

BN Back-end Management System Operation Manual

1. BN Node Onboarding

After installing the BN node, users should open the local link (<http://localhost:8080/>) and fill out the BN network access information:

BN Node Onboarding

To onboard a Business Node, input the following information

* BN Version ⓘ

☐ Standard

☒ Enterprise

* Select VN node to be connected

Select

* Upload the Node's DID document ⓘ

Upload

* Did Signature Document ⓘ

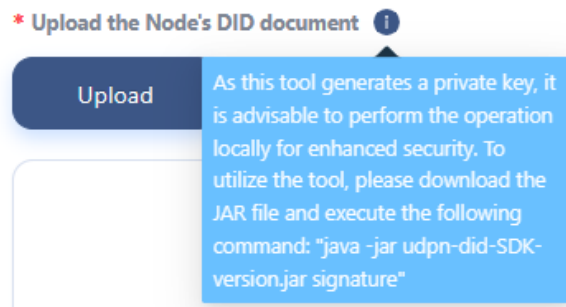
⬇

Next

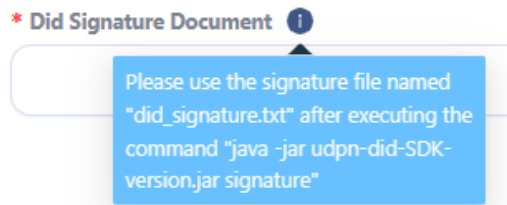
Users should select the BN version and VN to connect to, upload the DID and DID signature document, and click "Next";

- For information on how to generate the DID document,

please refer to:



- For information on how to generate the DID Signature Document, please refer to::



Users should enter their basic information, including Enterprise Name, Country, Node Name, Brief Introduction, and Description, as well as their contact information, including Contact Name, Mobile Number, Contact Email Address, Verification Code, and Detailed Address. After uploading their Business License, they should submit their application for network access and wait for the VN governance system to vote.

BN Node Onboarding

Basic Information

Enterprise Name

Country

Node Name

Brief Introduction

Description (Optional)

Contact Information

Contact Name

Mobile Number

Contact Email Address

Verification Code

Verification Code

Detailed Address

Business License

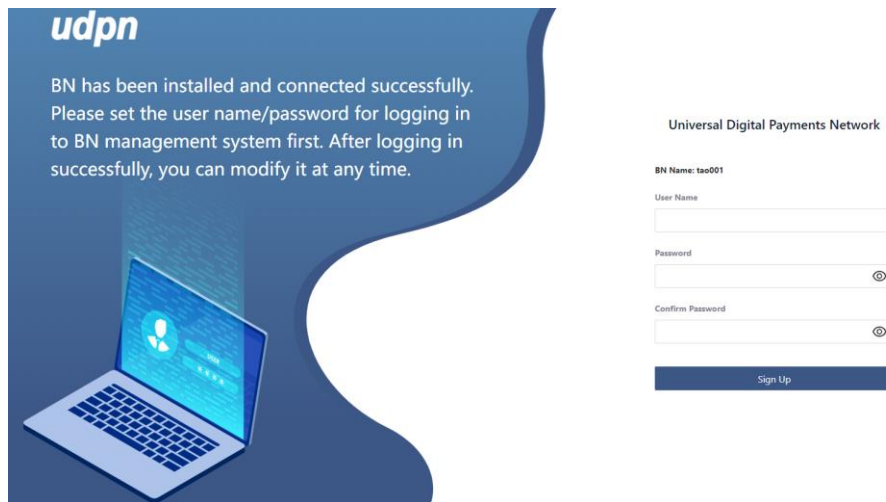
Upload

It is recommended to provide pictures with 160 * 160 (PNG / JPG / GIF / BMP / JPEG) pixels and size less than 10M, and It must be a company or product logo and not deformed.

2. Creating a Login Account and Logging In

2.1 Creating a Login Account

After the BN node's network access application is approved, users can proceed to create a login account:



Users can create an account by entering their User Name, Password, and Confirm Password.

2.2 Logging In

Users can log in to the BN back-end management system by entering their User Name and Password.

