

Tencent Cloud Blockchain RPC

Operation Guide

Product Documentation



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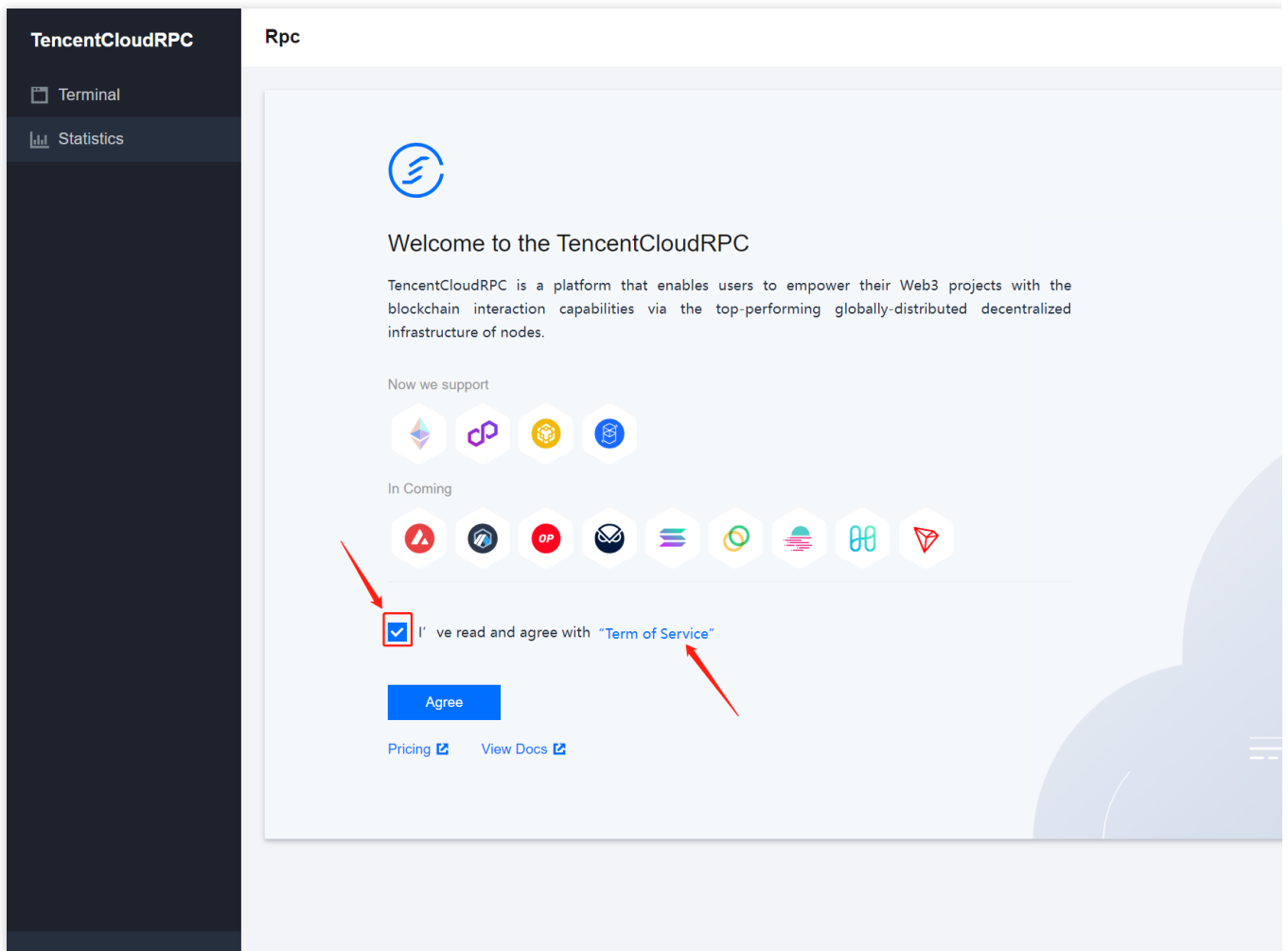
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Operation Guide

