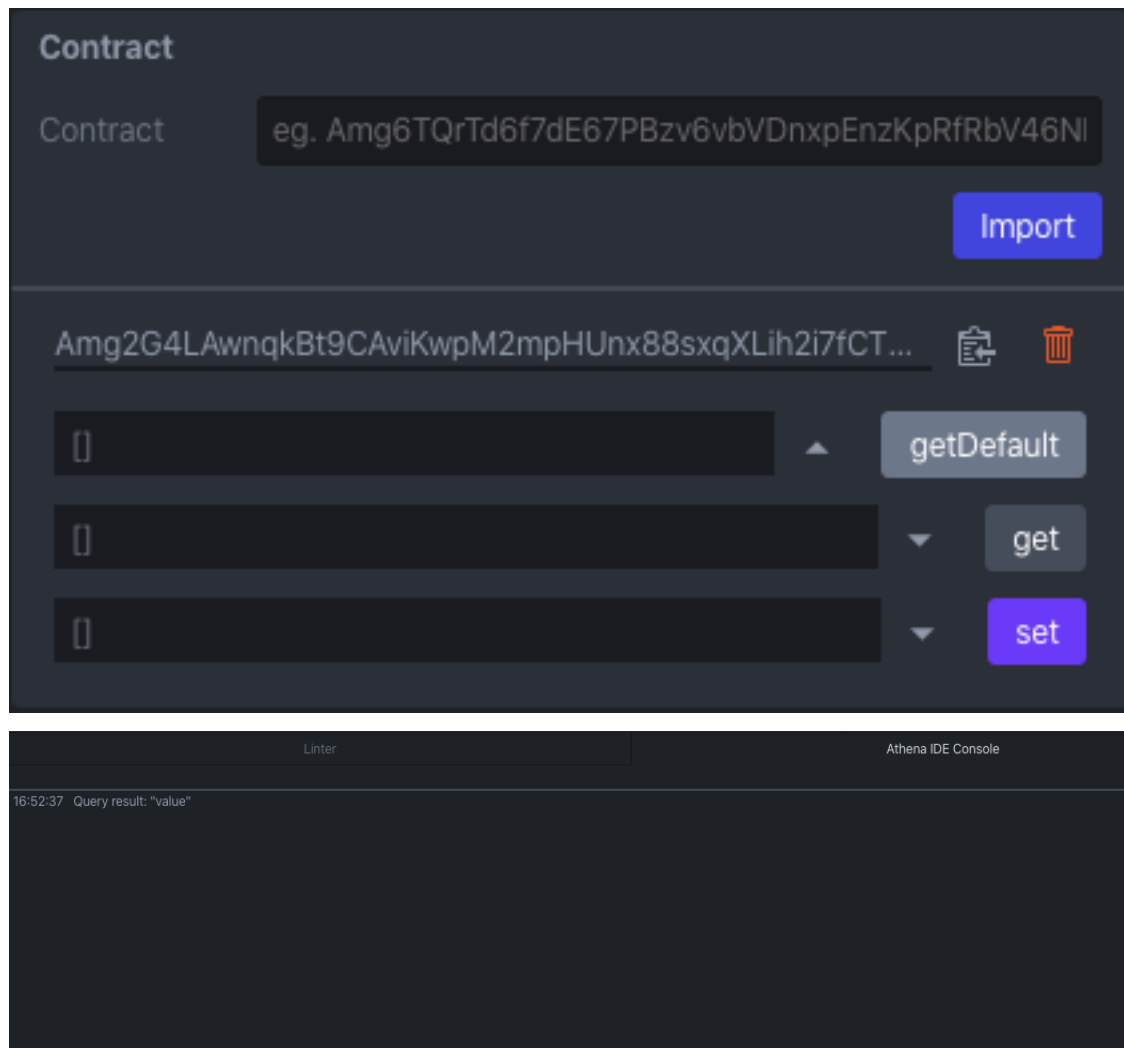
state db

4.5.1

•

```
...
-- no arguments
function getDefault()
    return system.getItem("k1")
end

-- registered as register_view
abi.register_view(getDefault)
```

