



PowerON Visual - PowerGantt v1.0

Documentation and Troubleshooting Guide

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Introduction

What

This document describes PowerON’s **write-back** capable tool: **PowerGantt**. The product is a custom visual developed for Microsoft Power BI, that enhances the user experience by enabling end-users to make permanent changes on data – aka write-back – enriching it with text input controls (like you would see it on modern html pages, e.g.: date pickers, dropdowns, rich text) as well besides the traditional look and see feeling.

Here you will find a detailed overview of PowerGantt visual, you will learn how to use it in your reports, how to configure it properly and what the pitfalls are you might encounter and how to overcome them.

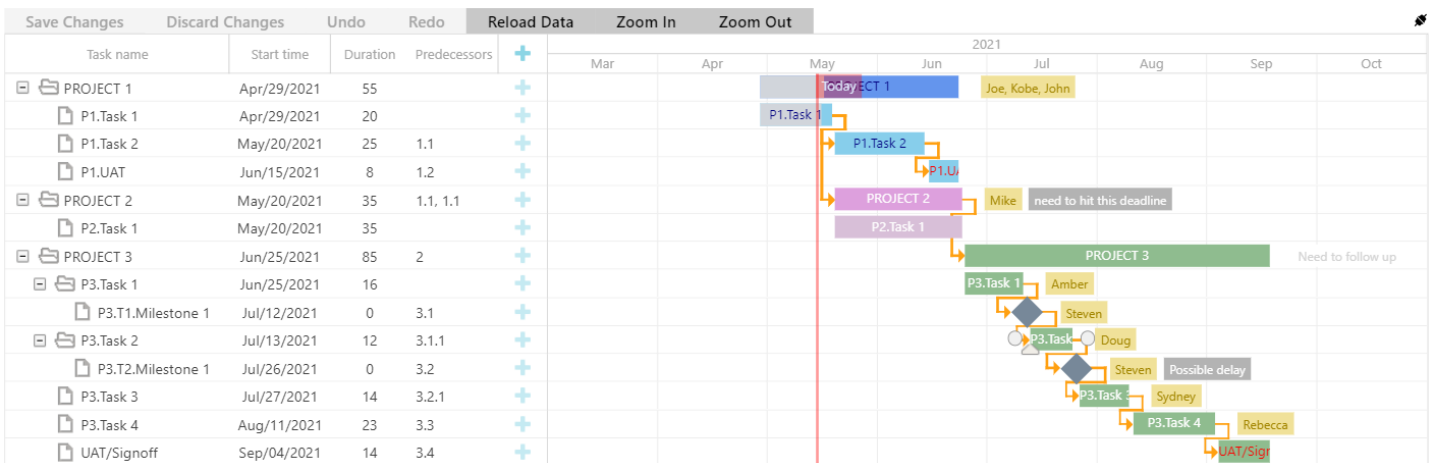
For who

This document is intended both for technicians (developers, DBAs, BI professionals) who are aware the depths of SQL Server, SSAS Tabular models, Azure Services and Power BI, but also users who are focusing mostly on building and preparing reports using Power BI Desktop.

Contact us

If anything is unclear or you wish to chat with one of our technical resources, please submit a ticket:

<https://support.poweronbi.com>



Overview

It is a project management tool assisting in the planning and scheduling of projects of all sizes.

The left side of the chart is the *Data Grid*, which displays lists of all the tasks as part of the project or work breakdown the structure to be completed.

It shows both summary tasks and normal tasks with a hierarchical list of goals or work divisions, with tasks and sub-tasks listed under them. Also shows the start and finish dates of several elements of a project.

Support

Check out **PowerON's Knowledge Base** articles at: <https://support.poweronbi.com> under 'Knowledge Base' (» Visuals » Visual Planning) for common use cases, tips, troubleshooting, etc.

Please note, that in order to access the articles, you need to **register** on the site. It is advised as you will be able **to submit tickets** (under 'Tickets' » [Add ticket] or [Submit ticket] button with filling the ticket form), if you encounter any difficulties or issues, so that our support team can give you the best service. You can also **email** us at: vizsupport@poweronbi.com

