ARCHICAD FOR TEAMWORK, A NEW CONCEPT IN CAD TEAMWORKING
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Architects are often obliged to use CAD and even to show a 3D CAD model of their design (that most CAD programs are capable of doing now) and most people are mislead by such slogans as the 3D is the most important part of a design although its just like drafting from other tricky viewpoints. We all know that a building is far more complex than the a bundle of sections, elevations and perspective views. It's a model of space where all building construction parts and other effects (even time, sunshine), that create and help to communicate this space have very complex cross references with each other. If we want to describe it with a program we have to create a digital building, and architects have to communicate this digital building towards each other in the design phase, if more than one architect or engineer is working on the building simultaneously.

Conceptually, ArchiCAD for Teamwork is a logical extension of ArchiCAD's capabilities. It provides simultaneous concurrent access to data in a central master project from an unlimited number of sites. It provides basic access verification, revision log, simple messaging and automatic backup features. The transport mechanism used is high level file sharing and is network neutral and network independent.

In order to minimize network traffic or even work off-line ArchiCAD for Teamwork does not keep a permanent connection with the master project. For that reason there is no need to install server software. Local changes are updated on the master project at the end of a work day or at any time by the Send/Get Changes command.

Once an ArchiCAD user decides to share his project and thus make it available to a team of real or fictional people, a Team Project file and an associated administration file is created. These files can reside on any computer provided that team members have access to them.

When the project is shared by the Administrator of the Master Project, team members can begin working on it. Team members are identified by name and password which they provide either when starting ArchiCAD or when they sign in to the project (optional).

In order to deliver the maximum flexibility required at early phases of a design project, team members can define for themselves their "workspace." Each team member signed on can create and make changes only in their workspace which is a subset of the project designated by layers, stories, a physical area limited by a polygon or any combination of these. By working in Workspaces each team member can assume full responsibility for his or her part in the project without interference from others.

Team members are responsible to define their Workspaces in a collaborative way. Potential conflicts are detected by the software and users are assisted in the process.

As the project nears its completion more and more components must remain unchanged. The division of labor within the team becomes more hierarchical. Modifications can require a "review" by senior team members before consolidation. Elements, which must not be changed can be locked, element by element.

Subcontractors' work can be integrated either by incorporating them as off-line team members or as owners of designated layers. Enhanced dxf and dwg translators integrated in ArchiCAD assure high level transfer from AutoCAD and other CAD packages.

DIFFERENCE BETWEEN THE ARCHICAD TEAMWORK CONCEPT AND THE REFERENCE FILE CONCEPT

ArchiCAD for Teamwork gives you flexible handling of the user reservations and access rights. When using reference files, it is very difficult to move given contents between the individual reference files. This makes it practically impossible to change or reassign the working areas between the users. Of course reference files are very useful when working off-line between different partners. While using this advantage of the reference files, ArchiCAD for Teamwork goes further with the new concept that you can give back your reservation anytime to the project with the Sign Out command while other people can continue working on this previously reserved part by signing in to that area.

In most cases the users of the reference files don't see each other's work. In ArchiCAD for Teamwork you can see the whole project while you work on your reserved area. If you have only two project files, it is easy to reference them to each other so that the user of the first file can see the second file as an external reference while at the same time the second user can reference back to the first file. But if you don't have 2, but - let say - 30 project files partly created in remote places, it is a huge administration task to reference all of them to all of the others. Keeping track of all the modifications on the files like copying, renaming, deleting, etc... is also a chore. The typical solution is to keep a common folder on a central computer where all the project files are copied to, with an additional project file keeping all the references to these project files. The architects of these individual project files are working apart and not seeing each others files, and from time to time they update their files in the central folder.