Delivering Robotic Process Automation

Since April 2020, DeNA Corporation has enabled customers to easily switch between cloud and local execution environments when using its cloud-based Robot Process Automation (RPA) service, Coopel. Coopel performs EV Code Signing at the time of build, so native Windows apps don't display warnings at install time. Initially, DeNA used physical credentials for this service, but that limited operation. In search of a faster, more flexible solution, DeNA turned to DigiCert® Software Trust Manager.

About DeNA

Established in March 1999, DeNA has launched a series of new internet services, including Bitters and Mobage. Today, the company’s business is not limited to the internet, but has expanded into sports, healthcare, and urban development. DeNA continues to grow while boldly taking on new challenges. The company places great importance on user delight, something that's reflected in the DeNA logo, emphasizing a mission to "provide each individual with delight beyond imagination."
Coopel, a hybrid RPA service for both cloud and local

Coopel is an RPA service that helps companies overcome issues with labor shortages by turning routine tasks over to an automated robot. As a cloud-based service, Coopel easily adapts for remote work environments, which is part of the reason it’s been deployed in over 200 companies. But Coopel is not only a cloud service. One of the advantages of the RPA is its ability to run locally and toggle between local and cloud.

To run RPA on a PC, software must be installed, but standard protections—especially in the case of Windows OS—prompt warnings if the software doesn’t include a digital signature. The software will still install, but the warning can lead users to worry about the safety of the program. This poor experience undermines DeNA’s user delight mission. Looking to correct for this issue, DeNA decided to implement EV Code Signing during the code build.

In need of automation

While EV Code Signing stops operating systems from displaying software installation warnings, the process of signing was originally slow and laborious for DeNA. Code was signed using USB dongles connected to the PC. This manual process didn’t work well with what was otherwise an automated CI/CD build process.

When the covid-19 pandemic forced DeNA to quickly transition to a remote workforce, the use of a physical signing token quickly became untenable. Mr. Ono and his team initially tried to share USB credentials over the network, but the quick fix didn’t work. Next, they shifted to a dedicated signer, but that solution forced one person to be available at all hours, because builds complete around the clock, seven days a week. In the end, Mr. Ono realized what they needed was a strong, automated signing solution.

“The frequency of releases, such as minor bug fixes and feature additions, which often occur several times a week, made it a hassle for operations to physically sign off on each release.”

- Atsushi Ono, Technical Director and Senior Project Manager, Coopel Business Development Promotion Office, Innovation and Strategy Division of DeNA
DeNA case study

DigiCert® ONE and DeNA

In April 2021, DigiCert released DigiCert Software Trust Manager as part of its flexible deployment PKI solution, DigiCert ONE. Software Trust Manager allowed Ono and his team to recreate a Digital Signing Certificate on the cloud and then incorporate the certificate into Coopel's CI/CD pipeline.

The flexibility of DigiCert ONE’s deployment model allowed DeNA to stand up the signing integration quickly and easily. After selecting the number of licenses and deploying the signing solution, Mr. Ono’s team was able to immediately transition away from physical credentials without compromising security or the user experience they seek to provide to customers.

Says Mr. Ono, “I feel great that I no longer have to carry my computer around in case of emergencies. Of course, it also means that builds don’t stop and development speed doesn’t slow down. Also, with a physical USB, I was worried about the risk of losing them. I’m glad we were able to eliminate that.”

DigiCert® Software Trust Manager

Built by DevOps for DevOps, DigiCert Software Trust Manager delivers continuous end-to-end code signing and management for code, software and apps. Full visibility, tracking and auditing of keys and signing processes ensure you always know who signed what and when. And for developers, automated processes make signing seamless, simple and lightning fast, so you don’t sacrifice agility or speed to market. DigiCert Software Trust Manager is more than a code signing service—it’s a mindset that actually closes the DevOps loop.

Want to learn more about automated software signing solutions delivered at scale? Visit https://www.digicert.com/software-trust-manager