Versions

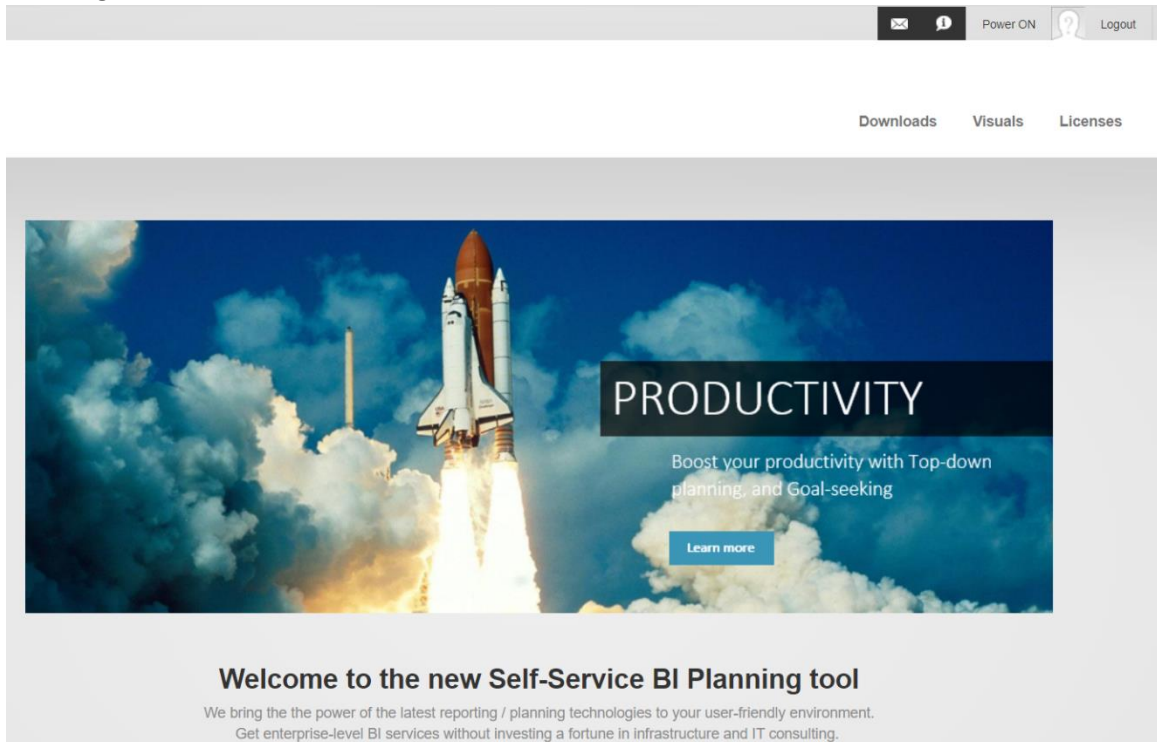
This document describes the **latest version** of PowerGantt; however, you can use the previous ones as well as they can be found in PowerON Storage, but please keep in mind that some of the features detailed here are not available in older versions.

The most recent visual is **powerGantt.v1.0.pbiviz**.

How can you download the different versions?

1. Register at **store.poweronbi.com** site with the same domain name you have registered originally

2. After login:

3. Click on **Visuals** in upper right corner

4. You can see our write-back capable visuals and their different versions.

Visuals			
dataEntryMatrix v3 (automatically updated)			
Version	Date	Release Notes	Link
3.4.45	03/01/2021		Download
dataEntryMatrix v4			
Version	Date	Release Notes	Link
4.4.29	04/06/2021	Notes	Download
4.4.0	02/22/2021	Notes	Download
tableEditor v2			
Version	Date	Release Notes	Link
2.7.51	05/05/2021	Notes	Download
2.7.47	03/01/2021	Notes	Download
vpService (automatically updated)			
Version	Date	Release Notes	Link
1.0.20	04/13/2021	Notes	Download
1.0.18	04/13/2021	Notes	

5. Pick the preferable version of PowerGantt and click on **Download**

- a. You can even download its **Release notes**, if you like.

Prerequisites

Write-back Service

You must have a working and **configured write-back service** (PPWebService) installed in your environment. If that is set, in order to build a report, you first must **import the custom visual - the powerGantt.[versionNumber].pbviz** file into your Power BI Desktop instance. Naturally, you need to do that for each report in which you want to use the PowerGantt visual. The visual will be stored in the report itself, so other people will also be able to use the write-back capabilities if they open it. In the case of PowerBI cloud services there is an option to store the custom visual in a centralized repository for easier management. You can find more information on this URL:

<https://docs.microsoft.com/en-us/power-bi/developer/visuals/power-bi-custom-visuals-organization>

The visual can be found in your **installation folder under Resources\PPWebService**.

Before you begin make sure that you have a properly configured write-back service (PPWebService) that is accessible from the point of the report server.

For more information about configuring the PPWebService check out PowerON's Knowledge Base articles at: <https://support.poweronbi.com> under 'Visual Planning' – 'Write Back Service' for more details.

In case of on-premises installations or virtual machines hosted in the cloud make sure that your Power BI Report Server can access the host IIS machine of the PPWebService.

In case of Azure, the Web Applications are accessible by default. The webservice must have a designated connection string configured for the data source in the web.config connectionStrings section that is pointing to:

- In case of SSAS models: the used SSAS Cube
- In case of SQL only models: the used SQL database

Connections to the data sources should be configured by your IT team. Please refer to the following article in our knowledge base on how to add ones at:

<https://support.poweronbi.com/portal/kb/articles/how-to-add-a-new-data-source-for-write-back>

You can find examples of valid connection strings for different data sources at:

<https://www.connectionstrings.com/>

The PPWebservice's service account - used in the connection string - must have the following permissions:

- In case of SSAS models: administration right on the cube, plus data reader and data write roles on the cube's underlying data source database
- In case of SQL only models: data reader and data write roles on the SQL database

The end users (or the user / Active Directory group they are in) must have:

- In case of SSAS models: data reader membership
- In case of SQL only models: data reader role

In case of impersonation enabled, then the end users must have data writer role.

VPService visual

The VPService is a helper visual which establishes the connection between our newest visuals and the write-back service.


The benefits of this solution:

- faster release processes: switching from one version to another is much faster, which results in a quicker support from our side (e.g.: in case of implementing new features)
- You can change between the versions of the visuals easily.

The functions of VPService:

- Saves the changes
- Saves the comments (e.g.: in Data Entry Matrix visual)
- Sends the user information
- Opens the pop-up windows (e.g.: in Table Editor visual)

How to configure VPService visuals

After importing the visual you can see its icon () under the built-in visuals. You can check its version by right clicking on the icon and selecting 'About' in the menu. A pop-up window appears with the version information.

Add the VPService helper visual to your Gantt chart related report.

