



# REDBOX PLATFORM

## Are you ready for the **Retail Revolution?**

We understand your challenges: secure your store network, manage numerous in-store technologies and reduce IT expenses. Retail merchants are being consistently pressured to improve store connectivity, security and application functionality to better serve their customers.

New technology trends such as the revolution in mobile store applications create unforeseen IT requirements, such as secure wireless access for customers and staff. As a result, store systems are increasingly stretched, and store back offices are transformed into mini-data centers with racks of expensive hardware. To this confusion, add the escalating costs of store-based systems and one thing becomes clear — your job of acquiring, deploying and supporting multiple applications in stores is becoming much harder.

Retailing now has a new approach to cost-effectively and securely managing the next generation of in-store applications. Through its patented Redbox Platform, the in-store private cloud, Reliant provides a comprehensive data security suite (PCI), powerful network infrastructure and an open platform to host a variety of in-store retail applications. Redbox Platform cost-effectively delivers VoIP, Digital Signage, Interactive Kiosk, DVR, Guest Wifi, Payment Applications, Music and more from one centrally managed, locally hosted appliance. Redbox Platform configurations and software updates are managed centrally from the corporate office through Redbox Platform Manager.

# HOW TO BUILD YOUR IN-STORE PRIVATE CLOUD

## Secure

### Comprehensive network security



At the heart of Redbox Platform is our patented, virtualized security architecture, providing comprehensive protection against data security threats. PCI compliance is a dynamic part of the retailing landscape, with new threats emerging often – particularly with the deluge of mobile shopping apps and mobile payment technologies. Each of these threats requires a common approach to logging, breach detection, encryption and monitoring. By eliminating the need for complex integration of multiple network products, Redbox Platform substantially reduces the cost of PCI Remediation while addressing all 12 PCI DSS technical requirements.

## Connect

### Simplified networking infrastructure



Networking is the foundation of any retail systems deployment. Redbox Platform incorporates robust networking features that replace or augment traditional stand-alone networking components. Unlike the traditional “want a new feature, buy a new box” approach, these features are highly configurable and can address a variety of environments without the need for new hardware. Redbox Platform features include:

- VPN functionality to enable private communication to headquarters, payment processors or trusted vendors
- a firewall that provides network segmentation for both external and internal network segments
- a secure wireless infrastructure that offers both staff and guest wireless access while maintaining centralized control and monitoring

## Manage

### Locally hosted, centrally managed, audit ready



As stores become more cluttered with technology, these distributed systems are increasingly difficult to deploy and manage. Redbox Platform addresses this issue twofold: (1) it offers a one-device solution to host these applications, thereby simplifying store architecture and reducing costs, and (2) it includes a centralized console that enables plug and play deployment, device monitoring and configuration management.

Configurations can be modified on an enterprise, group or individual basis. The Redbox Platform Management framework allows Redbox appliances to be dynamically built from a single generic image with store-specific requirements. This includes dynamically generating the configuration of the local area network, virtual machines, security controls and store apps. All configuration and software package data is securely and centrally maintained. This framework allows merchants to maintain software versions, control system changes and apply patches and updates.

The architecture supports simple and cost-effective deployment. To deploy or replace the Redbox Platform, just plug it in at the store, and it configures itself dynamically. This intelligent configuration provides a much simpler deployment experience over traditional data security implementations.

Redbox Platform is designed to provide retail IT managers and compliance auditors with a centralized view into performance against operating and PCI compliance requirements. It securely automates and manages many compliance-related tasks and data security events, automatically polling stores for security event logs and creating alerts where further investigation is required. Logs, file integrity, system status, access controls, local vulnerability scanning and Redbox Platform configurations can be viewed, accessed and managed from corporate headquarters.

## Extend

### Value-added application hosting



Redbox Platform's virtualized, open architecture provides an in-store private cloud that can host an array of applications without the need for additional hardware. The more applications you host on Redbox Platform, the more value you extend to your customers and operational staff. The end-result: Redbox Platform offers an impressive return on investment.

## REDBOX PLATFORM APPLICATIONS INCLUDE:



### HOSTED PAYMENT APPLICATIONS

Runs locally hosted PCI- and EMV-compliant payment applications, taking POS out of scope and integrating mPOS.



### MOBILE POS

Integrates mPOS with locally integrated payment and back-end systems.



### DIGITAL VIDEO RECORDER

Eliminates the high cost of DVR hardware and reduces licensing requirements for in-store surveillance.



### DIGITAL SIGNAGE

Offers 100% customizable digital content, including HD video for powerful sales- and customer-focused messaging, with integration to existing store-level and external display systems ... all with central content control and management.



