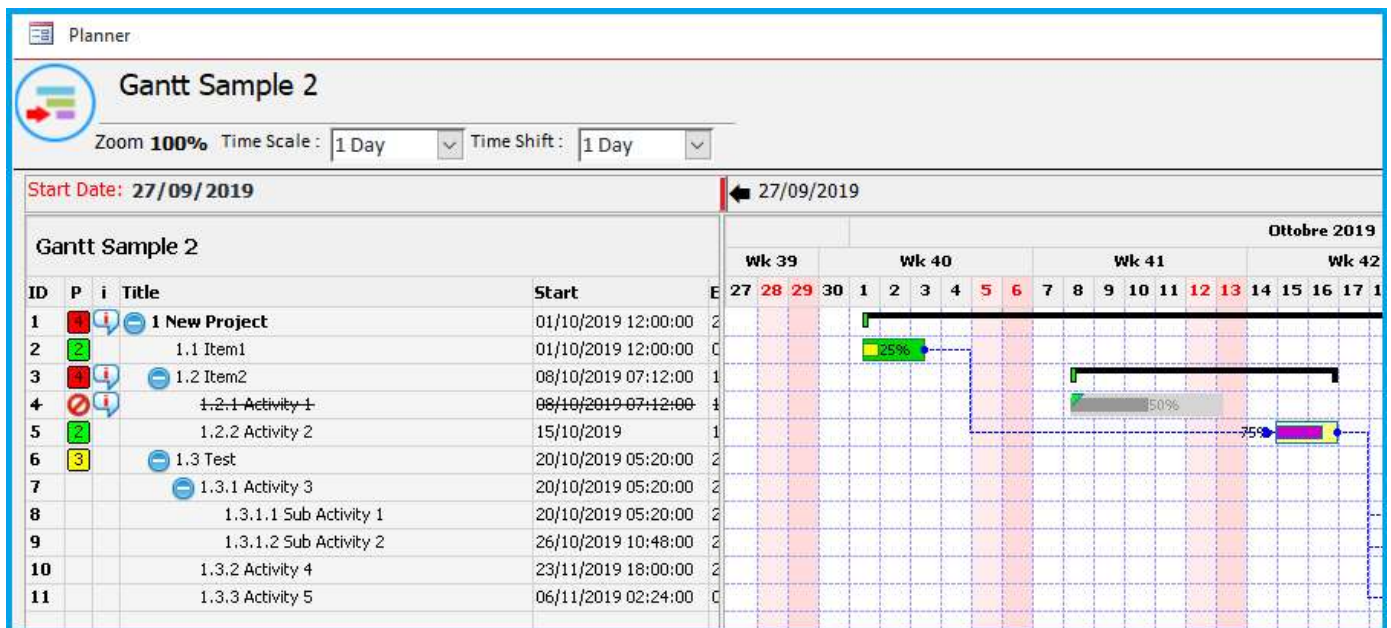


# GANTT

## USING GDI+



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# 1. INTRODUCTION

First, i apologize for english mistakes, the translation was built to allow minimal comprehension.

This project was built thanks to an impressive Class based on GDI+, created by:

Thierry GASPERMENT (Arkham46) <http://arkham46.developpez.com>

In the code you will find also a part of [JKP Application Development Services], because i developped also a GANTT TOOL with JKP Permission using MSFORM 2.O control, based on TreeView Example.

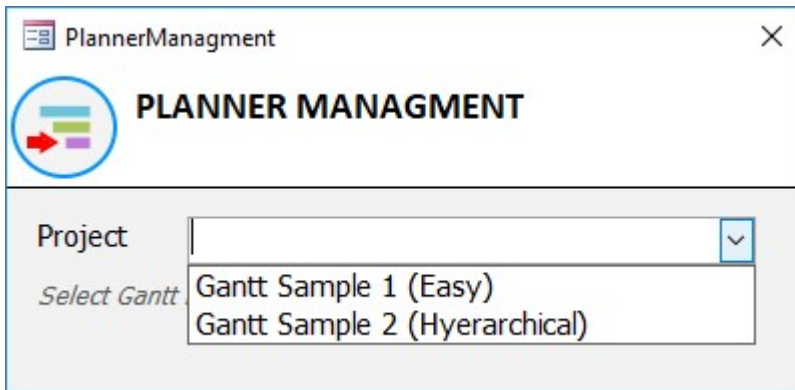
[An MSForms \(all VBA\) treeview for Access, Excel And Word](#)

The OOP approce was so similar that i could re-use the code in different parts.

