JBCNConf 2019 – Blockchain Workshop Prerequisites

Introduction

Get ready for the Blockchain workshop. We recommend that you download these resources before attending the workshop since we cannot guarantee the quality of the on-site internet connection.

This guide explains how to launch an Ardor node, create an account in the Ardor Testnet Wallet, how to get Testnet tokens and configure the development environment in order to follow the blockchain workshop.

Download Resources

We recommend that you download these resources before attending the workshop since we cannot guarantee the quality of the on-site internet connection.

1. Download the Ardor 2.2.3 installer for your favorite platform:
   - Windows - https://www.jelurida.com/ardor-client.exe
   - Mac - https://www.jelurida.com/ardor-installer.dmg
   - Linux - https://www.jelurida.com/ardor-client.sh
   - Zip file - https://www.jelurida.com/ardor-client.zip
2. Download the Ardor Testnet blockchain database: https://www.jelurida.com/Ardor-nxt_test_db.zip
3. Download and install OpenJDK 11 for your platform https://jdk.java.net/archive/
4. Download and IntelliJ IDEA community edition https://www.jetbrains.com/idea/download/ - the ultimate edition is supported but not required.


Optional steps

The following steps are optional as we will go over these steps together at the beginning of the workshop.

1. See getting started guides here https://ardordocs.jelurida.com/Getting_started
2. Install the Ardor software in testnet mode, see https://medium.com/ardor/blockchain-ardor-part-8-tutorial-on-downloading-the-ardor-testnet-f57b8007ff8c - replace 2.1.0e with 2.2.3 in all places. (You can follow Step by Step guide installation below in the document)
3. Download the testnet blockchain, there are two options:
   - Run the node and let it download the testnet blockchain, this can take several hours.
   - Unzip the blockchain database you downloaded in step 2 above into your user folder according to the instructions specified in the zip file. See also https://ardordocs.jelurida.com/Faq#User_directories_per_product_and_platform
4. Run the node and create a new account https://medium.com/ardor/blockchain-ardor-part-2-creating-an-account-on-the-ardor-platform-802f4b12d475

5. Fund your new testnet account with ARDR and IGNIS tokens by requesting here
   https://www.ardor.world/en/faucet_ardor/ and here
   https://www.ardor.world/en/faucet_ignis/
   (You can follow the instructions Fund your account with IGNIS and ARDR tokens below in
   this document)
6. Configure the IntelliJ dev environment as shows in
   https://wiki.jelurida.com/Lightweight_Contracts#Setting_Up_the_Development_Environme
   nt

Step by Step guide installation of the Windows Ardor client:

Open your web browser and type in https://jelurida.com and you will land on the page pictured
below.
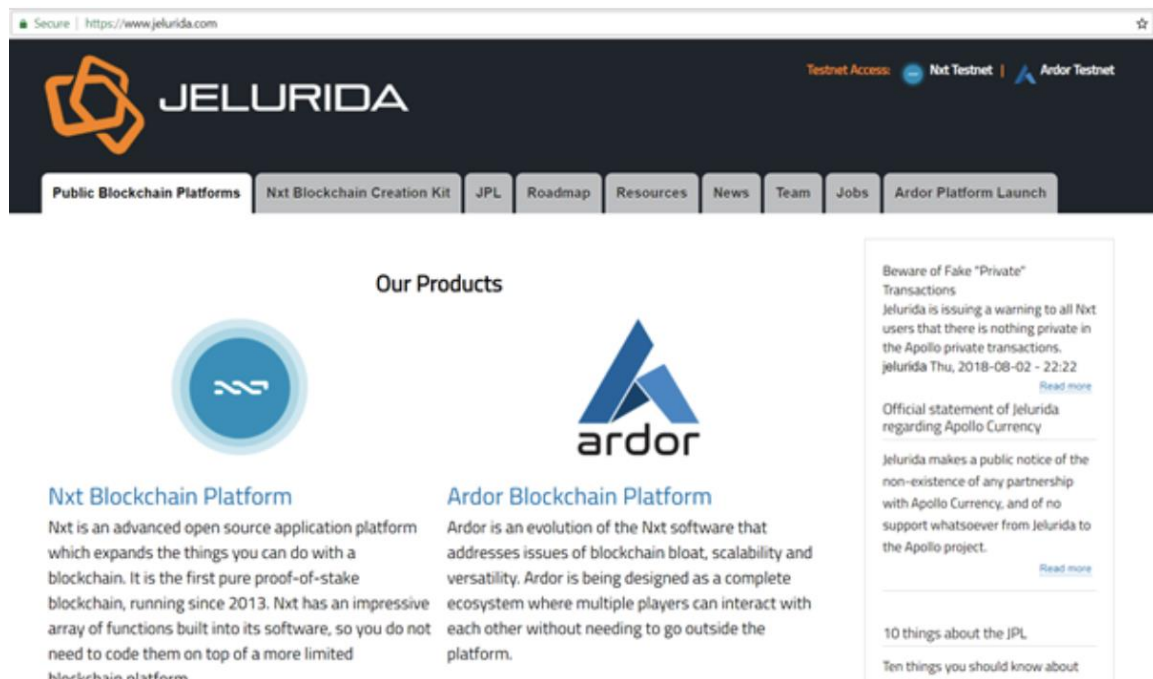
Scroll down on the homepage until you reach the "Ardor Downloads" section with various
download options for different operating systems. You will notice a stable release.

