Universa FAQ.

Available at: https://lnd.im/UniversaFAQEng

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What is Universa?

Universa Blockchain Platform is the first Russian blockchain platform for building business applications intended to address the tasks of corporate management and state administration. Universa offers a technology enabling decentralized issuance and acceptance of any cryptographically protected documents as well as ready-made extensive services for managing these documents, but it does not limit the customers to using just its own facilities and procedures. Universa smart contracts can be used to program internal and public applications.

UTN tokens are the basic Universa tokens.

The network is built around smart contracts and their changes, or “transactions” – each time a transaction is to be carried out, the current status of a contract and the source of transaction are propagated to all network nodes.

Universa does not rely on untrusted participants. All nodes in the Universa network are run and managed by Universa partners and must be licensed and authorized by Universa.

Universa Blockchain can process tens of thousands of transactions a second.

Universa ecosystems is financed by UTN tokens – a digital asset that also represents a Universa smart contract.

When was Universa launched?

Universa MainNet was launched on April 12, 2018, as the first public blockchain worldwide where developers of distributed apps have more than 20,000 transactions per second available, with further upscaling possible. Network users are provided ready-made smart contract solutions and an extensive array of functions supporting literally any objective: from smart money to universal passports for anyone on the planet.

Universa itself appeared even earlier, – on November 7, 2017, when Universa TestNet was publicly announced and launched, along with the very first version of Universa web client now available at mainnetwork.io.

What is a smart contract?

A smart contract is a key entity tracked by Universa distributed ledger. It is a structured document (in XML/YAML/JSON formats), which follows a set of rules:

- A smart contract has a specific strict structure, yet is flexible enough to store all sorts of data;
- A smart contract offers a wide selection of rules that enable the contract author to impose restrictions on the data stored (e.g., “only the current contract owner can change contract ownership”, or “only joint signature by the contract owner and contract author can change contract ownership”);

- The contract itself is not stored in the Universa distributed ledger (normally the end user is responsible for storing the contract), but if the document is valid, the Universa network can store this fact and validate it in a secure and unfalsifiable manner;

- New versions (revisions) of a smart contract can be registered with Universa (the earlier versions are recalled automatically);

- Any new revision can be registered only if the previous revision (on which the new one is based) is approved by Universa network and if the new revision has been obtained from the old version by a legitimate operation (which does not violate the rules/permissions contained in the contract).

What is the difference between UTN and UTNP?

UTNP – is an ERC20 token in the Ethereum network (“P” stands for “Placeholder”).

UTN tokens are the actual Universa tokens registered in Universa MainNet.

For more efficient interaction between Universa and existing platforms (e.g., cryptocurrency exchanges) and to ensure you can actually purchase tokens to pay network fees, UTNP was created in parallel, in the form of ERC20 tokens in the Ethereum network. Historically, the placeholder token (hence the name UTNP) was the earlier of the two tokens. Conversion between the two tokens is performed at 1:1 rate (but you still have to pay the network fees), and either can be used to pay Universa network fees (UTN can be used directly; UTNP has to be converted to UTN first).

UTN – is it utility or security token?

UTN is a utility token, a digital asset the Universa network needs to function. From legal point of view, UTN is a token and not a coin. UTN tokens are used to pay for all transactions within the Universa network.

Important: Universa does not, and never will, make any payments on its tokens.

See also:

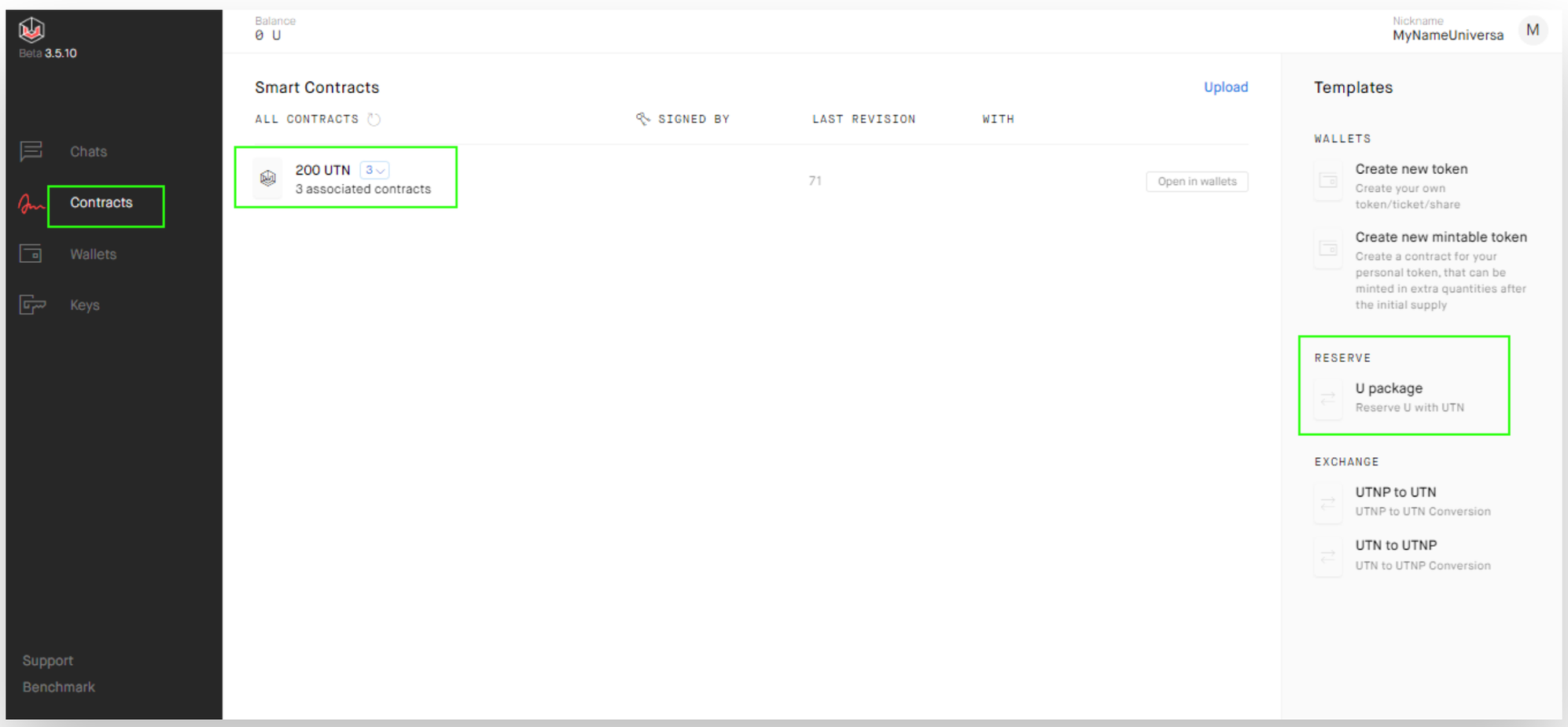
- What is UTN and UTNP: kb.universablockchain.com/universa_tokens_utn_and_utnp/33
- UTN token in Universa Explorer: lnd.im/utn

What is U Balance?

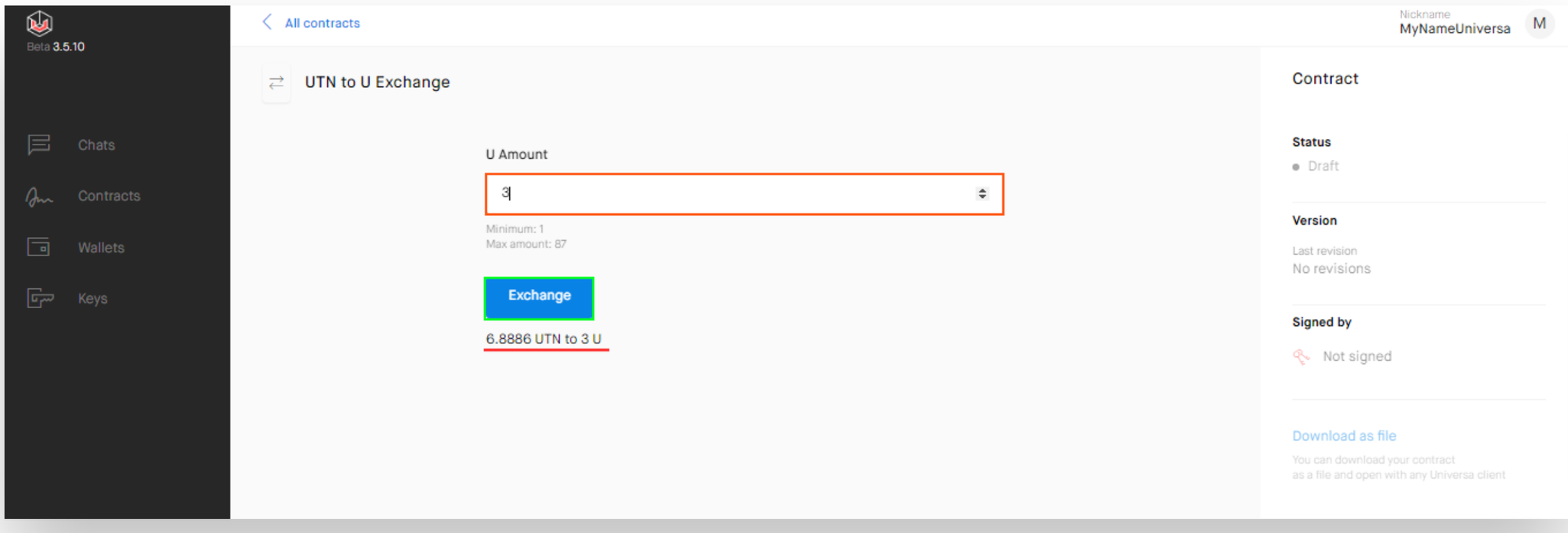
An internal unit in the Universa network, which measures the computational power the network has to use to execute your transaction is called ‘U’. You will need to purchase UTN/UTNP token to have U allocated.

Please note: U is not UTN; nor is it UTNP. U can be reserved with UTN, but it cannot be exchanged back to UTN. Make sure you reserve exactly the amount of U needed.

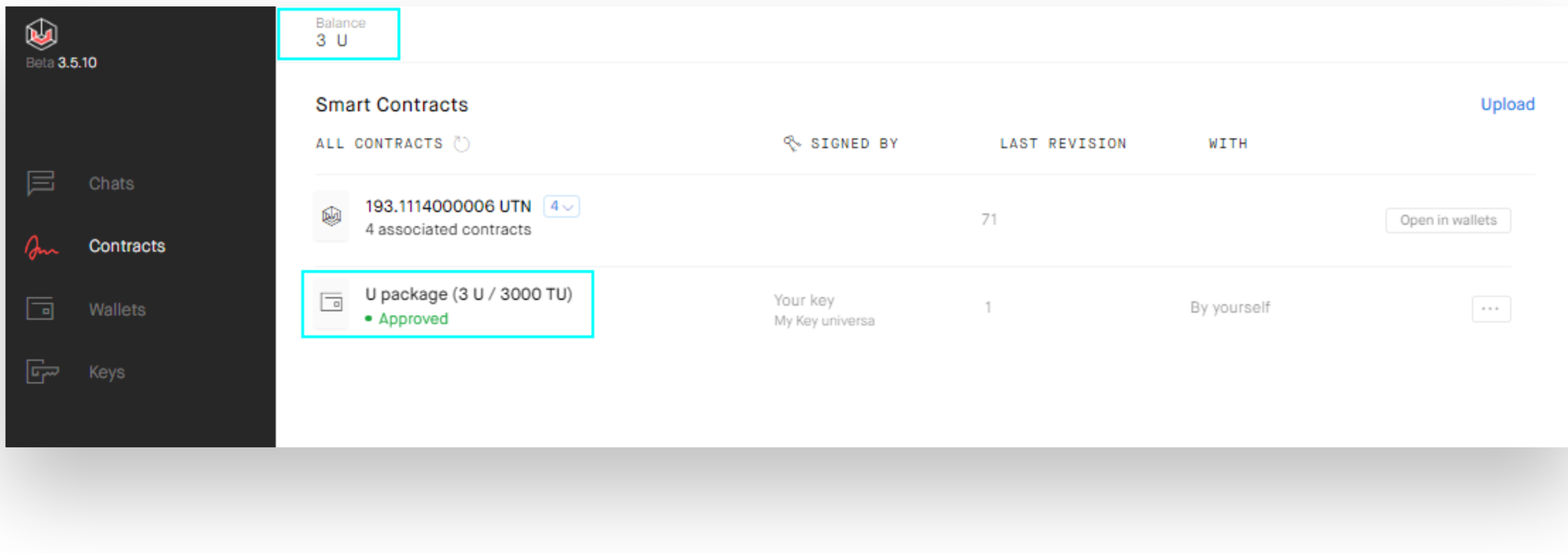
You will need U if you want to use the Universa network. All transactions that involve reading from Universa are free; a transaction that involves registering a contract on the network is not free and it uses some U. To reserve U open your MainNet- Web- Client page and click the "Wallets" tab. Make sure you have a UTN contract; then click “U Package” button on the right.



