NIST

National Institute of Standards and Technology

Technology Administration

U.S. Department of Commerce

AUTOMATED SECURITY SELF-EVALUATION TOOL (ASSET)

ASSET—Manager v1.0

Administration

- Target Audience
  - Individuals who have self-assessment data collection responsibilities
- Prerequisite: ASSET System training
- Length of training session
  - 1:30 - 5:00   ASSET Manager

Objectives

- Upon completion of this training, you will be able to describe:
  - The purpose of ASSET Manager
  - ASSET System roles and responsibilities
  - How to enter data into ASSET Manager
  - How to import assessments into ASSET Manager
  - How to create reports in ASSET Manager
 - How to export reports from ASSET Manager

Agenda

- Introduction to ASSET Manager
- Assessment Process
- Assessment Scenarios
- ASSET Manager Demonstration
- Information Security Considerations

Introduction to ASSET Manager

- Upon completion of this module, you will be able to describe:
  - ASSET System and Manager's roles in the assessment process
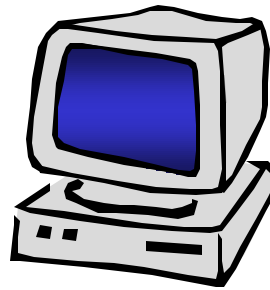 - Self-assessment implementation issues

ASSET Architecture

Reporter

**ASSET
Manager**

e-mail

"sneaker-net"

ASSET

Assessor
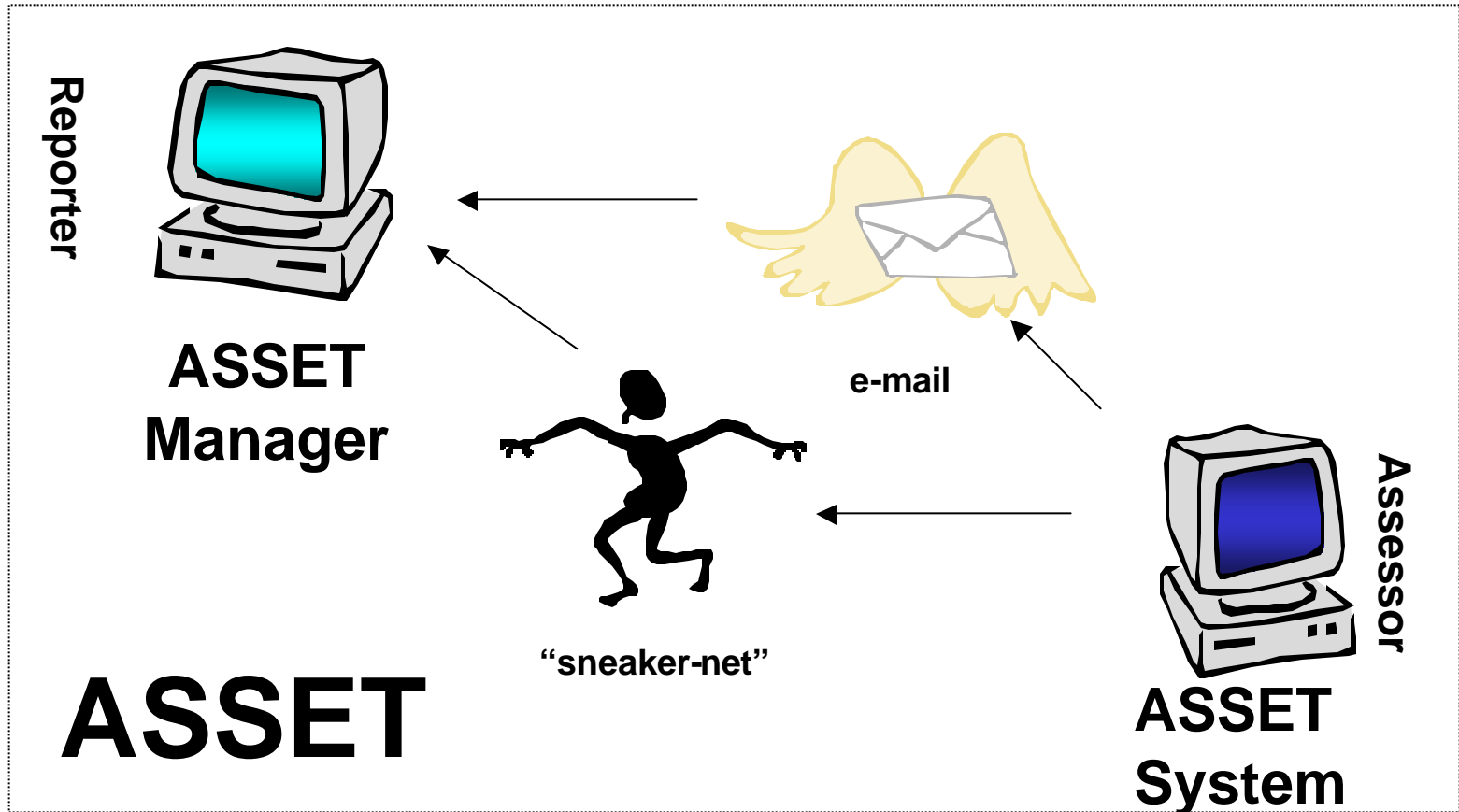
**ASSET
System**

ASSET is comprised of two separate host-based applications

ASSET – System
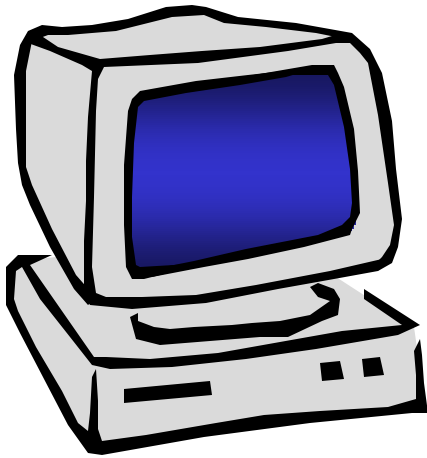

**Individual system information
Common answer set**

**Individual system reports
System data**

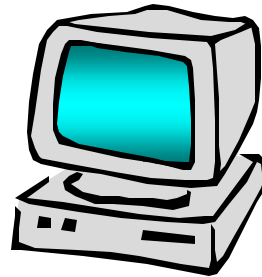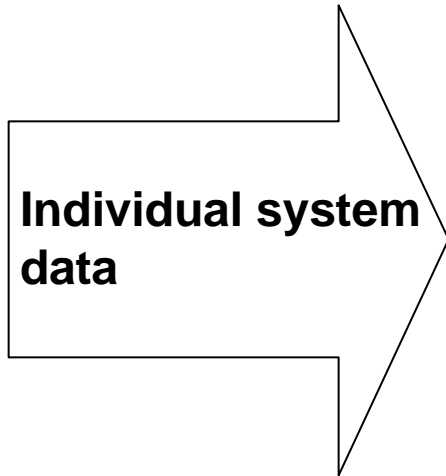After system assessment

