

RSK Analysis: Dave Liu, CTO MacroSQL Technology. Dec 18, 2017

RSK platform is, at its core, the combination of:

1. A Turing-complete resource-accounted deterministic virtual machine (for smart contracts)
2. A two-way pegged Bitcoin sidechain (for BTC denominated trade)
3. A dynamic hybrid merge-mining/federated consensus protocol (for consensus security), and a low-latency network (for fast payments).

Analysis:

1. VM is a relative gigantic structure, it has its language, language parser, run-time environment and security infrastructure. Even Google, when it starts its Android system, is built upon Oracle's VM. And OpenJDK has never needed very mature and robust after even a 10 years collected efforts by Google, Intel and many others. Ethereum platform's VM has been attacked in the DAO case at the beginning and frequently has security problems. RSK's VM will be battling the security for a very long time. For Ethereum and its security issue, please refer to http://sccbit.org/faq/#ethereum_diff
2. 2-way peg (for BTC denominated trade) is roughly moving some part of the Bitcoin traffic to the RSK chain. While still using BTC. It is similar to creating a new side chain that connects to the Bitcoin network for better speed. How many would move their Bitcoin coins to a second network and security risk is additive (the risk of Bitcoin + risk of RSK) and operation is additive? To trade security+trouble for faster? NOT me.
3. Partitioning of Bitcoin based on geographic location has been in discussion for a very long time. A federated blockchain is inherently very risky, especially across different federates.
4. **Team:** All of the RSK members are from Argentina and educated in Argentina, with CEOs attending 3 colleges without getting a Bachelor's degree. After the Latin American housing bubble and debt crisis, Argentina's currency tumbled hundreds of times and defaulted multiple times, overall don't have a single technical company that is competitive in any industry. Overall is similar to Tibet, China. While all of the key CPU, Database, Telecom Billing, OS are dominated by the USA and Israel. I don't see any Latin American team can compete in this high performance space.

SCC is a multi-layer network created by MacroSQL, a California Database company. It is the first parallel blockchain that directly deals with Bitcoin performance. It can handle millions of transactions per second by using hundreds of servers in parallel. It overcomes most of the pain points of Bitcoin while avoiding RSK's weaknesses. Check it out at sccbit.org for details.

RSK分析：MacroSQL技术首席技术官Dave Liu。 2017年12月18日

RSK平台的核心是以下方面的组合：

1. 图灵完成资源占用的确定性虚拟机（用于智能合约）
2. 双向挂钩的比特币侧链（用于BTC计价交易）
3. 动态混合合并/挖掘/联合共识协议（用于共识安全）以及低延迟网络（用于快速支付）。

分析：

1. 虚拟机是一个相对巨大的结构，它具有语言，语言解析器，全功能运行环境和安全基础架构。最初Google开始研发它的android系统，也是建立在Oracle的VM虚拟机之上的。OpenJDK即便经过Google，Intel以及其他公司10多年的努力之后，仍然未能发展到足够成熟和安全。以太坊平台的虚拟机在一开始就遭到了诸如DAO事件一样的攻击，并且经常有安全问题。RSK的虚拟机将在很长一段时期内与安全性问题作斗争。有关以太坊及其安全问题，请参阅 http://sccbit.org/faq/?lang=zh#ethereum_diff

2. 双向挂钩比特币侧链（用于BTC计价交易）只是简单粗暴地将部分比特币流量转移到RSK链，其实仍然主要使用BTC。这是类似于创建一个新的侧链，连接到比特币网络分流以提高处理速度。可是有多少人会将他们的比特币移动到第二个网络，付出额外的开销以及承担双重的安全性风险（比特币网络以及RSK网络双重的安全性风险，RSK安全风险会比比特币高10倍以上），而且增加一道转移麻烦，以换取较快的处理速度？至少我不会这样做。

3. 比特币在地理上分区这个问题已经讨论了很长时间了。联合链本质上是非常危险的，尤其是跨越不同的联合链。

4. 团队：所有RSK成员来自阿根廷，在阿根廷接受教育，首席执行官就读了3所大学而没有获得学士学位。在拉美房地产泡沫破灭和债务危机之后，阿根廷货币多次贬值达数百倍，违约多次，整体上没有一家技术公司在任何行业在国际上具有竞争力，总体上与中国西藏发展水平相似。而所有关键的CPU，数据库，高频电信计费，操作系统都是由美国和以色列垄断的。我没有看到任何拉美团队有能力在这个解决区块链性能的顶级技术领域参与竞争。

而SCC是一个全部由一家美国硅谷，由顶级数据库内核专家负责的多重网络，世界第一个并行区块链，直接解决了比特币的性能问题。它通过使用数百台并行的服务器每秒处理数百万次事务，克服了比特币的大部分痛点，同时避免了RSK的弱点。详情请参阅<http://sccbit.org/?lang=zh>

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