

# Technical Bulletin

## Picture Perfect and 2007 Daylight Saving Time

**November 2007**

This bulletin addresses the changes that must be made in Picture Perfect™ to support the year 2007 Daylight Saving Time (DST) changes.

“The Energy Policy Act of 2005 (Public Law 109-58) was passed by the United States Congress on July 29, 2005 and signed into law on August 8, 2005. This law changes the time-change dates for DST in the United States. Beginning in 2007, DST will begin on the second Sunday in March (11th) and end on the first Sunday in November (4th).”

The areas of a Picture Perfect system that are affected are: the operating system of the server in all versions of Picture Perfect, and the Picture Perfect application itself in version 4.0. Picture Perfect 2.0 and earlier versions did not support multiple zones, and therefore, no update to the application itself is needed. Microcontrollers store date and time, but do **not** store time zone information, and thus, are not affected. The Picture Perfect server will update the microcontrollers with the correct time as needed.

To determine what actions you must take on your Picture Perfect system, locate the Picture Perfect version and operating system in the table below.

Picture Perfect version	Operating system	Action to take to update the operating system	Does Picture Perfect software have to be patched?
Picture Perfect 4.0	AIX 5.2	Apply TL 08 or later. Request Update CD from your IBM provider.	Yes, apply Service Pack 1.5 or higher for PP 4.0
Picture Perfect 4.0	AIX 5.3	Apply TL 04 or later. Request Update CD from your IBM provider.	Yes, apply Service Pack 1.5 or higher for PP 4.0
Picture Perfect 4.0	Red Hat Linux 3.0	Apply Linux's <b>tzdata</b> package using Picture Perfect 4.0 SP1.5 or higher CD. See Linux section below for instructions.	Yes, apply Service Pack 1.5 or higher for PP 4.0
Picture Perfect 4.0	Red Hat Linux 4.0	Apply Linux's <b>tzdata</b> package using Picture Perfect 4.0 SP1.5 or higher CD. See Linux section below for instructions.	Yes, apply Service Pack 1.5 or higher for PP 4.0



## GE Security

Picture Perfect 2.0	AIX 5.1	Apply APAR IY75214. Request from IBM.	No
Picture Perfect 2.0	AIX 5.2	Apply TL 08 or later. Request Update CD from your IBM provider.	No
Picture Perfect 2.0	Red Hat Linux 7.3	Manually change the time from the system console. At 2:00 AM on March 11, change the time to 3:00 AM. See Note below.	No
Picture Perfect 1.7	AIX 4.3.3	Modify the TZ environment variable in the <code>/etc/environment</code> file. See AIX section below for instructions.	No
Picture Perfect 1.7	AIX 5.1	Apply APAR IY75214. Request from IBM.	No

If you are unable to implement the operating system patch as described above, and you are running Picture Perfect 2.0 or earlier, you may manually change the time ahead one hour on March 11—at 2:00 AM, change the time to 3:00 AM. But remember that you must also change the time back one hour on April 1—ahead one hour on Oct. 28, and back one hour on Nov. 4.

For assistance in DST matters, please call GE Technical Support at 1-888-437-3287, option 2, and then option 4.

## IBM AIX

IBM now refers to its AIX Maintenance Levels (ML) as Technology Levels (TL). The AIX information presented below can be found on the IBM web site:

<http://www14.software.ibm.com/webapp/set2/sas/f/eneews/2006/10/DSTupdate.html>

### AIX 5L Version 5.3

IBM recommends installing Technology Level 4 or later. The update is also available as a specific fix by installing the fix for APAR IY75211.

Filesets: bos.rte.libc.5.3.0.40 and bos.adt.prof.5.3.0.40

### AIX 5L Version 5.2

IBM recommends installing Technology Level 8 or later. The update is also available as a specific fix by installing the fix for APAR IY75213.

Filesets: bos.rte.libc.5.2.0.85 and bos.adt.prof.5.2.0.85



## GE Security

### AIX 5L Version 5.1 (Out of support)

The update is available as a specific fix by installing the fix for APAR IY75214.

Filesets: bos.rte.libc.5.1.0.70 and bos.adt.prof.5.1.0.70

To download these fixes, visit: [Quick links for AIX fixes at http://www14.software.ibm.com/webapp/set2/sas/f/genunix3/aixfixes.html](http://www14.software.ibm.com/webapp/set2/sas/f/genunix3/aixfixes.html)

### AIX 4.3.3 DST Workaround (Out of support)

You can manually specify when to start and stop DST by setting the TZ environment variable in the */etc/environment* file.