The scope is to build a GANTT intrument in MsAccess, complete of graphical interface and Tools Options easy to share and implement in any project.

## 2. USAGE

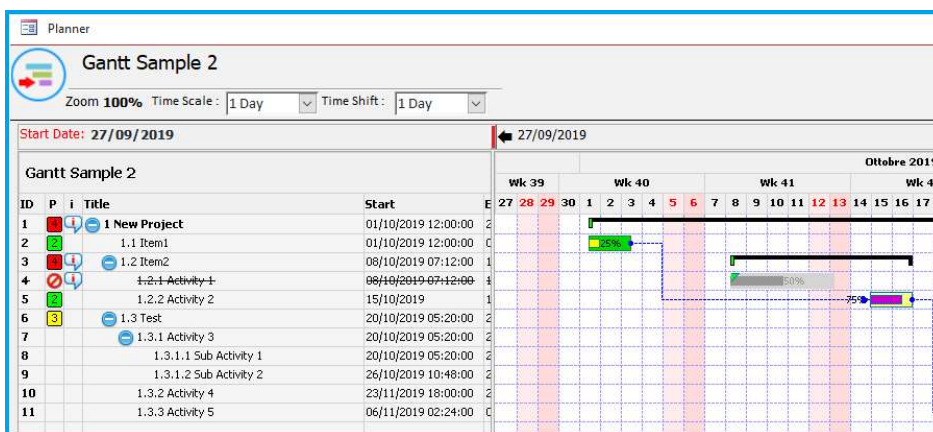
### 2.1. Main Form



This is only a Launcher Form, here you could choose an existing project or, insert a New one typing in the ComboBox.

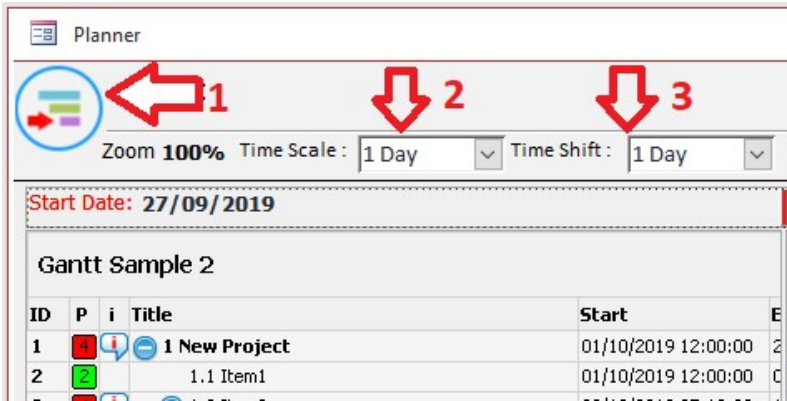
**NotInList()** Event, will provide to create a Project, and **AfterUpdate()** will open it

### 2.2. Planner Interface



Planner interface.

All function are inside this interface, here are built runtime Custom Pupup Menù in any different area, Fields side(on left), Planner Grid(on right) and Events Bar on Planner Area.



### Main Menù

Left Click on main Top-Left Icon to open Main Popup menù.