ASSET – System

ASSET System

- Provides for data entry and storage of individual system data
- Generates single system summary reports providing immediate picture of single system assessment results
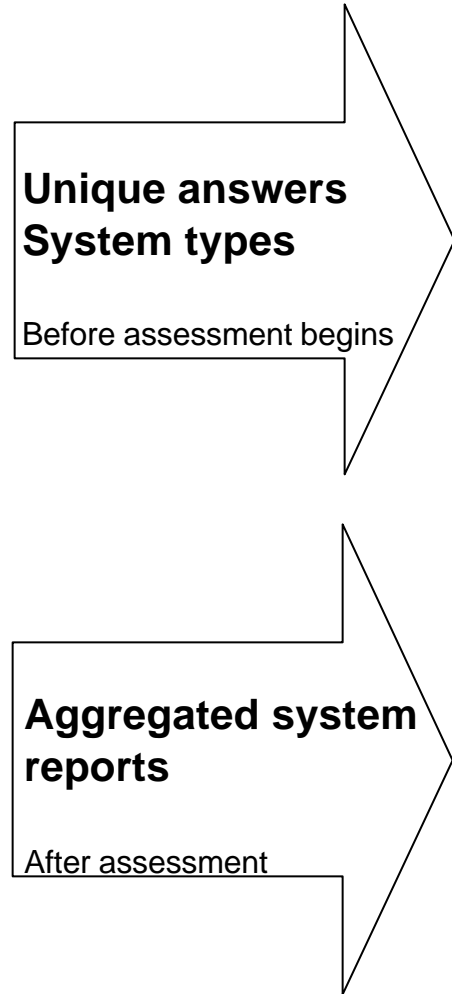- Reports are intended for the user who completes the questionnaire

ASSET System

- Reports can be exported to any popular spreadsheet or charting program
- Reports
  - Summary of topic areas by levels of effectiveness
  - List on N/A questions
 - List of risk-based decisions
  - System summary

ASSET – Manager

Individual system data

ASSET – Manager

**Unique answers
System types**

Before assessment begins

**Aggregated system reports**

After assessment

ASSET Manager

- Aggregates data from multiple systems so that organization-wide reports can be developed
- Tracks all system operators and SMEs who provide answers to ASSET questions
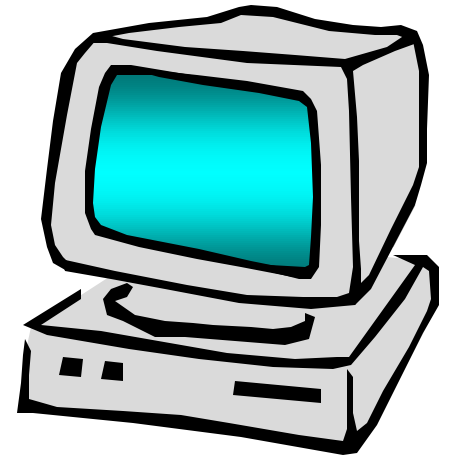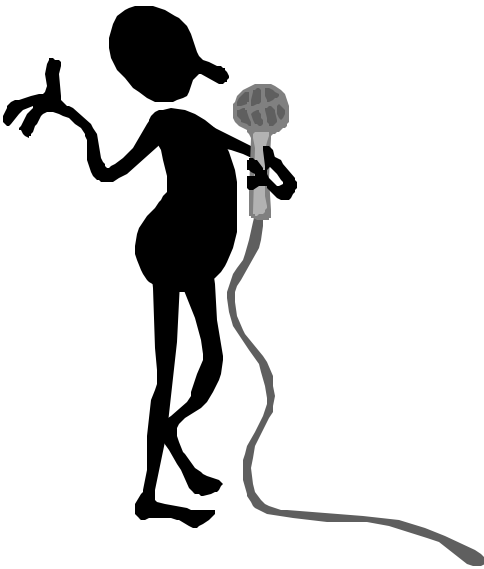
ASSET Manager

- Intended to generate reports (exportable to any spreadsheet application) that are interpreted by the managers who request an assessment

- Reports
  - Summary of all systems
  - Summary of system types
  - Summary by system sensitivities
  - Summary by organization
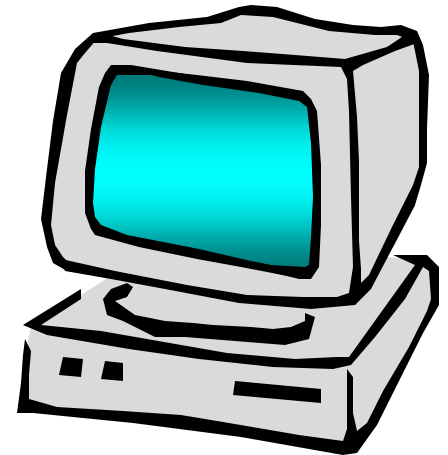
Special Considerations for the Assessment Process

Factors Influencing Assessments

- Each organization has specific concerns and issues

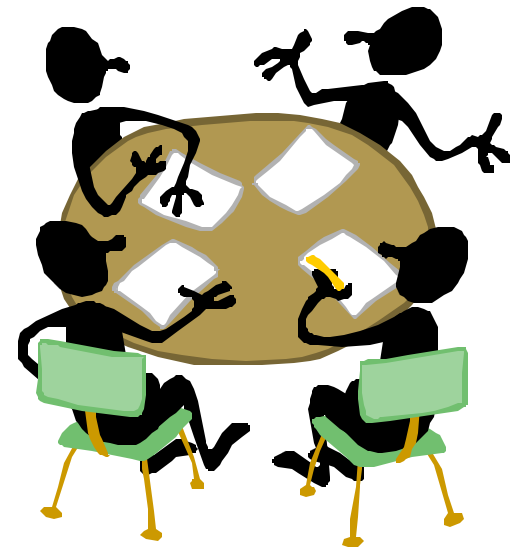- Each organization's approach toward assessments will be unique