A form will open. You can indicate the U amount you need to reserve.. In response, you will be shown the UTN amount you will be charged for this transaction. Verify the data and click “Exchange”.



Once the reservation transaction is completed successfully, you will get U tokens to execute your transactions in the Universa network!



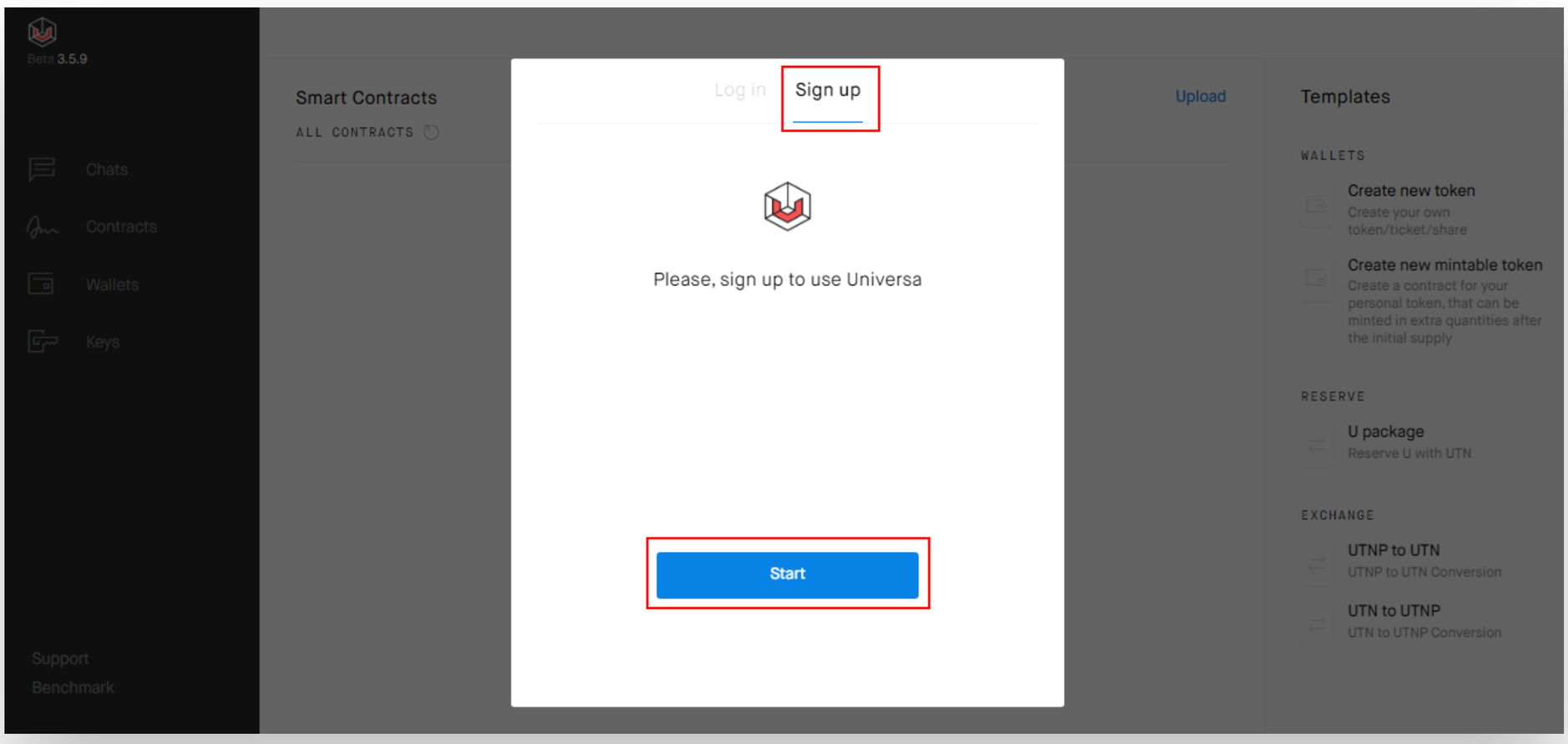
How do I start using Universa MainNet?

Warning: these actions are best performed using a personal computer (not a phone or a tablet), in any commonly used browser (Google Chrome recommended). If you use ad-blocking plugins (AdBlock, etc.) in your browser, it’s best to disable them or to add Universa websites as exceptions (we do not show any ads anyway). Unfortunately, less popular browsers and mobile versions, as well as ad blockers and automatic translation services, can sometimes create non-trivial issues when working with the site.

Step 1. Registration.

Enter the MainNet Web Client website.

A login screen will appear. Choose “Sign Up” tab and press the “Start” button.

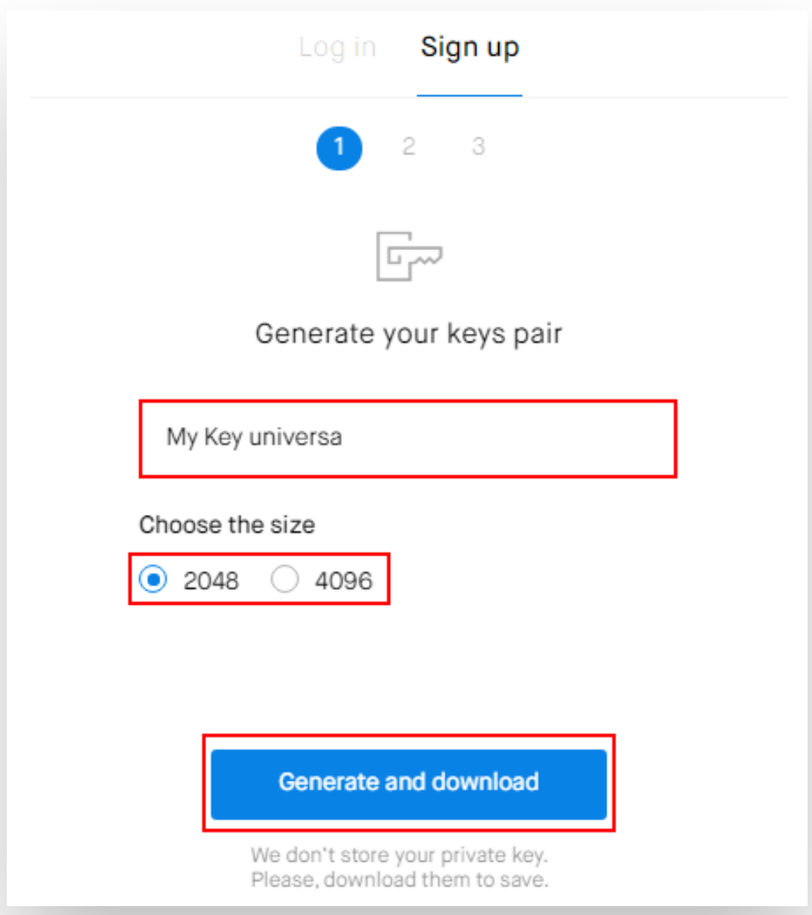


Step 2. Creating a private key.

What is the difference between 2048-bit and 4096-bit keys? The security and access model of Universa is based on asymmetric cryptography with RSA algorithm. A 2048-bit key is sufficient in most cases, while 4096-bit key ensures maximum protection. Please note, transactions in the Universa network which use the longer key may cost more.

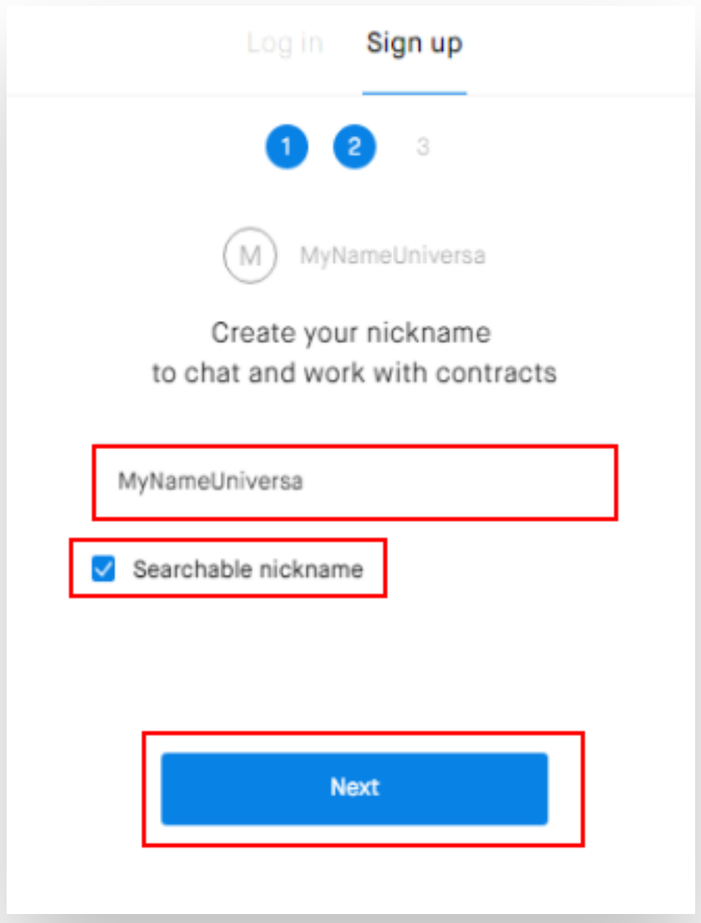
After choosing a suitable key name and length, press “Generate and Download” button. Once your private key has been generated and downloaded, PLEASE MAKE SURE TO STORE IT IN A SAFE AND SECURE PLACE! This file is your key to all your future Universa holdings. If you lose the private key file, you lose control of all your tokens, contracts and other Universa assets!

Attention: Universa administrators and developers will never ask for your private key (even though they might ask for other data, such as public keys and/or addresses, user's nickname in chat/Web Client, Web Client screenshots, browser logs and debugging data available by clicking " Download Local Data" in your profile page; the actual smart contracts can also be requested in individual cases). If you divulge your private key data to other users, administrators or developers, you are doing this at your own peril!



Step 3. Creating a nickname.

Now you need to create a “nick” – a name you will use to chat in Universa web client, work with contracts or for logging in after creating a password. You can also choose to have your nickname searchable (for chatting purposes). Choose any available nickname and press “Next”.

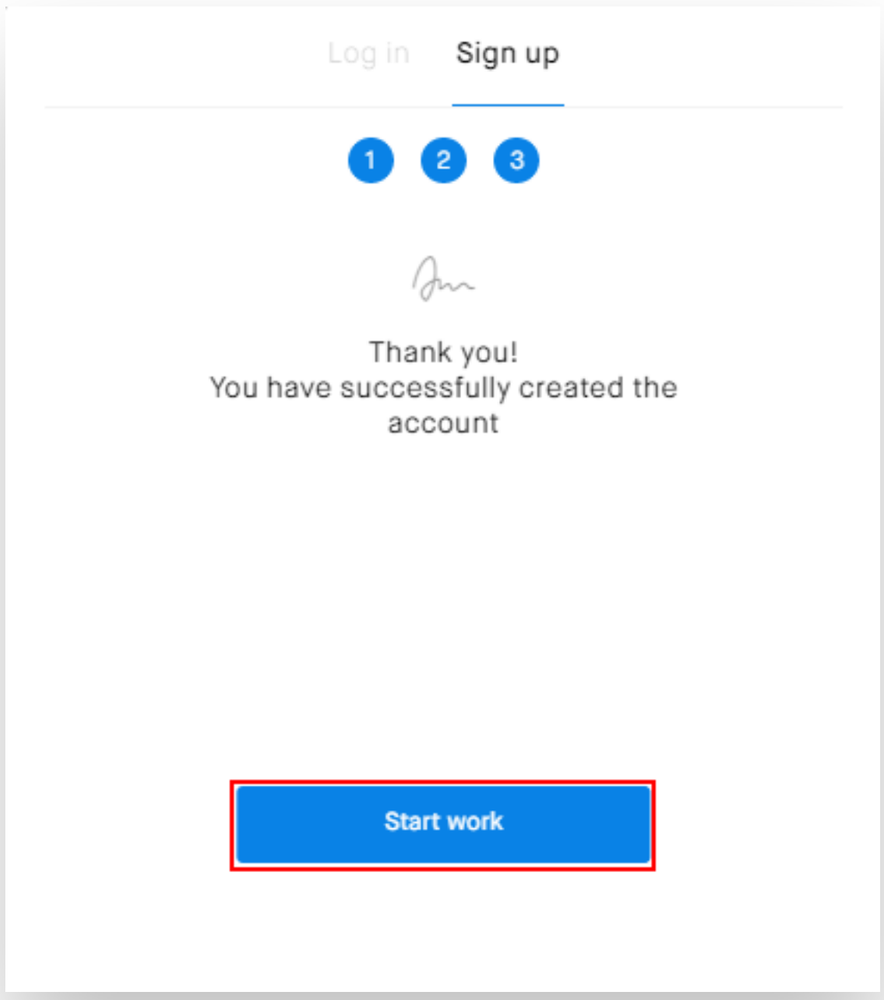


Any Universa user can create one or more unique nicknames.