Add an arbitrary field to VPService visual, e.g.: an ID.

The content of the Web Service property has to be **exactly the same** like in PowerGantt (Data Entry » Web Service)!

Setup and configuration of the visual

This main section describes the available configuration options for PowerGantt. Also, the following pages describes a **short** step by step instructions for building a **simple** report using it. You will find the details of the configuration elements later in this document, it is recommended that while you are going over the steps you also look up each mentioned option.

Validate the write-back service

After installation you might want to be sure that the write-back service is installed properly. You can validate that by navigating to your deployed URL, which is in the following format:

```
http(s)://yourserverName/PPWebService/PPWebService.svc
```

If you see the following page after the page load, then the Write-Back Service is up and running:

PPWebService Service

You have created a service.

To test this service, you will need to create a client and use it to call the service. You can do this using the svcutil.exe tool from the command line with the following syntax:

```
svcutil.exe https://tszdell12015/PPWebService/PPWebservice.svc/mex
```

This will generate a configuration file and a code file that contains the client class. Add the two files to your client application and use the generated client class to call the Service. For example:

C#

```
class Test
{
    static void Main()
    {
        HelloClient client = new HelloClient();

        // Use the 'client' variable to call operations on the service.

        // Always close the client.
        client.Close();
    }
}
```

Visual Basic

```
Class Test
Shared Sub Main()
    Dim client As HelloClient = New HelloClient()
    ' Use the 'client' variable to call operations on the service.

    ' Always close the client.
    client.Close()
End Sub
End Class
```

Setting up the basics

After you launched Power BI Desktop, connected to a data source and imported the visual into your report, the first step is to tell the visual where can it find the write-back service and which connection should it use during the process. The configuration options will appear in the Format section of the Visualizations **after** you dropped in the first column to the visual. You must complete the following steps in order to have a working report element for the write-back functionality.

The screenshot shows a configuration panel with three sections: 'Web Service' with a text input field containing 'https://machine/ppwebservice/PPWebService.svc'; 'Type' with a dropdown menu currently showing 'SSAS Datasource'; and 'Connection' with a text input field containing 'MySSASCubeConnection'.

Starting with Data Entry, you must set the **Web Service, Type** and **Connection** properties (see referring chapters) to make the write-back service working.

Publishing and testing the report

When you finished your report, publish it to either your on-premise Power BI Report Server, or to PowerBI.com. The **write-back works** dependably only, if your report is **published**. So, you cannot test the full functionality in Power BI Desktop while you are authoring it. After publishing your report try to modify a value and click on 'Save Changes' button. To validate that your changes have been committed to the database, connect to your underlying database where your table can be found with a tool like SQL Server

Management Studio, and execute a `SELECT * FROM yourTable` statement to see the content of the table. Your modification should be visible there as well as in your report.

Completing the above steps, you should have a working, simple, write-back capable report using PowerGantt visual.

The following pages cover more detailed configuration options as well as typical use-cases that you might find useful for your needs.

Configuration options

This chapter contains detailed description of the available configuration options for PowerGantt visual.

Data Entry

This section contains the configurations regarding the main behavior of the visual.

Web Service

Here you must set the write-back service URL which should point to the hosting machine – or app service – where it has been installed. Typical URL is:

[http\(s\)://WEBSERVICE_COMPUTER_NAME/PPWebservice/PPWebservice.svc](http(s)://WEBSERVICE_COMPUTER_NAME/PPWebservice/PPWebservice.svc)

Be careful **not** to have an extra slash at the end of the URL.

Type

This option is referring to the connection type that the write-back service uses. The setting is required.

- *SSAS Datasource*: Set a connection **name** in the Connection property defined in the web.config of the webservice
- *SQL Datasource*: The connection is set in the PPWebService web.config and you will have to refer it by its **name** in the Connection property
- *SSAS*: Set the connection string directly in the Connection property (leave the connection blank if using the default "**SSASConnection**" in set in the web.config of the webservice)
- *SQL*: Set the connection string directly in the Connection property (leave the connection blank if using the default "**SQLConnection**" in set in the web.config of the write-back service)

These last two options are used for testing, developing purposes first.

Connection

Specify Name of the SQL or SSAS connection defined in the web.config file of the webservice, or the connection string directly, or **leave blank** depending on the Type setting.

Customer

Customer name provided by us along with the License server license key. If already specified in the web.config file (generally, you don't have to set this at it is done by the setup), **leave blank**. **If you are sharing one webservice between multiple license keys, specify here the customer key you want to use.**

Domain

Set it to one of the following. Generally, this should **be left blank** as it is configured in the write-back service web.config file during setup.

- the fixed the name of the internal domain used (e.g.: DOMAIN)
- *auto*: use the domain part (part after @) of the powerbi.com user
- *auto-short*: use the short domain part (part after @ and before the .) of the powerbi.com user
- *azure*: use the full powerbi.com username (e.g.: [user@domain.com](#)) for Azure Active Directory authentication
- leave empty for no domain (e.g.: for a SQL authentication user)
- *SQL=..., SSAS=...* set domain options for SQL and SSAS separately
- Custom user mapping of powerbi.com users to SQL and SSAS users can be set up in the UserMapping table in the SQL database (should contain User, SQLUser, SSASUser varchar columns). For more information please visit:
<https://support.poweronbi.com/portal/kb/articles/custom-user-mapping-when-using-powerbi-com-service>

Windows Authentication

If you are in an on-premise environment using Power BI Report Server and Windows Authentication is turned on in the IIS for the write-back service this setting must be turned on, so that the Windows credentials can be passed back to the underlying data source. If you are completely in the cloud - your reports are published to PowerBI.com service - and you are using Azure AD, the setting should be turned off, so that AD credentials will be used when accessing the data source.

