pressat+

Utility Giant EDF Deploys Blockchain Application on Ethereum and iExec

Wednesday 29 May, 2019

May 30, 2019 - *iExec has announced its work with EDF, France's largest utility provider, to optimize its cloud computing infrastructure. The application GPUSPH used by EDF has been deployed on Ethereum to take advantage of the decentralized cloud.*

iExec has recently released its V3 along with a consulting and integration service for corporates named 'iExec for Enterprise'. In this context, iExec has teamed up with EDF, the fifth largest utility company worldwide, and deployed GPUSPH on Ethereum. This application is a popular simulator for modeling fluids developed and used by EDF, to study among other things water dams or lava cooling.

What are the advantages of deploying GPUSPH on iExec and Ethereum?

- Increasing the resilience of GPUSPH by running it on a decentralized network of machines
- Managing EDF's peak loads of computing power, to run heavy R&D software as needed by engineers
- Providing a clear situation of the enterprise's available computers (instead of looking for an available machine, idle/underutilized machines come to the user)
- Transparent monitoring of computational taks and auditing of each transaction

iExec also addresses Ethereum's scalability problem, which is one of its most pressing concerns. The heavy computing of decentralized applications like GPUSPH is done off-chain and does not overwhelm Ethereum.

Afterward, blockchain is used to reach a consensus on the validity of computing results, and a hash of this result is stored on the blockchain.

> "In a wider perspective, the development of distributed computing is a credible scenario for the future, and blockchain may be a nice lever in this scenario. The plan is to continue with other open scientific codes requiring possibly other types of worker pools."
> *Gilles Deleuze, EDF Blockchain Engineer.*

iExec and EDF will pursue exploring how blockchain technology can better optimize computing infrastructures, and will launch other experiments on iExec in the future.
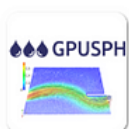

gpusph
by er@iex.ec

Addresses: #kovan

GPUSPH is the first implementation of Weakly-Compressible Smoothed Particle Hydrodynamics (WCSPH), for Lagrangian method for fluid flow simulation, to run entirely on GPU with CUDA.

Submit Work
Use Dataset
Login to see price

License
GPLv3

Created
29/05/2019

GPUSPH is available at: https://dapps.iex.ec/dapp/iexecblockchaincomputing/gpusph

----

About EDF: A key player in energy transition, the EDF Group is an integrated electricity company, active in all areas of the business: generation, transmission, distribution, energy supply and trading, energy services. A global leader in low-carbon energies, the Group has developed a diversified generation mix based on nuclear power, hydropower, new renewable energies and thermal energy. The Group is involved in supplying energy and services to approximately 39.8 million customers, 29.7million of which are in France. It generated consolidated sales of €69 billion in 2018. EDF is listed on the Paris Stock

Exchange.

About iExec: iExec is a decentralized marketplace for computing resources. It allows individuals and enterprises to monetize their applications and datasets, and to trade computing power. The company develops the technology and protocols that organize the exchanges between stakeholders, with the maximum level of trust, security and flexibility.

Connect with iExec

Press Contact: Jean-Charles Cabelguen - jcc@iex.ec / press@iex.ec

Website • Documentation • Slack • Telegram • Reddit • Twitter • Facebook • LinkedIn • Youtube • Github • Kakao • Instagram

Company Contact:

iExec

T. +33750957763
E. wb@iex.ec
W. https://iex.ec/

Additional Contact(s):
gf@iex.ec
hh@iex.ec

View Online

Additional Assets:
iExec One-Pager

Newsroom: Visit our Newsroom for all the latest stories:
https://www.iexec.pressat.co.uk