



# Eradication and Recovery

CYBER INCIDENT RESPONSE

## Eradication and Recovery

- Remove any artifacts of the incident
- Restore the network to full functionality
- Correct any security deficiencies
- Remove malicious code, sanitize compromised media, and fix any of the affected user accounts





### What Recovery is Not...

- Not a rebuilding of the entire network...
- Not a full redesign of the system...
- Not a reason to buy all new equipment...





## Reconstruction and Reimaging

- Once an attacker touches your system, consider it compromised
- Reconstruct or reimage the system from a known good backup
- Consider the root cause of the incident so that the system isn't susceptible to the same attack vector again



## Patching

 Patch any systems that may be vulnerable to the same attack vector

 This is a good time to rescan and patch ALL of your systems...







### Sanitization and Disposal

#### Clear

 Logical techniques used to sanitize data (reset to factory state or overwriting a disk with all 0s)

# Purge

 Physical or logical techniques to make data recovery from a disk infeasible using newest techniques (degaussing or overwrite 0s 35x)

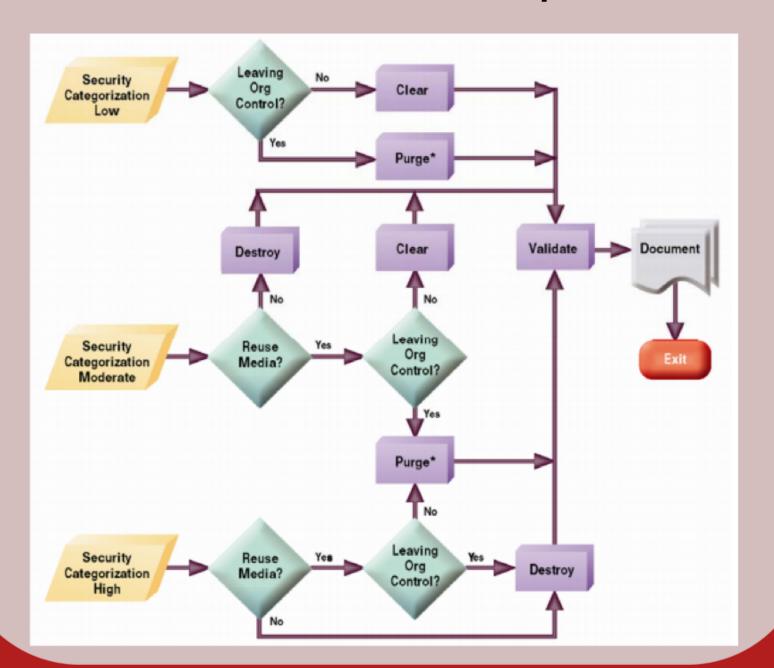
# Destroy

 Data recovery infeasible and disk drive unusable for storage (melting, incinerating, destroying)





# Sanitization and Disposal



# JASON DION

TRAINING THE CYBER SECURITY WORKFORCE



#### Validation Effort

- Only authorized user accounts exist on each system in the network
- Verify permission assigned to each user
- Verify all systems are logging correctly
- Verify vulnerability scans on all systems are routinely conducted