In case of Gateway by turning on Windows Authentication will have the following effects: Instead of setting the PowerBI.com credentials in the write-back service request, the visual posts the Windows login context. This value (e.g.: domain\user instead of [username@domain.com](#)) will be set if you use USERNAME() in computed and/or default value columns (see later in this document) as well in SQL context variables. Also, this makes possible to use impersonation, and it is **necessary to be turned on** if **Windows Authentication** is set in **IIS** for the write-back service.

Source Table

It is important that you configure this property correctly as misconfiguration can lead to save errors. Please read this chapter carefully.

This property tells the write-back service which table should be the **target** for data modifications. The name of the write-back target table needs to be entered here. Note, that the property is case sensitive! For example, if you put fields into the visual from the Product table, this property value should be Product as you want to save the modifications to the product table.

You should **not rename** tables or columns in your report. If you need to change the visual representation of a column, you can use the **Title** property for the column under Column Properties group.

In case of SSAS data source the value must be the **name of the entity** exactly how it is specified in the model.

In case of SQL only data source the value must be the **name of the SQL table** that is being used with the visual.

In case of SQL connections when the table is in a **different schema than dbo**, you need to make some adjustments. When you import a table with a schema to a report, Power BI automatically renames the table for you. For instance, if you are importing hr.SalesPerson table, in the Fields section you will see it renamed something similar like "Hr Sales Person". Because of this operation, PowerGantt visual will not be able to determine on which table it should initiate the write-back process. Please do the followings to overcome this situation:

1. Rename the table in the Fields list so that it contains exactly the actual SQL table name **without** the schema name (in the example it is SalesPerson)
2. Remove and re-add the columns to your PowerGantt visual
3. Enter into the Source Table property the full qualified table name in the format of: schema.table (in the example it is *hr.SalesPerson*)

Gantt Style

Here you can find the basic coloring settings considering all tasks and/or milestones.

Task Font Color

The font color of all tasks.

Task Background Color

The background color of all tasks.

Progress Color

The progress color of all tasks.

Milestone Background Color

The background color of all milestones.

Responsible Font Color

The responsible font color of all tasks and milestones

Responsible Background Color

The responsible background color of all tasks and milestones.

Comment Font Color

The comment font color of all tasks and milestones.

Comment Background Color

The comment background color of all tasks and milestones.

It is important to know, if you set a color in the pop-up container (see later: modal) of a task or milestone, that color will be applied to that element specifically, not all of them.

Color Palette that you can use:

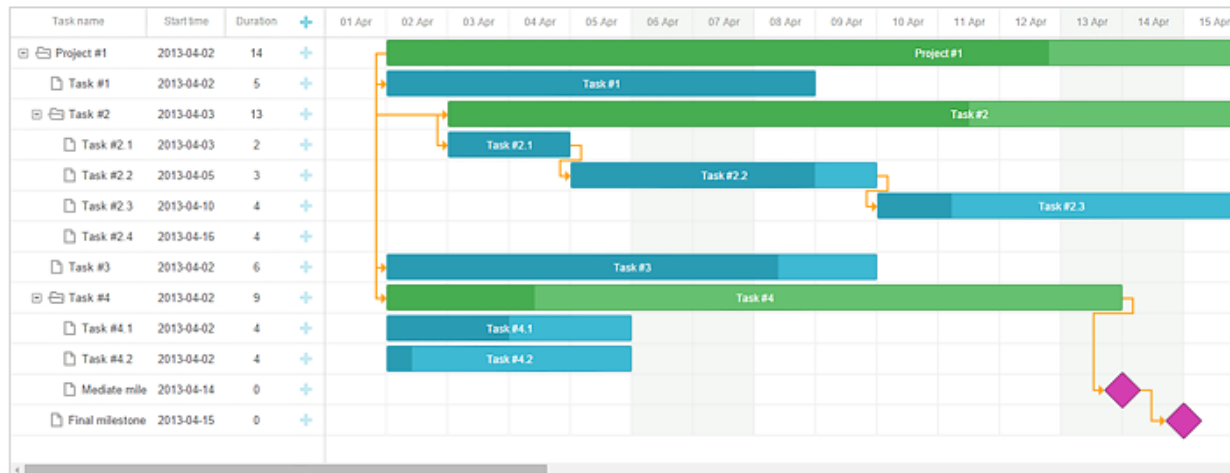
White colors	Red colors	Yellow colors	Green colors	Blue colors	Purple colors
White	Red	Yellow	Green	Blue	Purple
Snow	LightSalmon	LightYellow	PaleGreen	LightBlue	Lavender
Honeydew	Salmon	LemonChiffon	LightGreen	PowderBlue	Thistle
MintCream	DarkSalmon	LightGoldenrodYellow	YellowGreen	PaleTurquoise	Plum
Azure	LightCoral	PapayaWhip	GreenYellow	Turquoise	Violet
AliceBlue	IndianRed	Moccasin	Chartreuse	MediumTurquoise	Orchid
GhostWhite	Crimson	PeachPuff	LawnGreen	DarkTurquoise	Fuchsia
WhiteSmoke	FireBrick	PaleGoldenrod	Lime	LightCyan	Magenta
Seashell	DarkRed	Khaki	LimeGreen	Cyan	MediumOrchid
Beige	Pink colors	DarkKhaki	MediumSpringGreen	Aqua	MediumPurple
OldLace	Pink	Gold	SpringGreen	DarkCyan	Amethyst
FloraWhite	LightPink	Brown colors	MediumAquamarine	CadetBlue	BlueViolet
Ivory	HotPink	Brown	Aquamarine	LightSteelBlue	DarkViolet
AntiqueWhite	DeepPink	Cornsilk	LightSeaGreen	SteelBlue	DarkOrchid
Linen	PaleVioletRed	BlanchedAlmond	MediumSeaGreen	LightSkyBlue	DarkMagenta
LavenderBlush	MediumVioletRed	Bisque	SeaGreen	SkyBlue	SlateBlue
MistyRose	Orange colors	NavajoWhite	DarkSeaGreen	DeepSkyBlue	DarkSlateBlue
Gray colors	Orange	Wheat	ForestGreen	DodgerBlue	MediumSlateBlue
Gray	DarkOrange	BurlyWood	DarkGreen	CornflowerBlue	Indigo
Gainsboro	Coral	Tan	OliveDrab	RoyalBlue	
LightGray	Tomato	RosyBrown	Olive	MediumBlue	
Silver	OrangeRed	SandyBrown	DarkOliveGreen	DarkBlue	
DarkGray		Goldenrod	Teal	Navy	
DimGray		DarkGoldenrod		MidnightBlue	
LightSlateGray		Peru			
SlateGray		Chocolate			
DarkSlateGray		SaddleBrown			
Black		Sienna			
		Maroon			