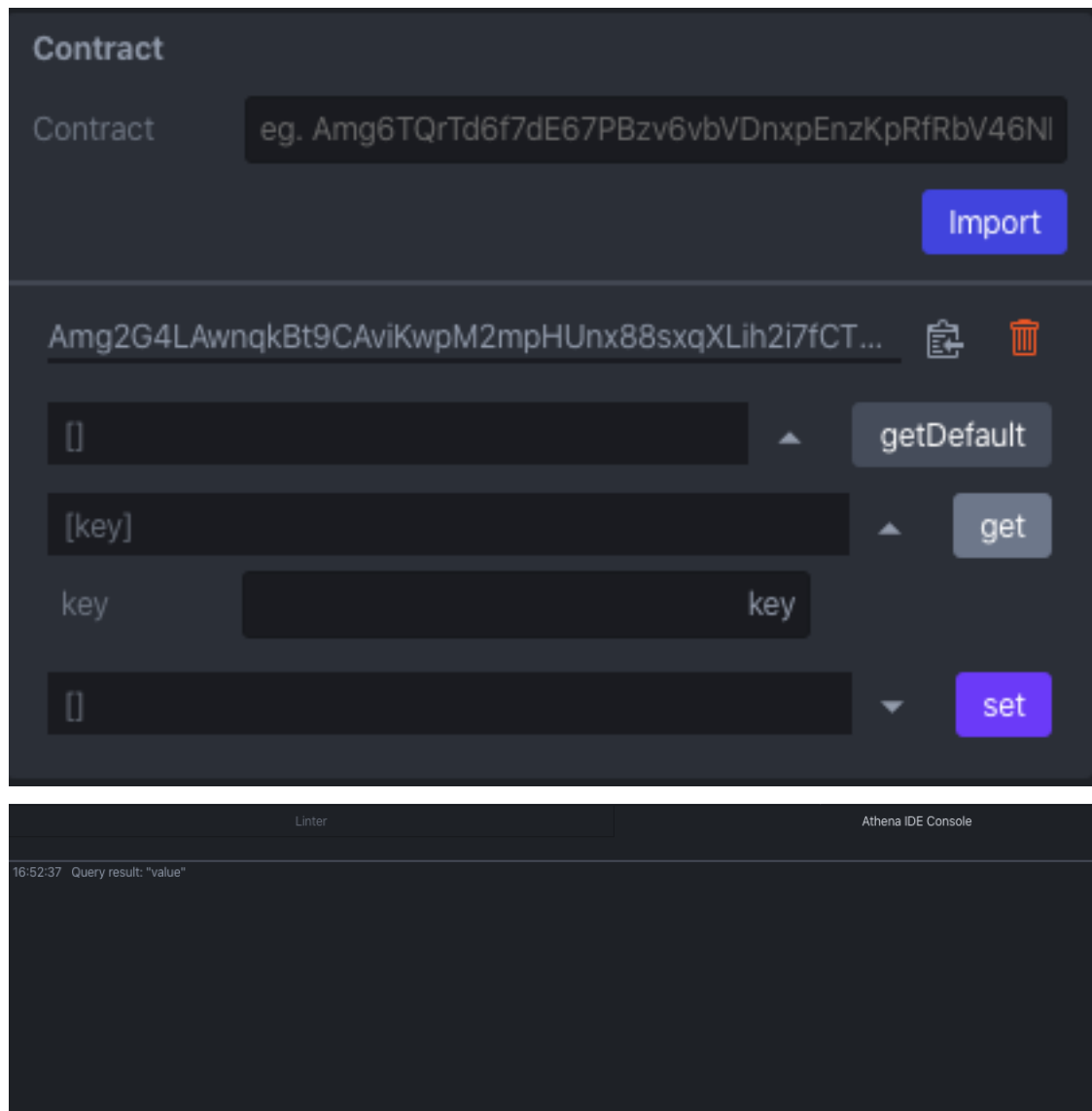


4.5.2

.

```
...
-- arguments (key)
function get(key)
  return system.getItem(key)
end

-- registered as register_view
abi.register_view(get)
```



4.6

Lua

```
...
-- ... : varargs
function set(key, ...)
  local s = ""
  for i,v in ipairs{...} do
    s = s .. v
  end
  system.setItem(key, s)
end
...
```

(continues on next page)

()

```
abi.register(set)
```

4.6.1

+

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnxpEnzKpRfRbV46NI

Import

AmgQW9YfDRGnvAJWNyUtrFv2cM6TbYowKv1JyHhySY5...



[]

▼

get

[key, v1]

▲

set

key

key

key

arg_1

v1

-

arg_2

Optional

+

Gas Limit

(default: 0)

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnxpEnzKpRfRbV46NI

Import

AmgBPce2qVNPae9WcgNY9G1in6ssU3AhATM81fUcTcc9E...



▼

getDefault

▼

get

[v1]

▲

set

key

arg_1

v1

-

arg_2

-

arg_3

Optional

+

Gas Limit

(default: 0)

4.6.2

-

Contract

Contract

Import

Amg62ZaCKSmLW6XBiHohtttFwRp1QCyF83wPYsmhBWQy...



get

getDefault

get

set

key

arg_1

-

arg_2

-

arg_3

+

Gas Limit

Contract

Contract

Import

Amg62ZaCKSmLW6XBiHohtttFwRp1QCyF83wPYsmhBWQy...  

▼

getDefault

▼

get

▲

set

key

arg_1

-

arg_2

+

Gas Limit

4.7 (private)

. private .

deploy .

Deploy

Target

test/resources/execute-table-vararg.lua

Args

Gas Limit

(default: 0)

Contract

Amg62ZaCKSmLW6XBiHohttFwRp1QCyF83wPYsm...

Compile

Deploy

Contract

Contract

eg. Amg6TQrTd6f7dE67PBzv6vbVDnxpEnzKpRfRbV46NI

Import

Amg62ZaCKSmLW6XBiHohttFwRp1QCyF83wPYsmhBWQy...