Note that to find a user in Crypto Cloud (and start a dialog), you need to know their nickname to the letter! Searching by nickname will only show complete match. Due to cryptographic mechanisms being used, the Crypto Cloud does not have a central list of all nicknames registered. Only if you search for a specific nick, you will know whether it has been taken.

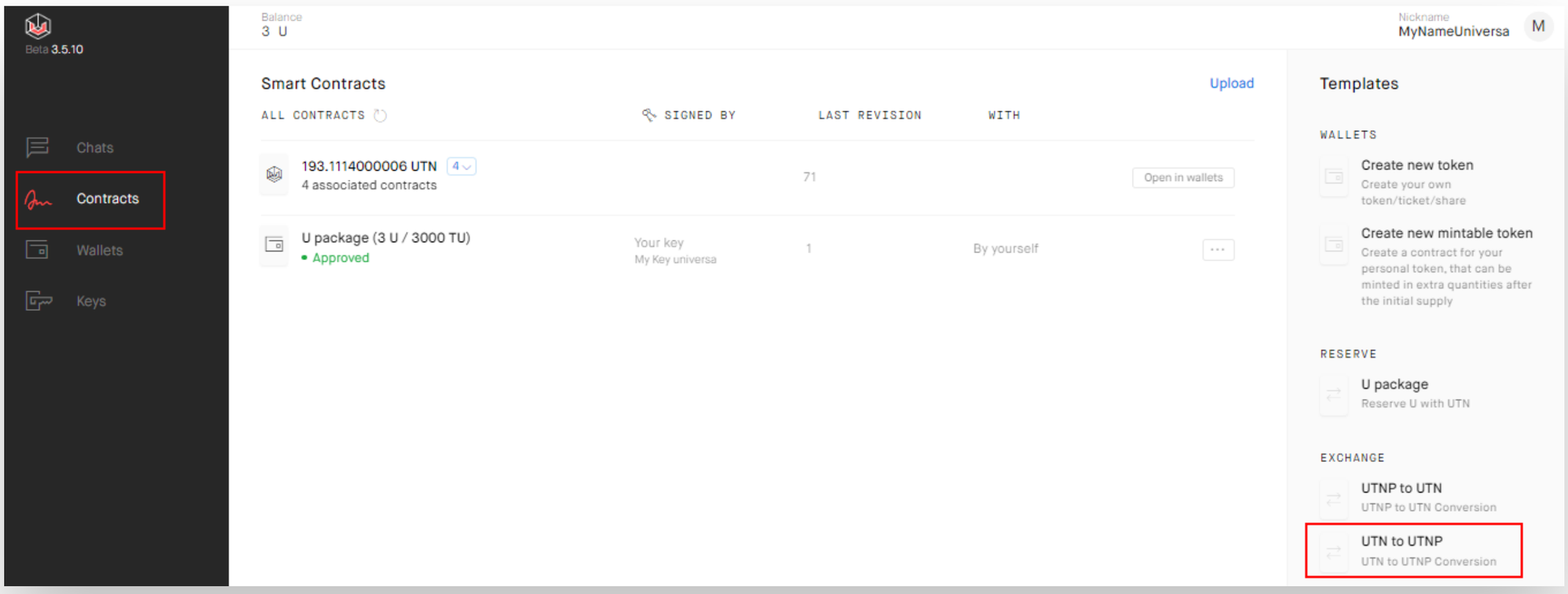
Step 4. Starting to work with Universa network.

Click “Start Work” to confirm you have completed creating your account. Now you have an account with Universa MainNet, your private key and a nickname you can use for logging in and as your chat address.

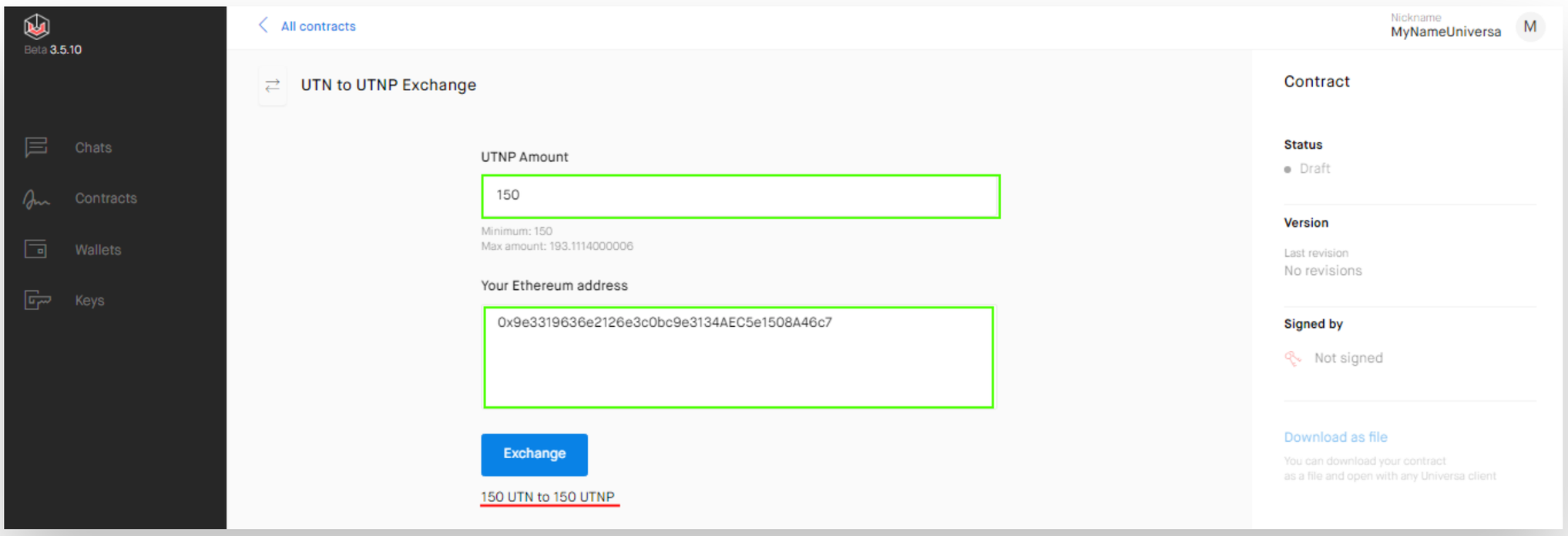


How do I exchange UTN to UTNP?

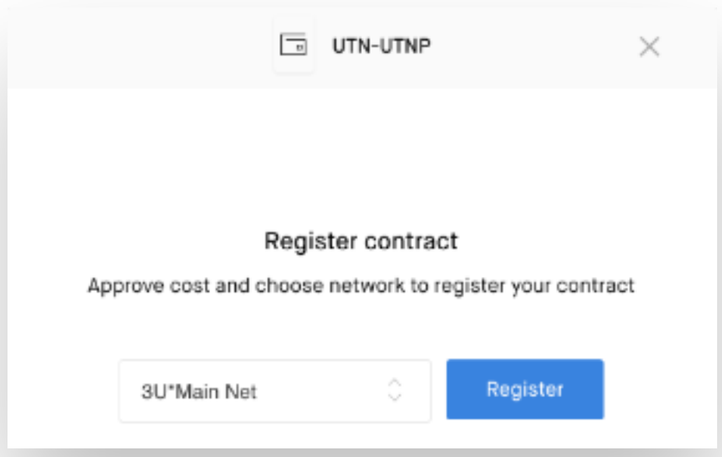
Open the MainNet Web Client and click the “Contracts” link. Next press “UTNP to UTN” button in the lower right corner.



A form will appear. Enter the amount you want to convert to UTNP, the Ethereum address you want to send it to, then click “Exchange”. As of this writing, at least 150 and at most 10,000 tokens can be exchanged in a single transaction.



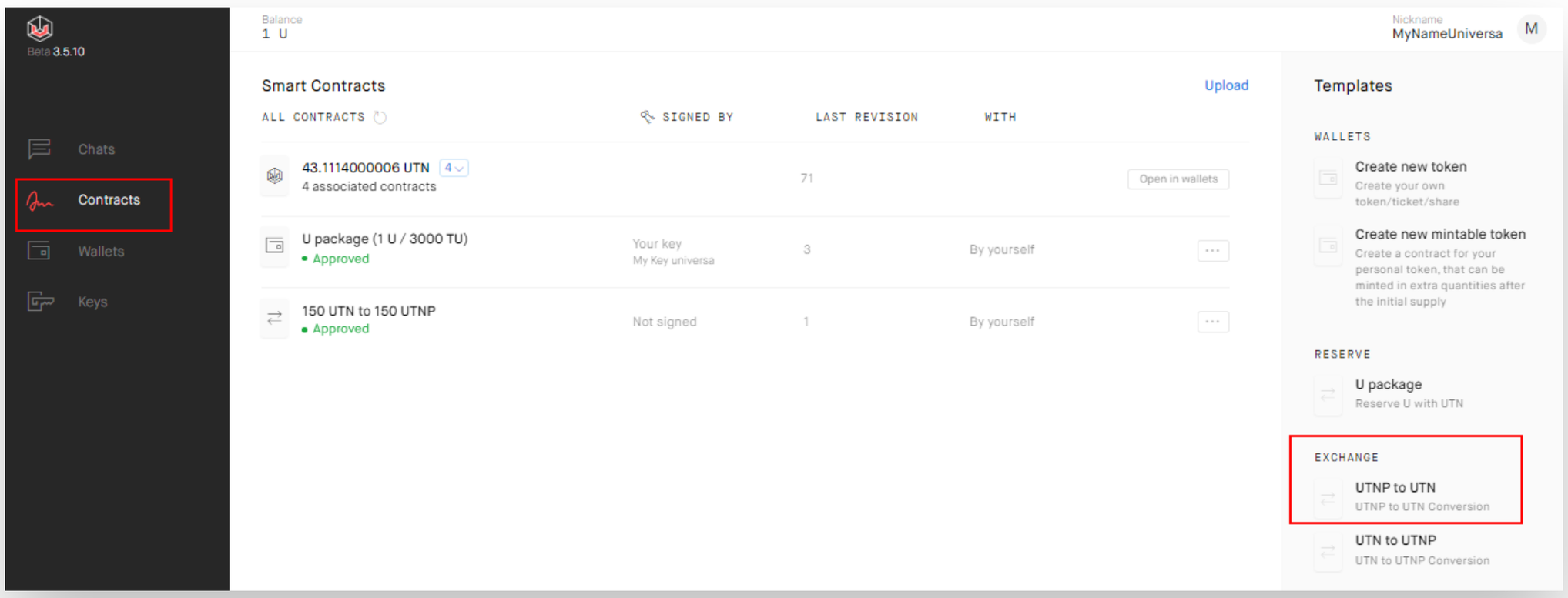
Transaction confirmation window will appear. Here you can see the U amount that will be written off your wallet for this transaction. Press the “Register” button. The window will close and the transaction will be executed.



