

Coinone Core

High Performing Resilient Trading Platform

Coinone Core Sales Team (coinonecore@coinone.com)

About iFunFactory Inc.

Introduction of iFunFactory Inc.

iFunFactory is a subsidiary of Coinone Inc.

It has been delivering software technology products to the online/mobile gaming industry to boost massive multiplayer online game server development and operation.

After becoming a family of Coinone Inc., its expertise in building distributed systems of high performance is being used to offer Coinone Core Trading Platform to the cryptocurrency trading industry.

Mission Statement

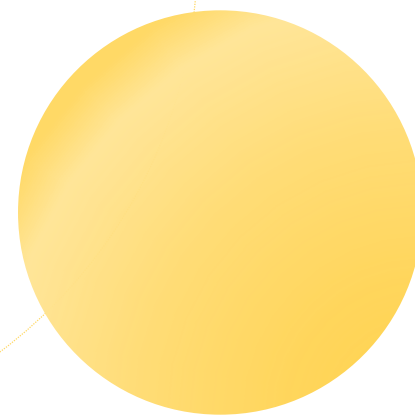
Our mission is **to be a robust technological vehicle** to help you achieve **your business goals** that otherwise **wouldn't be possible**.

For the goal,
we strive to deliver **the most reliable** and **the most efficient**
software technology to the cryptocurrency industry.

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#1 Coinone Core Introduction



Coinone Core Trading Engine

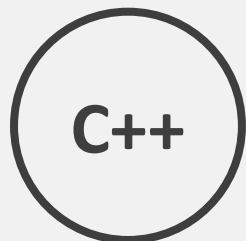
/ Matching engine is the core to run successful crypto exchanges.

/ Evolve into a global leading exchange with the stability and the performance of Coinone Core Trading Engine!



Feature 1: Super Speed

You will soon need more capacity as your trading volume skyrockets. Coinone Core will fill the gap.



Highly Optimized C++ Codebase

Blazing fast matching engine.
3M matching transactions per second¹



Scaling-out Architecture

Virtually unlimited capacity from low-end computing power by running extra Coinone Core Trading Engine instances.

¹ On Intel Xeon E5-2690 CPU @ 2.9GHz running Citrix XenServer 7.0.

Feature 2: Super Safe

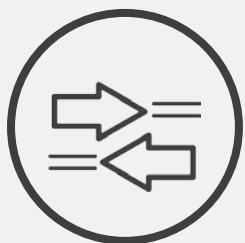
It is never a surprise that Coinone Core Trading Engine has been designed with fault-tolerance in mind from the beginning.



Fail-safe System

Each component is fully protected by replication & fast state recovery strategy.

Never miss even a single trading order.



New Coins Without Interruption

You can introduce new coins without stopping the exchange.

Never lose revenue opportunities

Feature 3: Super Simple

You can easily integrate and quickly oversee your trading platform on Coinone Core.



Integration via REST / Thrift

REST APIs to effectively accommodate the evolution of your trading platform.

Also, Thrift for high performance.



Easy-to-manage System

Admin dashboard for customer service. Monitoring dashboard for proactive mgmt.

Engine updates via Ubuntu package manager

Feature 4: Super Sophisticated

Equipped advanced features to target trading savvy investors.



Various Order Types

Limit order Market order
Stop limit order, Stop market order
And, margin trading¹



Diverse Functionalities

Calculating average ROI for traders
Fine-tuning trading fee rate per trading pair, per user Charting data ready for TradingView and ProChart

¹ Will be available from December 2018.



#2

Competitive Edges

Co-developed With Top Exchange



- Coinone Core has been designed and implemented with Coinone Inc., world-class exchange.
- It meets Coinone's strict performance criteria for a high trading volume and implements valuable lessons from large-scale live operation.

