Payment Engine Processes Payments from Existing PCs and Point-of-Sale Equipment

Introduction

Today's retail payments industry landscape is marked by concern over cardholder data security standards such as the Payment Card Industry Data Security Standard (PCI DSS) and the Payment Applications Best Practices (PABP). In the wake of several high-profile data security breaches, compliance regulations have tightened, and they will continue to evolve.

At the same time, the card payment acceptance model that has been entrenched in the industry since the 1980s is losing its luster. Manufacturers of payment terminals have developed better terminals, but the consolidation in this industry illustrates what many industry watchers have seen coming: the payment terminal is giving way to solutions that are more flexible, secure, and reliable. The industry awaits a replacement for the traditional payment terminal, one that will minimize capital costs and allow merchants to adapt easily to rapidly changing data security requirements.

Cisco and Precidia: Powering Payment Processing

The world leader in secure networking, Cisco® has teamed with Precidia Technologies, the leading developer of IP payments technologies. Recognizing the opportunity that exists for a new payment processing model, the two companies have introduced the TransNet payment engine with the Cisco Application Extension Platform (AXP), the industry's first router-based virtual terminal offering. This unique model provides a secure, end-to-end solution for payments, using the merchant's existing PC, payment terminal, cash register, or mobile device. It does not require networking in the edge device and instead integrates TransNet payment capability with Cisco's well-known networking device. In essence, the joint offering provides a full payment solution packaged in a router, backed by the biggest and most trusted name in networking.

How It Works

The TransNet/AXP solution combines three key elements: the Cisco AXP, the TransNet payment engine, and the NetVu management server.

The **Cisco AXP** offers a robust platform ideal for retail payments. Housing the payment application on this highly secure platform makes the payment function much less vulnerable to attack.

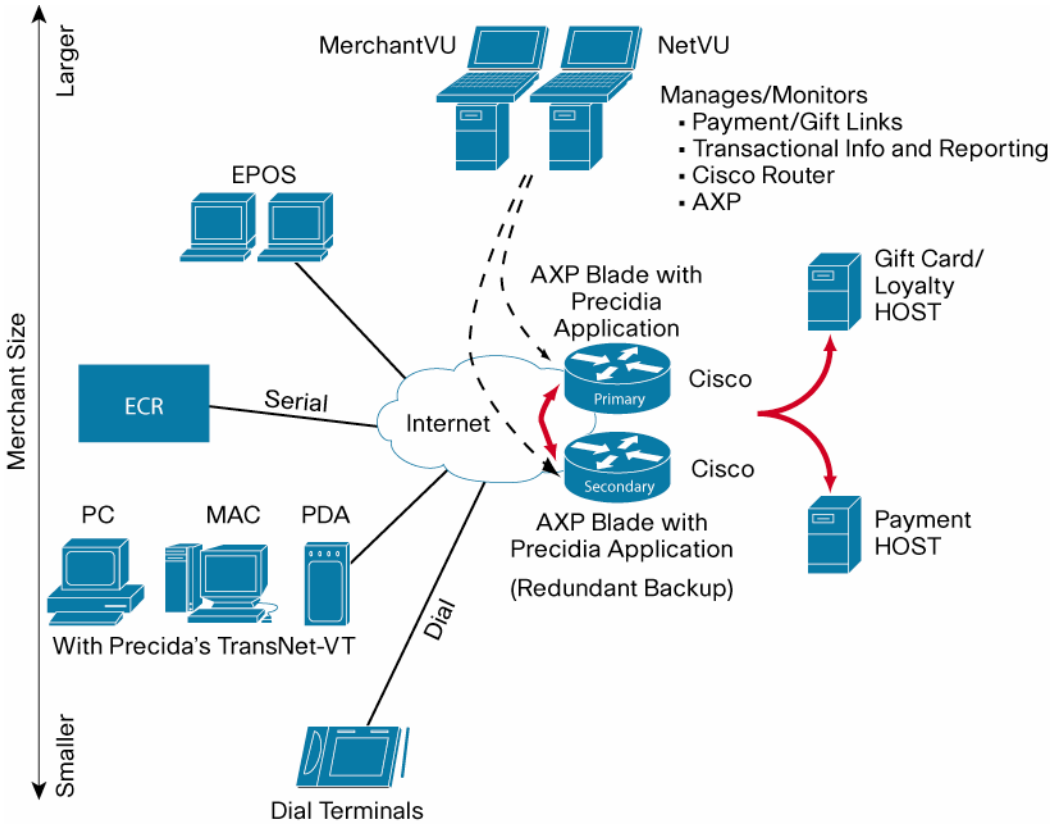
The **TransNet payment engine** is simply downloaded by the merchant. Once it has been installed on the Cisco AXP, the payment engine delivers complete end-to-end processing, from card swipe to processor authorization. TransNet is certified with a wide range of credit, debit, gift, and loyalty card processors and can establish direct links to any number of these processors, allowing merchants to easily take their processing business to the lowest-cost provider.

The **NetVu management server** is responsible for many of the most important features of this solution. It remotely manages and deploys any number of Cisco AXPs for simple, cost-effective operation and support. This control over the networking device gives processors and merchants the ability to implement application changes or upgrades, as well as PCI changes, to a large number of field devices at the click of a mouse. This feature ensures hassle-free, ongoing PCI compliance for merchants. TransNet is automatically updated as new threats emerge. The

management server, which also includes merchant-level data with MerchantVu, offers an unprecedented level of data, allowing the user to better manage both the device and the transactions.

