



JRA Powers ¥3 Trillion Central Horse Racing Operations with VMware Cloud Foundation

The Japan Racing Association (JRA) was established in 1954 under the Japan Racing Association Act. It manages 10 racecourses nationwide, 38 off-track betting facilities such as Wins Excel, the Equestrian Park, Racing School, and training centers. JRA welcomes over 5 million attendees annually, generates more than ¥3.34 trillion in betting sales, and has more than 6.5 million internet betting members.

Industry

Media and Entertainment

VMware footprint

- VMware® Cloud Foundation®
- VMware vDefend™ Distributed Firewall
- VCF Professional Services and Lifecycle Support

The Japan Racing Association (JRA), which oversees central horse racing in Japan, has modernized its integrated IT infrastructure with VMware Cloud Foundation (VCF). Leveraging VCF, JRA seamlessly transitioned 2,000 virtual machines overnight into its third-generation private cloud environment. The new infrastructure underpins approximately 25 mission-critical systems, from the official website to racehorse information management, while VCF Professional Services and Lifecycle Support provide the hands-on assistance that JRA considers indispensable.

Building reliable infrastructure

Founded in 1954 under the Japan Racing Association Act, JRA operates as a special corporation conducting and managing central horse racing. It oversees 10 racecourses, 38 off-track betting facilities called 'WINS', training farms in Hidaka and Miyazaki, and two major training centers in Ritto and Miho. It also manages the JRA Equestrian Park, JRA Racing School and Racehorse Research Institute.

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Mr. Kenji Yokota, Section Chief, System Management Division, Japan Racing Association

In 2024, JRA welcomed more than 5 million attendees, achieved a betting turnover of ¥3.34 trillion in its 13th consecutive year of growth, and surpassed 6.5 million membership accounts. Alongside its role as a leading sports and entertainment organization, JRA also advances



sustainability, climate change initiatives, and horse welfare—supported by secure, resilient IT systems and digital transformation.

“We are prioritizing the construction of reliable systems as our foremost goal in building our infrastructure,” says Mr. Kenji Yokota, section chief of the System Management Division, JRA. “Broadcom is responding to this foundational work. Based on past performance, we highly value the reliability of VMware technology.”

Modernizing for the third generation

JRA IT infrastructure supports 25 mission-critical systems, from the Japan Racing Information System (JARIS) for racehorse information to accounting and payroll, event hosting and management systems, and the virtual desktop infrastructure (VDI) that is essential for staff operations. Consolidating these into a single infrastructure reduced hardware costs and freed departments to focus on software development. But it also meant that a single failure could cascade across the entire environment.

“Consolidating previously separate systems onto a single platform has enabled departments to focus on software development while reducing hardware costs,” Mr. Yokota explains. “At the same time, because a

single failure could impact the entire system, we place high priority on building a stable foundation.”

With hardware and support for the second-generation platform expiring, the organization needed a new infrastructure that minimized risks through node separation, introduced staging, and verification environments.

Choosing VMware Cloud Foundation

When evaluating options, JRA considered public cloud environments but chose to continue with the Broadcom unified private cloud platform, VMware Cloud Foundation. “We evaluated public cloud environments, but our operations center on weekends—race days,” says Mr. Yokota. “This meant concerns around rapid incident response capabilities and the secure handling of personal information were top of mind. At this point, there is no cost advantage to public cloud adoption, and we determined that continuing to operate in a private cloud environment as before is the best for the third-generation platform.”

“Our conclusion, based on our actual experience operating the system onsite, was that no other solution offers the same level of functionality and stability as VMware Cloud Foundation.”

Mr. Michiyasu Mizuno, Researcher, Information Systems Operations Department, JRA System Services Co., Ltd.

The third-party analysis commissioned by JRA also confirmed this decision. “Our conclusion, based on our actual experience operating the system onsite, was that no other solution offers the same level of functionality and stability as VMware Cloud Foundation,” says Mr. Michiyasu Mizuno, researcher in the Information Systems Operations Department, JRA System Services Co., Ltd.

