

Carrefour

Customer

- Carrefour

Industry

- Retail

Challenges

- CAPEX and maintenance of traditional workplaces
- Need for mobility & flexibility
- Same user experience for all users
- Single vendor to provide hard- and software

Solution

- Turnkey end-to-end Solution
- NEC Virtual PC Center (VPCC) Solution
- 2 Servers at each site for redundancy
- Storage solution as back-up

Results

- Enhanced Business Agility
- Assured Services
- Increased QoS and User Satisfaction

Benefits for the Users:

- Continuous availability of data
- Secure data access - anywhere, anytime
- Full mobility and flexibility
- Business Continuity ensured

Benefits for the Administrators:

- Centralized management
- Easier to manage the day to day tasks
- Easy Updates – increased efficiency
- Minimal risk of hardware failure
- 2 servers at each site for administration and redundancy
- Storage solution to host virtual machines

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“While providing the next level of data protection and high availability, we found that NEC VPCC is a complete turnkey desktop virtualization solution supporting our need for mobility and flexibility. It has boosted security, enhanced business continuity and decreased terminal operation management for our administrators” – Mr. Jorge Dos Santos, IT Group Support Manager at CARREFOUR.

Challenges

With an installed park of more than 7000 aging traditional workplaces spread across their more than 200 Hypermarkets in France, Carrefour was having challenges regarding the maintenance and specifically the updates of these workplaces.

The need of rethinking their IT structure was reinforced by the migration of Microsoft Windows XP to Microsoft Windows 7 and Carrefour decided to seek a more cost effective alternative solution for the replacement of PC's, more easily manageable and providing mobility and flexibility.

An important requirement was that the new solution had to give the same user experience to all users, being administrative users (Human Resources, Procurement, Logistics), commercial agents in the stores and the agents of the shops situated in shopping malls.

Furthermore Carrefour had an unconditional demand of having hardware, software and a monitoring application provided by one single vendor as a turnkey end-to-end solution.

The solution needed to be robust but cost effective, fully accepted by the users and adapted to the new mobility needs of the sales agents.

Solution

After a careful and thorough evaluation, Carrefour opted for the implementation of NEC's Virtual PC Center (VPCC) solution. The project was deployed in 4 phases.

A first proof of concept was launched in one of the hypermarkets and within a timeframe of a month's testing, the users and

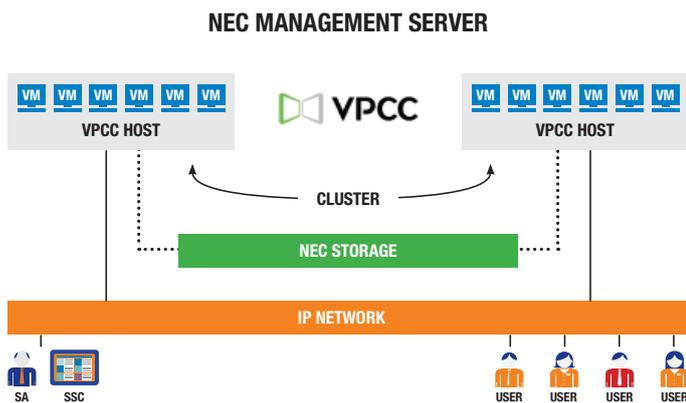
management were both very satisfied with this alternative solution as replacement of the desktops. After fine-tuning the Virtual Desktop solution to the needs of the Carrefour Group, four hypermarkets were fully deployed with NEC's VPCC.

Once the solution was qualified as steady and fully reliable, there was a need for flawless adjustment to the typical case of Carrefour. Some hypermarkets have only 10, others have more than 100 workplaces, which makes standardization in full security and with the best performance, quite challenging.

The solution consists of VPCC based on NEC's 2-way servers per site with a M-100 Storage Solution for a proper back-up solution and virtualization under Microsoft Hyper-V.

The third phase of deployment was prepared with the support of Osiatis as system integrator. The hardware was pre-installed in racks and the VM's were remotely deployed and tested by NEC. In the last phase the project went live where all physical workplaces were replaced within one day by the new solution, without interruption of service.

The virtualization of the workplaces needed cultural acceptance and internal preparations & training were considered mandatory. The fact that there was no longer local storage of data, in combination with the innovative element of mobility and flexibility were decisive in gaining user acceptance.



SA = System administrator | SSC = SigmaSystemCenter

Last but not least, the support and monitoring is accomplished by the partnership of NEC with system integrator Osiatis ensures guaranteed 24/7 support and monitoring as no downtime can be accepted.

Results

The smart architecture of the VPCC solution and the fact that there are no moving parts in the terminals means easier administration and less support. The move of the OS and applications to the server means that the IT team no longer needs to go physically to the site for updates or maintenance.

Centralized management and back-up results in a better performance, for users, the IT team and the complete organization. The entire infrastructure can be controlled from anywhere. The VPCC solution gives users the opportunity to access their data anywhere, anytime, with a high level of security. The absence of any local storage system on the thin clients makes it impossible for data to be accessed without authorization.

Users are no longer dependent of one device, as they can have access from any thin client available. Per site two servers have been installed in a cluster format, so everything is fully redundant. This makes the service always available.

About

In 50 years, the Carrefour Group has become a world leader in the retail sector. Being the second largest retailer in the world and the largest in Europe, the Group now features four major grocery retail formats: hypermarkets, supermarkets, cash & carry and convenience stores. The Carrefour Group currently has over 9 900 company-owned and franchise stores.

For further information please contact your local NEC representative or:

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