Implementation Issues

- Assessment preparation
- Data collection
- Reporting
- Analysis
- ASSET Manager role in the Assessment process

Assessment Preparation

- Policy and Implementation document
- Structure
- Strategy
- Pre Assessment Briefing
- Software distribution
- Standardized answers

Policy and Implementation

- Before beginning the self-assessment process, develop a policy and procedure document
  - Distribute this document to all individuals who will be participating in the self-assessment
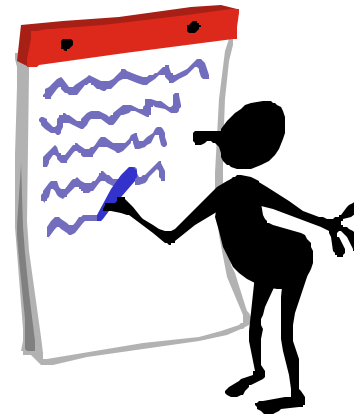
Structure

- Roles and responsibilities
  - Determine who has responsibility for self-assessments and who will perform as assessors and as reporters
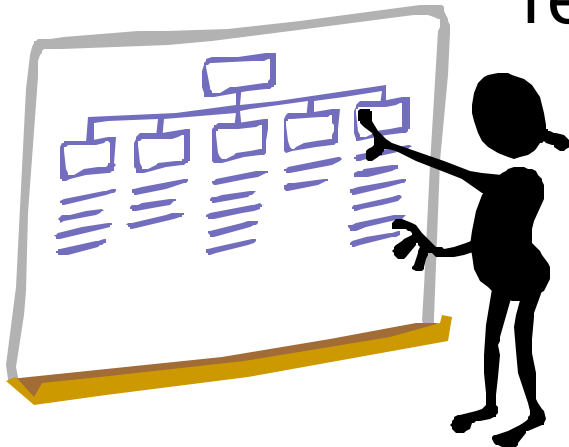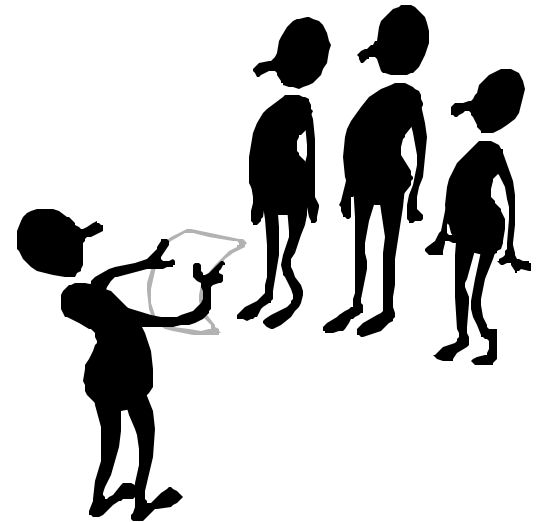
Organizational Strategy

- Factors that influence a strategy
  - Size
  - Location
  - Culture of the organization
  - Capabilities and competencies of data assessors
  - Numbers and complexity of systems under review

Pre-Assessment Briefing

- Hold a briefing with your assessors
- Discuss
  - Strategy
  - Roles and responsibilities
  - Use of ASSET
  - ASSET System training
  - Time lines

Software Distribution

- All software and documentation can be downloaded from
  http://csrc.nist.gov/asset/

- Consider how you will distribute the software to those individuals who will be using it

Standardized Answers

- It may be appropriate that certain questions in the self-assessment have standardized answers across all assessments
  - This is appropriate when answers to questions are generated at a higher level in the organization than where the assessor resides (i.e. policy)
- Consider how you will distribute the answers

Special Assessment Considerations

- Create a baseline questionnaire
  - Purpose: To provide standard answers to specific questionnaire elements
  - Possible areas that could require standard answers are
    - Policy
    - Physical Security
    - Anything else appropriate for your organization that is common across multiple systems

Create the Assessment Template

- Create a new assessment in ASSET System

- Create "dummy" system identification data

- Answer the questions required for standardization

- Export assessment to XML file and distribute to assessors

Standard Assessment - Assessor Actions

- Assessors import questionnaire into ASSET System database

- Assessors modify system ID and save assessment

  - Then complete the assessment

- Assessors repeat the modify/save for all systems to be assessed

Assessment Template Issues

- ASSET identifies the primary assessor as the initial creator of the assessment

- This software behavior may conflict in instances where someone created a assessment template

- The actual primary assessor would then have to be documented under assessment objective

Data Collection

- Each assessor acts as a data collector
  - Answers may be collected from SMEs and entered directly into ASSET System or collected on paper and then entered
  - SMEs are added into ASSET System as secondary assessors if they provide answers to questions
 - Answers may be delayed by using the "assign" feature

Data Entry

- ASSET assigns a primary assessor to each assessment
  - The primary assessor is the one responsible for recording responses into ASSET System
  - The names of other individuals who provide answers to self-assessment questions should be entered into ASSET System
    - They will be identified as secondary assessors

Analysis

- When assessments are imported into ASSET Manager, they can be used to generate reports

- ASSET Manager does not analyze data
  - It provides individual assessment and aggregate data in the form of reports that can then be analyzed
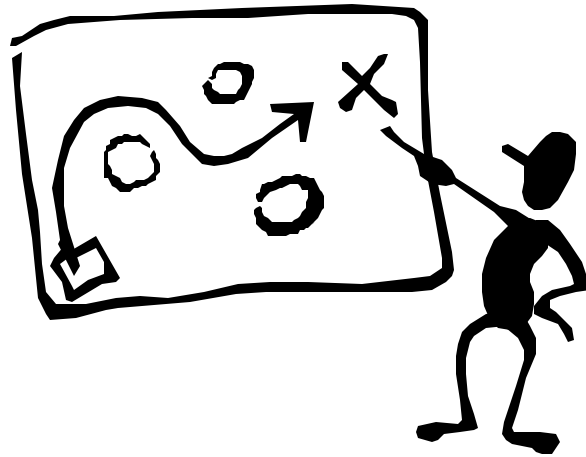
File and Naming Conventions

- Important for consistency across the assessments

- Simplifies searching for specific files

- Must be determined on an organizational level
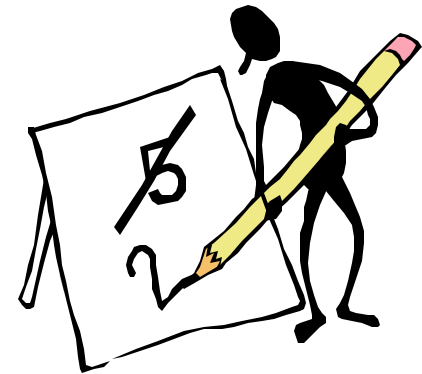
Exercise – File Naming Convention