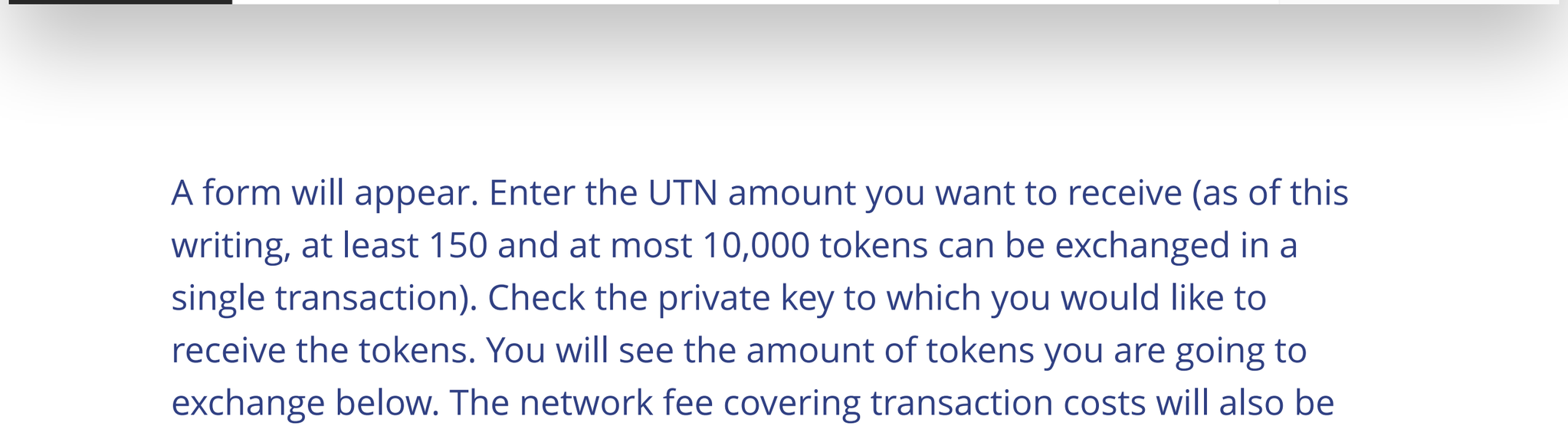
If the transaction is completed successfully, the transaction status in the “Contracts” section will change to “Approved”, and UTNP tokens will be credited to your Ethereum wallet.

How do I exchange UTNP to UTN?

Open the MainNet Web Client and click the “Contracts” link. Next press “UTNP- to- UTN” button on the right.



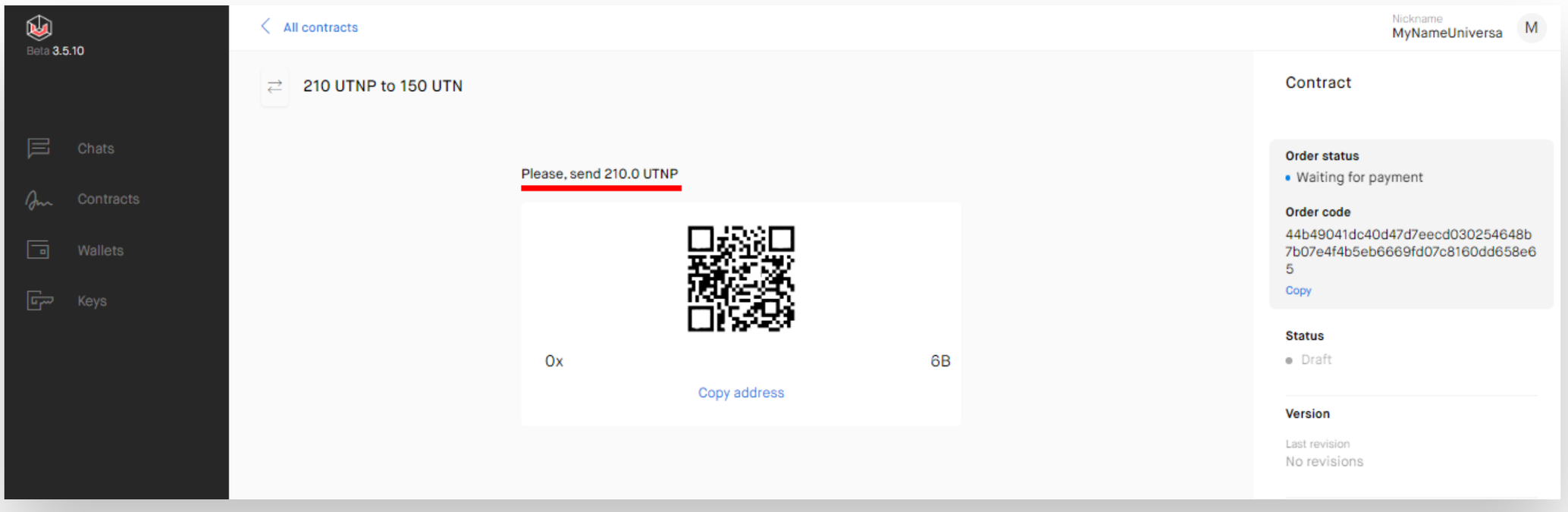
A form will appear. Enter the UTN amount you want to receive (as of this writing, at least 150 and at most 10,000 tokens can be exchanged in a single transaction). Check the private key to which you would like to receive the tokens. You will see the amount of tokens you are going to exchange below. The network fee covering transaction costs will also be shown. Finally, press the “Proceed to checkout” button.



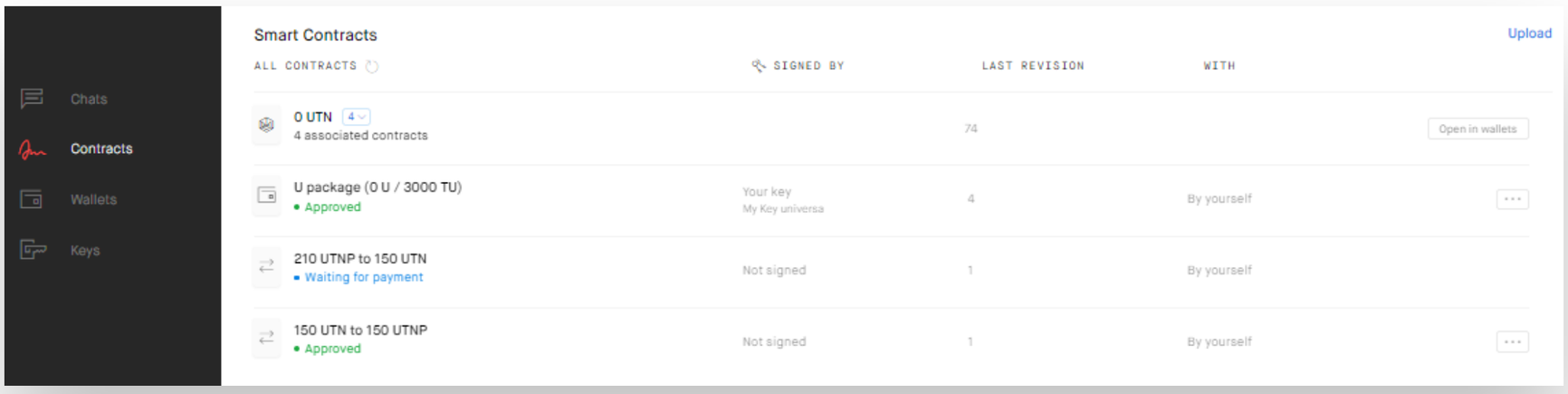
You will see a window with the address to which UTNP needs to be transferred for conversion to UTN. Proceed to transfer the respective amount of UTNP to the address indicated, using any method of ERC20 token transfer (MyEtherWallet, MyCrypto, Trezor, Ledger, MetaMask, etc.).

Warning! Be careful with the transfer. The amount to be credited to the address indicated must be exactly as shown. This is why you are highly recommended to transfer the amount from a personal wallet, rather than withdraw tokens from a cryptocurrency exchange.

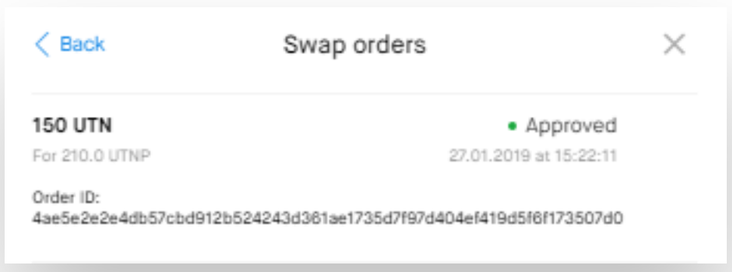
When transferring money from a personal wallet you usually indicate the amount to be transferred and pay fee on top of that amount. When withdrawing tokens from the cryptocurrency exchange, you indicate the amount you are going to withdraw, from which the transaction fee may be withheld. So the actual amount transferred will be smaller than needed. If that case you can wire the remainder of the funds in a separate transaction (transactions), within the time limit indicated!



It may take a while before Universa recognizes the transaction after it is completed (the system will wait for at least 12 confirmations from the Ethereum network).

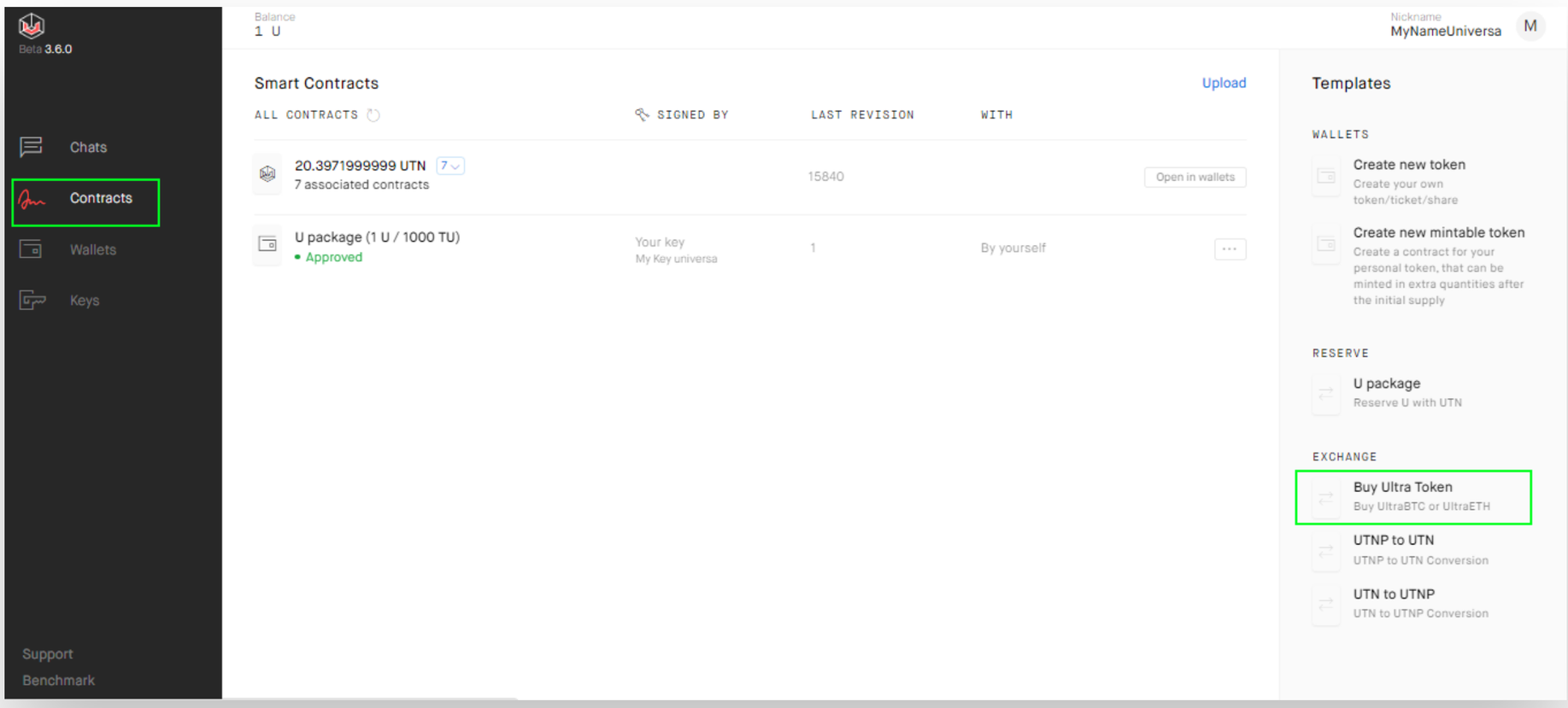


If you go to your contracts page now, you will see UTN, and a success confirmation in the Swap Orders.

