



Transaction. Interaction. Convergence.™



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# Cloud-Based Secure Transaction Processing Becomes Reality

**There has never been a more challenging time to be a competitive payment service provider** or indeed any other participant within the ecosystem processing transactions. The marketplace has recently been flooded with new entrants driven, in part, by the adoption of mPOS across the globe which has started to gain significant traction. So if you are an incumbent player who is suffering from depleting margins, or relatively new to the scene and desperate to grow market share, or indeed considering entering this sector and seeking that killer differentiator, this white paper makes for essential reading.

## The Challenges

It's no secret a successful payment processor can have an extremely lucrative reoccurring revenue stream. This has been proven time and time again by many players in the sector but the business model is fragile and becoming even more so. The main challenges are:

- Reducing transaction fees
- Increasing risk of fraud and the resulting cost of charge backs
- Meeting ever evolving regulatory compliance
- Absorbing high costs associated with large deployed end point estates
- Balancing increasing operating costs to maintain a PCI approved transaction processing centre (switching and host security module infrastructure)

Apart from the first point, all the remaining challenges can be directly associated with the need to maintain an up-to-date payment processing infrastructure. Keeping current is essential to minimise fraud (and associated liabilities), but this can be an extremely costly exercise with ever-evolving regulations. As such, many newcomers avoid the investment required to setup a processing centre (initial and ongoing), and outsource. This may sound a logical approach but it is also expensive in its own right and the very fact the system is run by a third party erodes the potential of competitive advantage.

## The Alternative

The alternative and the subject of this white paper is a solution whereby a payment processor can:

- Drastically reduce the initial investment required to set up a payment infrastructure
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- Optimise ongoing running costs of said infrastructure
- Guarantee all regulatory compliance is maintained seamlessly
- Be safe in the knowledge the latest security requirements are always met (and exceeded)
- Accommodate changing demand by dynamically scaling at the touch of a button
- Leverage the latest cloud technologies
- Pave the way for thin client end points and all of its advantages
- Maintain control and leverage competitive advantage

All the above has been made possible thanks to the launch of an innovative solution by NewNet Communication Technologies called the Secure Transaction Cloud (STC)

Payments; Europe's third largest Fintech payment solution provider the company is active in 92 countries.

NewNet has delivered switching, routing, transport and HSM hardware to payment solution providers, acquirers, and retailers alike for decades. However, in response to the relentless drive from customers for higher security, faster switching, and lower ongoing costs, NewNet has virtualised its hardware capability. The net result is the STC, which in simple terms is a software version of its market-leading switching, routing and HSM hardware product suite.

This provides the customer with the option of purchasing an annual transaction processing licence rather than investing 6 digit sums for hardware, racking, PCI compliant data centre, etc.

### Why The Cloud?

The term cloud has been over-used in the past but in the context of STC there are significant benefits, some of which are as follows:

- 99.999999% availability
- Enterprise level datacentre capability
- Geographically agnostic
- Scalability with rapid creation of additional instances
- STC centrally monitored and always current to regulatory requirements
- Extremely secure/disaster recovery capability
- Ability to leverage end point thin-client technology

### A Little More Detail

The STC supports a plethora of payments including internet payments, mobile payments, POS based transactions (which are IP/mobile access based), and all forms of e-commerce and m-commerce payments. With virtualized payment and security functions operating in the cloud the security of the solution remain the highest as stipulated by the standards' bodies,



NewNet is a global provider of innovative solutions for payment processors, telecommunication providers, and mobile operators. NewNet is working in close collaboration on many projects with Spire

with the strongest encryptions using long length keys, and crypto operations being handled completely within the HSM boundaries. REST/JSON which follow the SOA model and used by web service-based software architectures are used for integration purposes of the NST payment application with cloud services. The service can be offered as a private, public or hybrid cloud.

## End Points

Interfacing end points with the STC is extremely straightforward and requires no modification to the residing payment application on the device estate providing IP connection is available. This has been demonstrated by Spire Payments' latest SP range of POS end points seamlessly transact through the cloud.



The only requirement is a configuration change to the end point so it points to the STC rather than the traditional acquirer or payment solution provider datacentre. This applies to the entire range of fully PCI compliant end points offered by Spire Payments. Providing an IP connection is present all environments can be accommodated including countertop, portable, unattended, mPOS and multi-lane. This ease of changing ensures a seamless transition from a traditional transaction switching installation to the STC.

## Thin-Client Capability

The very fact the STC is located in the cloud provides the perfect platform for thin client migration for end points. Rather than have EMV payment applications residing on tens of thousands of end points, a single application could reside or coexist with the STC. This capability has many advantages including:

- **Instant payment application maintenance.** Update the central application rather than tens of thousands of application deployed across an estate.
- **Optimum processing power.** The fact the cloud has almost limitless and scalable processing capability and storage ensure transaction processing is optimised.
- **The release of processing power for end points.** This allows greater focus on enhancing the consumer experience, rather the end point is pre-occupied with complex transaction processing.

Spire Payments and NewNet are working closely together to make thin client processing transaction a reality.

### Want to learn more?

If you are interested in learning more about NewNet's STC and Spire Payments end points and software solutions please visit:

[www.newnet.com/business-units/secure-transactions](http://www.newnet.com/business-units/secure-transactions) • [www.spirepayments.com](http://www.spirepayments.com)