Gantt settings

Auto Scheduling

Re-calculates the position of tasks depending on their constraint types.

Scheduling is an ability to schedule tasks automatically depending on relations between them. Auto Scheduling recalculates the schedule of the project.



e.g.: Let's assume you have two tasks connected by a dependency link saying the second task starts when the first one ends, and you need to change the schedule of the first task by moving it to a new date.

Auto scheduling calculates the start date of the second task update according to the end date of the first task each time when it changes. This feature allows you to generate and maintain a project schedule by specifying relations between tasks without setting each task dates manually.

Today marker

A red horizontal line showing you the current date in the timeline.

Critical Path

Highlighting with red the critical tasks/ milestones and links in your project.

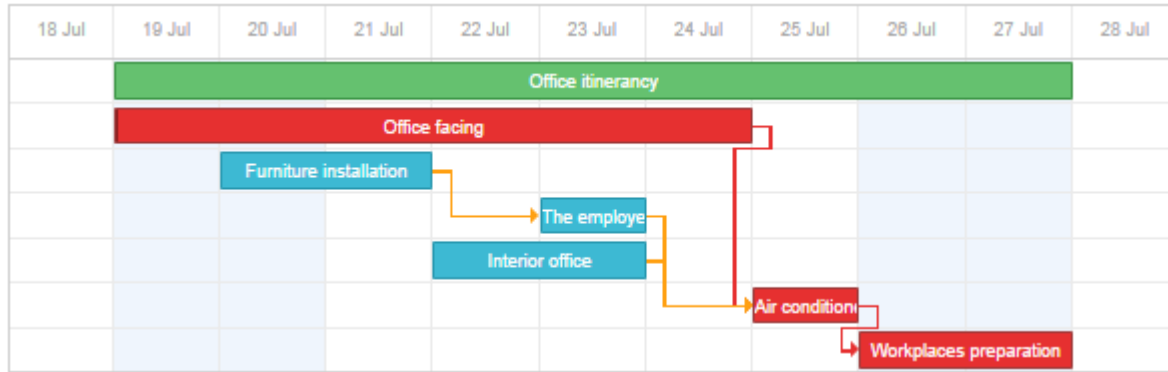
A critical path is a sequence of tasks that cannot be delayed. Otherwise, the whole project would be delayed.

The critical path also determines the shortest time the project can take.

A task is considered *critical* if it has no days of slack and any delay would directly affect the project completion date.

Slack time is the time that a task can slip without affecting other tasks or the project's completion date.

It is a cornerstone in project management, which determines vital tasks and the minimum duration of the whole project. Tasks that cannot be postponed are highlighted in red.



Snap To Scale

When you drag or resize a task/ milestone, its starting date will snap to the closest column in the timeline.

Predecessors

Showing the Work Breakdown Structure (WBS) code of the parent task and the type of links between them. (A WBS is a decomposition of a project into parts. It is usually hierarchical in nature. It can provide a valuable link to other management and administrative elements of projects.)

Possible values:

- SS = Start to Start
- SF = Start to Finish
- FF = Finish to Finish
- *number[.number[.number]]* = Finish to Start, where the number is the number of the (sub)task

Predecessors
1
1SS, 2
2FF
3.2
3.3
3FF

Row Height

Sets the height of the rows.

Task Name Min Width

Sets the minimum width of the Task name column in the grid. If you resize the grid, it might be wider.

Header Height

Sets the height of the header.

Date Format

The default date format is *MM/dd/YYYY*, e.g.: *May/24/2021*.

It is possible to change the date format:

American:	MM/dd/YYYY (e.g.: May/24/2021)	OR	mm/dd/YYYY (e.g.: 05/24/2021)
	MM-dd-YYYY (e.g.: May-24-2021)	OR	mm-dd-YYYY (e.g.: 05-24-2021)
European:	dd/MM/YYYY (e.g.: 24/May/2021)	OR	dd/mm/YYYY (e.g.: 24/05/2021)
		OR	dd.mm.YYYY (e.g.: 24.05.2021)
		OR	YYYY-mm-dd (e.g.: 2021-05-24)

Debug

Diagnostic Mode

By default, Diagnostic Mode is disabled, so the whole content of Debug property group is disabled.

