



Training workshop on Microsoft Project 2016 / 2019



Trainer : Sujoy Dutta, PMP, MCP

www.knowettlelearning.com



Sujoy Dutta, PMP, MCP

High Impact International Project Management Trainer & Consultant for
PMP, CAPM, PgMP, MS Project, Project Online, Primavera P6 and Scheduling Services

4,200+ Project
Managers Trained

200+ PMP
Workshops

200+ PM Concepts
Workshops

300+ MS Project
Workshops

25+ Project Online
Workshops

130+ Primavera
Workshops

Places Trained & Consulted

- India
- Middle East (UAE, KSA, Oman)
- Singapore
- Philippines
- US, UK, Europe, Canada, Australia (via online)

Corporates Trained

- AMEX
- Accenture
- TATA Advanced
- KPMG
- AON Hewitt
- Honda Motors
- Baxter India

PSUs Trained

- ONGC
- IFFCO
- NTPC
- DRDO
- MSME
- Power Grid Corp.

Scheduling & Roll out

- Genpact
- ICT
- Mahagun
- Landcraft
- SA Buildcon
- HT Media Ltd.
- Plus more..



Career Timeline

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Start	Programmer	Business Analys		Technical Architect						Project & Program Management																		Finish			
28 Mar '90	28 Mar '90 - 11 J	11 Jun '92 - 26		26 Aug '94 - 17 Sep '99						17 Sep '99 - 11 Sep '13																		27 Apr '20			

Training

23 Feb '06 - 24 Apr '20

Project Management Institute

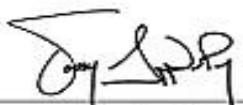
THIS IS TO CERTIFY THAT

Sujoy Dutta

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE
IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND
RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE



Tony Appleby
Chair, Board of Directors



Sunil Prashara
President and Chief Executive Officer



PMP® Number: 1251048
PMP® Original Grant Date: 21 April 2009
PMP® Expiration Date: 20 April 2021

 Project
Management
Institute.

Sujoy Dutta, PMP, MCP- My Credentials

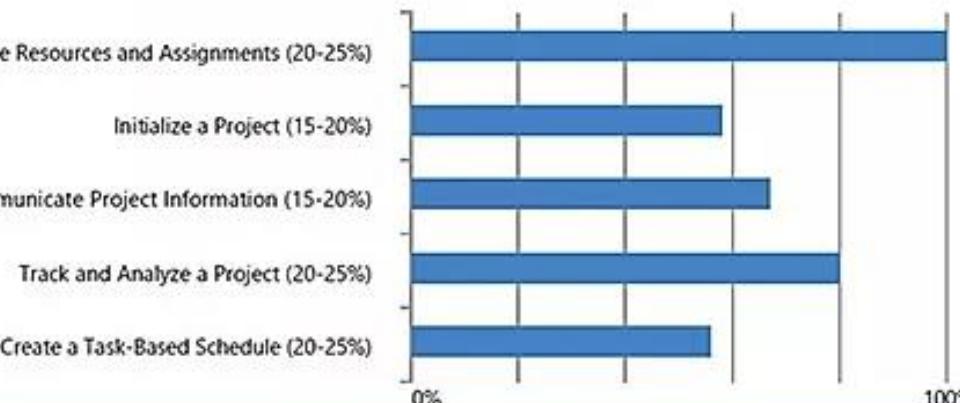
Microsoft

74-343
Managing Projects with Microsoft Project 2013

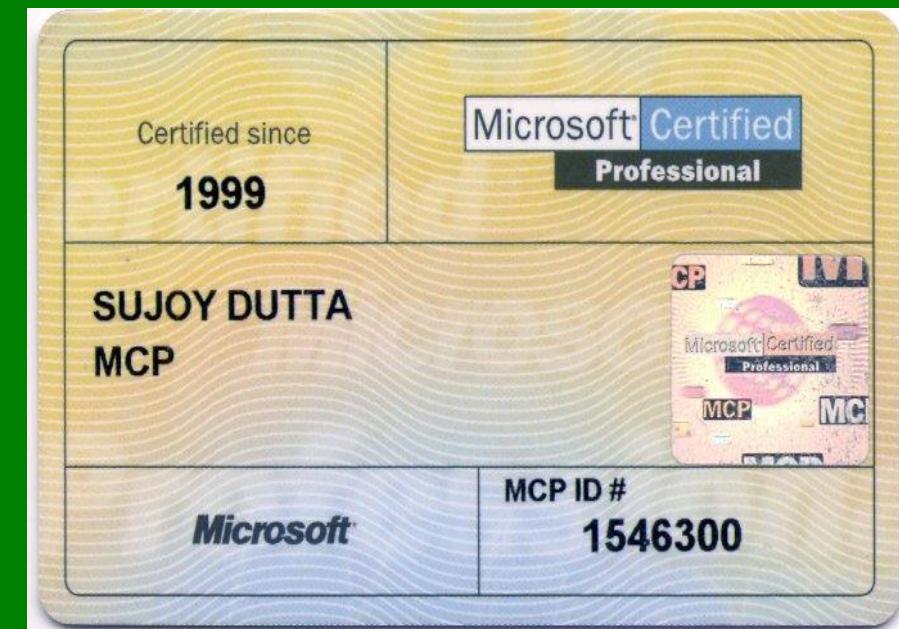
 Candidate: Sujoy Dutta
Candidate ID: MS0618608535
Result: PASS
Passing Score: 700
Your Score: 737

Date: 07/28/2019
Site Number: 82046
Registration: 358889864

Performance by exam section
Each section, and its corresponding percentage of the exam, appears to the left of the chart. The length of the bars represents your section-level performance. Shorter bars reflect weaker performance, and longer bars reflect stronger performance.



Section	Percentage	Performance (%)
Manage Resources and Assignments	20-25%	100%
Initialize a Project	15-20%	~75%
Communicate Project Information	15-20%	~85%
Track and Analyze a Project	20-25%	~85%
Create a Task-Based Schedule	20-25%	~75%



Sujoy Dutta, PMP, MCP- My Credentials

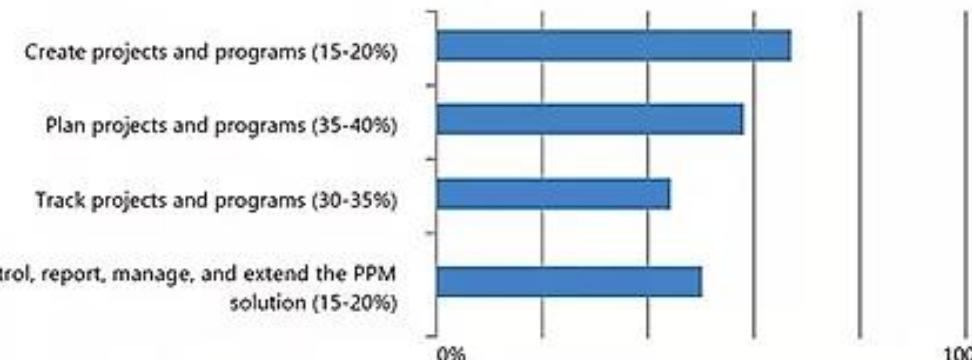
Microsoft

348
Managing Projects and Portfolios with Microsoft PPM

Candidate: Sujoy Dutta
Candidate ID: MS0618608535
Result: PASS
Passing Score: 700
Your Score: 733

Date: 07/28/2019
Site Number: 82046
Registration: 358891258

Performance by exam section
Each section, and its corresponding percentage of the exam, appears to the left of the chart. The length of the bars represents your section-level performance. Shorter bars reflect weaker performance, and longer bars reflect stronger performance.



Exam Section	Percentage
Create projects and programs	15-20%
Plan projects and programs	35-40%
Track projects and programs	30-35%
Control, report, manage, and extend the PPM solution	15-20%



Ground Rules during the training

1. Relax and smile
2. Please set your mike on mute
3. Avoid experimenting, please do exactly the same step by step as displayed on my screen as it is not possible to trouble shoot your screen if something goes wrong.
4. Discussion possible with one person at a time
5. Please raise hand symbol
6. Urgent Office meetings – at your own risk
7. If possible watch my screen on tab / mobile and practice on your laptop.
8. Break times as per team decision
 - a) 11:30 am to 11:45 am (15 minutes)
 - b) 1:30 pm to 2:15 pm (Lunch) (45 minutes)



Trainer Introduction : Sujoy Dutta- PMP, MCP, MCA



With PMP Trainees at Knowlett Learning, NOIDA

Trainer Introduction : Sujoy Dutta- PMP, MCP, MCA



With Project planning Team of Azure Solar Power, New Delhi, India

Trainer Introduction : Sujoy Dutta- PMP, MCP, MCA





Trainer Introduction : Sujoy Dutta- PMP, MCP, MCA





Pre-requisites



- Laptop / PC with 8 GB RAM, Win 7/ Win 10 O/s, 20 Gb available hard disk space
- Project 2019 (2016) Standard or Professional
- Project Standard is the entry-level desktop application with which you can create and modify plans.
- Project Professional includes all the functionality of Project Standard plus a few additional features you can use to create and modify plans. In addition, Project Professional can connect to Project Online, Project Web App (PWA), the browser-based interface of Microsoft Project Server.
- Project Online account for Project Online training



Training Outline



1. Quick Introduction to Project and Project Management
2. Introduction to Microsoft Project 2016/ 2019
3. Create and modify calendars
4. Defining Tasks
5. Establish dependencies and Organize Tasks using Group Summary and Milestone
6. Understand how the rescheduling of task(s) affects the overall delivery schedule
7. Understand and appreciate the importance of tasks on the critical path
8. Defining Resources & Resource listing in Resource Sheet
9. Assigning Resources to Tasks
10. Baseline project, update progress information



Training Outline



11.Understand the impact of scope, time, and cost changes using TimeLine

12. Generating Dynamic Reports of Project information

13.Refining and Formatting Project Details

14.Case Study

15.Setting Base line and Tracking Project Progress

16.Viewing & Printing Reports

17.Working with Multiple Projects

18.Cool Tips and Tricks

Introduction to Project and Project Management

What is a Project ?

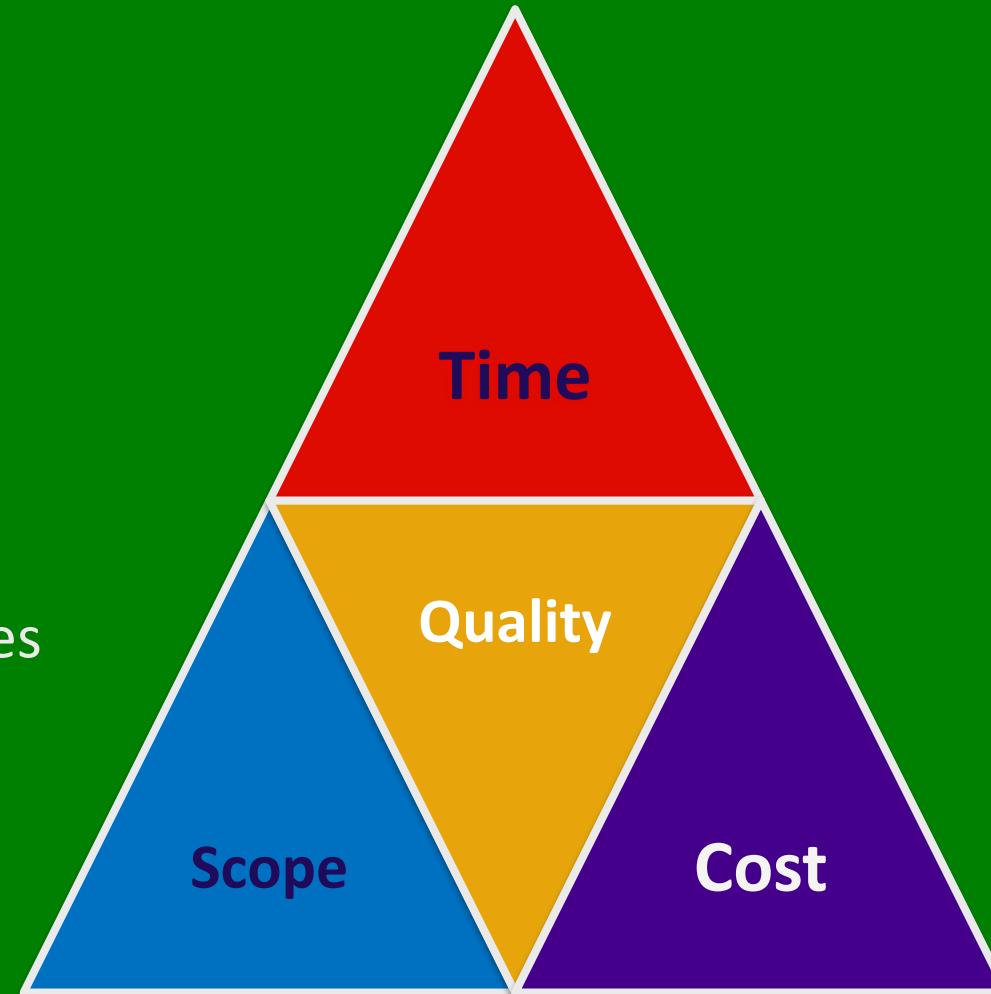


Any ideas anybody?

What is Project Management ?



1. Is it science or art?
2. Why does the top management of companies care so much about it?
3. What is triple constraint ?
4. Why do "I" need this training ?