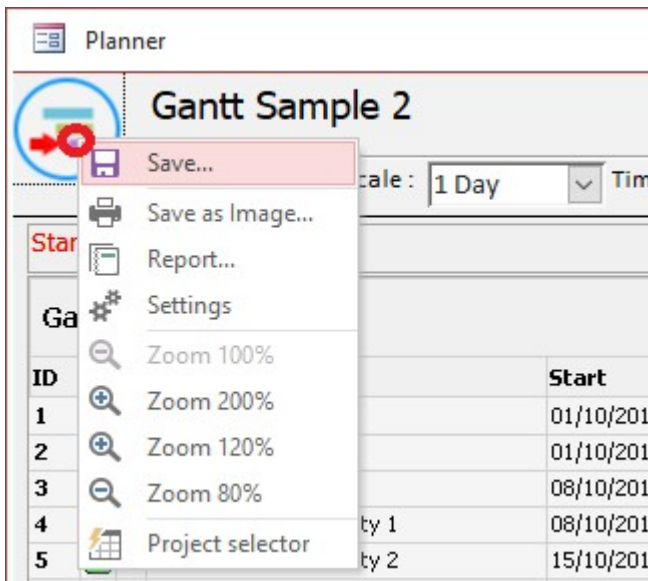
### Time scale

This option allow to change time definition of Planner Grid

### Time Shifting

This option set the Span of shifting in time.

## 2.3. Main Menù



Save all Events data changing

Save Planner as Image

Build Report A4/A3

Settings modification

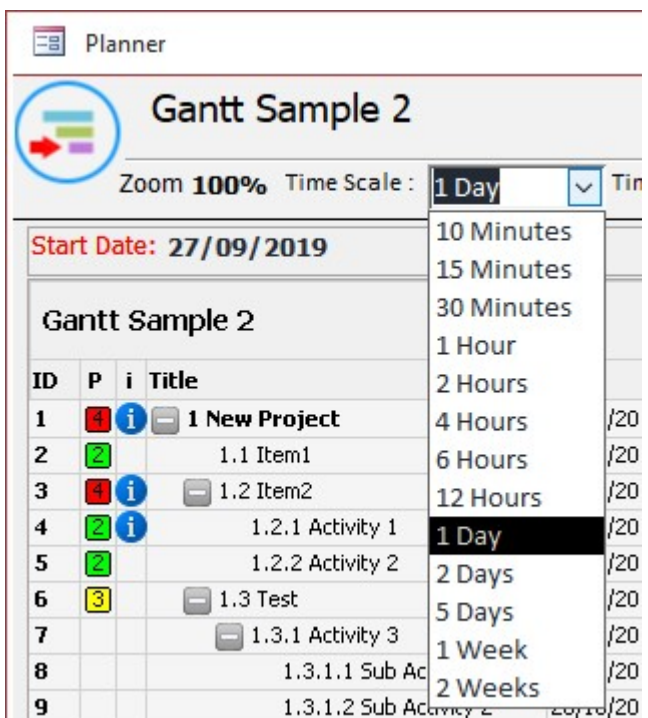
Zoom 100%

Zomm 200%

Zoom in/out [+/-20%] of Actual Level

Change Project

## 2.4. Time Scale



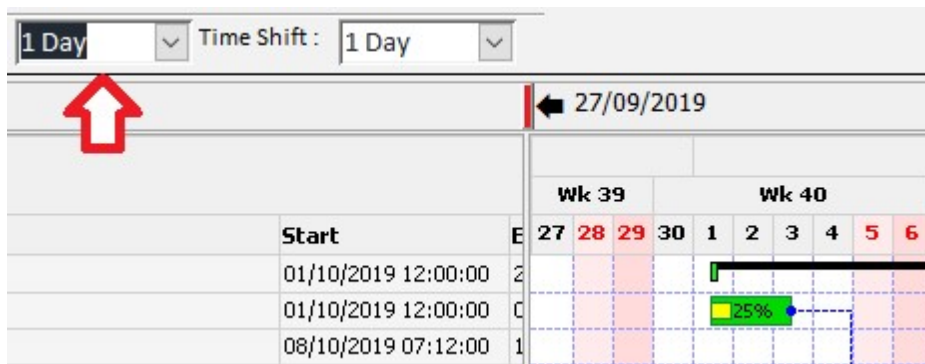
Define the Zoom in Time.

The Time Scaling is assigned to a single Column and match with the Bottom Header row(always visible).

