

Visual Basic Programmer's
Journal
and Microsoft Corporation
present VBITS 1994



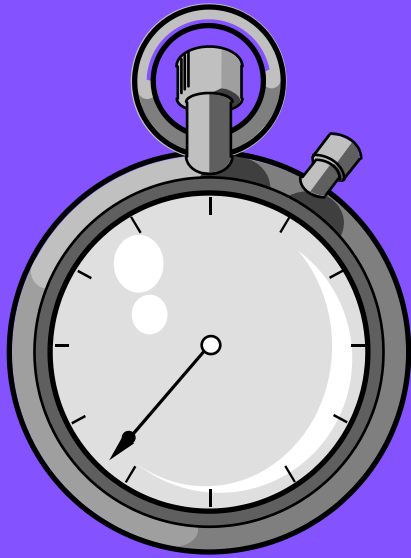
Software Configuration Management in Graphical Development Environments

Tobi Moriarty
Director, PVCS Product
Management
INTERSOLV, Inc.

Demo code ZIP file: [pvcsdemo.ZIP](#)



AGENDA

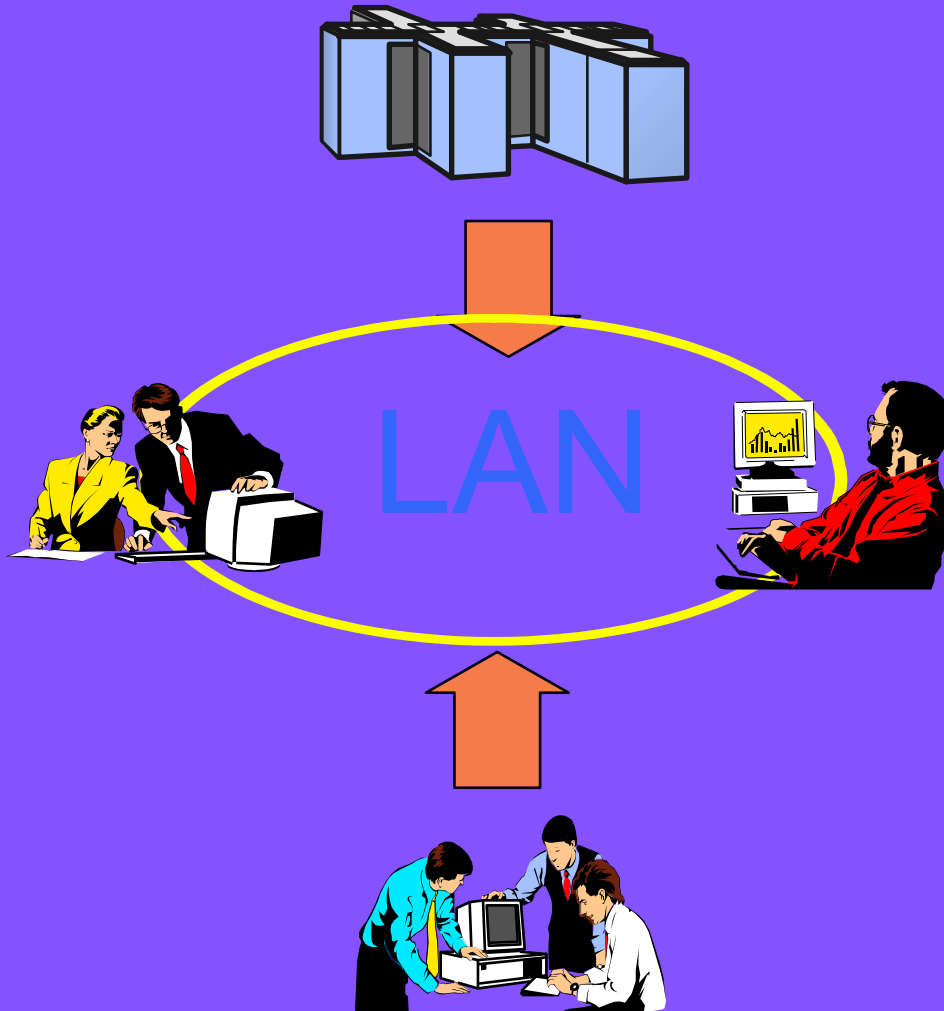


SCM Trends in LAN-Based
Team Development

PVCS Advantage for LAN-
Based Development

A Visual Basic Example

Development Migrating to the LAN



Driven by:

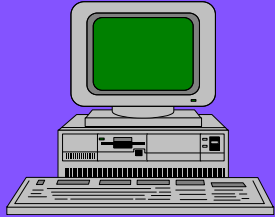
Downsizing

Client/Server

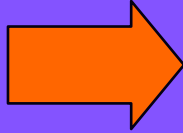
Open Systems

Team Development Key to Productivity

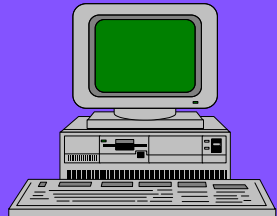
Developing for a Mixed Bag



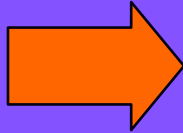
Typical Developer



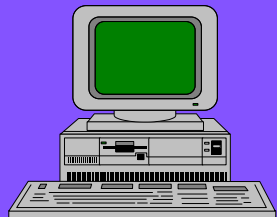
1 1/2 Operating systems
2 Languages
4 Classes of development objects



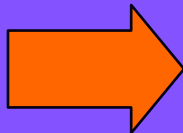
Typical Project



3 Operating systems
3 Languages
8 Classes of development objects



Typical Enterprise



5 Operating systems
6 Languages
12 Classes of development objects

Standard Approach to SCM Required

Key SCM Issues in LAN-Based Development



- Code is overwritten
- Duplicate copies
- Fixes get lost
- Conflicting changes
- Multiple versions
- Incorrect builds
- Failure in production
- No audit trails
- Synchronization with host

Software Configuration Management Is Key

Managing Change Across....

