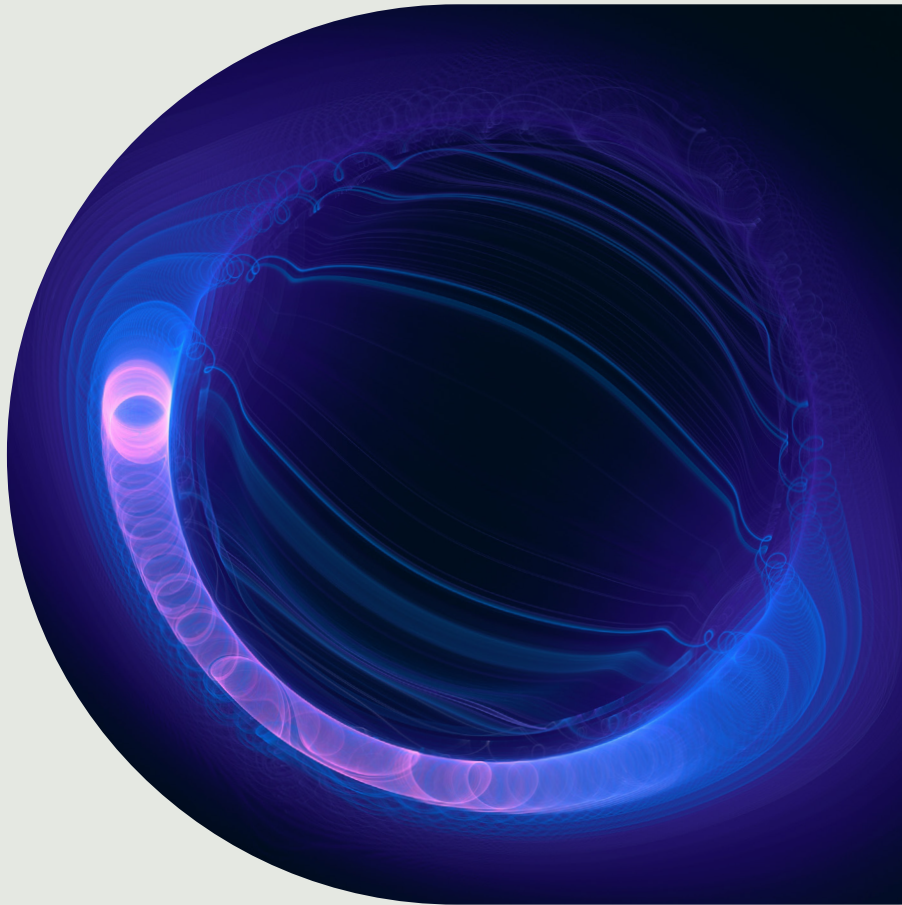


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# Square Enix's 'Quest' for Simplified Infrastructure Management Leads to Red Hat

By switching to Red Hat® Enterprise Linux®, Square Enix resolved system vulnerabilities while maintaining the high performance expected by players of its Dragon Quest X Online role-playing game.



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## Challenge

Square Enix Co., Ltd. is one of Japan's leading entertainment companies and a driving force in the game industry, delivering high-quality content, services and products to customers across the world.

Square Enix has supported a consistently high number of players of Dragon Quest X Online, a massively multiplayer online role-playing game (MMORPG), since its 2012 release. Dragon Quest X Online's unique experience lets players move freely between multiple virtual worlds and continue gameplay even as they change worlds.

With a steady addition of online titles and version upgrades, system configuration continues to evolve—and so does the load on the operating system, network, storage and database. With users playing in real-time, any problems have a big impact.

To maintain the high performance levels that Dragon Quest X Online players expect, Square Enix's online game infrastructure team needed

a way to improve operational efficiency and support faster, on-demand resource scaling. The team also wanted to expand their Linux skills to address complex troubleshooting and resolve system issues faster.

## Solution

Square Enix's IT division worked with Red Hat Consulting to address infrastructure performance challenges by replacing its existing Linux operating system with Red Hat Enterprise Linux.

"Red Hat's consultants understood our situation precisely and made recommendations based on their deep problem-solving experience with other customers facing similar challenges," said Yuki Miyamoto, IT Infrastructure/Business Online Infrastructure System, Information Technology Division, Square Enix.

In addition to Red Hat Enterprise Linux, Square Enix also adopted two other Red Hat solutions: Red Hat Satellite, a management

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solution that automates and simplifies system provisioning, configuration, and updating of its new Linux environment; and Red Hat Ansible® Automation Platform, which improves process efficiency with repeatable, human-readable automation scripts.

## Results

The new infrastructure and Red Hat solutions have helped Square Enix resolve vulnerabilities faster, centralize server management, and create a foundation for future container adoption.

Benefits include:

### ■ **Simplified operational management**

During and after implementation of its new platform and management technology, Square Enix's IT Division teams worked closely with Red Hat consultants to troubleshoot any issues with the Linux environment and continuously adjust related processes in alignment with strategic goals.

In Japan's unique IT engineering market, highly skilled in-house talent is essential to success—and recruitment can be challenging and time-consuming. Hands-on collaboration with Red Hat helped Square Enix's IT staff quickly expand their Linux skills with insights into best practices and new perspectives for delivering a positive player experience.

### ■ **Improved IT security with built-in management capabilities**

Red Hat's Linux management capabilities have helped Square Enix's IT Division teams simplify code debugging and security management, enabling them to more quickly discover and investigate bugs and vulnerabilities. Red Hat Satellite tracks and

manages server status centrally, helping IT staff quickly prioritize and resolve high-impact vulnerabilities and performance issues. Ansible Automation Platform also helps mitigate potential human errors in device configuration that could create vulnerability or other security risks.

### ■ **An established technology foundation for future container adoption**

To further improve the scalability and responsiveness of the systems supporting Dragon Quest X Online, Square Enix's IT Division team worked with Red Hat Consulting to adopt a container-based service architecture. Red Hat consultants provided invaluable insights into the underlying technologies and how to deploy them.

The team used Podman, an open-source tool developed by Red Hat engineers with the larger community, to gain additional capabilities for developing, managing and running Linux containers. The combination of Red Hat Enterprise Linux, Ansible Automation Platform, and Podman technologies provides more flexibility and control when scaling servers and deploying applications.

Container technology is just one of the ways Square Enix is modernizing the systems that have supported Dragon Quest X Online since its launch. The company also plans to use its Red Hat Enterprise Linux foundation to continue strengthening the game's back-end operations and ensure a continuously engaging experience for its vast player base.<sup>1</sup>

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<sup>1</sup> Note: The information contained in this content was current at the time of the interview.