Nxt Downloads (stable production release 1.11.15):   Ardor Downloads (stable production release 2.2.3):

- Windows Installer
- Mac Installer
- Unix Installer (sig)
- Platform Independent Zip Package (sig)
- Android Mobile Client
- Release Notes | Full Changelog | GPG Key
- Nxt Source Code | License

Blockchain download:
Nxt production | Nxt testnet

Live testnet access:
Nxt testnet wallet

- Windows Installer
- Mac Installer
- Unix Installer (sig)
- Platform Independent Zip Package (sig)
- Android Mobile Client
- Release Notes | Full Changelog | GPG Key
- Ardor Source Code | License

Blockchain download:
Ardor production | Ardor testnet

Live testnet access:
Ardor testnet wallet
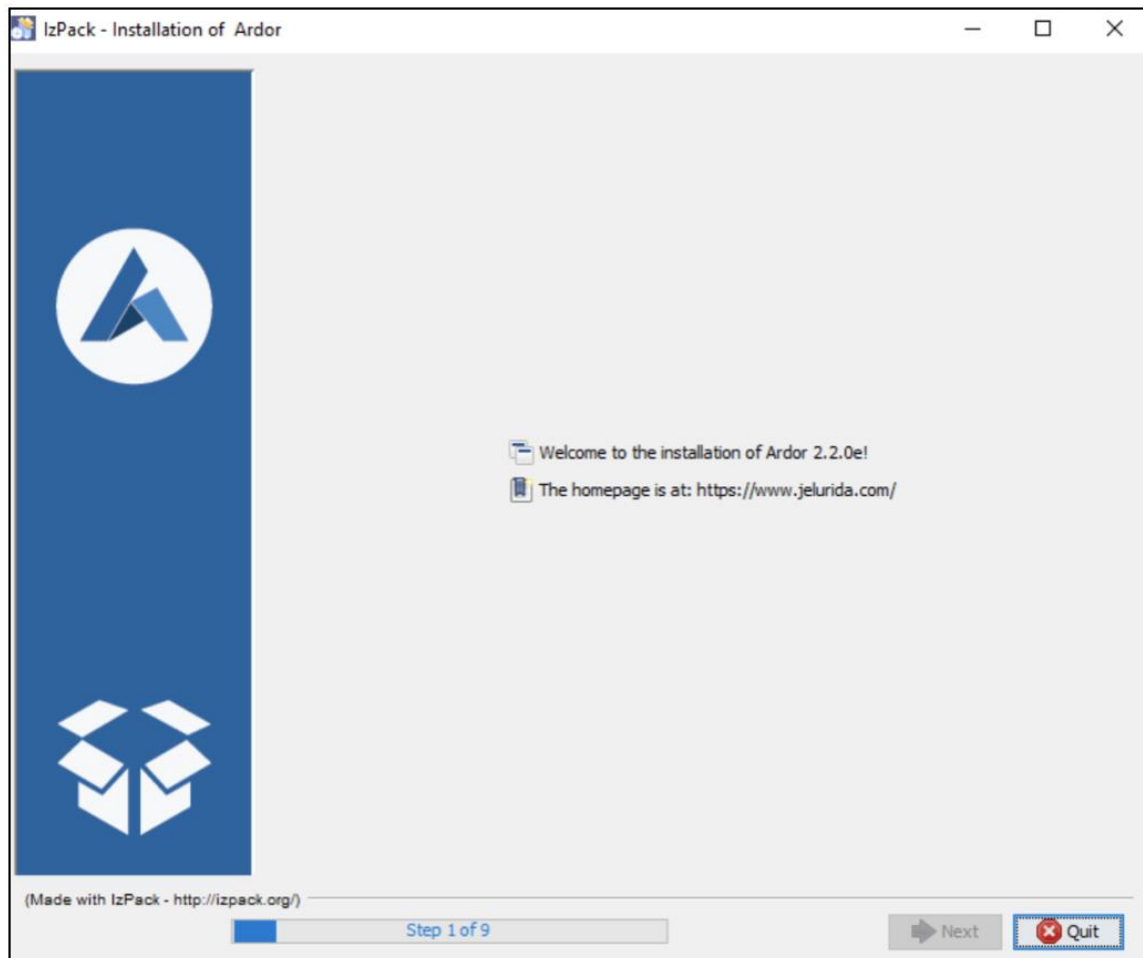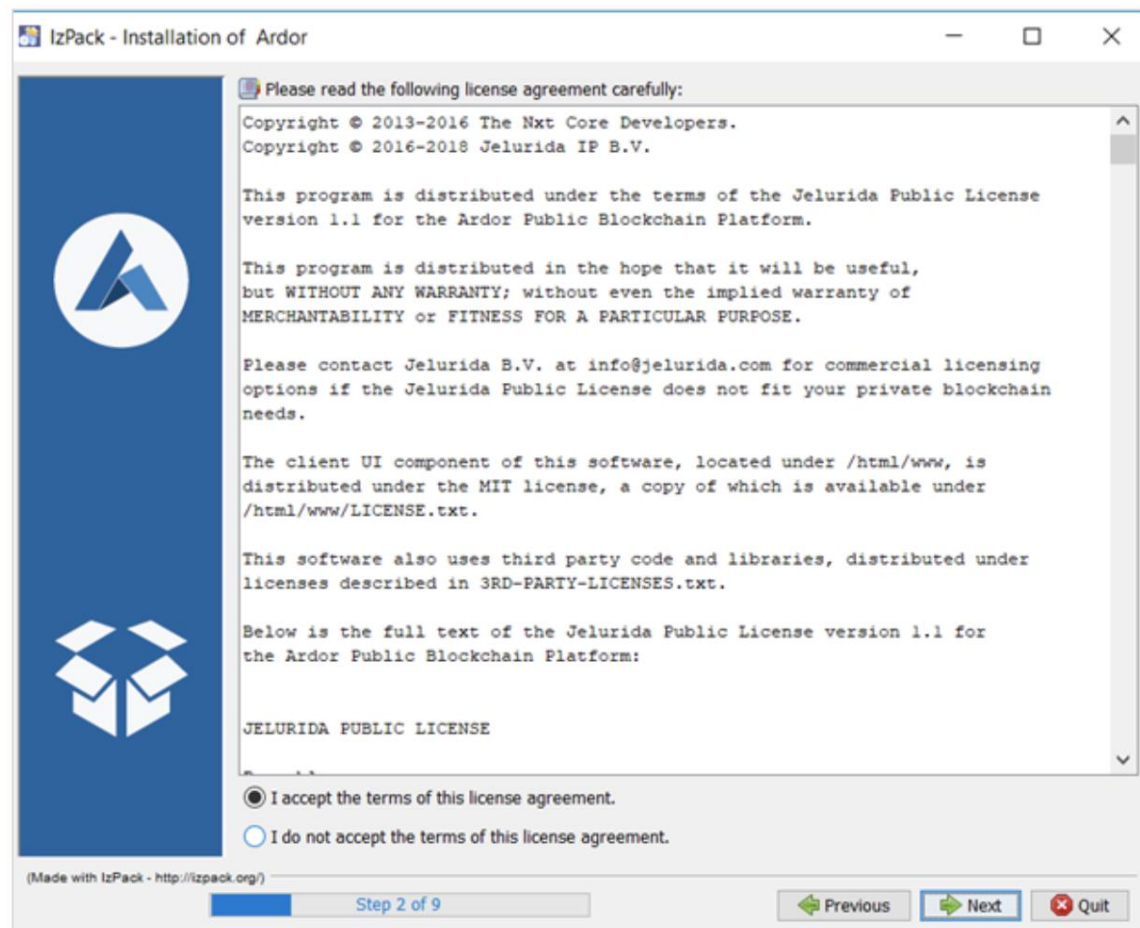
Click on the "Installer" for the latest stable release for your operating system, and save the application to your desired destination on your computer.
