

SmartPM[™] Technologies, Inc

User Manual

Client Service Protocol Package

SmartPM™ Introduction

This manual will help you get started using the SmartPM™ software by leading you through the steps for importing a project, analyzing that project, and navigating through the project by discussing the following topics:

- Loading all native schedule updates for the Project
- Running a delay analysis for insights into the Project
- Review Schedule Quality index for all schedules
- Reviewing and understanding the Delay Analysis
- Reviewing and understanding the Audit Log
- General navigation of the system

Importing a New Project



In order to get started, you will need to locate available official & final schedule updates for the Project you would like import into the SmartPM™ Software

- SmartPM™ only accepts native schedule files from Oracle Primavera (.xer files) and Microsoft Project (.mpp files)
- Once those schedules are identified & procured, import the schedules into SmartPM™ in from earliest data date to latest data date
 - All Primavera schedules have to have a data date built in due to Primavera rules. However, MS Project does not require a built in data date; therefore you will be asked to identify MS Project file's data date upon import
- If for any reason and error occurs during an import, reach out to your SmartPM™ Client Services Manager

1. From your Dashboard Select “Add New Project” and select the type of schedule file you will be importing. You will then be prompted to import the Baseline schedule for the Project

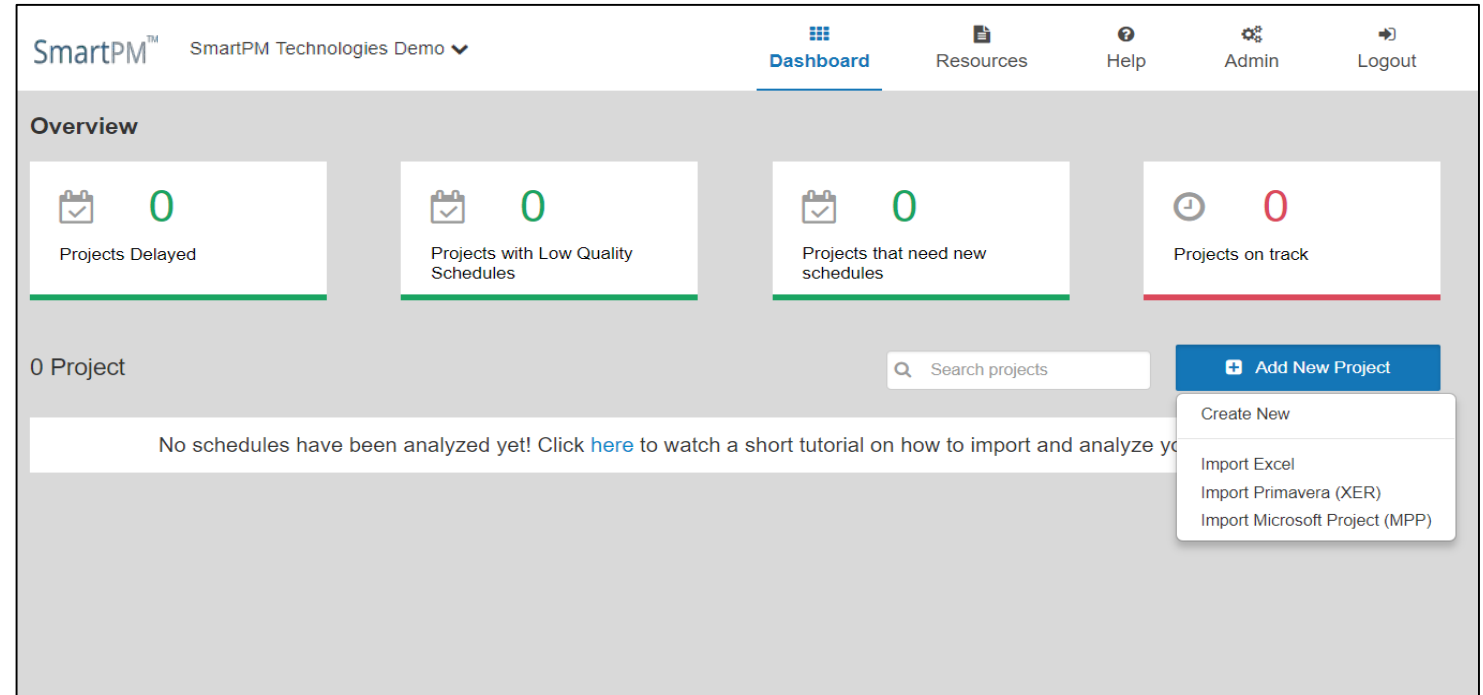
- For Primavera Files

1. Select “Import Primavera (XER)”
2. Click “Select File” and locate the file in your computer’s directory
3. Give the Project a Name
4. Enter the Country and Zip Code where the Project is located

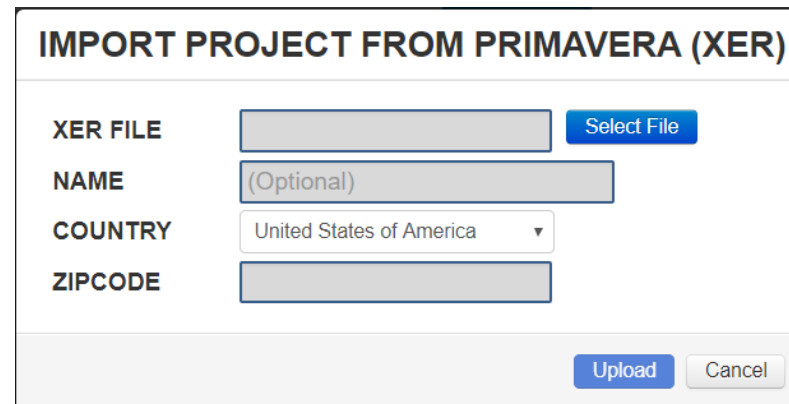
- For Microsoft Project Files

1. Follow the same steps as above and also enter the Data Date for the Baseline schedule

Importing a New Project



The dashboard shows a top navigation bar with 'SmartPM™', 'SmartPM Technologies Demo', and links for 'Dashboard', 'Resources', 'Help', 'Admin', and 'Logout'. The 'Overview' section contains four cards: 'Projects Delayed' (0), 'Projects with Low Quality Schedules' (0), 'Projects that need new schedules' (0), and 'Projects on track' (0). Below these is a search bar and an 'Add New Project' button. A dropdown menu from the button lists 'Create New', 'Import Excel', 'Import Primavera (XER)', and 'Import Microsoft Project (MPP)'. A message states: 'No schedules have been analyzed yet! Click [here](#) to watch a short tutorial on how to import and analyze your schedules.'



IMPORT PROJECT FROM PRIMAVERA (XER)

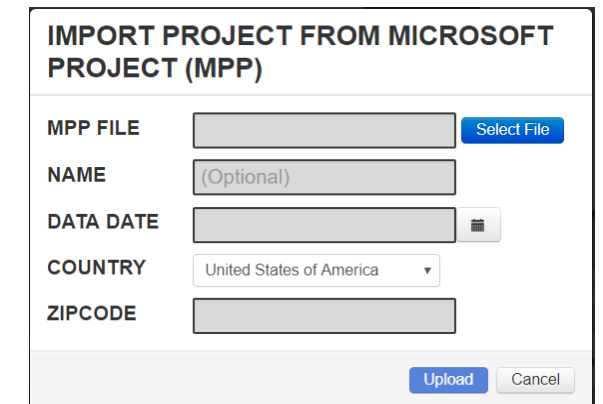
XER FILE [Select File](#)

NAME

COUNTRY

ZIPCODE

[Upload](#) [Cancel](#)



IMPORT PROJECT FROM MICROSOFT PROJECT (MPP)

MPP FILE [Select File](#)

NAME

DATA DATE [Calendar](#)

COUNTRY

ZIPCODE

[Upload](#) [Cancel](#)

If your Project is just starting out and the Baseline is the only schedule you have for the Project, you are done with the importing process. However, if you have Schedule Updates, you will want to add them to the Project.

1. Click the “Add Schedule Update” link
2. Click the “Select File” button and locate the file in your computer’s directory
3. If your Project is Microsoft Project based, you will need to enter a Data Date for the new Update
4. Click “Upload”
5. Repeat for all updates

Note: All Schedule Updates must be the same file type. For instance, you cannot import a Microsoft Project Schedule Update on top of a Primavera Baseline.