Scaling time definition:

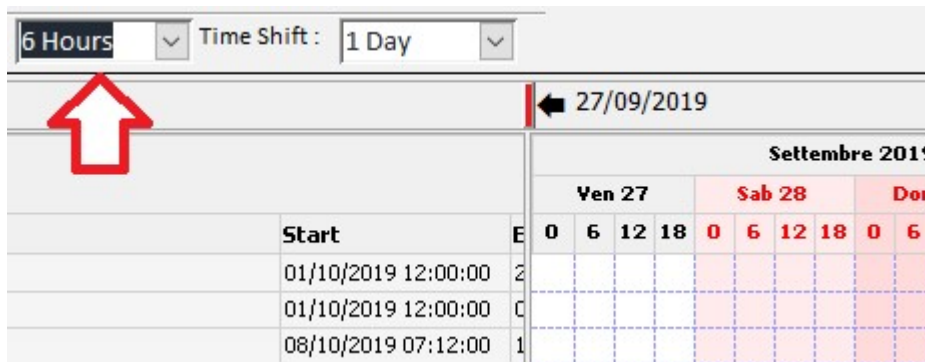
- 10 minutes
- 15 minutes
- 30 Minutes
- 1 Hour
- 2 Hours
- 4 Hours
- 6 Hours
- 12 Hours
- 1 Day
- 2 Days
- 5 Days
- 1 Week
- 2 Weeks

## Few sample og Time Scaling



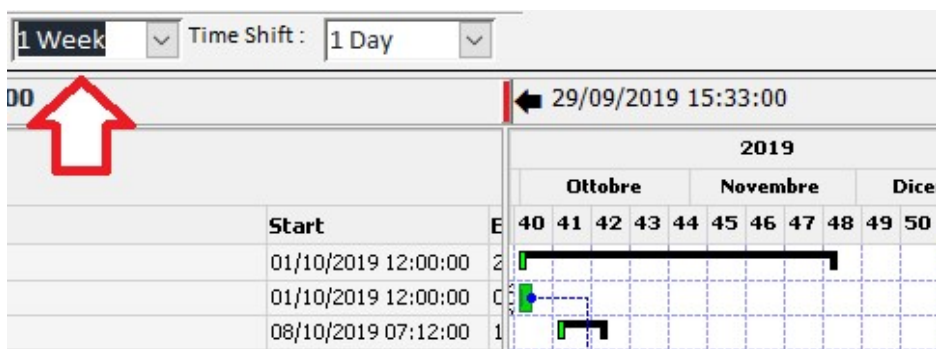
### Scale 1 Day

- Top Header [Mont Year]
- Middle Header [Week num]
- Bottom Header [1 Day]



### Scale 6 Hours

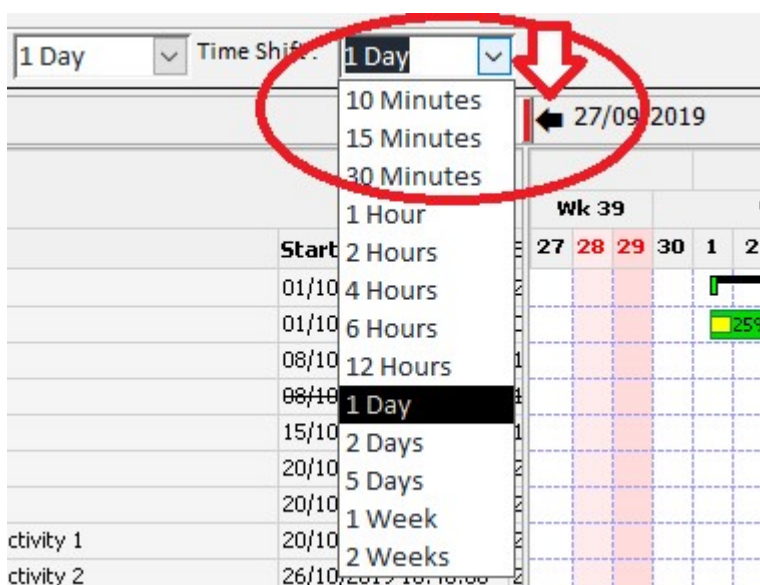
- Top Header [Mont Year]
- Middle Header [Day num]
- Bottom Header [6 Hours]



### Scale 1 Week

- Top Header [Year]
- Middle Header [Month]
- Bottom Header [Week num]

## 2.5. Time Shift



Define the Right/Left shift in Time.