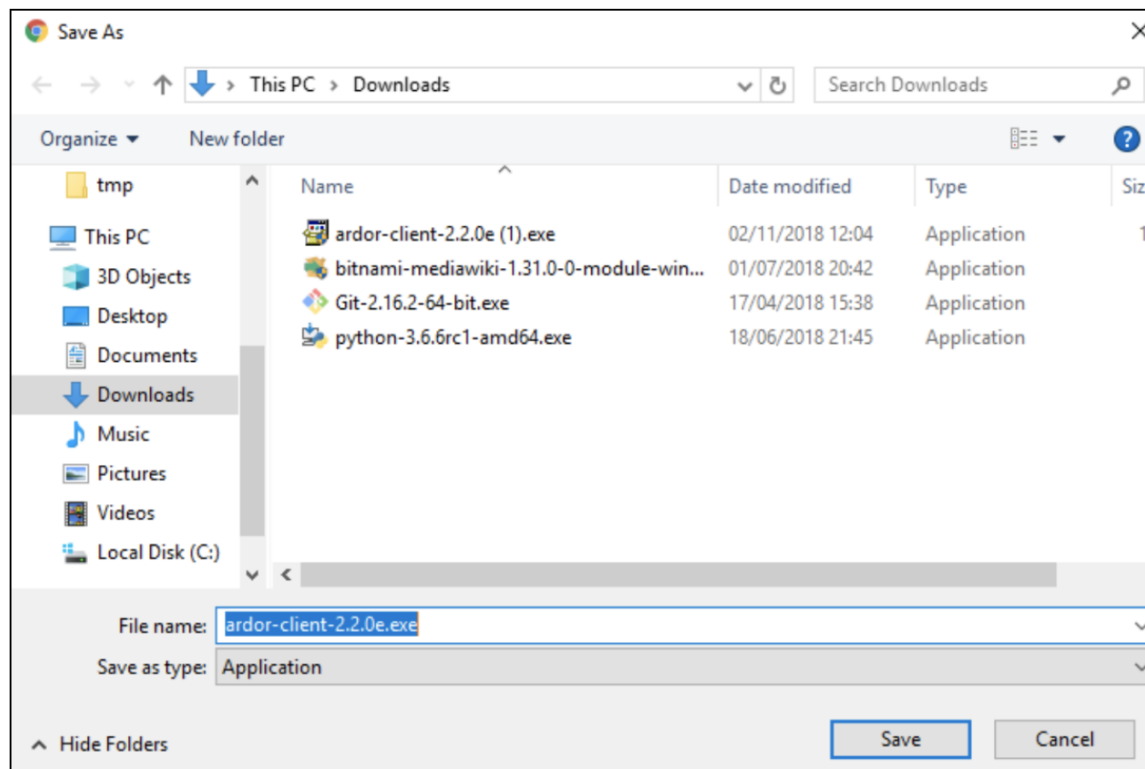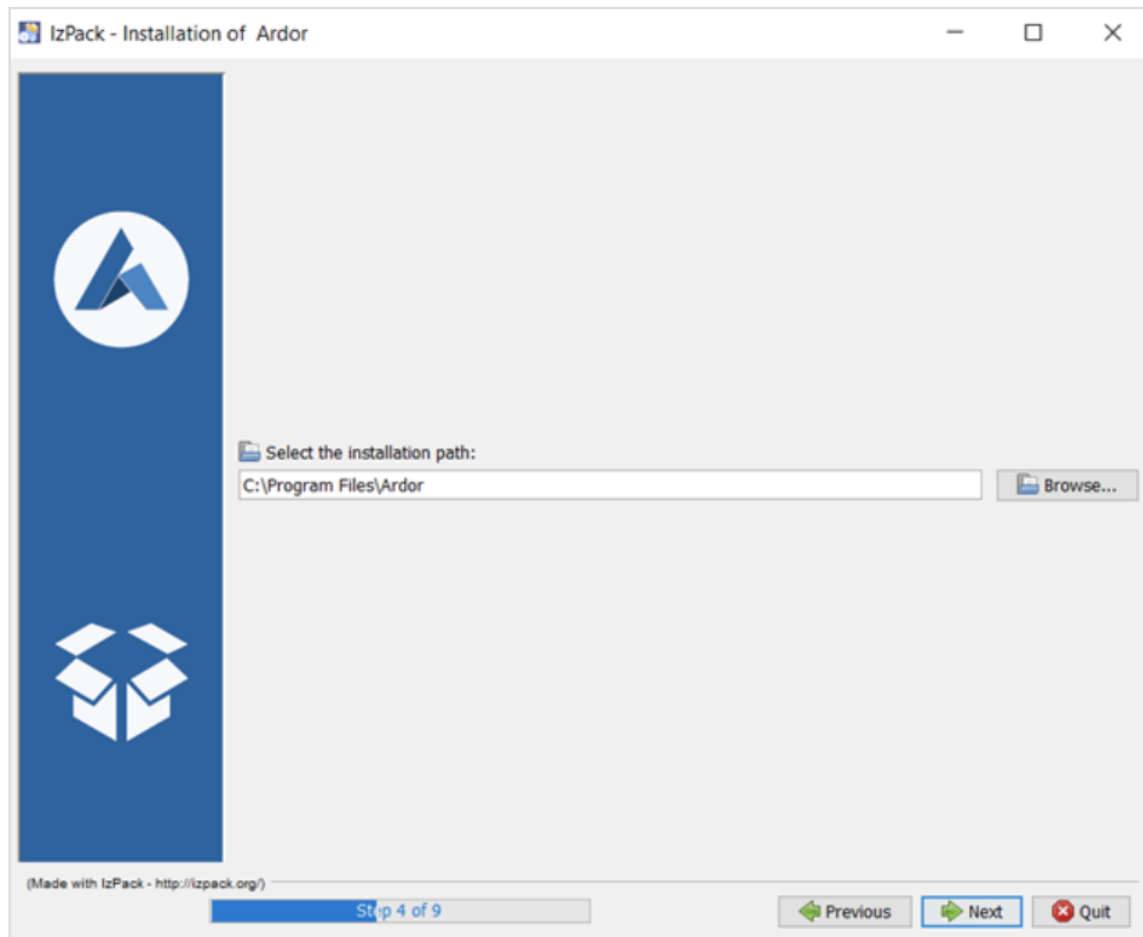
Navigate to wherever you saved the Ardor Client, and open the installer. You may get a notification asking for permission to allow the client to install, click "yes." The file will extract, and then you will select your language and click "ok." You land on a page that looks like this:
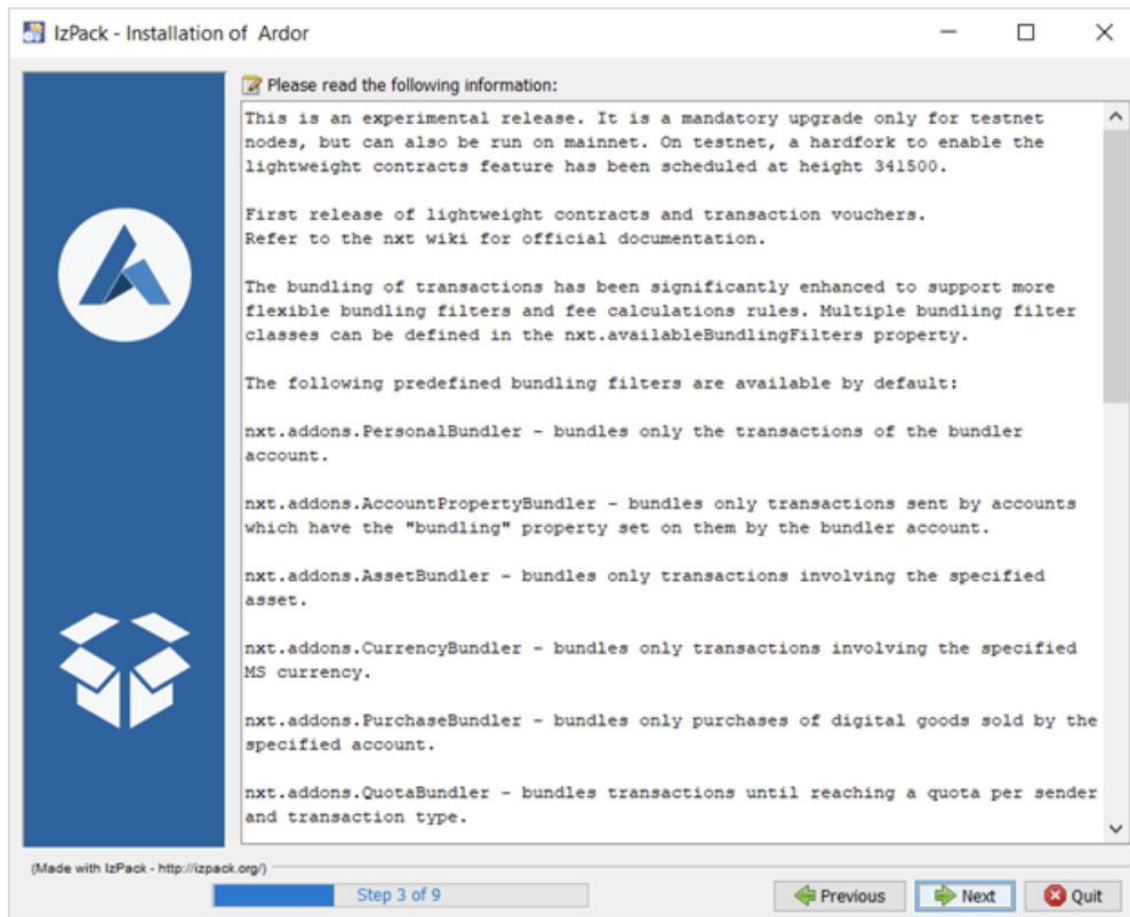
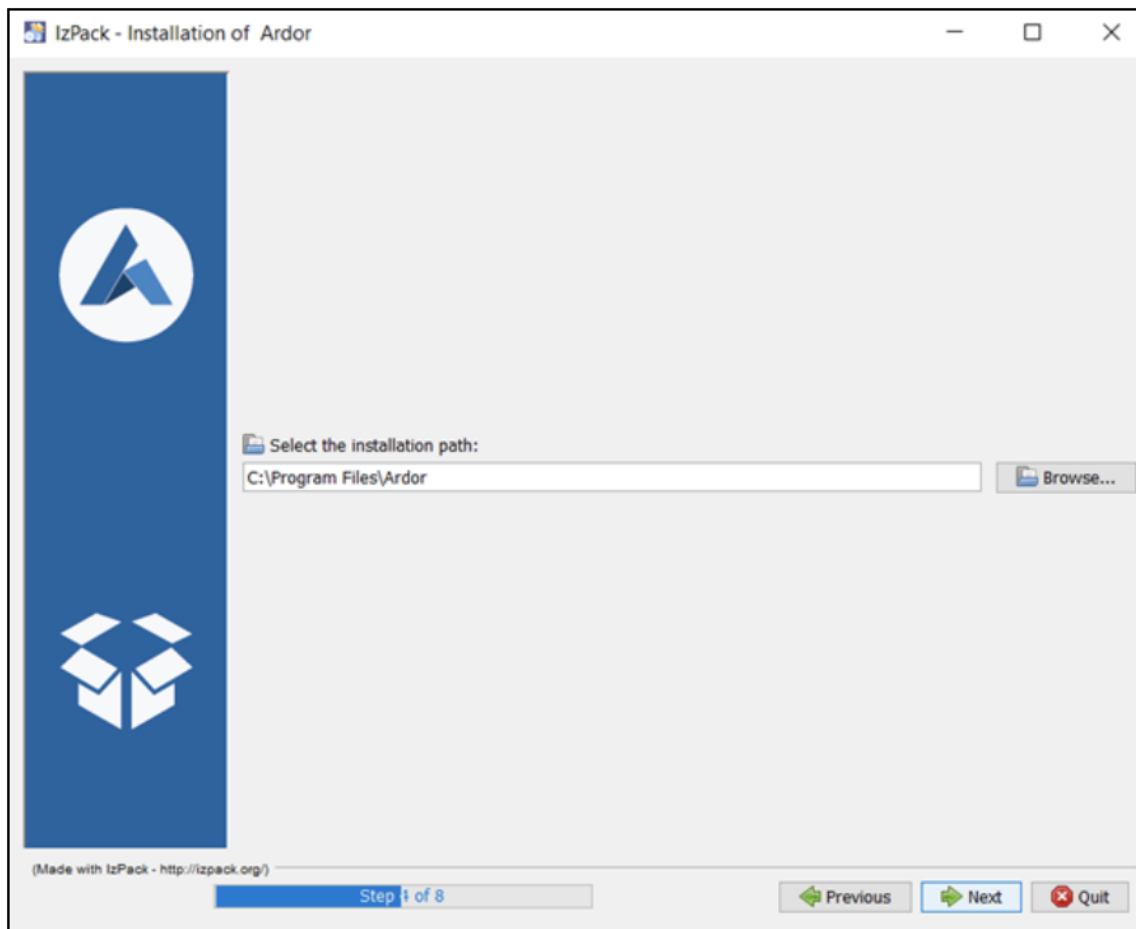Click "Next" and you land on a page with the license agreement.

