

PlanGrid Integration – Quick Guide (R12)

PlanGrid Training Materials

The following webpages contain training materials and documentation created by PlanGrid:

- I. <https://www.plangrid.com/training/>
- II. <https://help.plangrid.com/hc/en-us>

PlanGrid Setup

Part 1: PlanGrid Registration

A registered PlanGrid account is required to retrieve the API key for authentication; or if a PlanGrid customer already exists, ask the account representative for the key.

Part 2: CMiC Setup

Step 1: Launch CMiC-PlanGrid Connect

Launch the CMiC-PlanGrid Connect application to complete the following three steps, which is launched using a URL in the following format:

`<server>:<port>/<environment>/CmicPlanGridConnect/CmicPlanGridSync.jsp`

Step 2: Enter API Key from PlanGrid

On the System Info section, enter the required information. Click [**Save System Info**] when finished.

CMiC - PlanGrid Connect Purge Logs Recent Logs

Mapping Search:

Project Code	Company Code	Company Name	Project Name	PG Project UID	PG Project Name	Mapping Time	Action
PG-CMIC	SSC	S S Construction company	PlanGrid CMiC Side 2019	049c3d98-f798-dc64-80ce-36f9d10ff454	TEST2V12-PG side 2019 SS	2019-12-24 01:25 AM	

System Info

* API Key API key from PlanGrid

* API URL

Status Key is valid!

Scheduler

Frequency Minutes

Status Started

Default Values PlanGrid API Base URL

Admin: PGADMIN
 Collaborator: PGCOLLAB
 Power Collaborator: PGPWRCO
 Issue Severity: 1 - Critical
 Issue Type: TEST - Testing Issue
 Attachment Status: OPEN

Module	Direction
Contacts	CMiC to PlanGrid
<input checked="" type="checkbox"/>	RFIs
<input checked="" type="checkbox"/>	RFIs
<input checked="" type="checkbox"/>	Issues
<input checked="" type="checkbox"/>	Submittals

OPEN	Open	
RECEIVED	Received	
RETURNED	Returned	
PENDING	Pending	
REJECTED	Rejected	
SENT	Sent	
SUBMITTED	Submitted	
REVRESUB	Revise & Resubmit	
REVIEWED	Reviewed	
APROVNOTED	Approved as Noted	

test12

To validate the API key - click the [Check Key] button. The validation occurs automatically upon clicking the [Save System Info] button.

NOTE: Before using the [Check Key] button, please ensure that PlanGrid certificates have been installed on the application server. The key validation procedure uses the information from the certificates.

Step 3: Create System Defaults

The screenshot shows the 'CMiC - PlanGrid Connect' interface. At the top right are 'Purge Logs' and 'Recent Logs' buttons. Below is a 'Mapping' section with a search bar and a table of mappings. The table has columns: Project Code, Company Code, Company Name, Project Name, PG Project UID, PG Project Name, Mapping Time, and Action. One mapping is shown for PG-CMIC, SSC, S S Construction company, PlanGrid CMiC Side 2019, etc. Below the table is an 'Add New Mapping' button. The 'System Info' section contains fields for API Key, API URL, and a 'Status' indicator (Key is valid), with 'Check Key' and 'Save System Info' buttons. The 'Scheduler' section has a 'Frequency' field set to 15 minutes and a 'Status' indicator (Started), with a 'Stop Scheduler' button. The 'Default Values' section (highlighted with a red box) contains fields for Admin (PGADMIN), Collaborator (PGCOLLAB), Power Collaborator (PGPWRCO), Issue Severity (1 - Critical), Issue Type (TEST - Testing Issue), and Attachment Status (OPEN), with a 'Save Default Values' button. The 'Approved Submittal Status' section (also highlighted with a red box) contains a table of status codes and names, with 'Add Status' and 'Delete' icons. The 'Synchronization Controls' section contains a table of modules and directions, with a 'Save Sync Controls' button.

Under the Default Values section, shown above, enter the following:

- The project role names to be created and assigned to project contacts to work with PlanGrid.
- The issue default values to be used when the sync process creates issues in CMiC.
- A value for the Attachment Status field for attachments that are coming over from PlanGrid.

Click [Save Default Values] when finished.

Under the Approved Submittal Status section, enter the statuses for submittals to be synced by selecting a status from the drop-down menu and clicking [Add Status]. Statuses can be deleted by clicking on the Delete (🗑️) icon.