Turning it on reveals all of the debug settings. These settings are for debugging and developing purposes.

Working with PowerGantt visual

Buckets and Fields

You can think of the data structure of the Gantt chart as a table, where each row represents a task, milestone or link and each field you assign to buckets represents one column thus one cell in each row.

It is important to note that many features work only, if you assign fields to the corresponding buckets. E.g.: you will not be able to save parent-child relationships, if you do not have a field in the Task Parent ID bucket.

Task ID

The ID of the tasks, links and milestones.

It is **required** to add it to the chart Fields.

The field type is integer.

Task Description

The description of the tasks and milestones.

It is **required** to add it to the chart Fields.

The field type is text.

Type

The type of the saved entities/ rows, e.g.: "task" or "milestone".

It is **required** to add it to the chart Fields.

The field type is text.

Task Start Date

The start date of the tasks or milestones.

It is **required** to add it to the chart Fields.

The field type is date.

Task End Date

The end date of the tasks and milestones.

It is not required to add it to the chart Fields.

The field type is date.

Task Duration

The duration of the tasks in days.

It is not required to add it to the chart Fields.

The field type is integer.

Task % Complete

The progress of the tasks, expressed as a percentage, e.g.: 0.4 = 40%

It is not required to add it to the chart Fields.

The field type is float.

Constraint

The constraint type of tasks.

It is not required to add it to the chart Fields.

The field type is text.

Constraint Date

The constraint date of tasks.

It is not required to add it to the chart Fields.

The field type is date.

Task Parent ID

The ID of the parent of tasks, milestones and links.

It is not required to add it to the chart Fields.

The field type is integer.

Task Responsible

The responsible of the tasks, milestones or links.

It is not required to add it to the chart Fields.

The field type is text.

Task Comment

The comment of the tasks, milestones or links.

It is not required to add it to the chart Fields.

The field type is text.

Task Font Color

The font color of the tasks. Must be in one of the following formats:

1. rebeccapurple
2. #00ff00
3. rgb(214, 122, 127)

It is not required to add it to the chart Fields.

The field type is text.

Task Background Color

The background color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Task Progress Color

The task progress color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Task Responsible Font Color

The responsible font color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Task Responsible Background Color

The responsible background color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Task Comment Font Color

The comment font color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Task Comment Background Color

The comment background color of the tasks. The format must be the same as in Task Font Color.

It is not required to add it to the chart Fields.

The field type is text.

Link Source

The ID of the tasks or milestones from which links start.

It is not required to add it to the chart Fields.

The field type is integer.

Link Target

The ID of the tasks or milestones to which the links point.

It is not required to add it to the chart Fields.

The field type is integer.

Link Type

The type of the links, represented by a number.

It is not required to add it to the chart Fields.

The field type is integer.

Meta Data

Extra information about the tasks, milestones or links. It can be used for debugging purposes.

It is not required to add it to the chart Fields.

The field type is text.

Properties of tasks and milestones

If you double click on a task/ milestone, a container/window appears in the middle of the visual, with property setting possibilities. Henceforth this container is called **modal**.

There is a difference in the number of properties between tasks and milestones, that you can edit.

Property	Task	Milestone
Description	Yes	Yes
Constraint	Yes	Yes (except date)
Type	Yes	Yes
Time period (Start date & Duration)	Yes	Yes (except duration)
Progress	Yes	No
Parent	Yes	Yes
Responsible	Yes	Yes
Comment	Yes	Yes
Font Color	Yes	No
Background Color	Yes	Yes
Task Progress Color	Yes	No
Responsible Font Color	Yes	Yes
Responsible Background Color	Yes	Yes
Comment Font Color	Yes	Yes
Comment Background Color	Yes	Yes

Description

Description

You can give a meaningful name to the task/ milestone. The default content is 'New task'.

Constraint

Constraint

Start No Earlier Than ▼ Constraint date: May ▼ 20 ▼ 2021 ▼

- Start No Earlier Than
- As Soon As Possible
- As Late As Possible
- Start No Later Than
- Finish No Earlier Than
- Finish No Later Than
- Must Start On
- Must Finish On

Delete

- **As soon as possible** - If this constraint is set to an independent task, the task starts at the same time that the **project** does. If this constraint is set to a dependent task, the task starts as soon as its predecessor tasks end. This is the default value.

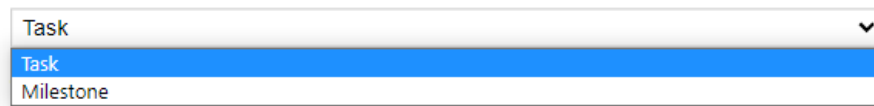
- **As late as possible** - If this constraint is set to an independent task, the task ends at the same time that the **project** does. If this constraint is set to a dependent task, the end of the task coincides with the start of its immediate successor task.

The other types of constraints affect tasks regardless of their types (dependent or independent):

- **Start no earlier than** – the task should start on the specified date or after it.
- **Start no later than** – the task should start on the specified date or before it.
- **Finish no earlier than** – the task should end on the specified date or after it.
- **Finish no later than** – the task should end on the specified date or before it.
- **Must start on** – the task should start exactly on the specified date.
- **Must finish on** – the task should end exactly on the specified date.

