

Lecture 24: The Insider

Date: November 22, 2013

Homework Due: Dec. 6 at 5:00pm

1. What is an “insider”?
 - a. Masquerader
 - b. Traitor
 - c. Notion of “perimeter”
2. Types of insider attacks
 - a. Misuse of access
 - b. Bypassing defenses
 - c. Access control failure
3. Technological solutions: detection
 - a. Policy languages (especially formal ones)
 - b. Misuse and anomaly techniques
 - c. Decoys
 - d. Markers
 - e. Data exfiltration prevention
 - f. Access controls (especially Role-Based Access Control, RBAC)
 - g. Trusted systems
4. Human solutions: detection and prevention
 - a. Policies: languages and hierarchies
 - b. Monitoring
 - c. Forensics
5. Human solutions: predictive
 - a. Taxonomies and their uses
 - b. Attack-related symptoms and behaviors
 - c. Semantic analysis
 - d. Motivational analysis
6. Legal considerations
7. Response