You can also upload an Image of your Project by clicking on the “Upload Project Image” button on the left

Importing a New Project

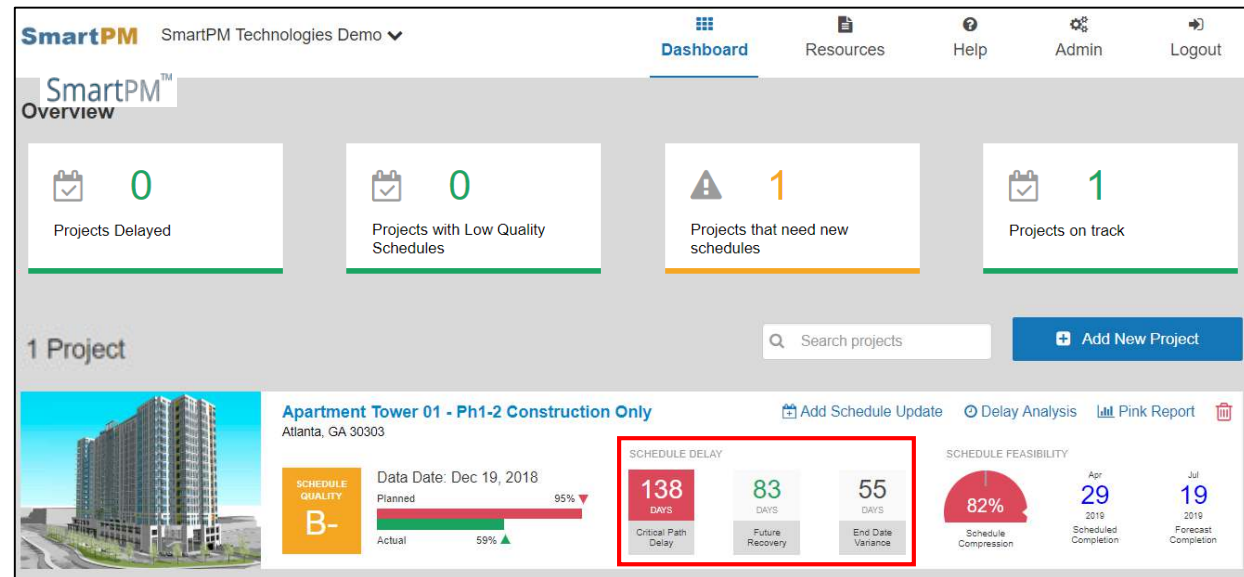
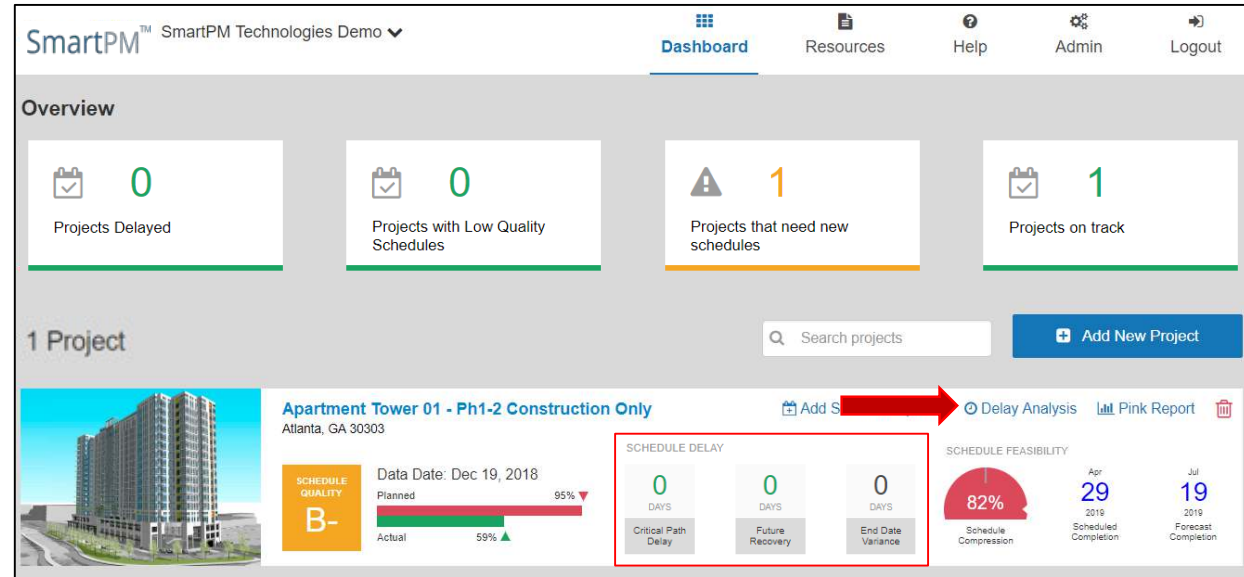
The screenshot displays the SmartPM dashboard interface. At the top, there's a navigation bar with 'SmartPM Technologies Demo' and links for Dashboard, Resources, Help, Admin, and Logout. Below this is an 'Overview' section with four cards: 'Projects Delayed' (0), 'Projects with Low Quality Schedules' (0), 'Projects that need new schedules' (1), and 'Projects on track' (1). The 'Projects that need new schedules' card is highlighted with an orange border. Below the overview is a section for '1 Project' with a search bar and an 'Add New Project' button. The main project card for 'Apartment Tower 01 - Ph1-2 Construction Only' in Atlanta, GA 30303, is shown. It includes an 'Upload Project Image' button, a 'Schedule Quality' indicator (C), and a 'Data Date' of Jul 06, 2017. A red arrow points from the project title to the 'Add Schedule Update' link. Below the project details are two sections: 'SCHEDULE DELAY' with three cards for 'Critical Path Delay' (0 days), 'Future Recovery' (0 days), and 'End Date Variance' (0 days); and 'SCHEDULE FEASIBILITY' with a 'Schedule Compression' gauge at 0% and a 'Forecast Completion' of N/A.

Once all your schedules are imported you will notice that there are zeros across the Project's Schedule Delay section. In order to automatically calculate these figures, you will need to run a Delay Analysis.

The Delay Analysis feature creates a schedule by schedule windows analysis based on the data from the imported project schedule updates.

1. Once all schedules have been imported click the "Run Delay Analysis" option in the Project Window on the SmartPM™ dashboard
2. You will receive an email once the delay analysis is complete
 - A delay analysis can take anywhere from 30 seconds to 45 minutes depending on the length and size of the schedule
3. If for any reason an error occurs during a delay analysis, reach out to your SmartPM™ Client Services Manager