Step 4: Create PM Roles for PlanGrid

This is a close-up of the 'Default Values' section from the screenshot above. It shows three input fields: 'Admin' with the value 'PGADMIN', 'Collaborator' with the value 'PGCOLLAB', and 'Power Collaborator' with the value 'PGPWRCO'.

Create CMiC project roles with the same names entered in step 3 (see screenshot above) and assign them to the relevant users who will work with PlanGrid.

PROJECT ROLES	
Role	Description
PGADMIN	PlanGrid Admin
PGCOLLAB	PlanGrid Collaborator
PGPWRCO	PlanGrid Power Collab
PM	Project Manager

Comparative PlanGrid roles:

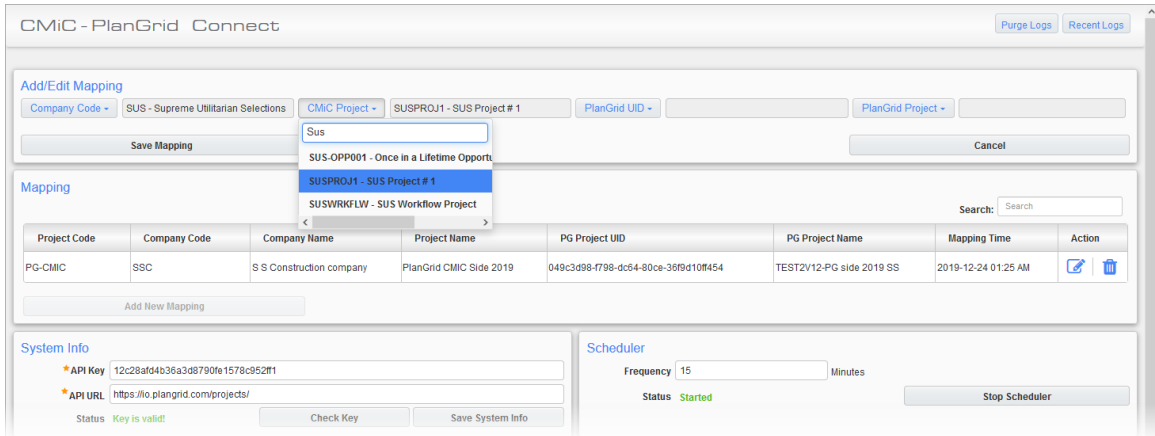
Permission level

- Collaborator**
Can make and assign personal annotations but cannot publish to project or manage sheets.
- Power Collaborator**
Can make personal annotations and publish to project. Cannot upload or delete sheets.
- Admin**
Has complete control over this project. Admins can upload, export, and delete sheets.

Mapping CMiC Project to PlanGrid

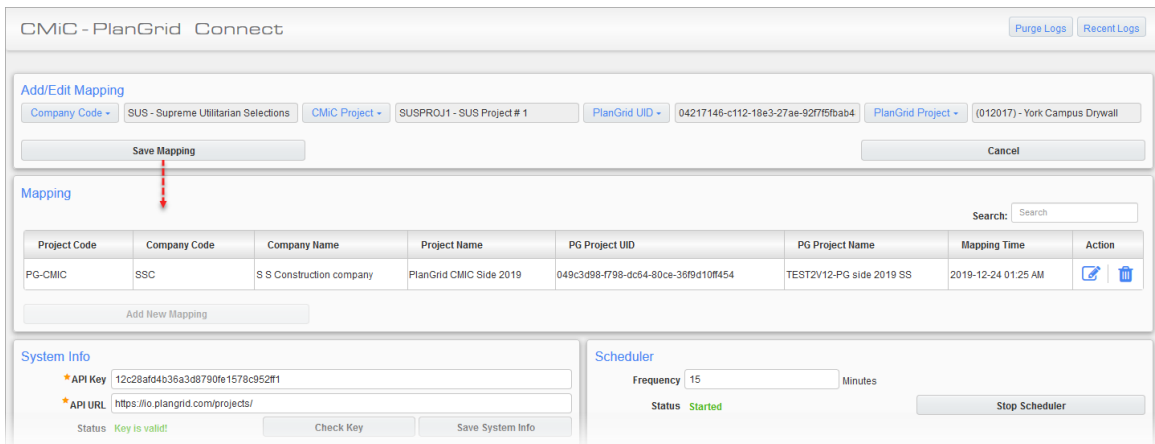
1. Create a project to be mapped to the CMiC system on the PlanGrid site.