ANALYSIS	DESIGN	PRODUCE	TEST	PRODUCTION/ MAINTENANCE
----------	--------	---------	------	----------------------------

....THE APPLICATION DEVELOPMENT LIFE CYCLE

RAD

4GL

JAD

WATERFALL

IDE

O-O

3GL

Ways To Do SCM:

Manual Paper-Driven Systems

- Lost Forms

- Delays In Getting Signatures

- Incomplete Audit Trails

Semi-Automated System

- Costly To Maintain

- Excessive Downtime

- Difficult To Enhance

- Incomplete Audit Trails

Vendor Product

INTERSOLV - PVCS



Family of SCM Solutions
Broadest Reach & Range
Low Startup Cost
Team Productivity

The Standard for SCM on the LAN
150,000 Users at 10,000 Sites

PVCS - Family of SCM Tools

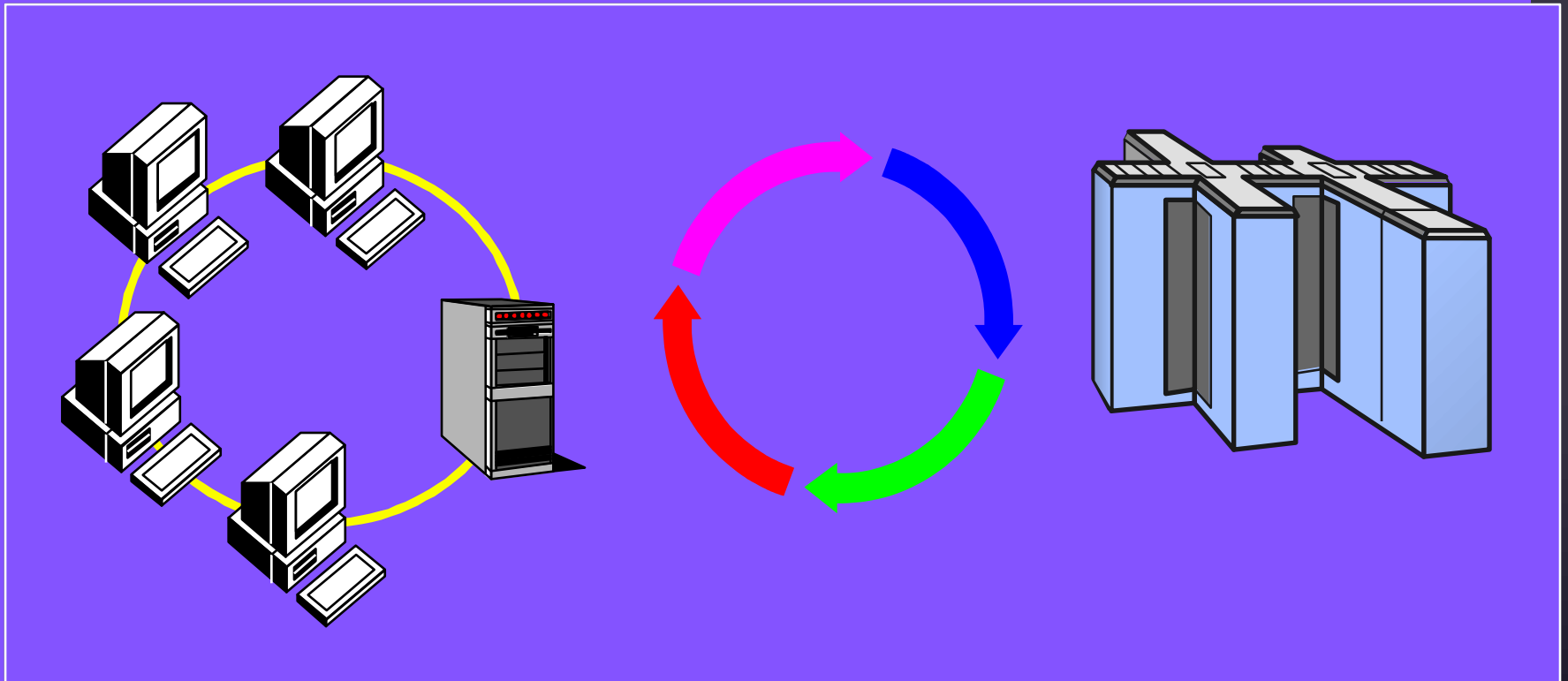
PVCS Version Manager
PVCS Configuration Builder
PVCS Production Gateway
PVCS Developer's Toolkit
PVCS Reporter

Library Management
Version control
Configuration build
Transfer into production
Security
Host synchronization
Query and reporting
Open API