IzPack - Installation of Ardor

Please read the following license agreement carefully:

```
Copyright © 2013-2016 The Nxt Core Developers.
Copyright © 2016-2018 Jelurida IP B.V.

This program is distributed under the terms of the Jelurida Public License
version 1.1 for the Ardor Public Blockchain Platform.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

Please contact Jelurida B.V. at info@jelurida.com for commercial licensing
options if the Jelurida Public License does not fit your private blockchain
needs.

The client UI component of this software, located under /html/www, is
distributed under the MIT license, a copy of which is available under
/html/www/LICENSE.txt.

This software also uses third party code and libraries, distributed under
licenses described in 3RD-PARTY-LICENSES.txt.

Below is the full text of the Jelurida Public License version 1.1 for
the Ardor Public Blockchain Platform:


JELURIDA PUBLIC LICENSE
```

◉ I accept the terms of this license agreement.
◯ I do not accept the terms of this license agreement.

(Made with IzPack - http://izpack.org/)

Step 2 of 9

◄ Previous ➡ Next ❌ Quit

Read the agreement. If you agree, select "I accept the terms of this license agreement," and click "Next."

This page gives you some extra information on bug fixes. Click "Next."

IzPack - Installation of Ardor

📝 Please read the following information:

This is an experimental release. It is a mandatory upgrade only for testnet
nodes, but can also be run on mainnet. On testnet, a hardfork to enable the
lightweight contracts feature has been scheduled at height 341500.

First release of lightweight contracts and transaction vouchers.
Refer to the nxt wiki for official documentation.

The bundling of transactions has been significantly enhanced to support more
flexible bundling filters and fee calculations rules. Multiple bundling filter
classes can be defined in the nxt.availableBundlingFilters property.

The following predefined bundling filters are available by default:

nxt.addons.PersonalBundler - bundles only the transactions of the bundler
account.

nxt.addons.AccountPropertyBundler - bundles only transactions sent by accounts
which have the "bundling" property set on them by the bundler account.

nxt.addons.AssetBundler - bundles only transactions involving the specified
asset.

nxt.addons.CurrencyBundler - bundles only transactions involving the specified
MS currency.

nxt.addons.PurchaseBundler - bundles only purchases of digital goods sold by the
specified account.

nxt.addons.QuotaBundler - bundles transactions until reaching a quota per sender
and transaction type.

(Made with IzPack - http://izpack.org/)

Step 3 of 9

◀ Previous   ➡ Next   ❌ Quit

You need to select the destination on your computer for the Ardor Client application, then click "Next."