2. On the Mapping section of the CMiC-PlanGrid Connect application, click the **[Add New Mapping]** button, then select the company code and the project code for the project to be mapped to PlanGrid from the drop-down list (note that the search functionality is available):



3. In the PlanGrid Project field, select the project created in PlanGrid, and the corresponding PlanGrid UID will appear.

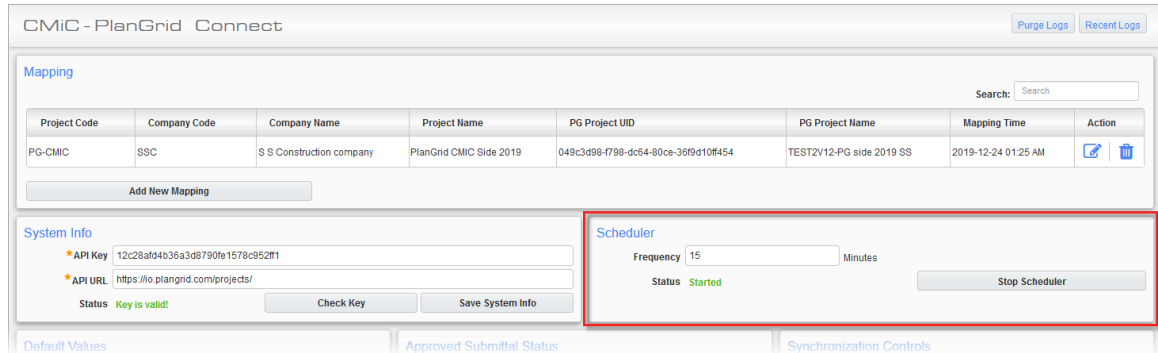
4. Upon clicking **[Save Mapping]**, the new record appears in the list of projects, showing mapped CMiC and PlanGrid projects:



5. The mapped project can be removed from the list using the Delete (🗑️) icon.

CMiC – PlanGrid Synchronization

The created and updated contacts, RFIs, and issues are auto-synchronized based on the frequency set in the Scheduler section of the CMiC-PlanGrid Connect application:



Contacts Synchronization

The contacts assigned to a project will be synchronized with PlanGrid if their PM role is one of those set in the System Defaults tab of the CMiC-PlanGrid Connect application.

When a contact appears in the PlanGrid project team list, the invitation email to collaborate on the project will be sent.

NOTE: If the project contact email is changed, the synchronization process will consider it to be for a new contact, and a new record will be created in PlanGrid.

RFI Synchronization

Synchronization works both ways – RFIs created/updated in the CMiC system will be created/updated in PlanGrid, and RFIs from PlanGrid will be created/updated in the CMiC system.

RFI subject lines in PlanGrid are created as concatenations of CMiC RFI IDs and subject lines. Subject lines for RFIs in CMiC are created as concatenations of PlanGrid RFI IDs and RFI subject lines.

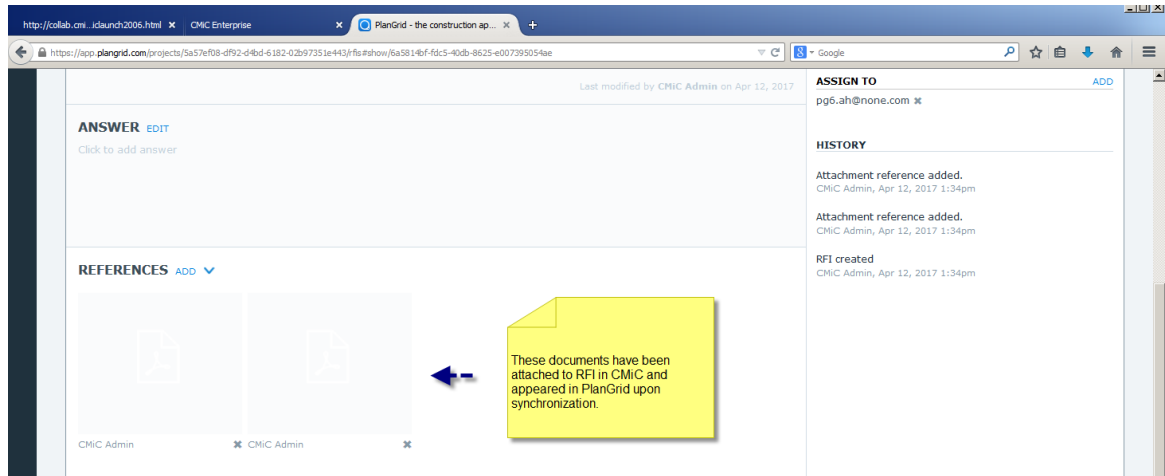
Comments added to RFIs in PlanGrid are displayed in the CMiC system as notes.