Powerful Full-Function SCM Solutions

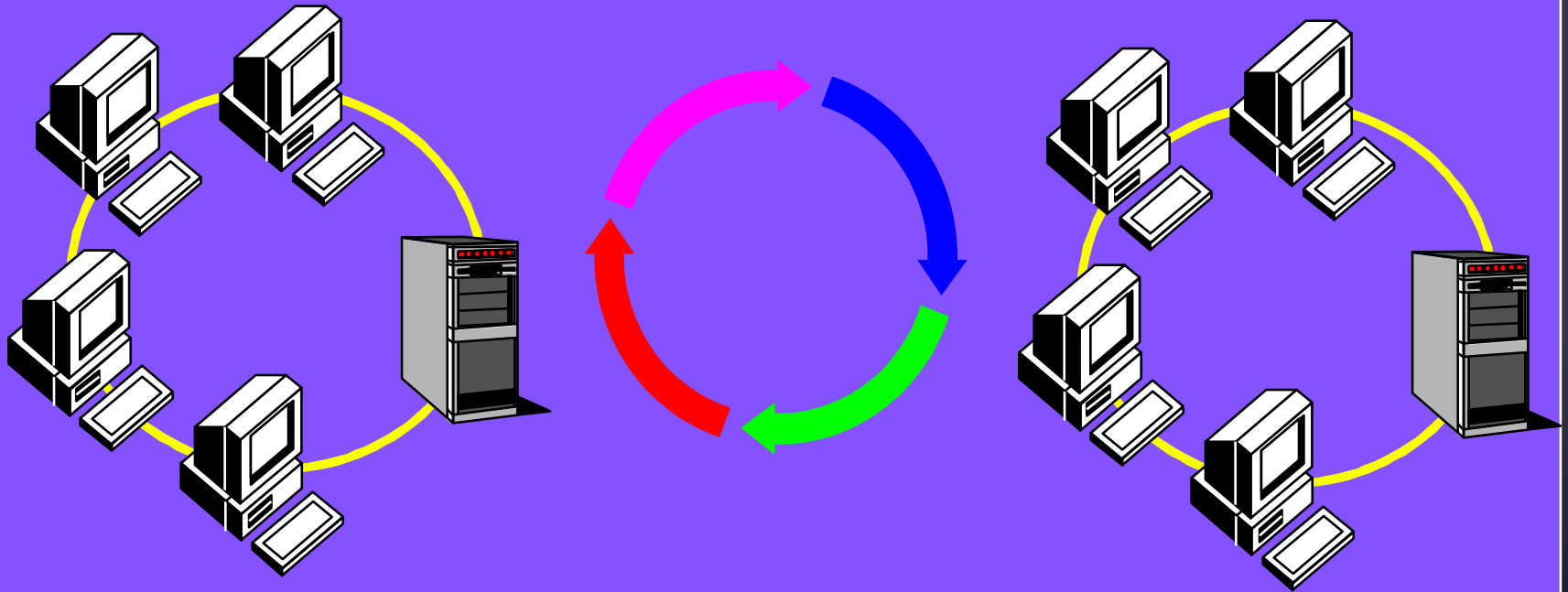


Connection to Host Development



A Single Secure Point Of Host Access
Synchronization Of Multiple Platforms
Supports All Popular Libraries

Connection to Remote Development



A Single Secure Point Of Transfer
Synchronization Of Multiple Platforms
Supports Remote Development Sites

PVCS SCM Coverage

Broadest Reach and Range

Operating Systems

Windows
MS/DOS
Windows NT
OS/2
HP UX
SunSoft
IBM AIX
SunOS
Solaris
SCO UNIX
System V/386
Connection to MVS
and more...

Development Environments

Microsoft PWB
Micro Focus COBOL
Borland IDE
Powersoft PB
HP Softbench
IBM SDE/600
INTERSOLV APS
INTERSOLV Excelerator
INTERSOLV MWB
Digitalk Team/V
Symantec IDE
MS Visual C++
MS Visual Basic
and more...

Object Types

C Code
COBOL Code
4GL Code
Text
Graphical Objects
Binary Files
Executables
Arbitrary Files
Copybooks
Spreadsheets
and more...

Standardize Within and Across Projects

Some PVCS Alliances

Partner

Micro Focus

HP

Microsoft

IBM

SUN

Digitalk

Powersoft

Gupta

Knowledgeware

Easel

and more...

Solution

COBOL

Softbench

Windows NT

OS/2 SCM

Solaris

OO

PowerBuilder

SQL Windows

ObjectView

ENFIN

and more...



Industry Endorsed Broad Coverage

Some PVCS Alliances

for Problem Tracking

Partner

Software Edge

Repository Technologies

Scopus Technologies, Inc.

Qualtrak

and more...