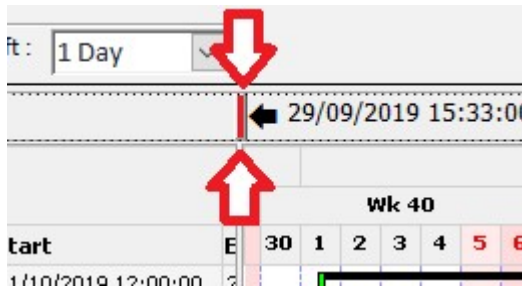
It has the same TimeScaling range definitions.

- 10 minutes
- 15 minutes
- 30 Minutes
- 1 Hour
- 2 Hours
- 4 Hours
- 6 Hours
- 12 Hours
- 1 Day
- 2 Days
- 5 Days
- 1 Week
- 2 Weeks

Clicking on Top Black Arrow you shift the planner in the past of the TimeShift period each click, on the right you have the same Black Arrow to move in the future



## 2.6. Planner Area Sizing



The planner is divided by two separate Control Image:

- Fields Area on the Left
- Planner Area on the Right

It's possible to re-size the dimension scrolling the Top red bar.

The movement it's limited Min÷Max to allow to visualize operations.

## 2.7. Form Planner Sizing

The Demo include Resize Management, so it's possible to RESIZE the form or maximize...

## 2.8. Fields(Area) & Planner(Area) Popup Menù

### 2.8.1. Fields Popup

ID	P	i	Title	Start
1	1	1	1 New Project	01/10/2019 12:00:00
2	2	1		01/10/2019 12:00:00
3	1	1		08/10/2019
4	2	1		08/10/2019
5	2	1		15/10/2019
6	3	1		20/10/2019 05:20:00
7				20/10/2019 05:20:00
8				20/10/2019 05:20:00
9				26/10/2019 10:48:00
10				23/11/2019 18:00:00
11				06/11/2019 02:24:00

Activate by right click on Fields Area, this context menù is built runtime and customized depending on Item where the mouse is over.

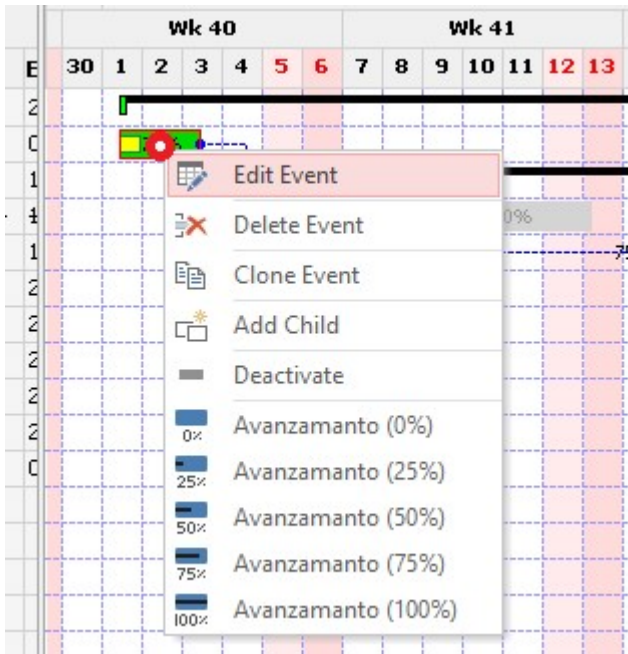
In this case the Item is ROOT, and we have to manage Move OUT capability.. not available because it's just ROOT, in the same time can't be a Child of anyone because this Item is the FIRST in the list... so we disable also MOVE IN.

Menù:

- Edit, open a specified Popup Form to manage the single Event properties
- Activate/Deactivate
- Move OUT, change the Level of item moving out Level=Level-1
- Move IN, make this item child of previous Item
- Delete Item, and ALL childs...
- Clone Item and ALL childs
- Add Root Item
- Insert Item Before active at the same Level
- Insert Item After active at the same level
- Insert Item al last position in the same level(if you select first child item of 10, you insert as 11th)
- Add child of...