### INTERACTIVE KIOSK

Versatile interactive touchscreens deploy simply into existing network infrastructure using power over Ethernet and Wi-Fi configurations and support VoIP and full price-check capability.



### IP PBX

Offers full VoIP support, on-hold music, full ACD, IVR, 3 & 4 digit store dialing, voicemail as email, call routing to corporate office and analog line failover when the IP network is not available.



### PUBLIC/PRIVATE/GUEST WI-FI

Provides a complete multi-location enterprise grade wireless solution at a price point that is a fraction of complex commercial alternatives.



### REDBOX MUSIC PLAYER

Eliminates the cost of physical hardware for a single-point music appliance and reduces high licensing fees.

## Comprehensively Satisfies All 12 PCI Requirements

1. Install and maintain a firewall configuration to protect data
2. Do not use vendor-supplied defaults for system passwords and other security parameters
3. Protect stored data
4. Encrypt transmission of cardholder data and sensitive information across public networks
5. Use and regularly update anti-virus software
6. Develop and maintain secure systems and applications
7. Restrict access to data by business need-to-know
8. Assign a unique ID to each person with computer access
9. Restrict physical access to cardholder data
10. Track and monitor all access to network resources and cardholder data
11. Regularly test security systems and processes
12. Maintain a policy that addresses information security

Redbox Platform provides one of the broadest ranges of connectivity options available, covering both LAN and WAN technologies. Its open architecture enables a wide range of configurations, supporting numerous LAN and WAN network options, including:

#### ✓ LAN PORT SWITCH

Redbox Platform is equipped with a number of 10/100/1000 gigabit Ethernet ports — ranging from one to thirty-two, depending on the hardware model — each of which can be configured as a separate layer 3 network, or aggregated together, in any combination, as a layer 2 switch.

#### ✓ WAN CONNECTIVITY

Redbox Platform allows for any interface or combination of interfaces to be configured as a WAN interface. Available interfaces include Ethernet, USB or serial. Connectivity options typically include Ethernet to a broadband modem or router, MPLS or T1 router, VSAT or USB 3G/4G modem.

#### ✓ VLANS AND WIRELESS VLANS

Redbox Platform has full support for 802.1Q VLAN trunking. Up to 1024 separate VLANs can be assigned to any combination of physical or virtual interfaces. In addition, Redbox Platform can interface with wireless access points or switch and provide support for wireless VLANs via trunk interface.

#### ✓ WWAN

Via USB interface, Redbox Platform accommodates 3G or 4G mobile wireless data modems. Use of the modem is controlled by flexible scripts, which can manage use of the link based on usage, network availability, time of day, source, destination, protocol and port.

#### ✓ VPN

Redbox Platform uses a flexible and efficient SSL-based

“Initially we worked with Reliant as data-security and PCI consultants because we needed to quickly become PCI compliant. We then learned about the Redbox Platform, and the many ways we could leverage the appliance to provide data security and other functionality. After evaluating other alternatives, we decided on Reliant and its Redbox Platform for the high level of security and innovation, and to ensure a successful PCI audit.”

-Bob Schoening, CIO. Total Wine & More

## REDBOX PLATFORM TECHNICAL OVERVIEW

### Hardware:

Reliant has various models of Redbox Platform hardware available depending on the anticipated application, and plans for future growth, in the store environment.

- Single, dual, or quad core AMD or Intel ATOM, Core i3, Core i5, Core i7, or Xeon processors
- Memory configurations that range between 1GB to 32 GB of RAM
- Between 1 to 6 ports of autosensing 10/100/1000 Ethernet interfaces
- Storage options that include 8GB to 16GB compact flash, SSD and traditional hard disks up to 2 terabytes in size.
- Serial connectivity within is provided through USB interfaces.
- For applications that require video, Redbox models are available with VGA, DVI, or HDMI output and include Intel or Nvidia GPUs.
- The physical size of Redbox Platform appliances range between 3.5" x 5" x 1.5" to 19" rack mountable units between 1 and 2RU.

### Redbox Platform operating system:

Redbox Platform uses a Debian Linux operating system with OpenVZ virtualization.

VPN that runs smoothly and securely over any WAN medium.

#### ✓ PRIMARY OR BACKUP CONNECTIVITY

Redbox Platform provides primary or backup WAN connectivity from any of its interfaces. For example, it can be configured for primary connectivity using DSL with backup connectivity via a 3G/4G wireless link. It can also provide backup connectivity to a location, when paired with another router.

#### ✓ ROUTING PROTOCOLS

Redbox Platform supports most standard based routing protocols, including RIP, OSPF and BGP.

#### ✓ QOS

Redbox Platform offers robust quality-of-service options that can be established on a per-interface level. These include custom packet queuing and prioritization.