

Product Name
Beta 2 CD dated 3/2/00
Sample Testing Report
March 14, 2000

Summary:

We are still encountering some of the problems with installations and viewing movies on the Macintosh and we question whether it may not be necessary to use another installer. The scoring of the Multiple Choice tests is not always correct and the reporting of these scores is also not correct in the Teacher Utility. Also the Help file for the Teacher Utility is not present and in Macintosh we are getting an error message if we remove a task in the Test Prep Planner.

Disclaimer:

Hudson Software Corporation (herein referred to as "Hudson"), its employees and contractors have prepared the information contained in this report using their best efforts. No warranty, express or implied, is made with regard to the content of this report. Under no circumstances will Hudson be liable for incidental or consequential damages in connection with, or arising out of, the providing of information contained herein.

Nothing in this report, express or implied, shall be construed as an endorsement of the tested software by Hudson, or a designation or certification that the tested software is "Y2K compatible" or free of problems with relation to its operation in the Year 2000 and beyond.

Testing Personnel:

Robert Maloney, Barbara Korn, Rich Vocke, Kerry Kohr, and Reed Payne.

SAMPLE REPORT: The product name, publisher name and other sensitive information have been removed and replaced with the words "PRODUCT NAME", PUBLISHER, or *** as appropriate. Other information may have been removed to protect client confidentiality.**

Hardware Used:

The following machines were used to test the software:

Windows

Make/Model	Processor	Clock Speed	RAM	Windows Version
Gateway 2000	Pentium II	350 MHz	64 Mb	Windows 2000
HP Brio BAx	Pentium II	400 MHz	64 Mb	Windows NT 4.0 SP4
Micron Millennia	Pentium III	600 MHz	64 Mb	Windows 98 SE
Dell XPS T550	Pentium III	550 MHz	128 Mb	Windows 98 SE
Midwest Micro	Pentium III	450 MHz	64 Mb	Windows 98 SE
Midwest Micro	Pentium II	266 MHz	64 Mb	Windows 98 SE
HP Brio BA	Celeron	333 MHz	32 Mb	Windows 98
HP Vectra VE	Celeron	333 MHz	32 Mb	Windows 95
NEC Direction	Pentium MMX	200 MHz	64 Mb	Windows 95
Quantex	Pentium MMX	200 MHz	64 Mb	Windows 95

Windows Network

For network testing in Windows we used a Windows NT 4.0 network and a Novell NetWare 4.2 network. The product was tested using the following combinations of network platform, installation option and data location:

<u>Network</u>	<u>Installation Option</u>	<u>CD-ROM/Data Location</u>
Windows NT 4.0	Network Server install with movies	Installed from local CD with all files installed to server.
Windows NT 4.0	Network Server install without movies	Installed to the NT server and accessed movies from both the local CD-ROM drive and in a CD-ROM Tower with an Axis StorPoint CD E100 server*
Novell NetWare 4.2	Network Server install with movies	Installed from local CD with all files installed to server.
Novell NetWare 4.2	Network Server install without movies	Installed data to the server with the CD local to client.

Macintosh

Make/Model	Processor	Clock Speed	RAM	OS Version
PowerMac G4	G4 PowerPC	350 MHz	64 Mb	Mac OS 9
iMac	G3 PowerPC	333 MHz	32 Mb	Mac OS 8.6
iMac	G3 PowerPC	233 MHz	32 Mb	Mac OS 8.6
G3 Minitower	G3 PowerPC	300 MHz	64 Mb	Mac OS 8.5
Performa 6400	PowerPC 603e	200 MHz	32 Mb	Mac OS 8.1
PowerMac 6100	PowerPC 601	60 MHz	40 Mb	System 7.6

Macintosh Network

For network testing in Macintosh we used systems linked by AppleTalk over the same Ethernet wiring that our Windows NT 4.0 network server is on. We are able to test installing to the Windows NT server using the software both with and without the CD-ROM. This product was tested using the following combination of network platform, installation option and data location:

<u>Network</u>	<u>Installation Option</u>	<u>CD-ROM/Data Location</u>
AppleTalk	Network Server install with movies	Installed from local CD with all files on NT server.
AppleTalk	Network Server install without movies	Installed to the NT server and accessed the movies on the CD-ROM in a CD-ROM Tower with an Axis StorPoint CD E100 server*

NOTE: The Axis StorPoint CD E100 server is attached to an 18 GB hard drive where CD-ROM volumes are cached for faster access. This server can also read hybrid CD-ROM volumes and make them accessible to both Macintosh and Windows systems.