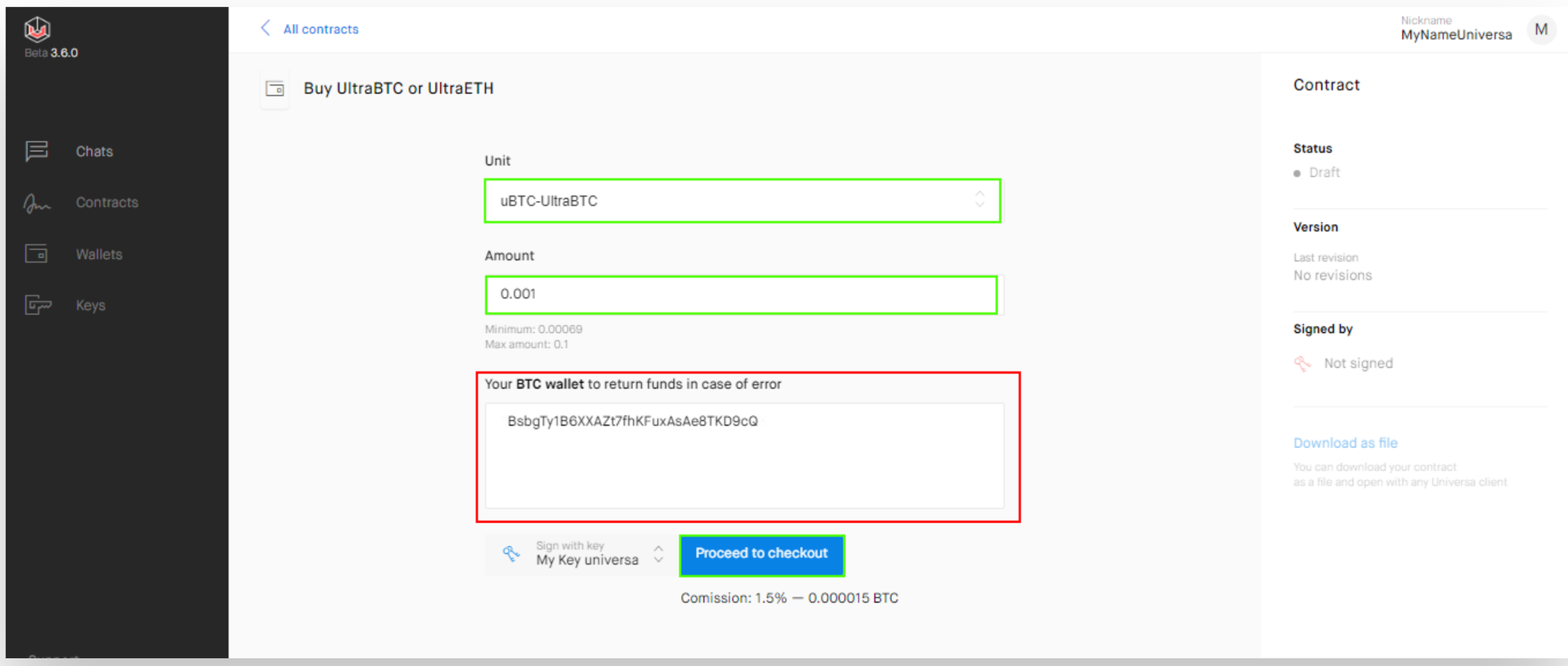


How do I convert BTC (ETH) to UltraBTC (UltraETH)?

Open the MainNet Web Client and click the “Contracts” link. Then click “Buy Ultra Token” on the right.



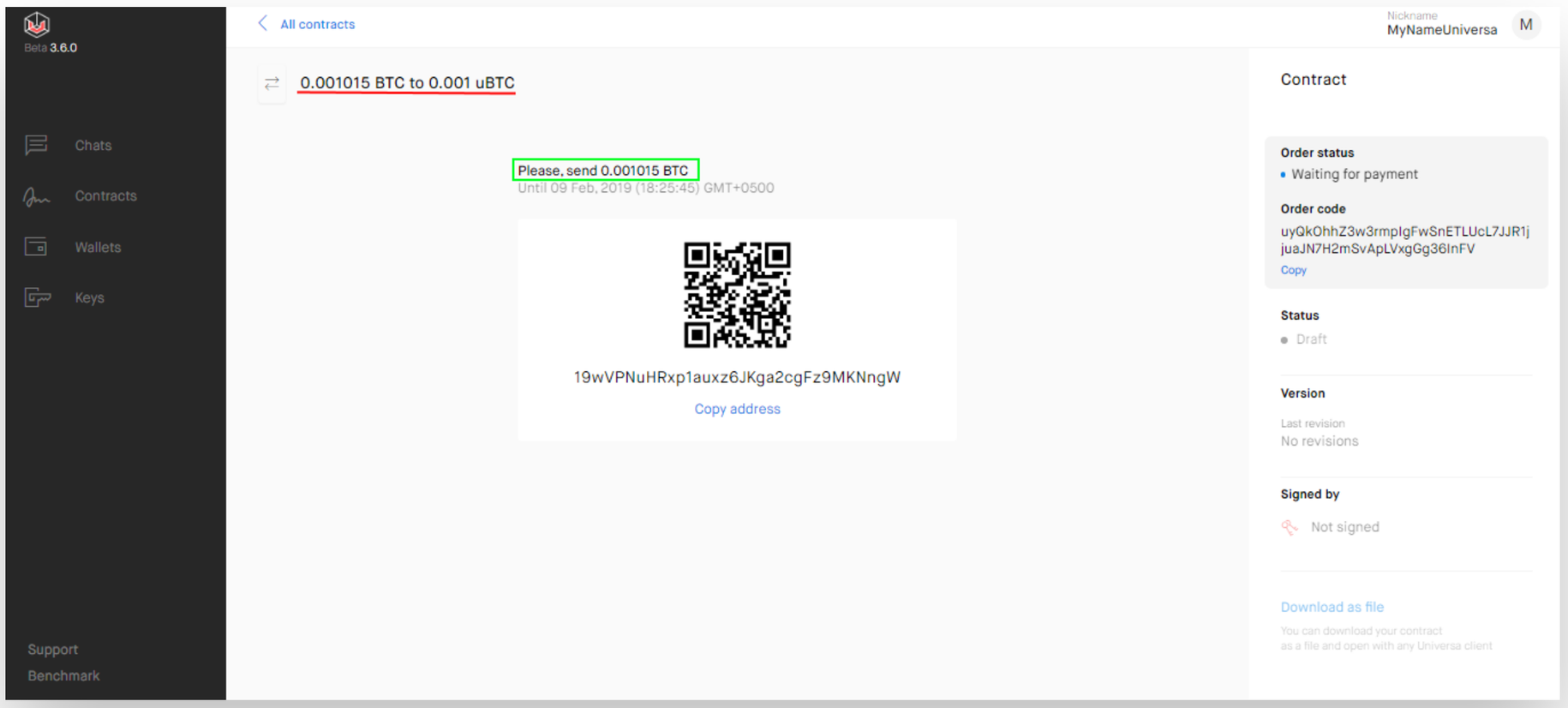
In the form that opens, choose uBTC or uETH, the amount you want to receive and your BTC (ETH) wallet address to which the funds will be returned in case of an error; check the private key to which you would like to receive the tokens. You will also see the network fee covering transaction costs. Next, click the “Proceed to checkout” button.



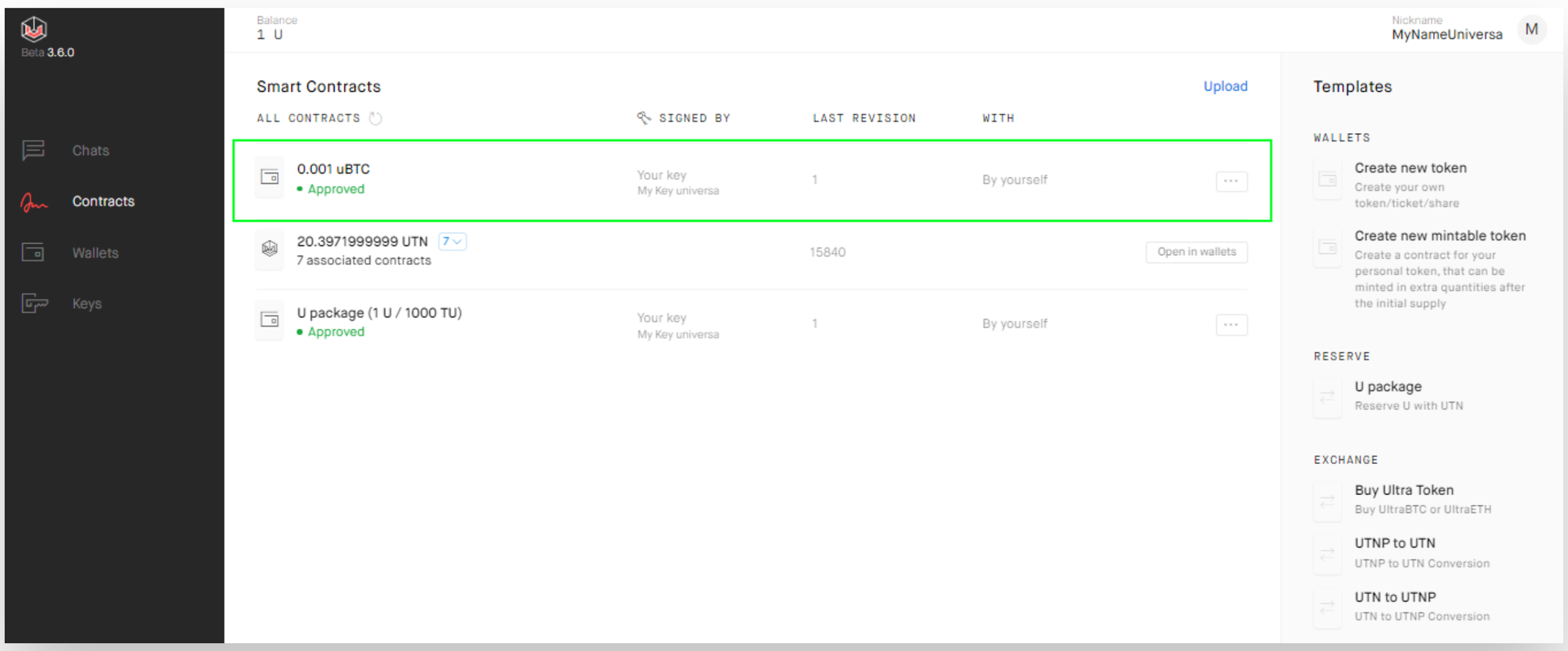
You will see a window with the address to which BTC (ETH) needs to be transferred for conversion to uBTC or uETH. Proceed to transfer the respective amount of BTC (ETH) to the address indicated.

Warning! Be careful with the transfer. The amount to be credited to the address indicated must be exactly as shown. This is why you are highly recommended to transfer the amount from a personal wallet, rather than withdraw tokens from a cryptocurrency exchange.

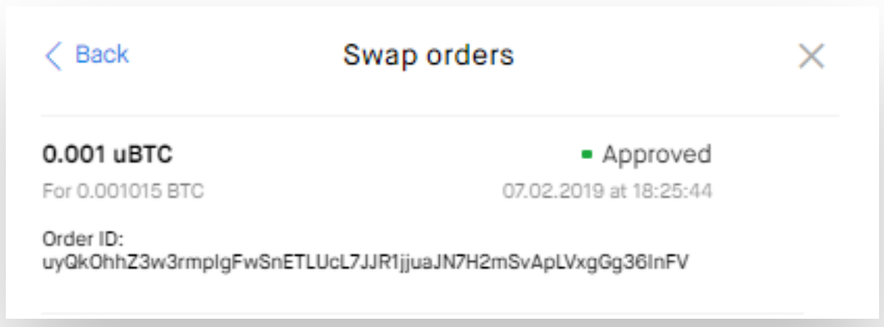
When transferring money from a personal wallet you usually indicate the amount to be transferred and pay fee on top of that amount. On the contrary, when withdrawing tokens from the cryptocurrency exchange, some exchanges show the amount you are going to withdraw, including the transaction fee; so the actual amount transferred will be smaller than indicated. If you accidentally transfer smaller amount than necessary, you can wire the remainder of the funds in a separate transaction(transactions), within the time limit indicated!



It may take a while before Universa recognizes the transaction after it is completed.



If you go to your contracts page now, you will see uBTC or uETH, and a success confirmation in the Swap Orders.



How do I find out if a contract/revision is current?

Enter the HashID of a contract/revision of interest at https://universaexplorer.com and get the status “APPROVED” for a current contract, or “REVOKED”/“UNDEFINED” for a revoked contract.

Current (APPROVED) or outdated status refers only to a specific revision of the contract. After a new revision of the contract is created (in case of tokens, such as UTN, this happens with any spending of the tokens), the previously current revision is automatically recalled (receives the REVOKED status). The REVOKED status is stored in the network for a limited time, to prevent creation of another contract with the same HashID; upon the expiry of storage time, the network “forgets” the contract completely (to save storage space in the blockchain and improve performance), and the contract changes status to UNDEFINED.

What else can be done with Universa Block Explorer?