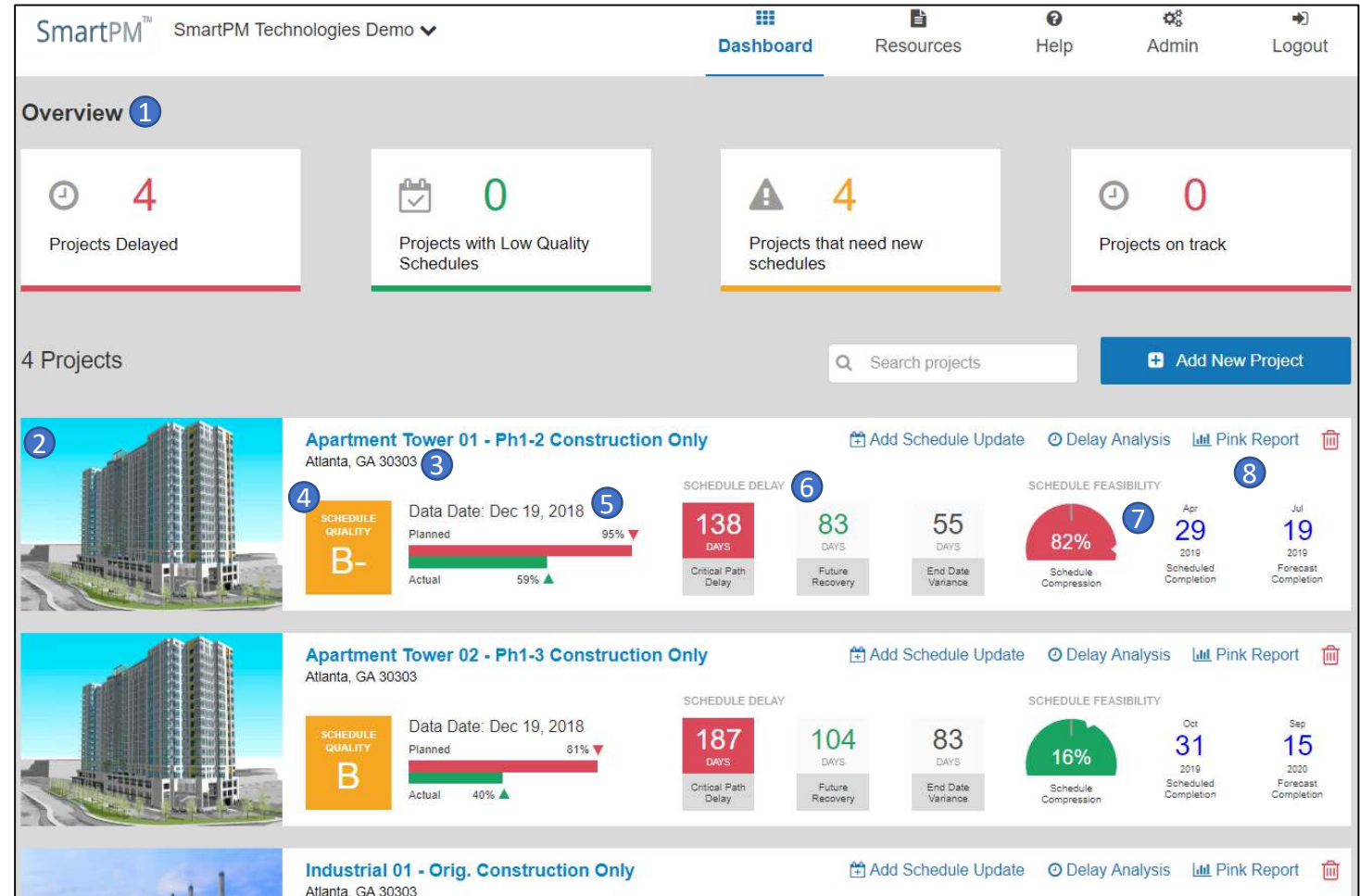
Run Delay Analysis



Your Company Dashboard is your hub to view the key metrics across all of your Company's projects. From this view you can view:

1. An executive overview on the health & status of all of your projects
2. Uploaded image of the Project
3. Location of the Project for weather tracking purposes
4. Schedule Quality Grade of the latest schedule which you can click on for more information
5. The Data Date of the most recently imported Schedule and the Actual Percent complete in that schedule as compared to the Baseline
6. The Schedule Delay & Recovery figures for the Project
7. A look at the feasibility of the Project, as listed in the latest schedule update, moving forward
8. The Pink Report creation button

The Dashboard

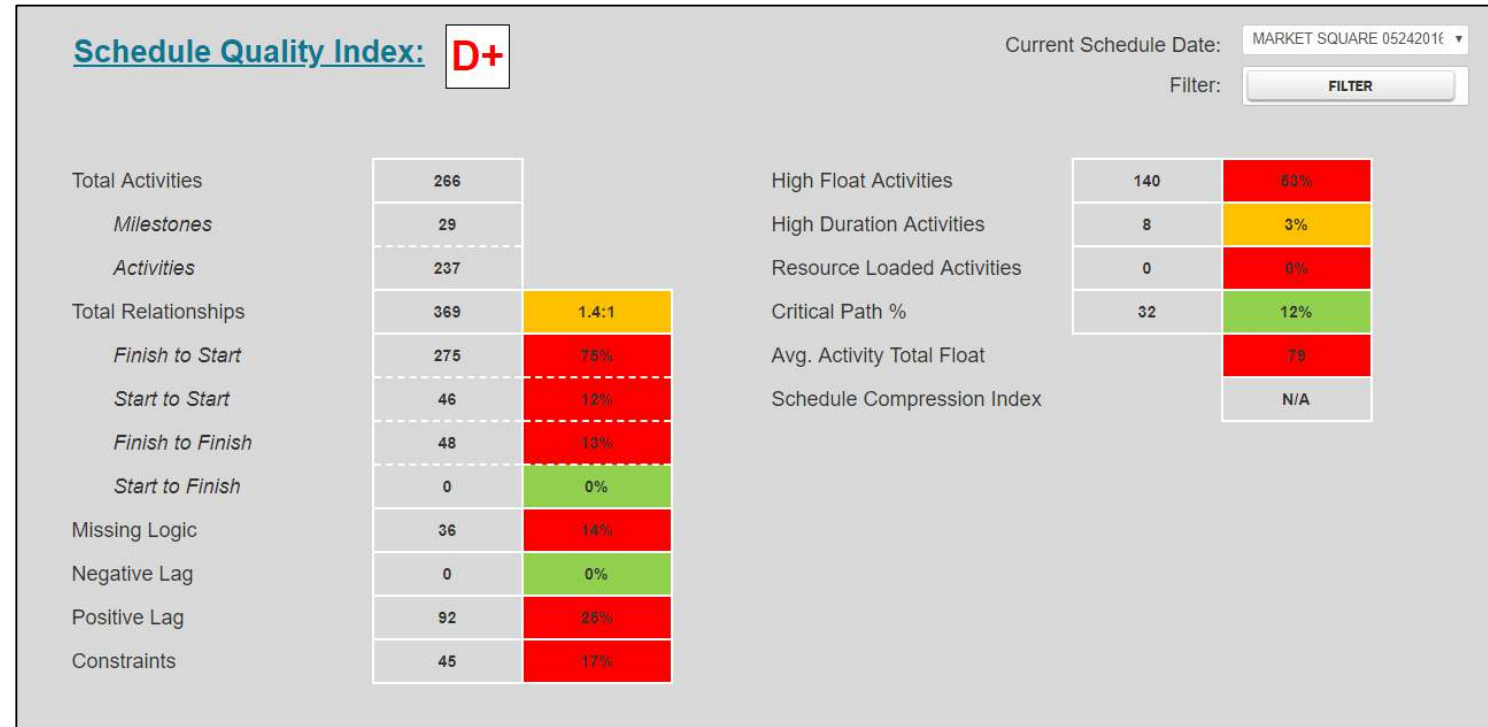


Click on the Schedule Quality Grade on the dashboard or the Quality Index button from the Gantt Chart View.

SmartPM's™ Schedule Quality Index grade assessment is guided by the United States Defense Contract Management Agency's (DCMA) 14-point schedule assessment guideline. The DCMA guideline was developed by the Department of Defense to evaluate the enormous volume of contracts and schedules they were tasked with managing. Essentially, it is evaluating whether a schedule is well-built and whether it adheres to a set of best practices considered important to the success and manageability of a project. These best practices are broken down in the attached "Schedule Quality Index Explained" document.

Click on any value to automatically filter for the offending activities in the Gantt Chart view

Schedule Quality



Schedule Quality
Index Explained

[Click here](#)

The numeric grade is categorized based on the table below.

Grade	Value
A+	97-100
A	93-96
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	63-66
D-	60-62
F	0-59

The grade for the quality index is calculated by subtracting the penalties from 100 based on the individual metrics based on the Quality Index.

The SmartPM™ Schedule Quality Index is set to default to the DCMA 14-point guidelines. Thresholds are fully customizable and can be set to your specifications.

Metric	Good Threshold	Okay		Bad	
		Threshold	Grade Impact	Threshold	Grade Impact
Total Relationships	> = 1.5	> = 1.25	- 2.5	< 1.25	-5
Finish to Start	> 90%	80% - 90%	-1	< = 80%	-2
Start to Start	< = 5%	5% - 10%	-1	> = 10%	-2
Finish to Finish	< = 5%	5% - 10%	-1	> = 10%	-2
Start to Finish	< = 0%	0% - .2%	-1	> = .2%	-2
Missing Logic	< = 2.5%	2.5% - 5%	-%	> 5%	- %
Negative Lag	< = 2.5%	2.5% - 5%	- 1.5	> 5%	-3
Positive Lag	< = 2.5%	2.5% - 5%	- 1.5	> 5%	-3
Constraints	< = 2.5%	2.5% - 5%	-%	> 5%	- %
High Float Activities (>44 days)	< = 20%	20% - 33%	- 1.5	> 33%	-2.5
High Duration Activities (>44 days)	< = 2.5%	2.5% - 5%	- 2.5	> 5%	-5
Critical Path %	10% - 20%	5%-10% or 20% -30%	- 2.5	< 5% or >30%	-5
Average Total Float	15 - 44	7.5 - 15	-1	< 7.5 or > = 44	-2

The Schedule Delay section will let you know the total delay, future recovery, and end date variance from the Baseline to the latest update on your Project

- This metric tells you how many days of actual critical path delay the project has suffered to date. Behind this metric is an in depth delay analysis complete with a delay table and schedule summary that review, analyze and/or drill down on
- The future recovery of a schedule captures the remediation efforts that have been put in place by the scheduler in order to recover time from the delays that have occurred thus far and bring the project completion date back in
- The end date variance of a schedule captures the diversion of the current schedule completion date from the baseline schedule completion date