Procedures:

On all machines, we checked the installation and ran at least a basic routine, checking functionality in the major areas. On one Windows machine and one Macintosh, we did a complete regression check using our last annotated reports. With the network installs, we mainly focused on the Teacher Utility and the scoring and timing of the Multiple Choice tests.

NOTE: We have upgraded one of our systems to Windows 2000 and included that system in this round of testing. We used this system for part of our regression testing with the single-user install and also did a limited test of all of the major sections using the workstation install from the Network Server with movies option on the Windows NT 4.0 server.

Installation:

Macintosh

- (1) We still could not install the software on the Performa 6100, which was running System 7.6.1. As Mark requested, we compared the files on this machine with another machine where the installation worked. The *****.sit and XTRAs.sit files were present on the 6100, but on the other machine, they were expanded and instead there was an *****.PKG file and an XTRAS folder.

We monitored the installation with the Java Console. During the unpacking of the SIT files, we noticed that “exceptions occurred while installing.” We saved the Java Console script and have included it with this report.

We also installed StuffIt Expander 5.5 onto this system, which had version 4.5, but when we reran the installation we had the same result. Consequently, we have not been able to run the software at all on this low end system.

- (2) The first time that we ran the client setup on the Performa 6400, the system froze and we had to restart the machine. The installation completed normally after restarting. This system has StuffIt Expander 4.0.2, which came with the System 8.1 software on this system. This is below the requirements in the Readme file, but when we did a single-user install we did not have this problem.
- (3) We did a network server install with Movies from the 233 MHz iMac to the NT network hard drive and the installation took 2 hours and 25 Minutes. The installation does not give much indication that it is still going and we thought at first that it might have hung up. This system has StuffIt Expander 5.1. We had noticed similar but slightly smaller delays using the G3 (300 MHz) and the G4 (350 MHz) during the last round, but had attributed them to the other problems we had reported with the installation.

We have not seen network installations of this size take quite so long on these relatively high-end systems. The installation without Movies took 25 minutes on the Performa 6400 (200 MHz), which admittedly only has StuffIt Expander 4.1 on it. If the installation is going to be this long, it will generate some complaints. I know you don't really want to have to change installers at this stage of product's development, but if these delays and the issue of the failed installation on the Power Macintosh 6100 cannot be resolved, you may have to at least consider it.

Of the Mac installers that we are familiar with, the only one that might be able to handle a network installation like this is the full version of InstallerVise (not the InstallerViseLite). However, that installer bases it's fee upon how many CDs you plan to sell. Still you might consider that if things don't work out with InstallAnywhere.

Operational Problems Common to Windows and Macintosh:

- (1) There were instances where the timer in the Multiple Choice tests did not begin to wind down, but remained at the starting time. This happened sporadically on all systems tested, and was not easily replicable in any one section. We did see this happen at least once in both tests and in both parts.

Operational Problems in Windows Only:

- (1) On a machine where we did the standalone install, the program crashed and we had to reboot the system. After restarting, and launching the application, we got the message that "Product Name reports that you are already logged in from somewhere else. If you know you are not logged in, click "Yes" to continue. Otherwise, click "No" to exit."