- In small groups, create 3 ways that self-assessment files could be named
  - Provide an advantage and disadvantage to each convention

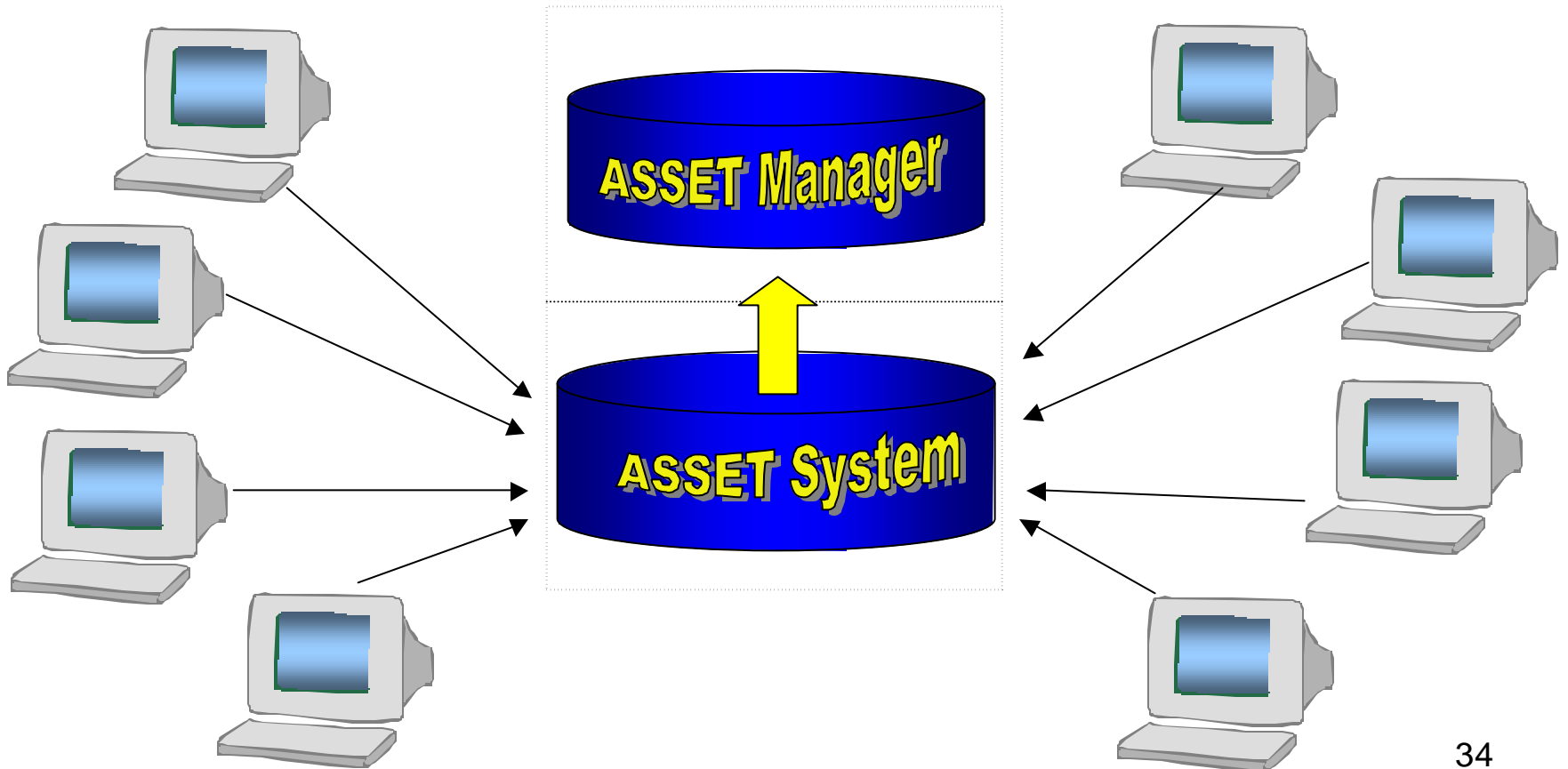# Self-Assessment Scenarios

Assessment Considerations

- Planning and conducting an assessment will be unique for each organization

- For an organization-wide assessment, consider:
    - Size
    - Location
    - Culture of organization
    - Data assessors
    - Number and complexity of systems
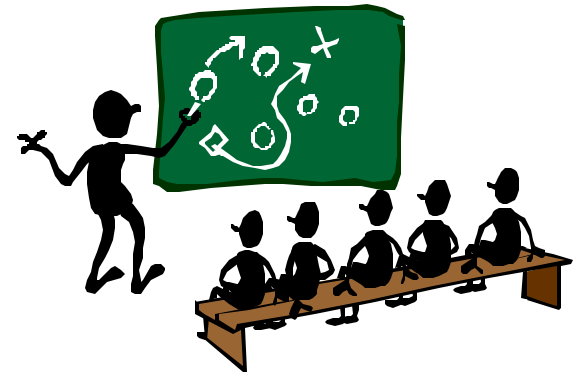
Example Implementation

- Eight systems
- One assessor/reporter

Exercise:
Two Sample Scenarios

- In small groups, determine ASSET implementation:

- How will assessment roles and responsibilities be assigned

- How will ASSET System and Manager be used

Scenario One

- Significant number of systems defined in logical grouping
- Roles and Responsibilities:

- ASSET implementation:

Scenario Two

- Large number of systems across geographically distributed organization
- Roles and Responsibilities:

- ASSET implementation:

Summary

- Planning and preparation before implementing self-assessments will help the process flow smoothly
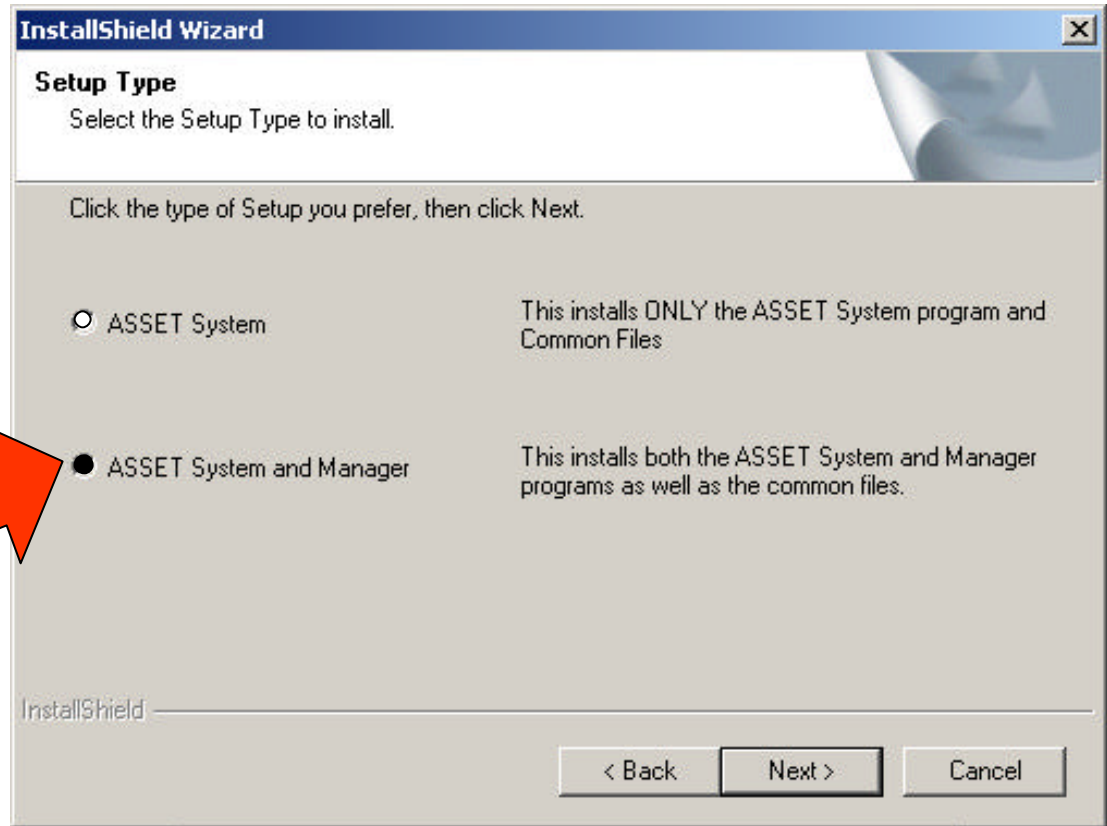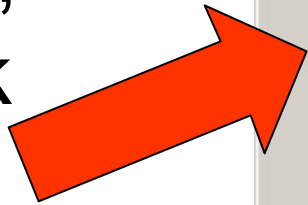- The implementation of ASSET will be unique to each organization

ASSET Manager Demonstration

Objectives

- Upon completion of this demonstration, you will be able to describe how to
  - Import assessments into Manager
  - Search on assessments
  - Generate Reports
  - Export Reports

ASSET Manager Installation

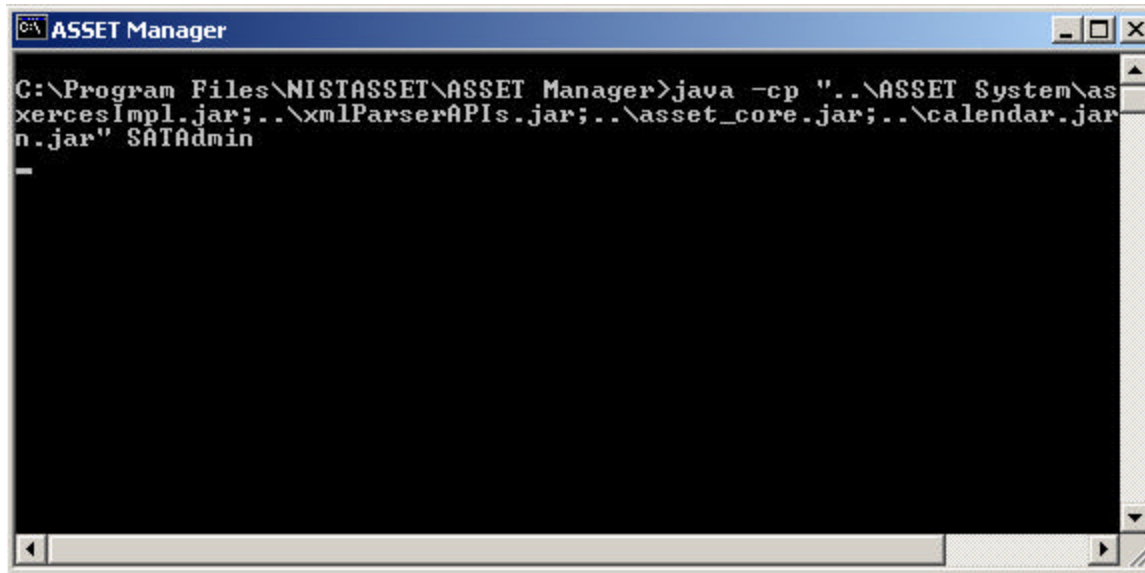Select ASSET System and Manager, then click **Next**

InstallShield Wizard

Setup Type
Select the Setup Type to install.

Click the type of Setup you prefer, then click Next.

○ ASSET System
This installs ONLY the ASSET System program and Common Files

● ASSET System and Manager
This installs both the ASSET System and Manager programs as well as the common files.

InstallShield

< Back   Next >   Cancel

Open ASSET Manager

- Installation created a short cut on your desktop

- Double click on the icon

- Alternate method: Start Menu

- Command window appears

Command Window Appears
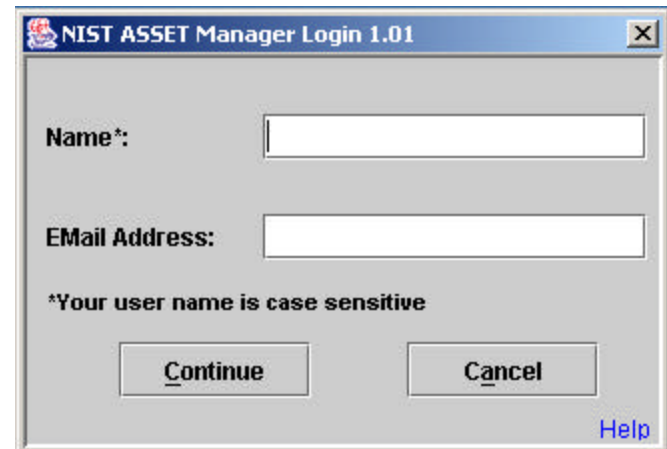
- DO NOT close this window

