ELLIPTIC CURVE INTEGRATED ENCRYPTION SCHEME

Just a few short years ago, etherFAX began to change the shape of fax communications with the introduction of its Secure Exchange Network (SEN), a platform that allows "etherFAX-aware" endpoints to communicate both digitally and securely. Raising the bar further, etherFAX now brings true end-to-end encryption to its network using methods defined by the ECIES (Elliptic Curve Integrated Encryption Scheme) standard to subscribers through its APIs. Introducing, SENx.

As the name implies, ECIES is a hybrid encryption "scheme" that defines methods to secure and transfer information between two endpoints. These methods start with the use of Elliptic Curve Cryptography to generate a shared secret between peers to seed the encryption process with unique keying material while further protecting the information using signing and authentication mechanisms to assure the validity of the data in transit.

As security threats, data breaches and cyberattacks continue to rise, using well-defined encryption systems such as ECIES are essential in securing sensitive information; especially information that is in flight.

etherFAX device manufacturers and integration partners are already taking advantage of this new delivery framework as it allows digital content to flow nearly instantly between subscribers within the etherFAX framework. Instead of sending low-resolution information at "modem" speeds, subscribers may send information – digitally – using high-resolution, rich content, and choose to encrypt information from the moment it leaves the sending device (or application) until it is accepted – and validated – by the receiving party. Even if a third-party were able to eavesdrop on the network communication, the information itself would be indecipherable.

In the traditional sense, fax (as we know it) is certainly reaching the sunset epoch of its lifespan; and with good reason. The days of modems "hissing" at one another, sending low-resolution, pixelated images are soon to become a relic of the past. Now, sending a 50-page, 600dpi color document [securely] from Seattle to Saskatchewan can take mere seconds instead of hours.

Using the etherFAX ecosystem, the chasm between traditional telephone lines and the world of digital communication is closing quicker than ever.

Contact us today to learn more about SENx encryption APIs.