

Losing our Memory

A couple of decades ago, we all closed out a project by reviewing all the paper documents associated with it, throwing out the extraneous stuff, packing the rest in a file box or cabinet (sometimes along with a current copy of building codes and ordinances), and dropping it off in dead storage.

Things are much more complex now. The life of a project is now no longer in a single format like paper. We have faxes, phone calls, e-mail, CAD documents, word processing, spreadsheets and databases. What can we expect when we attempt to resurrect all this information years from now when we need to make changes to a structure or reconstruct information to support a legal position?

Later in the life of a project, it's sometimes difficult to figure out the rationale for early decisions made just months ago.

This month we'll discuss maintaining project information generated with CAD and Office Productivity software. Next month, we'll explore the integration of faxes and e-mail project data.

CAD and Office Productivity Data

Assuming you have already placed CAD, Word Processing, Spreadsheets and Databases into a common project directory for each individual project you have dealt with only a small part of the information consolidation problem. Let's look in more detail at this piece of the puzzle.

Will the information you archive today be readable 5 or 10 years from now? You may be surprised. Readability will depend on several components: Media Readability, Software Readability and Software Environment.

Media Readability: Will you have the hardware and software to read the tape or disk the information is stored on? 10 years ago, many of us stored information on 5 1/4" floppy disks or Bernoulli cartridges. Now, you might be hard-pressed to find a Bernoulli Drive that could read that media (and someone that could repair it when it breaks). Those cartridges required device drivers that no doubt would fail in Windows2000 or WindowsXP. Most offices would have trouble even finding a machine with a 5 1/4" floppy drive that still works!

If you keep this information on your servers forever, you don't really have to worry about these issues. As you upgrade your servers, the information is simply digitally moved from old servers to new servers.

On the other hand, if you archive this project info to tape or CD, you must transfer it to the new media or format as you retire the old devices (this could be a difficult and time-consuming process - and bureaus which perform this service are available) - or you can just accept the loss of the information forever.

Software Readability: I announced years ago my astonishment that AutoCAD could not read AutoCAD files from just a couple of versions earlier! In fact, non-AutoCAD software was much more reliable in reading those old files than the latest version of AutoCAD itself! To make sure you will be able to read, print or alter your file data, you may require a working copy of the software that created it (including any add-ons). If the software is copy protected with generated serial numbers or hardware locks, you need to keep those and maintain hardware that will accommodate them as well (such as the correct serial ports for those hardware locks)! This is a good reason to refuse to use software with such copy protection.

Some firms use a different twist when archiving files for future readability: they export files to a more generic and common format that is more easily readable by more software. AutoCAD files may be

saved as DXF or HPGL plot files, Word Processing as HTML or even text format, and Spreadsheets in CSV format. This technique requires an extra step to export, but almost eliminates Software Readability and Software Environment concerns.

Software Environment: If you need to save the software to read the files, you may also need a copy of the operating system it works on! You may be surprised at your inability to install a Word Processor on WindowsNT that ran fine in Windows 3. CAD programs are even more picky about their environments. Again, this is a good reason to avoid operating systems such as WindowsXP that require generated serial numbers to install on different hardware.

Of course, you have to REALLY want to recover that information if you're willing to set up an old system with a newly installed but antiquated operating system and all it's needed drivers - plus the application software needed. Don't forget the drivers and devices you will need to connect it all to your current network. You'd better not need technical support for all this stuff - it's not likely to be available for software that many years out of date. Odds are high that some of the companies that created that software are not around any longer. You really need to assess whether it's easier to reconstruct the data from other sources - or at all!

Can you read your CAD files from 10 years ago? E-mail me to share your story. Next month we'll look at e-mail and fax integration.

Michael Hogan - at Ideate, is an Architect. He developed the first national AEC Information Exchange. He currently provides business extranet solutions and provides consulting services to the AEC industry in Chicago. He welcomes comments by e-mail at mhogan@id-8.com