

# Credit Cards: Everything You have Ever Wanted to Know

Robert “hackajar” Imhoff-Dousharm

# A brief History

- 1950 DinersClub
- 1958 American Express
- 1958 BankAmericard (Visa)
- 1966 MasterCard International (ICA)
- 1986 Discover Card

# Technology

- Knuckle Buster's
- Dial-Up Authorization Terminal
- High Speed Leased Lines
- Gateway Processor's
- Co-op Leased Lines
- Online API Gateways

# Marketing & Technology

- Smart Cards
- Virtual One Time Use Cards
- Gift Cards
- Secure Cards
- Easy Pay RFID Cards

# Physical Fraud Features

- Embossed Card Number
- Card Vendors Logo
- Card Vendors Hologram
- Card Vendors Embossed Cursive Letter
- First 4-digits non-embossed
- Expiration Date
- Magnetic Strip
- Signature Panel
- CVV2 Code

# Credit Card Magnet Data

- 2 Tracks used for credit cards
- 3<sup>rd</sup> Track used for meta data, non credit cards
- Review of Tracks 1 & 2

# Transaction Flow - Authorization

- Initial Authorization
- FEP Hand Off
- Back End / Merchant Link
- Issuing Bank Authorization
- FEP Record Update
- Terminal Signature Printout

# Transaction Flow - Settlement

- Close Out Terminal
- Send Closeout request to FEP
- Send Totals, individual transactions, Totals
- FEP Record Update
- FEP Batch Close to Issuing Banks
- Money is “Settled” to MSP
- MSP Funds Merchant



# Data Storage

- Grab ass with your personal data
- Known sources of data storage
- Possible sources data may be stored
- Extent of Information Stored
- High Risk Merchants (for information leakage)
- Internet Merchants

# Questions & Answers

- All questions accepted on topics covered from last three DefCon talks
- Some topics NOT covered during main talk, reserved for you to ask here
- Thank You for 3 great years of Credit Card Security Talks