If your Pointer is outside Row Items, the menù it's Limited to AddNew, as Root Item al last place.

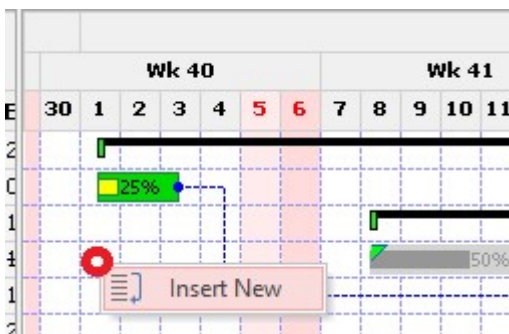
## 2.8.2. Planner Popup



Activate by right click on Event planner Area, this context menù is built runtime and customized depending on Event where the mous is over.

Menù:

- Edit, open a specified Popup Form to manage the single Event properties
- Delete Item, and ALL childs...
- Clone Item and ALL childs
- Add Child Item
- Activate/Deactivate
- (\*)Fast Progress editing... 25% Step  
Only if Event has NO CHILDREN

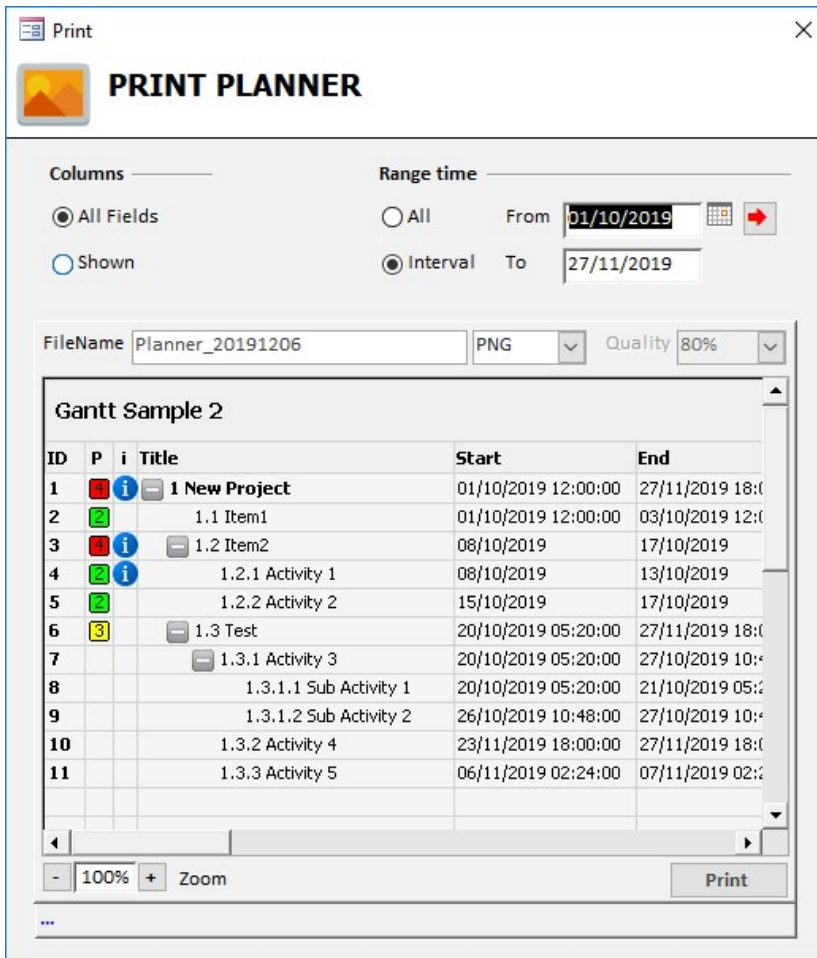


If your Pointer is not over an event, than it's on the GREED, the menù it's Limited to AddNew.

In this case will be added a new Event as Root Item at last place with DateINI equal to Start Planning date.