For JRA System Services, which oversees infrastructure design, build, and operations, the proven track record of VMware solutions across virtualization and networking was key. “Certainly, if an effective solution emerges, it could become a viable comparison,” says Mr. Hiroyuki Hori, manager of the Information Systems Management Office, JRA. “However, our understanding is that no other product currently exists that combines extensive proven track record and stability across the entire infrastructure, including network virtualization.”

Achieving seamless migration and stronger operations

Having relied on VMware technology since its first-generation platform launched in 2015, JRA again turned to VMware Cloud Foundation for its third-generation renewal.

The new infrastructure now supports more than 8,000 VMs running on over 130 physical servers across JRA East and West data centers. With GPU-enabled VDI using vGPU, staff enjoy a smooth, reliable working environment. “There are no more instances of unstable operation, everything goes smoothly,” Mr. Yokota says. “Staff are able to use the system without noticing any decline in quality.”

Daily operations are further strengthened by VCF Operations, which delivers monthly reports, usage

trends, and forecasts. “VCF Operations has played a crucial role as an operational tool for many years, supporting the long-term stable operation of the integrated IT infrastructure,” says Mr. Hori. “These tools give administrators full visibility into the infrastructure’s performance and help identify and resolve potential issues before they impact operations.”

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VCF Networking (VMware NSX) simplified network management by removing the complexity of physical switches, while VMware vDefend Distributed Firewall continued to provide micro-segmentation security.

“The solutions provide us with a total package for the virtual environment, including the network domain, enabling us to resolve many operational challenges centered around physical switches,” says Mr. Hidemitsu Maki, researcher at the System Planning Office, JRA. “We are experiencing the tangible benefits of implementing VCF Networking and vDefend Distributed Firewall.”

Highlighting the flexibility of the VMware ecosystem, Mr. Maki says, “A key strength of VMware Cloud Foundation is its ability to deliver a highly stable infrastructure, whether using external storage (3-Tier) or storage virtualization (HCl).”

Customer-first partnership for a multi-trillion-yen racing industry

With the completion of the third-generation infrastructure, JRA has secured a foundation capable of supporting the scale and complexity of its



operations. The infrastructure underpins trillions of yen in betting transactions annually, ensuring JRA can continue to operate without disruption while sustaining growth.

VCF Professional Services and Lifecycle Support play a pivotal role in this success. “Since the second generation, VCF Professional Services and Lifecycle Support has provided comprehensive, one-stop support through collaboration among engineers with diverse skills and experience,” Mr. Yokota says. “This includes operational management assistance from Technical Adoption Managers (TAMs), incident and task support via Critical Situation Management Services (CMS), and implementation and migration support through Technical Consulting Services (TCS).”

“The VCF Professional Services and Lifecycle Support team create opportunities for information sharing and problem-solving, including regular meetings and report briefings. They truly walk alongside us.”

Mr. Hiroyuki Hori, Manager, Information Systems Management Office, JRA

JRA values this engagement style, which it describes as “hands-on” and “customer-focused” rather than transactional. “They frequently visit our site and provide ample opportunities for conversation,” says Mr. Yokota. “It’s a huge help that they’ve established a system where we can immediately communicate any issues that arise.”

Mr. Hori says, “The VCF Professional Services and Lifecycle Support team create opportunities for information sharing and problem-solving, including regular meetings and report briefings. They truly walk alongside us.”



Mr. Kenji Yokota, Section Chief, System Management Division, Japan Racing Association

Mr. Mizuno continues, “Given our in-house development, the VCF Professional Services and Lifecycle Support team provides advice on design aspects. They also thoroughly investigate non-VMware peripheral systems with subject matter experts before addressing issues. Their flexible approach is incredibly reassuring.”

Preparing for next-generation systems

Looking ahead, JRA plans to extend VMware Cloud Foundation to its Totalizator Systems, which directly drive turnover through ticket sales, tallying, and odds calculation. Currently based on mainframes and UNIX servers, this system is being modernized to align with the long-term IT strategy of JRA. Meanwhile, research has already begun into the fourth-generation integrated infrastructure, where VMware solutions are again expected to play a central role.

“The massive infrastructure supporting Japan Racing Association’s market exceeding ¥3 trillion will continue to be robustly supported by VMware Cloud Foundation and the expertise of VCF Professional Services and Lifecycle Support,” says Mr. Yokota.