Introduction to Project and Project Management

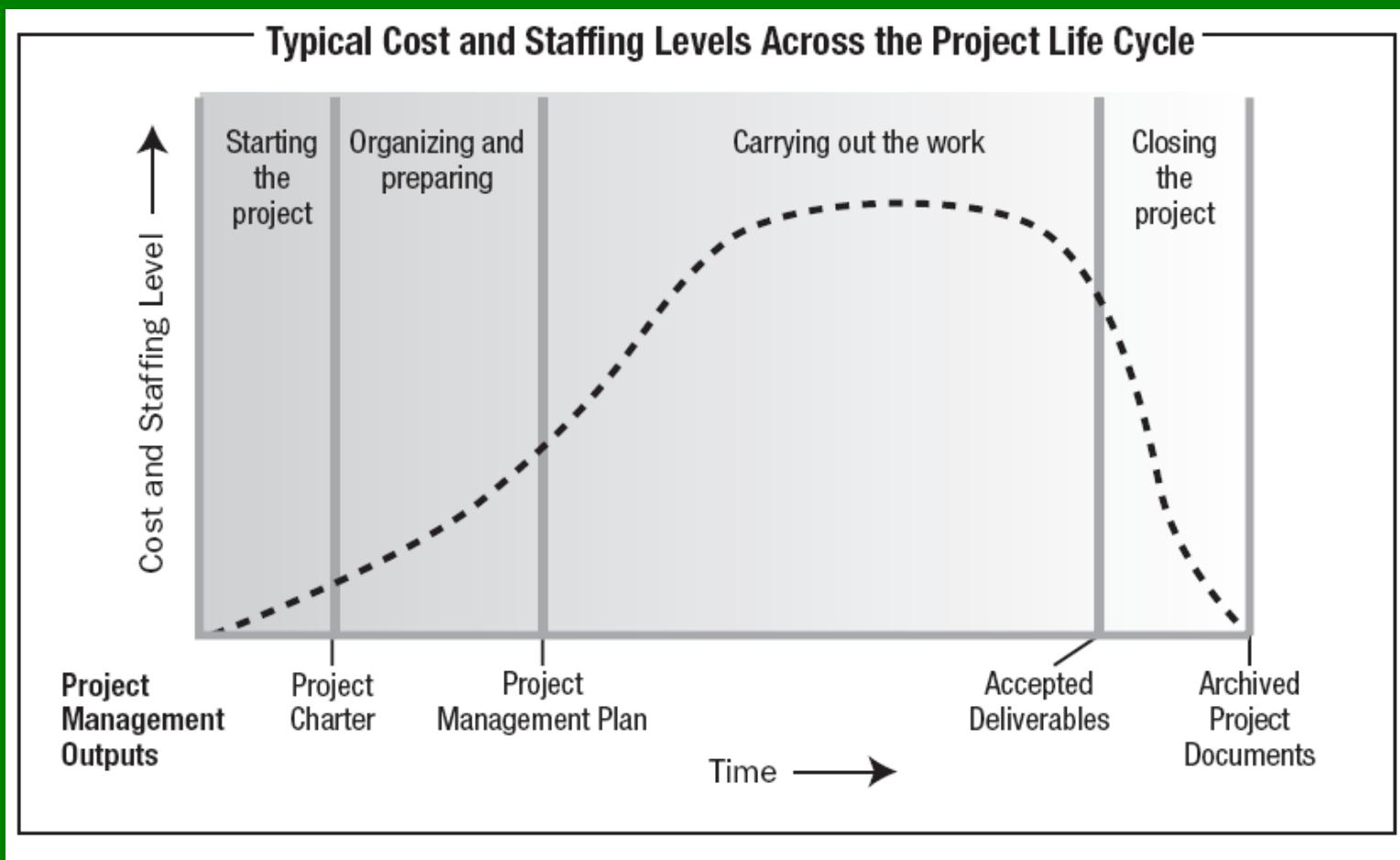


1. Project management is a broadly practiced art and science
2. The top management wants to ensure timely delivery of customer order as per scope with profit
3. Time, Cost and Scope
4. Why do “I” need this training ?
 - a) I want to be able to plan the customer delivery in a more predictable and managed fashion
 - b) I want to identify the key constraints which might affect timely delivery
 - c) I want to be able identify an alternative solution to a task/component well before it becomes a big blocker to the delivery
 - d) I want to track the progress of my project as compared to the baseline
 - e) I want to use a more appropriate tool for project scheduling...

Projects fail in the beginning not at the end !

Introduction to Project and Project Management

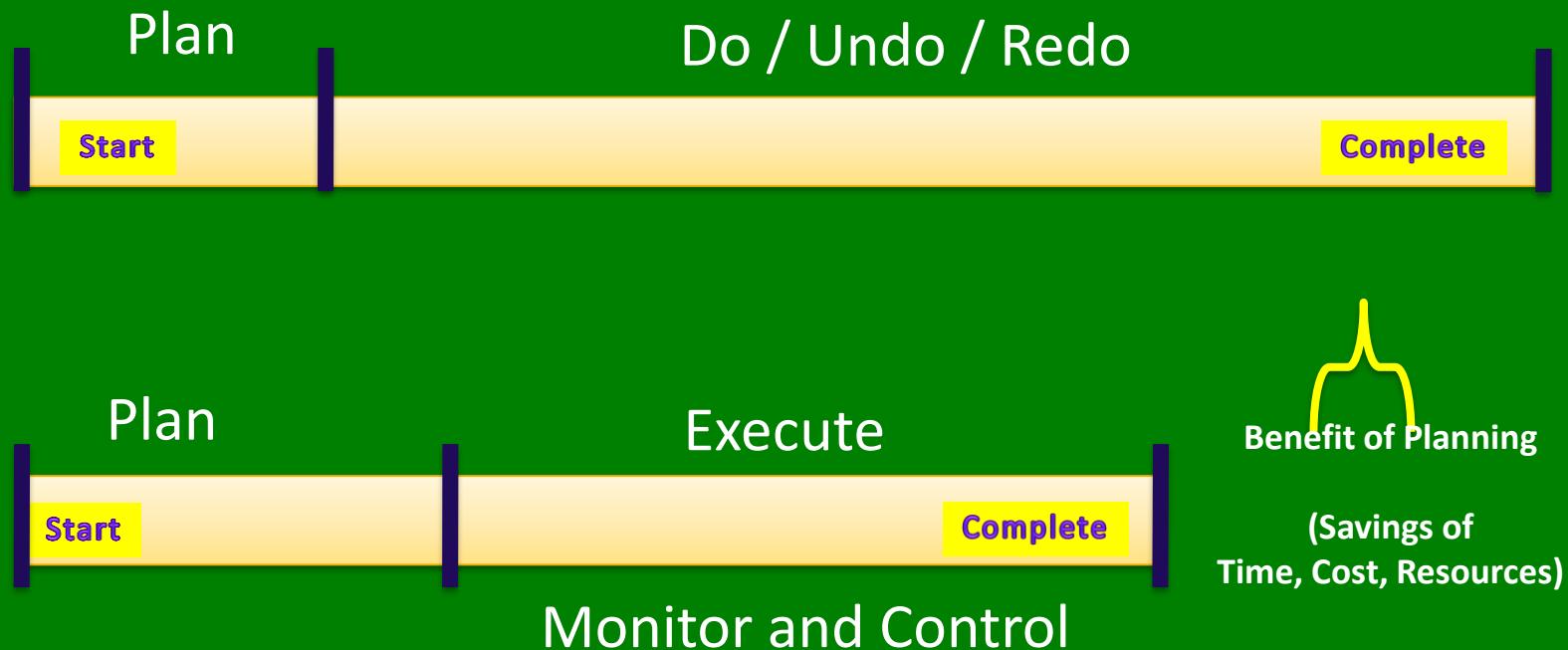
What does a typical project life cycle looks like ?



Expert advice : Complexities grow as the project progresses, so it is wiser to plan ahead

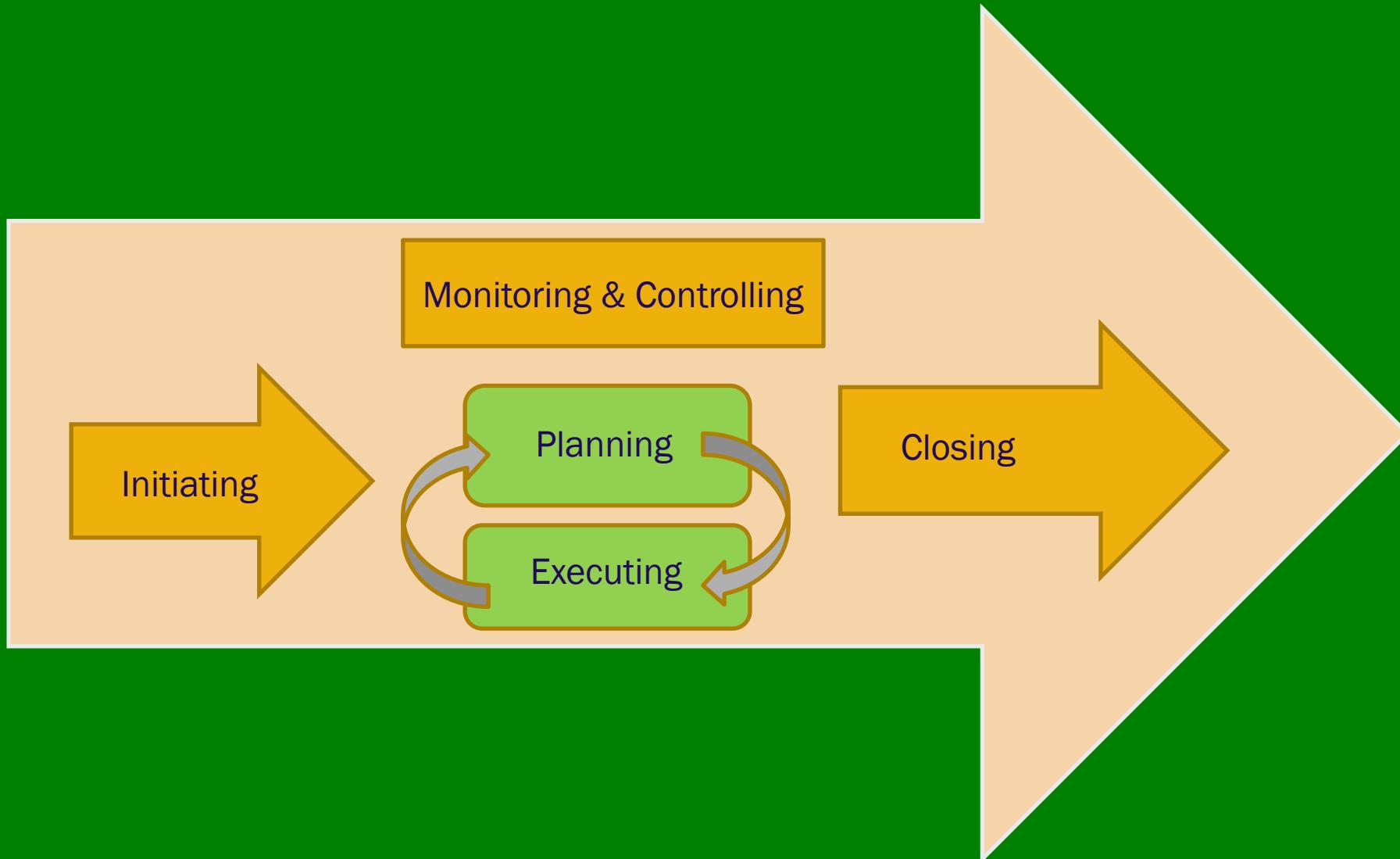


Benefits of Planning



The real size of benefit maybe be even more, maybe your client and the whole business !

Interaction between Process Groups



Introduction to Project and Project Management

The ten knowledge areas of Project Management

1. Integration Management
2. **Scope Management**
3. **Time Management**
4. **Cost Management**
5. Quality Management
6. Human Resources Management
7. Communication Management
8. Risk Management
9. Procurement Management
10. Stakeholder Management





Introduction to Microsoft Project 2019

The best project management tool in the world can never replace your good judgment and experience. However, the tool can and should help you accomplish the following:

1. Track all the information you gather about the work, duration, costs, and Resource requirements for your project.
2. Visualize and present your project plan in standard, well-defined formats.
3. Schedule tasks and resources consistently and effectively.
4. Exchange project information with other Microsoft Office System applications.
5. Communicate with resources and other stakeholders via reports
6. Helps project manager, retain ultimate control of the project.
7. Manage projects using a program that looks and feels like other desktop productivity applications.

Introduction to Microsoft Project

Why MS Project has become so widespread ?

What's under the hood ?

- Scheduling Engine !

What is it and what does it do?

- It is a computational brain that can handle issues such as ripple effects when task 1 in a 10,000-task sequence changes its start date. This scheduling engine can also account for nonworking time such as weekends when calculating a task's start and finish dates. Applications such as Excel and Outlook might have a place in your project management toolbox, but to be really successful you'll need a scheduling engine such as MS Project.





