# The Tunneled Extensible Authentication Method (TEAM)

Glen Zorn Network Zen

#### **TEAM Overview**

- Derived from Protected Extensible Authentication Protocol (PEAP)
- Typical TLS-tunneled EAP protocol with a few twists
  - TLVs
    - including vendor-specific TLV support
  - "Built-in" facilities
    - Certificate installation
    - Plain-text password authentication & change

#### **TEAM Features**

- Identity protection
- Ciphersuite negotiation
- Mutual authentication
- Replay protection
- Integrity protection
- Confidentiality
- Secure key derivation
- Dictionary attack protection

## TEAM Features (2)

- Fast reauthentication
- Cryptographic channel binding
- Acknowledged success & failure indications
- Session independence
- Fragmentation
- State synchronization
- Secure initial provisioning

## **TEAM Advantages**

- The TEAM is unconditionally compliant with the requirements for WLAN authentication mechanisms, as specified in RFC 4017
- As of today, TEAM fulfills 100% of the requirements specified in draft-ietf-emueaptunnel-req-08

## **TEAM Advantages (2)**

- No issues with backward-compatibility
  - Zero installed base
  - No existing implementations
    - But based upon a widely available code base
- Complete IETF change control
  - No external pressures
- Known & understood technology
  - Secure and robust
- Highly flexible