Offerings

	Standard plan	Premium plan	Super plan
Features	<ul style="list-style-type: none"> Trading of 5 coins using 1 fiat Limit order Market order User admin dashboard System monitoring dashboard Initial remote installation Software updates 	Everything in Standard plan plus <ul style="list-style-type: none"> Trading of 10 coins using 1 fiat, and all possible coin-to-coin trading pairs from 10 coins. Stop limit order Stop market order 	Everything in Premium plan plus <ul style="list-style-type: none"> Unlimited number of coins and trading pairs Margin trading⁵
Pricing	<ul style="list-style-type: none"> Start-up fee: USD 100K Monthly minimum fee: USD 10K Monthly revenue share¹: 3bps (0.03%) of total trading volume² 	<ul style="list-style-type: none"> Start-up fee: USD 150K Monthly minimum fee: USD 15K Monthly revenue share¹: 3.25bps (0.0325%) of total trading volume³ 	<ul style="list-style-type: none"> Start-up fee: USD 200K Monthly minimum fee: USD 20K Monthly revenue share¹: 3.5bps (0.035%) of total trading volume⁴

Duration of agreement is 5 years. Longer term is negotiable.

Deposit of 3 month minimum fee is required. Unpaid monthly revenue share is deducted from the deposit.

¹ in USD based on average USD/fiat exchange rate during the month.

² Capped by 20% of total revenue of an exchange.

³ Capped by 25% of total revenue of an exchange.

⁴ Capped by 30% of total revenue of an exchange.

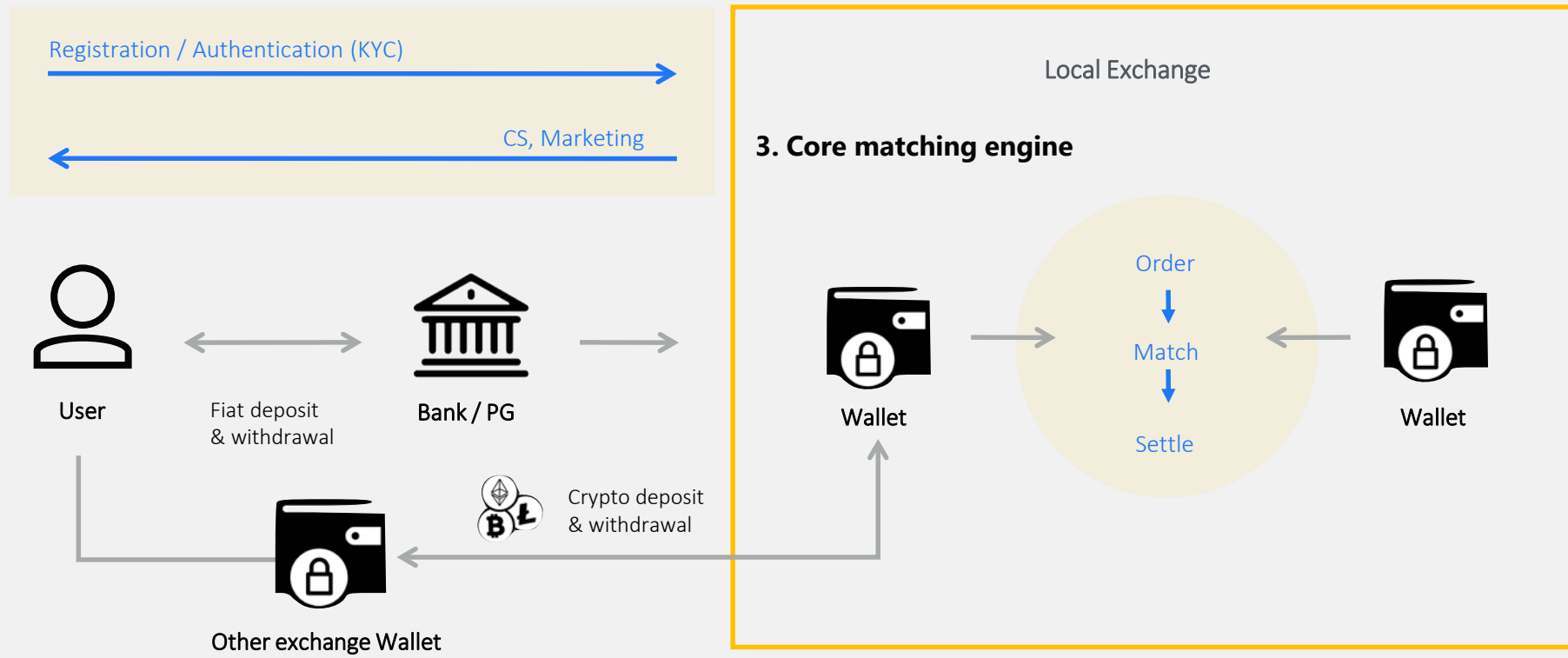
⁵ Will be available from December 2018.