Microsoft Project new features 2019

New features in MS Project 2019

More flexible timelines

Better control over resource scheduling

Do things quickly with Tell Me

Resource Engagements

Resource Capacity heat maps

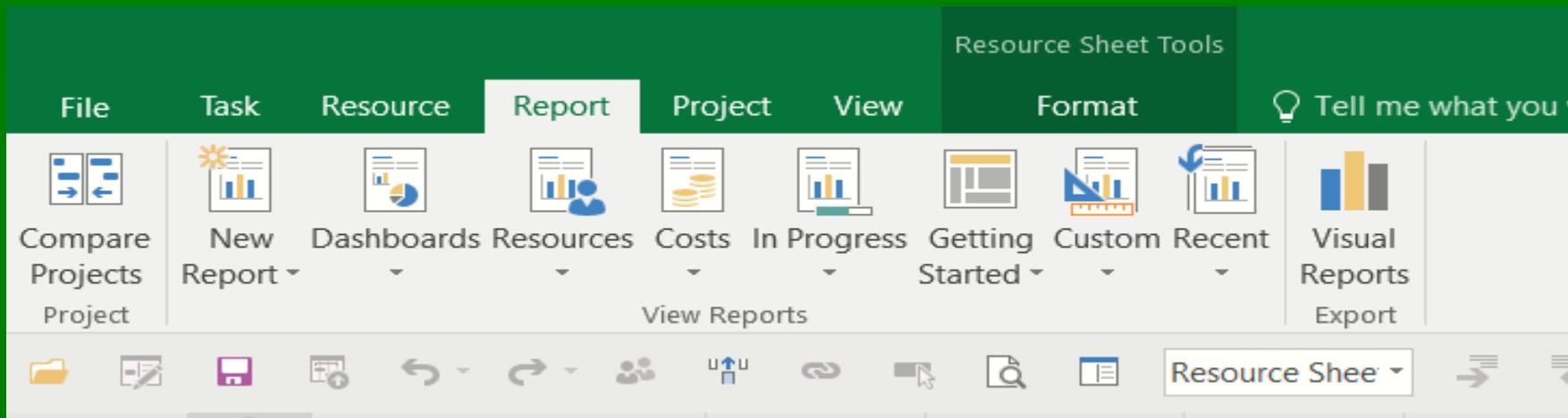
Multiple Named Timelines

Read/Write Office Add-ins



Microsoft Project 2019 Features

Dynamic Reporting

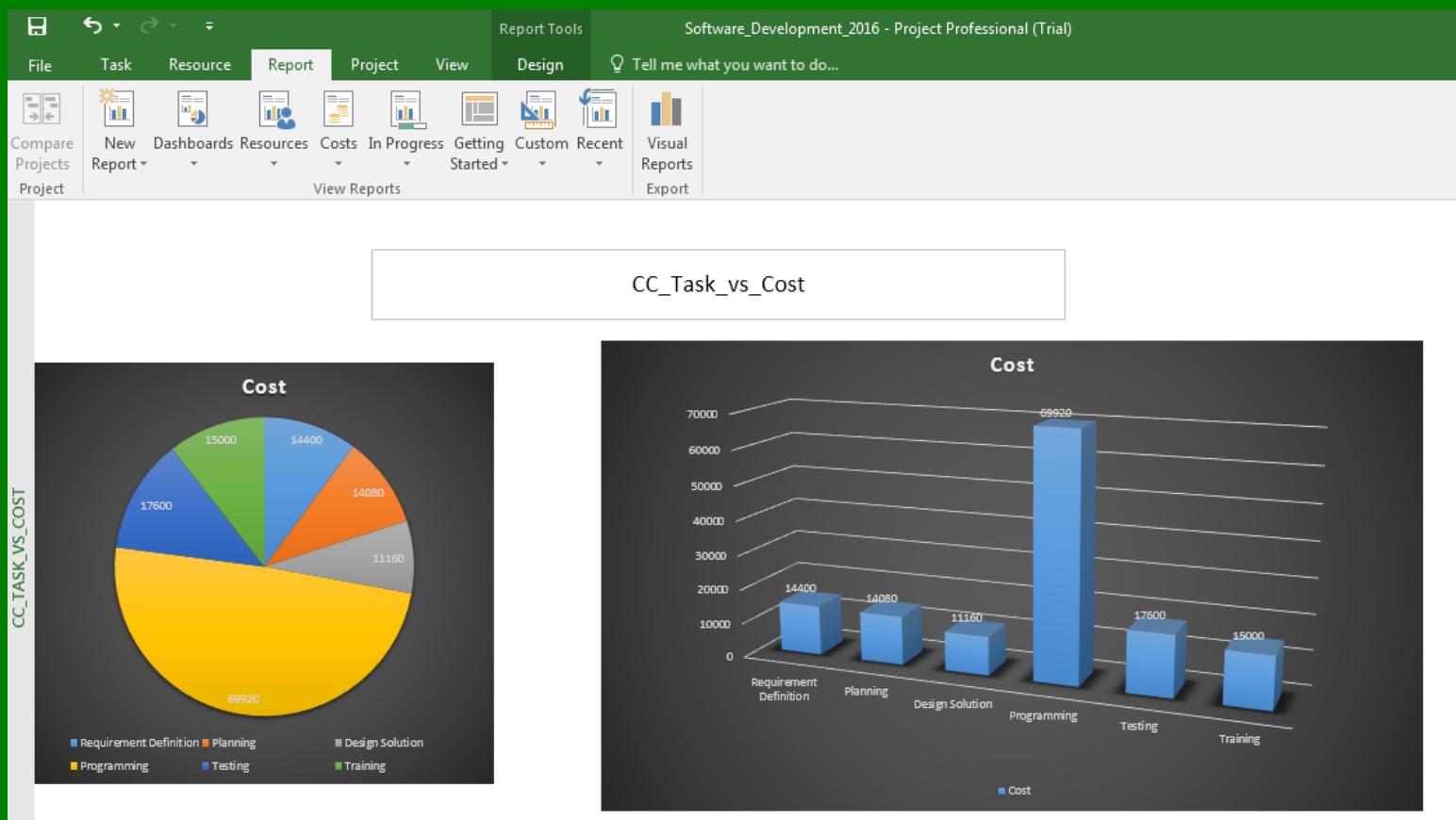


The new reports feature includes a dynamic mix of tables, charts, and textual content, and it's highly customizable.



Microsoft Project 2019 Features

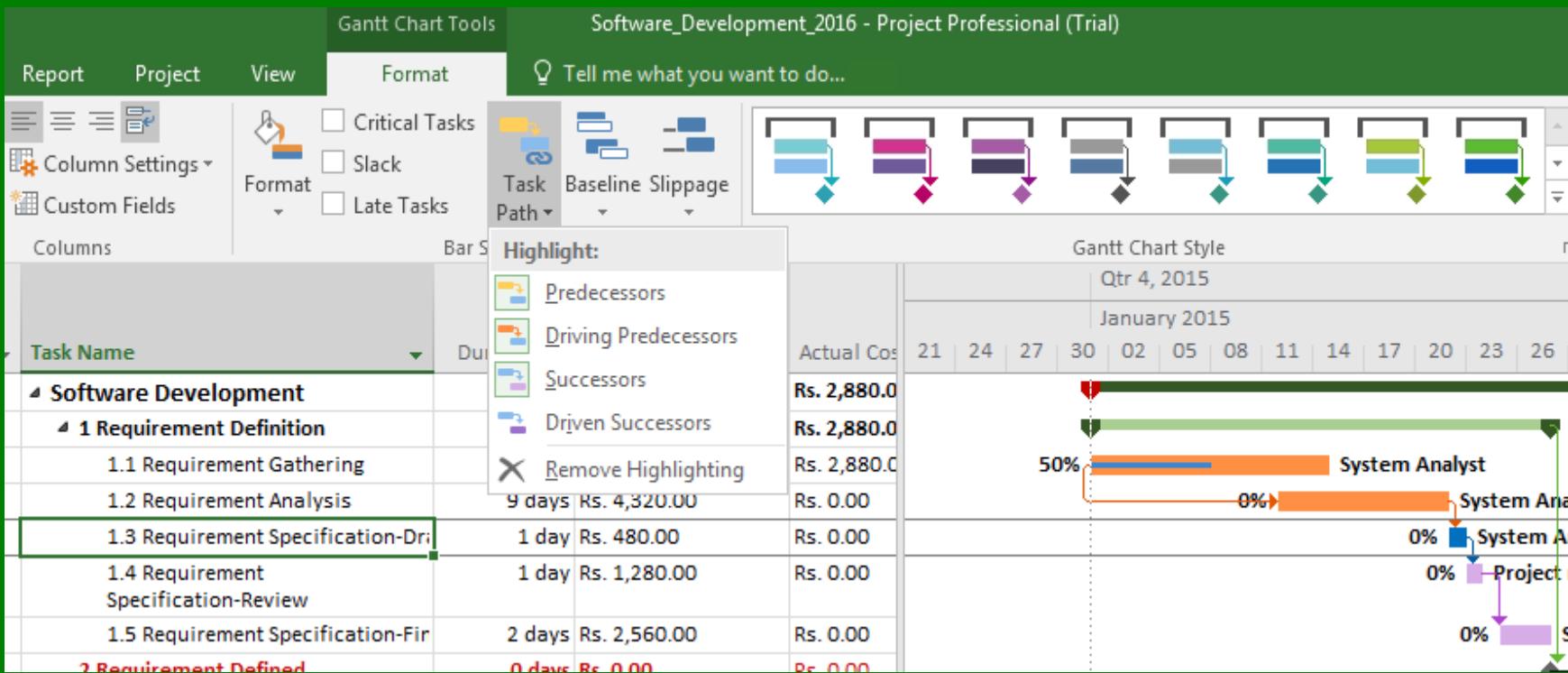
Dynamic Reporting





Microsoft Project 2019 Features

Task Path



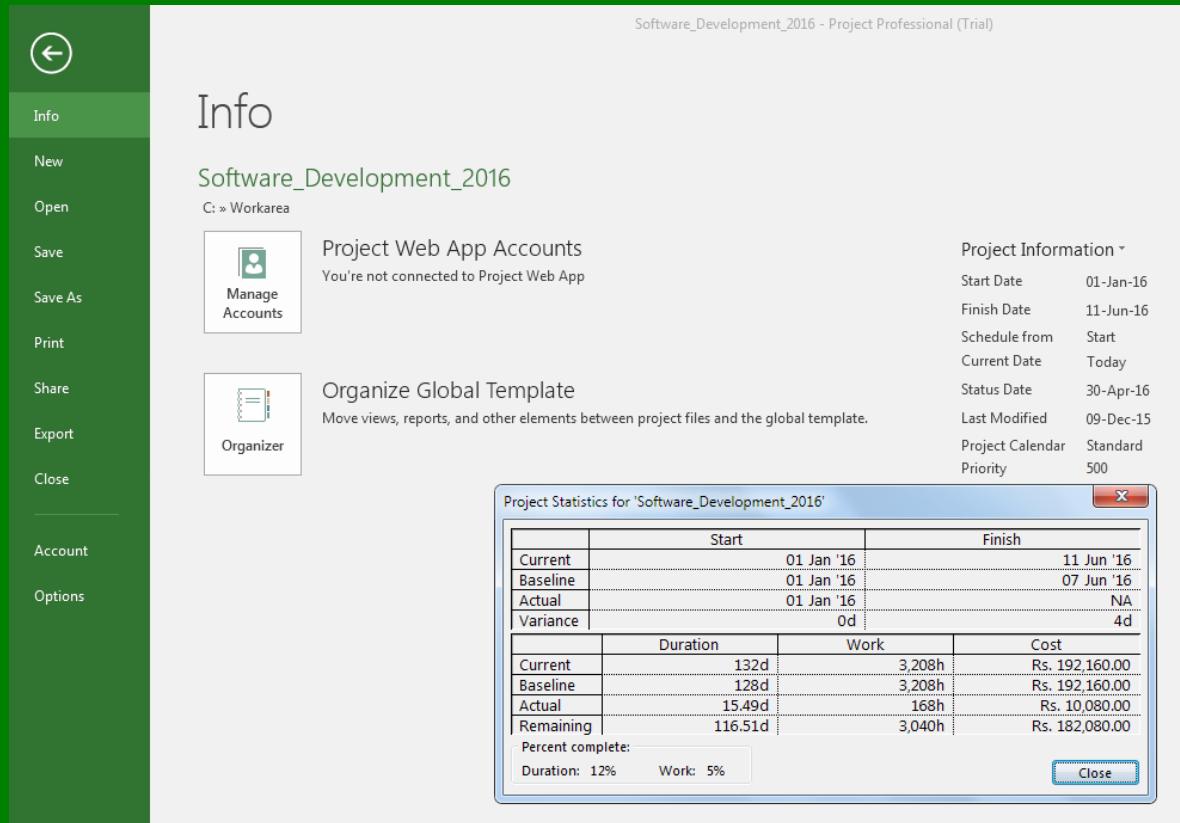
MSP 2019 makes it easy to keep track of the predecessor tasks that affect the scheduling of their successor tasks by visual identification.



Microsoft Project 2019 Features



Backstage view

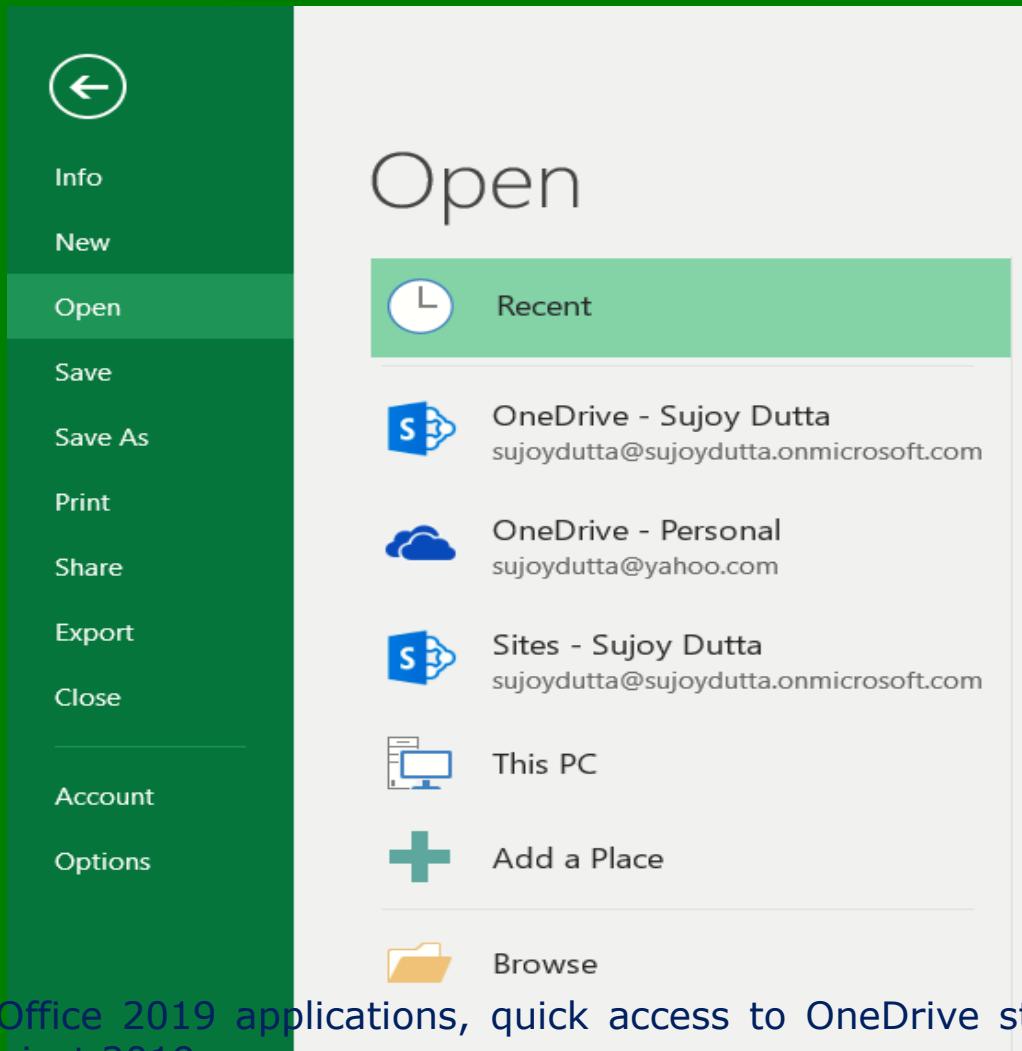


The Microsoft Office Backstage is part of the Fluent UI and a companion feature to the ribbon. The Backstage view, which can be accessed from the File tab, helps you find frequently used features for managing your Microsoft Project files.



