

# Elliptic Curve Integrated Encryption Scheme (ECIES)

etherFAX has transformed how data and documents are shared with its Secure Exchange Network (SEN), a platform that allows endpoints to communicate both digitally and securely. Raising the bar further, etherFAX brings end-to-end encryption to subscribers using methods defined by the Elliptic Curve Integrated Encryption Scheme (ECIES).

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 schemes such as ECIES are essential in securing sensitive information; especially information that is in flight.

etherFAX's device manufacturers and integration partners are already taking advantage of this delivery scheme as it allows digital content to flow nearly instantly between subscribers within etherFAX's network. Instead of sending low-resolution information at "modem" speeds, subscribers can send information digitally and 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 two modems "hissing" at one another, sending low-resolution, pixelated images are soon to become a relic of the past. Now, securely sending a 50-page, 600dpi color document from Seattle to Saskatchewan can take mere seconds instead of hours.

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**For more information, contact a Sales team member at 877-384-9866 or [sales@etherFAX.net](mailto:sales@etherFAX.net).**

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## About etherFAX

Founded in 2009, etherFAX® provides an intelligent, software-defined network and suite of applications to facilitate the exchange of business-critical documents and information. etherFAX's patented technology is widely utilized across a broad range of industries. Leveraging the cloud, artificial intelligence, and data extraction technologies, etherFAX helps organizations to save time, money, and resources by automating processes and workflows. etherFAX's encrypted data exchange solutions operate in a HIPAA and SOC 2® compliant environment that is both HITRUST CSF® and PCI DSS certified.