Extra Offerings

- ✓ Wallet: USD 5K / coin
- ✓ Partnership with Coinone
 - Including (but not limited to) guidance on marketing, customer service, and localization.
 - For partnership terms & conditions, please contact us at coinonecore@coinone.com

Coinone Partnership Program

Provides operational guidelines to assist partner to successfully launch a new trading platform.

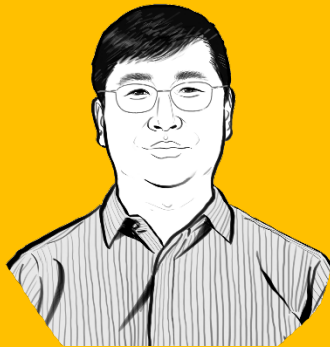


References



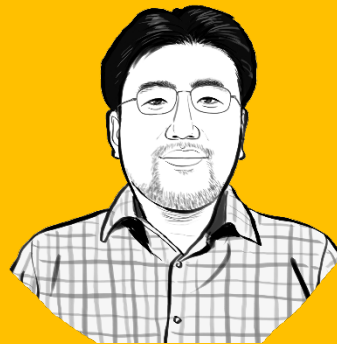
The Team

Development (iFunFactory Inc.)



DK Moon, CEO

- MS/Ph.D. in EECS, UC Berkeley
- BS in CS, Seoul National University
- Senior software engineer, Nicira Networks
- Manager, Research Lab, Nexon



Jinuk Kim, CTO

- MS/BS in CS, Seoul National University
- Manager, Cloud Dev Team, Nexon
- Software engineer, NCsoft



Advisors (Coinone Inc.)



Yohan Cho
Project Manager
Coinone

Jinwoo Lee
CTO
Coinone

Daehyun Kim
CTO
Coinone Global

Datasheet

Supported currencies	Virtually any possible currency combinations. Limited by pricing plan.
OS	Ubuntu 16.04
Database	MySQL or compatible
Programming language	<ul style="list-style-type: none"> • C++ for core components • Python Flask/Django for management dashboard and admin dashboard
Supported integration	<ul style="list-style-type: none"> • 1. REST API • 2. Thrift • 3. Binary packed C/C++ struct
Scaling strategies	<ul style="list-style-type: none"> • Scaling-out for orders admission/commit components • Scaling-up for matching component • Sharding for user data cache component
Fault handling strategies	<ul style="list-style-type: none"> • Master-slave replication for matching/cache components • Stateless worker style for orders admission/commit components • Each component is also capable to recover from the database as a back-up method
Supported system alerts	<ul style="list-style-type: none"> • Email • SMS • Voice call
Distribution & upgrade	Via Ubuntu's APT (private repository)

Benchmark Test Result (Match Server)

Hypervisor spec	XenServer 7.0 on Xeon E5-2690 (2.9GHz)
Virtual machine spec	8 vCPU w/ 8GB RAM for each of orders admission/commit components 16 vCPU w/ 32GB RAM for each of matching/cache components
Test result	3M matches per second
Test scenario	In this scenario, match server held enough number of limit orders in memory, and the number of matches it clears every second is measured.

Benchmark Test Result (Whole System)

Hypervisor spec	XenServer 7.0 on Xeon E5-2690 (2.9GHz)
Virtual machine spec	8 vCPU w/ 8GB RAM for each of orders admission/commit components 16 vCPU w/ 32GB RAM for each of matching/cache components
Test result	10K order injections per second per admission server within 140 milliseconds.
Test scenario	<p>In this scenario, bot issued a random order to a single admission server. We measured the number of orders the system takes every second. Here, “order taking” includes all the internal steps to pass an order to a match server respecting Coinone Core’s fault-tolerance strategy. During this injection, match server also performs its order matching job and clears orders. Thus, this number indicates how many orders can be injected via a single admission server while the exchange processes orders.</p> <p>The number is measured with a single admission server. Scaling-out by adding more admission server will increase the performance number.</p>

Contacts



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