Universal Digital Payments Network

BN Name: BN00000003

User Name

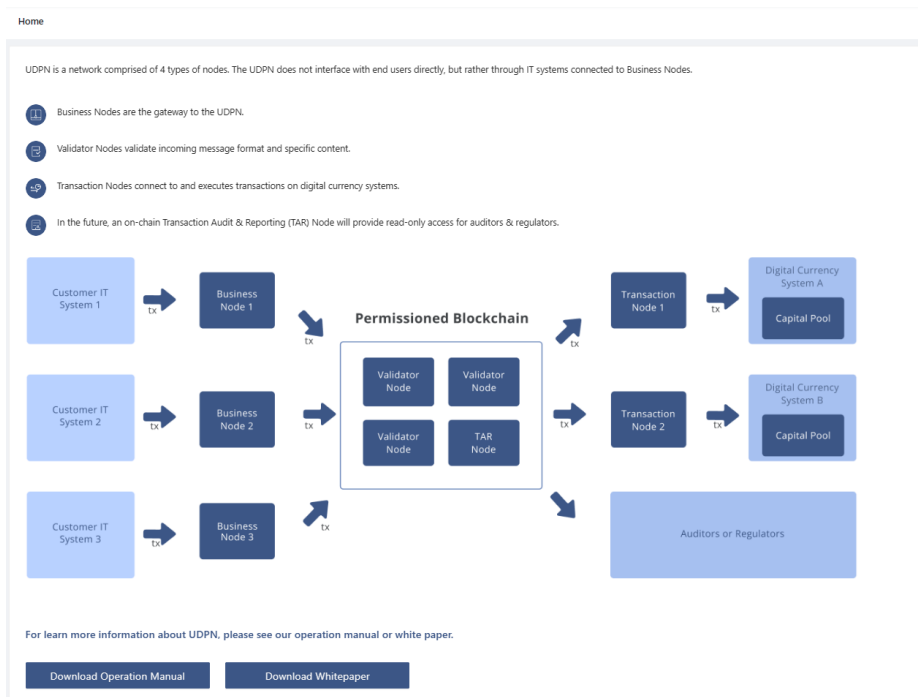
Password

LOGIN

3. Home

Here, users can learn about the overall overview and

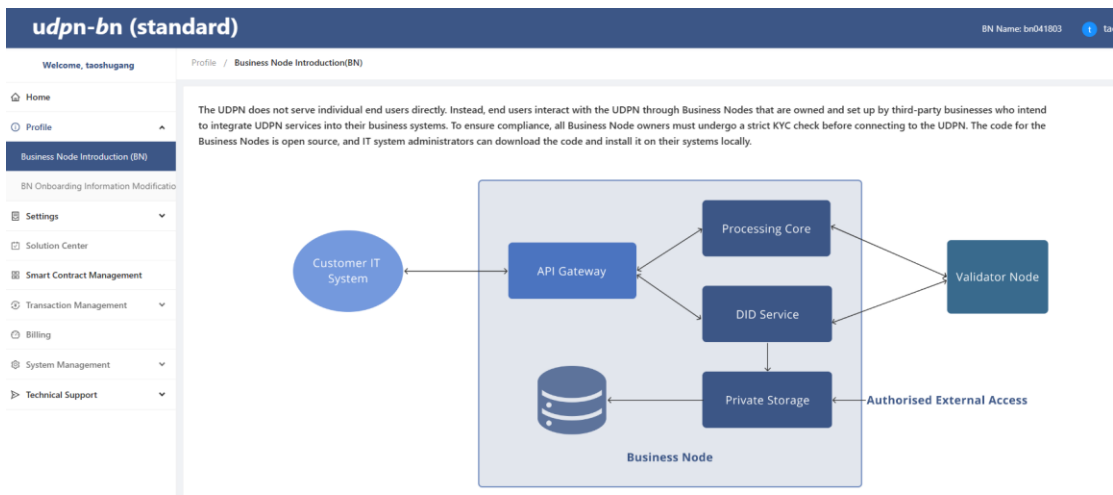
technical architecture of UDPN. Users can also download user manuals and white papers to learn more about UDPN.



4. Profile

4.1 Business Node Introduction (BN)

Go to the “Home→ Business Node Introduction” page, where you can view the information of Business Node Introduction (BN).



