Getting Ready for the Year 2000

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Most computerized systems will have a difficult time after December 31, 1999. Fortunately, Adager's date-oriented kit for IMAGE/SQL databases (and IMAGE/3000 as well as TurboIMAGE) has been available since 1996.

The year 2000 and beyond

Adager is Year-2000 compliant (as long as you stay within Adager's validity period for your Company, which depends on your Adager maintenance contract).

Adager is Year-2000 compliant

Most Adager customers have up-to-date maintenance contracts and enjoy Adager software that operates beyond December 31, 1999. Please contact Adager if you have questions about the status of your contract.

You can easily verify Adager's Y2K compliance by starting your HP3000 with "December 31, 1999" and "11:50 PM" as the system date and time. As your clock ticks into the next millennium, Adager will continue to work normally (provided, of course, that your HP3000 supports dates beyond 1999). You can check Adager's behavior on *any* date within Adager's validity period.

In addition to being Y2K compliant, Adager helps you make your databases Y2K compliant.

Adager helps you make your databases Y2K compliant

Adager intelligently *examines, searches* and *changes* your date-oriented formats and values to make the information in your IMAGE databases ready for the new millennium.

Examine Date

Before embarking on the process of *changing* your date formats and values, it is wise to *examine* them to make sure you have a clean foundation.

Adager's *Examine Date* produces an exhaustive report of potential problems. You can verify the contents of your date fields, even if you don't have any immediate need to convert these values for the next millennium.

Check for legality and log exceptions

With Adager's *Examine Date*, you can check for dates which are:
- *Null* (i.e., binary zeroes in ASCII/ZONED fields)
- *Zero*
- *Blank*
- *Out of legal bounds* (such as 985742)
- *Garbage* (such as "*&@23\")

Find given date values

With Adager's *Examine Date*, you can also find dates which are:
- *Earlier* than a given date
- *Later* than a given date
- *Equal* to a given date
- *Within* a range of dates
- *Outside of* a range of dates

Change Date

Armed with the information provided by *Examine Date,* you can easily configure *Change Date*, which converts the formats of your date-oriented data items as well as all of the date values contained in their corresponding dataset fields.

How about master search fields?

Adager rehashes master datasets (manual and automatic) whose date-oriented search fields change.

There is nothing special for you to do, because Adager automatically takes care of everything.

Have you "cheated" by redefining item types?

Adager always asks you for the *authentic* type of date you have, regardless of the *declared* IMAGE type.

For instance, you may have ASCII *yymmdd* information in an item with IMAGE type *binary* J3.

Adager supports date-oriented items that have more than one subitem (for instance, 2X5 or 3J2).

Adager supports date types such as *yyddd* and *yyyyddd* (year and day-of-year) in X5 and X7 formats (you need to have an even subitem count in these cases, to comply with IMAGE's rule that all items must have an even byte count).

Adager supports fillers around date fields, such as an X10 item valued "ABC970123W" with a 3-byte prefix "ABC" followed by a 6-byte date field "970123" and a 1-byte suffix "W".

After conversion via *Change Date* (according to your specific destination format), this may end up as an X10 item "AC1997023W" with a 2-byte prefix "AC" (if you decide to drop the "B" to give the item an *even* byte count), a 7-byte *year and day-of-year* date "1997023" and a 1-byte suffix "W".

Adager allows you to specify the *deletion* of an existing filler byte (or the *addition* of a new filler byte) to comply with IMAGE's requirement that an item must have an even-byte length. In the above example, you specified the deletion of the second filler prefix byte "B".

You can also ask Adager to *add* a new filler byte anywhere and to initialize it to any value of your choice. For instance, if you specify the addition of a filler byte in position 4 with an initial value of "M", you get an X12 "ABCM1997023W" result.

Adager handles ASCII as well as binary date-oriented values in a variety of configurations. As soon as you specify the source data item, Adager reports all its possible date-oriented formats.

For convenience, let's say that "yy" refers to the two digits of a year, "mm" refers to the two digits of a month, "dd" refers to the two digits of a day within a month, and "ddd" refers to the three digits of a day within a year.

There are date formats that are character-oriented. Adager supports a variety of source character formats, including:

> yymmdd
>
> yy/mm/dd (or yy-mm-dd, or yy.mm.dd, etc.)
>
> mmddyy
>
> mm/dd/yy (or mm*dd*yy, or mm?dd?yy, etc.)
>
> ddmmyy
>
> dd/mm/yy (or dd#mm#yy, or dd\mm\yy, etc.)
>
> yyddd

The "/" in the examples above can be any arbitrary character. We have used "- . * ? # \" as illustrations of the many arbitrary possibilities.

There are packed-nibble formats that include one digit for the century and require a base of "18" or "19". For instance: 0770210 becomes 18770210 with base "18" and 19770210 with base "19". As another example, 1770210 becomes 19770210 with base "18" and 20770210 with base "19".

There are date formats that are binary-oriented. Adager supports a variety of source binary character formats, including:

> yymmdd, mmddyy, ddmmyy, yyddd, dddddd (the number of days since January 1, 0000, or since January 1, 1900 for DataExpress, or since January 1, 1973 for MANMAN).

There are proprietary bit-packed formats. Adager supports PowerHouse, MM/3000, CA-MANMAN (formerly known as ASK MANMAN), HP Calendar, SRN Chronos formats, as well as 128-bit IMAGE/SQL (ALLBASE/SQL) formats.

In the case of MM/3000, the leading yy character may be "A" through "Z" to mean a year beyond 1999.

Defining the current century (or the next century) via a threshold or cutoff value

For those date formats that allow it, Adager permits you to specify a **threshold value** that will define a destination century of 19 if the yy component of your date is greater than (or equal to) the threshold value and will define a destination century of 20 if the yy component of your date is less than the threshold value.

For instance, if you specify the threshold value as 78, a source date equal to 810212 will define a destination date of 19810212, whereas a source date of 770210 will define a destination date of 20770210.

How about overloaded date values?

Some applications may depend on special date values (which are obviously illegal dates) whose presence triggers some specific action on the part of the software.

For instance, 000000 may mean *not yet paid,* 870245 may mean *there were no new students this month,* and so on. Creative people have used all kinds of overloading tricks, including the use of blanks, binary zeroes, asterisks, month values beyond 12, day-of-month values beyond 31, etc.

Adager preserves all such illegal dates, if the destination format allows them.

If you decide to convert your date formats with *Change Date*, Adager gives you a comprehensive list of target formats.

In particular, Adager allows only target date formats that contain a 4-digit year (implicitly or explicitly). So, you can never *downgrade* your date formats: Adager only allows you to *upgrade* them.

Yes. You can use *Change Date* to convert your dates from a sort-unfriendly format (even a year-2000-compliant one, such as ddmmyyyy) to a sort-friendly format (such as yyyymmdd).

Adager has been helping users update their mission-critical production databases for the new millennium since 1996.

How long have you been waiting? Are your IMAGE databases Y2K ready? — If not, what is holding you up?

Contact Adager for further information about Adager's Y2K assistance and about Cure2000 from Hewlett-Packard (including a video from HP featuring Adager and other premier HP Cure2000 partners).