VSE/ESA Inventory

#### Software Asset Management

#### **VSE Resource Auditing**

#### From Barnard Software, Inc.



#### Year 2000

- Yes, it was necessary.
- Most customers very quiet
- IS personal told 'Do not talk about ...'
  - Image is important
- Privately customers indicate many small issues
- Would have been a disaster ...

#### Year 2000

- Gov has biggest problem
- NSA spy sat. down for 3 days.
- Other Gov's had minor to major problems
- Private/Public companies very quiet
  - Image again
- Many companies still working on less important applications

#### Benefits

- Documentation
- Cleanup
  - Dead program and source code
- Computer system all more current
  - Easier support for vendors

- Monitors VSE Phase, PROC and File activity
- Inventory Analysis
  - What Phases, PROCs, Files are in use?
  - What Phases, PROCs, Files are not in use?
  - What Phases are used by other Phases?
  - What Files are used by which Phases?

- Analyzes VSE/ESA libraries
  - Scans DASD and locates all libraries
  - Verifies libraries are in standard labels
    - » Ensure no 'private' programmer libraries
  - Verifies library status
  - Verifies all library sublibraries

» Extracts PHASE, PROC information

 Creates an internal database of PHASE, PROC and DATASET analysis information

- Resource Audit Reports
  - System Audit Reports
  - Detail Audit Reports
- System Reports show graphical system resource usage (CPU, I/O, PAGING, etc)
- Detail Reports show resource usage step by step, job by job
- Various selection options

#### Web Browser Interface

- Requires TCP/IP for VSE
- Use Browser (Netscape, etc.) for queries
- Uses CGI to access OPTI-AUDIT database
- Phase Reference Query
- Dataset Reference Query
- Bind Information Query
- More to come ...

## **OPTI-AUDIT New Features**

- Source to Phase Bind Facility
  - Change Management Facility
- Links Source Code to the Phase
  - Link Data Stored in the Internal Database
- Phase is Analyzed During BIND
  - Is the Phase COBOL?
  - What Compiler, When was Compile Done?
  - Were COBOL Object Routines Included?
  - Was LE Included during LNKEDT?

- Bind Reports
  - Reports on Bind Data
  - Location of Source, Phase
  - Date of Bind, User who performed the Bind
  - Is Bind Still Valid? What Phases have Changed?
- Phase Compare Utility
  - Compares Two or More Phases

- COBOL Phase Analyzer
- Scans Specified Library/Sublibrary for COBOL Phases
- What Compiler Created the Program?
- When was Program Compiled?
- Were COBOL Object Routines Included?
  - What Routines? What Compiler was Used?
  - When was Routine Compiled?
  - Was LE Included During LNKEDT?

- BSAUCOPT COBOL Compile Options
- Extracts and displays Compiler Options used
  - For main program
  - Included COBOL routines too
- VS/COBOL II
- COBOL/VSE
- FCOBOL support not available

- OPTI-ANALIZER Feature
- Analizes any batch application
- Where is it spending its time?
- Tracks each phase (program) used
  - Including SVA and GETVIS phases
- Tracks SVC activity for each phase
- Analyze SVC 34 (GETIME) for each phase

## **OPTI-AUDIT GA Release**

- OPTI-AUDIT 2.90 is latest GA release
- COBOL CICS Restricted Verb Scan
- JOB/JCL Entries added to internal database
- DATACOM support update
- COBOL Source Scanner produces DIF file
- Other misc updates ...

# **OPTI-AUDIT Interim Release**

- OPTI-AUDIT 3.00 is latest Interim release
- VSAM Statistics Data Collection
  - BSAUMRPT VSAM Report
  - BSAUJRPT Resourse Audit Report
- Added RBUFF=31 to ACB's (VSE/ESA 1.4)
- BSAUCOPT COBOL Compiler Options
- IGNORE option added to reports
- BSAUXDSN Dataset Scan Report (REXX)
- BSAURSCN Scan VSE Lib for string (REXX)

- Planed Updates
- CICS TS Resource Auditing
- TCP/IP Resource Auditing
  - SNMP client
- VSE/ESA 2.5 Connectors
- Misc ...

## **OPTI-AUDIT In The Future**

- Change Management System
  - Bind Facility
- COBOL Compiler Analysis
  - Must convert at some point
- Audit Tool
  - Programs, PROCs, Datasets, JCL
  - Inventory Vendor Products
  - Resources (Performance)