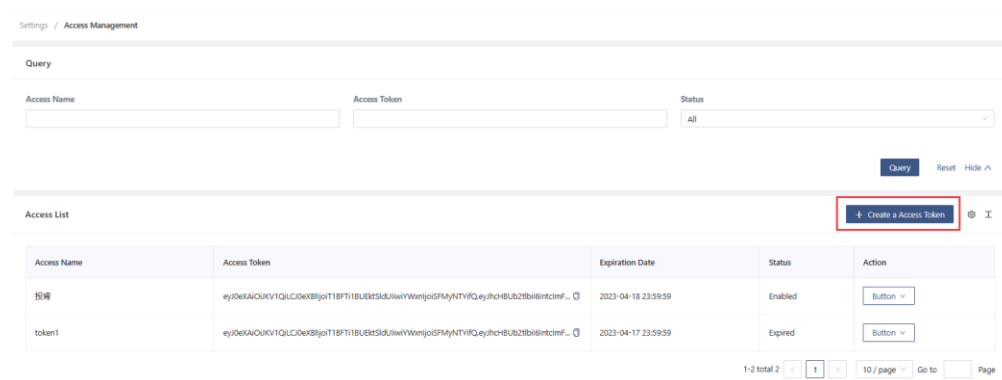
5. Settings

5.1 Access Management

When an IT business system accesses BN through an interface, BN must assign an Access Token to the business system before it can access the system. Access Tokens have three states: Enabled, Disabled, and Expired. When in the Enabled state, Access Tokens can be refreshed, disabled, or deleted. When in the Disabled state, Access Tokens can be enabled or deleted. When in the Expired state, Access Tokens can be deleted.

5.1.1 Create an Access Token

On the "Access Management" page, click the "Create an Access Token" button:



The screenshot shows the 'Access Management' page with a query bar and an 'Access List' table. The 'Create an Access Token' button is highlighted with a red box.

Settings / Access Management

Query

Access Name Access Token Status

Query Reset Hide ^

Access List

Create an Access Token

Access Name	Access Token	Expiration Date	Status	Action
授權	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiIsdWUiOiJWenJpZGMyNTYiQyJhbnQ4B2tBb6l6ntcmf...	2023-04-18 23:59:59	Enabled	Button
token1	eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiIsdWUiOiJWenJpZGMyNTYiQyJhbnQ4B2tBb6l6ntcmf...	2023-04-17 23:59:59	Expired	Button

1-2 total 2 1 10 / page Go to Page

In the "Create an Access Token" dialog box, enter the Access Name and Expiration Date to create the Access Token.

Create a Access Token

* Access Name

* Expiration Date

Select date

Cancel

Confirm

5.1.2 Query

Users can query Access Token information by entering Access Name, Access Token, and Status (All, Enabled, Disabled, Expired).

Query

Access Name

Access Token

Status

Query

Reset

Hide

Access List

Create a Access Token

Access Name	Access Token	Expiration Date	Status	Action
拉博	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT11BUktsSldlIiwiaWVWenjoSFMyNTYiOiJhbnBub211bi9intcmF...	2023-04-18 23:59:59	Enabled	Button
token1	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT11BUktsSldlIiwiaWVWenjoSFMyNTYiOiJhbnBub211bi9intcmF...	2023-04-17 23:59:59	Expired	Button

1-2 total 2

1

10 / page

Go to

Page

5.1.3 Refresh Access Token

Users can refresh an Access Token by clicking the “Refresh Access Token” button in the Action column:

Access List

Create a Access Token

Access Name	Access Token	Expiration Date	Status	Action
拉博	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT11BUktsSldlIiwiaWVWenjoSFMyNTYiOiJhbnBub211bi9intcmF...	2023-04-18 23:59:59	Enabled	Button
token1	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT11BUktsSldlIiwiaWVWenjoSFMyNTYiOiJhbnBub211bi9intcmF...	2023-04-17 23:59:59	Expired	Refresh Access Token Disabled Access Token Delete

1-2 total 2

1

10 / page

Go to

Page

When refreshing, users can set a new expiration date for

the Access Token.

Refresh

Refreshing the access token requires resetting the Expiration Date.

* Expiration Date

2023-04-18

Cancel

Confirm

5.1.4 Disabled Access Token

Users can disable an Access Token by clicking the “Disable Access Token” button in the Action column. Disabled Access Tokens cannot access BN.

