

Global Automobile Manufacturer Secures Mainframe Communications with Tectia for z/OS

A global automobile manufacturer with major operations in Europe and North America needed to replace numerous batch processes sending data in the clear with secure, encrypted file transfers. Using SSH Communications Security Tectia Solutions for Mainframe z/OS, this global manufacturer eliminated unsecure FTP without disruption to legacy applications and processes.

Background

File Transfer Protocol (FTP) remains the defacto standard for data transfer in many mainframe environments. FTP is used to move bulk information such as payroll, credit card records and medical information. When first introduced in the 1970's, there was no apparent need to encrypt file transfers because they generally took place over private, dedicated lines. Today that is no longer the case. Unencrypted information transfers are vulnerable to theft as they traverse shared network infrastructure.

The Problem

The Automobile Manufacturer had numerous legacy mainframe based batch processes transferring sensitive financial information between the US and Europe on a daily, weekly and monthly basis. These transfers over the public internet used clear text FTP. A security audit mandated replacing these processes with encrypted file transfers. The mainframe team needed a solution that could achieve the security requirements without introducing risky and disruptive changes to long standing legacy applications.

Automobile Manufacturer



Quick Facts:

Size & Type of Environment:

4 z/OS LPARS with multiple distributed Windows, Unix and IBM systems

Security Issues:

10 Applications transferring financial data internationally over the internet, in clear text
Daily, Weekly and Monthly automated file transfers

Audit Compliance:

Achieved audit compliance by encrypting critical PCI information that was being transmitted in clear text

Easy Installation:

No IPL required. Data captured and encrypted without any JCL or application changes at all

Choosing a Solution

The solution had to meet several stringent requirements. The project to convert ten legacy applications needed to be completed in less than a year. The solution also had to accommodate a heterogeneous infrastructure comprising a mix of Mainframe USS, Windows and other Unix/Linux systems. Both IBM open ported tools and third party solutions were evaluated. The Automaker chose Tectia SSH for z/OS because of its seamless conversion of FTP to SFTP. No changes to existing JCL or legacy applications were needed. The native MVS data support provided by Tectia SSH for z/OS also eliminated the potential complexity of file conversion. Finally, the solution provided the flexibility to convert FTP to SFTP or secure the FTP transfers in an encrypted SSH tunnel. This additional benefit was particularly helpful as it enabled the Automaker to retain the use of FTP where the applications relied on specific FTP functionality.

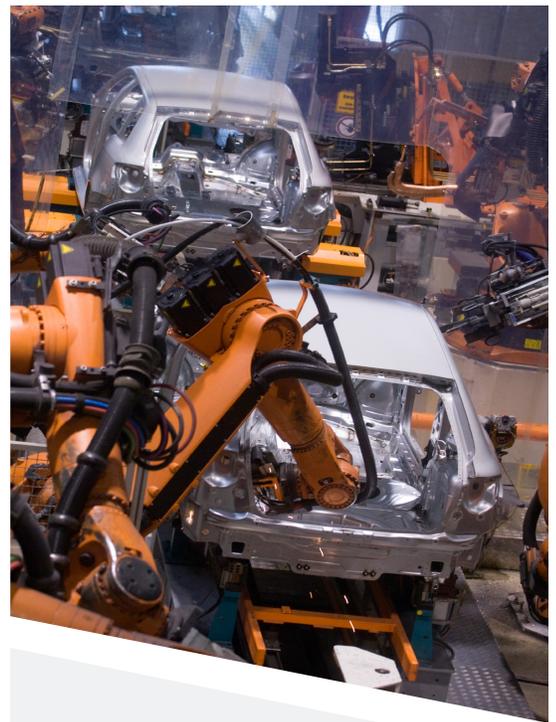
The Result

The project to convert ten legacy applications was completed in eight months – from proof of concept to production. The team was easily able to demonstrate compliance to the audit requirements and is now evaluating more legacy applications for conversion.

“We are anticipating more requests to lock things down in the next audit, but I just wanted to let you and your team know the Tectia SSH software accomplished what we needed. The fact that we did not have to alter any JCL saved us many man hours. I also would like to say how much I appreciated the expert support I received during this project. I could not have completed it without it”

- Automaker IBM Systems
Programming Consultant

*The company has requested anonymity, but all the facts are accurate as stated.



Further Reading:

- SSH User Key Remediation: Getting Control of One of the Most Significant Hidden Threats to Your Enterprise Security
.....
- SSH User Keys and Access Control in PCI-DSS Compliance Environments
.....
- The Technical Complexities and Risks of Public Key Authentication