

# Software makes project managing easier

Amoco was consolidating its worldwide construction department back in 1995 and developed a plan to migrate the two groups located in Chicago and Houston to a new single location at the old IBM building in Clear Lake.

I was tagged to lead the computer networking team to gut the existing Token Ring network and build a new fiber FDDI backbone and CAT5 network to support the moving 400-person outfit.

The one thing was put into stone was the move date of April 1, 1996 due to the Chicago crew losing the lease of their current office building. That meant we had to have the remodeled Clear Lake location completed and ready to move in that April Fool's day or heads would roll.

As network project manager I had to plan everything down to the micro level and it all hinged on that 4/1/06 locked in date. I had messed around with Microsoft Project in the past but this time it was for real.

MS Project is a project planning and resource management software application that is an optional and separate component of the Microsoft Office suite family.



John Deans

After quickly obtaining MS Project, I immediately started setting the move-in date and then reverse scheduled all the preceding milestones before it to see what tasks I had to have completed by which date to make that April 1 deadline.

Luckily I started this just as the demolition of the old Token Ring coax was beginning. By the time they were done ripping out all the cabling and internal walls, I had a good list of tasks inputted into MS Project along with the linked time lines.

The way MS Project works is that you start entering the list of tasks that need to be completed for a project in the exact order that is required.

For example, the list of tasks we had to get performed for the new local area network in order was: 1) removal old cabling, 2) plan new cabling routes, 3) bid and contract cabling company, 4) build cabling support structures and pathways, 5) pull all CAT5 and Fiber cables, 6) terminate and test all cabling, 7) connect cabling to active network components, 8) test new network for stability and performance.

This was the high level task list and each of those had several subtasks

that also had dependencies and prerequisites. This list of tasks and subtasks looked basically like an outline that is spread out on a timeline and can be displayed in a tabular format or a graphical representation called a Gantt chart.

The really neat thing about MS Project is that you can link the tasks graphically and run simulations to see, for example, how Task D start and end times are affected if the previous task C takes a week longer than expected. This capability saved my tail that year and probably the whole project.

During the cabling pulling phase of the project I was getting concerned the six-man team was moving a bit slow. Since they had to pull four cables to each network drop per office or cubical and even more to conference rooms and work areas, that added up to over 2,000 CAT5 cables that had to be pulled, terminated and tested within that task start and end date displayed on MS Project.

At the end of their shifts (3:30 p.m.), I went and took count of how many cables they had pulled that day and after a week of doing that I was able to establish a rate of subtask completion using that same crew. Using that actual observed rate of cables pulled per day the MS Project timeline pushed all the

other tasks way out in time to a May 15 completion date.

Red alert!!!

I raised my concern to the cabling vendor project manager and he was non-responsive, basically telling me that the rate of pulling is what I had to deal with. So I dealt with it by replacing him and doubling his crew after a sit-down with the owner of that cabling contractor. The following week a team of 10 guys pulled cables for 10 hours a day working six days a week.

With this increased cable pulling rate the MS Project Time line quickly came back in line with our April 1 move-in date. It would have been very difficult to calculate and see this problem using MS Excel or just a calculator.

MS Project graphically showed me how if we had stuck with the original cable pulling rate with the low ball crew, we would have been way behind schedule and I would have been taken for a ride by the Amoco Chicago boys which would not have been nice.

Being a bit of a micro-manager, counting cables after hours and simulating the timelines with MS Project preserved our April 1 move-in date and all went well.

MS Project 2007 is available from Microsoft for \$599 and is used by many of my construction clients.

Collier Construction uses it heavily with hundreds of tasks and subtasks lined up helping them build schools in Texas. Collier's project managers swear by MS Project which has allowed them to finish these multi-million dollar schools on time at or under budget.

The price may be steep but the capabilities and critical functions MS Project supports well justifies the cost. When you are the project manager of a seven figure operation that has to be completed on time with performance bonds at stake, a mere \$600 piece of software is a small price to pay enabling you to plan and hit those milestone dates.

The 2007 version of MS Project is even better than the one I used 13 years ago with features like flexible project tracking and analysis, 3-D Gantt bars, leverage charts and diagrams, and even a What-If Scenario simulator.

Bottom line: If you are handed a project to manage with multiple tasks and numerous resources, then you need MS Project to manage those timelines and make those deadlines.

Next week's column: PC sound.

John Deans of DeansConsulting.com is a Brenham area computer networking consultant who can be reached at 289-2233 or John@DeansConsulting.com for questions and comments.