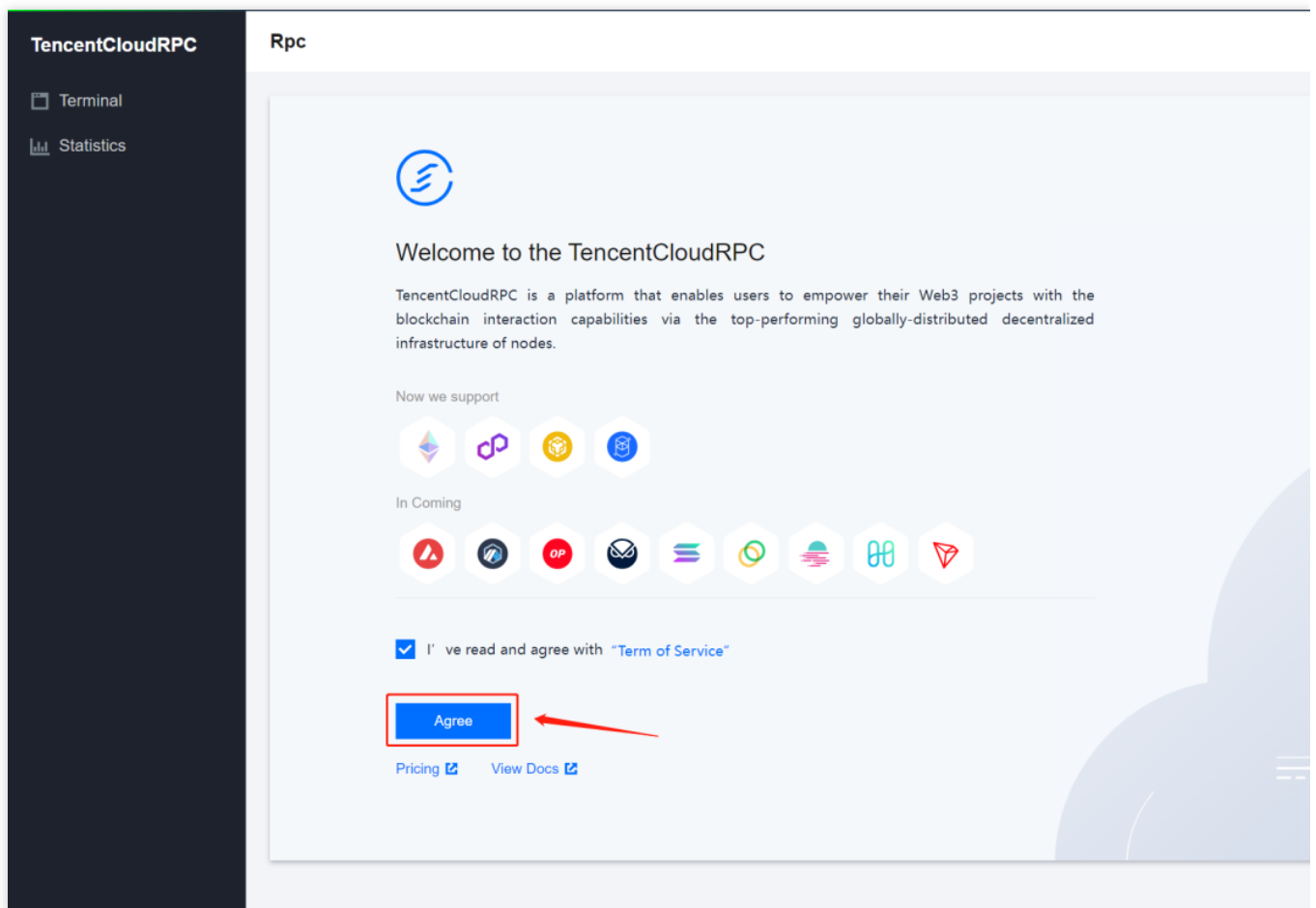
Apply Service

Last updated : 2023-09-11 16:28:45

1. Sign in to the Tencent Cloud International Website and go to the RPC console by visiting [Console-RPC](#).
2. Review the 'Terms of Service' and check the box to agree to them.



3. Click Agree to proceed with the service



Create an Application

Last updated : 2023-09-11 16:29:03

1. Click the Terminal, and then click Create New Application.

Note : Make sure that the ApplicationName is not already in use.

The screenshot shows the Tencent Cloud Blockchain RPC console interface. On the left, a dark sidebar contains the 'Terminal' tab, which is highlighted with a red arrow. The main content area is divided into two sections. The top section, titled 'Application', features a 'Create New Application' button (highlighted with a red arrow) and a table listing existing applications. The table has columns for 'Application Name/Description', 'REQUESTS (24h)', and 'Created'. The bottom section, titled 'Overview', displays 'Unit Balance' (0), 'Unit Usage (24h)' (0), and 'Unit Usage (7days)' (0). Below these are tabs for 'Unit Usage' (1h, 24h, 7d, 30d) and a line graph showing usage from 2023-07-31 to 2023-08-21. The graph shows a sharp increase in usage starting around 2023-08-10, peaking at approximately 450,000,000 units around 2023-08-17, and then declining.

Application Name/Description	REQUESTS (24h)	Created
applicationaakuyhdook descriptionkricawhuslhdzccleri	0	2023-08-15 15:07:42
applicationktzvcbowfo descriptionbopksiqvhwylkbhixok	9,360,249	2023-08-10 15:16:05
applicationrlzhlpjebu descriptionzcxslcnhaqraysuiwn	0	2023-07-27 10:41:57

2. Enter an Application Name and a Description.

The screenshot displays the Tencent Cloud Blockchain RPC console interface. On the left, a sidebar contains 'Terminal' and 'Statistics' tabs. The main area is divided into two sections: 'Application' and 'Overview'.

The 'Application' section features a table with the following data:

