Oracle Ksplice

Increase security and uptime while reducing business disruptions and admin time

Eliminate tradeoffs between security and availability
- Apply patches while your systems are running
- Avoid business disruptions
- Increase security and compliance across your environment
- Minimize staff time required for patching processes

Business benefits
- **Increase Security**: Protect your Linux systems from vulnerabilities and known exploits and increase your security compliance.
- **Improve Availability**: Install patches quickly without interrupting running applications, increasing your uptime.
- **Reduce OPEX**: Eliminate unscheduled maintenance and costly overtime expenses for night/weekend upgrades and reduce admin time. No need to coordinate with system users about outages caused by reboots.

Linux patching process—before and after Ksplice

Traditional Process

- Change management
- Downtime scheduling
- Production shutdown
- Kernel patching
- Production restart
- Validation and release

Ksplice Process

- Change management
- Kernel patching
- Validation and release
- 60% reduction in task resources with Ksplice

The Bottom Line:
With Oracle Ksplice, Linux administrators can apply critical Linux patches quickly and reliably without reboots and disruptions to users and customers, enabling them to address security compliance requirements proactively. Ksplice streamlines the patching process, minimizes downtime and reduces operational costs.

ksplce.oracle.com
### Industry-leading Oracle Ksplice technology

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<th>Feature</th>
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| Comprehensive patching      | • Patches almost any part of the kernel  
• Supports critical user space packages such as glibc and openssl  
• Supports KVM and Xen hypervisors and related user space tools  
• Applies patches to unloaded modules when they are reloaded  |
| Known exploit detection     | • Sets tripwires for privilege escalation vulnerabilities  
• Sends notification when Ksplice patches have attempted exploits  
• Generates configurable notifications of blocked escalation attempts  |
| Safety checks               | • Verifies that running kernel matches what is expected  
• Prevents calls to removed functions  
• Blocks third-party tools such as antivirus and IPS from modifying kernel during patching  |
| Deployment models           | • Installs online for quick access, status interface, and API  
• Installs offline for isolated deployments  
• Supports up to 5,000 kernels at once  
• Supports all Oracle Linux 5,6,7 and 8 kernels (UEK and RHCK)  |
| Field proven                | • In continuous service since 2008  
• More than 250,000 systems protected  
• More than 10 million updates applied  
• More than 4 million reboots saved  |

### Customer testimonials

**Oracle Linux and Ksplice have been game changers for United. We’ve consolidated our IT environment, eliminated vulnerabilities, and streamlined security compliance—we can now roll out patches with zero downtime.**

*Marshall Weymouth*

Senior Manager of Platform Engineering, United Airlines

**Ksplice reduces our time and cost for patching significantly. Oracle Linux offers an excellent price/performance ratio and helps us to have best possible alignment between database and operating system.**

*Manfred Konrad*

Software Developer

Kristl, Seibt and Co GmbH