Microsoft Project 2019 Features

OneDrive Integration

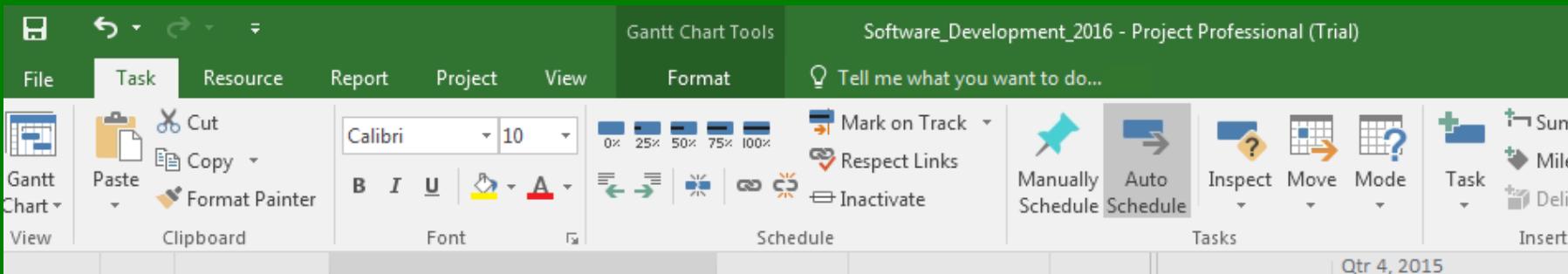


Like other Microsoft Office 2019 applications, quick access to OneDrive storage is now integrated into the Project 2019.



Microsoft Project 2019 Features

Fluent UI (Ribbon Menu)



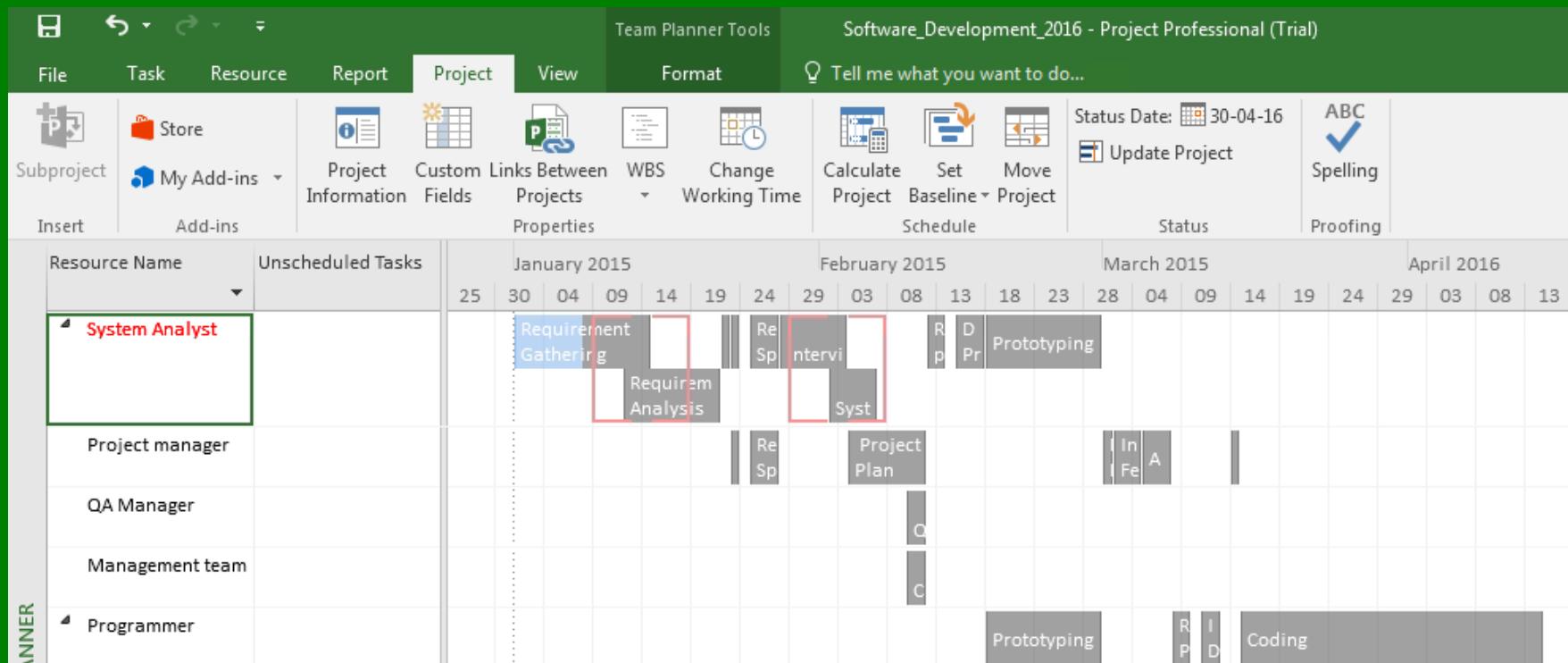
The Project 2019 user interface is redesigned with subdued colors.

Introduced in the 2007 Microsoft Office system, the Fluent UI is designed to make it easier for people to find and use the full range of features that Office applications provide, and to preserve an uncluttered workspace.



Microsoft Project 2019 Features

Team Planner



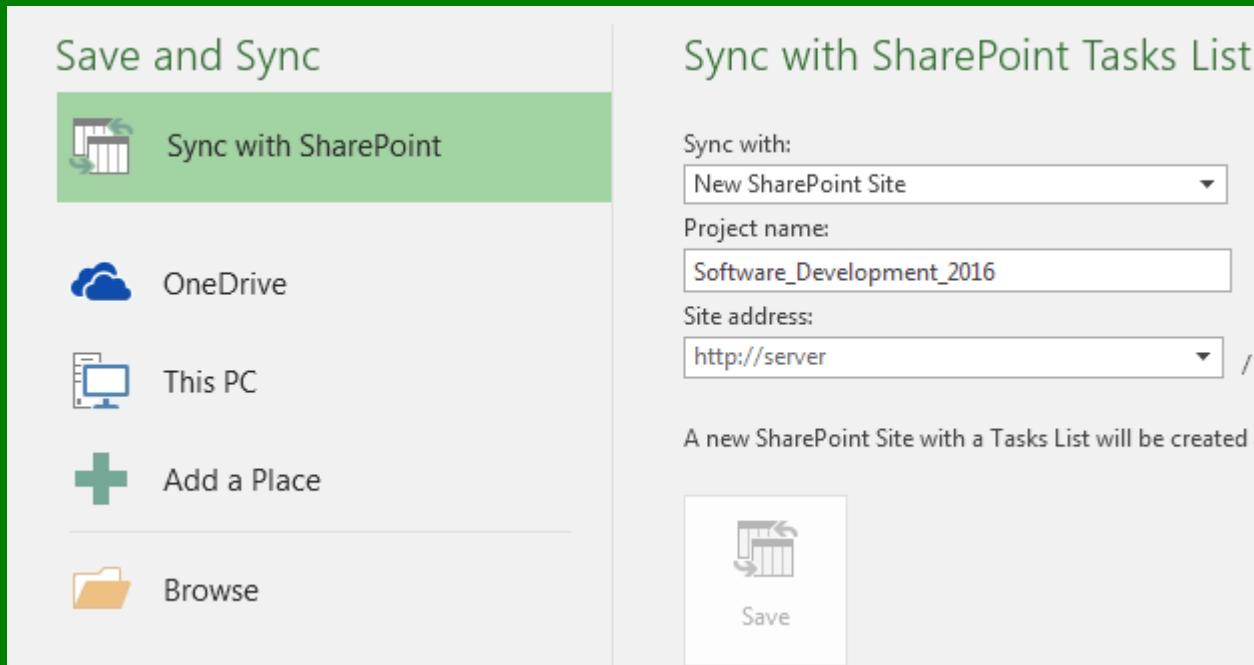
Project 2019 Professional contains the Team Planner, a resource scheduling view that lets users see at a glance what their team members are working on and move tasks from one person to another. Users can also view and assign unassigned work, view overallocations, and see task names and resource names.



Microsoft Project 2019 Features



Synchronization with SharePoint lists



In Project 2019 Professional, users can export project files to a list in Microsoft SharePoint Server 2019 or Microsoft SharePoint Foundation 2019. This provides a quick and easy way for a project manager to share status or create reports that can be viewed across the organization. Project Web Access (PWA) is not required to synchronize with a SharePoint list.

Microsoft Project 2019 Features

Manual Scheduling

The screenshot shows the Microsoft Project 2019 interface. The ribbon at the top has the 'Gantt Chart Tools' tab selected. In the 'Schedule' section of the ribbon, the 'Manually Schedule' button is highlighted. The task list below shows several tasks, with '1.1 Requirement Gathering' currently selected. The Gantt chart on the right visualizes the project timeline.

Task Name	Duration	Cost
Software Development	128 days	Rs. 192,160.00
1 Requirement Definition	22 days	Rs. 14,400.00
1.1 Requirement Gathering	12 days	Rs. 5,760.00
1.2 Requirement Analysis	9 days	Rs. 4,320.00
1.3 Requirement Specification-Driv	1 day	Rs. 480.00
1.4 Requirement Specification-Review	1 day	Rs. 1,280.00

Project 2019 changes how projects are scheduled. Factors such as task dependencies and the project calendar no longer automatically adjust task dates when a task is manually scheduled. Users can place a manually scheduled task anywhere in their schedules, and Project 2019 will not move it.

This feature can be especially useful for early planning when the duration of a task might not yet be known.



Microsoft Project 2019 Features

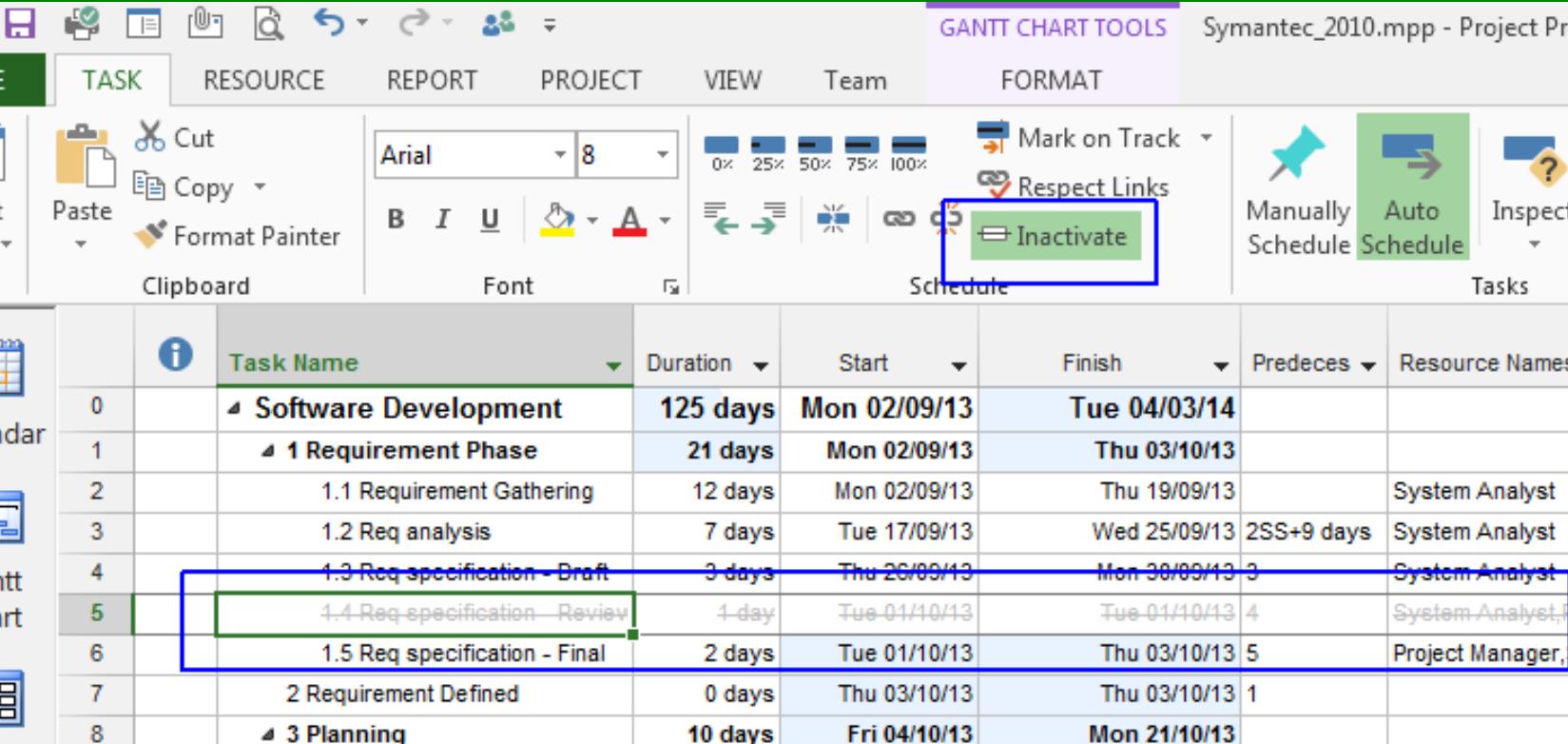
Placeholder Tasks

Task	Start Date	Duration	End Date	Resource	Progress (%)	
1.4 Req specification - Review	Tue 01/10/13	1 day	Tue 01/10/13	System Analyst,Project Manager	0%	
1.5 Req specification - Final	Thu 03/10/13	2 days	Fri 04/10/13	Project Manager,System Analyst	0%	
1.6 Placeholder task	Mon 02/09/13	2 days	Tue 03/09/13		0%	
2 Requirement Defined	Fri 04/10/13	0 days	Fri 04/10/13		04/10	

Placeholder tasks let users create a plan by using task names only. Users can enter any combination of start date, finish date, and duration and fill in the rest later.

