Parchment Uses GlobalSign Digital Signing Service to Secure Electronic Credentials for Academic Institutions



Background

Parchment, the leading provider of academic credential management software, knew document security was one of the critical factors in an academic institution's migration from paper records to electronic. These institutions go to great lengths to secure their paper credentials and transcripts, incorporating anti-copy features, holograms, watermarks, and more in an effort to protect the documents, reduce fraud, and protect their brand. It's a given that they would demand the same level of protection for electronic versions.

Parchment found a solution that would meet their customers' high security standards, while also being easy to use within their platform, in GlobalSign's digital signatures. Digital signatures certify the documents, create a tamper-evident seal on the document contents so no changes can be made, validate the source of the document so recipients know it was legitimately issued from the institution, and include a trusted timestamp to prove when the document was generated.

"Parchment's goal is to make it easy for institutions and individuals to send and receive digital credentials and an essential aspect of that is document security," said Chris Kaschmitter, Vice President of Member Services at Parchment. "We were the first vendor to provide certified PDFs for higher education credentials and over the years we've only seen demand increase – every institution that uses electronic credentials, from K12 to university level, has come to expect the 'Blue Ribbon Certified' symbol and knows it means the document can be trusted."

Key Benefits

- All electronic academic credentials transcripts, diplomas, certificates, verifications, and other student records – are delivered securely and display the "Certified Blue Ribbon", an expected security indicator in the academic industry
- Parchment customers get the benefits of digital signatures, including tamper-evidence, timestamping, and proof of who created the document, without having to administer or manage certificates themselves
- Parchment customers can choose to brand their signatures and certify academic credentials in their institution's name

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CUSTOMER PROFILE

- INDUSTRY Education technology
- CUSTOMER BASE 8,000+ K12 and higher education institutions
- GLOBALSIGN SOLUTION Digital Signing Service

AT A GLANCE

CHALLENGE

For years, Parchment has used digital signatures to secure and certify their customers' electronic academic credentials, prove they are legitimate and not forgeries, and protect the document contents from tampering. However, their original hardware-based deployment was cost- and resource-intensive, particularly when it came to hardware and cryptographic updates.

SOLUTION

GlobalSign's cloud-based Digital Signing Service provides the same digital signature benefits without Parchment having to manage hardware and PKI in-house. Using a hosted service means Parchment is free to focus on their core competencies, while GlobalSign maintains the cryptographic components needed for signing and updates according to the latest industry best practices.



Deployment Evolution - From In-house **HSM** to Cloud-based Service

Parchment has been a GlobalSign customer since 2009, when they first adopted GlobalSign digital signatures for their electronic academic credential service using a hardware security module (HSM) deployment. This meant the digital signing certificates used to certify and secure the documents were stored on HSMs (multiple instances needed for redundancy and backup) that Parchment managed on-premises.

While this solution achieved their goals of digitally signing and securing their customers' credentials, it put the burden of maintenance on internal Parchment teams, most notably in the event of a hardware upgrade a few years ago and changes to PKI best practices over the years (e.g., supporting OCSP responses in addition to CRLs, incorporating trusted timestamping services).

When GlobalSign released a cloud-based Digital Signing Service that offered the same signing functionality without the need to manage hardware, it was an easy decision for Parchment to migrate to the new service. They would keep the same digital signing capabilities and experience, so it would be a seamless transition for their end customers, while outsourcing all other cryptographic and PKI management to GlobalSign.

The Digital Signing Service provides all the cryptographic components needed to apply signatures in one RESTful API call, which made it easy to integrate into Parchment's existing systems. Now Parchment is free to focus on their core competencies, knowing GlobalSign is ensuring the service is reliable, available, and up to date with the latest industry standards.

Results

- Switching to cloud-based Digital Signing Services means Parchment can outsource PKI services to GlobalSign, so they no longer need to invest in and maintain on-premises HSMs or keep up with the latest PKI technology and best practices
- Digital signatures are still built into the Parchment experience all records, transcripts, diplomas, certificates, and verifications managed within the Parchment platform are digitally signed to protect their contents verify their authenticity
- By eliminating hardware and management costs, the Digital Signing Service is more cost-effective than the original **HSM-based deployment**

Learn More About GlobalSign Digital Signing Service >

About GlobalSign

GlobalSign is the leading provider of trusted identity and security solutions enabling businesses, large enterprises, cloud service providers and IoT innovators around the world to secure online communications, manage millions of verified digital identities and automate authentication and encryption. Its high-scale Public Key Infrastructure (PKI) and identity solutions support the billions of services, devices, people and things comprising the Internet of Everything (IoE).

"In our almost ten years of working with GlobalSign, my biggest takeaway, and what always impresses me, is how accessible they are. Someone is always available to answer our questions, and they are proactive about keeping us informed and updating their solutions to meet the latest industry best practices. Their expansion of cloud-based services shows me that they are forward-thinking and makes me confident that they will be able to support us for years to come."

- Chris Kaschmitter Vice President of Member Services, **Parchment**

About Parchment

At our core, Parchment believes credentials matter. Providing a convenient platform to help institutions and individuals securely send and receive credentials, such as transcripts and diplomas, online has established Parchment as the leader in eTranscript exchange. Since 2003, 20 million credentials have been exchanged between Parchment's member network of senders and receivers. This network, reaching 22% secondary and 13% postsecondary schools in the U.S., is the gateway to turning credentials into opportunities.

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