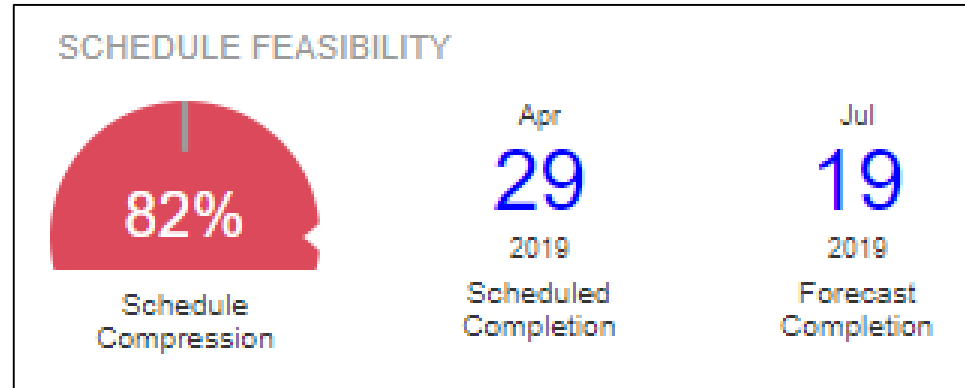
Schedule Delay



The Schedule Feasibility section provides you a window into to the health of your Project and reliability of the plan moving forward

- The schedule compression captures the amount of effort remaining in the schedule as compared to the baseline.
- SmartPM's™ forecasted completion date uses a proprietary AI based algorithm based on current progress to give a realistic estimate of what the completion date of the schedule should be given things progress as they have thus far. The scheduled completion date shows the completion date based on the current schedule update.

Schedule Feasibility



The Pink Report is an executive summary of the project to date that empowers you with the information you need in order to have the appropriate conversation with your leadership team or contractors.

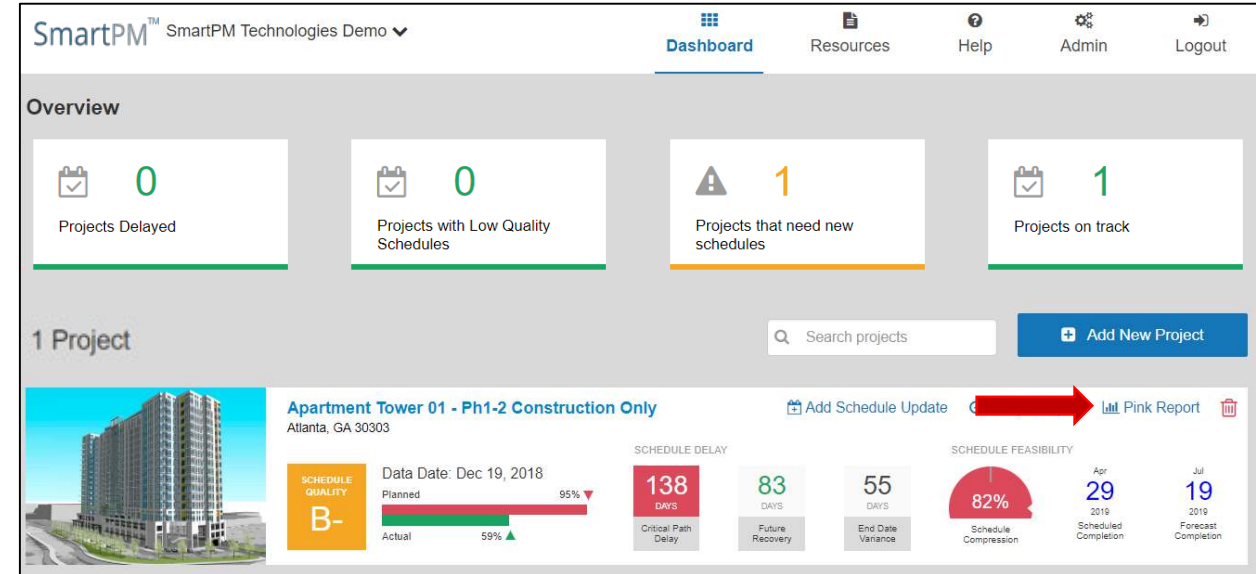
Follow these steps to have SmartPM™ auto-generate an executive report for your Project that includes:

1. All Schedule Quality Issues
2. A Summary Progress Graphic
3. A Copy of the Delay Table
4. All Critical Changes in the Audit Log

Here are the steps:

1. Click the Pink Report button on the dashboard to activate the Pink Report Creation menu
2. Select Schedule Update: Select from which schedule update the graphic will be based off of
3. Select WBS Level to Group From/To: Select the range of WBS Levels the summary bars in the summary graphic will be generated via. Note, the maximum selectable range is 1 level apart
4. Click "Print"

The Pink Report



PRINT PINK REPORT

Select Schedule Update:

December 19, 2018

Select WBS Level to Group From:

Level 2

Select WBS Level to Group To:

Level 3

Print

Clear Selection

From the Dashboard, click on your Project's name to open it up into the Gantt Chart view. This view may look more familiar as a traditional schedule view.

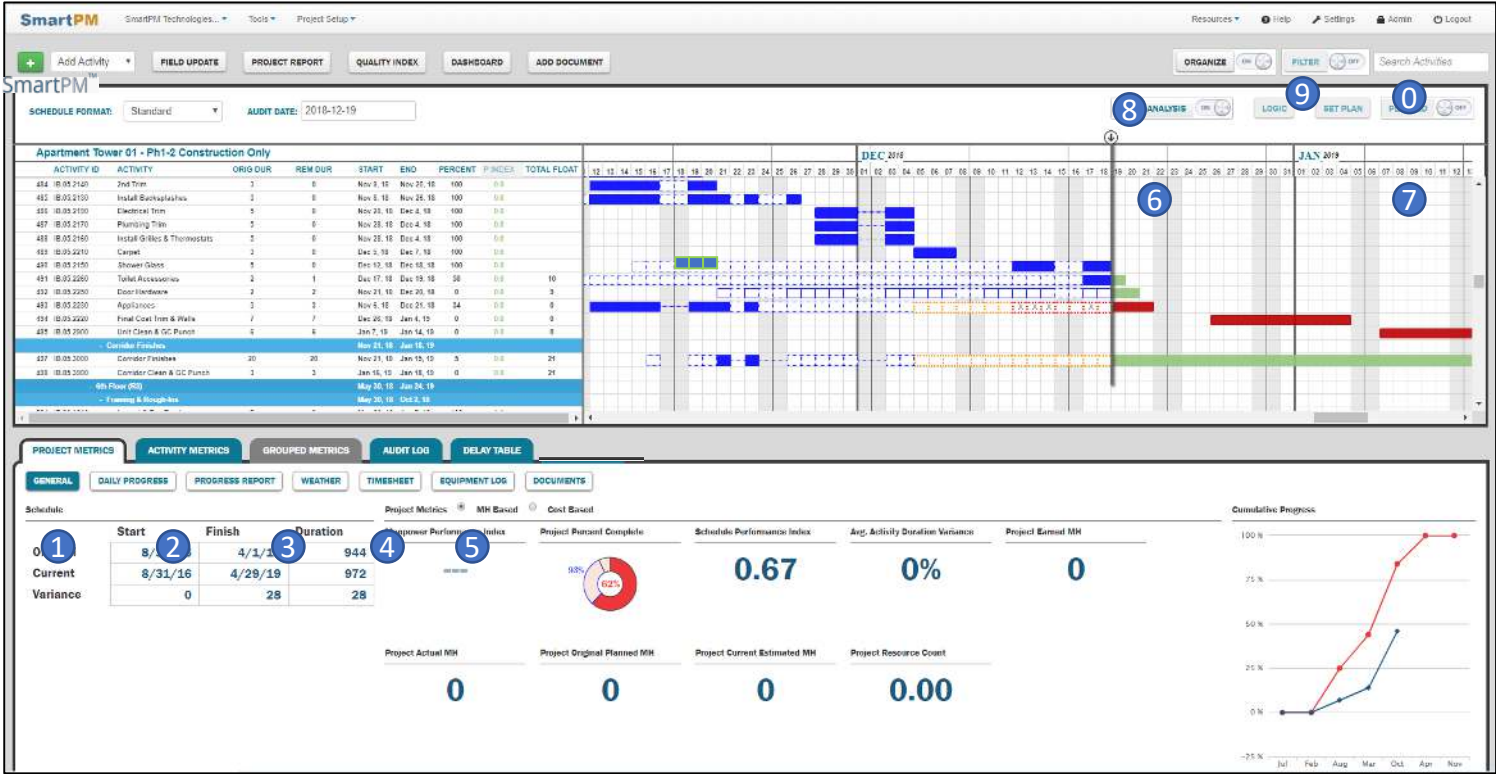
In addition to viewing your schedule, you can drill down with specific analytics, and review delays, recoveries, and changes across the life of your Project.