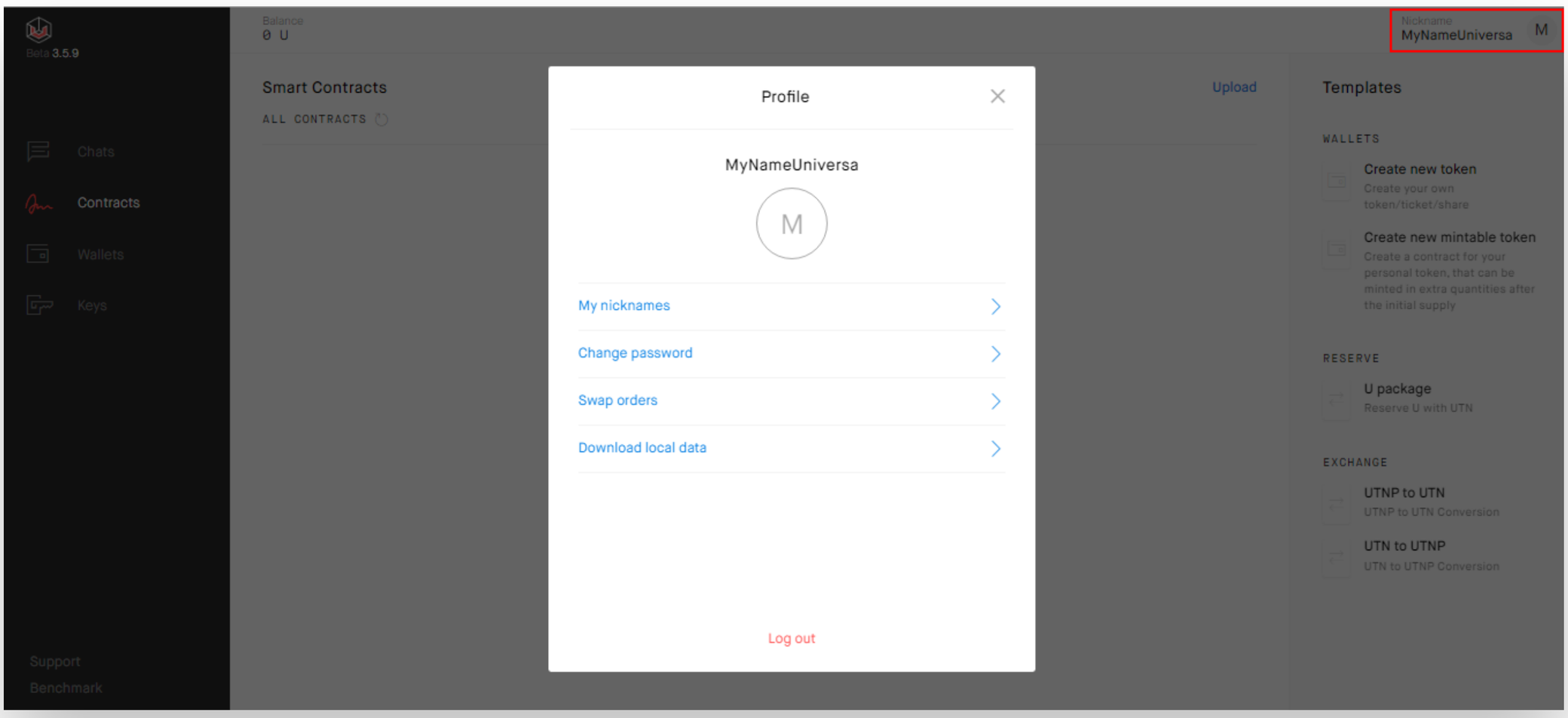
Since Universa does not store the actual block content, the information you can access in the Block Explorer depends on what data you have available.

If you only know the HashID of a contract/revision, then (as a rule) you can only find out if that contract is current. In some cases (if the contract body is stored publicly using Universa's optional advanced features), you can see the body of the contract as well; an example of that arrangement is https://lnd.im/utn – the root contract of UTN token.

If you have a specific Universa smart contract (usually in .unicon format), you can upload it to Universa Block Explorer. Then you will be able to see whether it is current and view its content as well.

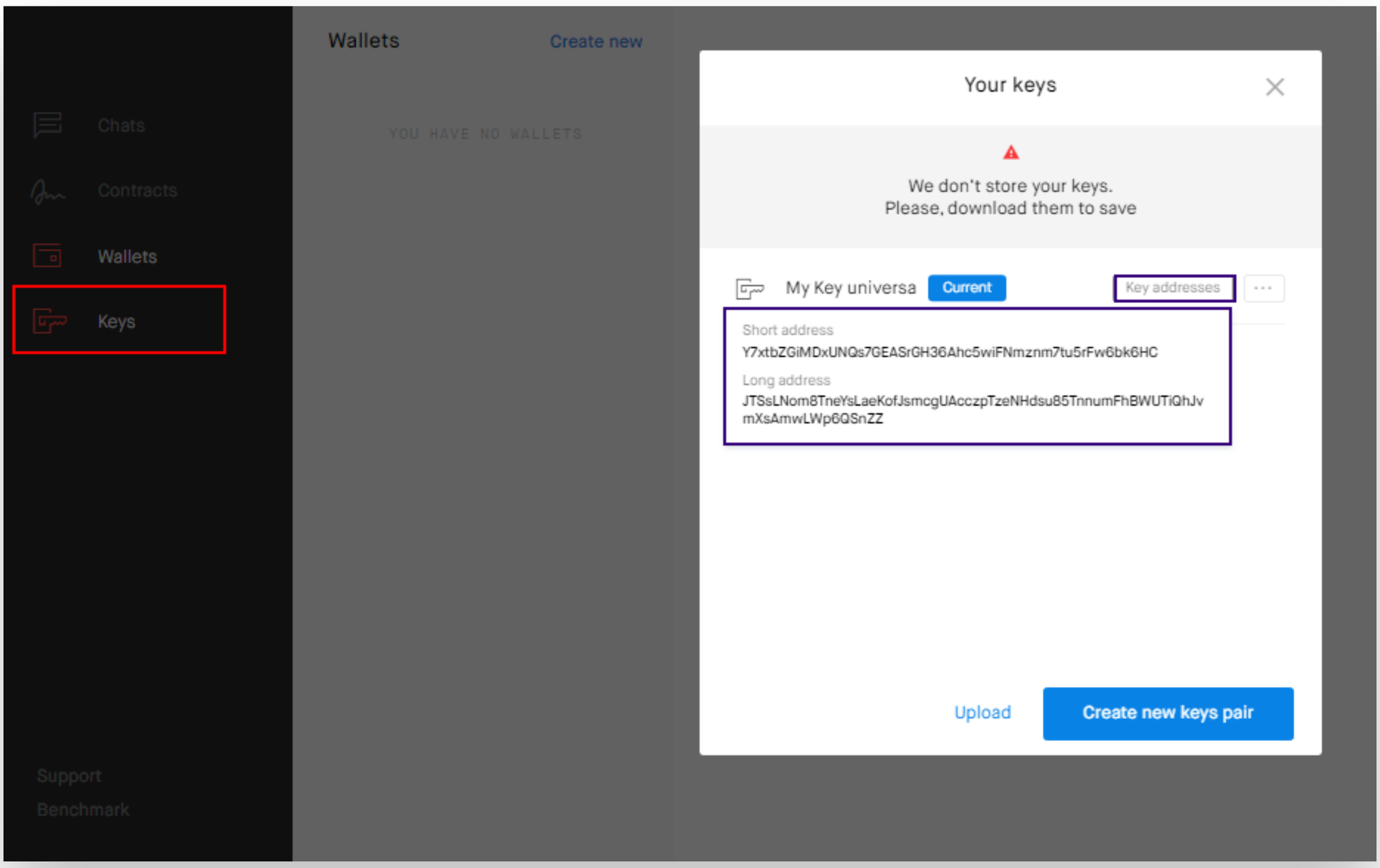
Where is my profile in Universa MainNet web client?

To view your profile, click your link in the upper right corner. From here you can manage your profile, create or change nickname/password, view order history or log out.



How do I find my public key address?

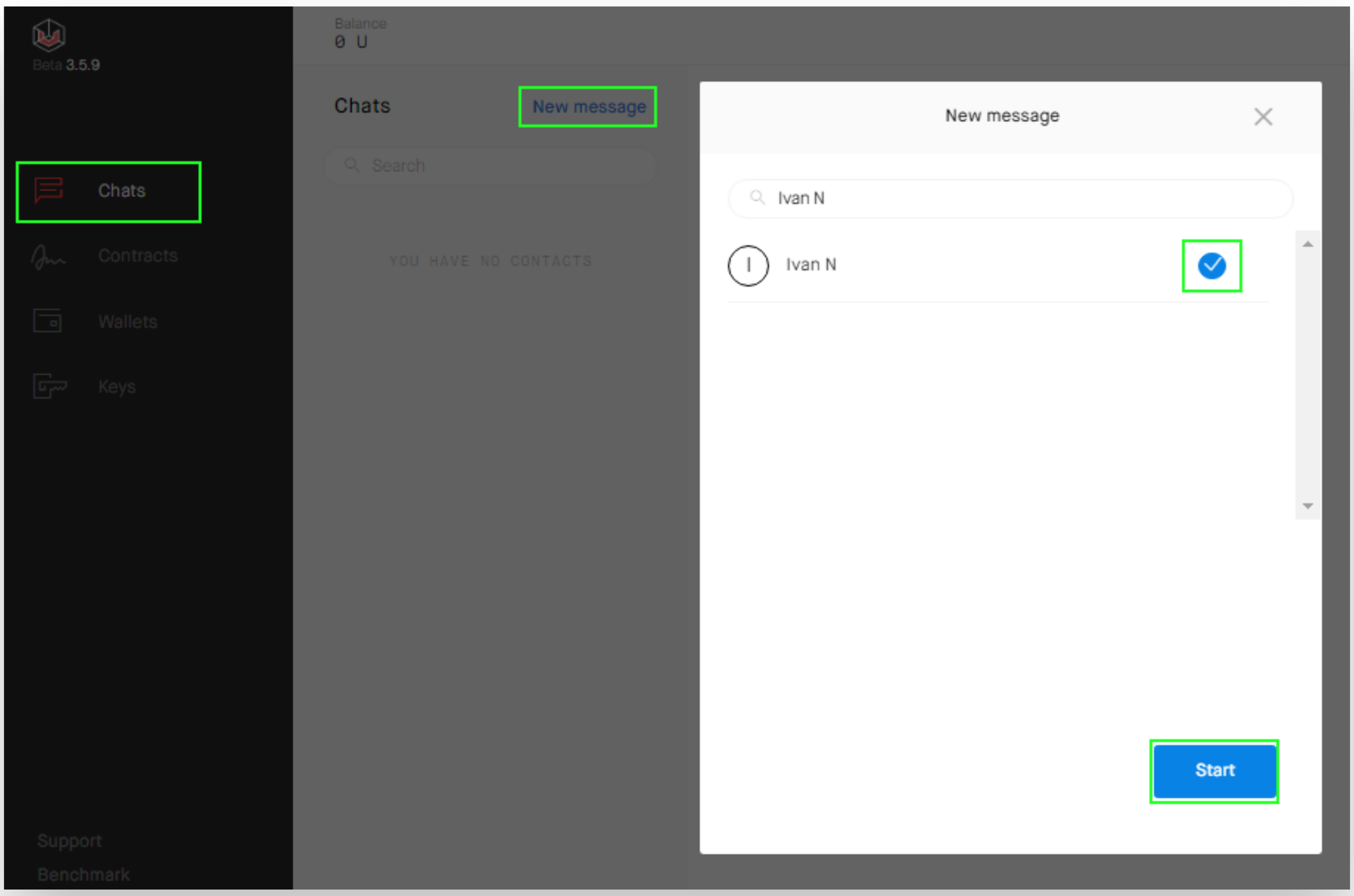
Your address is a short alternative representation of your public key, which is convenient for filling various forms. For your convenience, you can use a short address (51 character long) or long address (72 characters long). Both are related to the same public key; the long address ensures maximum security, but even the short address is enough in most cases.



What is the chat for?