Log In

- Enter name (case sensitive) and email address
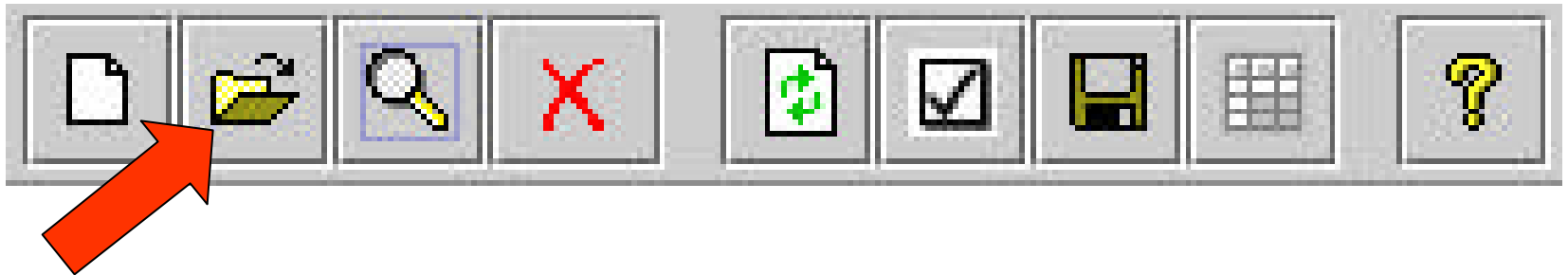- Click **Continue**

User Interface
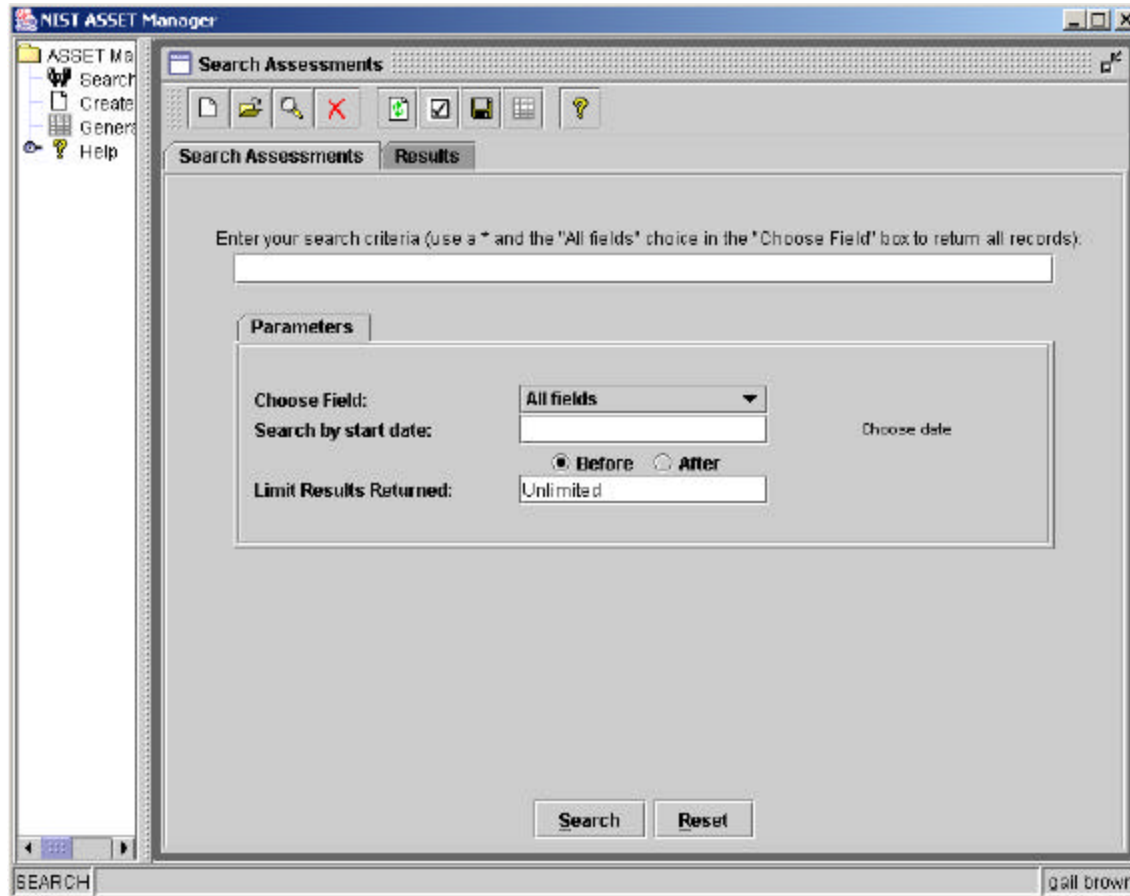
Maximize the window to full screen
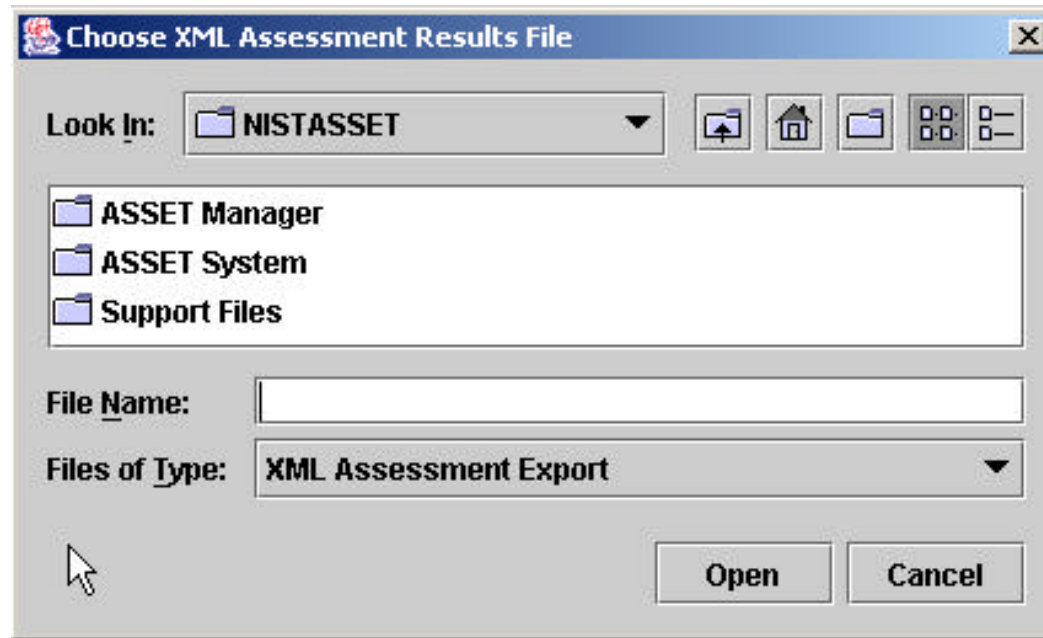
To Access an Assessment

