



Parallel Teams, Serial Teams and the Critical Importance of Templates

Parallel Teams

a group of people working on a given project, at the same time.

Teams working in parallel are well discussed in the world of ArchiCAD and BIM. There are a variety of options for ArchiCAD users: independent .pln files, hotlinked modules, and of course Teamwork 2. It's pretty safe to say that, regardless of what other software vendors will tell you, there is no better solution for parallel teams than Teamwork 2. With a successful reserve and release protocol, Teamwork 2 becomes seamless and invisible to one's usual workflow. My general rule of thumb is reserve what you need to work effectively (even if that means over-reserving elements) and release all your workspace every 5-10 minutes, or when you change views (for example when you switch from one story to the next or from a section to a detail, etc.). That way you can gobble up workspace with equanimity because you'll release it quickly. The 5-10 minute rule means you'll sometimes release objects and then reserved them right away. That's okay because for every element you release and re-reserve, there will be 10 elements that you release and won't need back. But extolling the virtues and nuances of working in Teamwork 2 is not the point here. So let's talk about...

Serial Teams

a group of people working on a given project, one after the other.

Serial teams are less discussed but probably happen just as often as parallel teams. And in the world of residential architecture, it's a constant of working life. So above is an example that starts at the end:

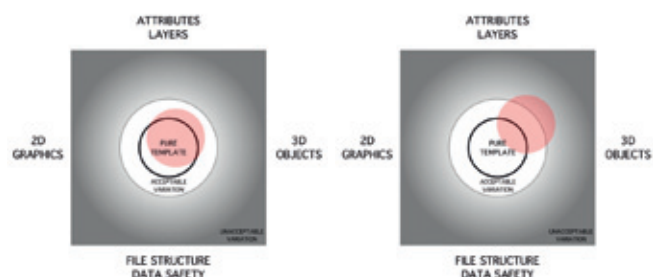
a pretty picture of a recently completed project I worked on at SALA Architects.

Projects like this are our bread and butter at SALA Architects. A client buys a home that hasn't been updated in close to 40 years and they want help turning it into their dream home... but on a tight budget. The lead architect on this particular project was Eric. He met with the client, agreed upon a course of action, and then sent Chris out to measure the existing conditions. Chris measured the home and modeled it in ArchiCAD. By the time Schematic Design started in earnest, Chris was off working on another project so Abbie joined the team. Abbie worked on the drawings and got them almost to completion. But then she went on maternity leave for 3 months. So Carol came on board and finished up the drawings. Then Carol went on vacation. As with all projects, there were last minute changes and the submission for permitting needed to happen while Carol was gone. So I joined the team. In the end the lead architect (who doesn't know ArchiCAD) had 4 different people helping him on this remodel, each joining the team after the previous person had left. The project was completed on-time and on budget. It was a huge success.

The Critical Importance of Templates

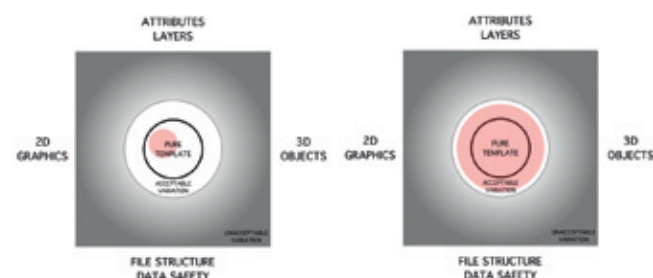
While it helped to have a great BIM manager who was aware of this project for its entire life, adherence to a solid template is what really made this serial team work. As a BIM manager one has to accept that not everyone will perfectly follow your well-crafted, pure template.

In fact no one will. Probably not even the BIM manager--though the BIM manager will just say s/he's developing it further rather than not following the template. At least that's what I tell myself. A good template should have flexibility built into it. It should work well for all users with their various skill levels, strengths, and weaknesses. It should be flexible enough to allow people to express their own styles and encourage ownership of their process without inhibiting the ability to share work.



The red circle represents how a particular user works in ArchiCAD. The user on the left will work well with others in the office. The user on the right won't.

For every template there's a zone of acceptable variation around it. If a user deviates from the pure template, but stays within this zone (the white area surrounding the pure zone in the diagrams) then others can easily work both in parallel and in series with this user. If the user's 'personal template' strays into the unacceptable variation zone, then trouble will arise. This is the type of user who insists on doing things their way. It might be using their own special objects, custom libraries, pen sets, layers, fonts, backup systems, etc. Some of this is okay. And some deviations are more acceptable than others. But as people stray from the agreed upon template, no matter how awesome or logical their changes and improvements are, the ability for teams to function degrades. Regardless of how 'good' someone is at ArchiCAD, if their personal template resides in the unacceptable zone, then they will be a hindrance and a liability.



The red circle represents how much of ArchiCAD a person uses. The team member on the right will be able to continue work started by the team member on the left. The reverse is not necessarily true.

Merely staying within the bounds of the template (and not even venturing into the zone of acceptable variation) is not necessarily virtuous. A narrow usage of the template suggests a lack of sophistication in the usage of ArchiCAD. In the diagram on the left, the user never deviates from the template, but only uses a small portion of it. He is the type of user that uses the company pen sets, but doesn't bother to use all the richness embedded in the various pens (see my blog for examples of pen set development: www.shoegnome.com/tag/pen-sets/). This team member is easy to work with in a parallel team (because through delegation of work, he can stay safely in his comfort zone). However, his ability to function in a serial team is compromised. If he has to continue work started by someone who

can utilize the entire template, then work-arounds will invariably occur and the benefits of using an advanced BIM template will be lost. Lack of understanding of the full template leads to the introduction of unintentional errors. Layers and layer combinations are a simple example of this. A user with a small personal template might use a minimum of layers (say putting all trim and millwork on the interior walls layer), causing conflicts with views and modeled elements established by another user with a more sophisticated understanding of how to use ArchiCAD.

Not following a template wastes energy and money

There are many benefits of a good template. For parallel and serial teams, a template provides graphic consistency between users (no one should be able to tell who produced what), ease of transference (there should be no time lost when team members change), team scalability (a team should be able to grow and shrink without the file falling apart), and enhanced accountability of both the team and individuals (deviations from the template should be easy to spot). Understanding how everyone relates to the pure template in your office helps both parallel and serial teams run efficiently and smoothly. By comparing the 'personal template' of each team member potential pitfalls of the team can be identified early. A strong template makes sharing work easy. Recognizing how everyone uses the template, and applying that knowledge to how teams function, makes sharing work successful.

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ABOUT THE AUTHOR

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