Microsoft Project 2019 Features

Inactive tasks



	Task Name	Duration	Start	Finish	Predeces	Resource Names
0	▲ Software Development	125 days	Mon 02/09/13	Tue 04/03/14		
1	▲ 1 Requirement Phase	21 days	Mon 02/09/13	Thu 03/10/13		
2	1.1 Requirement Gathering	12 days	Mon 02/09/13	Thu 19/09/13		System Analyst
3	1.2 Req analysis	7 days	Tue 17/09/13	Wed 25/09/13	2SS+9 days	System Analyst
4	1.3 Req specification - Draft	3 days	Thu 26/09/13	Mon 30/09/13	3	System Analyst
5	4.4 Req specification - Review	4 day	Tue 01/10/13	Tue 01/10/13	4	System Analyst
6	1.5 Req specification - Final	2 days	Tue 01/10/13	Thu 03/10/13	5	Project Manager,
7	2 Requirement Defined	0 days	Thu 03/10/13	Thu 03/10/13	1	
8	▲ 3 Planning	10 days	Fri 04/10/13	Mon 21/10/13		

Users can make tasks inactive and still keep them in their projects. The main value of this feature is that custom field information, resource assignments, and all other data stays in the task. (Note that these factors do not contribute to roll-ups.) Inactive tasks often have important information (such as cost information) that can be valuable for archival purposes and what-if planning.



Microsoft Project 2019 Features

Top-down summary

The screenshot shows the Microsoft Project 2019 interface. The ribbon at the top has tabs for Task, Resource, Report, Project, View, Format, and Gantt Chart Tools. The Gantt Chart Tools tab is selected. A tooltip for the 'Summary' button in the Tasks group is displayed, stating: 'Insert Summary Task. Insert a summary task to help organize the task list. If any tasks are selected, they are grouped under the newly created summary task.' In the Gantt chart, two tasks are visible: '<New Summary Task>' and '<New Task>'. Both tasks have a duration of '1 day?' and start on 'Wed 09-12-1'. The '<New Summary Task>' task is highlighted with a blue border.

Task Name	Duration	Start	Finish	Predecessors
<New Summary Task>	1 day?	Wed 09-12-1	Wed 09-12-1	
<New Task>	1 day?	Wed 09-12-1	Wed 09-12-1	

Creating subtasks and then rolling them up into summary tasks is no longer restricted. In Project 2019, users can create summary tasks first, and the summary tasks can have dates that do not exactly match the roll-up dates of the subtasks. At the beginning of the planning phase, users might only have some high-level information about key deliverables and major milestones of their projects. In Project 2019, users can divide projects into high-level phases based on the overall timeline and budget. This means that it is not necessary for dates of individual work items to line up exactly with dates of the high-level phases..



Microsoft Project 2019 Features



Compare projects

The screenshot shows the Microsoft Project 2019 ribbon with the 'Report' tab selected. A blue box highlights the 'Compare Projects' icon in the ribbon's left pane. A modal dialog box titled 'Compare Project Versions' is open in the foreground. It contains fields for selecting a previous version (with a 'Browse...' button highlighted by a blue box), choosing task and resource tables ('Entry' selected for both), and buttons for 'OK' and 'Cancel'. In the background, a Gantt chart is visible with tasks numbered 13 and 14, showing progress percentages and descriptions like '3.5 Config Mngmt Plan' and '4 Planning complete'. To the right of the Gantt chart, a list of dates from '01 Jan '16' to '16 Feb '16' is shown.

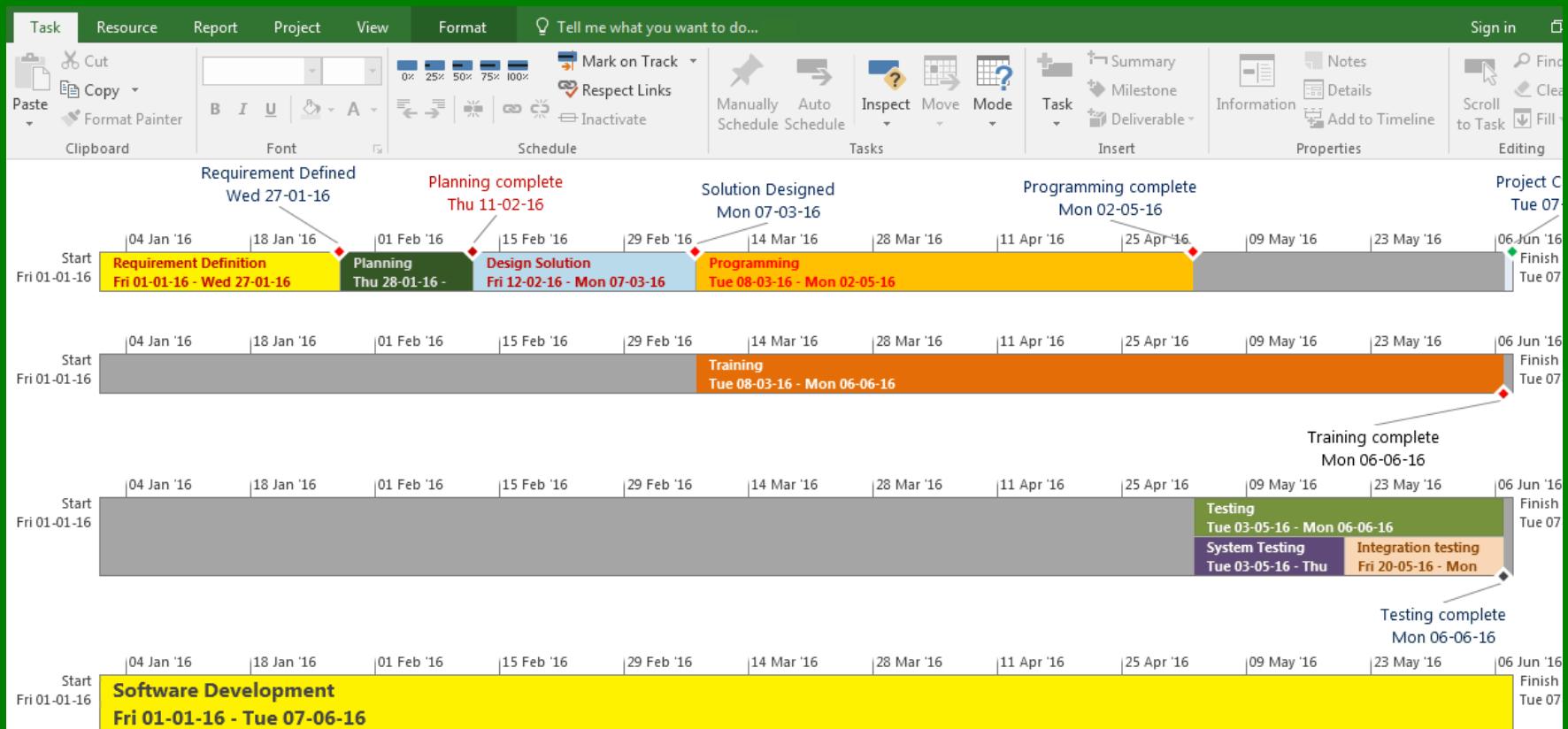
Date	Description
32 days	01 Jan '16
24 days	01 Jan '16
2 days	01 Jan '16
9 days	14 Jan '16
1 day	25 Jan '16
1 day	27 Jan '16
2 days	28 Jan '16
0 days	29 Jan '16
14 days	01 Feb '16
5 days	01 Feb '16
5 days	06 Feb '16
7 days	09 Feb '16
2 days	15 Feb '16
2 days	15 Feb '16
0 days	16 Feb '16

The compare projects feature in Project 2019 includes Gantt bars to help users see more clearly how one version of a project differs from another version.



Microsoft Project 2019 Features

Multiple Named Timelines



Project 2019 now includes multiple timelines view. For new files, the timeline view is automatically displayed above most other views. This shows a concise overview of the entire schedule. Otherwise, users can turn on the timeline view manually. Users can add tasks to the timeline, print it, or paste it into an e-mail message for an easy-to-view project summary.



Microsoft Project 2019 Features



Enhanced copy and paste

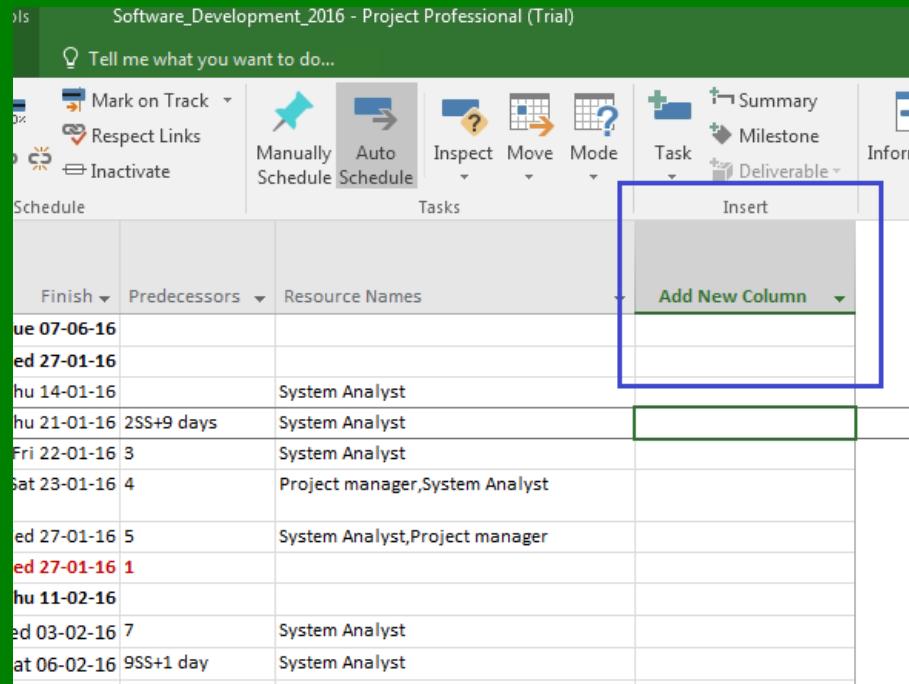
The screenshot shows the Microsoft Project 2019 interface. A context menu is open over a task named "Task Name" in the Gantt Chart view. The menu items are: Cut, Copy (highlighted with a blue border), Copy, and Copy Picture. The "Copy" item is highlighted. The "Cut" item has a small red X icon next to it. The "Font" ribbon tab is visible at the top right. The Gantt Chart view displays tasks from 0 to 6, with "Software Development" as the parent task for phases 1 through 5.

Index	Task Level	Task Name	Duration	Start Date	End Date
0	1	Software Development	126 days	Mon, Jan 1, 2018	Mon, Mar 26, 2018
1	1	1 Requirement Phase	22 days	Mon, Jan 1, 2018	Tue, Feb 27, 2018
2	2	1.1 Requirement Gathering	12 days	Mon, Jan 1, 2018	Wed, Feb 14, 2018
3	2	1.2 Req analysis	7 days	Mon, Jan 1, 2018	Thu, Feb 22, 2018
4	2	1.3 Req specification - Draft	3 days	Mon, Jan 1, 2018	Fri, Feb 23, 2018
5	2	1.4 Req specification - Review	1 day	Mon, Jan 1, 2018	Sat, Feb 24, 2018
6	2	1.5 Req specification - Final	2 days	Mon, Jan 1, 2018	Sun, Feb 25, 2018

This feature lets users copy and paste content between Microsoft Office programs and Project 2019, and keep formatting, outline levels, and column headers.

