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Engineers implementing PlanGrid and going through remote work

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Learning Objectives

- Create project templates to speed up and ensure consistency of project creation
- Using tasks export to generate site visit reports
- Using the administrator console to help improve overall quality of use
- Global implementation approach

Description

As an engineering firm, how do you implement PlanGrid in a department where the vast majority of projects are small, and the general contractor is not using any of these tools? We had to tweak and adjust what seems to be the intended use of PlanGrid to match our needs. We had our road map all plan for and then Covid sent all our employees' home. It forced us to reconsider our entire approach of deployment and management. At the end of the day, using tablets with PlanGrid allowed us to maintain business continuity while keeping our staff safe as they didn't have to go to the office and plot drawings.

Speaker

I have been working for almost ten years as a mechanical engineer. In the last five years, I involved myself in the implementation of Revit and BIM in our company. Since 2015, I am a full-time BIM Manager and Revit specialist. I have worked on several projects as a BIM Manager and Model Manager, from 100 k\$ to 300 M\$. I oversee the elaboration of our internal Revit MEP and structural standard. I develop Dynamo scripts to improve model management efficiency. I handle training of our new users as well as honing the skills of our more seasoned modelers. I accomplish this by a mix of one to one sessions, training videos, online webinar and more formal classes, both in English and French. My experience with Revit lead Autodesk to invite me three times to "Inside the factory, Live!" (formerly "Gunslinger"). I have attended Autodesk University for the last three years as well. Since early 2016, I assist Autodesk's developers' team in their efforts to improve the MEP aspect of Revit.



Introduction

There are many training sessions available on how to use PlanGrid. What makes this class different is the fact that we use PlanGrid on many small projects. This brings in specific requirements to reduce the overhead of setting up any cloud-based platform. Furthermore, the workflows and approaches presented here are developed with the idea of using PlanGrid internally only, meaning that the owner not the contractor has access to it. Finally, this document assumes that the reader is familiar with PlanGrid general usage.

Creating and using a project template

PlanGrid does not have a built-in project template feature. There is a need to have a standard project organization that users do not have to rebuild from scratch every time they create a new project. This is especially true in the context of a company having a lot of small projects where the overhead of tailoring a PlanGrid project would use all the surveillance fees for the job.

The way to simulate a project template is by cloning an existing project. Your template should be named the same way you want all your projects to be named. Use this opportunity to help ensure consistency in project naming. This becomes important when you have a lot of projects. This feature allows the user to select what to copy over. Our suggested workflow is to copy Team, Field Report Templates and Custom Stamps. Cloning instructions can be found here: <https://help.plangrid.com/hc/en-us/articles/224165848-Creating-a-Project-Duplicate>

Cloned Project Options

☐ Team (With all user permissions)

☐ Sheets (Versions, Tags, Callouts)

☐ Documents

☐ Field Report Templates

☐ Task Lists

☐ Customizations
☐ Custom Stamps
☐ RFI Statuses

PROJECT CLONING OPTIONS

Copying Team is the crucial step to think about when you create templates. Our company is broken down into small local departments. Therefore, we have several templates, one for each department with all the potential users already added to the template. This way, when users use the template, they do not have to add users. Also, always having all team members in all their projects increases redundancy if someone is sick or away. The downside to it though is that it adds a lot of sheets to each user account. Knowing that PlanGrid accounts are limited by the number of sheets, this can become a problem. Proper house keeping of closing out projects and removing users from certain project is our solution. Globally, figuring out what template to create for what team is the most delicate element of this whole setup. Here is the information on how to

manage your team: <https://help.plangrid.com/hc/en-us/articles/224132187-Managing-Your-Project-Team>

Other elements to copy are really related to the way you use PlanGrid. Having your standard reports in your template is a low hanging fruit. Refer to the online help on how to setup report template: <https://help.plangrid.com/hc/en-us/articles/115005693447>

Custom stamps are quite relevant since you can adjust them to your specific field of operation. Also, this allow for language adjustment if your team does not work in English. You can learn how to customize your stamps here: <https://help.plangrid.com/hc/en-us/articles/360010527354-Customizing-your-Tasks-Stamps>

In summary, you create a project template with these steps

1. Create a normal project
2. Name that project according to your standards. Add "Template" in the name and the group it applies to
3. Add relevant team members as administrators
4. Add report templates
5. Create custom stamps
6. Configure other elements of the project as required by your organization

Then, you use the template with these steps

1. Open the template project
2. Clone the project
3. Make sure you select the options related to the way you created your template
4. Rename the project according to your standards

Using tasks export to generate site visit reports

The key point for our use of PlanGrid is to be very efficient during site visits, but especially back at the office, or home, when we prepare our site report. This is a classic challenge, you come back from your site visit, full of good intention of preparing your report right away, but then the phone rings. Next thing you know, your scribbled notes are sitting on your desk for a week and they do not make much sense now. Our goal, when we started using PlanGrid, was to find a way to make that process as easy as can be. The Site Report feature did not meet our goal, so we came up with our way to use PlanGrid for reports.

On site workflow

As you do your normal site visit, you create tasks, by adding stamps to sheets, for every entry you want in your report. Do not see Tasks as necessarily actual tasks, they can be any entry in your report. Let say that the general job site was not kept clean, you simply add a stamp, which creates a task, then add pictures and add text to it. This will all be part of your final report. If the element is location specific, do make sure to add the stamp at the right place. Be mindful to write a good description, in a good language, as this will part of your final report and cannot be modified once exported. As they say, a picture is worth a thousand words. Take a lot of pictures and mark them up as you take them, which can tell a much better story then a lot of words typed

on an iPad. We ignore all other fields from the task creation as we only use PlanGrid internally. Being clean in this process during your visit is key to the efficiency and quality of your final report, so do not rush it. Finally, you want to be diligent in reviewing tasks from previous report and mark them as Closed as you walk around on site. You can still add pictures and text to show the completed task as it will still appear in your final report.