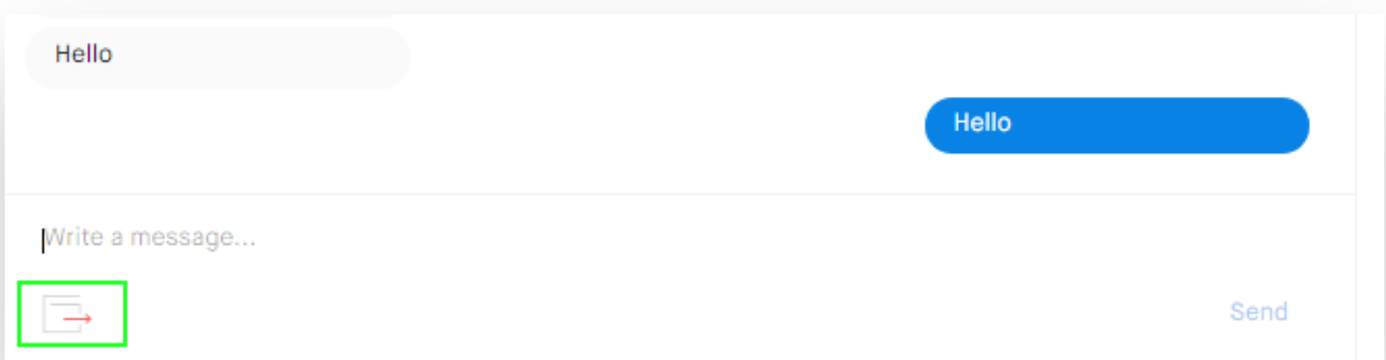
One convenient feature of the Universa MainNet crypto cloud is the Chats function. You can start a dialog with any other crypto cloud user, exchange messages and even send and receive tokens or smart contracts. Crypto cloud chats also encrypt all the data on the user's side, but this is a much more advanced form of encryption: all the information in a chat arrives to the cloud in encrypted form, and only the chat participants can decode it.

Log in to MainNet Web Client and click "Chats" tab, then click "New message", enter the name of the user you want to write to, then click "Start".

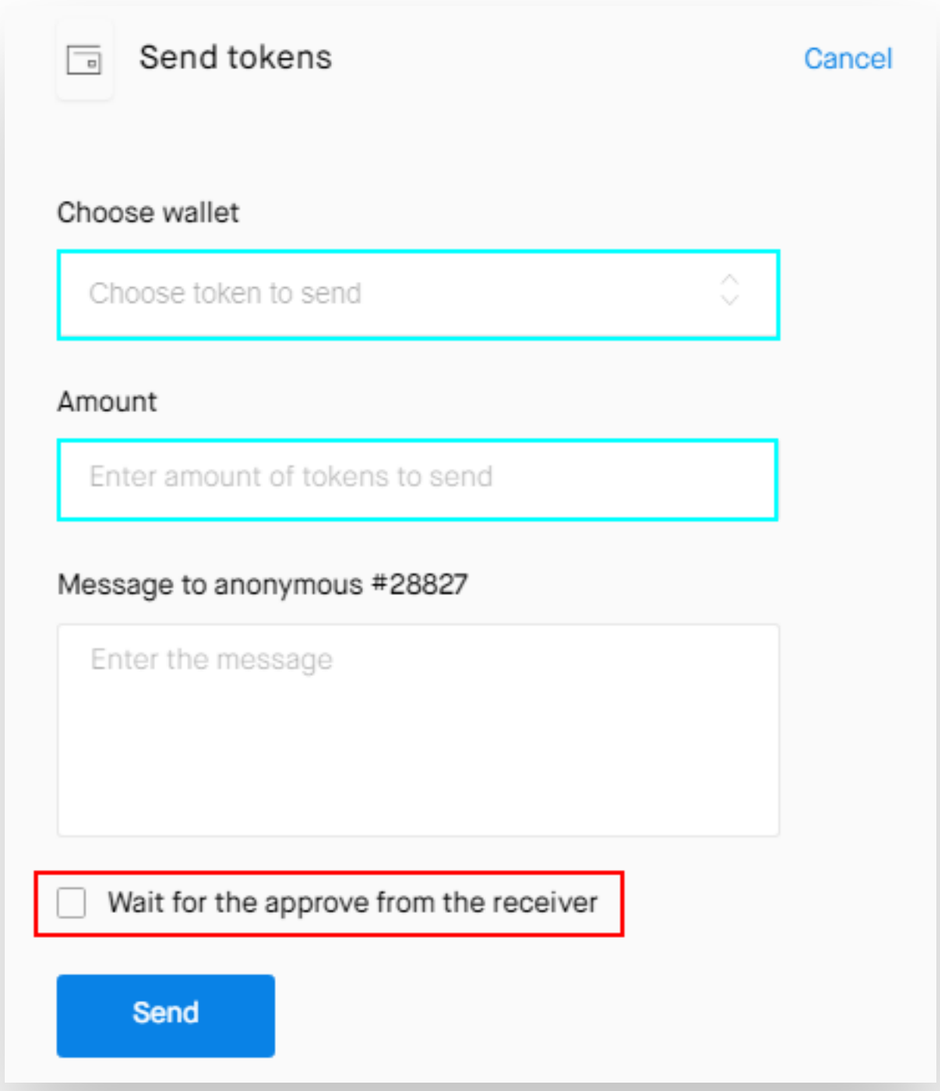


How do I send smart contracts within the Universa network?

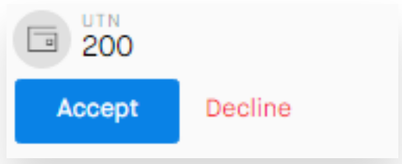
At the bottom of a chat you can find a wallet icon; click it to open a menu.



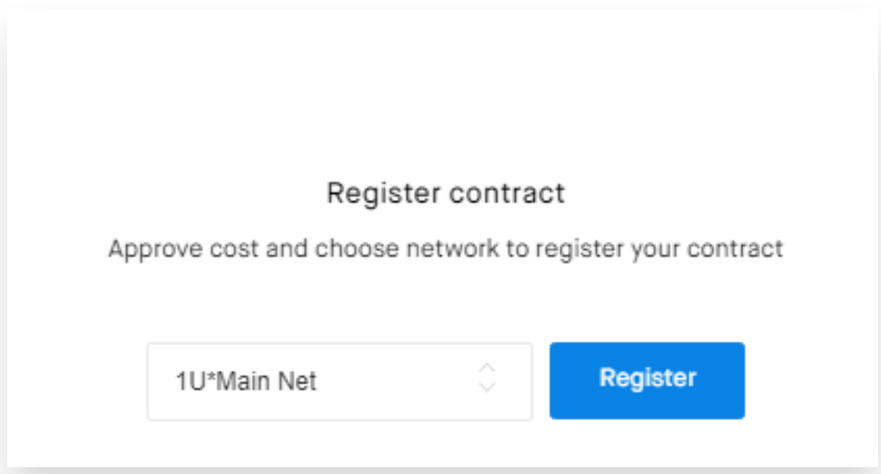
Here you can choose a contract, enter the amount and write a message if necessary. Then click “Send”.



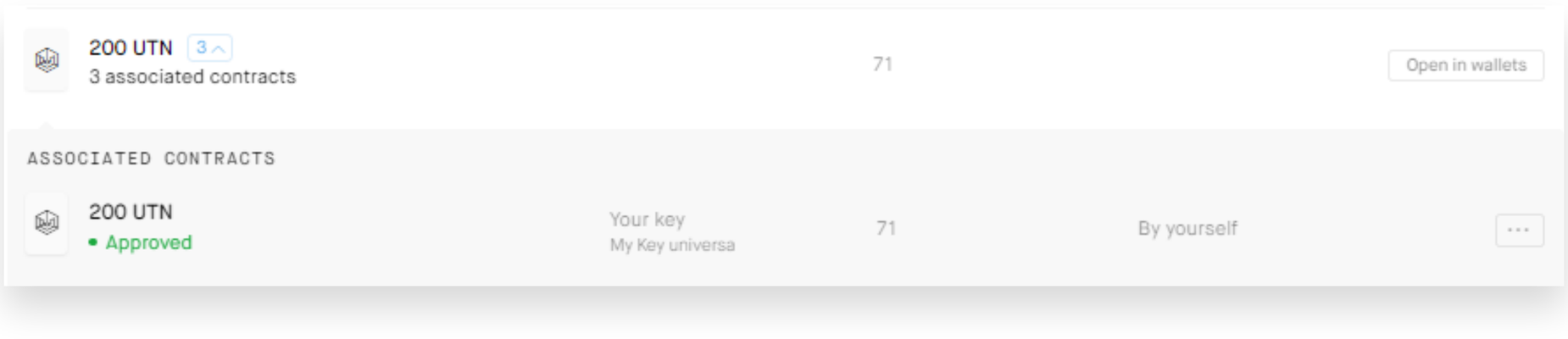
Please note: if you decide to choose the “Wait for the approve from the receiver” feature, the other party in the dialog has to confirm the transaction by clicking the “Accept” button.



You have to pay the transaction fee.



Once the transaction is completed successfully, the recipient will see the contract in the “Contracts” section of their Web client.



How do I withdraw UTN/UTNP tokens acquired during the Token Generation Event?

To withdraw UTN tokens acquired during the TGE (or received as a reward for participating in the bounty campaign) in MainNet, log in to check.universablockchain.com site using the credentials you used during the registration.

A window will open showing user name and the tokens quantity.

Click the “Withdraw” button to initialize the withdrawal procedure.

Once you complete the UTN withdrawal form, you will receive a message to the email address you specified for withdrawal. A video guide with a detailed description of all steps is available at https://youtu.be/ObPXKd8oail

What if I completed the withdrawal form but UTN token withdrawal email never arrived?

If that happens, please write to our support at support@universa.co or contact administrators of our Telegram groups, and provide the following data:

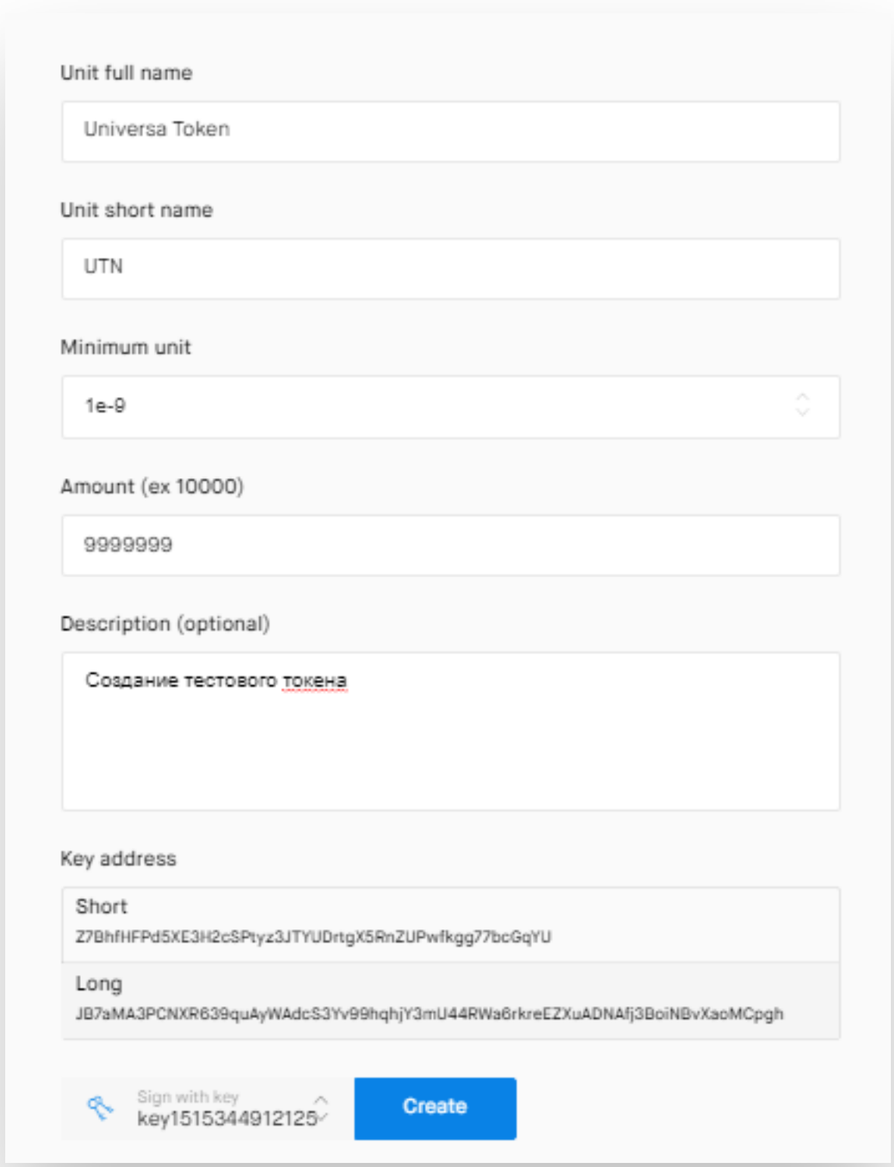
1. Your personal link at check.universablockchain.com
2. The email specified in the withdrawal form.

