Premium Platform for Nutanix
Product Information Note

Bringing best-in-class computing hardware and advanced virtualization technologies together in an easy to deploy, compact, scalable and reliable pre-packaged solution delivering protection from hardware downtime and an unmatched lifecycle experience.

Powerful reference design

Honeywell's Premium Platform for Nutanix provides a reference virtual design optimized for the process control industry. The design is based on hyperconverged infrastructure hardware integrated with Nutanix software, delivering a simple, compact, reliable, flexible and scalable solution with a premium hardware lifecycle experience.

Built to specification for process control

Virtualization technology provides the benefit of hardware independence. However, with a wide variety of server options to choose from, it is difficult to decide on the ideal combination that provides the best overall performance and reliability experience for Experion PKS.

Honeywell eliminates this complexity with the Premium Platform Nutanix. It delivers a pre-defined hardware configuration optimized for virtualized process control environments using Honeywell-customized provisioning templates, and Honeywell's deep collaboration with Dell and Nutanix ensures optimal performance and resiliency without the guesswork of the design. You no longer must worry about trying every possible component combination such as server chassis, processors, memory, local versus shared storage, storage controllers, or networking options across multiple vendors.

Integrated, Compact and Scalable Solution

Unlike traditional virtualization designs that separate the storage array from the hypervisor, Honeywell's Premium Platform for Nutanix combines the best of server and shared storage technologies in a design that is optimized for the process control industry. It tightly integrates pre-defined storage and compute into a base building block, and multiple storage blocks are integrated through the Nutanix Distributed Storage Fabric to create a resilient shared storage pool across all nodes in the cluster. This cluster-based approach enables you to leverage advanced virtualization features while maintaining the modular and easy to maintain characteristics of the solution. Honeywell's approach delivers the benefits of shared storage while ensuring that the core tenants of a Distributed Control System - that risk is distributed - is retained.

The Honeywell Premium Platform for Nutanix delivers excellent lifecycle benefits above and beyond traditional bare metal solutions. These benefits include greater networking options and flexibility, 30% or more reduction in setup time, and significantly more density with the consolidation of workloads to the virtualization environment. Advanced availability features provided increased protections from hardware failures, including capabilities for live migrations of virtual machines between hardware hosts and High Availability technology to automatically restart virtual machines in the event of a hardware failure.

Ready-to-go customized solution from Honeywell

With typical hardware platforms, there are multiple network and configuration settings that need to be adjusted along with a multitude of different firmware packages. On the software side, third-party software packages like the Nutanix hypervisor and Microsoft operating system need to be installed and configured. All of these tasks can be tedious and error prone to perform. To eliminate these concerns, Honeywell delivers the Premium Platform for Nutanix in a package that provides a simplified deployment experience that enables all hardware and hypervisor configuration steps to be quickly implemented and deployed.

Honeywell offers the Microsoft Windows Server Datacenter edition operating system with the Premium Platform server, allowing for unlimited virtual machines to be licensed per Premium Platform server. This also eliminates the need to license individual operating systems.

Honeywell works directly with Dell to define a configuration that provides the optimal balance of both performance and resiliency, eliminating countless hours of configuration guesswork that would otherwise need to be done as part of a project. The Premium Platform for Nutanix is available exclusively from Honeywell, and all contents and deliverables with this solution are for the exclusive use by Premium Platform customers, including:

• Firmware, BIOS, and hypervisor releases installed to the Honeywell baseline

• Standardized management switch configuration files

• Detailed deployment documentation and aids delivering a simple deployment experience

• Microsoft operating system templates

Honeywell's standardized ordering and deployment processes ensure that each Premium Platform deployment delivers the expected performance, resiliency, quality, and security requirements. It also enables Honeywell to ensure documentation, global support and engineering services are all aligned to this configuration.

Virtualization provides improved hardware independence opportunities and with greater hardware choice. However, that power to choose can come at the expense of standardization. The standardization provided with the Premium Platform creates a far superior and seamless customer experience over any non-standardized hardware approach.

Enhanced Lifecycle experience

In addition to opportunities for reducing facility costs, the Premium Platform for Nutanix provides a superior lifecycle experience through its remote administration and management capabilities. Overall uptime is improved by reducing the impact of preventative maintenance or expansion events. These capabilities include:

• Adding new processing capacity and hypervisor updates on-line with zero disruption to operations

• Refreshing hardware online without having to touch the operating system or application layer

• Rapid fallback to a known good point using snapshots

• Standardized networking for simplified deployments and management

Improved system availability

The Honeywell Premium Platform for Nutanix vastly increases system availability by reducing operational disruptions due to unplanned or planned hardware downtime. This is achieved through advanced virtualization capabilities including:

• High Availability technology to automatically restart virtual machines in the event of a hardware failure

• Virtual machine Live Migrations enable preventive maintenance tasks like hardware maintenance and periodic hypervisor patching to be performed online and with no impact to plant operations

• Cluster-level redundancies to enable clusters to tolerate the loss of a hardware component

Improved performance with design flexibility

With the use of solid-state disk drives, Honeywell's Premium Platform for Nutanix offers best in class disk performance which improves support for a wider array of Experion PKS workloads with less hardware. The high performance is complimented by the flexible network design allowing each server to connect to multiple network segments with reduced complexity.

Simplified hardware choices for easy ordering

Honeywell's Premium Platform for Nutanix delivers a vastly simplified ordering experience by distilling a large number of possible permutations down to simple, ready to deploy bundles. These bundles include the Premium Platform for Nutanix servers, management network switches, and operating system licensing.

Lower Facility Costs

Honeywell's Premium Platform for Nutanix has a much lower footprint than traditional hardware topologies and can dramatically reduce server room space, weight, cooling and power requirements. The power saved can defer or eliminate costly Uninterrupted Power Supply (UPS) upgrades and reduce power consumption. With each server that is eliminated, there is one less node that requires a periodic maintenance task to be performed against it.

Comprehensive Services and Technical Support

Honeywell offers standard and optional service plans that help in the management of the Premium Platform for Nutanix solution. This includes Honeywell remote technical support and services, patching and upgrade solution, parts repair and replacements, and optional hardware warranty extensions.

Comprehensive user documentation is provided to address all aspects of the system lifecycle, including system planning, installation, troubleshooting, and best practices.

Why buy Honeywell's Premium Platform for Nutanix?

- Reference virtual design that is optimized for the process control industry
- Custom networking design templates, provisioning aids, and configuration stack that is available exclusively for Premium Platform for Nutanix customers
- Tested for performance with various Experion PKS and Advanced Solutions products
- Modular design with advanced virtualization capabilities for complete protection against hardware downtime
- Full GTAC support for all layers of the stack
- Simplified design and ordering experience
- Standardized and hassle-free project execution by Honeywell engineering teams
- Reduced configuration time on site
- Superior support experience over the life of the platform.
- Better hardware scalability with smaller system building blocks and simplified networking
- Extensive hardware-software integration with automated and simplified deployment, update, and system expansion tools

For More Information

To learn more about Honeywell's Premium Platform for Experion® Virtualization solutions, visit https://hwll.co/virtualization or contact your Honeywell Account Manager.

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