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Minutes to Seconds: Pearson VUE's GraalVM Journey

Pearson VUE, a global digital assessment services company operating in 200 countries. This is their journey adopting Oracle GraalVM Enterprise Edition Native Image.

Before: Challenges and opportunity for improvement

Pearson VUE builds, deploys, and runs Assessment software. They needed a solution to further maintain the security and performance of software they run in their test centers worldwide. As you can imagine, security is imperative to providing fair testing and combating misconduct. At the same time, their Spring Boot-based Java application start-up times were not as fast as they wanted.

- The ability to compile and generate native executables ahead of time allows Pearson VUE to maintain the security of their applications. The tooling they were using to do this was approaching end of life and they needed a supported alternative.

- Securing the Intellectual Property (IP) within their applications is vital to Pearson VUE. Trust and security are critical within the professional, high-stakes assessment sector.

- Application start-up times and performance are important to providing the best service to their test takers, third party test centers, and clients. Better performance helps drive a positive customer experience and higher satisfaction. Retooling afforded Pearson VUE with an opportunity to improve performance.

During: Process

Pearson VUE decided that GraalVM Enterprise Edition Native Image could address the challenges they faced. This was their approach:

- GraalVM Enterprise Native Image would allow Pearson VUE to distribute their applications as binary executables on a vendor-supported platform.

- They engaged Oracle to run a Proof of Concept (POC) where existing legacy applications would be migrated to GraalVM Enterprise Native Image.

- Greenfield development adopted GraalVM Enterprise Native Image.

"At Pearson VUE, we have been impressed with the significant improvements that GraalVM Enterprise brings. Thanks to Native Image, our application start-up times are significantly reduced. The ability to distribute applications as native executables has likewise maintained the security of our Intellectual Property."

Kris Keil

Product Engineering Manager

Value propositions

- Securing applications
- Improving Stability
- Accelerating start-up times
- Enabling Spring Boot Applications
- Accessing GraalVM 24/7 Professional Services

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After: How GraalVM Enterprise improved start-up times

GraalVM Enterprise Native Image helped Pearson VUE to:

- **Package** applications used in worldwide test centers **into binary executables.**

- **Improve security:** Packaging as binary executables maintains security by reducing the possible attack surface for applications. All application logic is packaged with the single binary file, obfuscating the code and making it harder to compromise.

- **Successfully migrate legacy applications** to run on GraalVM Enterprise Native Image. Oracle provided the detailed technical support that helped Pearson VUE make this successful.

- Reduce the **start-up times** of applications**.**

- **Support**: GraalVM Enterprise Native Image is a vendor-supported platform, meaning that Pearson VUE can be assured in the knowledge that they are building their applications on technology that will be secure, supported, and sustainable.

In summary

GraalVM Enterprise Native Image helped Pearson VUE further secure their applications. It offered a significant improvement in the start-up times of applications. The customer worked closely with Oracle to ensure the migration process to GraalVM Enterprise Native Image was smooth and successful.

"For us, the switch to GraalVM Enterprise Edition and Native Image was the right move in terms of both security and performance."

Guy Speier,

VP - Technology & Product Engineering at Pearson VUE

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