## 2.9. PopUp Forms

### 2.9.1. Save As Image



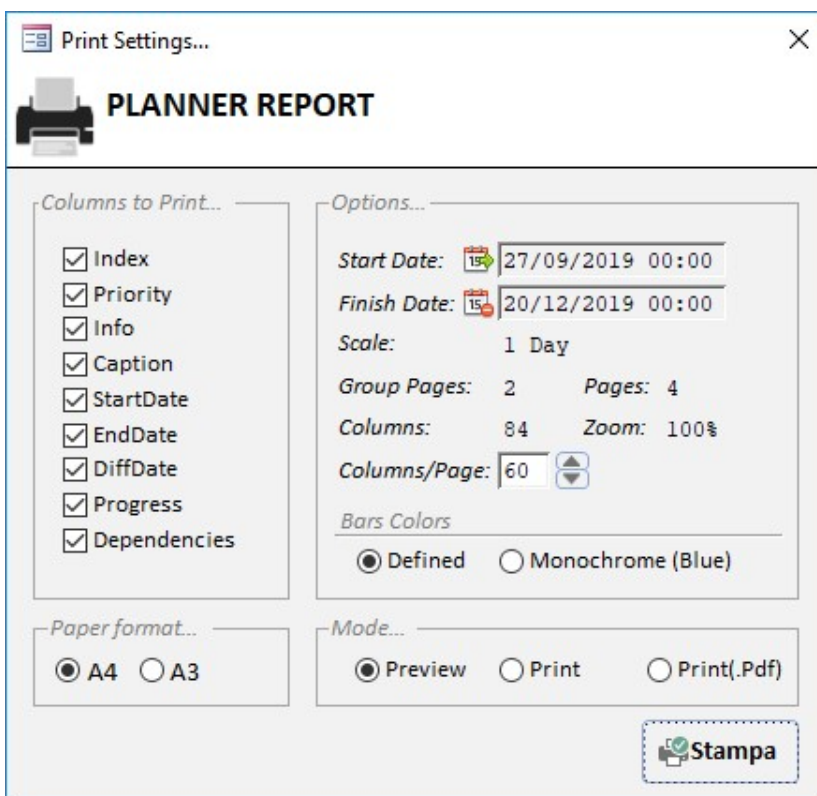
Export the GANTT activities as Image.

#### OPTIONS

- Fields Area Chois include ALL Columns or Visualized...
- Planner Area include the period selection or all Planner area.
- Define the format of image, and if JPG the Quality.

The PATH is the same of Application.

### 2.9.2. Report Settings



Generate a Report

#### OPTIONS

- Define the Columns in the Fields Area
- Time-Period to print
- Column per Page, similar to Zoom effect.
- Colored or Monochrome(blue)
- Format A4 or A3
- Print/Preview or PDF...

The application will calculate the Groups Pages and pages required.



### 2.9.3. Settings

TGNT\_Settings

**Settings**

ProjectID: 12 Modified: 11/10/2019 12:35:06

Project Name:

General Fields Column Planner

StartDate:

Headers Type:

Scale factor is referred to Bottom Header Row

Scale:

Top	1 Month
Middle	1 Week
Bottom	1 Day

ShowToolTips

**Headers**

Font:

BackColor:

Pre-holiday:

Holiday:

Row Height:

All Day:

Working Time:  ÷

#### GENERAL

- Start Date, define the Init of calendar
- HeaderType, you can chose 3 Element in the Header, but you can't Remove it, The BottomHeader is required to have time reference.
- Scale, define the Time(in minute) per Column
- ShowToolTips, allow to show Descriptions details as a Popup near the event in the Planner... or in Fields Column
- Header Font settings

TGNT\_Settings

**Settings**

ProjectID: 12 Modified: 11/10/2019 12:35:06

Project Name:

General **Fields Column** Planner

**Columns settings**

N°	Source	Caption	Width	Aligne
1.	<input checked="" type="checkbox"/> Index	ID	25	Left
2.	<input checked="" type="checkbox"/> Priority	P	18	Center
3.	<input checked="" type="checkbox"/> Info	i	18	Center
4.	<input checked="" type="checkbox"/> Caption	Title	270	Left
5.	<input checked="" type="checkbox"/> StartDate	Start	115	Left
6.	<input checked="" type="checkbox"/> EndDate	End	115	Left
7.	<input checked="" type="checkbox"/> DiffDate	dT	30	Center
8.	<input checked="" type="checkbox"/> Progress	%	30	Center
9.	<input checked="" type="checkbox"/> Dependenci	Rel.	40	Center

Priority Icon

Show

1	<input type="text" value=""/>	...
2	<input type="text" value=""/>	...
3	<input type="text" value=""/>	...
4	<input type="text" value=""/>	...
5	<input type="text" value=""/>	...