IMPORTANT: After you complete the form for withdrawal to UTNP, the tokens are disbursed in batches or “tranches”, once about every 3-4 weeks. If it has been more than six weeks since you clicked the “Withdraw” button and you still have not received your tokens, please contact the support.

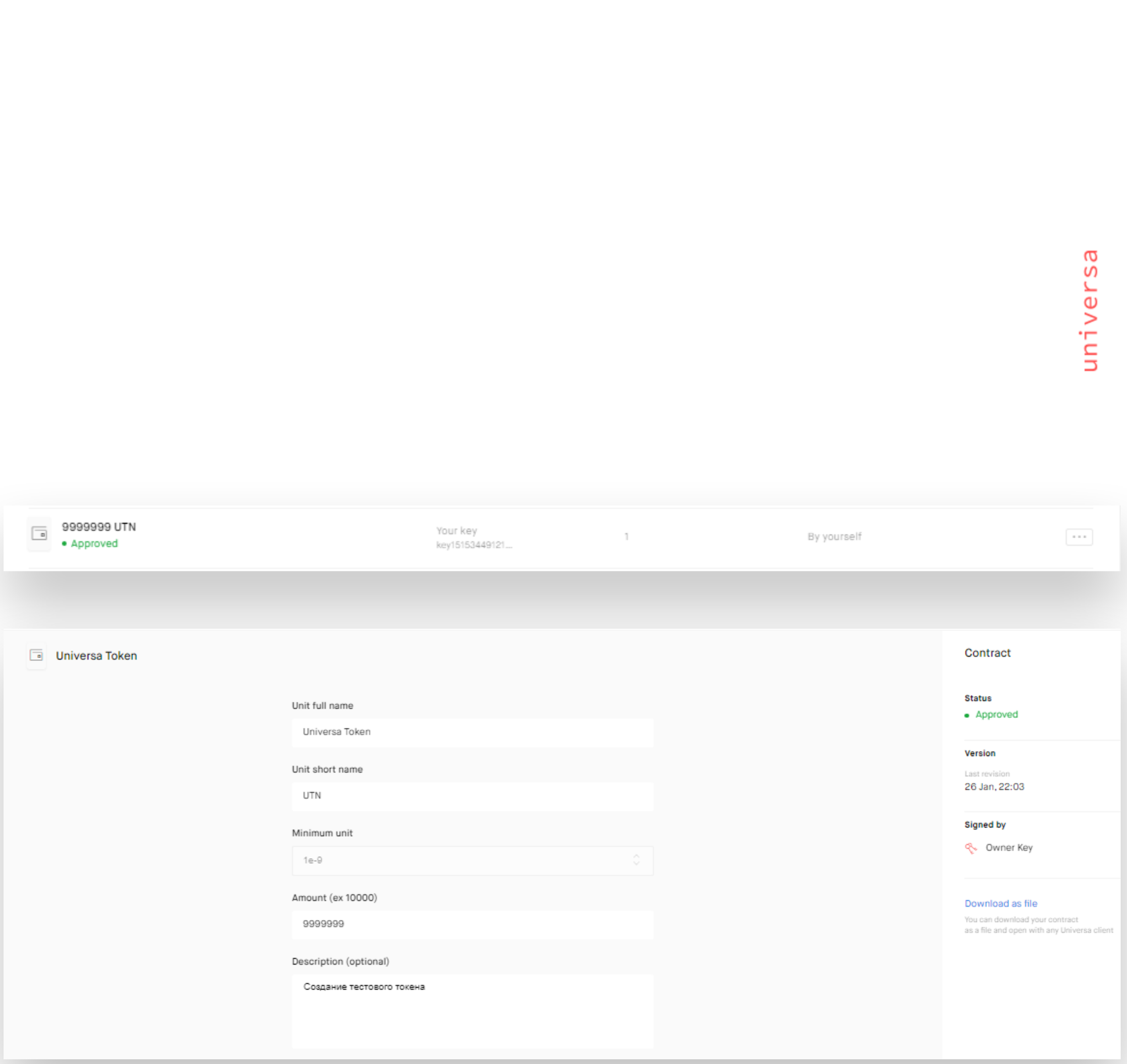
How do I create my own token in the Universa network?

IMPORTANT!!! Before creating a token, you need to decide whether you are planning further issues of the unit.

1. Go to “Contracts” page and click “Create new contract” on the right for an ordinary token or “Create new mintable token” for tokens with further issues.
2. Fill out the form for your new token:
    a. Unit full name: full name of your token (e.g., Universa Token);
    b. Unit short name: abbreviated name of your token (e.g., UTN);
    c. Minimal unit: minimal fractional unit of the token (choose “1e-9”, which represents 9 decimal places, unless you have other requirements);
    d. Amount: the amount of tokens you are planning to issue;
    e. Description: description of your token (optional);
3. Click “Create” at the bottom and pay the transaction charge for creating the token.



The new contract will be registered within seconds.



Attention: currently (as of March 2019) smart contracts (including tokens) created via the web interface have a limited lifespan of 5 years. If you need to change this time, use Uniclient (kb.universablockchain.com/uniclient/66) to analyze the contract structure and create them completely by hand!

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How do I add UTNP token to MyEtherWallet/ MyCrypto

Click “Add Custom Token” and enter the following values:

- Token Contract Address:
  0x9e3319636e2126e3c0bc9e3134AEC5e1508A46c7
- Token Symbol: UTNP
- Decimals: 18

What do I need to create a node?

If you want to operate a node, you need to complete KYC (Know Your Customer) procedure and have the hardware meeting technical requirements: a 16-core CPU with 32 GB RAM, solid state drive (SSD) of at least 256 GB, at least 1 GBps Internet connection (up and down – this is available at most data centers). Software requirements: OS Debian Linux stable/Stretch 9.3+ AMD64

You also need to acquire a license from Universa.

For more detail, please click here: kb.universablockchain.com/node_owner_central/31

What is the KYC procedure for cash withdrawal after selling tokens?

Users investing USD 10,000 or more will have to complete a mandatory simple KYC procedure. Universa team also reserves the right to enable KYC procedure for other users if necessary.

What is the total supply?

The total supply of tokens is the total number of tokens sold (66%), plus tokens for the Universa Foundation (20%), plus tokens for Universa team (10%) and tokens for consultants, partners and bounty program (4%).

The exact distribution can be found below:

- Tokens for sale – 3,298,608,688 (66%)
- Tokens for the Universa Foundation – 999,578,390 (20%)
- Tokens for Universa team – 499,789,195 (10%)
- Tokens for consultants/partners/bounty program – 199,915,678 (4%)

Based on these figures, the total supply is 4,997,891,952 (100%).

How much does UTN cost?

The current price can be seen at https://coinmarketcap.com/currencies/universa/

What are the team’s plans for token value growth?

UTN token value is set by the market based on the current supply and demand. Internal priorities and strategic goals of the company remain a commercial secret until they are published.

UTN token value is based on the current market supply and demand. Universa does not provide any kind of financial services (including, but not limited to, consultations on investment-related issues)

What exchanges are Universa tokens traded in?

Currently UTNP tokens are traded in these exchanges:

- Livecoin: https://livecoin.net
- Bitfinex: https://bitfinex.com
- IDCM: https://idcm.io

What are “Hypertokens”?

Another type of Universa tokens currently in existence are the so-called “Hypertokens”, namely UltraBTC and UltraETH (as of this writing). They ensure direct translation of third-party currencies/values to Universa smart contracts and are traded within Universa at 1:1 rate (do not forget transaction charges!) with the original coins they are based on (UltraBTC is based on Bitcoin in Bitcoin Core blockchain; UltraETH is based on Ether in Ethereum blockchain).

What are U Bots?

U Bots are distributed self-executable smart contracts. Effectively, these are smart contracts with a fully-featured client built in: secure, signed smart contract applications are supported by Uniclient. The U Bots network is based on this technology. Scripts can be used to write complex contracts and their revisions in JavaScript language.

Where can I find Universa whitepaper?

You can read our Whitepaper here: universablockchain.com/files/whitepaper.pdf

What Internet channels does Universa use?

- Website: https://universablockchain.com
- Twitter: https://twitter.com/Universa_News
- Telegram: http://t.me/uplatform
- Medium: https://medium.com/universablockchain
- Reddit: https://reddit.com/r/Universa/

Where is Universa registered?

See https://kundmachungen.li/AktuellsteNeugr%C3%BCndungen/Details?nr=FL00025881644&Firma=UNIVERSA+HOLDING+AG&ort=Ruggell&datum=25.07.2018

Where is Universa Foundation registered?

See http://www.curacao-chamber.cw/services/registry/search-company

What projects use Universa?

- https://smartgold.so/
- https://fastr.biz/
- https://mydocuments.io/

How else can Universa be used?

- Transfer of title, in all its flavors (e.g., exchange, swap, acquisition in the course of contract execution).

- Executing, performing, canceling and disputing a contract, including ones that involve change of property title in all cases (penalty for cancellation or breach of contract, reward, bonus, fine for violating payment obligations, etc.). The most basic example is a purchase contract; the smart contract in this situation includes transfer of title in the property being purchased after the buyer advances the respective amount to the seller's account. As soon as that happens, the seller confirms the condition for title transfer has been met. The property then changes hands automatically, without any bureaucratic red tape;

- Electronic keys and identifiers – automating operations like receiving services (e-token), discounts, physical access (managing access control systems: locks, turnstiles, unlocking car controls, etc.);

- Automatic cargo tracking – important for logistics companies;

- Automating gas pumps, toll booths, parking lots. A smartphone is used as a transponder, sending a request automatically on approaching the necessary infrastructure; confirmation is received and the respective amount is debited from the user's account without human involvement;

- Smart home – all intellectual devices can be linked to one another via the Internet or by purchasing a special node to control interaction between all devices;

- Fare collection in public transport, booking hotel rooms, etc.;

- Validation of real estate title – Universa can be used for the purposes of operating Unified State Real Estate Register, state registration of real estate titles and transactions, state cadastral registration of real estate and provision of information contained in the Register;

- Blockchain can be used for factoring transactions (financing suppliers against assignment of their accounts receivable) helps engage an unlimited number of suppliers and banks while maintaining confidentiality of transaction information, to record the information on goods/money relationships between the transaction participants. Automating verification of shipment documentation and eliminating risk of fraud and loss of confidentiality; reducing operating costs, increasing speed and convenience of factoring payments;Automating gas pumps, toll booths, parking lots. A smartphone is used as a transponder, sending a request automatically on approaching the necessary infrastructure; confirmation is received and the respective amount is debited from the user’s account without human involvement;

- Digital platform for knowledge exchange and circulation of intellectual property, primarily copyright and patent law items: scientific, literature and art works, educational content, publications, 3D-objects and models, data objects and fragments, descriptions of genetic information fragments, photographs, etc. – recording the fact of creation or usage, handling of intellectual property without human involvement while guaranteeing validity of the respective information. Instant execution of contracts without special legal knowledge and automatic monitoring of performance conditions using smart contracts;

- Moving electronic patient profiles into a single database, with accounting, monitoring and control of patients' health;
- Conducting and registering transactions (e.g., housing rent and purchases), conducting auctions and contests, utility management, distributing subsidies, cadastral registration.

What is the consensus algorithm Universa uses?

Universa does not use Proof-of-Stake or Proof-of-Work – Universa uses Proof-of-Authority (BFT-safe) protocol. Universa does not wait for a block to be created; each revision of a smart contract is a new block. There is no need to store and revalidate the entire blockchain. Universa keeps proof of contract validity.

Enter the HashID of a contract in universaexplorer.com and get its status – "APPROVED" for a current contract, or "REVOKED"/"UNDEFINED" for an outdated contract.

Nobody knows what stands behind this HashID – a deed of gift for a two-bedroom apartment in downtown Moscow, ownership of 10 billion UTN or a three-month gym pass.

Let's repeat: the system only stores validation of the facts/data, not the data itself. It is impossible to "roll back" transaction history; once a transaction has been executed, it has been executed; no need to wait for "six confirmations".

We at Universa are confident blockchain is a growing technology that opens up numerous opportunities that have never existed before and can address all sorts of tasks thanks to its high speeds, low costs and ultimate security that cannot be maintained with the older consensus mechanism using mining.

For more detail, please see kb.universablockchain.com/p/56

What programming languages is Universa written in?

Scala/Java, JavaScript.

What cryptographic algorithms are used in Universa?

RSA (with 2048-bit and 4096-bit keys); AES-256; GOST R 34.11-2012 “Streebog”/SHA-2/SHA-3.

Where can I find more technical information on the Universa platform?

Our Knowledge Base: kb.universablockchain.com has it all.

You are recommended to start with this article: kb.universablockchain.com/basics_and_main_concepts/59 — it will answer most of your questions!