Access List

Create a Access Token

Access Name	Access Token	Expiration Date	Status	Action
投票	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT1BUEk5ldiUiwiWmVjaW5FMjYNTYiQyJhchBub2tbiilintcmF...	2023-04-18 23:59:59	Enabled	Button ▾
token1	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT1BUEk5ldiUiwiWmVjaW5FMjYNTYiQyJhchBub2tbiilintcmF...	2023-04-17 23:59:59	Expired	Refresh Access Token Disabled Access Token Delete

1-2 total 2

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1

>

10 / page

Go to

Page

5.1.5 Delete Access Token

Users can delete an Access Token by clicking the “Delete Access Token” button in the Action column:

Access List

Create a Access Token

Access Name	Access Token	Expiration Date	Status	Action
投票	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT1BUEk5ldiUiwiWmVjaW5FMjYNTYiQyJhchBub2tbiilintcmF...	2023-04-18 23:59:59	Enabled	Button ▾
token1	eyJ0eXAiOiJKV1QiLCJ0eXBlIjoiT1BFT1BUEk5ldiUiwiWmVjaW5FMjYNTYiQyJhchBub2tbiilintcmF...	2023-04-17 23:59:59	Expired	Refresh Access Token Disabled Access Token Delete

1-2 total 2

<

1

>

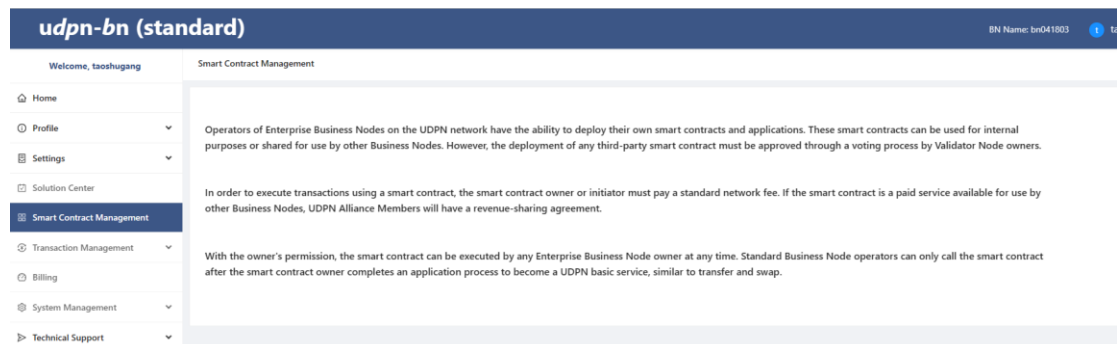
10 / page

Go to

Page

6. Smart Contract Management

Go to the "Home→ Smart Contract Management" page, where you can view the introduction of smart contract management.



7. Transaction Management

7.1 Event logs

7.1.1 Query

On the "Event Logs" page, users can enter one or more search criteria, including From Block Number, To Block Number, Contract Address, and Transaction Hash. Clicking the "Query" button will return matching event logs.

Query

From Block Number

To Block Number

Contract Address

1222

Transaction Hash

Query

Reset

Hide ^

Event Logs

Block Number	Block Hash	Log Index	Transaction Hash	Contract Address	Action
15891340	0x7864fcdab6565a6fa05f3c4370e...	0	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891340	0x7864fcdab6565a6fa05f3c4370e...	1	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891340	0x7864fcdab6565a6fa05f3c4370e...	2	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891279	0x5e18e3026af08054378bdc27ae...	0	0x7fdd7daff3c73be1f855d5e554a452c57a3c4466ba37a4fc6a8222abb40613a3	0x3b1b7e4c31f4017f2127192c75d3020f99c06...	Detail
15891279	0x5e18e3026af08054378bdc27ae...	1	0x7fdd7daff3c73be1f855d5e554a452c57a3c4466ba37a4fc6a8222abb40613a3	0x3b1b7e4c31f4017f2127192c75d3020f99c06...	Detail

7.1.2 Detail

In the “Event Logs” list, users can select a data record and click the “Detail” button in the action column:

Event Logs					
Block Number	Block Hash	Log Index	Transaction Hash	Contract Address	Action
15891340	0x7864fcdab6565a6fa05f3c4370e...	0	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891340	0x7864fcdab6565a6fa05f3c4370e...	1	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891340	0x7864fcdab6565a6fa05f3c4370e...	2	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483	0x081997d6b7719f1facd724ab8849e985ee58...	Detail
15891279	0x5e18e3026af08054378bdc27ae...	0	0x7fdd7daff3c73be1f855d5e554a452c57a3c4466ba37a4fc6a8222abb40613a3	0x3b1b7e4c31f4017f2127192c75d3020f99c06...	Detail

On the “Detail” page, users can view detailed information about the event log.