Below are the mapping rules for the RFI statuses:

PlanGrid Status	CMiC Status Code	CMiC Record Status
PENDING	PENDING	OPEN
CLOSED	CLOSED	CLOSED
OPEN	OPEN	OPEN
REJECTED	REJECTED	REJECTED
RETURNED	RETURNED	RETURNED
VOID	VOID	VOID

NOTE: Due to limitations of the PlanGrid API, notes added to RFIs in the CMiC system will not appear in PlanGrid.

The documents attached to RFIs in the CMiC system will appear in the References section in PlanGrid:



For the documents added in PlanGrid, the synchronization process will create the attachments using the default document type set in Project System Option, and they will appear on the Attachment tab of the RFI.

Issues Synchronization

Unlike for RFIs, the synchronization process for issues works from PlanGrid to CMiC only: the issues created/updated in PlanGrid will be created/updated in CMiC.

The issue title in CMiC will be the same as the one in PlanGrid.

The issue ID in CMiC will be created as concatenation of CMiC ID and PlanGrid ID.

Comments added in PlanGrid will be displayed as notes in the issue.

The documents attached to the issue during the creation process in PlanGrid will appear on the Attachment tab of the created issue in CMiC.

NOTE: PlanGrid allows only JPG, PNG, and JPEG files to be added to the issue. When adding the picture – please edit its title. If it stays “Untitled”, the name of the attachment appears in CMiC as a random number generated by PlanGrid.

Submittals Synchronization

The screenshot displays the 'CMiC - PlanGrid Connect' interface. The 'Mapping' section shows a table with columns: Project Code, Company Code, Company Name, Project Name, PG Project UID, PG Project Name, Mapping Time, and Action. Below this are sections for 'System Info' (API Key, API URL, Status), 'Scheduler' (Frequency, Status), 'Default Values' (Admin, Collaborator, Issue Severity, etc.), 'Approved Submittal Status' (a table of status codes and names), and 'Synchronization Controls' (Module, Direction).

Project Code	Company Code	Company Name	Project Name	PG Project UID	PG Project Name	Mapping Time	Action
PG-CMIC	SSC	S S Construction company	PlanGrid CMIC Side 2019	049c3d98-f798-dc64-80ce-36f9d10ff454	TEST2V12-PG side 2019 SS	2019-12-24 01:25 AM	[Edit] [Delete]

Status Code	Status Name	Action
CLOSED	Closed	[Delete]
OPEN	Open	[Delete]
RECEIVED	Received	[Delete]
RETURNED	Returned	[Delete]
PENDING	Pending	[Delete]
REJECTED	Rejected	[Delete]
SENT	Sent	[Delete]
SUBMITTED	Submitted	[Delete]
REVRESUB	Revise & Resubmit	[Delete]
REVIEWED	Reviewed	[Delete]
APROVNOTED	Approved as Noted	[Delete]

The submittal attachments are synchronized if the submittal header status is one of the approved submittal status that is set in the Approved Submittal Status section of the CMiC-PlanGrid Connect screen and the status of the attachment(s) is approved, by checking the 'Approved' flag for the attachment, in CMiC.

The screenshot shows the 'Submittal Attachments' section. A table lists attachments with columns: Attachment, Type, Number, Name, Rev. Number, Rev. Date, Description, Notes, User, Status, E Signings, E Sign Status, and Approved. The 'Approved' column contains a checkbox, which is highlighted with a red box.

Attachment	Type	Number	Name	Rev. Number	Rev. Date	Description	Notes	User	Status	E Signings	E Sign Status	Approved	Action
CMiC_Wallpaper_1920x1080.jpg	Attachment	ATT-00257	CMiC_Wallpaper_1920x1080	0	28-09-2018	Original Version		Steve Cangiano	SUBMITTED			<input type="checkbox"/>	[Edit] [Delete]

The sync process will use the document attached to the submittal and create the same in PlanGrid in the Documents/Submittals folder.

Attachments Synchronization

For references/attachments, CMiC supports any file format, while PlanGrid references may not support all file formats. Known formats supported by PlanGrid are: PDF, JPG, GIF, DOCX, DOC, and PNG file types. Therefore, CMiC attachments with these file type formats are supported by the integration.