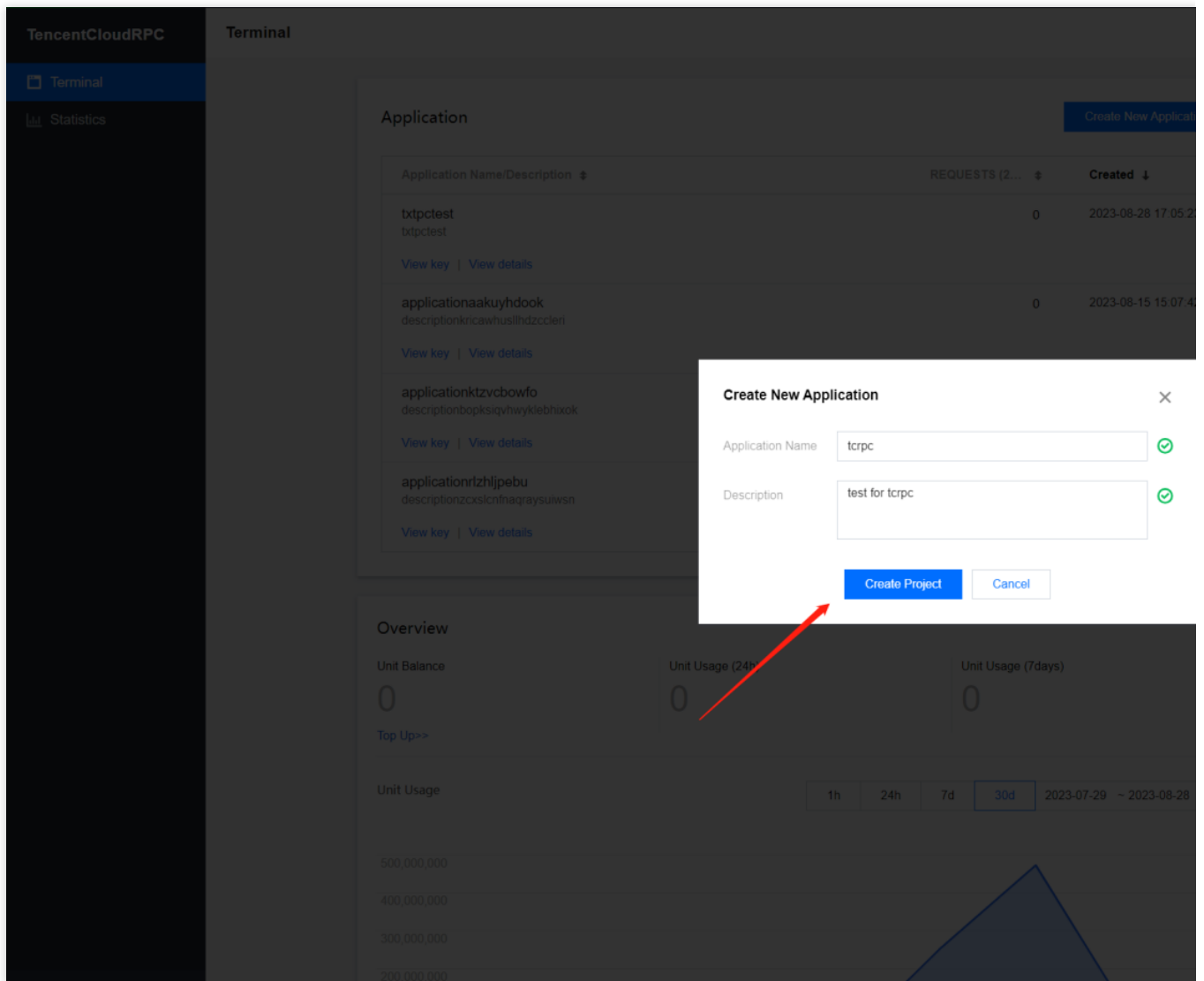
Application Name/Description	REQUESTS (24h)	Created
txtpctest txtpctest View key View details	0	2023-08-28 17:05
applicationaakuyhdoock descriptionkicawhusilhdzccien View key View details	0	2023-08-15 15:07
applicationktzvcbowfo descriptionbopksiqvhwkiebixok View key View details		
applicationrzhjpebu descriptionzcxscnfnagraysuwsn View key View details		

The 'Overview' section shows 'Unit Balance' as 0 and 'Unit Usage' for 24h, 7d, and 30d, all at 0. A 'Top Up>>' link is present. Below this is a line chart for 'Unit Usage' over time, with a legend for 1h, 24h, 7d, and 30d. The 30d tab is selected, showing usage from 2023-07-29 to 2023-08-28.

A 'Create New Application' dialog box is open in the foreground, containing the following fields and buttons:


- Application Name:** tcrpc (with a green checkmark icon)
- Description:** test for tcrpc (with a green checkmark icon)
- Buttons:** 'Create Project' (blue) and 'Cancel' (white)


3. Click Create Project.



4. Project creation is successful.

TencentCloudRPC

 Terminal

 Statistics

Terminal

Application

Application Name/Description
tcrpc test for tcrcp View key View details
txtpctest txtpctest View key View details
applicationaakuyhdo descriptionkricawhusllhdzccleri View key View details
applicationktzvcbowfo descriptionbopksiqvhwylkbhixok View key View details
applicationrlzhlpjebu descriptionzcxsicnfnaqraysuiwsn

Application Information Maintenance

Last updated : 2023-09-11 16:29:16

1. Select the Application that needs to be renamed or modified, and click View details.

The screenshot displays the TencentCloudRPC Terminal interface. On the left, a dark sidebar contains the 'Terminal' tab, which is highlighted with a red arrow. The main content area is divided into two sections: 'Application' and 'Overview'.