**Fields Font settings**

FontName:

Vert. Align:  BackColor:

Expanders:  Progress Level  Grid Line Color:

#### FIELDS COLUMN

- Define fields, Columns Width and caption to show
- Define the Priorities Colors
- Font Settings
- Show(Expanders Icon, if Hyrarchical you have to Forse to TRUE)
- Show Progression Level Index on the Left of Caption
- BackColor/GridColor

TGNT\_Settings

**Settings**  
ProjectID: 12 Modified: 11/10/2019 12:35:06

Project Name: Gantt Sample 2 (Hyerarchical)

General Fields Column **Planner**

**Grid area**

BackColor  ShowGridOriz

Column Width 20 ShowGridVert

RowHeight 18 GridColor

**Events**

Reducer 80% Progress [%]  Progress Bar

Resources  Rounded

**Default Color**

BackColor

BorderColor

ProgressColor

**Deactivate Color**

BackColor

BorderColor

ProgressColor

**Dependencies**

Show

Width 1

Type DASH

## PLANNER

### GRID AREA

- Define planner BackColor
- ColumnWidth in Pixels
- RowHeight in Pixels
- Show, or Not, Horizontal/Vertical Grid
- Define grid Color

### EVENTS

- Reducer, is a [%] of RowHeight
- Progress [%], visualize Progress in %
- Progress Bar (draw ProgressBar inside Event)
- S
- Resource, if assigned, show in the planner the Resources
- Rounded, draw Events as Rounded Bar
- Colors Settings

### Dependencies

- Show Connection Line
- Line Width in Pixels
- Line Type (Dash, Dot...)

### 3. [TABLES]

- ✓ [TGNT\_Data] (Store all Data Planning Events)
- ✓ [TGNT\_Report] (Used to Print Report, Empty every time)
- ✓ [TGNT\_Settings] (Store all Projects Settings)

### 4. [FORMS]

- ✓ [GNNT\_MAIN] (*Project Selection/New Project...*)
- ✓ [GNNT\_Planner] (*This is the Planner, do not OPEN StandAlone...*)
- ✓ [GNNT\_EventDetail] (*Edit single Even*)
- ✓ [GNNT\_PrintImage] (*Export Planner as Image with some settings*)
- ✓ [GNNT\_PrintTool] (*Generate Report/PDF ...*)
- ✓ [GNNT\_Settings] (Project Settings)

### 5. [REPORTS]

- ✓ [GANNT\_A4]
- ✓ [GANNT\_A3]

### 6. [MODULE] (standard)

- ✓ [basColorPickerVBA7]
- ✓ [basDateManupulation]
- ✓ [basEnumType]
- ✓ [basFormError]
- ✓ [basMenuPopup]
- ✓ [basPlanning]
- ✓ [mdlObjectPointers]

### 7. [MODULE] (Class)

- ✓ [clGdiplus] v3.1 (09/10/2019) *Thierry GASPERMENT (Arkham46)*
- ✓ [clsGANTT] *This is the CORE*
- ✓ [clslBox] *Class ImageBox*
- ✓ [clsItem] *Hyerarchical Event*
- ✓ [clsItems] *MasterClass Events*
- ✓ [clsReportEvent] *Used to Draw RelationShips Dependencies in Report*
- ✓ [clsReportGrpPage] *Used to Draw RelationShips Dependencies in Report*
- ✓ [clsReportPage] *Used to Draw RelationShips Dependencies in Report*

### 8. [Reference]

No specific external Reference required

- ✓ [ACE DAO] **Version 16.0**