Next step of the installation process shows you the developer tools that come built-in to this version of the Ardor client. Check the box as they are needed for this workshop and Click "Next."
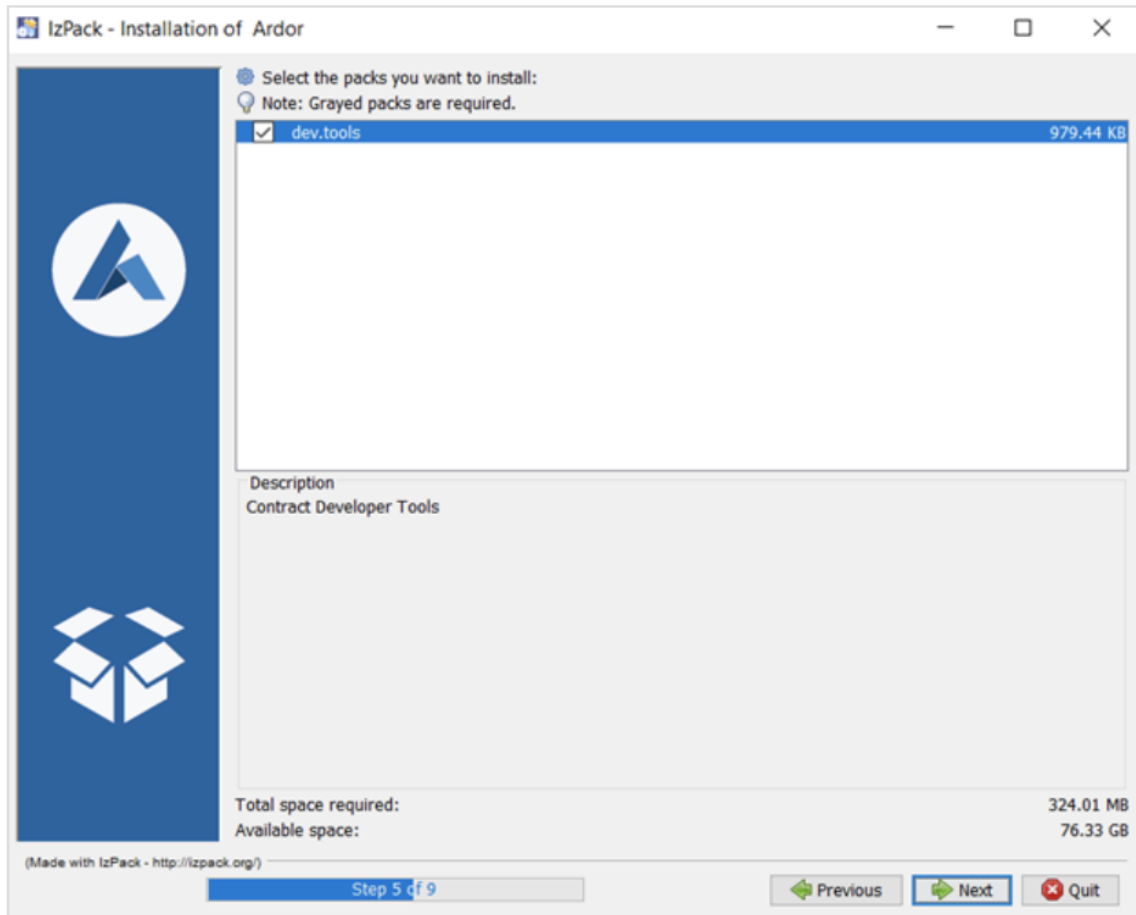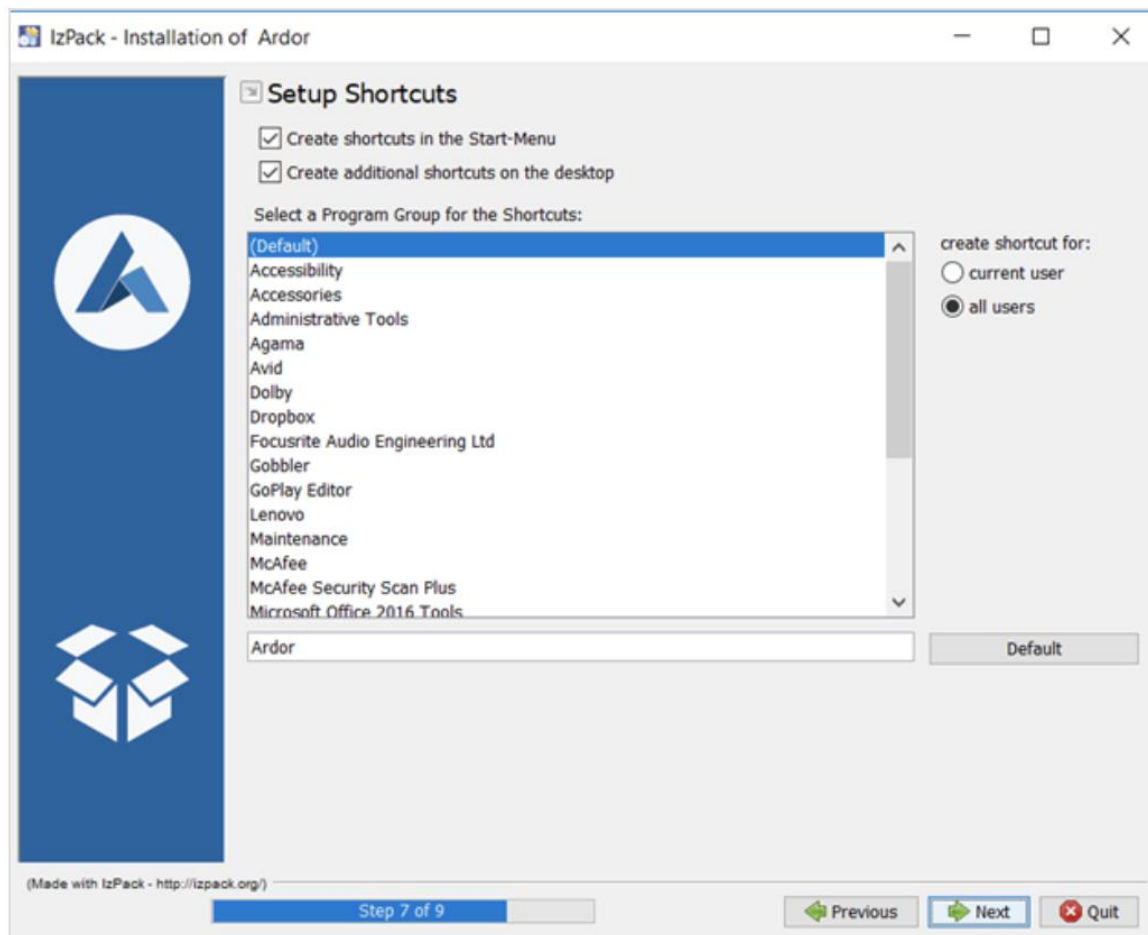