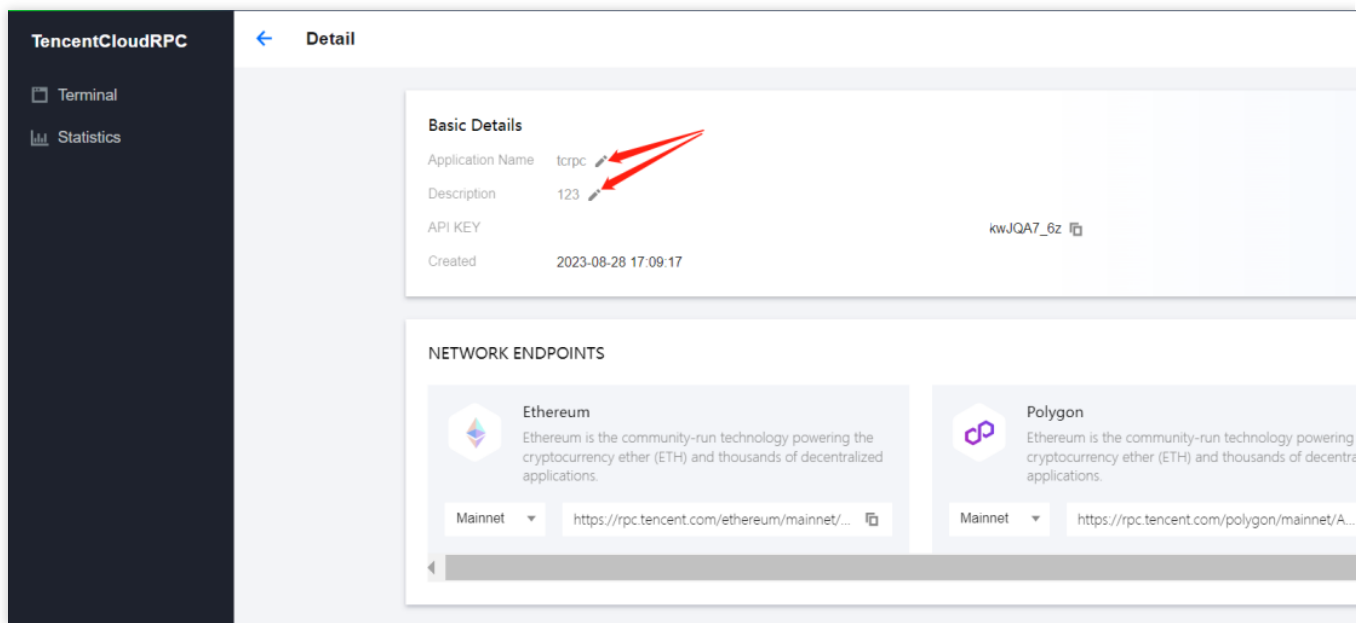
The 'Application' section features a table with the following data:

Application Name/Description	REQUESTS (2...)	Created
new application new application View key View details	0	2023-08-29 10:35:34
tcrpc 123 View key View details	0	2023-08-28 17:09:17
txtpctest txtpctest View key View details	0	2023-08-28 17:05:23
applicationaakuyhdook descriptionkricawhusllhdzccleri View key View details	0	2023-08-15 15:07:42
applicationktzvcbowfo descriptionbopksiqvhwylkbhixok	30,246,030	2023-08-10 15:16:05

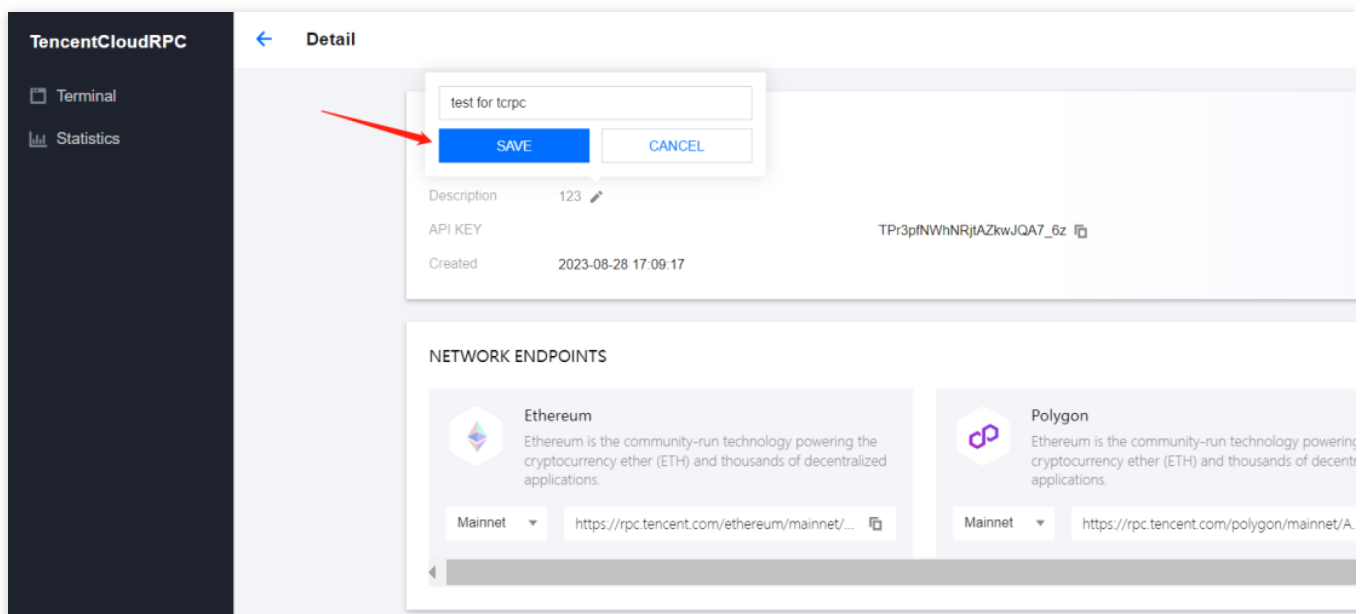
The 'Overview' section below the table shows 'Unit Balance' as 0, 'Unit Usage (24h)' as 0, and 'Unit Usage (7days)' as 0. It also includes a 'Top Up>>' link and a 'Unit Usage' section with tabs for 1h, 24h, 7d, and 30d, and a date range of 2023-08-29 to 2023-08-29.