An example for the US Central time zone follows:

TZ=CST6CDT,M3.2.0,M11.1.0

"M3.2.0" means to go on DST starting in month 3 (March), week 2, and Day 0 (Sunday).

"M11.1.0" means 1st Sunday in November.

NOTE: Reboot the system before March, 2007 so all processes running will pick up the new time change.

## Red Hat Linux

If you visit Red Hat's web site, you will see that they recommend applying updates to Linux 3.0 and 4.0 to support the DST changes for the year 2007: "For Red Hat Enterprise Linux 3 and Red Hat Enterprise Linux 4, a revision of the tzdata package will be included in update 7 (U7) and update 3 (U3), respectively".

However, Picture Perfect has a dependency on the Linux kernel for compatible drivers for the Digiboard serial adapter and modem. With each Linux update, the kernel is usually updated as well. Therefore, **Linux updates must not be applied to a Picture Perfect system**. As a separate task, GE Security will, in the future, review the latest Linux updates and determine how best to provide updated Digiboard and modem drivers to its customers.

Follow the instructions below, **in the order shown**, to update your system. Note that the Linux **tzdata** package (RPM) is on the Picture Perfect 4.0 Service Pack 1.5 or higher Installation CD. If your CD drive is a CDR, use */mnt/cdrecorder* instead of */mnt/cdrom*.

### Linux 3.0

#### New install of Picture Perfect 4.0 with Linux 3.0

- 1) Install the Red Hat Linux 3.0 operating system
- 2) When the Picture Perfect 4.0 SP 1.5 or higher Installation CD is used for part 2 of the OS installation (*/mnt/cdrom/INSTALL -u*), the **tzdata** RPM will automatically be installed
- 3) Run **redhat-config-date** from the console; Click OK on the Adjust Date&Time UI



## GE Security

- 4) Install the Picture Perfect **base** package and reboot

### Patching an existing Picture Perfect 4.0 system running Linux 3.0

- 1) Insert the Picture Perfect 4.0 SP 1.5 or higher Installation CD and /mnt/cdrom/INSTALL -u to install the **tzdata** rpm
- 2) Run **redhat-config-date** from the console; Click OK on the Adjust Date&Time UI
- 3) Install the Picture Perfect **base.patch** package (/mnt/cdrom/INSTALL -p) and reboot

### Linux 4.0

#### New install of Picture Perfect 4.0 with Linux 4.0

- 1) Install the Red Hat Linux 4.0 operating system
- 2) When the Picture Perfect 4.0 SP 1.5 or higher Installation CD is used for part 2 of the OS installation (/mnt/cdrom/INSTALL -u), the **tzdata** RPM will automatically be installed
- 3) Run **system-config-date** from the console; Click OK on the Adjust Date&Time UI
- 4) Install the Picture Perfect **base** package and reboot

### Patching an existing Picture Perfect 4.0 system running Linux 4.0

- 1) Insert the Picture Perfect 4.0 SP 1.5 or higher Installation CD and /mnt/cdrom/INSTALL -u to install the **tzdata** rpm
- 2) Run **system-config-date** from the console; Click OK on the Adjust Date&Time UI
- 3) Install the Picture Perfect **base.patch** package (/mnt/cdrom/INSTALL -p) and reboot

## Client Workstation—Java Changes for DST 2007

These instructions apply only to Picture Perfect 4.0 customers that are applying Service Pack 1. The changes for DST 2007 require a new version of Java (version 1.4.2\_13), which is accessible from the Picture Perfect Webtop of a 4.0 SP1.5 or higher system.

**After** the Picture Perfect server has been updated, do the following on each client:

- 1) Be sure you are logged out of Picture Perfect and the browser is closed
- 2) Clear cache by going to Start > Settings > Control Panel > Java Plug-in. Select the Cache tab. If caching is enabled, click Clear, answer Yes, uncheck the Enable Caching box, click Apply, and exit out.
- 3) Using Windows Explorer, navigate to C:\avatar folder and delete the folder and all contents
- 4) Uninstall the current version of Java by going to Start > Settings > Control Panel > Add/Remove Programs and uninstall Java 1.4.2\_06
- 5) Using Internet Explorer, browse to the Picture Perfect Webtop
- 6) Click on the JRE link to download and install Java 1.4.2\_13



## GE Security

- 7) Open the Java console and setup Java memory runtime parameters in the Advanced tab. This step is critical - the memory parameters used depend on the total amount of memory on the client PC.
  - If the PC has 512 MB, use: -Xms192m -Xmx384m
  - If the PC has 1GB or more, use: -Xms384m -Xmx512m
- 8) Re-enable caching (see #2 above, and check the Enable Caching box)
- 9) Reboot the client PC