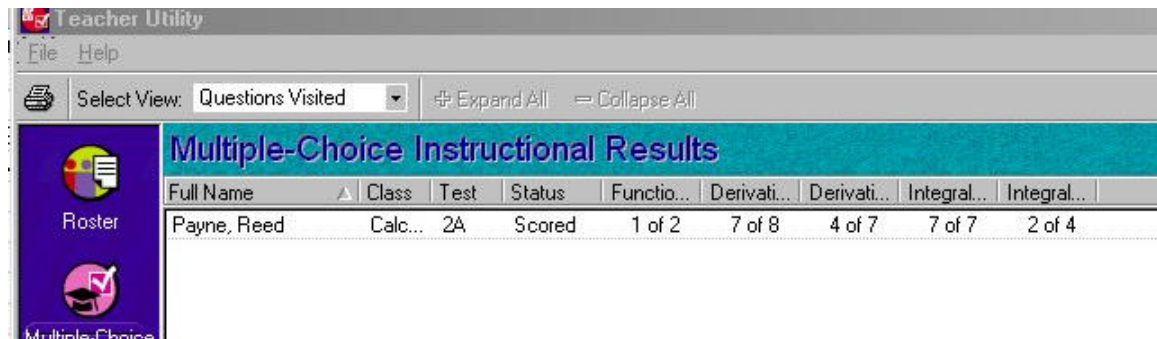
Since this is not the network version, and we had not logged in anywhere, it seems odd to get a message like this. We managed to replicate this by manually ending the task from the Task Manager and reentering the program. It seems as if a user file is left open when the program is crashed and there may not be a way to prevent that from happening, but the message above should be changed.

- (2) We encountered some erratic problems when checking scores in the Teacher Utility:
 - (a) It seems that the student data is not always being reported. On various machines, we took tests, but when we exited and then logged in as the teacher, no scores were listed for that student. This replicated with all of the network installations.
 - (b) We logged in as a new student and completed Multiple-Choice Instructional Mode Test 2A. We got a total of 5 out of 28 correct. We went into the Teacher Utility to view our results, and the scoring on this chart showed that we had gotten everything correct as seen in this capture: (SCREEN CAPTURE REMOVED).
 - (c) For another student, we went into the Instructional Mode again, answered a couple of questions, and then scored the test, leaving the rest of the answers blank. The scoring screen showed 2 correct out of 15 questions. The Teacher Utility score was 3 correct out of 15.

What appears to be happening in both (b) and (c) is that when we answer a question from a category section, then the Teacher Utility marks all questions

from that section as correct. If we don't answer any questions from a particular section, then they are left as incorrect or blank.

- (d) However, for another student we saw inconsistent reporting when we did test IIA. In the Teacher Utility we had the following results:



Full Name	Class	Test	Status	Funcio...	Derivati...	Derivati...	Integral...	Integral...
Payne, Reed	Calc...	2A	Scored	1 of 2	7 of 8	4 of 7	7 of 7	2 of 4

In this instance, we know we got questions 11, 16, and 21 wrong and left questions 22 to 28 blank. In all of the instances where we noticed discrepancies in the scoring, it was while using Instructional Mode. Also, these discrepancies seem to happen the first couple of times with a student and then they did not seem recur.

- (e) In the instances where the clock did not count down during the test, the elapsed time in the Teacher Utility was 0:00. This would actually be correct since, according to the program, no time elapsed.
- (3) Once, while on the Hewlett Packard Vectra (Windows 95), while viewing the Solids of Revolution Exploration, the system froze and we had to restart the machine. This did not replicate, and may have been due to low system resources.
- (4) On a machine that did not have a printer attached to it, we got this message when we attempted to print out the report from the Planner:

```
**** caused an exception eedfadeh in module  
QUITMSG.U32 at 016f:03e09873
```

After installing a printer, we did not replicate this message. However, the user should get a message that no printer is installed, rather than this cryptic error.

- (5) While using the Teacher Utility, we clicked on the Help – Contents link from the menu bar and got an error message such as the following:

“Cannot find the K:\TestingonK\productname\tutil.hlp file. Do you want to try to find this file yourself?”

We clicked on 'Yes', but could not find any instance of this file. This also occurred when using the Teacher /Help option from the main Product Name program menu bar. This replicated on all network installations.

- (6) The screens printed out in color on a Hewlett Packard DeskJet 722c, but in black and white on an Epson Stylus 800. We checked the printer's properties, and it was definitely set up correctly. We could not determine why it would print in color on one and not the other.

Operational Problems in Macintosh Only:

- (1) During this round, we could run the movies only on the two iMacs and not any of the other systems. In the last round, only one of the iMacs was able to run the movies. We checked all of the machines, and on each one, the nine Xtras files were installed by the Product Name installer. These were: BMP Import Export, BuddyAPI Xtra, FileIOXtraFat, GIFImportExport, MIX Services, MIX Viewer, Moafile, Viewer Services, and QuickTime Asset. These two systems are the only ones that were running Mac OS 8.6, but we doubt that the version of the OS would affect the running of the movies.