Solution

Defect Control System

Control First/Customer First

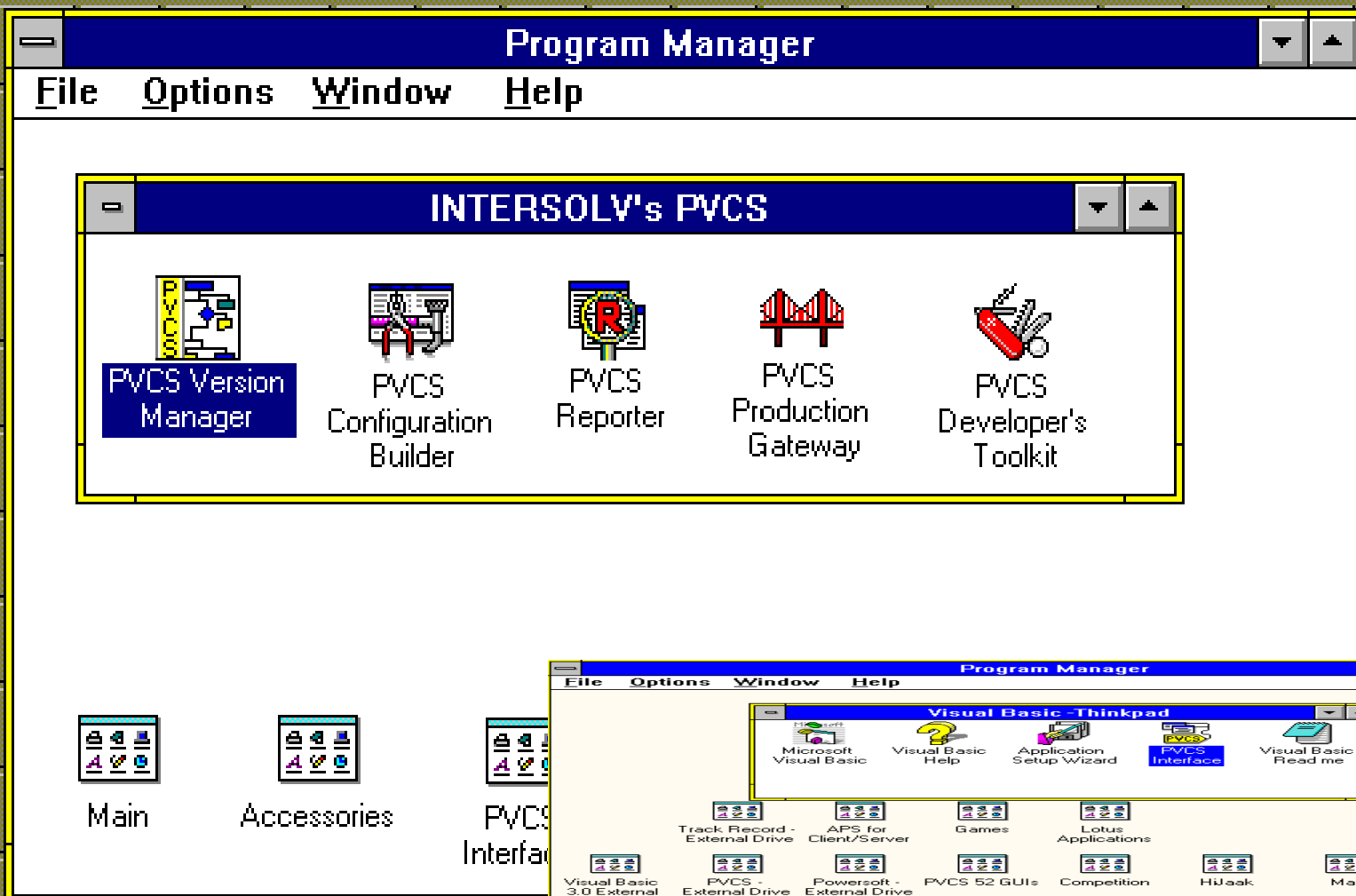
ProTeam

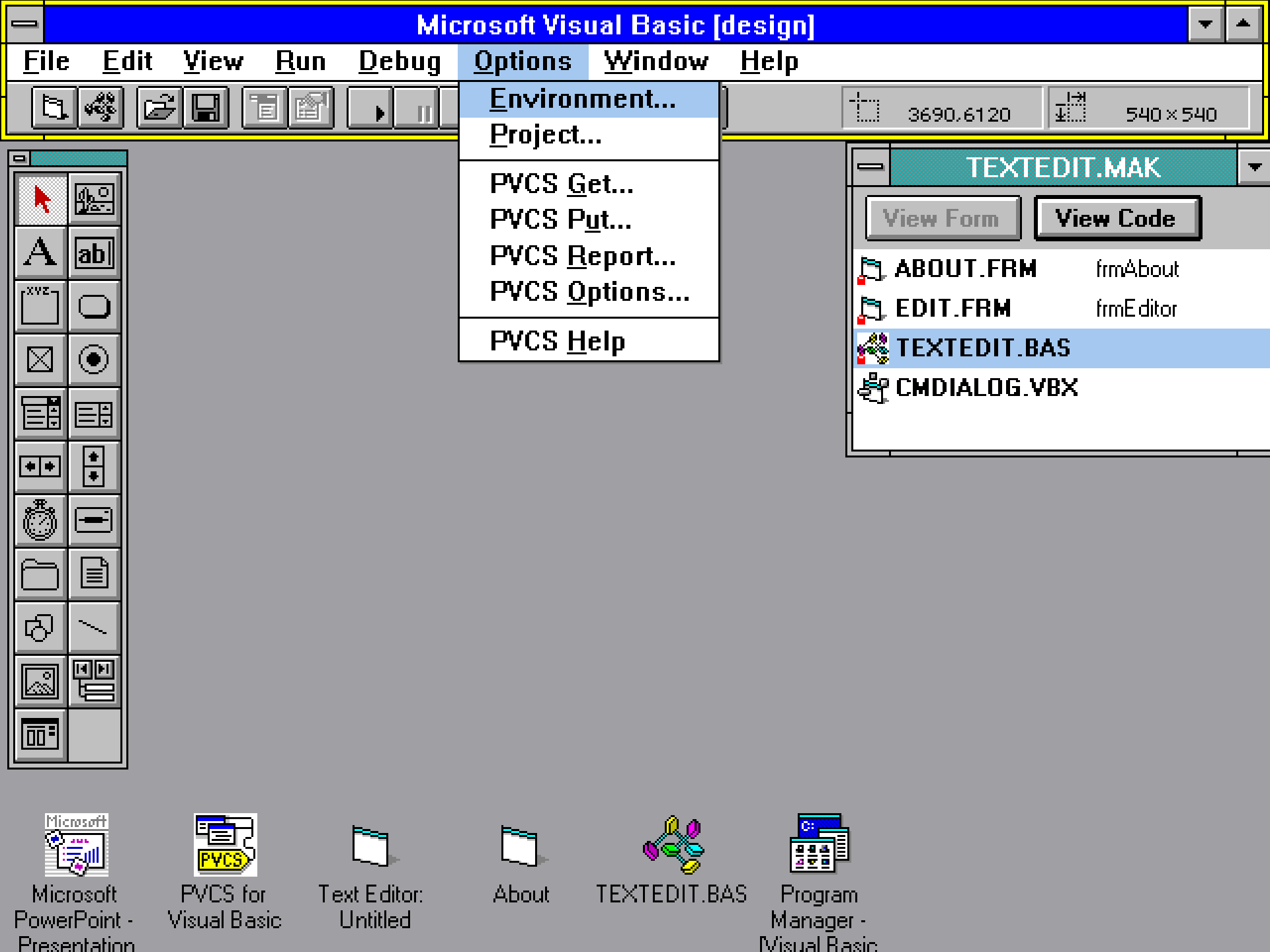
Distributed Defect Tracking System

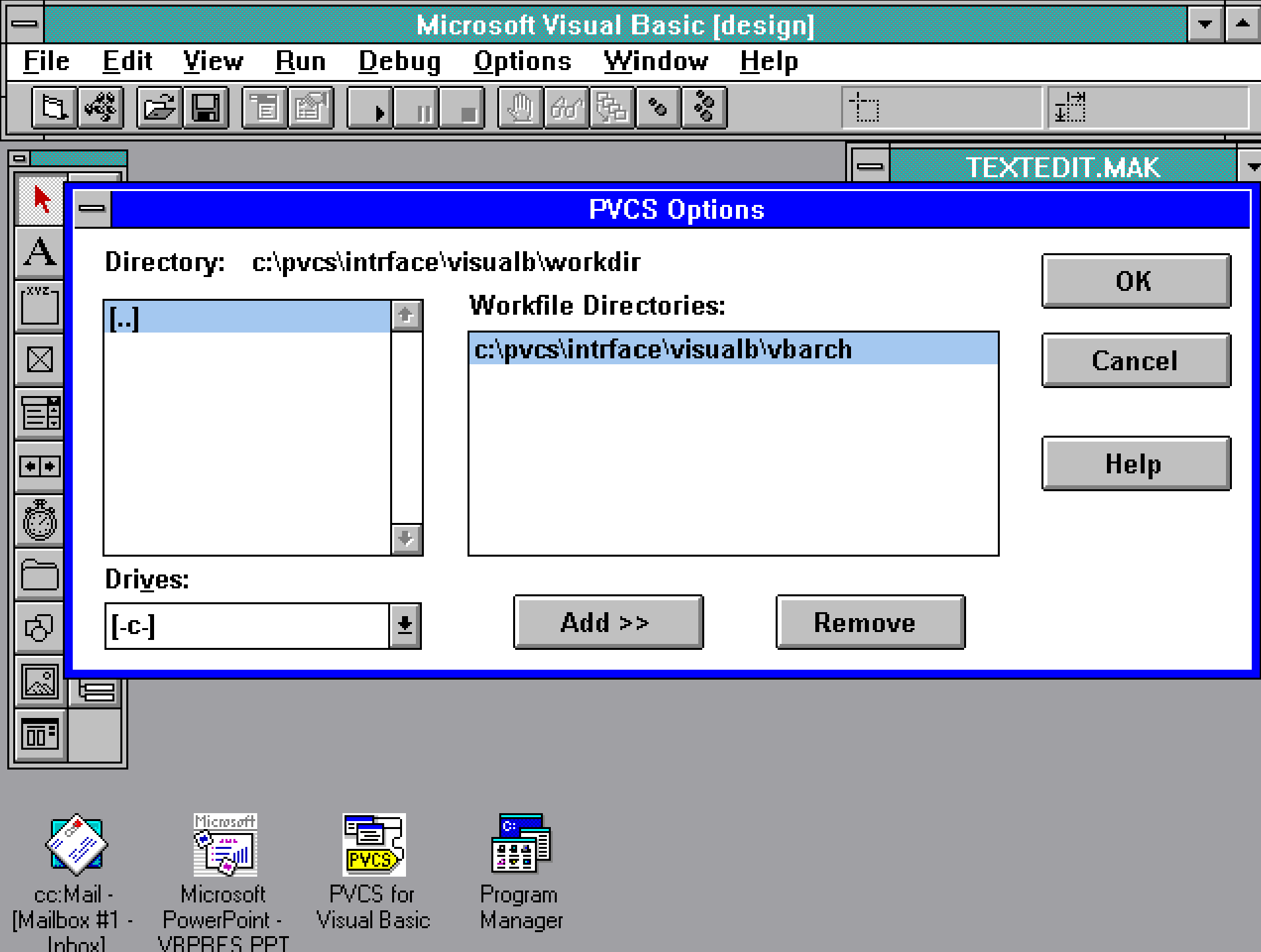
and more...



Industry Endorsed Broad Coverage







Microsoft Visual Basic [design]

File Edit View Run Debug Options Window Help

TEXTEDIT.MAK

PVCS Options

Directory: c:\pvcs\intface\visualb\workdir

OK

Workfile Directories:

c:\pvcs\intface\visualb\vbarch

Cancel

Help

Drives:

[-c-]

Add >>

Remove



cc:Mail -
[Mailbox #1 -
Inbox]

Microsoft
PowerPoint -
VBPRES.PPT

PVCS for
Visual Basic

Program
Manager

Creating Archives

The first time you use the Desktop Interface to save a [workfile](#), the program creates an [archive](#) for it in the archive directory you choose.

Note: Before you can create archives, you must first use Tools [PVCS Options](#) to specify the locations where you want to keep them.

To create an archive, follow the procedure below.