Figure 1 shows the architecture of the TransNet/AXP solution.

Figure 1. Architecture of the TransNet/AXP Solution



Key Markets

The TransNet/AXP solution is ideal for almost any merchant looking for cost-effective, highly secure, and easily managed payments. However, there are unique benefits for several key retail sectors:

Restaurants can integrate TransNet/AXP with their existing hospitality application, gaining ongoing PCI compliance and faster transactions. Larger chain restaurants will appreciate the ability to download application changes to multiple terminals simultaneously.

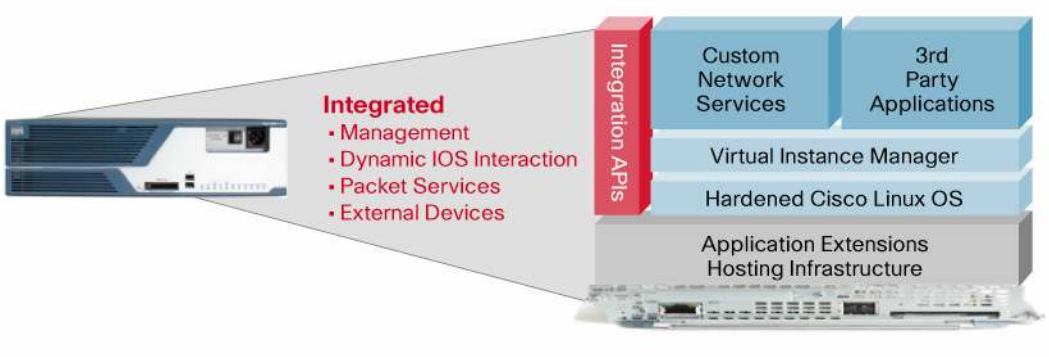
Small business owners can use their existing PC for more secure PCI-compliant payment processing. These users can also eliminate the monthly/capital cost of a separate payment terminal and can negotiate better processing rates with a direct route into the processor. TransNet-VT delivers a user-friendly payment interface for those who do not have an existing payment application.

Small retailers who depend on electronic cash registers (ECRs) or payment terminals will gain a payment processing interface on their existing device. On the back end, the transactions will be PCI compliant and dramatically faster, with many achieving cost savings by eliminating the need for a dedicated dial line.

Mobile workers will gain the ability to negotiate better processing rates while operating a fast, easy-to-use payment processing solution that integrates with an existing cell phone.

AXP Product Overview

The Cisco Application Extension Platform (AXP) provides a standards-based Linux hosting environment within the Cisco ISR allowing third parties to integrate applications with the router. Harnessing this integration, an AXP application can appear to the end user as an Extension of the router.



The AXP solution consists of:

- Application runtime network module, providing dedicated resources to host applications
- Application Extension Platform hosting environment, providing the infrastructure to securely host, install, upgrade, and manage third-party applications and services
- Cisco IOS® Software Integration APIs, allowing the application to integrate and utilize the features of the router
- Software developer kit (SDK), allowing certified customers and partners to develop applications and services
- AXP Partner Program, providing the collateral, extended technical support, and online resources to help partners develop, deploy, and market their AXP-based solutions

Solution Highlights

Security for Cardholder Data

- Combines the expertise of the industry's most trusted names in highly secure networking and IP payments
- Unique router-based design ensures that the payment function delivers fully PCI- and PABP-compliant transactions
- PCI and PABP compliance is constantly monitored and updated as new threats emerge, ensuring hassle-free ongoing cardholder data security

Cost-Effective Operation

- Preserves the merchant's existing capital investment in PCs or other point-of-sale (POS) equipment
- Provides ongoing operational savings due to more efficient provisioning, easier maintenance, and decentralized data centers using redundancy provided by the Cisco router

- Built-in PABP and PCI compliance eliminates the need for costly annual audits and recertifications
- Reduces transaction fees for many businesses, since they can route transactions directly to the processor's host, eliminating the intermediary
- Uses Cisco architecture designed for unified communications, allowing easy integration of voice over IP (VoIP), video, and other features for cost savings into the future

Advanced Management and Reliability

- Includes management tools that are unprecedented in the industry, delivering around-the clock access to transaction data and diagnostics files
- Management suite facilitates simple remote deployment, making the solution very cost-effective for processors and support organizations
- Unique router model offers simple redundancy, for enhanced reliability

Powerful User-Controlled Features

- Gives the user greater control over the payment function by removing the payments function from the PC or POS device
- Allows application or specification changes to be deployed to multiple locations at the click of a mouse
- Enables processors and network providers to expand their offerings beyond payments, creating new revenue streams

Next Steps

To learn more about or purchase the TransNet/AXP payments solution, contact:

Sales
Precidia Technologies Inc.
1-877-998-2747
1-613-592-7557 x 300
productinfo@precidia.com

About Precidia

Precidia Technologies is a global leader in the design and manufacture of Internet Protocol (IP) payment and networking products. With customers in more than 85 countries, Precidia offers unique products designed for simple serial networking, as well as a suite that manages the complexity of IP-based payments in the retail industry. All of Precidia's products have been designed to maximize the potential of existing equipment, with deployment, monitoring, security, and management tools. For more information, visit Precidia on the Web at: http://www.precidia.com/payments

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA C78-462175-01 11/08