Type

Type



A screenshot of a dropdown menu. The label 'Type' is above the dropdown. The dropdown is open, showing three options: 'Task' (selected and highlighted in blue), 'Task', and 'Milestone'. A small downward arrow is visible on the right side of the dropdown box.

You can select, if the additional value is a task or a milestone.

Time period

Time Period



A screenshot of a time period input field. It consists of several dropdown menus: 'May', '20', and '2021'. To the right of these is a duration input field with a minus sign, the number '33', and a plus sign, followed by the text 'Days Jun/22/2021'.

It has a start date and a duration part. The non-editable date at the end of the line is the finish date which has been calculated based on the start date and the duration.

% Complete

% Complete



A screenshot of a text input field containing the value '0.55'.

The progress of the tasks expressed as a percentage, e.g.: 0.55 means 55%.

Parent

Parent



A screenshot of a dropdown menu for 'Parent'. The dropdown is open, showing the option 'No parent' selected.

You can select if the task/ milestone has a parent and you can choose from the previously saved, available list of (sub)tasks/ milestones. By default, it has no parent.

Responsible Person

Responsible Person



A screenshot of an empty text input field for 'Responsible Person'.

You can name someone who is responsible for the given task/ milestone.

Comment

Comment



A screenshot of an empty text input field for 'Comment'.

You can leave a comment belonging to the task/ milestone.

Font Color

Font Color

You cannot write onto the milestone, so you cannot determine a font color for that. So, it belongs to the task. You can give a color in the following formats:

1. rebeccapurple
2. #00ff00
3. rgb(214, 122, 127)

Background Color

Background Color

The background color of the task/ milestone.

Task Progress Color

Task Progress Color

You can determine a color of the task progress.

Responsible Font Color

Responsible Font Color

The font color of the responsible person for both task and milestone.

Responsible Background Color

Responsible Background Color

The background color of the responsible person for both task and milestone.

Comment Font Color

Comment Font Color

The font color of the comment for both task and milestone.

Comment Background Color

Comment Background Color

The background color of the comment for both task and milestone.



At the bottom of the modal, you can decide if you would like to add, cancel your settings or delete the whole task/milestone.

Note! It is not enough to click on Add to modify your settings. You also need to click on Save Changes button to save back your modifications to your database for good.

Control buttons

Save Changes

After you have made some changes to the chart, the Save Changes button becomes enabled. If you have the **VPService visual set up correctly**, you can save your changes by clicking on the Save Changes button.

Discard Changes

After you have made some changes to the chart, the Discard Changes button becomes enabled. If you click on it, all your changes after the last save will be discarded.

Undo

After you have made some changes to the chart, the Undo button becomes enabled. If you click on it, one step of your changes will be undone.

Redo

After you have made some changes to the chart and click Discard Changes or Undo, the Redo button become enabled. If you click on it, the last undone action will be redone.

Reload Data

If you click on this button, the chart reloads. Any unsaved changes will be lost.

Zoom In

If you click on this button the scale of your chart will be more detailed. There are four zoom levels: day, week, month and year. Month is the default.

Zoom Out

If you click on this button the scale of your chart will be less detailed. There are four zoom levels: day, week, month and year. Month is the default.

User Interface Helpers

Spinner



When you click on Save Changes, a small spinner is shown in the top right corner indicating that communication with your server is in progress.

Resizing

You can resize the columns and the timeline in your grid by dragging their left or right side.

Note! These changes are only temporary and when you revisit your report or refresh the page the settings will be lost.

Tooltip

If you hover over a task/ milestone in the grid or in the timeline, a tooltip can be seen showing the name, start date and end date of the hovered element.

Open/close a task or milestone

If a task/ milestone has any children, a small + or – icon can be seen next to the name of the task in the grid. By clicking on it, you can show or hide the children of the task.

Required settings before saving

If you try to save your work without having a field in the Task ID bucket or the Web Service or Source Table settings are missing from the Data Entry settings, you will not be able to save and an error message can be seen.

Working with tasks and milestones

Generally, the Gantt Chart does not show the dependency of tasks to each other and neither which tasks are critical to finishing the project on time.

Adding tasks/ milestones

1. Click on “+” icon:



2. A modal appears. You can set the properties here.
 3. Depending on you want a task or a milestone, change the Type property.
- Note!** Milestone does not have that many properties as task has.

 A screenshot of a 'New task' modal form. The form has a title bar with the date range '01 January 2020 - 02 January 2020' and the text 'New task'. The form contains several sections:

- Description:** A text input field containing 'New task'.
- Constraint:** A dropdown menu set to 'As Soon As Possible', followed by 'Constraint date:' with three dropdowns for '4', 'March', and '2021'. A red arrow points to the 'As Soon As Possible' dropdown.
- Type:** A dropdown menu set to 'Task'.
- Time period:** Three dropdowns for '1', 'January', and '2020', followed by a '- 1 +' spinner and the text 'Days 02 January 2020'.

4. Click on Add

Adding child tasks/ milestones

1. Click on “+” icon of a task or milestone.

Note! The parent must be saved already. Otherwise, the “+” icon will be gray and you will not be able to click on it.



2. A modal appears. You can set the properties here.
3. Depending on you want a task or a milestone, change the Type property.

Note! Milestone does not have that many properties as task has.

4. Click on Add.

Editing tasks/ milestones

Using the edit modal

1. Double click on a task or milestone in the timeline.
2. A modal appears.
3. Edit the properties.
4. Click on Add.

Dragging and resizing

You can change the start and end date of tasks/ milestones, if you drag them on the timeline. You can also change the duration of tasks by resizing them, click on the right or left side of a task in the timeline and drag it to the desired value.