Transaction Management / Event Logs / Detail			
← Detail			
Block Number	15891340	Block Hash	0x7864fcdab6565a6fa05f3c4370e177808bf56a3eb40d10e66a177ecf2a353982
Log Index	0	Transaction Hash	0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483
Contract Address	0x081997d6b7719f1facd724ab8849e985ee58db8e		
Original Block Message	<pre>{ "blockHash": "0x7864fcdab6565a6fa05f3c4370e177808bf56a3eb40d10e66a177ecf2a353982", "logIndexRaw": "0x0", "transactionIndexRaw": "0x0", "address": "0x081997d6b7719f1facd724ab8849e985ee58db8e", "blockNumberRaw": "0xf27b8c", "logIndex": 0, "data": "0x", "removed": false, "topics": ["0x7cd75a20ee27fd9adebab32041f755214dbc6bffa90cc0225b39da2e5c2d3b", "0x00"], "blockNumber": 15891340, "transactionIndex": 0, "transactionHash": "0x7870183a71a791a8f586f929f928a9f00c5ae03781a78a0eb308fcc979802483" }</pre>		

7.2 Transactions

7.2.1 Query

On the “Transactions” page, users can enter one or more search criteria, including Contract Address, Transaction

Hash, Transaction Type, and Transaction Date. Clicking the “Query” button will return matching transactions.

Query

Contract Address

Transaction Hash

Transaction Type

All

Transaction Date

Start date → End date

Query

Reset

Hide ^

Transactions

Contract Address	Transaction Hash	Transaction Type	Transaction Result	Transaction Time
0x11cc41a251cdde49a790f086fc533808d7f05da9	0x7c0bd1f345ff70174ebd804ee65fc010690e70fb01a49f4e2606f9c1ccaa2448	Contract Call	Success	2023-04-19 15:26:48
0x11cc41a251cdde49a790f086fc533808d7f05da9		Contract Call	Success	2023-04-19 15:23:38
0x11cc41a251cdde49a790f086fc533808d7f05da9	0xb319d59961316dc0b5cee0c815c703840d0ab108ea479235c3177d46d2049...	Contract Call	Success	2023-04-19 15:23:24
0x11cc41a251cdde49a790f086fc533808d7f05da9		Contract Call	Success	2023-04-19 15:23:13

7.2.2 Transaction Receipt

In the “Transactions” list, users can click the “Transaction Hash” to view the transaction receipt associated with that transaction.

Query

Contract Address

Transaction Hash

Transaction Type

All

Transaction Date

Start date → End date

Query

Reset

Hide ^

Transactions

Contract Address	Transaction Hash	Transaction Type	Transaction Result	Transaction Time
0xfcaa46d5e744404f43f72fc42802495507e56b80	0x5b19b796b8c51068a71102536bbde96fb11352812251950154e7836b383a8...	Contract Call	Success	2023-04-19 15:16:21
0xfcaa46d5e744404f43f72fc42802495507e56b80	0xfbcc2878246b41382ef9c08b7d5a7fc204801eb1402093fe39411d21444635e...	Contract Deployment	Success	2023-04-19 15:15:03
--	0x72359a0c17c9f1a5998a1c2fd2a2037423b163af5be44238ddc37b398c101c...	Contract Deployment	Fail	2023-04-19 15:07:13
--	0x15677346e0adcaa43e9eefc5ec01118362c18d23f696394529fbe1edd187a2...	Contract Deployment	Fail	2023-04-19 15:06:23
--	0xee8709c946dc1a0e0ed00bca317714153b66449355fa03dd215be9e01b6d8...	Contract Deployment	Fail	2023-04-19 15:05:46

[← Receipt](#)

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