1. Analytics at the Project level
2. Analytics at the Activity level
3. Analytics based on an Applied Filter
4. The Audit Log
5. The Delay Table
6. Delay-Analysis "On" Switch (this MUST be on to use of SmartPM's™ best capabilities)
7. Planned Bar "On" Switch
8. Organizational Structure "On" Switch
9. Filter "On" Switch
10. Quick Search

The following is a key to all that you see within the Bar Chart section of the Gantt Chart:

- Blue Fill: Period of Actual Progress
- White Fill: Period of No Progress for an Activity that should have had Progress
- Green Fill: Planned Work
- Red Fill: Critical Path
- Green Outline: Actual Critical Path Recovery
- Yellow Outline: Historical Near Critical Path
- Red Outline: Historical Critical Path
- "X": Day of Delay

The Gantt Chart



The Delay Table provides you an automatically generated Windows Analysis; letting you know exactly what activities were delayed, recovered, and where you stand moving forward

- Schedule Period
- Schedule Run Date.
- End Date Variance
- Critical Path Delay
- Realized Critical Path Recovery
- Net Critical Path Delay –
- Description of Critical Path Delays/Recovery
- Planned Delay Recovery –
- Schedule Compression Index

SEE NEXT PAGE FOR DEFINITIONS:

Delay Table

PROJECT METRICS ACTIVITY METRICS GROUPED METRICS AUDIT LOG DELAY TABLE													
PERIOD	SCHEDULE RUN	SCHEDULED END	END DATE VARIANCE		CP DELAY	REALIZED CP RECOVERY	NET CP DELAY		DESCRIPTION OF CP DELAYS (IN PERIOD)	PLANNED DELAY RECOVERY		SCHEDULE COMPRESSION INDEX	
	DATE	DATE	IN PERIOD	CUMULATIVE			IN PERIOD	CUMULATIVE		IN PERIOD	CUMULATIVE		
0	7/6/2017	3/5/2019		0			0	0	0 Delays: 0 Recoveries:		0		
1	8/23/2017	3/11/2019	6	6	15	9	6	6	4 Delays: • CC.1170 - Balance of Site Demolition (10 days) • CC.1200 - Demo Site Wall @ Peachtree Rd. (7 days) • CC.1090 - Shoring & Excavataion @ Tower Base (5 days) • CS.0310 - Drilled Piers (Crew 1) (1 days) 2 Recoveries: • CC.1090 - Shoring & Excavataion @ Tower Base • CS.0310 - Drilled Piers (Crew 1)	0	0	1.0549	▼
2	9/21/2017	3/7/2019	-4	2	20	18	2	8	2 Delays: • CS.0310 - Drilled Piers (Crew 1) (12 days) • CC.1230 - U/G Storm Sewer @ Stratford Drive (8 days) 2 Recoveries: • CC.1260 - Excavate Elevator Mat Footings • CS.0410 - Pile Caps and Concrete Foundations	6	6	1.1053	▼
3	10/18/2017	3/8/2019	1	3	17	4	13	21	2 Delays: • CS.0550 - Form & Place Concrete Columns (12 days) • CS.0410 - Pile Caps and Concrete Foundations (11 days) 2 Recoveries: • CS.0550 - Form & Place Concrete Columns • CS.0310 - Drilled Piers (Crew 1)	12	18	1.1443	▼
4	11/15/2017	3/19/2019	11	14	19	0	19	40	4 Delays: • CS.0410 - Pile Caps and Concrete Foundations (12 days) • CS.0540 - Vertical Foundation Walls (Perimeter, Dock, Interior) (7 days) • CS.0550 - Form & Place Concrete Columns (7 days) • CS.0810 - M/E/P Underground (Lobby Level) (3 days) 2 Recoveries: • CS.0810 - M/E/P Underground (Lobby Level) • CS.0550 - Form & Place Concrete Columns	8	26	1.1554	▼
5	12/13/2017	3/15/2019	-4	10	13	20	-7	33	2 Delays: • CS.0810 - M/E/P Underground (Lobby Level) (13 days) • CS.0410 - Pile Caps and Concrete Foundations (1 days) 3 Recoveries: • CS.0810 - M/E/P Underground (Lobby Level) • CS.0820 - Concrete Slab-on-Grade (Lobby Level) • CS.1022 - Form / Re-Bar / MEP / Place - Level 2a	-3	23	1.1947	▼
6	1/18/2018	3/25/2019	10	20	17	3	14	47	3 Delays: • CS.1032 - Form / Re-Bar / MEP / Place - Level 3a (10 days) • CS.1022 - Form / Re-Bar / MEP / Place - Level 2a (7 days) • CS.0820 - Concrete Slab-on-Grade (Lobby Level) (5 days) 4 Recoveries: • CS.0810 - M/E/P Underground (Lobby Level) • CS.1022 - Form / Re-Bar / MEP / Place - Level 2a • CS.1032 - Form / Re-Bar / MEP / Place - Level 3a • CS.0820 - Concrete Slab-on-Grade (Lobby Level)	4	27	1.2297	▼

- **Schedule Period** – This is the period for review between the current schedule and the one before, obviously listed by title.
- **Schedule Run Date** – This is the data date of the schedule that was imported during a specific period.
- **Schedule End Date** – This is the PLANNED end date of the schedule that was imported during a specific period
- **End Date Variance** – This is the difference between the end date of the current schedule and the baseline (cumulative) and the previous schedule update (period).
- **Critical Path Delay** – This is the total historical critical path DELAY that has accumulated on a project (cumulative) or during a specific window (period) of time.
- **Realized Critical Path Recovery** – This is the total historical critical path Recovery that has accumulated on a project (cumulative) or during a specific window (period) of time.
- **Net Critical Path Delay** – This is the net historical critical path delay that has accumulated on a project (cumulative) or during a specific window (period) of time MINUS historical critical path Recovery (both cumulative and in each period.) This explains how much the project has been impacted and factors in how much realized recovery has existed to minimize delay exposure.

- **Description of Critical Path Delays/Recovery** – this identifies the activities that were critically delayed or recovered during a specific period.
- **Planned Delay Recovery** – This is the amount of critical path recovery that has been built in to the go-forward schedule (so, unrealized recovery) to reduce historical delay exposure.
- **Schedule Compression Index** – This is a gauge that indicates whether a schedule has been modified to complete more collective work in equal or less amount of time as compared to the baseline. Generally speaking, a number greater than 1 indicates compression, less than 1 equals decompression and 1 is equal to the same level as the baseline. To explain in Lehman's terms; if the schedule compression index is equal to 2, then that means the schedule is now set up to do twice the amount of work in the remaining time frame than it was originally to do (thus geared to minimize delay, albeit at risk).

Audit Log

In an effort to better understand the various modifications made from one schedule update, we keep a running log on changes and dates for these changes. Our product then runs through these changes and lets the user know which changes had a direct impact on the go-forward critical and near critical paths.

Click on any figure to drill down to see what specific changes were made.