Microsoft Project 2019 Features

Excel-like features



Finish	Predecessors	Resource Names
ue 07-06-16		
ed 27-01-16		
hu 14-01-16		System Analyst
hu 21-01-16 2SS+9 days		System Analyst
Fri 22-01-16 3		System Analyst
Sat 23-01-16 4		Project manager, System Analyst
ed 27-01-16 5		System Analyst, Project manager
ed 27-01-16 1		
hu 11-02-16		
ed 03-02-16 7		System Analyst
at 06-02-16 9SS+1 day		System Analyst

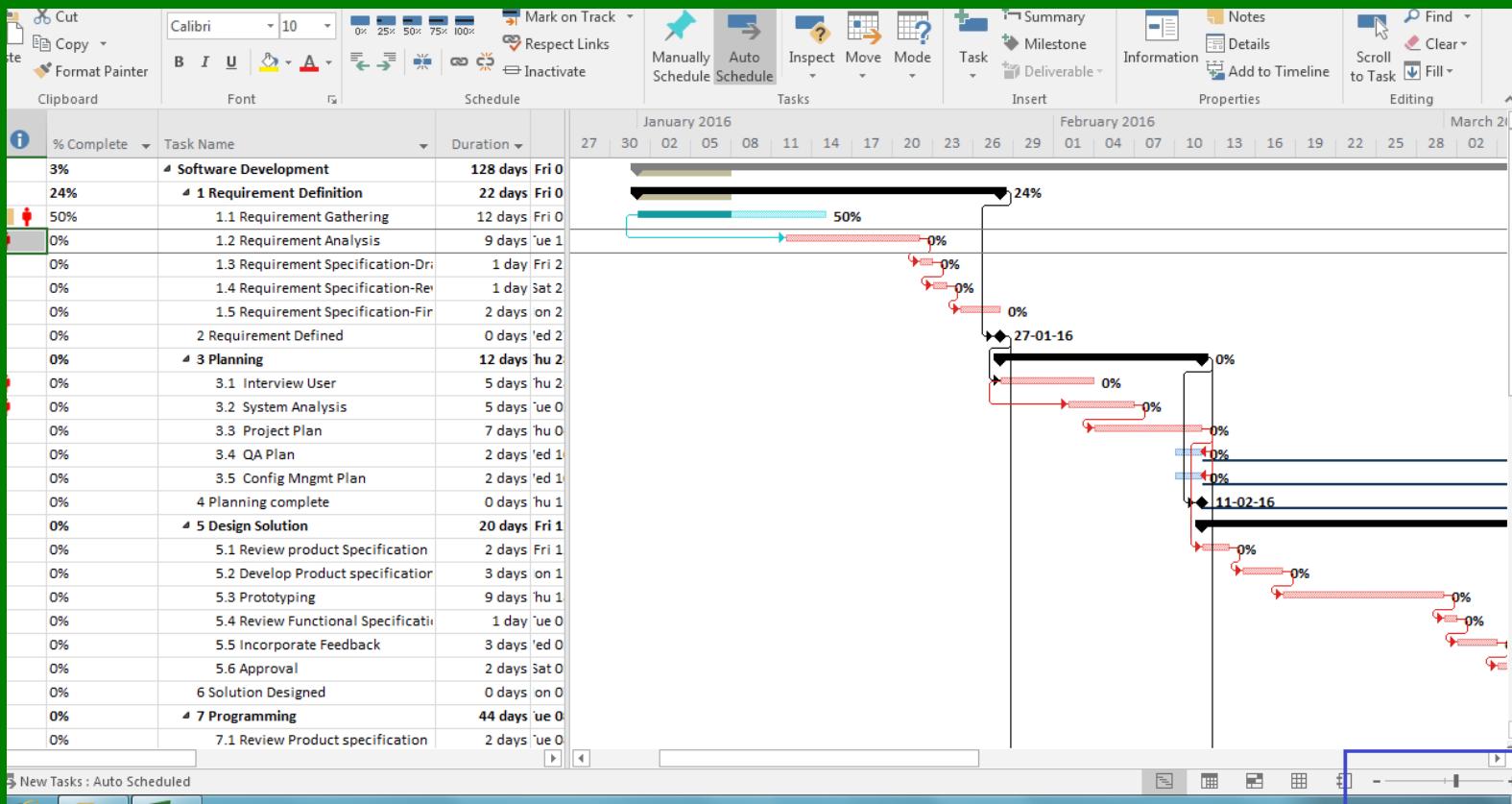
Features similar to those in Microsoft Excel are available in Project 2019. This includes the following:

- Simplified adding of new columns. A user can click the Add New Column heading at the right end of a sheet view, and then type or select the name of a new or existing column. An existing column can also be quickly renamed by clicking its title and typing a different column name.
- 32-bit color support and text wrapping enable users to create views that are similar to Excel reports.



Microsoft Project 2019 Features

The view slider

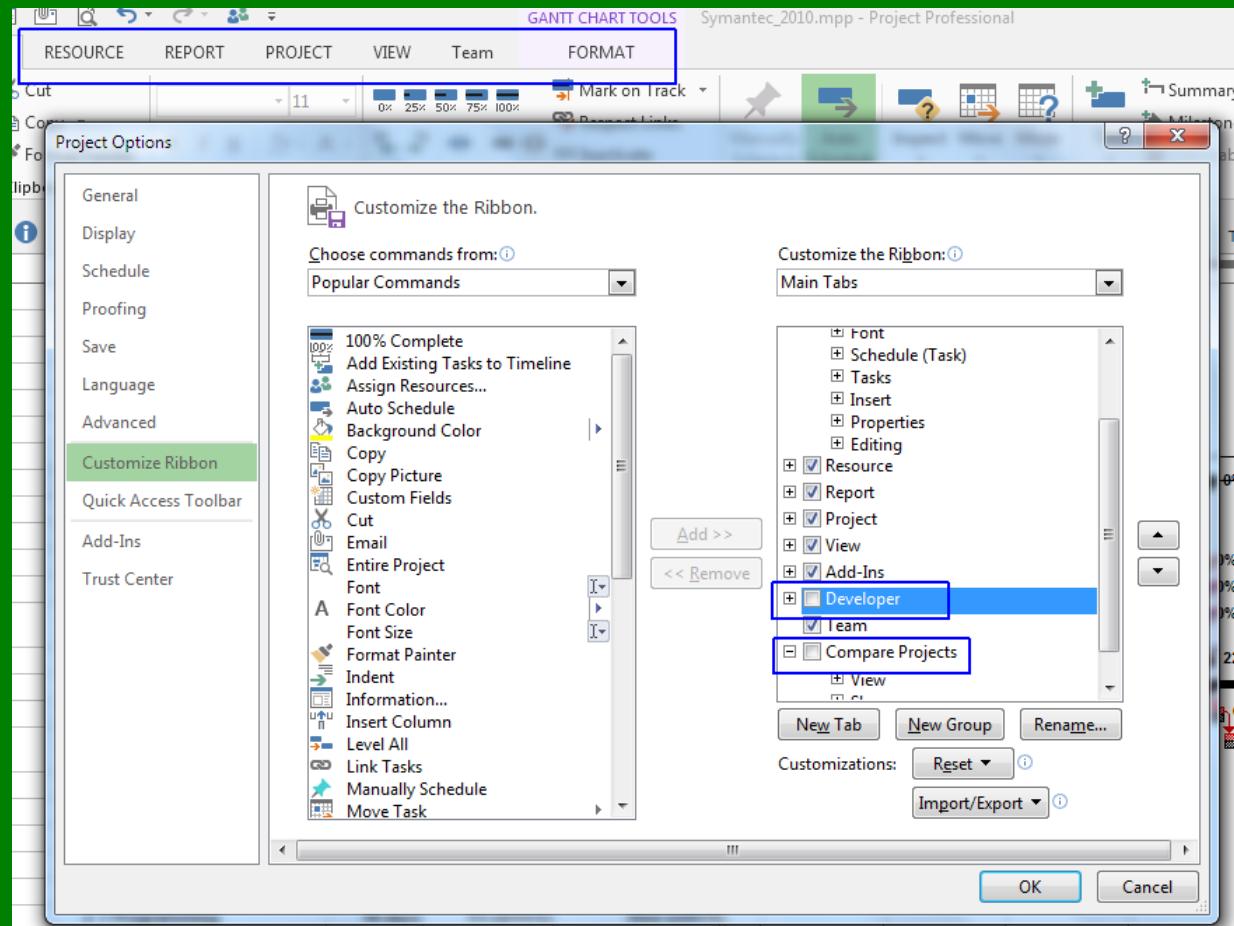


In Project 2019, users can quickly zoom in and out of the time phased section of a view by using a slider in the status bar. Move the view slider to the right to zoom in a schedule and move the slider to the left to zoom out. The view slider works in the Gantt chart, network diagram, calendar, and all graph views.



Microsoft Project 2019 Features

Customize Ribbon Menu

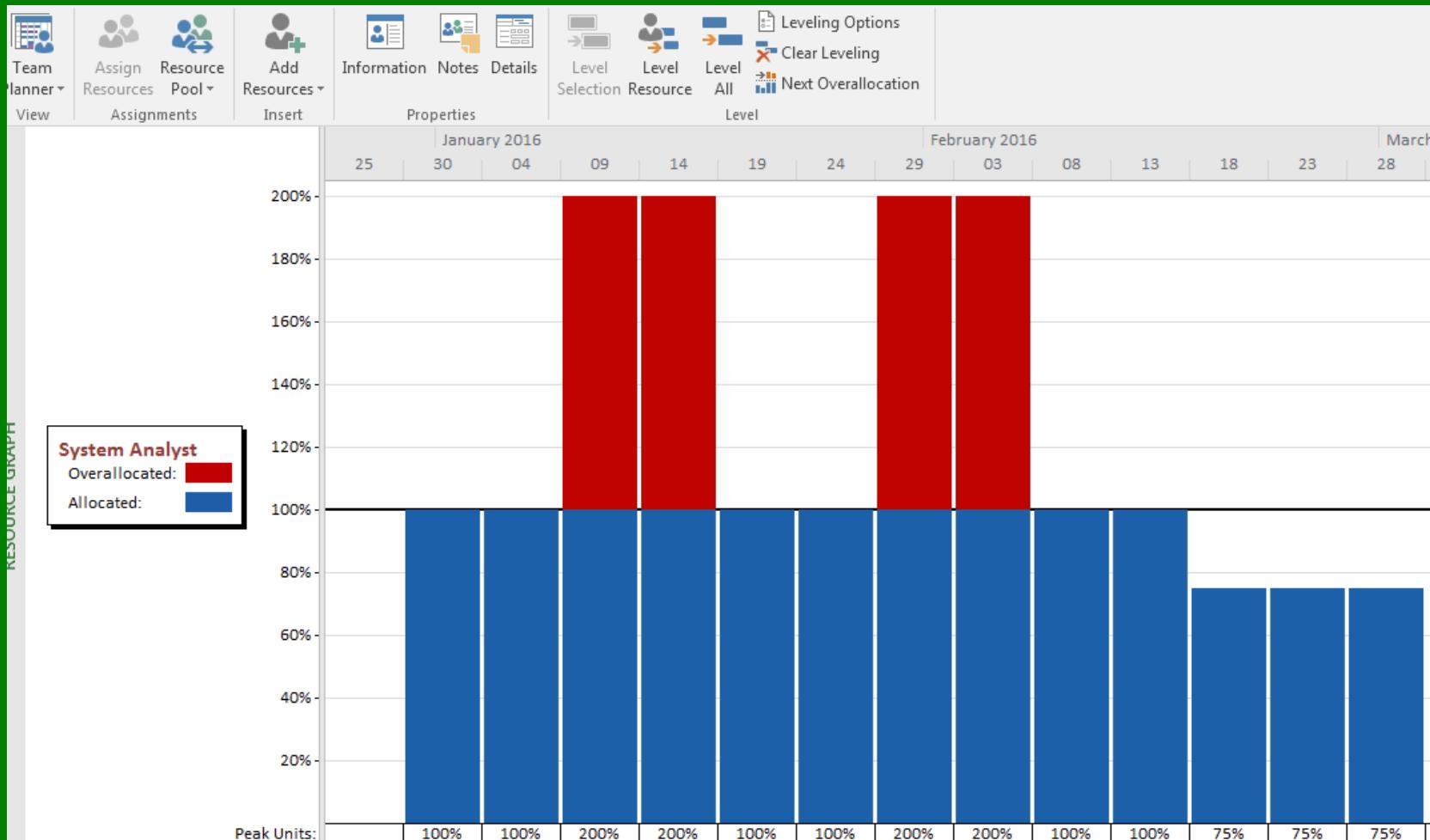


In Project 2019 you can select the required menu items from
File -> Options -> Customize Ribbon



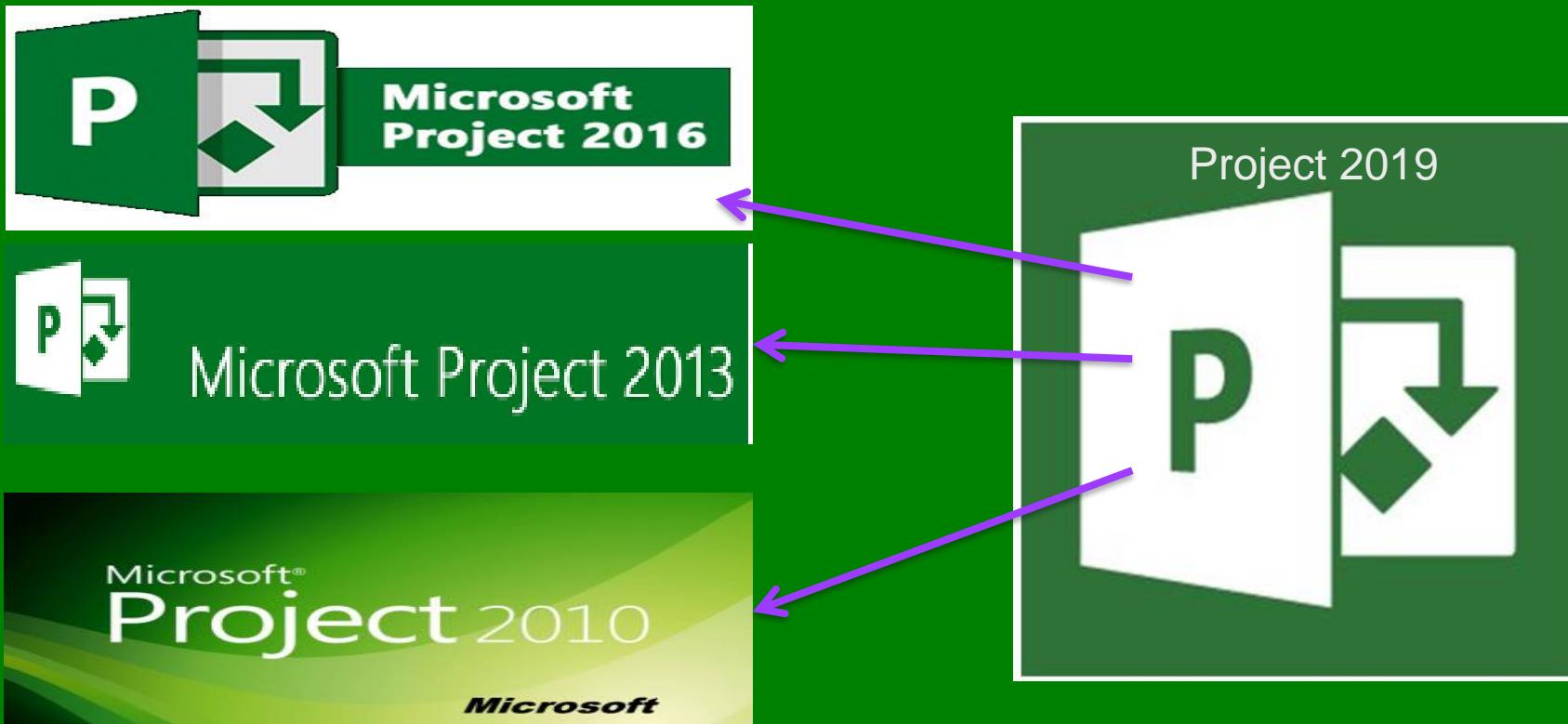
Microsoft Project 2019 Features

Resource Usage Graph





Microsoft Project 2019 Backward Compatibility



Project 2019 is compatible with previous versions of Microsoft Project.
Files created in Office Project 2007 or earlier can be opened and edited in Project 2019,
although certain features of Project 2019 are not enabled

In addition, you can create files in Project 2019 and then convert them to the Office Project 2007 format.



