

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



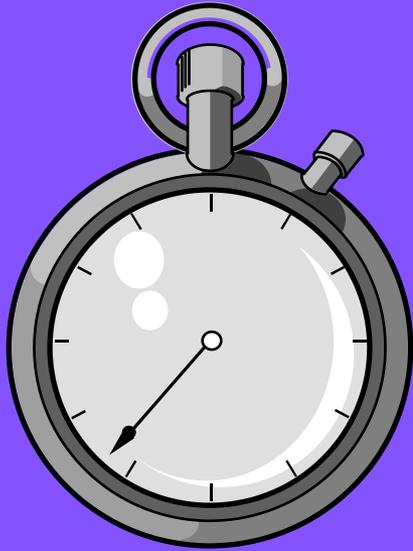
Software Configuration Management in Graphical Development Environments

Tobi Moriarty
Director, PVCS Product
Management
INTERSOLV, Inc.

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



AGENDA

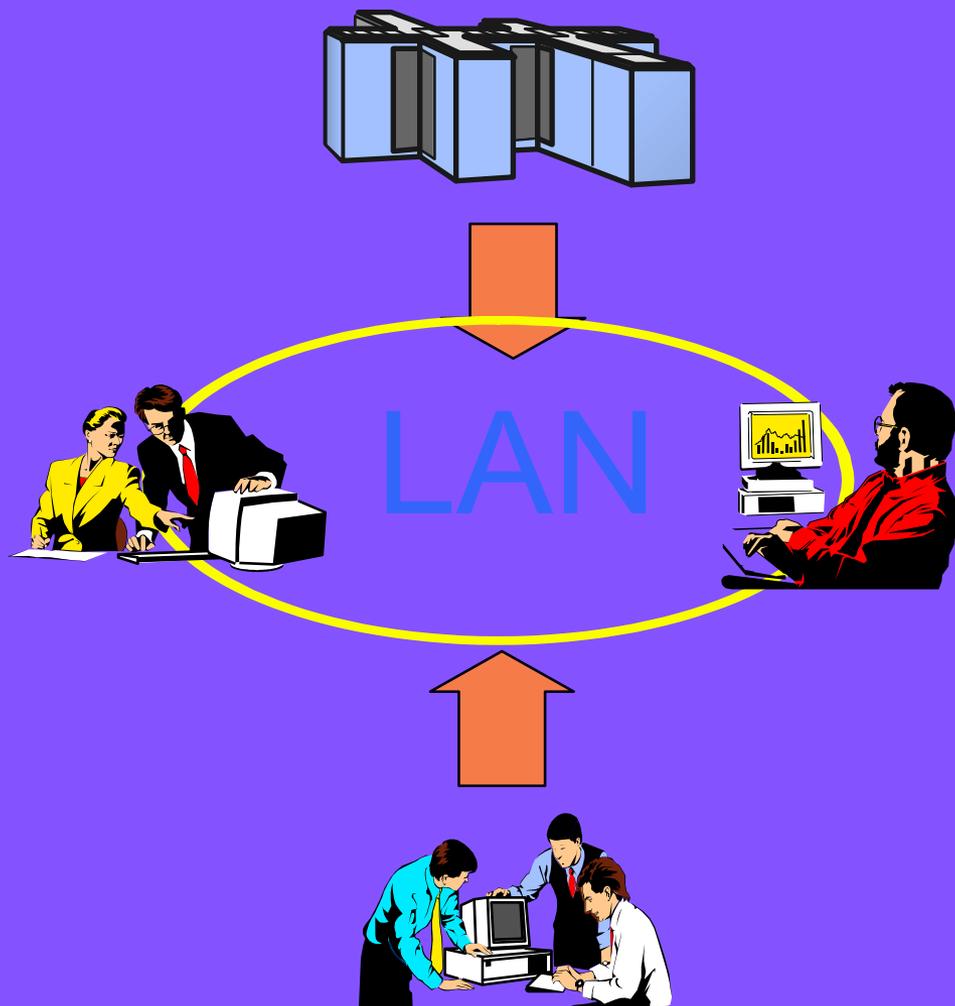


SCM Trends in LAN-Based
Team Development

PVCS Advantage for LAN-
Based Development

A Visual Basic Example

Development Migrating to the LAN



Driven by:

Downsizing

Client/Server

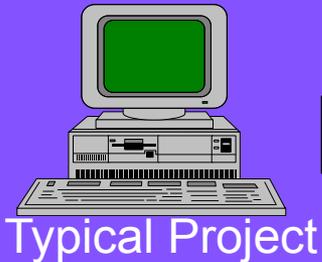
Open Systems

Team Development Key to Productivity

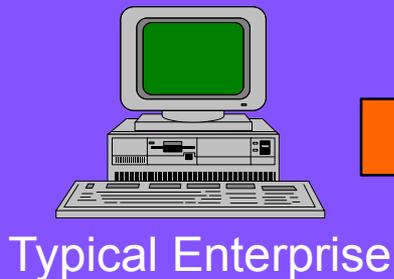
Developing for a Mixed Bag



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



3 Operating systems
3 Languages
8 Classes of development objects



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

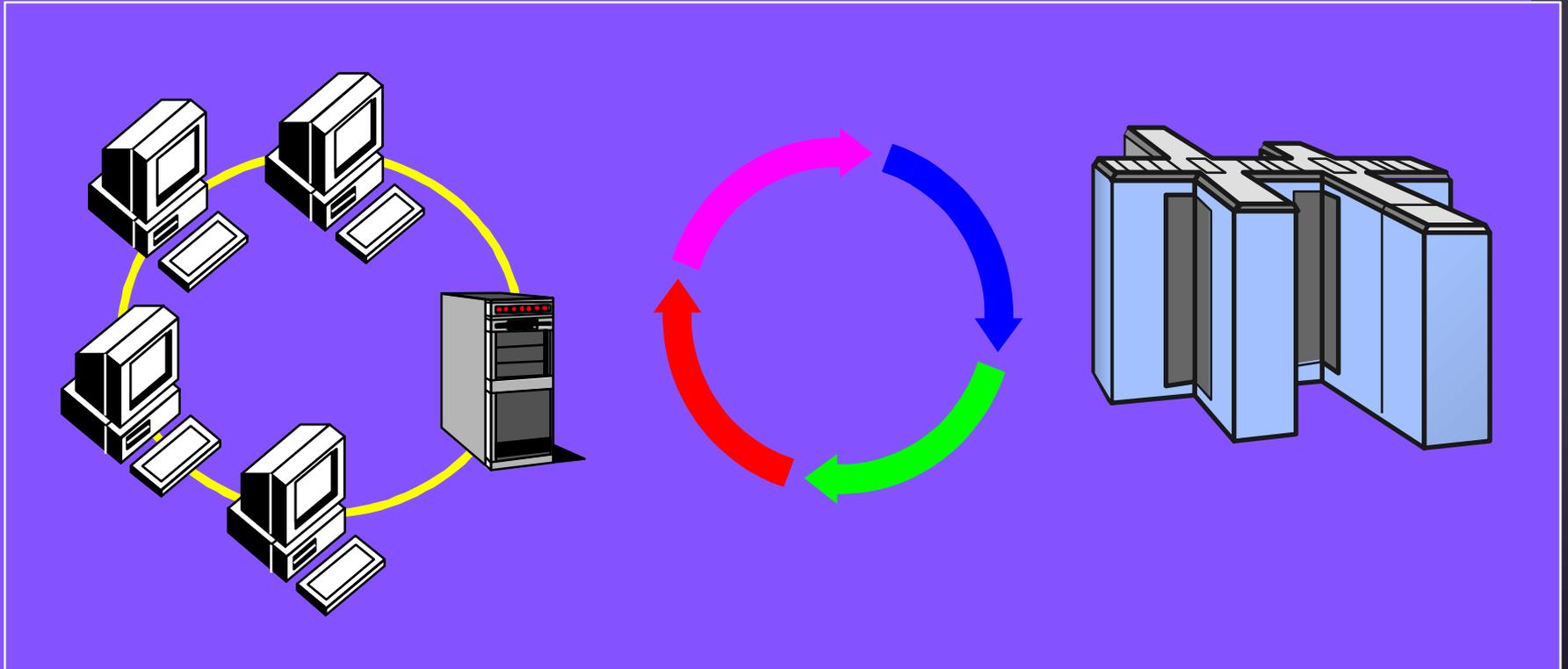
PVCS Version Manager
PVCS Configuration Builder
PVCS Production Gateway
PVCS Developer's Toolkit
PVCS Reporter