- First: Import the assessment into the ASSET Manager database

- Second: Use the Search feature to display the assessment identification information

- Third: Make system active and then perform desired action

Import Assessment

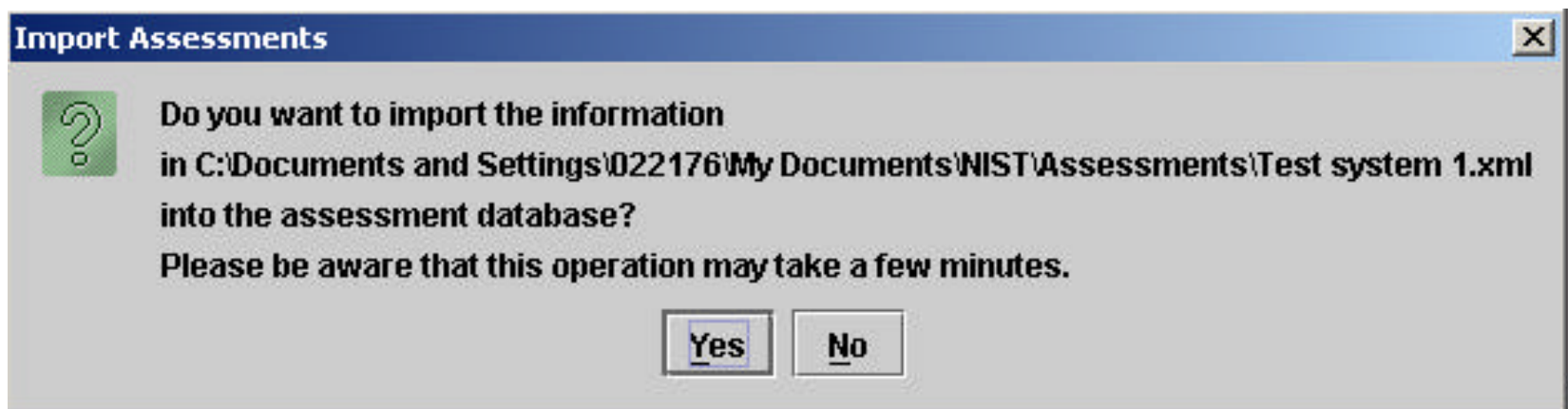- Click on the Import new assessment icon

Import Assessment

- Navigate to file location, select file, and then click Open

Import Confirmation

- Click **Yes** to continue

Import Complete

- Assessment is now in the database.
- Click OK to continue

Enter Search Criteria

Enter your search criteria (use a * and the "All fields" choice in the "Choose Field" box to return all records):

Parameters

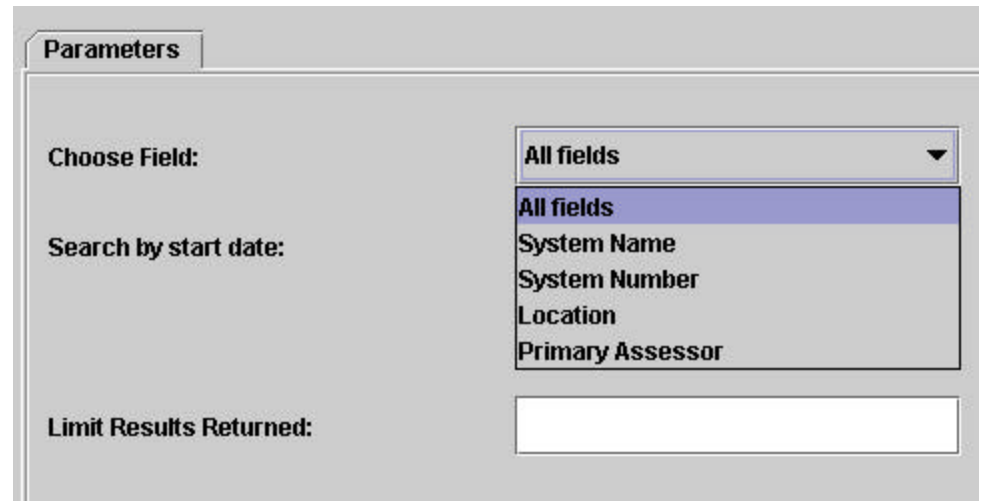|		
Choose Field:	All fields ▼	
Search by start date:		Choose date
	● Before ○ After	
Limit Results Returned:	Unlimited	

Refined Searches

- Choose the field on which the search will be performed

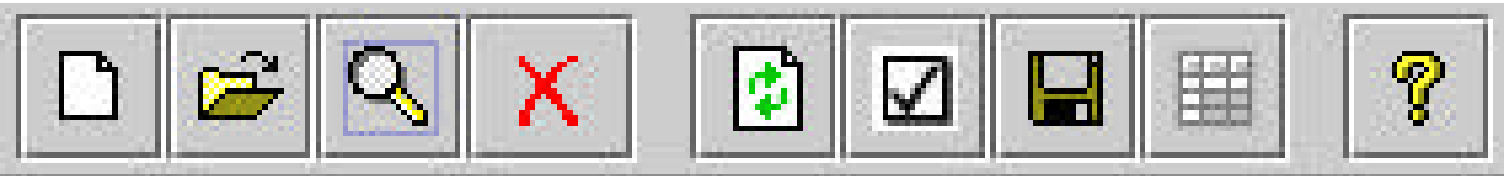- Chose by start date

- Limit results

Search Results

Search Assessments	Results				
System	System Number	Location	Start Date	Primary Assessor	Select
System Name	1001	agd	Thu Jun 20 15:07:...	gail brown	☐
Test System 2	TS2	Sect3 Bldg 5 Rm ...	Mon Jun 24 10:46:...	gail brown	☐
test3	test3	test3	Mon Jun 24 21:46:...	gail	☐

