



## CASE STUDY PCI PIN Security (PCI PIN)

### THE COMPANY

# FIRST TECH

First Tech Tecnologia Ltda

### THE PRACTITIONER

**Edmar Andre Siqueira**, Security Director

**Years there:** 20 years

#### What does your company do?

First Tech is a provider of services and information technology solutions. With over 25 years of experience in the payment market, we are the leading provider of HSM solutions and services to the Brazilian market.

#### What do you do for your company?

I am responsible for the business unit that offers security solutions and services for the electronic payments market. I am responsible for sale and pre-sales team, seeking and evaluating solutions that can address the needs of the payment market.

#### What is your professional experience?

I have been working with security projects for the electronic payments market for more than 20 years. I have technical training on encryption and data security and I have helped companies to design and implement the best solutions to meet their objectives. My work comes from the implementation of the 3DES algorithm to the market, migration to EMV and data tokenization. Today I have worked with my team to provide solutions and services to meet the new demands of customers to comply with PCI PIN security requirements.

#### What procedures has your company put in place to help with PCI PIN security controls?

We developed a plan with a small internal group and a [Qualified PIN Assessor](#) (QPA) company to assess our gaps to address the PCI PIN Security controls. Most of the challenges we identified were related to the physical security procedures required for data center access (mainly the rack housing the HSMs), procedures for the secure room access, and logical networking controls.

The implementation of the remediation tasks to overcome all identified challenges required support from staff in different departments in First Tech (Internal Audit, Key Management Process Responsible and Key Custodians), who were trained to execute their process and procedures in a way to adhere to PCI PIN Security controls.

The next steps included assessing the impacted applications and business risks, resulting in a migration plan to address the new process and procedures and PCI PIN Security standard.

After the implementation of the migration plan, First Tech was assessed for almost 290 PCI PIN Security requirements by a [QPA](#), in order to be able to provide our services to our clients, supporting them to adhere to the PCI PIN Security standard.

#### How has your company effectively managed the implementation of PCI PIN security controls?

First Tech is a solution provider who supports our clients to adhere to the PCI PIN Security Requirements. We have found that many clients lack of knowledge of the standard and face internal challenges to approve budgets for investments in technology and services to address the PCI PIN Security controls.

There is where First Tech come in to play. We needed to study and understand the PCI PIN Security controls throughout in order to better support our clients, so they could understand the benefits of adhering to PCI PIN Security controls.

The technology solution we chose was a differentiator since it was flexible to support different encryption keys structures. Our process and documentations for key generation and key management were all supported, resulting on an easy to execute and more effective process to support our clients in their key-management processes as well.

#### Has your company implemented a key blocks migration plan to adhere to PCI PIN Security Requirement 18-3? How was this implemented?

Yes, in order to address to the key blocks structures, First Tech established a team with two subject matter experts in PCI PIN Security and PCI HSM standards. The following tasks were crucial to support the migration plan:

- Survey of applications and encryption keys involved;
- Identify the personnel responsible for each application and to perform the necessary changes;
- Train the team to understand the new requirements and necessary changes;
- Survey the possible risks and impacts on the business;
- Establish a project schedule.

The execution of the above-mentioned tasks required a lot of discussion time and several interviews with different departments of the company. Once the impacted keys and applications were identified, the necessary changes were made followed by simulation and validation tests.

We also reviewed the key-generation and key-management procedures to adapt them to address the new key blocks structures, and prepared a complete migration report, which included the defined action plan divided in phases and including the risks.

#### How do you and your company plan to use the knowledge of PCI PIN Security?

We plan to use this knowledge for the purpose of always being up to date and complying with requirements, providing safe quality services to our customers and helping the market with implementations.

We can now offer knowledge and support to assist with the generation of keys in a secure environment.



### Brazil Regional Engagement Board

First Tech Tecnologia Ltda is an active member of the [Brazil Regional Engagement Board](#), which represents perspectives of PCI SSC [Participating Organizations](#) and PCI SSC constituents in Brazil, advising and providing feedback and guidance to the PCI SSC on standards and programs development and adoption in Brazil.