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

Powerful Full-Function SCM Solutions

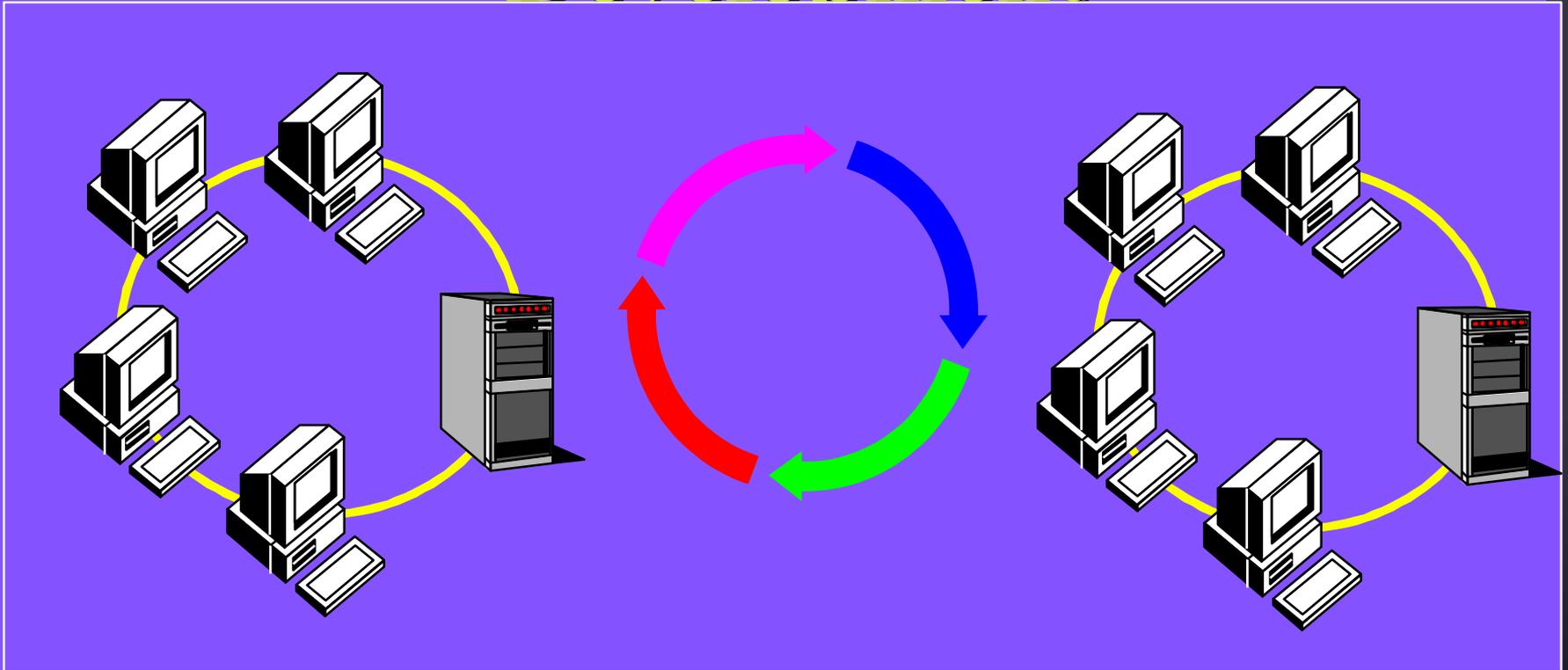


Connection to Host Development



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
Digitaltalk 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

Program Manager

File Options Window Help

INTERSOLV's PVCS



PVCS Version Manager



PVCS Configuration Builder



PVCS Reporter



PVCS Production Gateway



PVCS Developer's Toolkit

Main Accessories PVCS Interface

Program Manager

File Options Window Help

Visual Basic - Thinkpad



Microsoft Visual Basic



Visual Basic Help



Application Setup Wizard



PVCS Interface



Visual Basic Read me

Track Record - External Drive APS for Client/Server Games Lotus Applications

Visual Basic 3.0 External Drv PVCS - External Drive Powersoft - External Drive PVCS 52 GUIs Competition HJJaak Main ThinkPad

Electronic BBS Microsoft Office MS Visual C++ External Drive Symantec C++ External Drive Trackem LapLink V Excelerator WORLDOX

Microsoft Tools HJJaak PRO - External Drive Microsoft Publisher CompuServe WinFax 2.0 Accessories PVCS PVCS Interfaces