2. Modify the name or description.

Note : Make sure that the ApplicationName is not already in use



3. Enter the new name or description, and click SAVE to submit the changes.



Request Blockchain RPC service

Last updated : 2023-09-11 16:29:27

1. Select the Application that you want to use, and click View details.

The screenshot shows the TencentCloudRPC Terminal interface. On the left, a sidebar contains 'Terminal' (highlighted with a red arrow) and 'Statistics'. The main area is divided into two sections: 'Application' and 'Overview'.

Application Section: A table lists applications with columns for 'Application Name/Description', 'REQUESTS (24h)', and 'Created'. A red arrow points to the 'View details' link for the 'tcrpc' application.

Application Name/Description	REQUESTS (24h)	Created
new application new application View key View details	0	2023-08-29 10:35:34
tcrpc 123 View key View details	0	2023-08-28 17:09:17
txtpctest txtpctest View key View details	0	2023-08-28 17:05:23
applicationaakuyhdoock descriptionkricawhusllhdzccleri View key View details	0	2023-08-15 15:07:42
applicationktzvcbowfo descriptionbopksiqvhwylkbhixok	30,246,030	2023-08-10 15:16:05

Overview Section: Displays 'Unit Balance' (0), 'Unit Usage (24h)' (0), and 'Unit Usage (7days)' (0). Below these are 'Top Up>>' and 'Unit Usage' tabs with a time range selector (1h, 24h, 7d, 30d) and a date range (2023-08-29 ~ 2023-08-29).

2. Move to the bottom of the page, and configure the IP/Domain whitelist (Note: Without a whitelist, all IP addresses can use this token to call the RPC service. Adding a whitelist allows only the IP addresses in the whitelist to use this token to call the RPC service).

2.1 Add the IP/Domain whitelist: Enter the IP/Domain in the input box, and click the Add button.

Security

Ensure the integrity of your requests by adding an extra layer of security with the domain (url referer or origin header) and IP address allowlist.

Add website address 10 max

console.intl.cloud.tencent.com

Add

List of allowed websites

Add IP address 10 max

255 . 255 . 255 . 255

Add

List of allowed IP addresses

Security

Ensure the integrity of your requests by adding an extra layer of security with the domain (url referer or origin header) and IP address allowlist.

Add website address 10 max

Add

List of allowed websites

console.intl.cloud.tencent.com ✕

Add IP address 10 max

255 . 255 . 255 . 255

Add

List of allowed IP addresses

2.2 Remove the IP/Domain whitelist: Click the cancel button for the corresponding IP/Domain in the whitelist.

Security

Ensure the integrity of your requests by adding an extra layer of security with the domain (url referer or origin header) and IP address allowlist.

Add website address 10 max

Add

List of allowed websites

console.intl.cloud.tencent.com ✕

Add IP address 10 max

255 . 255 . 255 . 255

Add

List of allowed IP addresses

127.0.0.1

✕

Security

Ensure the integrity of your requests by adding an extra layer of security with the domain (url referer or origin header) and IP address allowlist.

Add website address 10 max

Add

List of allowed websites

console.intl.cloud.tencent.com ✕


Add IP address 10 max

Add


List of allowed IP addresses

3. Select the chain service, network, and other information you want to use, such as Mainnet in Ethereum.

NETWORK ENDPOINTS


**Ethereum**
Ethereum is the community-run technology powering the cryptocurrency ether (ETH) and thousands of decentralized applications.

Mainnet

**Polygon**
Ethereum is the community-run technology powering the cryptocurrency ether (ETH) and thousands of decentralized applications.

Mainnet

GET STARTED

CHAIN  Ethereum

NETWORK Mainnet

HTTP

```
# bash
curl -X POST https://rpc.tencent.com/ethereum/mainnet/ -d '{"jsonrpc":"2.0",'
```

WSS


```
# bash
wscat -c wss://rpc.tencent.com/ethereum/mainnet/
# subscribe
> [{"jsonrpc": "2.0", "id": 1, "method": "eth_subscribe", "params": ["newHeads"]}
# unsubscribe
> [{"jsonrpc": "2.0", "id": 2, "method": "eth_unsubscribe", "params": ["The result value returned after successful subscription"]}
```

4. Call the RPC service

4.1 Invoke the RPC service using command-line commands: copy the command in the example and paste it to the whitelist machine, then press Enter to execute it using curl/wscat commands.

GET STARTED

CHAIN

 Ethereum ▼

NETWORK

Mainnet ▼

HTTP

```
# bash
curl -X POST https://rpc.tencent.com/ethereum/mainnet/... '{"jsonrpc":"2.0",
```

WSS

```
# bash
wscat -c wss://rpc.tencent.com/ethereum/mainnet/...
# subscribe
> {"jsonrpc": "2.0", "id": 1, "method": "eth_subscribe", "params": ["newHeads"]}
# unsubscribe
> {"jsonrpc": "2.0", "id": 2, "method": "eth_unsubscribe", "params": ["The result value returned after successful subscription"]}
```

4.2 Invoke the RPC service using code: Copy the RPC invocation address in the NETWORK ENDPOINTS and connect to it using HTTP or HTTPS.

NETWORK ENDPOINTS



Ethereum

Ethereum is the community-run technology powering the cryptocurrency ether (ETH) and thousands of decentralized applications.