For more information on creating tasks on sheet with stamps

https://help.plangrid.com/hc/en-us/articles/360010610393-Viewing-Creating-and-Editing-Tasks#on_mobile_sheet

Back at the office

Once you are back in the office or home, you need to create an export of your task list. Depending on your project organization, you might have to filter tasks before you export the list. A good filter criterion for this is “Created by” as this only captures your elements. Tasks should not filter by status as you want to inform the project team of closed tasks as well as on going elements.

Once you have filtered the task list, you can produce the export. Do make sure to sort the tasks by status, from Open to Closed. This will group all the closed elements at the end. Select PDF export, make sure to include photos and uncheck all irrelevant Task details. Be mindful of the Company Logo setting as this affects all projects from your company.

Here is more information on tasks export: <https://help.plangrid.com/hc/en-us/articles/360010610513-Creating-Detailed-Tasks-Reports>

You can then generate the export of tasks. There are no options to change the look of the export other than the export menu. You cannot provide a report template. Our approach to meet company and client requirements is use our standard internal report as a cover page and joint the PDF of the task list after it. It is important to note that you cannot change the language of the export, fields name will always be in English, which can be a problem depending of your project team and client.

Once you have a complete PDF, combining your company standard report as a cover page, followed by the tasks export PDF, you can send it to your client. One downside to this approach is that the final report is not part of your PlanGrid project. To fix this, you can simply upload the final report to the Documents section.

In summary:

During your site visit

1. Do your normal visit, as you see something that you want to put in your report
 - a. Add a stamp to your sheet (this creates a task)
 - b. Write a proper and clean description
 - c. Add pictures
 - d. Markup the pictures
2. Review existing task to see if completed. If so
 - a. Add pictures to show completion
 - b. Add comments

- c. Set the status to Closed

Back at the office

3. Filter the task list with “Created by”
4. Export the filtered list with these options
 - a. Sort by Status, from Open to Closed
 - b. Include pictures
 - c. Uncheck unused task details
 - d. Export to PDF
5. Fill in your standard site report document
6. Join the PDF export
7. Send to client
8. Add in the Documents section of your PlanGrid project

Using the administrator console to help improve overall quality of use

The Administration Console brings you a global view on the view of PlanGrid with your organization. The goal is to make sure that staff is using the system to its full capacity. The console environment is simple, but here are a few elements to check and some shortcomings

- Refer to the project list to review the proper project naming method
- Check the number of users in a project to clean old or improper projects
- Check last project activity to archive inactive projects
- Export user list to CSV. You can then check for users with no project. There are three reasons why a user does not have project to its name
 - Actually, does not have project
 - Could need a follow-up on why PlanGrid is not used
 - Created “Personal Project” instead of “Organization Project” which prevents account administrator to see the project.
 - This is a bad practice and user needs to switch the project to organization. Here is how: <https://help.plangrid.com/hc/en-us/articles/224593807-Organization-Linked-Projects>
 - Can be part of projects managed by other organizations.
 - This is correct
- The same export can be used as a mailing list. All email addresses can be selected and pasted into an email

Here are some shortcomings

- There is no way for the administrator to know how many sheets is being used by each user, which makes license management very difficult
- There is no way for the administrator to know the last time a user signed, which makes hard to know who is active

As far as we know, there are no work around for these. Autodesk does have that information and can provide it to you. You can ask your representative for that information very couple months.

Global implementation approach

Deploying new technology always comes with its fair share of obstacle, no matter how good the technology. Here are a few tips that helped us.

- We worked closely with the production team to make sure that the final workflow met their requirements. We went through several iterations to come up with the current version.
- PlanGrid and mobile technology might sit in a weird spot in your organization. This is normally handled by IT, but no one from the production side has a global view on the entire account and usage. This makes it really hard to come up with standards. IT departments need to assume a more modern role where you do not simply provide a piece of technology to your production team. You need to provide an actual proper workflow in their very own work environment.
- Covid lockdown happened right as we were ramping up our deployment. This came as a challenge but provided some unique opportunities as well. It forced most of our staff to work from home, where they mostly do not have printers, even less, plotters. Since everyone was looking for a solution on how to bring their drawings on site, PlanGrid and iPads were suddenly very welcomed. With people having an iPad shipped to their home, no plotting or scanning was required, and all documents were always saved on PlanGrid cloud.
- The other unexpected opportunity was that all training was done remotely, using Microsoft Teams. This allowed us to easily record training sessions to be reused and rewatched at a later stage. Also, during a training session, we would start and stop recording for each topic. This produces several video files. Once renamed properly, staff does not have to rewatch the full hour for questions.
- Finally, this growing popularity started to bring new demands and scenarios in which people are on site, doing various types of work. As this is being written, we are exploring newer ways to use this technology to our benefits.

Conclusion

The goal of this presentation was to show how to use built-in functionalities of PlanGrid in a different approach to efficiently deal with departments having many small projects. Workflows showed are simple, very quick and can be adapted to various situations. We also gave tips and limitations to the Administrative Console to help follow and coach your users. Finally, we looked at global implementation strategies and how working remotely changed our deployment.