To install PVM on an NT system without using the installshield package requires that the installer manually perform the same tasks as installshield. These tasks are outlined below.

All tasks should be assumed to be for both NT and Win 95/98 systems unless otherwise indicated as only (NT) or only (95/98).

1. Unpack the PVM files to directory: C:\Program Files\PVM3.4

2. Install registry entries for (NT) or environment variables for (95/98):

   - (NT) Install registry entries. Based on your version of Visual C++ and optionally Digital Fortran, double click on both the pvm.reg and pvm_user_env.reg files in the appropriate directory. NOTE that every PVM user will have to install the pvm_user_env.reg entries for their personal account while pvm.reg need only be done once.

     - DevStudio 5: C:\Program Files\PVM3.4\WIN32\DevStudio5
     - DevStudio 6: C:\Program Files\PVM3.4\WIN32\DevStudio6

   - (95/98) Install environment values into C:\Autoexec.bat file.

     1. Append the contents of C:\Program Files\PVM3.4\into-Autoexec.bat to C:\Autoexec.bat.
     2. Edit C:\Program Files\PVM3.4\PVMVARS.BAT according to instructions in that file with respect to DevStudio 5 versus DevStudio 6 installations.

3. Install your rshd package according to supplier instructions.

   (NT) Information provided here is for the Ataman package available at http://www.ataman.com (this is a commercial package). In the future we will do additional testing on an internally developed rshd package. Look for information regarding that package in the near future.

   - (NT) Set the environment file to: C:\Program Files\PVM3.4\WIN32\file.env

   Note that other rshd packages may (or not) require this "help" in setting the PVM_ROOT environment value. This is a result of Ataman's package not using an individual's environment settings (this is discussed in Ataman documentation.)

   Windows 95/98 does not exhibit this problem as it uses the settings in C:\Autoexec.bat to pickup the environment values.

4. Copy the appropriate PVM compile shell (with icon) to your desktop. You will want to use this DOS window when compiling PVM. Perhaps more important, when others walk by your desktop – they will see that you are a proud PVM 3.4.0 user!

   - (NT) C:\Program Files\PVM3.4\WIN32\PVM NT Compile Shell
   - (95/98) C:\Program Files\PVM3.4\WIN32\PVM Compile Shell

   (95/98) If you run the C:\Program Files\PVM3.4\make.bat file and see "Out of environment space", this indicates that you have too many environment variables set for your DOS shell. This can be resolved by: right click the "PVM Compile Shell" icon – select "properties" – choose "memory" tab – increase the "Initial environment" setting – click "OK". Our initial setting is 2048. We required this value on Windows 95 and 98 machines with C++, Fortran, and PVM environment values installed. If you do more, expect to increase this value.

5. Activate the new environment variables.

   - (NT) Logoff and then logon.

     Not as intrusive as “other” applications that require a reboot after every other step… This step is necessary so that the new registry entries are recognized as environment variables.

   - (95/98) Reboot

     Just can’t be avoided. That is, unless you switch to NT.

6. You are now ready to compile PVM on your machine.

   1. Double-click the desktop PVM compile shell icon.
   2. Type make.bat at the DOS command prompt to see makefile options.
   3. Go for it!

7. To place PVM shortcuts in your START menu – two options – (A) for all users, (B) for individual users:

   (A) To install shortcuts so that all users have them:

   (NT)
   1. Create directory PVM in C:\WINNT\Profiles\All Users\Start Menu\Programs
   2. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvm.exe
   3. Place shortcut in C:\WINNT\Profiles\All Users\Start Menu\Programs\PVM
   4. Rename shortcut “PVM Console”
   5. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvmd3.exe
   6. Place shortcut in C:\WINNT\Profiles\All Users\Start Menu\Programs\PVM
   7. Rename shortcut “PVM Daemon”
   8. Create a shortcut for C:\Program Files\PVM3.4\man\WIN32\Pvmhelp.hlp
   9. Place shortcut in C:\WINNT\Profiles\All Users\Start Menu\Programs\PVM
   10. Rename shortcut “PVM Help”

   (95/98)
   1. Create directory PVM in C:\WINDOWS\Start Menu\Programs
   2. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvm.exe
   3. Place shortcut in C:\WINDOWS\Start Menu\Programs \PVM
   4. Rename shortcut “PVM Console”
   5. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvmd3.exe
   6. Place shortcut in C:\WINDOWS\Start Menu\Programs \PVM
   7. Rename shortcut “PVM Daemon”
   8. Create a shortcut for C:\Program Files\PVM3.4\man\WIN32\Pvmhelp.hlp
   9. Place shortcut in C:\WINDOWS\Start Menu\Programs \PVM
   10. Rename shortcut “PVM Help”

(B) To install shortcuts so that only an individual has them:

(NT)
1. Create directory PVM in C:\WINNT\Profiles\<username>\Start Menu\Programs
2. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvm.exe
3. Place shortcut in C:\WINNT\Profiles\<username>\Start Menu\Programs \PVM
4. Rename shortcut "PVM Console"
5. Create a shortcut for C:\Program Files\PVM3.4\lib\WIN32\pvmd3.exe
6. Place shortcut in C:\WINNT\Profiles\<username>\Start Menu\Programs \PVM
7. Rename shortcut "PVM Daemon"
8. Create a shortcut for C:\Program Files\PVM3.4\man\WIN32\Pvmhelp.hlp
9. Place shortcut in C:\WINNT\Profiles\<username>\Start Menu\Programs \PVM
10. Rename shortcut "PVM Help"

(95/98) option not available on 95/98 systems –operating system limitation

## IMPORTANT NOTES:

ALPHA VS INTEL:

Although both Intel and Alpha based machines can run NT, remember that these two systems require their own binary format. Thus, you must compile PVM codes for the target physical architecture.

KNOWN PROBLEMS:

There appears to be a "timeout" problem related to ports on the NT/95/98 systems or with Ataman. One source suggested making all connections non-persistent. The symptom is that it takes some time before a reconnection to a dropped or deleted host is accepted. The error "cannot connect to rsh port … cannot shutdown rsh client socket" appears in the hoster window during a PVM add command from console.

LATE BREAKING NT/95/98 NEWS:

http://www.epm.ornl.gov/~sscott

Filename: installation.doc
Last Updated: 3-15-1999