Mainnet ▼

<https://rpc.tencent.com/ethereum/mainnet/...> 

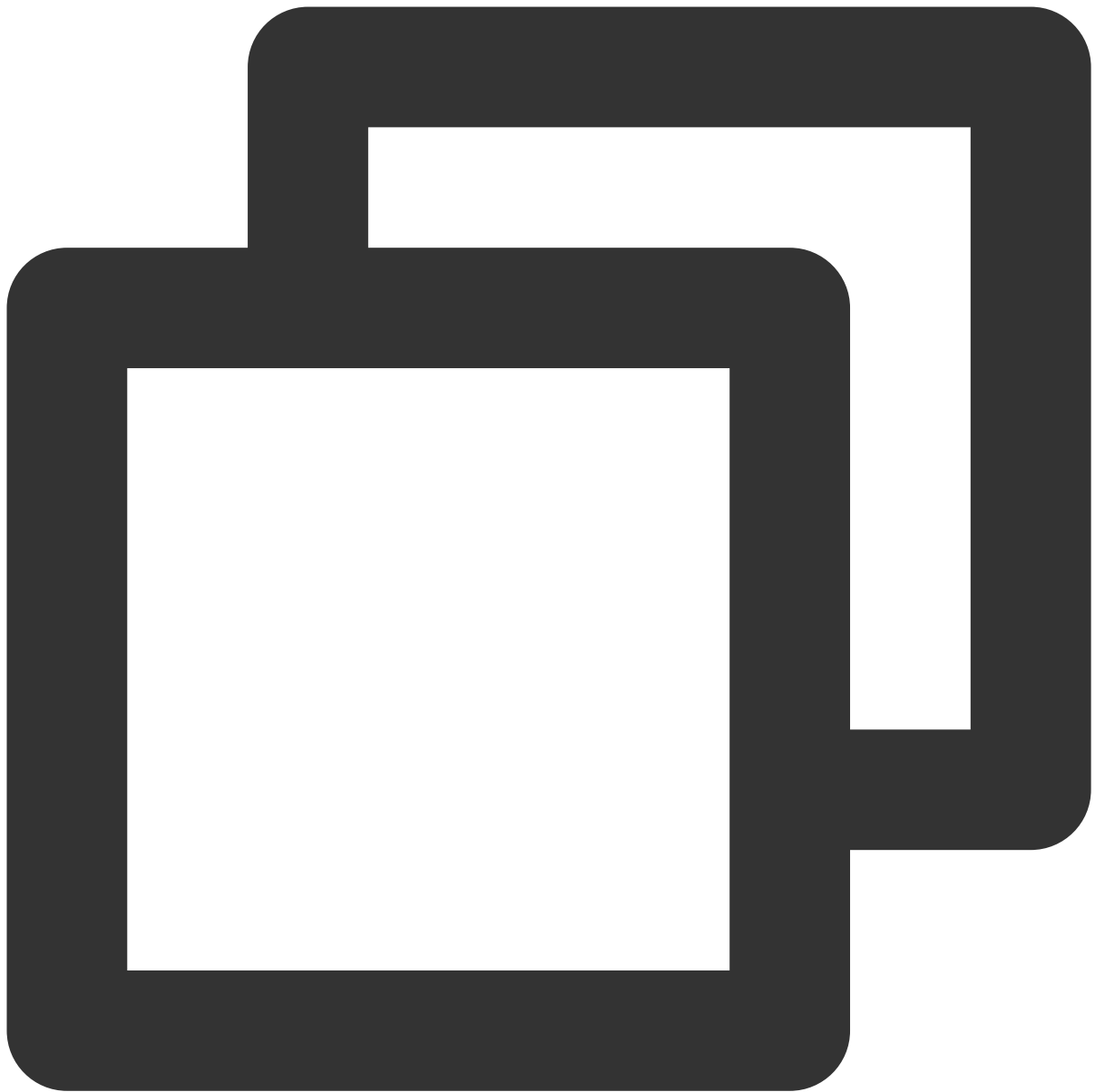
Polygon

Ethereum is the community-run technology powering the cryptocurrency ether (ETH) and thousands of decentralized applications.