- 1 Use the [host application](#) to create or open a workfile.
- 2 Use Tools [PVCS Save](#) to save the workfile to an archive for the first time. You see the [PVCS Create Archive](#) dialog box.
- 3 Select the archive directory for this archive.
- 4 If desired, use the Archive Description entry field to enter a text description of the workfile that's stored in this archive. For example: C Sorting Routines
- 5 If you plan to continue editing this workfile during this session with the host application, select Keep Locked.
- 6 If desired, enter a version label to assign to the initial revision in this archive.
- 7 Choose the OK button.

Related Topics

File

Get Project File

File Name:

textedit.mak

Archive Directory:

c:\pvcs\intrface\visualb\vbarch

OK

Cancel

Help

Destination c:\pvcs\intrface\visualb\workdir

[.]

[-a-]

[-c-]

[-f-]

[-h-]

☐ Lock

<<Revisions

Revisions:

1.3

1.3

GA Release 1.2

1.2

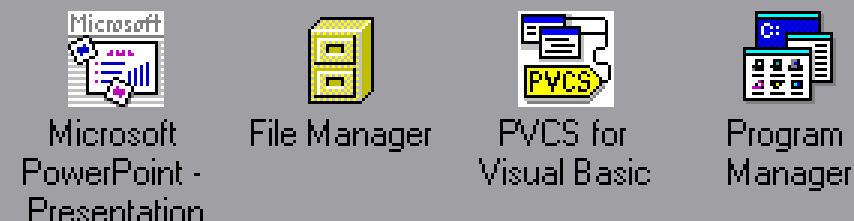
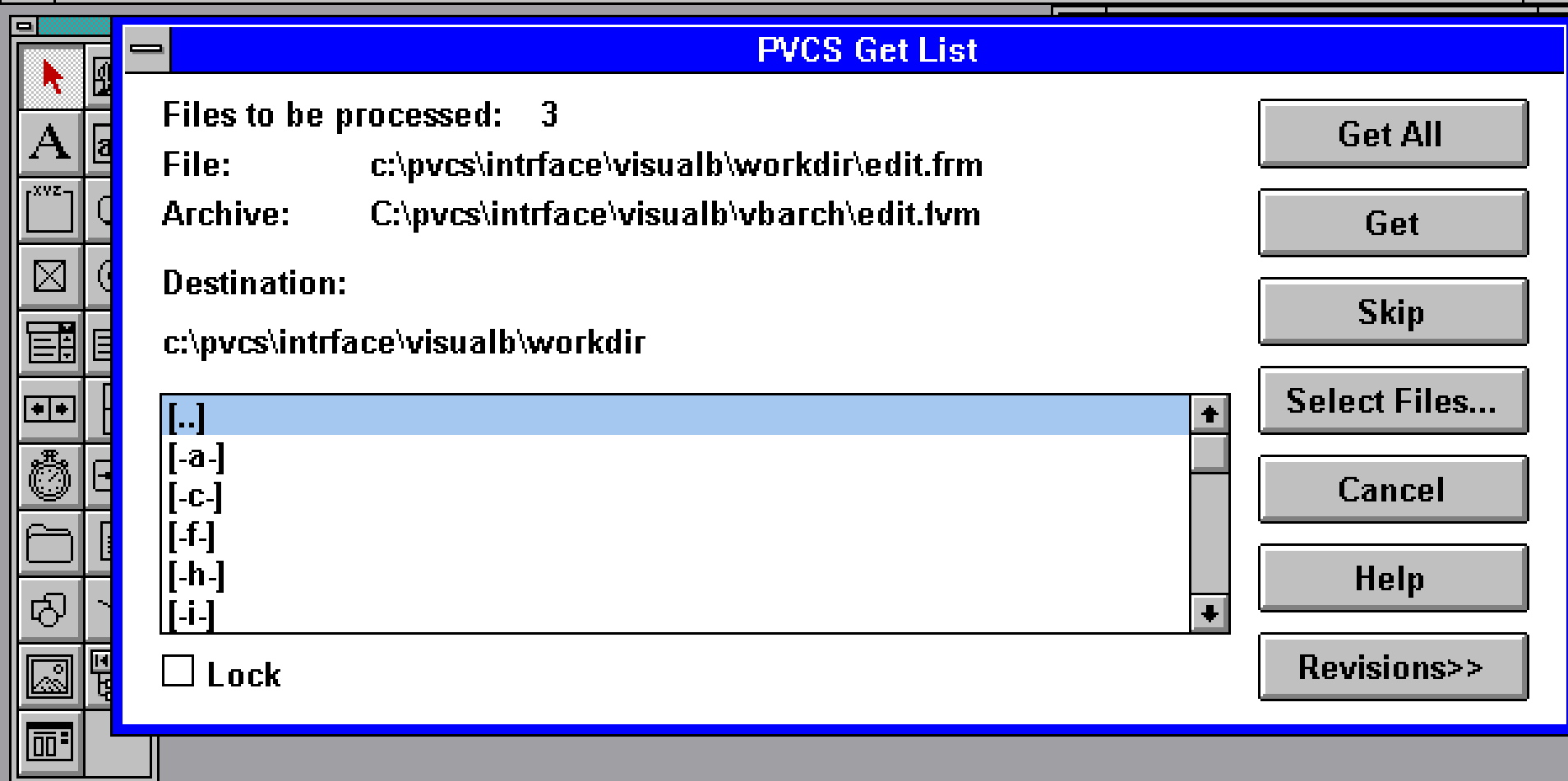
ESP Release

