Machuzu NextGen Application Installation and Network Setup Experience

Introduction

Installing the Machuzu NextGen application, ensuring its proper operation, and testing a few of its essential features are the goals of this task. Download the necessary files, configure the environment, and confirm that the program can establish and distribute a blockchain network comprise most of the procedure. Although it requires attention to file locations, permissions, and configuration details, the setup is not challenging.

Organising the Application Files

Placing all of the application files in one location is the first step. Path management becomes simpler as a result, and missing files are prevented later.

Steps to Take:

- Create a folder called **MachuzuNextGen**
- Download the application JAR file and the launcher batch file

  https://nextgen.machuzu.com/downloads/LaunchMachuzuNextGen.bat

  https://nextgen.machuzu.com/downloads/Machuzu-Next-Gen.jar
- Download ImmuDB and rename the executable to immudb.exe

  https://github.com/codenotary/immudb/releases
- Download and Extract the data folder from data.rar

  https://nextgen.machuzu.com/downloads/data.rar
- Extract the crypto folder from crypto.rar

  https://nextgen.machuzu.com/downloads/crypto.rar
- Update File access permissions for all local folders for full permissions

Keeping everything in one folder prevents common file-path issues.

Installing Required Software

The necessary software is installed after the files are arranged so that the application can function correctly.

Software installation:

Follow the steps in *Setup.pdf* file

Configuration steps:

- Extract the SQLite tools to the local folder
- Add the SQLite folder path to the system environment variables
- Restart the computer so the changes could take effect

This allowed the application to access SQLite without any command or path errors.

Setting Up ImmuDB – DO NOT DO

The application uses ImmuDB to safely store data. The application needs some basic setup before it can be used.

Steps to follow:

- Install ImmuAdmin
- Log into ImmuDB
- Change the default password
- Create the database named **machuzu**

Once this is done, the database is ready to be used by the application.

Fixing the Launcher Configuration

When running the application for the first time, it will not start correctly if the launcher is pointing to a JavaFX folder that does not exist on the system.

What was done:

- Open LaunchMachuzuNextGen.bat using **Notepad**
- Update the OpenJavaFX and Machuzu-Next-Gen.jar path so they match the local JavaFX installation
- Save the file and run the launcher again

After this change, the application opens normally and the JavaFX interface loads correctly.

Running the Application

With the setup completed, the application was launched successfully.

Final steps:

- Navigate to the **MachuzuNextGen** folder
- Run LaunchMachuzuNextGen.bat
- Confirm that the application opens without errors

Network Creation and Testing

Create a Blockchain Network

After confirming that the application was running, the next step was to test the network functionality.

Steps taken:

- Open the application
- Select **File** - **New Blockchain Network**
- Create a new network

The network is created locally and prepared for exporting and sharing.

Sharing and Importing the Network

Once the permission issue is resolved, the network settings are successfully exported and shared.

Steps to take:

- Share the network key with a colleague
- The colleague receives the key via email

Steps to be performed by the colleague:

- Open the Machuzu NextGen application
- Go to the **Networks** section
- Select **Import Network Settings**
- Paste the network key and apply it

The network is imported successfully, and the colleague was able to join the network without issues.

Conclusion and Learning Experience From Intern

Overall, the installation and testing process was manageable and did not require complex troubleshooting. Most issues were related to file paths, permissions, and

configuration settings. By checking the application output and adjusting permissions where necessary, the problems were resolved.

This task helped improve my understanding of how real applications handle setup, security certificates, and network configuration. It also showed the importance of reading error output carefully and verifying that the system has the correct access rights during installation and testing.