



Reliant Platform

The change in Retail and Hospitality technology is accelerating. Can you keep up?

The challenges for today's IT managers can appear daunting—needing to add new customer engagement applications, constant focus on cyber security, providing mobility solutions, and integrating legacy systems with cloud applications, among others—all in an effort to better serve customers. Of course, they need to remain vigilant on controlling and potentially reducing operational costs.

In this hyper changing world, new technology trends like omnichannel payments and immersive rich-media customer experiences create additional requirements such as secure wireless access for customers and staff along with faster store connectivity. As a result, store technology infrastructure is increasingly stretched thin, with an ever-increasing number of individual systems, networks, and overlapping applications. To this confusion, add the escalating costs of maintaining store systems and one thing becomes clear—your job of acquiring, deploying, and supporting multiple applications in stores is becoming much harder.

Fortunately, retailers and hospitality operators now have a new approach to cost-effectively deploy, secure, and manage the next generation of customer-engaging applications. Reliant Platform is an edge computing platform that uses virtualization and a webscale DevOps infrastructure to automate delivery and management of applications, networking, and security controls. Reliant Platform operates at the edge between your locations and the cloud or data center.

Reliant leverages the latest technologies in application and system orchestration so that the Reliant Platform more effectively delivers immersive customer experiences and supports agile application delivery. This includes in-store web content, digital images, music, traditional retail systems (payments, POS, mPOS), networking, and security controls from one centrally managed platform.

Reliant offers an integrated, scalable platform that integrates new and legacy systems into one holistic system through virtualization, centralized management, and comprehensive monitoring. And, since it is an edge computing solution, you'll realize continual operations even when connectivity to the cloud or data center is lost. Imagine being able to leverage the power of automation, connectivity, security, and cost-savings all in one platform!

Many of today's top global brands have selected Reliant Platform to leverage the features provided and to manage their next generation of mobile, agile, and customer-engaging applications.

Edge Computing Bringing Compute Power to the Retail Edge

Edge computing is a compliment to an enterprise's Cloud architecture. The benefit of edge computing is reducing latency and the time it takes to process data in the cloud by doing a component of application delivery on local devices in order to bring compute, storage, and associated services closer to the store. This results in better performance and improved reliability through elimination of a hard requirement for continuous WAN availability. Along with new developments in agile and DevOps, Reliant Platform transforms retail and hospitality IT with widely distributed edge computing significantly.

Automate: Technology Automation Management At Scale

By performing tasks and functions without human intervention, automation leads to much higher productivity, efficiency, and lower costs. Automating functions such as mobile apps to self-checkout systems to robotic fulfillment centers derive great benefits. Alongside of automation stands orchestration, which focuses on the creation of consolidated workflows designed to keep the regular and ad-hoc tasks associated with systems and application management working together seamlessly.

Secure:

Comprehensive Network Security

At the heart of Reliant 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, Reliant 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. Reliant 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. Reliant Platform features include:

- VPN functionality to enable private communication to head-quarters, 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

Reliable:

Better connectivity and uptime

Reliant Platform provides a more reliable solution to cost effectively deploy, secure, and manage your next generation of mobile, agile, and customer-engaging applications. With our central cloud managed, in-store platform, retailers and restaurant operators keep their peace of mind while keeping pace with the demands of today's rapidly evolving business environment. Here are just some of the many features that makes Reliant Platform the most reliable solution for your business:

- Cloud-level automation resulting in better connectivity and uptime
- Dynamic configuration reduces discrepancies between disparate software environments
- Real fault-tolerance through in-store hardware redundancy and automated failover
- Continual operations even with the loss of communication through the cloud or data center

Manage:

Locally hosted, centrally managed, audit ready

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

Configurations can be modified on an enterprise, group, or individual basis. The Reliant Platform Management framework allows Reliant appliances

Save:

Reduced Capex & Opex Costs

As never before, retail is under increasing pressure to deliver more technology rich and immersive customer experiences at drastically reduced costs. Since operational expenses are typically the bulk of a company's regular costs, businesses increasingly look for ways to lower this first without causing a critical drop in quality or production output. The challenge however of reducing OpEx expenses in IT is offset by the tangle of systems and infrastructures required to support the increasing demands of automation. The value of Reliant Platform is that it consolidates network, security, infrastructure, and application functions into a virtualized platform that bridges the gap between the cloud and the store. Automation and system consolidation means more real fault tolerances as less hands-on deck are required to support and maintain disparate back-office systems in exchange for better uptime, connectivity, and overall reliability.

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 Reliant 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.

Reliant Platform

Reliant Platform is designed to provide retail IT managers and compliance auditors with a holistic view of their in-store technology infrastructure that monitors performance against all 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 Reliant Platform configurations can be viewed, accessed, and managed from corporate headquarters.



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 SIGNAGE

Offers the ability to host signage applications from leading providers, or integrate directly with next generation display systems with support for web services, to deliver powerful sales- and customer-focused messaging.



INTERACTIVE KIOSK

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



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.



RELIANT MUSIC PLAYER

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



PAYMENT CONFIGURATION AND ESTATE MANAGEMENT

Reliant Platform can provide comprehensive vendor neutral payment software management and payment terminal device configuration and estate management. Our solution can manage payment configurations from the Payment Entry Device (PED) to payment middleware to POS to payment switch from one central system; providing orchestration from lane, to store, to across an entire brand.



Reliant Platform Technical Overview

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

LAN Port Switch

Reliant 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

Reliant 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

Reliant 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, Reliant Platform can interface with wireless access points or switch and provide support for wireless VLANs via trunk interface.

WWAN

Via USB interface, Reliant 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

Reliant Platform uses a flexible and efficient SSL-based VPN that runs smoothly and securely over any WAN medium.

SD-WAN

SD-WAN within the Reliant Platform uses configuration as code that comprises networking, including IP addressing, routing, firewall and network services such as DNS and DHCP. The SD-WAN solution provides a strong central management of the overall network topology and dynamically responds to network changes giving greater capability to prioritize traffic by applications or need additional bandwidth at peak periods.

Primary or Backup Connectivity

Reliant 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

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

Hardware

Reliant Platform is a software solution but can be delivered as an appliance with hardware provided by Reliant, or run on a customer provided server. Reliant Platform requires an x86 CPU, which depending on the use-case can range from a single core SOC to multi core, multiprocessor systems.

Reliant Platform Operating System

Reliant Platform uses a Debian Linux operating system with LXC containers and a KVM hypervisor.

About Reliant

Reliant is a leading provider of an Edge Computing platform for hospitality and retail. Reliant's software solution centralizes, automates, and controls application and content delivery, management, and security on-premise, in stores and restaurants. Edge computing compliments cloud computing, providing reduced latency, accelerating digital transformation, and supporting continuous operations.