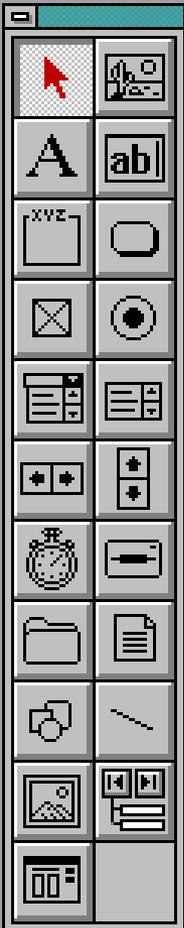
Microsoft Visual Basic [design]

File Edit View Run Debug Options Window Help



3690.6120 540 x 540

- Environment...
- Project...
- PVCS Get...
- PVCS Put...
- PVCS Report...
- PVCS Options...
- PVCS Help



TEXTEDIT.MAK

View Form View Code

ABOUT.FRM	frmAbout
EDIT.FRM	frmEditor
TEXTEDIT.BAS	
CMDIALOG.VBX	



Microsoft PowerPoint - Presentation



PVCS for Visual Basic



Text Editor: Untitled



About



TEXTEDIT.BAS

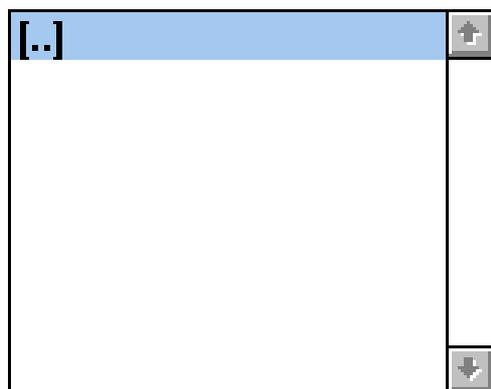


Program Manager - Visual Basic

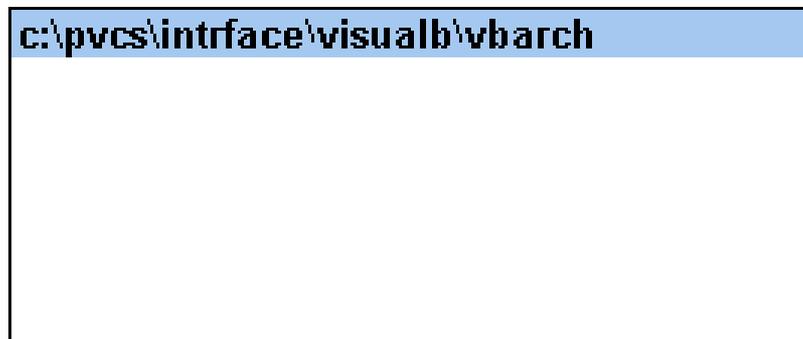


PVCS Options

Directory: c:\pvcs\interface\visualb\workdir



Workfile Directories:



Drives:



Add >>

Remove

OK

Cancel

Help



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\interface\visualb\vbarch

OK

Cancel

Help

Destination

c:\pvcs\interface\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 Get List

Files to be processed: 3

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

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

Destination:

c:\pvcs\interface\visualb\workdir

- [.]
- [-a-]
- [-c-]
- [-f-]
- [-h-]
- [-i-]

Lock

Get All

Get

Skip

Select Files...

Cancel

Help

Revisions>>



Microsoft PowerPoint - Presentation

File Manager

PVCS for Visual Basic

Program Manager

PVCS Select Project

File Name:

sualb\workdir\textedit.mak

textedit.mak

List Files of Type:

VB Projects (*.MAK)

Directories:

c:\...\visualb\workdir

- c:\
- pvcs
- iniface
- visualb
- workdir

Drives:

c: ms-dos_6

OK

Cancel

540 x 540

DIT.MAK

View Code

frmAbout

frmEditor



About



File Manager



PVCS for Visual Basic



Program Manager



Text 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 be processed: 4

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

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

Report Type:

Full

Full

- No revision information
- Revision information only
- List locked revisions
- List version labels

Report All

Report

Skip

Select Files...

Cancel

Help





PVCS Report

Files to
File:
Archive
Report
Full

```
-----  
Rev 1.3  
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.
```

```
-----  
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  
=====
```

Microsoft Visual Basic [design]

File Edit View Run Debug Options Window Help



4815.6120 540 x 540

PVCS Report

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

Files to be

File:

Archive:

Report Type

List version



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

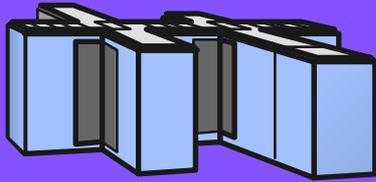
INTERSOLV's PVCS:
The standard in configuration management

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



LAN



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