Search Assessments Tool Bar

Start new assessment

Import new assessment

Open selected assessment

Delete selected assessment

Refresh selected assessment

Select all results

Save results

Open reporting on active systems

Help

Generate Reports
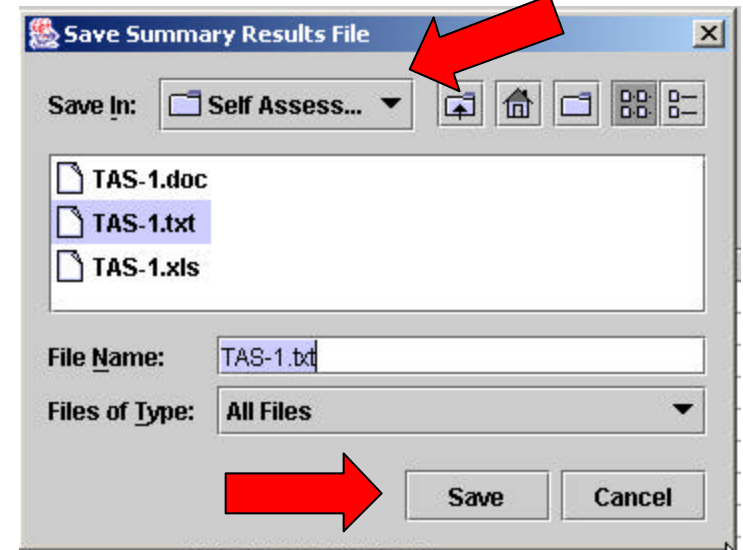
- Available reports
  - Summary of topic areas by level of effectiveness
  - List of non-applicable questions
  - List of risk based decisions
  - System summary

Export a Report

- Generate the report

- Click on the floppy disk icon in the ASSET Reporting window

- Select location to save file and name the file and add file extension

- Select Save

- Export confirmation window appears
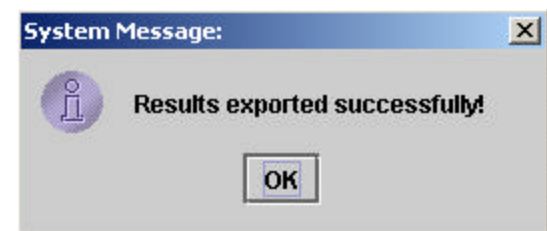
User Interface Navigation Map

Access to Search Window

Open Self-Assessment Window

Generate reports on ALL systems in the Manager database

Create Assessments In ASSET Manager

- Use the map or the toolbar icon to open the new assessment window

- It is preferable to use ASSET System to create new self-assessments

Modify Assessments

- Search for assessment
- Open the assessment
- Navigate to the item to be modified
- Make the entry/correction
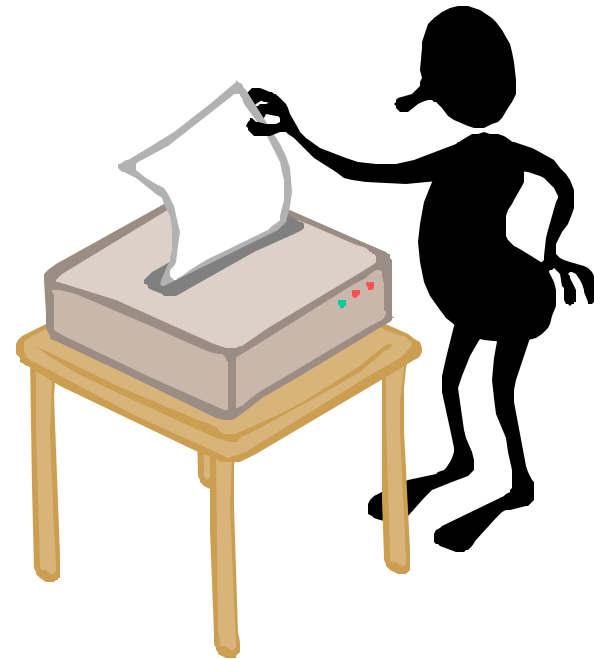- Open Summary tab – save assessment to database to save the change

Print Reports

- Reports are exported to another application (word processor, spreadsheet) to be printed
- Reports can not be printed directly from ASSET Manager

Print a Report

- Open the exported file in the appropriate software application.

- Print

Demonstration Summary

- ASSET Manager is designed as a management tool
- The main functions of ASSET Manager are
  - Import assessments
  - Modify assessments
  - Generate reports
  - Export reports

Information Security Considerations

Exercise: Information Security

- Considering ASSET System and Manager, identify information security issues regarding:
  - Desktop Security
  - ASSET software
  - Data Storage
  - Data Disposal
  - Data Aggregation
  - Any Others

Post Assessment Issues

- Upon completion of a self-assessment cycle
  - Should ASSET System software be removed from desktop
  - Where should completed assessment files be stored
   - How should they be protected?

Wrap Up

Any Questions?????

Summary

- As a result of today's training, you should now be able to describe:
  - The purpose of ASSET System and Manager
  - ASSET roles and responsibilities
  - How to enter data into ASSET
  - How to save assessments
  - How to import assessments into ASSET Manager
  - How to export assessments from ASSET Manager
- All processes demonstrated today can be found in the User Manual

Critique
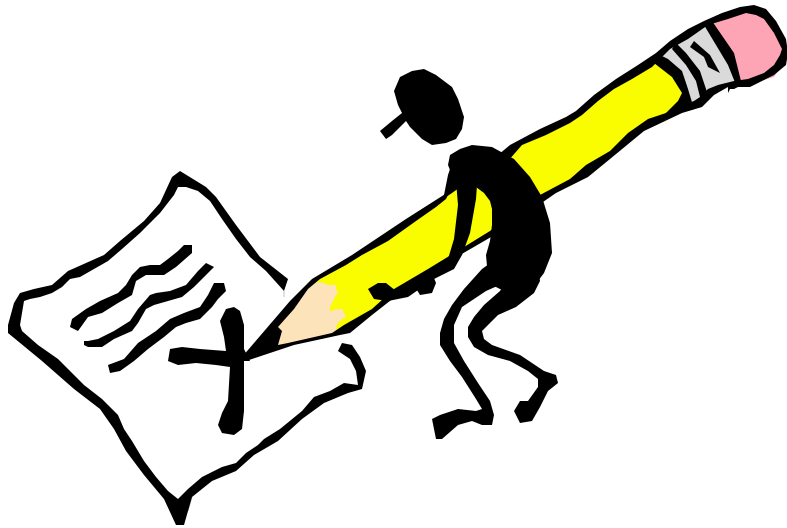
Please take a minute to fill out the course critique