Scheduling Automatic Synchronizations

The scheduler allows the user to set up the CMiC-PlanGrid synchronization process for automatic syncing. Once set up, the synchronization process runs automatically based on the configured settings, and the sync log will be updated at the end of each run.

CMiC - PlanGrid Connect

Purge Logs | Recent Logs

Mapping

Project Code	Company Code	Company Name	Project Name	PG Project UID	PG Project Name	Mapping Time	Action
PG-CMIC	SSC	S S Construction company	PlanGrid CMiC Side 2014	049c3498-7798-4c84-90ce-3694108454			

Add New Mapping

System Info

API Key: 12c28afd4b36a3d8790fe1578c952ff1

API URL: https://o.plangrid.com/projects/

Status: Key is valid! | Check Key | Save System Info

Scheduler

Frequency: 15 Minutes

Status: Stopped

Start Scheduler

Default Values

Admin: PGADMIN

Collaborator: PGCOLLAB

Power Collaborator: PGPVRCO

Issue Severity: 1 - Critical

Issue Type: TEST - Testing Issue

Attachment Status: OPEN

Save Default Values

Approved Submittal Status

Status Code	Status Name	Direction
CLOSED	Closed	CMiC to PlanGrid
OPEN	Open	CMiC to PlanGrid
RECEIVED	Received	PlanGrid to CMiC
RETURNED	Returned	PlanGrid to CMiC
PENDING	Pending	CMiC to PlanGrid
REJECTED	Rejected	

Save Sync Controls

[Start Scheduler] / [Stop Scheduler] – Button

If the Status field is “Stopped”, the [Start Scheduler] button will be enabled to start the scheduler. If the Status field is “Started”, the [Stop Scheduler] button will be enabled to stop the scheduler.

Frequency

This is the time in minutes after which the next sync automatically starts. The default frequency is 15.

The Frequency field is disabled and cannot be edited when the scheduler is stopped. It can only be edited when the scheduler is running.

Status

This field indicates the current status of the scheduler.

Synchronization Controls

CMiC - PlanGrid Connect Purge Logs Recent Logs

Mapping Search:

Project Code	Company Code	Company Name	Project Name	PG Project UID	PG Project Name	Mapping Time	Action
PG-CMIC	SSC	S S Construction company	PlanGrid CMiC Side 2019	049c3d98-f798-dc64-80ce-36f9d10ff454	TEST2V12-PG side 2019 SS	2019-12-24 01:25 AM	✎ 🗑️

[Add New Mapping](#)

System Info

API Key:

API URL:

Status: Key is valid!

[Check Key](#) [Save System Info](#)

Scheduler

Frequency: Minutes

Status: Started

[Stop Scheduler](#)

Default Values

Admin:

Collaborator:

Power Collaborator:

Issue Severity:

Issue Type:

Attachment Status:

[Save Default Values](#)

Approved Submittal Status

Status Code	Status Name	
CLOSED	Closed	🗑️
OPEN	Open	🗑️
RECEIVED	Received	🗑️
RETURNED	Returned	🗑️
PENDING	Pending	🗑️
REJECTED	Rejected	🗑️
SENT	Sent	🗑️
SUBMITTED	Submitted	🗑️
REVRESUB	Revise & Resubmit	🗑️
REVIEWED	Reviewed	🗑️
APROVNOTED	Approved as Noted	🗑️

[Add Status](#)

Synchronization Controls

<input checked="" type="checkbox"/>	Module	Direction
<input checked="" type="checkbox"/>	Contacts	CMiC to PlanGrid
<input checked="" type="checkbox"/>	RFIs	CMiC to PlanGrid
<input checked="" type="checkbox"/>	RFIs	PlanGrid to CMiC
<input checked="" type="checkbox"/>	Issues	PlanGrid to CMiC
<input checked="" type="checkbox"/>	Submittals	CMiC to PlanGrid

[Save Sync Controls](#)

This section provides users control over what gets synchronized.

By default, the listed synchronization processes under this section are enabled, so that all the expected PM objects (e.g. RFIs, issues, submittals) are synchronized between CMiC and PlanGrid when the auto-sync is run.

To turn off a synchronization process, in order to speed up the overall synchronization process, uncheck the box next to the unwanted synchronization process to disable it. Click the **[Save Sync Controls]** button to save any changes.