Note: Changes to the Critical Path and Near Critical Path will have a red and orange box, respectively, in the far left column

PROJECT METRICS ACTIVITY METRICS GROUPED METRICS AUDIT LOG DELAY TABLE							
Copy Schedule							
DATE	CRITICAL CHANGES	NEAR CRITICAL CHANGES	ACTIVITY CHANGES	LOGIC CHANGES	DURATION CHANGES	DELAYED ACTIVITY CHANGES	TOTAL
2017-07-06	0	0	0	0	0	0	0
2017-08-23	14	5	33	70	11	0	103
2017-09-21	13	4	1	19	1	0	20
2017-10-18	13	11	32	70	14	0	102
2017-11-15	10	0	0	11	0	0	11
2017-12-13	8	3	10	28	10	0	38
2018-01-18	52	92	300	61	16	2	361
2018-02-15	14	8	11	17	9	0	28
2018-03-14	20	2	17	41	9	0	58
2018-04-25	33	4	10	39	8	1	49
2018-05-22	28	85	75	167	24	1	242
2018-06-25	26	71	215	473	17	3	688
2018-07-18	14	20	17	44	9	1	61
2018-09-24	357	568	306	785	15	1	1091
2018-10-24	51	86	150	412	13	1	562
2018-11-26	0	0	10	16	3	0	26
2018-12-19	105	56	47	157	2	0	204
Total	758	1015	1234	2410	161	10	3644

DURATION CHANGES ON 2018-09-24

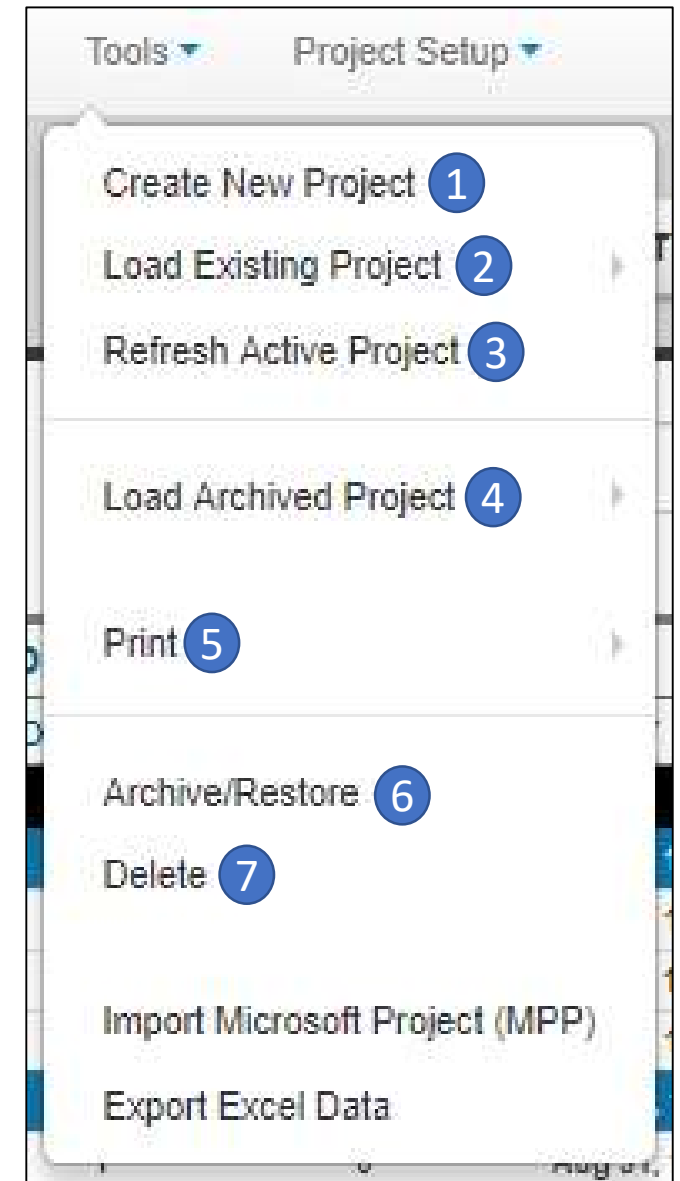
Select All

Deselect All

DATE	ID	CHANGE ITEM	OLD VALUE	NEW VALUE	USER	ACCEPTED
2018-09-24	ENV.8030 (Entry Lobbies - North & South)	Activity (planned_duration)	20.0	10.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	IB.10.1090 (HVAC Flex Duct)	Activity (planned_duration)	7.0	3.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CC.1320 (Fine Grade Service Drive)	Activity (planned_duration)	20.0	5.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.0230 (Re-Mobilize Pre-Cast Crew)	Activity (planned_duration)	1.0	2.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.0230 (Re-Mobilize Pre-Cast Crew)	Activity (constrainedDate)		2018-10-08	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.0220 (Grade Subgrade @ Crane Pathway)	Activity (planned_duration)	5.0	4.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1356 (Form / Re-Bar / MEP / Place - Level 35b)	Activity (planned_duration)	19.0	17.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1352 (Form / Re-Bar / MEP / Place - Level 35a)	Activity (planned_duration)	15.0	13.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1296 (Form / Re-Bar / MEP / Place - Level 29b)	Activity (planned_duration)	5.0	4.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1282 (Form / Re-Bar / MEP / Place - Level 28a)	Activity (planned_duration)	6.0	5.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1262 (Form / Re-Bar / MEP / Place - Level 26a)	Activity (planned_duration)	6.0	5.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.1302 (Form / Re-Bar / MEP / Place - Level 30a)	Activity (planned_duration)	6.0	5.0	Billy Upchurch	<input checked="" type="checkbox"/>
2018-09-24	CS.0060 (M/E/P Underground (B1 Upper Ramp))	Activity (planned_duration)	8.0	5.0	Billy Upchurch	<input checked="" type="checkbox"/>

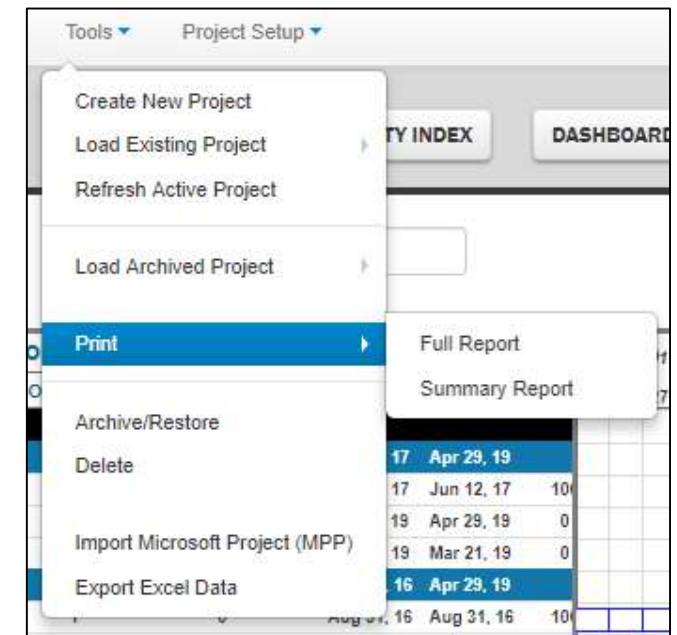
The Tools menu located on the top ribbon of the Gantt Chart view, allows you to quickly maintain your available projects. The Tools menu provides the following options:

1. Create a new Project by importing new Schedule Files. Complete the fields in the pop up window and Click "Submit"
2. Open an already existing Active Project. You will have quick access to any Project without having to navigate to the dashboard
3. Re-load the currently opened Project
4. Open a Project that has been Archived
5. Open the Print menu to choose from Print to PDF options (more on p. 2)
6. Toggles the opened Project between Active and Archived. When "Active," the Project is available to Company Users for normal use. When "Archived," the Project is removed from the Company's dashboard and is stored in a safe place until it is resurrected
7. This completely removes every aspect of the opened Project from the Company. Deleting a Project is irreversible and Project will never be accessible again.



The Print allows you to generate a PDF Document that shows the current status of the Project Gantt Chart. You can choose from a Full or Summary Report:

1. Full Report prints the Project as it is shown on the screen. It will print based on any Filters, Organization, or Sorting that is currently active. Additionally, the Full Report menu has 3 Calendar time-scale options:
 - Full Schedule - The time scale of the Calendar will span from the Original Start Date to the Current Finish Date listed in the Schedule Spreadsheet in the Project Metrics' General Tab
 - 3-Week Look Ahead - The time scale of the Calendar will span from 3 Weeks before the Data Date to 3 Weeks after the Data Date
 - 6-Week Look Ahead - The time scale of the Calendar will span from 6 Weeks before the Data Date to 6 Weeks after the Data Date
2. Summary Report prints the Project in a summarized view based on the Project's WBS Structure. It will print summary bars based on a selected range of WBS levels which will highlight Historical Critical Path, Historical Near Critical Path, Critical Path Delay, Critical Path Recovery. The Summary Schedule menu requires the following Menu choices:
 - Select Schedule Update: Select from which schedule update the graphic will be based off of
 - Select Paper Size: Select the dimensions of the generated PDF
 - Select WBS Level to Group From/To: Select the range of WBS Levels the summary bars will be generated via. Note, the maximum selectable range is 2 levels apart



PRINT SCHEDULE

☒ **Full Schedule**
☐ **3-Week Look Ahead**
☐ **6-Week Look Ahead**

Paper Sizes

☐ Letter (8.5x11)
☒ **Legal (8.5x14)**
☐ Tabloid (11x17)
☐ ArchD (24x36)
☐ ArchE (36x48)

PRINT SUMMARY REPORT

Select Schedule Update:

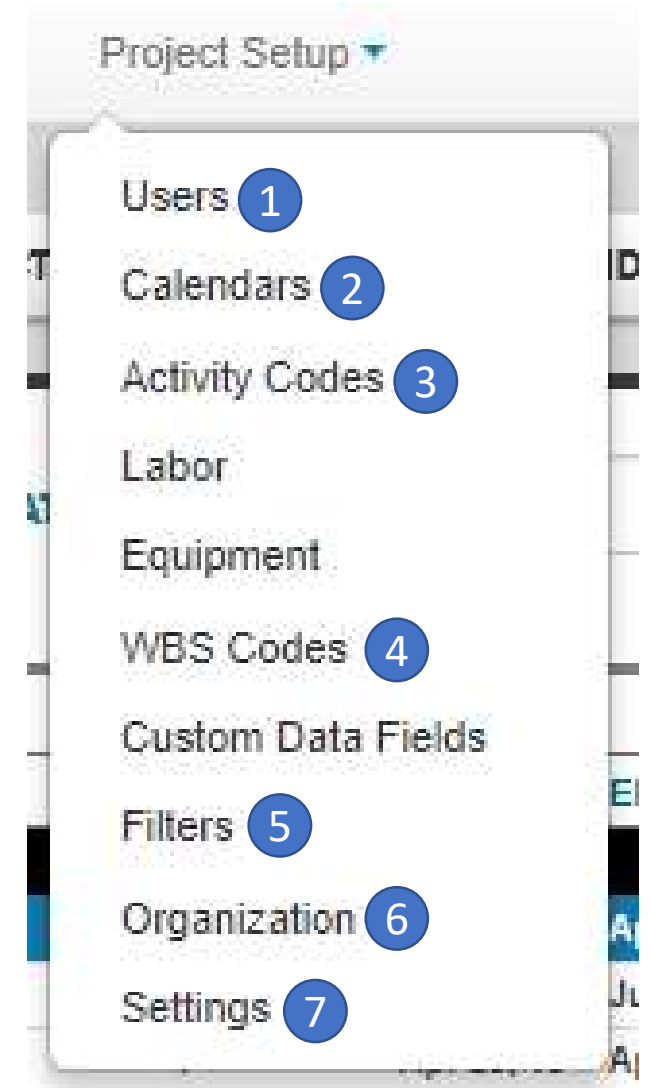
Select Paper Size:

Select WBS Level to Group From:

Select WBS Level to Group To:

The Project Setup menu located on the top ribbon of the Gantt Chart view, allows you to quickly maintain the currently opened project. The Project Setup menu provides the following options:

1. Add Users in order for them to access to the opened project
2. Review and edit all Activity Calendars
3. Review and edit all Activity Codes
4. Review and edit the WBS Structure
5. Review, add, edit, and activate Project Filters
6. Review, add, edit, and activate the Project's Sorting and Organizational Structure
7. Modify the Project's Name, Location, and Features



1. Once you have created a Project, you will need to decide which Users from your Company's Roster will have access to the Project. You will also define the User Role each User will have in interacting with the Project.
Click Submit.

1. There are 4 different User Roles:
- Schedule Administrator: The Schedule Administrator Role allows users access to all aspects of the SmartPM™ platform including project set up, schedule management, and field entry/modification.
 - Project Manager: Project Managers have the ability to enter data into the program through the field update log for any activity in the schedule. They do not have the ability to modify the project setup or schedule in any way.
 - Activity Manager: Activity Managers have the ability to enter data into the program through the field update log for only the activities for which they are listed as the "Activity Manager". They do not have the ability to modify the project setup or schedule in any way and they don't have the ability to enter data on activities for which they aren't listed as the "Activity Manager".
 - Read-Only: A Read-Only User will have no ability to alter the state of the Project in anyway, however can utilize the program for project review and analysis purposes.

2. You can remove a User from the Project by clicking the Red Trash Can button

USERS

Project Personnel

Billy Upchurch

+

Information

FIRST NAME

LAST NAME

E-MAIL

PHONE

ROLE

Billy

Upchurch

bupchurch86@gmail.com

Description

Schedule Admin

Project Manager

Activity Manager

Read Only User

Close

USERS

Project Personnel

BILLY UPCHURCH

+

Information

FIRST NAME

LAST NAME

E-MAIL

PHONE

ROLE

Billy

Upchurch

bupchurch86@gmail.com

Schedule Admin

Description

Close

Every Activity must be assigned a Calendar. The Calendar assigned will be used in the calculation of the Activity's Current & Planned Start & Finish Dates by using the Calendar's defined Work Days and Work Hours. Every new Project will include a all Calendars from all imported Schedules. You can view, edit, add, and delete Calendars from this menu.

1. To add a calendar:

- Click the Green Plus button
- Select the newly created Calendar
- Click the Blue Wrench button
- Click the Blue Pencil button to edit the following Calendar information
 - ❖ Title – You will need to type the Calendar's title into the text field
 - The new Calendar's default title will be "New Menu '#'"
 - ❖ Standard Daily Work Hours – You will need to enter in the how many hours make up a work day for each day of the week
 - The program will default to a five day, eight hours a day schedule
 - ❖ Holidays: You can select what days of the year will be considered non-working holidays. You can toggle a holiday by double-clicking on a specific date within the shown 12-month calendar. All Holidays are denoted by grey boxes.
 - Newly created Calendars are defaulted to include standard US Holidays
- To save changes, click the Blue Check Mark
- The new Calendar can be assigned to Activities in the Activity Metrics tab

2. You can edit already existing Calendars by selecting the Calendar you want to edit, clicking the blue wrench, click the blue pencil, and following the same steps as adding a new Calendar

3. You can delete already existing Calendars by selecting the Calendar you want to delete, clicking the blue wrench, and clicking the red trash can

CALENDAR

Project Calendars +

+6 day workweek w/No Holidays

7 - Day Workweek (No Holidays) ✎

7-Day (no Holidays)

Standard Work Week for: "7 - Day Workweek (No Holidays)"

S	M	T	W	T	F	S
8	8	8	8	8	8	8

Nov 15, Dec 15, Jan 16

Submit

CALENDAR

Project Calendars +

+6 day workweek w/No Holidays

7 - Day Workweek (No Holidays) ✓ ✕

7-Day (no Holidays)

Standard Work Week for: "7 - Day Workweek (No Holidays)"

S	M	T	W	T	F	S
8	8	8	8	8	8	8

Nov 15, Dec 15, Jan 16

Submit

Activity Codes are values that identify characteristics of the work or in some way categorize schedule Activities that allow for filtering and ordering of Activities within reports. Activity Codes are structured by using Activity Code Parents and Activity Code Children, where the Children are subsets of the Parents. Every new Project will include all Activity Codes from all imported Schedules. You can view, edit, add, and delete Activity Codes from this menu.

1. To add an Activity Code Parent:

- Click the Green Plus button in the Parent window
- Select the newly created Activity Code
- Click the Blue Wrench button
- Click the Blue Pencil button and give the Activity Code Parent a name
- To save changes, click the Blue Check Mark

2. To add an Activity Code child:

- Select the Activity Code Parent you want to add the Activity Code Child under
- Click the Green Plus button in the Child window
- Select the newly created Activity Code
- Click the Blue Wrench button
- Click the Blue Pencil button and give the Activity Code Parent a name
- To save changes, click the Blue Check Mark
- The new Activity Code Child can be assigned to Activities in the Activity Metrics tab

ACTIVITY CODES

Parent	Child	
Activity Code Type	CODE	Description
WRKP	GC	Sandpoint Services
RESP	CONC	Concrete Sub
AREA	MAS	Masonry Sub
MODF	VCT	Flooring Sub
BIDI	GUTT	Gutters & Downspouts Sub
PHAS	MSST	Miscellaneous Steel Sub
CATW	SITE	General Sitework
FOW	DEMO	Demolition Sub
	HAZ	Hazardous Material Abatement

☐ Set as default

Close

ACTIVITY CODES

Parent	Child	
Activity Code Type	CODE	Description
WRKP	CADR	Cadre Wing
RESP	CORE	Core Areas
AREA	MER	Main Electrical Room
MODF	MMR	Main Mechanical Room
BIDI	CLAS	Core Area Classrooms
PHAS	SITE	Sitework
CATW	CLO	Project-Wide Testing & Closeo
FOW	BOND	Bond
EMPTY		

☐ Set as default

Close

3. Re-Order Activity Code Child

- Select the Activity Code Parent of the Activity Code Children to be re-ordered
- Select the Activity Code Child to be re-ordered
- Click the Blue Wrench button
- Click either the Blue Up or Yellow Down Arrow buttons until the Activity Code Child is in the correct place
- The order of the Activity Code Children within this window will be the order in which they will be Organized and Sorted within the Gantt Chart when the Organize function is being utilized

4. You can edit already existing Activity Codes by selecting the Code you want to edit, clicking the blue wrench, clicking the blue pencil, and following the same steps as adding a new Activity Code

5. You can delete already existing Activity Codes by selecting the Activity Code you want to delete, clicking the blue wrench, and clicking the red trash can

ACTIVITY CODES

Parent	Child	
Activity Code Type +	CODE	Description +
WRKP	MILE	Milestones
RESP	SUMM	Construction Summa <div>⬆ ⬇ ✎ 🗑</div>
AREA ✎	DP1	Design Package 1
MODF	DP2	Design Package 2
BIDI	DP3	Design Package 3
PHAS	DP4	Design Package 4
CATW	PP	Planning & Permits
FOW	SUB	Submittals & Submttals Review
	FAB	Fabrication & Delivery

☐ Set as default

Close

A WBS Structure is a way to organize Activities within a Schedule. Each Schedule's WBS Structure is comprised of WBS Codes which are then assigned to Levels on a hierarchy. Every new Project will reflect the WBS Structure from the most recent Schedule import. You can view, edit, add to, and delete from the WBS Structure from this menu.