Deleting tasks/ milestones

1. Double click on a task/ milestone in the timeline.
2. A modal appears.
3. Click on Delete.
4. A confirmation window appears.
5. Click on OK.

Working with links

Adding links

You must have at least two tasks **added and saved** to your chart. Then you just simply need to click on the little circle icon at the start or end of the task and drag it to the start or end of another task. It is important to note that you cannot add a link to unsaved tasks/ milestones.

There are four types of links:

- Start to start (SS),
- Start to finish (SF),
- Finish to finish (FF),
- Finish to start (FS).

Save Changes		Discard Changes		Undo	Redo	Reload Data	Zoom In	Zoom Out					
WBS	Task name	Start time	Duration	Predecessors	+	19	2020	2021	2022	2023	2024	2025	
1	New task	01-01-2022	397		+			Today	New task	Responsible	Comment		
2	New task	01-01-2022	276	155	+								

Editing links

A link cannot be edited. You need to delete any unnecessary links and create new ones.

Deleting links

1. Double click on a link.
2. A confirmation window appears.
3. Click on OK.

Troubleshooting

For all cases, please visit our Knowledge Base at <https://support.poweronbi.com/> to find a solution for your problem. Below you can find common cases. If your issue cannot be solved by the provided materials, please open a ticket on our support site, and PowerON will assist you. Also, you can use the debug settings of PowerGantt – described in the next chapter – to acquire more details on the problem.

Network Error

Symptom: You receive Network Error message when you try to save data.

Cause: You may get this error typically in the following cases:

- The write-back service URL is not set correctly – or it is malformed – in the Data Entry settings
- The write-back service is not reachable or offline
- Bad connection name or/and type was specified
- The license service is stopped unexpectedly
- Missing files in the web service folder, or typo / malformed strings in the web.config file
- Windows / Kerberos authentication issue
- Missing Service Principal Names
- Missing Active Directory permissions for service accounts
- Report server URL web service URL format mismatch
- Invalid SSL certificate

Solution: Make sure that the write-back service is up and running and reachable (firewall not interfering) as it is described earlier in this document. Verify that the referenced connection exists in the write-back service configuration and the connection type is selected correctly.

A particular error can indicate a license service failure. Please refer to this article:

<https://support.poweronbi.com/portal/kb/articles/error-the-communication-object-system-servicemodel-channels-servicechannel-cannot-be-used-for-communication-because-it-is-in-the-faulted-state>

If you encounter CORS issue, please check the web.config file of the write-back service for typos, and also missing DLL-s and config files inside the web service folder. As a last resort, try updating the web service file following these articles:

- <https://support.poweronbi.com/portal/kb/articles/how-to-update-the-service-manually-azure-cloud>
- <https://support.poweronbi.com/portal/kb/articles/how-to-update>

If you encounter SSL error, make sure that the certificate is issued by a trusted authority for the full qualified domain name of the IIS server, or that the certificate is set to ignore by the client's browser in case of self-signed certificate, or if the certificate is issued internally by your organization and you try to reach the report outside of the organization domain.

If you are using Power BI Reporting Services on-premise, make sure that the Report Server URL and the web service URL format matches. Either both have to reference the machine name or the full qualified domain name and both have to be http or https.

In case of on-premise installation in a domain with Windows Authentication, make sure that Service Principal Names are created for your SQL and SSAS servers and the correct domain users are used for the services. An SPN is also needed for the service account that is running the PPWebService on the IIS machine as the Application Pool user. Make sure that delegation is enabled in your Active Directory from the App Pool's user (which has to be a trusted user) to the SQL/SSAS services. If these are not set correctly, Kerberos authentication issues can occur, which might result in HTTP 403 or 404 errors or appearing log-in popups. Please refer to the following article and contact your internal IT team:

<https://support.poweronbi.com/portal/kb/articles/configure-iis-for-kerberos-authentication>

The visual is not working in Power BI Desktop or the settings are not shown.

Symptom: The visual is not rendered, or PowerGantt specific setting are not displayed (like Data Entry, Gantt Settings, etc.)

Cause: Generally, there can be two reasons for this:

- your machine is running out of memory, therefore Power BI Desktop cannot render the elements properly
- your Power BI Desktop Cache is outdated.

Solution: Free up memory on your computer by closing other applications. For clearing the Power BI Desktop cache, please refer to the article in our Knowledge Base at:

<https://support.poweronbi.com/portal/kb/articles/power-bi-desktop-clear-cache>

Save Failed

Symptom: You receive Save Failed message when you try to write back to the selected table.

Cause: You may get this error if there is a configuration error in your visual, the write-back service is not configured properly, or in the following cases:

- there is a custom validation implemented that prohibits write-back
- SQL objects are interfering with the data modification TSQL statements (like security policies, triggers, unique constraints, etc.)
- the service account used by the write-back service does not have permission on the underlying SQL database to make the necessary modification on the source table.

Solution:

- Check if the service account has the necessary permissions, the password has not expired
- Verify that RLS policies or triggers are not prohibiting the operations

As there can be various reasons for this error, review the paragraphs in this chapter and please also visit our Knowledge Base to find the solution at <https://support.poweronbi.com>

If you were not able to overcome your issue, please submit a ticket on our support site or write at vizsupport@poweronbi.com and we will contact you shortly to help you investigate and fix the problem.