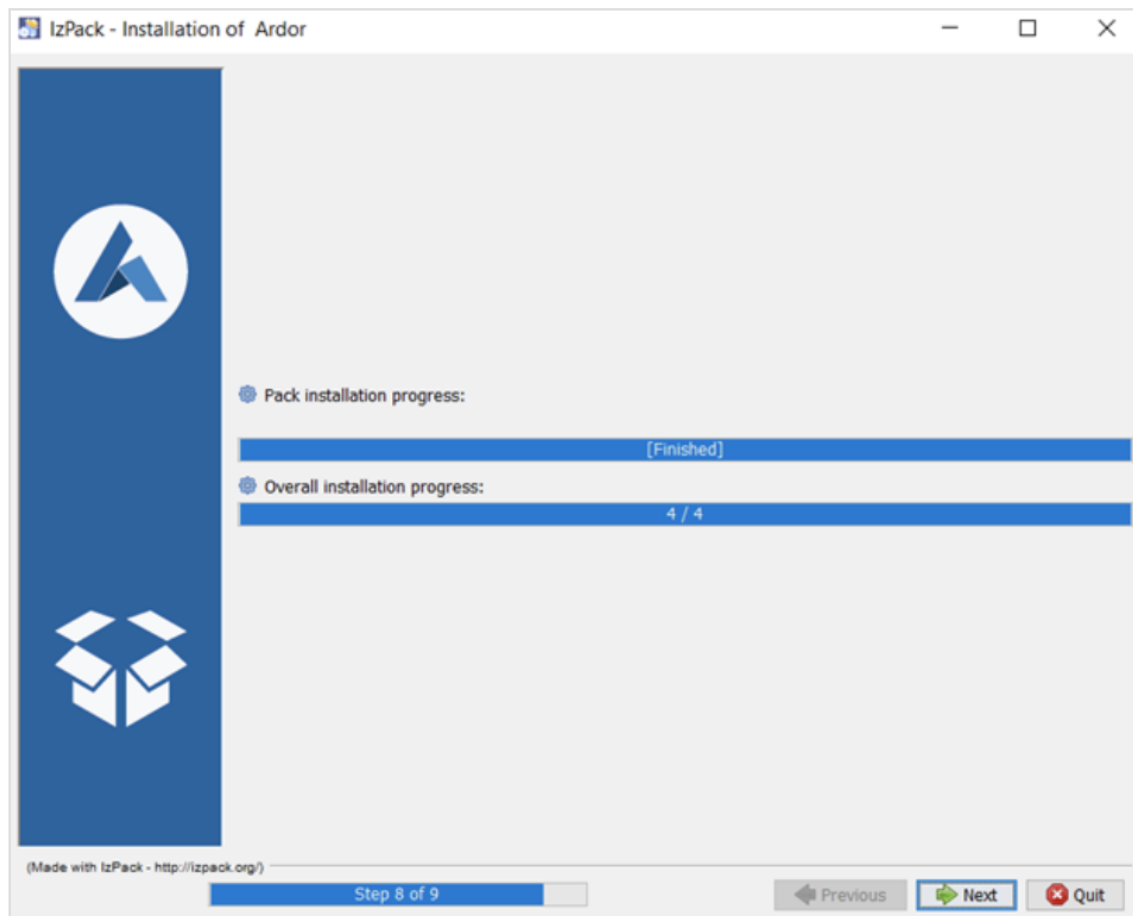On this page, you can decide whether to run the full client, the light client, or the testnet.
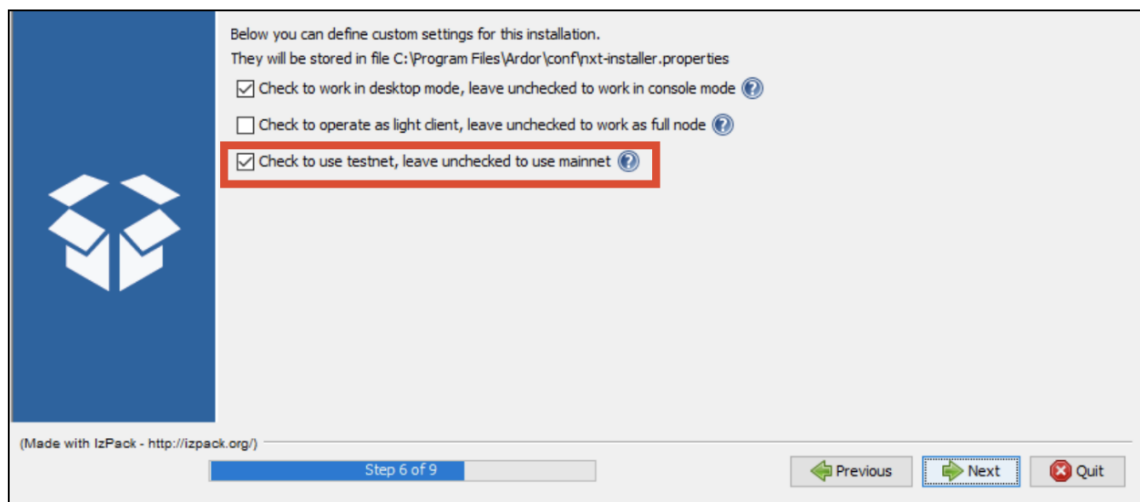
You should click the box next to the "testnet" option.