- (2) The problem when adding tasks to the Test Prep Planner was fixed. However, when we tried removing a task that we had previously added, we got the following message:

"Unable to execute a Scripting Xtra function. There is no function named "baFlushini" in the Scripting Xtra "BudAPI"."

We replicated this on all of the Macs.

- (3) Once again, we got a memory error while testing on one of the iMacs. While in an Instructional Mode Multiple Choice test, we got the following message:

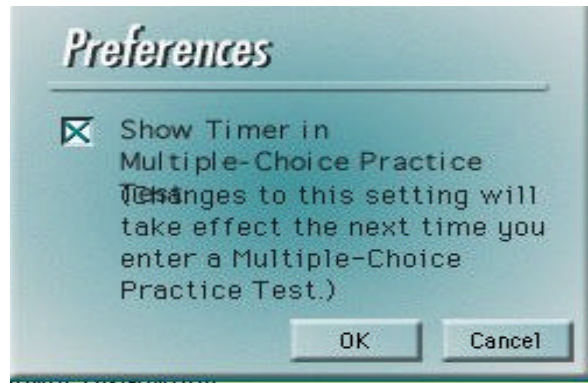
"Unable to display icon "Rationale Page2" because the following error has occurred: Computer memory is full. Other objects may fail to appear. Records of this session will not be saved."

After clicking on OK, we were able to continue in the program. This did not replicate on this machine, and we did not see this anywhere else.

- (4) In general, using the client version on Macintosh was much slower than it was on the Windows machines. For example, on the Performa 6400, the main screens took between 10 to 20 seconds to load. The Multiple Choice tests took approximately 2 minutes to be scored, the Explorations took from 3 to 5 Minutes to load, and the personal test planner took about 2 minutes to load. On the 333 MHz iMac, it took

about 1.5 minutes to score a test and 3.5 minutes to load an exploration. We were working with the installation from the Network Server without movies option, where the CD-ROM was being accessed from the network tower; however, we would have expected that a decrease in performance would have been seen only in the playing of movies.

- (5) On the Performa 6400, we took the Multiple Choice test for Test 1, Part A, and chose all the correct answers using the answer sheet we had received, but the test was scored 22 correct, 2 incorrect, and 1 blank. When we used the Browse function, all 25 questions were correct. We cleared our answers and took the test again. We got the same scoring. This did not replicate on any other systems. Again, this system has the older version of StuffIt Expander (4.0.2) and perhaps the installation did not complete correctly. However, if the installation did not finish, we would expect that the software would have more serious problems running and not exhibit errors in scoring.
- (6) When we tried to access the Tools menu item "Preferences" we get the following screen capture where the last word "Test" overlaps the start of the next line:



- (7) Twice, when trying to access a menu item on the Performa 6400 using the client installation, we got the standard Mac message that:
"The document PRODUCTNAME.HLP could not be opened, because the application program that created it could not be found.

This happened when we clicked on the Product Name help topics item as well as the Topic index. This did not replicate on any of the other machines.

Interface and Other Issues:

- (1) With earlier versions of Product Name, the teacher was not allowed to log on if a student was logged on and vice versa. That is not the case with this CD. We did not experience any problems after doing this, but question whether there may be any

corruption of student data or class files as a result of both features being used simultaneously. If so, then the software should display a message either for the student or the teacher advising them that they cannot use the desired application until the other is logged off. The teacher would have a way of over-riding this if necessary. This was the case with the older software.

- (2) We were able to add 51 users into the Teacher Utility Roster without error. On previous versions of Product Name, the software did not allow more than 50 students to be listed, because 50 was the limit of the site license. Has the site license restriction been changed, and if so, is there a limit on the number of students the software should be able to allow?
- (3) We think this item could be a potential problem. We logged on for the first time with the User Name, Barbara, and the Password, Mom. We wanted to see if another student with the same name, Barbara, could log on using a different Password. This was not possible. We got the following message: "Your password is incorrect. Please try again." This means that two or more students with the same user name will not be able to log on to this program. Perhaps it should be mentioned in the Readme file and other documentation that logins need to be unique. This is especially a problem on the Macintosh.