Mainnet ▼

<https://rpc.tencent.com/polygon/mainnet/A...> 

Demo :



```
package test

import (
    "context"
    "fmt"
    "github.com/ethereum/go-ethereum"
    "github.com/ethereum/go-ethereum/core/types"
    "github.com/ethereum/go-ethereum/ethclient"
    "log"
    "testing"
)
```



```
func Test_ws(t *testing.T) {
    chainUrl := ""
    client, err := ethclient.Dial(chainUrl)
    if err != nil {
        log.Fatal(err)
    }

    query := ethereum.FilterQuery{}
    logs := make(chan types.Log)
    sub, err := client.SubscribeFilterLogs(context.Background(), query, logs)
    if err != nil {
        log.Fatal(err)
    }
    fmt.Printf("sub: %+v\\n", sub)

    for {
        select {
            case err := <-sub.Err():
                fmt.Printf("err: %+v", err)
            case vLog := <-logs:
                fmt.Printf("%+v\\n", vLog.BlockNumber)
        }
    }
    fmt.Printf("client: %+v", client)
}

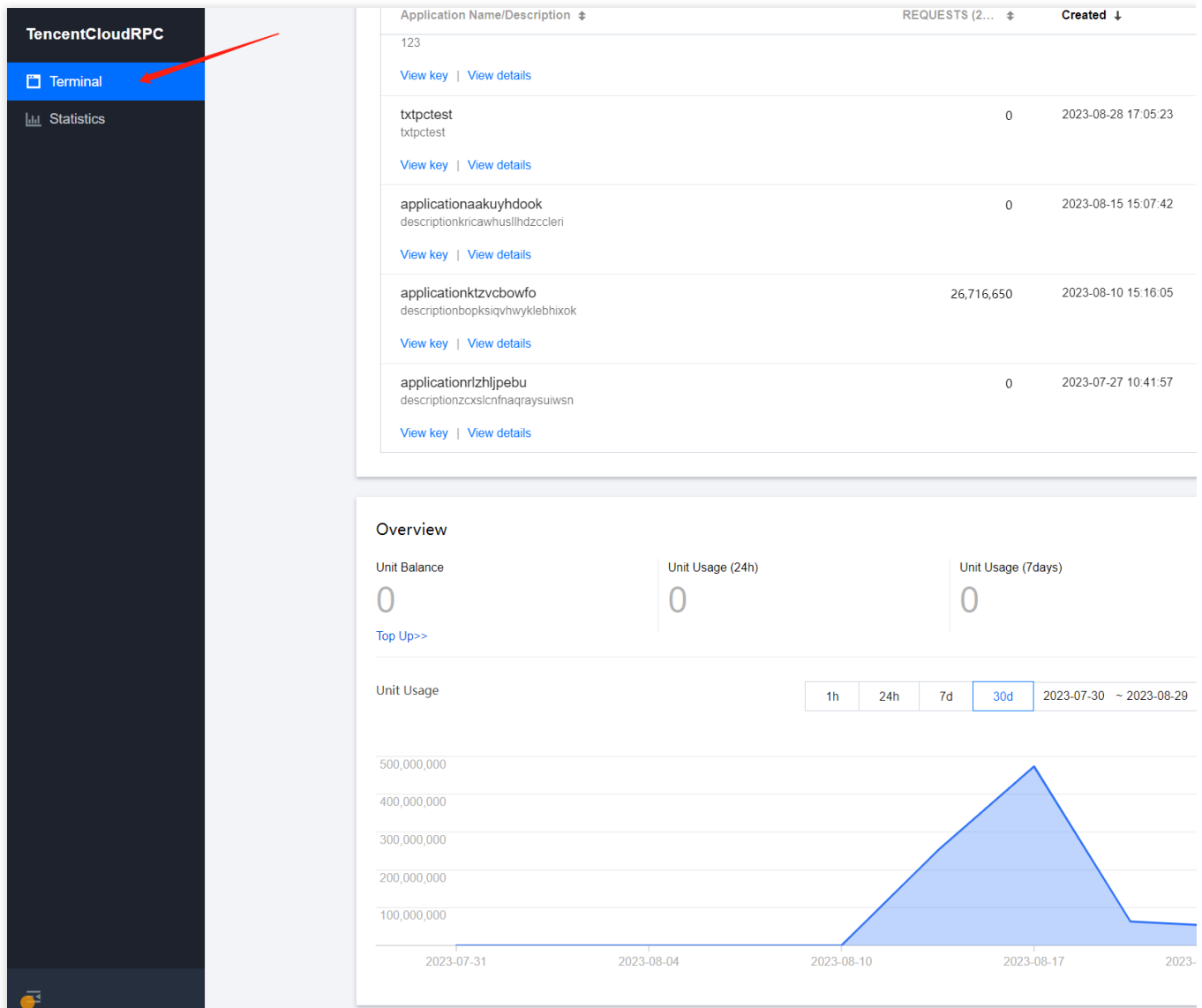
func Test_http(t *testing.T) {
    chainUrl := ""
    client, err := ethclient.Dial(chainUrl)
    if err != nil {
        log.Fatal(err)
    }

    height, err := client.BlockNumber(context.Background())
    if err != nil {
        log.Fatal(err)
    }
    fmt.Printf("block height: %+v\\n", height)
    fmt.Printf("client: %+v", client)
}
```

View and Download Usage Information

Last updated : 2023-09-11 16:29:38

1. View account package total usage: Click the Terminal, move to the bottom of the page, and change the query time range in the Overview.

