Overview
Recently, a large law firm approached us with a request to streamline their users’ ability to sign in to Lex Machina. The firm has an internal research portal that contains various useful links to Lex Machina. However, when users clicked on these Lex Machina links, they had to sign in to Lex Machina by entering their email address and Lex Machina password. This additional step frustrated users and led to decreased usage.

We worked with the firm’s team to streamline this authentication process, and now their users can seamlessly access Lex Machina via their internal research portal. No typing email addresses, no forgetting passwords—just click the link and the desired page loads. This even works for new users who never even set up an account!

How It Works
When a user signs in to the firm’s internal portal, the firm’s authentication system knows who that user is. Specifically, the firm’s system knows the user’s email address. When the user clicks on a Lex Machina link, the firm’s system passes the user’s encrypted email address to Lex Machina. With this verified and cryptographically signed email address, Lex Machina’s system can identify the user and automatically sign the user in to Lex Machina.
“Lex Machina's auto sign-in allows attorneys to seamlessly jump from their firm's intranet into Lex Machina in a single click. There is no sign-in step required, and therefore no complaints about forgotten passwords or user IDs!”

Wade Malone, Product Manager
Lex Machina

Users can use Lex Machina just as if they had signed in using the traditional process of typing in their email address and password, so they have full access to their personalized settings, favorites, alerts, history, etc.

Furthermore, because this law firm has an enterprise-wide subscription with unlimited users, this process even works for brand new users. If a new user clicks on a Lex Machina link, Lex Machina will automatically create a new account, based on the email address, that the user will be able to access again in the future.

What Did Implementation Entail

We were able to implement this new sign-in process in a few days. It is a straightforward process that mainly involves collaborating with the firm’s technical team to create links to Lex Machina with encrypted tokens, and to exchange secure keys to generate them. If you’re interested in setting this up for your firm, please contact your Customer Success Manager.

Technical Details

Lex Machina can parse Fernet signed and encrypted strings where the Ciphertext is the user’s email address. Fernet covers the usage of cryptographic primitives, signing, and URL-safe byte encoding in a secure, standard, and reusable way. Implementations are available in many languages, for example Python and Java. See https://github.com/l0s/fernet-java8 or https://cryptography.io/en/latest/fernet/ for more details.

Lex Machina offers a special URL that accepts these encrypted email addresses (i.e. FernetTokens) and a target URL, so you can link to any page in Lex Machina.

https://law.lexmachina.com/login/link?user=<FernetToken>&keyring=<YourDomain.com>&target=/court/cacd/judge/3143

Lex Machina engineers are happy to work with your firm’s technical team and provide additional details.