



3PEA International Now known as Paysign



The Customer

3PEA International is a payment solutions company serving the U.S. healthcare market. Since 2007, it has issued over 30 million cards and supports 62,000 pharmacies, delivering secure transaction processing tightly coupled to real-time claims adjudication (RTCA).

The Challenge

Electronic Payment Method (EMV) adoption in the United States expanded authorization requirements and broadened compliance scope. Operating Futurex Excrypt SSP7000 units, 3PEA required modernized key management, card verification, PIN validation with clear, auditable evidence inside its Card Management System, and defined control monitoring. The team also needed readiness for changing authorization data elements and EMV scripts while aligning to PCI HSM and PCI DSS without disrupting pharmacy operations nationwide.

The Goals

Be EMV-ready without disrupting national operations, maintaining service continuity across all pharmacy endpoints. Align HSM controls to PCI HSM and protect cardholder data per PCI DSS within the CMS, with defined control owners, evidence artifacts, and real-time monitoring thresholds. Gain headroom for peak pharmacy traffic during seasonal surges and promotional spikes. Preserve vendor continuity to lower migration risk and accelerate post-cutover stabilization.

- EMV authorization support and end-to-end certification plan
- PCI HSM posture with dual-control and split-knowledge procedures
- PCI DSS evidence inside CMS, including diagrams, logs, and ownership mapping

Up to 2,250

transactions per second on
Excrypt SSP9000

*described as the world's fastest
payment HSM at the time.*

► Key takeaways

- Prove PCI HSM controls with clear ownership.

Why it matters:

Uptime protects revenue and patient trust.

- Embed HSM in the CMS for scalable protection.

Why it matters:

Tighter control reduces gaps.



The Solution

3PEA upgraded to Futurex Excrypt SSP9000, embedding it in the CMS to enable scale EMV readiness and PCI-aligned protection.

The Results

3PEA positioned for EMV and strengthened standards alignment by integrating the Excrypt SSP9000 as a core CMS security component. At the time, Excrypt SSP9000 delivered up to 2,250 transactions per second, providing performance headroom for peak loads. The platform addressed issuer needs like card verification, PIN validation, and key management while supporting future authorization flows tied to EMV. Benefits included clearer audit paths for PCI DSS, reduced migration risk through vendor continuity, and a scalable foundation for healthcare-scale payments.

- Positioned for EMV introduction in the United States
- Compliance alignment with emerging standards such as PCI HSM
- Cardholder data protection within the CMS complies with PCI DSS
- Performance capability up to 2,250 transactions per second on Excrypt SSP9000; described as the world's fastest payment HSM at the time
- Robust physical and logical security with a customizable architecture

Highlights

EMV readiness, PCI HSM posture, PCI DSS protection within CMS, and up to 2,250 TPS performance (at the time).



*Excrypt SSP9000 provides a complete solution for current key management and authorization needs as well as future requirements such as **EMV**. Its compliance to emerging standards like **PCI HSM** makes it integral to our Card Management System's security strategy.*

— Mark Newcomer, President,
3PEA International



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Futurex is headquartered outside of San Antonio, Texas, with regional offices worldwide and over a dozen data centers across five continents and delivers unmatched support for its clients' mission-critical data encryption and key management requirements.

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