1.1

Description:

Checked in by KEITH on 1/12/1994.
Made the final changes for the GA release.

☐



PVCS Select Project

File Name:

sualb\workdir\textedit.mak

textedit.mak

List Files of Type:

VB Projects (*.MAK)

Directories:

c:\...\visualb\workdir

c:\
pvcs
infrface
visualb
workdir

Drives:

c: ms-dos_6

OK

Cancel



About



File Manager

PVCS for
Visual BasicProgram
ManagerText Editor:
Untitled

TEXTEDIT.BAS

Microsoft
PowerPoint -
Presentation

PVCS Put List

Files to be processed: 4

File: c:\pvcs\interface\visualb\workdir\edit.frm

Archive: C:\pvcs\interface\visualb\vbarch\edit.lvm

Change Description:

Added another combo box to the form

After Putting

- ☐ Delete workfile
- ☒ Keep read-only workfile
- ☐ Keep writable workfile and lock

Add Version Label: GA Release 2.0

Put All

Put

Skip

Select Files...

Cancel

Help



About

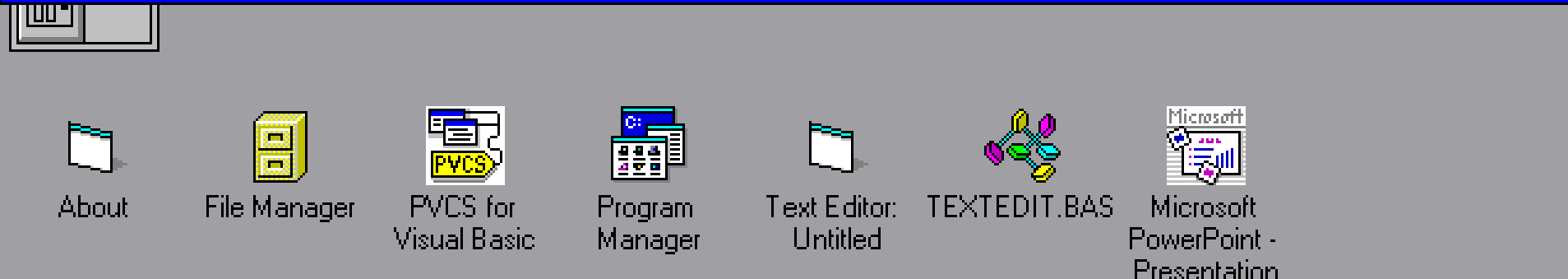
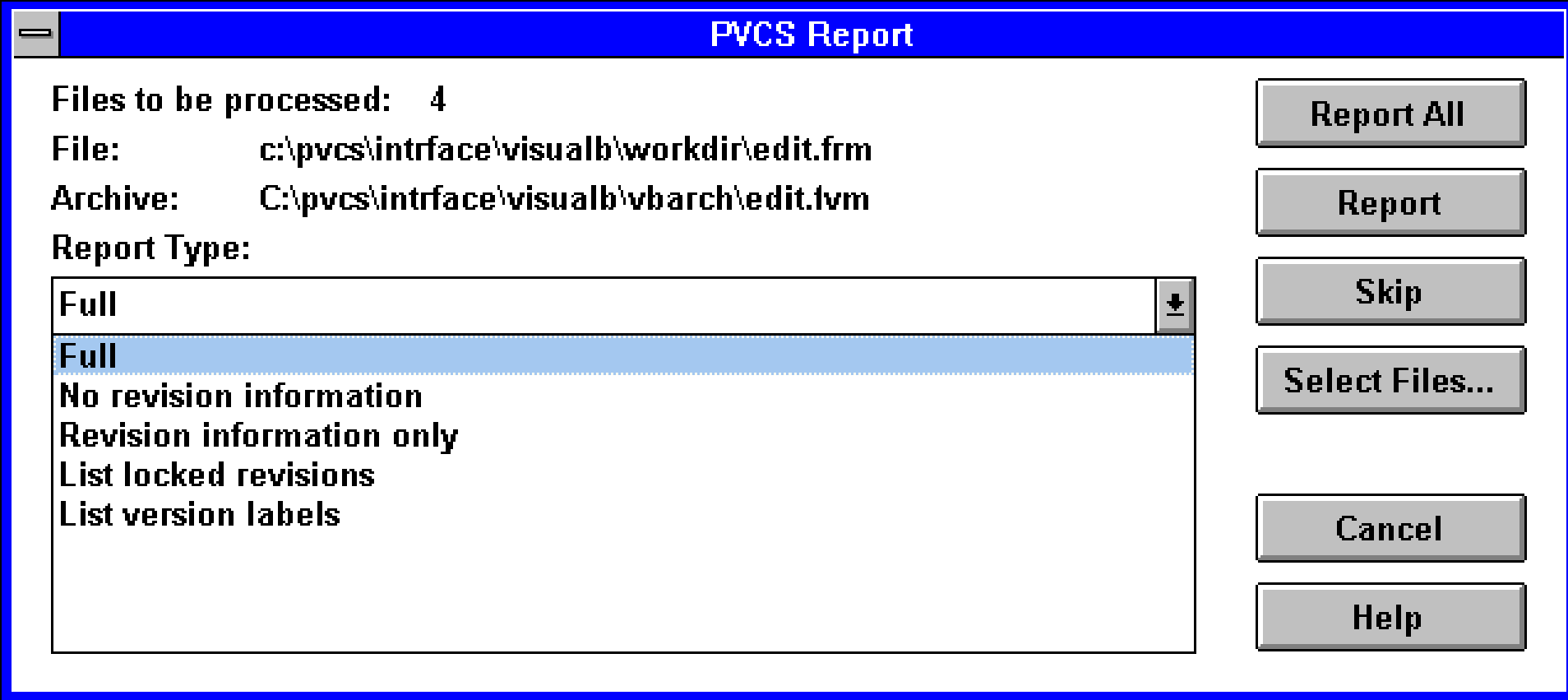
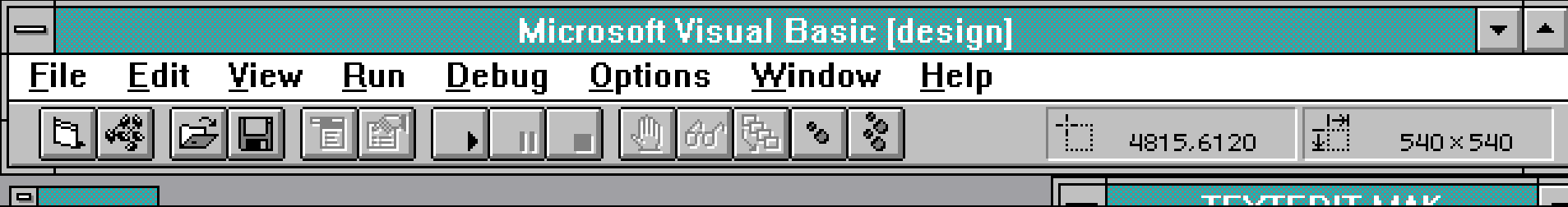