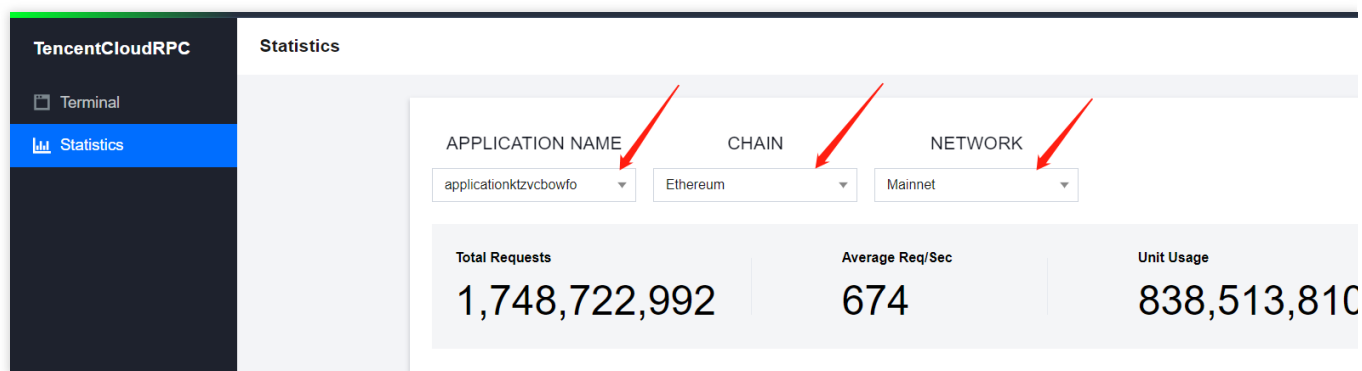


2. View usage information under a specific token:

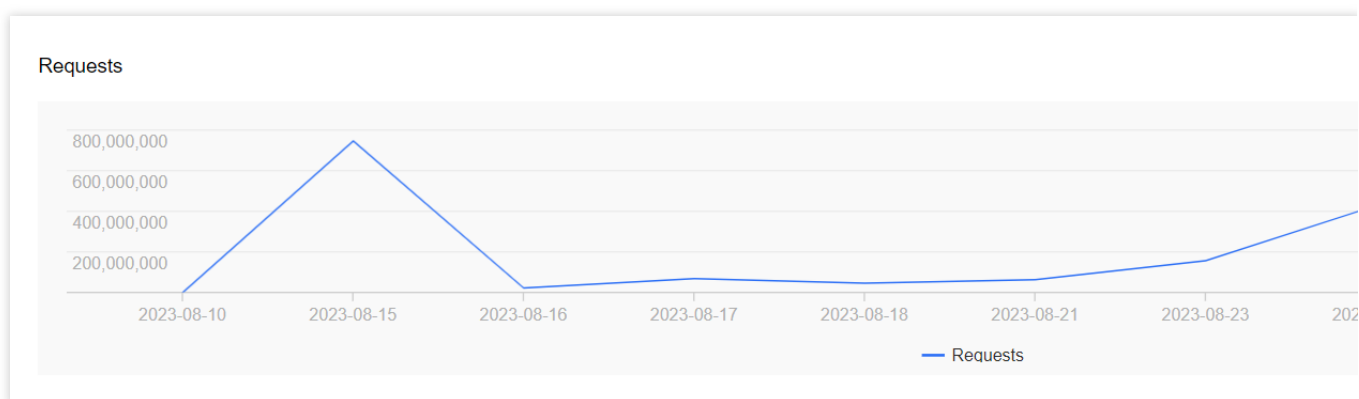
Step1: Click Statistics.

Step2: Select Application, Chain, Network.

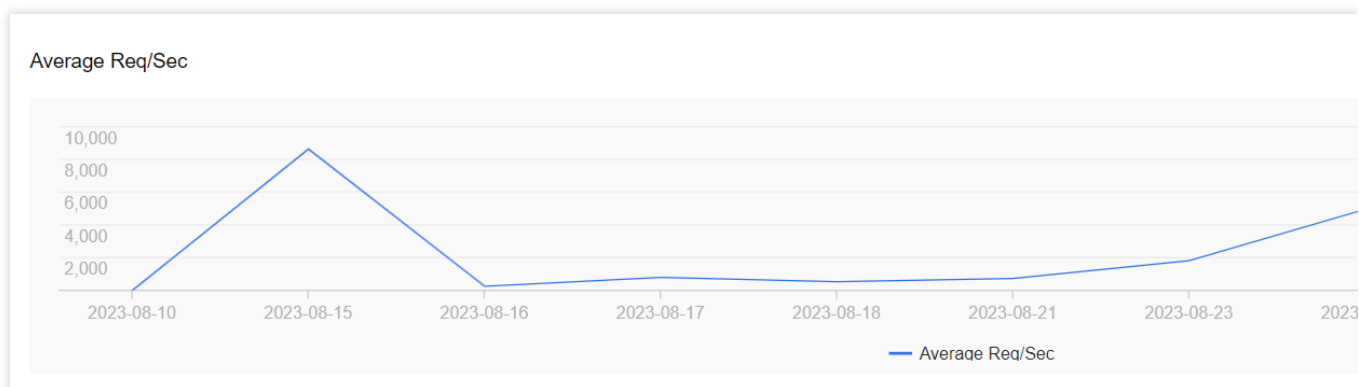
Step3: Change the query time range.



Request statistics chart (records the total number of requests within a certain period of time):

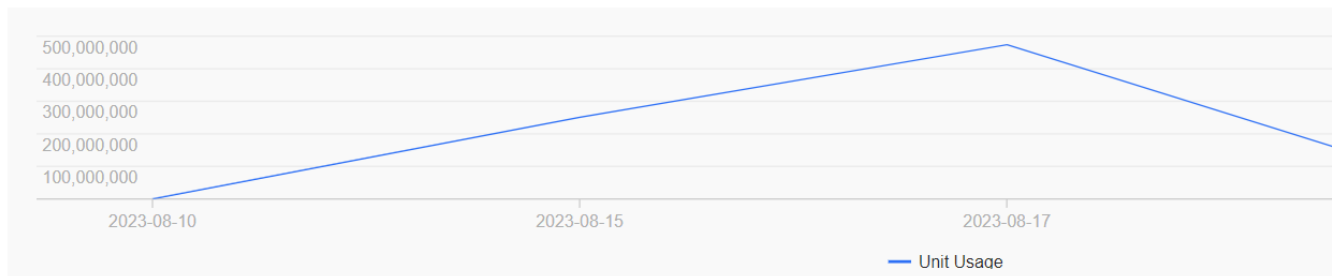


Average Req/Sec statistics chart (records the average number of queries per second within a certain period of time):



Unit Usage statistics chart (records the total consumption of packages within a certain period of time):

Unit Usage



3. Download usage information.