Then, click "Next."

Click "Next."

Step by Step guide creation of an Ardor account:

Execute the Ardor software. Open a browser and go to https://localhost:26876. It will open the local Ardor testnet wallet. Create a new account following the next instructions:

Click on the DON'T HAVE AN ACCOUNT? CLICK HERE TO CREATE ONE! link at the bottom
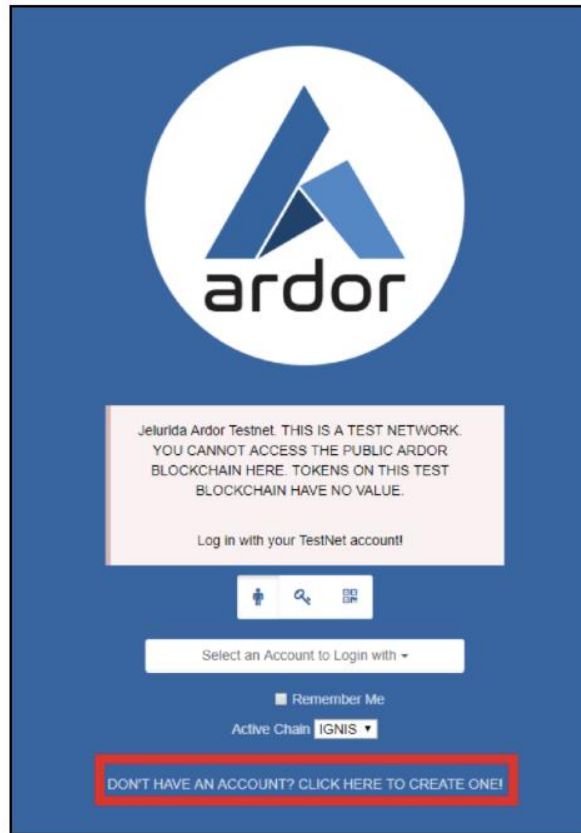
A strong passphrase made from 12 random words will automatically be generated for you. **Make sure you copy and paste it somewhere you will remember during the workshop**.

IMPORTANT:

The passphrase is the only way to access to your account. If you lose your passphrase you will not be able to access to your tokens, nor perform any transaction in the blockchain anymore. There is no third party that controls or stores your passphrase.

Check the box that states "I will not forget my passphrase and I will never disclose it", and click next
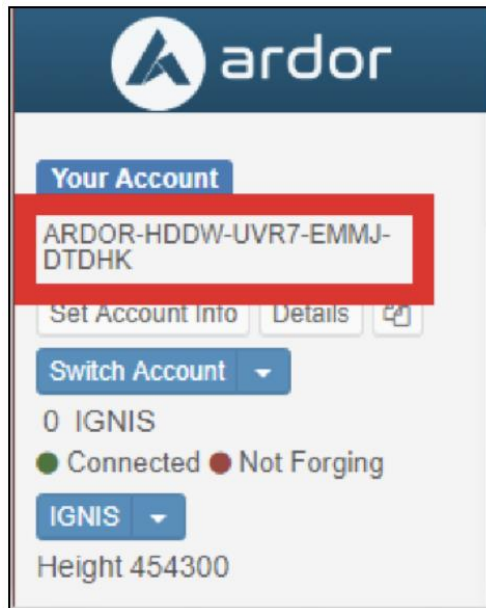
Copy your passphrase in the white box and click next. **This step is required for your safety, to make sure that you have copied your passphrase**. However, is your responsibility to save it and keep it in a private and secure place.

Your account has been created. Note that your Ardor account address is shown in the following image:

Fund your account with IGNIS and ARDR tokens

Copy your Ardor account number that you just created

Go to the webpage: https://www.ardor.world/en/faucet_ignis

Paste your Ardor account number in the box "Wallet"

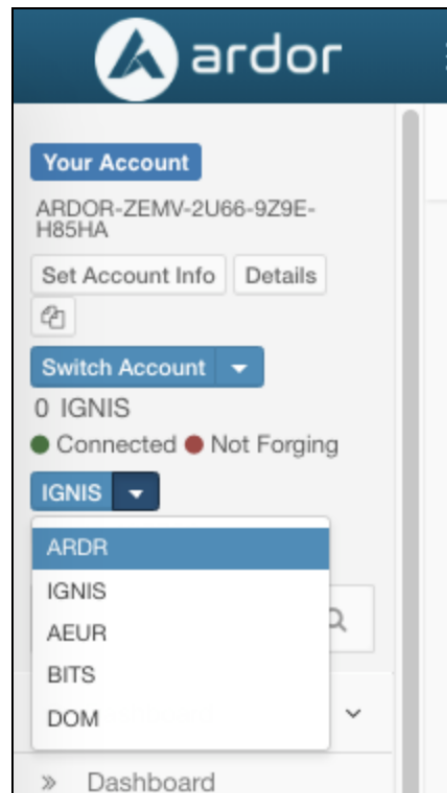Check the Terms and Conditions box, and validate the Captcha

Click on "Submit", and after a couple of minutes, you should see your testnet IGNIS tokens in your Ardor wallet

Finally, fund your account with ARDR tokens.

Switch to ARDR

Copy your Ardor account number (it is the same that you have copied before)

Go to the webpage: https://www.ardor.world/en/faucet_ardor/

Paste your Ardor account number in the box "Wallet" again

Check the Terms and Conditions box, and validate the Captcha

Click on "Submit", and after a couple of minutes, you should see your testnet ARDR tokens in your Ardor wallet