File Manager

PVCS for
Visual BasicProgram
ManagerText Editor:
Untitled

TEXTEDIT.BAS

Microsoft
PowerPoint -
Presentation





4815.6120

540 x 540

PVCS Report

Files to

File: Checked in: 12 Jan 1994 12:27:46
Last modified: 12 Jan 1994 12:25:46
Author id: KEITH lines deleted/added/moved: 0/0/0
Made the final changes for the GA release.

Full

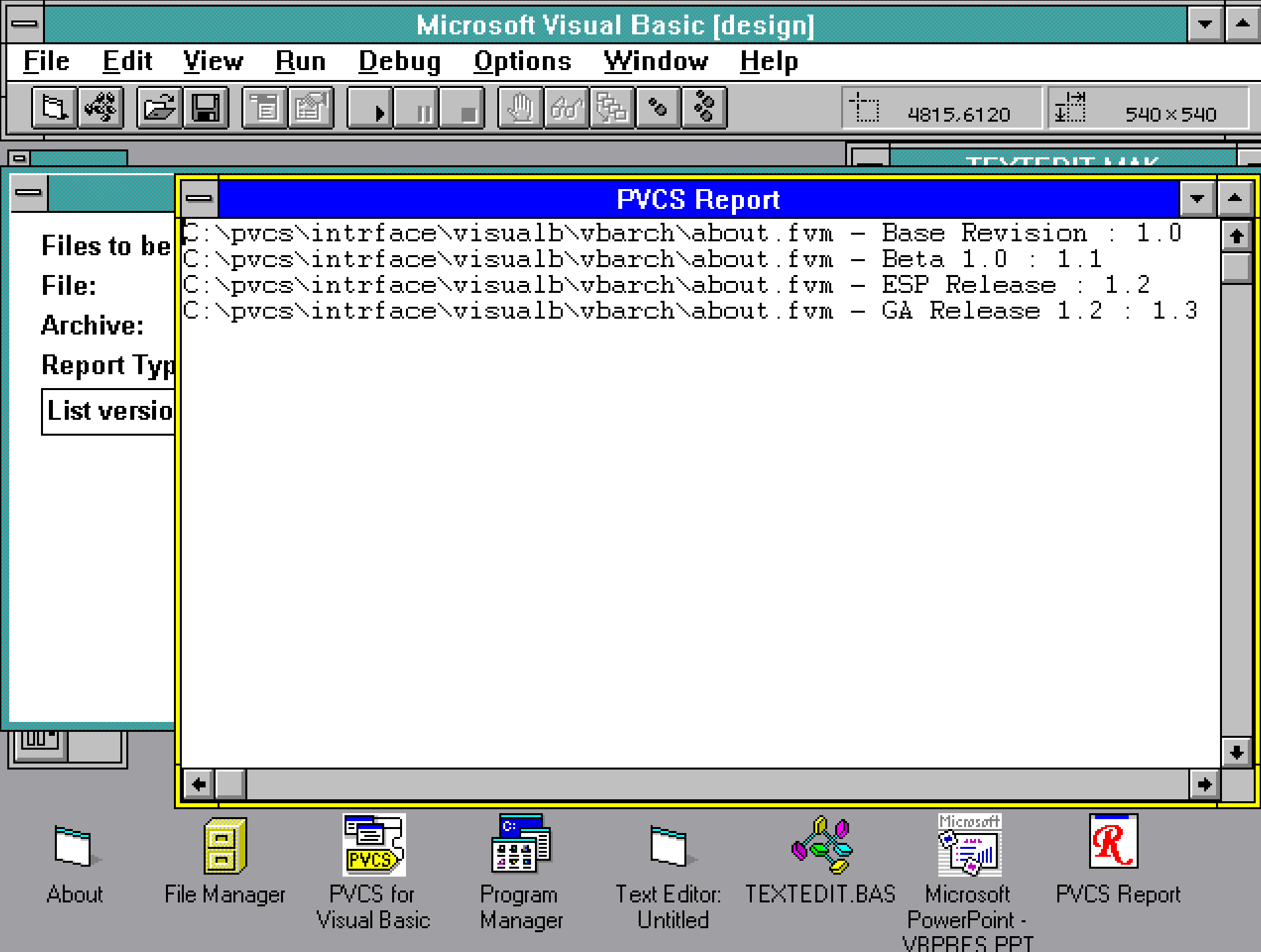
Rev 1.2
Checked in: 12 Jan 1994 12:23:02
Last modified: 12 Jan 1994 12:17:38
Author id: KEITH lines deleted/added/moved: 0/0/0
Changed the forms.

