

## **Cyber Security Newsletter Tip - New Credit Card Chip Technology**

Maybe you've gotten a new credit or debit card in the mail or heard something about the U.S. moving to the "Chip and Signature" or "Chip and PIN" standard. The U.S. is moving toward adopting these standards, and October 1st, 2015, is a major deadline for U.S. payment companies and merchants.

What is Chip and Signature/Chip and PIN?

The Europay, MasterCard, Visa (EMV) standard uses payment cards with a chip and requires either a PIN (Chip and PIN) or a signature (Chip and Signature) to authorize a payment. The chip is a small metal square, typically silver or gold, on the payment card that stores encrypted, dynamic data. After payment approval during a transaction, the data on the chip will change. This is different from the older magnetic strip cards, where the data on the magnetic strip never changed, which made it easy for malicious actors to copy. With the new chips, it will be more much difficult for malicious actors to read the data on the chip and then, because it constantly changes, to counterfeit it.

Chip and Signature/Chip and PIN cards are only new to the United States. Many countries around the world already use these new technologies because they help to reduce credit card fraud through the use of authentication, verification, and authorization.

- Authenticating a card through its chip helps to prevent counterfeit cards.
- Verifying the card holder through the signature/PIN helps protect against lost or stolen cards.
- Authorization of the transaction indicates that both the merchant and buyer agree to the transaction.

When you purchase an item using a chip card, the credit card may be swiped, like you are used to, or it may be placed into a slot, placed on a sensor, or waved over the sensor. The merchant will direct you on what to do.