NCR SOFTWARE DEFINED STORE

Overview

Software Defined Store (SDS) enables the virtualization of retail back office and front office IT resources, and offers specific virtualization solutions for Point of Sale (POS), tablets, kiosks, self-checkout and a variety of other retail store applications.

The solution combines on premise, Cloud functionality, and support services:

- Deployed in-store, the **Intelligent Edge** provides core IT services and virtual machine resources for hosting virtualized POS and applications. It comprizes an edge-scale, hyperconverged core with tightly integrated compute, storage and networking.

- **Intelligent Edge Clien**t software runs on POS terminals and other in-store devices, securely connecting their screen and peripherals to the virtualized software running on the Intelligent Edge. The Intelligent Edge supports a range of modern and legacy client devices, including USB, Bluetooth, and serial connected peripherals.

- The **Intelligent Control Plane** enables the provisioning, management, control and updating of hundreds or thousands of Intelligent Edge servers across your retail estate. It simplifies and accelerates what would otherwise be complex IT tasks, while ensuring a consistent, secure IT environment in every store. Intelligent Control Plane services are hosted on private-Cloud, datacenter, or public-Cloud resources, with the option of a hosting managed service.

- The **SDS Support Team** provides support and maintenance, plus the option of enhanced services for on-going monitoring, patching and updates of the SDS solution.

Key Product Features

Enhanced PCI-DSS Compliance

- PCI-DSS Compliant Service Provider. The solution is developed and supported by a PCI-DSS Tier 1 Service Provider.
- Secure. A hardened architecture designed for retail environments, with compliant event and log auditing.
- Policy. Enforcement of system-level intrusion prevention measures such as password policy, failed-logon blocking, and port blocking.

Cloud Managed

- Monitoring, Management and Automation. Manage all your virtualized edge servers from the Cloud, rapidly provision new sites, and access detailed event and diagnostic information.

Application Hosting

- Virtual Machines. Compute capacity to host your applications. Allocate CPUs, RAM and storage to virtual machines for virtualized POS and local applications that benefit from the security and reliability of the Intelligent Edge HCI Core.

Edge-scale

- Installed on your choice of verified server hardware, the Intelligent Edge architecture is designed for the edge delivering significantly lower store IT hardware costs than data center virtualization solutions.

For more information on NCR Software Defined Store Edge Servers, visit ncr.com.

Resilient and Reliable

- **Dual-node Cluster.** Two virtualized edge servers working together to remove single points of hardware failure, increasing up-time and resiliency.

- **Data Replication.** Data is automatically replicated between each node, making it available during a fail-over event while also increasing overall data resiliency.

- **Independent Updates.** Allows each node's core system software to be updated independently, reducing planned downtime and de-risking the update process.

POS Device and Peripheral Support

- **User experience.** Users continue to interact through the screen of the original POS terminal, presenting the POS application exactly as it appears and operates today.

- **Peripheral integration.** Use existing peripherals such as printers, cash drawers, magnetic stripe readers, barcode scanners, check readers and ancillary displays to continue to operate without the need for replacement or upgrade.

- **Thin client.** Intelligent Edge Client software runs on modern thin client devices and legacy hardware, requiring very little RAM, CPU and no local storage thanks to a PXE-based network boot option.

Support and Maintenance

Two support and maintenance options are available to ensure a reliable, up-to-date solution while also helping customers reduce the cost and effort to maintain their in-store IT.

- **Standard Support and Maintenance.** Provides support required for deployment of the solution into a production environment, including 24x7 support and access to software updates.

- **Gold Support and Maintenance.** All the benefits of Standard Support and Maintenance, with the addition of managed services—The SDS Support Team proactively monitors and manages your virtualized edge servers on your behalf. This reduces your IT effort required to look after your server inventory, allowing you to focus on the hosted business applications and users.

Hardware Requirements

Installed on your choice of verified hardware, the solution architecture is designed for the edge delivering significantly lower store IT hardware costs than data center virtualization solutions.

- **Server Type.** Micro-server, tower or rack-mount
- **CPU.** Intel Core or Xeon CPU, from 4 Cores and 1.8 Ghz base frequency
- **Memory.** From 24GB DDR4 RAM
- **Storage.** SATA HDD or SSD, in one or more mirrored pairs
- **Disk Cache.** Optional M.2 or SATA 120GB SSD

NCR provides a choice of small form-factor servers designed exclusively for SDS, meeting the resource requirements for a range of store sizes and use cases.

NCR Software Defined Store Edge Server

Entry Level	4-6 VMs
Standard	8-12 VMs
Enterprise	12-20 VMs

NCR delivers market leading store infrastructure and applications at the Retail Edge, designed to help retailers worldwide evolve faster on a lower cost curve. This leadership was further enhanced by the acquisition of Zynstra in 2019, a specialist software company delivering Software Defined Edge infrastructure for retail with patented, unique IP and global scale enterprise deployments. Zynstra's IP is embedded in an Edge and Cloud microservices strategy for all retail applications and at the core of the NCR Commerce Platform.

Why NCR?

NCR Corporation (NYSE: NCR) is a leading enterprise technology provider that runs stores, restaurants and self-directed banking. NCR is headquartered in Atlanta, Ga., with 38,000 employees globally. NCR is a trademark of NCR Corporation in the United States and other countries.