- To add a WBS Code:
 - Select the WBS Code you would like the new code to go directly under
 - Click the Green Plus button in the Parent window
 - Enter the Code and Code Name in the right window
 - Use the left and right arrow buttons to place the new WBS Code in the correct hierarchy
- You can edit already existing WBS Codes by selecting the Code you want to edit and following the same steps as adding a new WBS Code
- You can delete already existing WBS Codes by selecting the WBS Code you want to delete and clicking the Grey "X" button

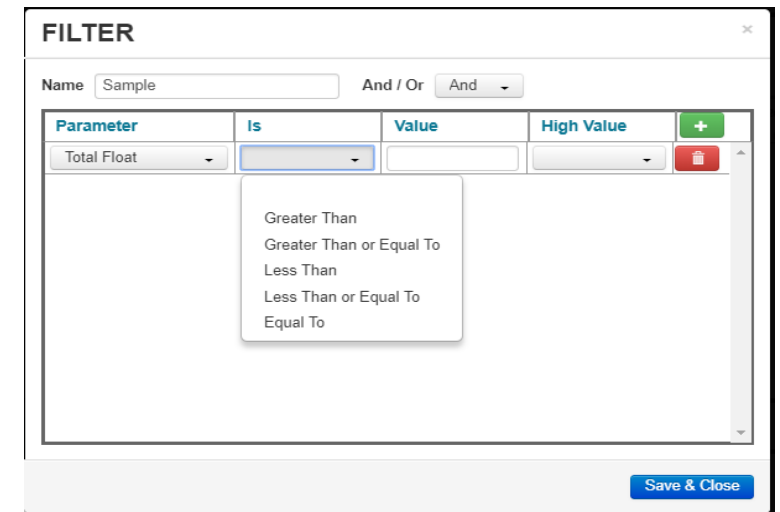
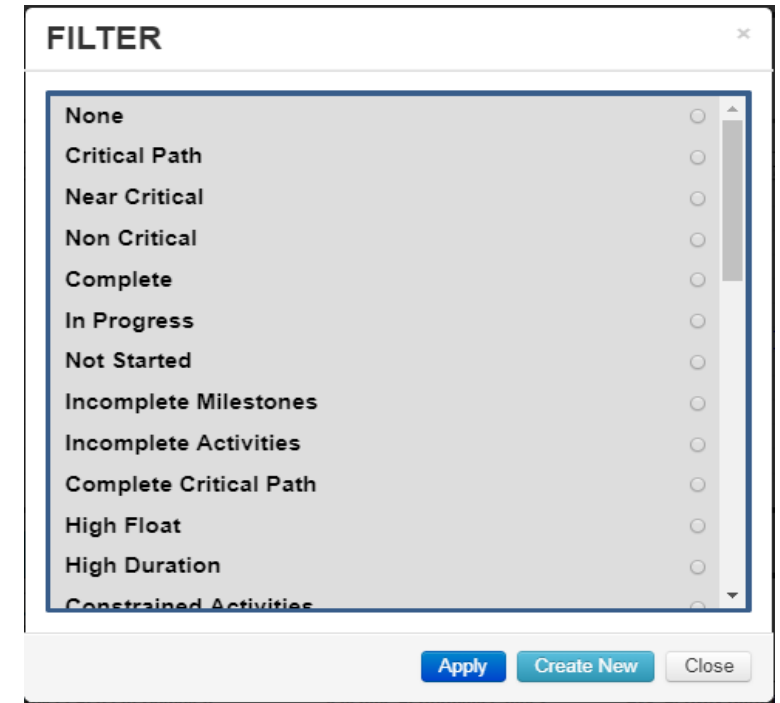
The screenshot shows the 'WBS CODES' dialog box. On the left, a list of WBS codes is displayed under the heading 'WBS Code'. The list includes 'SMARTPM APARTMENTS', 'Contract Milestones', 'Construction Milestones', 'Schedule Impacts' (which is highlighted), 'Shear Wall', 'Design Changes', 'Weather', 'Door Hardware Revisions', 'Amenity Level Design', 'Pool Deck Re-Design', 'Drains Design Finalization @ Pool Deck', 'Low-Voltage Inspections', and 'Corridor Changes'. To the right of the list are three buttons: a green plus sign, a left arrow, a right arrow, and a grey 'X' button. On the right side of the dialog, there are two input fields: 'CODE' with the value '3' and 'NAME' with the value 'Schedule Impacts'. Below these fields are 'Save' and 'Cancel' buttons. At the bottom right of the dialog is a 'Close' button.

The Filter functionality allows you to determine which Activities will be shown in the Gantt Chart based on selected Activity Attributes. SmartPM™ comes with numerous useful Filters built in and also allows you to create custom Filters. **To set a Filter, you need to have the Filter Toggle Switch to turn “On” and then navigate to the Filter menu.**

To activate a pre-loaded filter, simply select the filter and click “Apply”

To create a New Filter:

1. Click the blue Create New button
2. Enter the Filter’s name in the “Name” field
3. Click the “And/Or” drop down menu and select “And” or “Or”
 - “And” Filters – Activities must fit all defined parameters in order to be displayed in the Gantt Chart
 - “Or” Filters – Activities must fit at least one of the defined parameters to be displayed in the Gantt Chart
4. Click the Green Plus button to add a parameter
5. Click the drop-down menu in the Parameter column and select which Attribute this Parameter will be based on
6. Click the drop-down in the "Is" column and select the desired type of status of the Attribute(s)
7. In the Value column, enter or select the status of the Attribute(s) desired
8. If the type of status is a range, enter or select the top of the range in the High Value Column
 - To delete a Parameter, select the Parameter to be deleted and click the Red Trashcan Button
9. Once all Parameters are entered, click “Save & Close”



- The Organizational Structure menu allows you to organize your Activities by the assigned WBS Structure or Activity Code for easier viewing & navigation of the Project.
- To organize by the WBS Structure, simply click the “Group by WBS” check box and click “Submit”
- To organize by Activity Code:
 - In the “Grouping Structure” window to Add by clicking the green “+” button. In the drop down window choose the appropriate Code and repeat as necessary
 - After the Grouping Structure is set, set the “Sorting Structure” in the right window of the window by clicking the green “+” button. In the drop down window choose the appropriate Sort parameter and repeat as necessary
 - Click Submit
- **To view the Organizational Structure, you need to have the Organization Toggle Switch to turn “On.”**

The screenshot shows the 'ORGANIZATIONAL STRUCTURE' dialog box. It has two main sections: 'Grouping Structure' and 'Sorting Structure'. The 'Grouping Structure' section has a dropdown menu with 'MODF' and 'RESP' options. The 'Sorting Structure' section has a dropdown menu with 'Start Date' selected, and a secondary dropdown with 'Ascend' selected. A list of sorting options is visible: 'Start Date', 'Complete Percent', 'Planned Duration', 'Total Float', and 'Activity Id'. At the bottom, there is a checkbox labeled 'Group by WBS' which is currently unchecked, and two buttons: 'Submit' and 'Close'.

This screenshot shows the same 'ORGANIZATIONAL STRUCTURE' dialog box, but the 'Group by WBS' checkbox at the bottom is now checked. The 'Grouping Structure' and 'Sorting Structure' sections are empty, indicating that the previous selections were cleared or reset. The 'Submit' and 'Close' buttons remain at the bottom right.