Rev 1.1
Checked in: 12 Jan 1994 12:18:54
Last modified: 12 Jan 1994 12:17:38
Author id: KEITH lines deleted/added/moved: 1/1/0
Change the position of the button

Rev 1.0
Checked in: 12 Jan 1994 12:14:10
Last modified: 28 Apr 1993 00:00:00
Author id: KEITH lines deleted/added/moved: 0/0/0
INITIAL REVISION
=====



About



Microsoft Visual Basic [design]

File Edit View Run Debug Options Window Help



4815.6120 540 x 540

TEXTEDIT.BAS

PVCS Report

Files to be

File:

Archive:

Report Type

List version

C:\pvcs\interface\visualb\vbarch\about.fvm - Base Revision : 1.0
C:\pvcs\interface\visualb\vbarch\about.fvm - Beta 1.0 : 1.1
C:\pvcs\interface\visualb\vbarch\about.fvm - ESP Release : 1.2
C:\pvcs\interface\visualb\vbarch\about.fvm - GA Release 1.2 : 1.3



About



File Manager



PVCS for
Visual Basic



Program
Manager



Text Editor:
Untitled



TEXTEDIT.BAS



Microsoft
PowerPoint -
VBPBES.PPT



PVCS Report

Low Startup

PVCS Services

Comprehensive Training
Implementation Assistance
Support Plus
User Groups
CompuServe Forum



INTERSOLV's suite of
configuration management

TOOLS OF THE TRADE

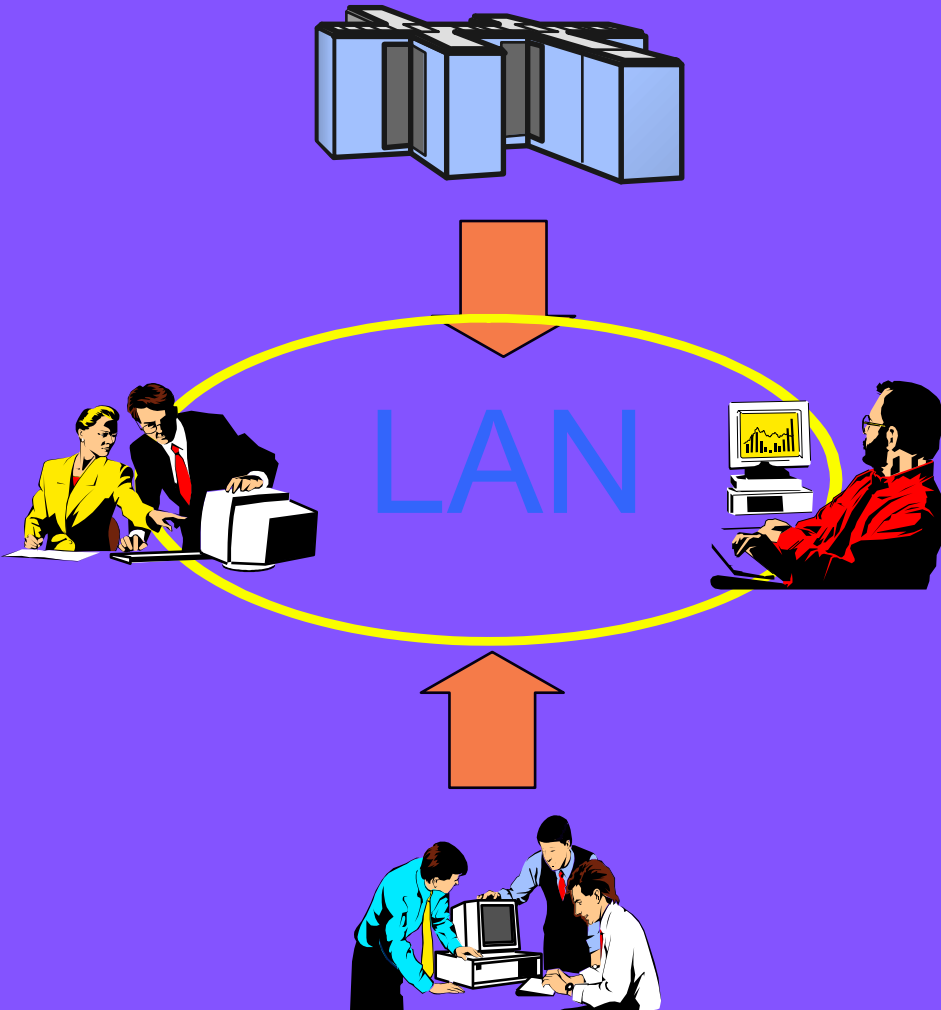
INTERSOLV's PVCS:
The standard in configuration
management

management environment.
This is the kind of support
professional developers
need and want, not upgrade

There is one other reason
why you should consider
buying PVCS: support.
Intersolv's support is
excellent and very unusual

Ensuring Your Success

SCM is Mandatory for Team Development



Help programmers keep track of their work

Ensure security of updates

Increase quality of production systems

Synchronize with remote/host systems

Leave audit trails about project activities

Support applications of yesterday, today, and the future