Thinking of buying ?



http://www.microsoftstore.com/store/msin/en_GB/pdp/Project-Standard-2019/productID.324415500

The screenshot shows a Microsoft Store page for on-premise solutions. It features three main product cards:

- Project Standard**: Priced at ₹ 39,599. A green "Buy now" button is available. Description: On-premises project management for those who don't need collaboration tools and other advanced features.
- Project Professional**: Priced at ₹ 77,549. A green "Buy now" button is available. Description: A comprehensive on-premises project management solution.
- Project Server**: A green "Find a partner" button is available. Description: A flexible, scalable on-premises solution for project portfolio management and everyday project and work management.



Let's learn some MS Project Terms

- ◆ Duration
- ◆ Work
- ◆ Resource
- ◆ Resource Units
- ◆ Effort-Driven
- ◆ Fixed Duration
- ◆ Fixed Units
- ◆ Fixed Work
- ◆ Over-allocation
- ◆ Leveling



Duration & Work

- ◆ Duration - The total span of working time or elapsed time required to complete a task.
- ◆ Work - The total effort required to complete a task.

Duration, Work and Resource units

◆ Duration:

Duration is the length of working time between the start and finish of a task



◆ Work:

Work is the amount of effort, measured in time units (like hours or days), that a resource needs to complete the task



◆ Resource Units:

Resource Units indicate how much of a resource's available time, according to the resource calendar, is being used to work on a particular task





Resource Types

- ◆ Resources are the people, equipment and supplies used to complete tasks in a project.
- ◆ Resources that are assigned to tasks but do not create work are known as material resources.
- ◆ Resource Units indicate how much of a resource's available time, according to the resource calendar, is being used to work on a particular task. In a project schedule, resource effort is expressed as assignment units or sometimes just as units.
- ◆ A cost resource is a cost item that contributes to the completion of a task but does not affect the duration or work of a task E.g. Travel, lodging, Booth Rental, conference fees etc.



Scheduling Formula

- ◆ Duration = Work ÷ Resource Units



Fixed Units

- ◆ As the task's assigned units remain constant, an increase / decrease in assigned work will result in a corresponding increase / decrease in task duration.
- ◆ Fixed Units is the default task type for new tasks.



Fixed Work

- ◆ If assigned work should remain constant, then as a task's duration goes up assigned units will go down (and vice versa).
- ◆ If assigned units are greater than max units, a resource over-allocation will arise.
- ◆ Duration = Work ÷ Resource Units
- ◆ or Duration = 1 ÷ Resource Units



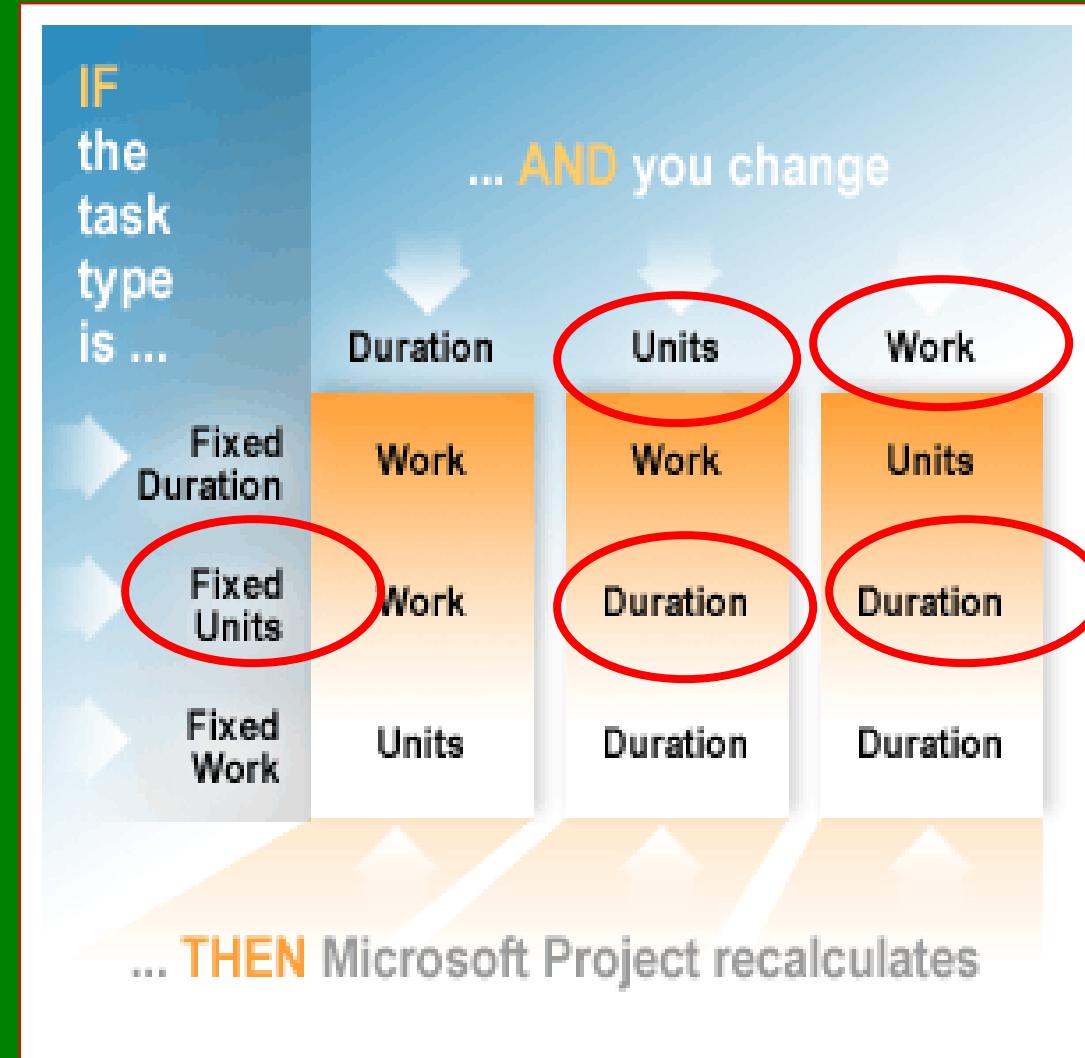
Fixed Duration

- ◆ For a constant task duration, as assigned work is increased so will assigned units.
- ◆ Decrease the units and the work will correspondingly reduce.
- ◆ Duration = Work ÷ Resource Units
- ◆ If assigned units are greater than max units, a resource over-allocation will arise.



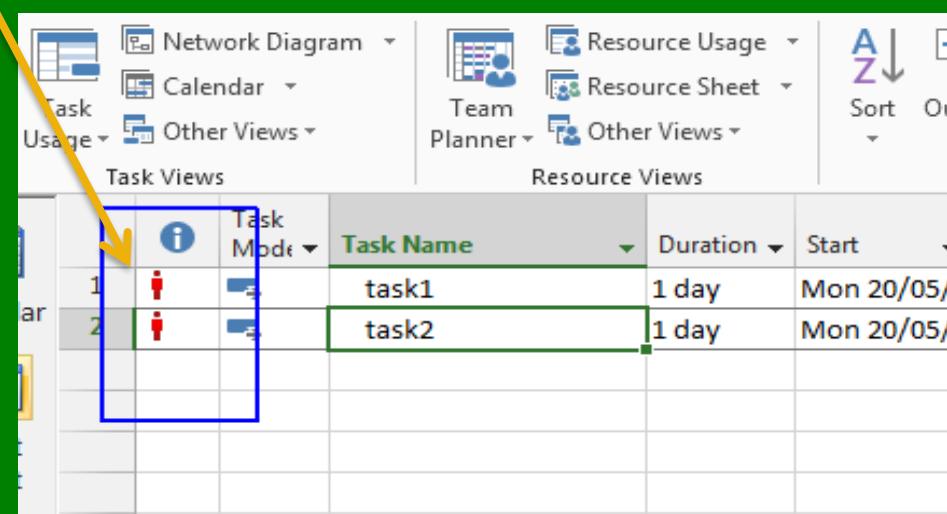
Effort-Driven

- ◆ Only comes into play after the initial resource assignments have been made
- ◆ Work stays constant
- ◆ When resources (manpower) are assigned or removed from a task, Microsoft Project will extend or shorten the duration of the task to accommodate change in resources
- ◆ This is the default option for new tasks



Resource Over-allocation

- ◆ Situation when more hours of a resource are allocated than are available
- ◆ Identifying Over-allocated Resources
 - Special leveling indicator
 - Resource Usage View – over-allocated resources are red
- ◆ Over-allocation can be resolved by leveling project



	Task Mode	Task Name	Duration	Start
1	Red	task1	1 day	Mon 20/05/1
2	Red	task2	1 day	Mon 20/05/1



Resource Leveling

- ◆ Resolving resource conflicts or over-allocations by delaying or splitting certain tasks.
- ◆ During leveling, assignments are rescheduled according to the resource availability profiles, assigned units, and resource calendars, as well as the task's duration and constraints.



Resource Leveling

- ◆ It is done either automatically or (more commonly) by the command from the ribbon menu.
- ◆ Select task -> Resource Pool -> Level Resources

The screenshot shows the Microsoft Project application interface. The ribbon at the top has the 'RESOURCE' tab selected. In the 'Level' section of the ribbon, the 'Level Resource' button is highlighted with a blue box. A callout box points to this button. Below the ribbon, a Gantt chart displays two tasks: 'task1' and 'task2'. A 'Level Resources' dialog box is overlaid on the chart. The dialog box has 'Selected Resources' selected in the 'Level' dropdown. The resource 'worker1' is listed in the resource list. At the bottom of the dialog box are 'Level Now' and 'Cancel' buttons.

	Task Mode	Task Name	Duration
1		task1	1 day
2		task2	1 day

Level Resources

Level:

Everyone

Selected Resources:

Project1

worker1

Level Now Cancel



Project Planning

Must start with

- ◆ A list of tasks

Or

- ◆ A Work Breakdown Structure
- ◆ It is suggested make your first task a PROJECT summary task to which all other tasks are subordinate



Opening Screen

←

Info

New

Open

Save

Save As

Print

Share

Export

Close

Account

Options

New

Search for online templates

Suggested searches: Project Management Project Plan Projects Themes Schedules Analysis Industry

Blank Project

New from existing project

New from Excel workbook

New from SharePoint Tasks List

Using Project to Manage your Agile Projects

Sprints

Product Backlog

Sprint Backlog

In this view, add each sprint that your team is going to work on. Make sure to give the sprint a unique sprint number and set the Item type to Sprint.

In this view, add all the work items that you plan to work on. To add them to a sprint, update the sprint number. Make sure to set the Item type to Work item.

In this view, manage the individual sprint. You can assign the task to a resource and then update remaining and actual work as work progresses.

Sprint Status

Remaining Work

Agile project management

CREATE A BUDGET

5 simple steps to track your project's budget.

1. Create Budget Resources
2. Assign them to the project summary task
3. Add Budget Work and Cost to resources
4. Specify the Budget
5. Generate Budget Task custom field

Budget Work

Budget Type: \$30,000 hrs

Budget - 376 hrs

Create a budget

Long Lead Procurement Work 02/01/12 - 02/28/12

General Construction Work 03/01/12 - 03/31/12

General Condition Work 04/01/12 - 04/30/12

Long Lead Procurement Work 05/01/12 - 05/31/12

Mobile on Site Work 06/01/12 - 06/30/12

Foundations and Utilities Work 07/01/12 - 07/31/12

Excavation and Dewatering Work 08/01/12 - 08/31/12

Farm and Pour Foundation Phases Work 09/01/12 - 09/30/12

Carpentry Work Work 10/01/12 - 10/31/12

Commercial Construction

EARNED VALUE

\$7,720.00 \$1,230.00

Actual Work

Planned Work

Remaining Work

Earned Value

Commercial Construction

Earned value

Toolbars, Columns and their functions

The screenshot shows the Microsoft Project Professional interface with several components highlighted:

- QUICK ACCESS TOOLBAR:** Located at the top left.
- RIBBON MENU:** A dropdown menu visible above the ribbon tabs.
- PROJECT TIMELINE:** A horizontal bar at the top indicating project phases and dates.
- CALENDAR TIME SCALE:** A timeline view on the right showing tasks over time.
- GANTT CHART:** A chart view on the right showing tasks as bars with progress percentages.
- VIEW BAR:** A vertical bar on the left containing icons for different views: Gantt Chart, Network Diagram, Task Form, Task Sheet, and Task Usage.
- DIVIDER BAR:** A vertical bar on the right separating the Gantt chart from the rest of the interface.
- INDICATOR FIELD:** A column header in the main table.
- COLUMNS:** A column header in the main table.

Table Data:

	Task Name	Duration	Start	Finish	Predeces	Resource Names	Add New Column
0	Software Development	126 days	Mon 02/09/13	Wed 05/03/14			
1	1 Requirement Phase	22 days	Mon 02/09/13	Fri 04/10/13			
2	1.1 Requirement Gathering	12 days	Mon 02/09/13	Thu 19/09/13		System Analyst	
3	1.2 Req analysis	7 days	Tue 17/09/13	Wed 25/09/13	2SS+9 days	System Analyst	
4	1.3 Req specification - Draft	1 day	Thu 26/09/13	Mon 30/09/13	3	System Analyst	
5	1.4 Req specification - Review	1 day	Tue 01/10/13	Tue 01/10/13	4	System Analyst,Project	
6	1.5 Req specification - Final	2 days	Thu 03/10/13	Fri 04/10/13	5	Project Manager,Syster	
7	2 Requirement Defined	04/10/13		Fri 04/10/13	1		
8	3 Planning	10 days	Mon 07/10/13	Tue 22/10/13			
9	3.1 Interview Users	5 days	Mon 07/10/13	Fri 11/10/13	7	System Analyst	
10	3.2 System Analysis	5 days	Tue 08/10/13	Mon 14/10/13	9SS+1 day	System Analyst	
11	3.3 Project Plan	7 days	Thu 10/10/13	Tue 22/10/13	10FS-3 days	Project Manager	
12	3.4 QA Plan	2 days	Mon 21/10/13	Tue 22/10/13	11FF	QA Manager	
13	3.5 Configuration management plan	2 days	Mon 21/10/13	Tue 22/10/13	11FF	Management Team	
14	4 Planning complete	0 days	Tue 22/10/13	Tue 22/10/13	8		
15	5 Design	20 days	Wed 23/10/13	Thu 24/11/13			
16	5.1 Review product specificat	2 days	Wed 23/10/13	Thu 24/10/13	11	System Analyst	
17	5.2 Develop functional specification	3 days	Fri 25/10/13	Tue 29/10/13	16	System Analyst	
18	5.3 prototyping	9 days	Wed 30/10/13	Wed 13/11/13	17	System Analyst[75%],F	
19	5.4 Review functional specs	1 day	Thu 14/11/13	Thu 14/11/13	18	Project Manager	



Toolbars, Columns and their functions



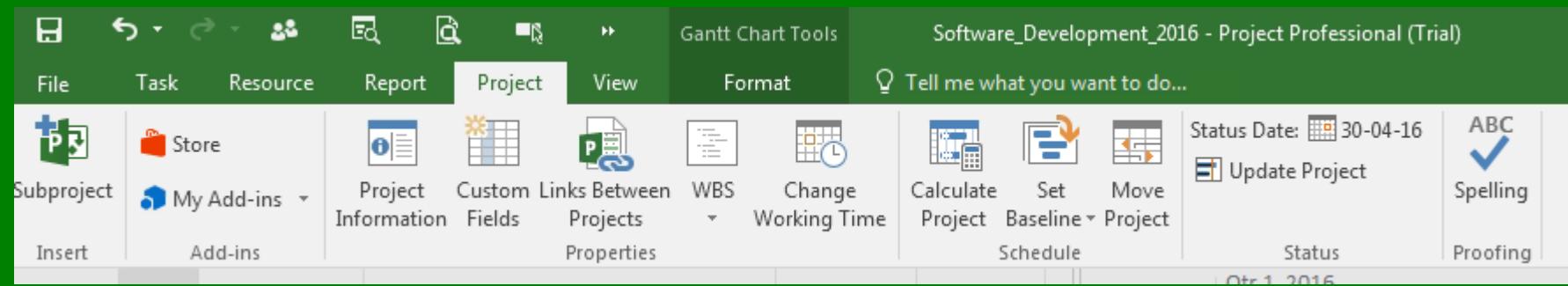
The image displays three separate screenshots of the Microsoft Project ribbon interface, each showing a different set of tabs and toolbars.

- Task Tab:** Shows the "Task" tab selected. The ribbon includes tabs for File, Task, Resource, Report, Project, View, Format, and Tell me what you want to do... The Task tab has sections for Gantt Chart, Clipboard, Font, Schedule, and Tasks. The Gantt Chart section shows a timeline from Jan '16 to Feb '16 with specific dates like 21, 28, 04, 11, 18, 25, 01, 08.
- Resource Tab:** Shows the "Resource" tab selected. The ribbon includes tabs for File, Task, Resource, Report, Project, View, Format, and Tell me what you want to do... The Resource tab has sections for Team Planner, Assign Resources, Resource Pool, Add Resources, Properties, and Level. The Assign Resources section includes options like Information, Notes, Details, Level Selection, Level Resource, Level All, and Next Overallocation.
- Report Tab:** Shows the "Report" tab selected. The ribbon includes tabs for File, Task, Resource, Report, Project, View, Format, and Tell me what you want to do... The Report tab has sections for Compare Projects, New Report, Dashboards, Resources, Costs, In Progress, Getting Started, Custom Reports, Recent Reports, Visual Reports, and Export. The New Report section includes dropdown menus for Project, Report Type (e.g., New, Dashboards), and View Reports.

The “Task” and “Resources” tabs relate to the data you frequently work with in Project.



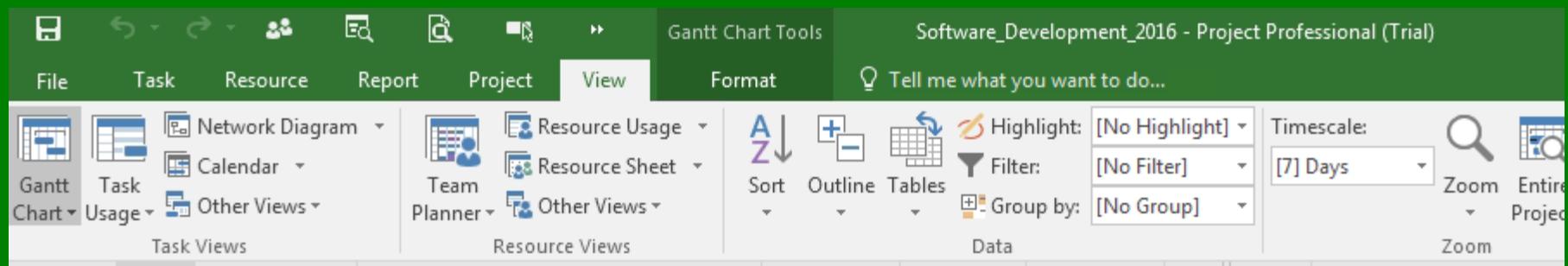
Toolbars, Columns and their functions



The “Project” tab contains commands that usually apply to the entire project plan.

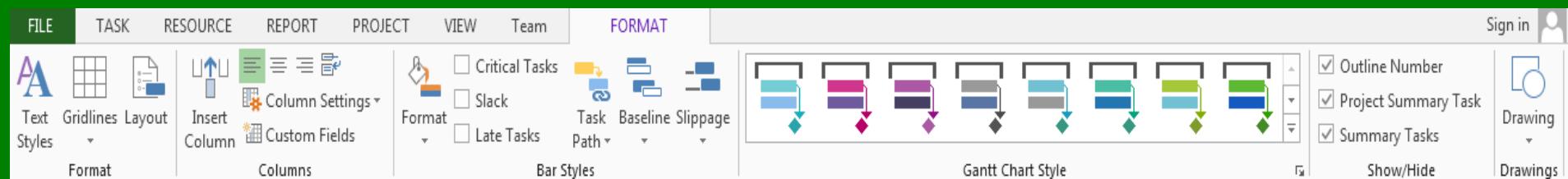


Toolbars, Columns and their functions



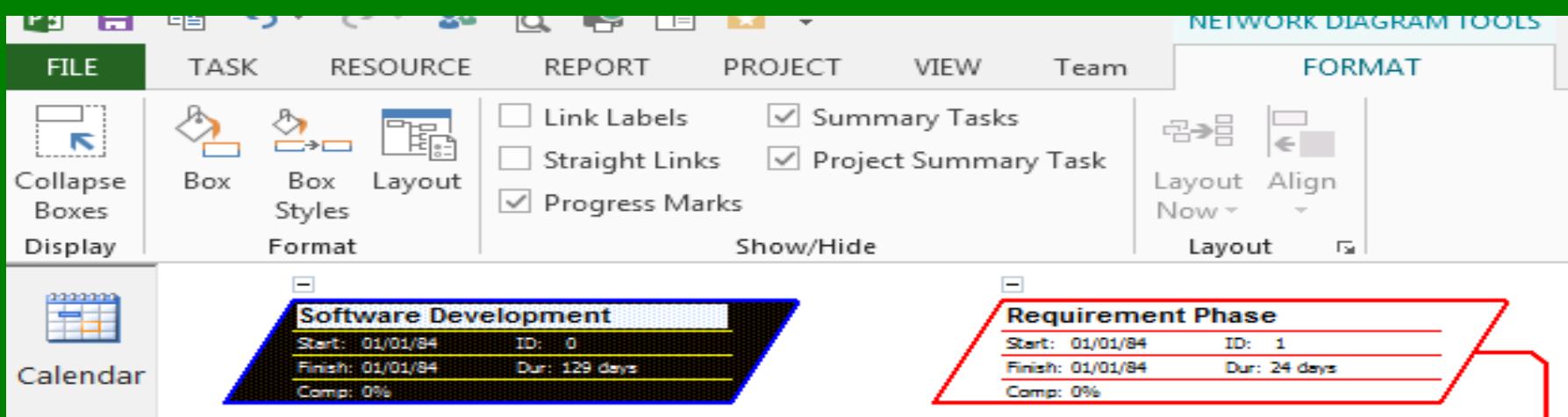
The “View” tab helps you control what you see in the Project window and how that information appears.

Toolbars, Columns and their functions



The “Format” tab is a contextual tab; the commands displayed on the Format tab vary, depending on what kind of information is displayed in the active view, or what kind of item is selected at the time. For example, when a task view, like the Gantt Chart view, is displayed, the commands on the Format tab apply to tasks and Gantt Chart items like Gantt bars.

The current context of the Format tab appears above the tab label—Gantt Chart Tools, for example.





Show View Bar

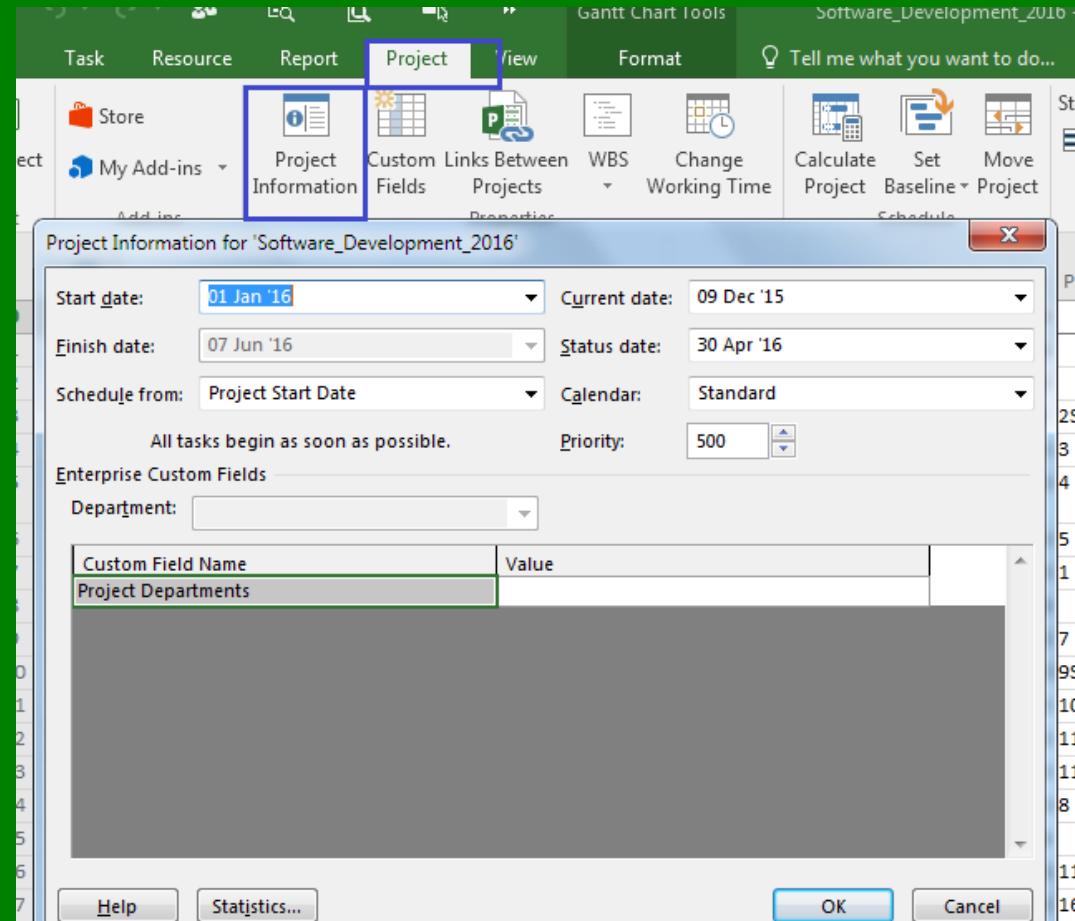
Right Click → Views bar

The screenshot shows a Microsoft Project window with a Gantt chart view. A context menu is open over a task labeled 'Software Development'. The menu path 'View Bar' is highlighted with a green border. Other options in the menu include 'Calendar', 'Gantt Chart', 'Multiple Baselines Gantt', 'Network Diagram', 'Task Form', 'Task Sheet', 'Task Usage', 'Timeline', 'Tracking Gantt', 'Resource Form', 'Resource Graph', 'Resource Sheet', 'Resource Usage', 'Team Planner', 'More Views...', and 'View Bar' again at the bottom.

The screenshot shows a Microsoft Project window with a Gantt chart view. The 'View Bar' button is highlighted with a green border. The interface includes a ribbon with tabs like 'File', 'Home', 'Insert', etc., and a toolbar with icons for 'New', 'Open', 'Save', etc. The main area displays tasks with columns for Task Name, % Compl., and Task Name.

The view bar contains the buttons for most commonly used views

Project -> Project Information



- ◆ Can schedule from a start date or backward from a finish date
- ◆ Can choose a particular calendar type (Std., 24 hrs, night shift)—that makes assumptions about when people will be working



Creating new project plan

Symantec_2010 - Copy.mpp - Project Professional

New

Info

New

Open

Save

Save As

Print

Share

Export

Close

Account

Options

Search for online templates

Suggested searches: Business Construction Marketing Products

Blank Project

New from existing project

New from Excel workbook

New from SharePoint Tasks List

Welcome to Project

Get Started

Customer Service

Software Development Plan

New Product Launch

Create a budget

Commercial Construction

If we select more templates then MS Project 2019 will download the template and save the .MPT file to be available for later projects as well



Using the File -> Options -> General



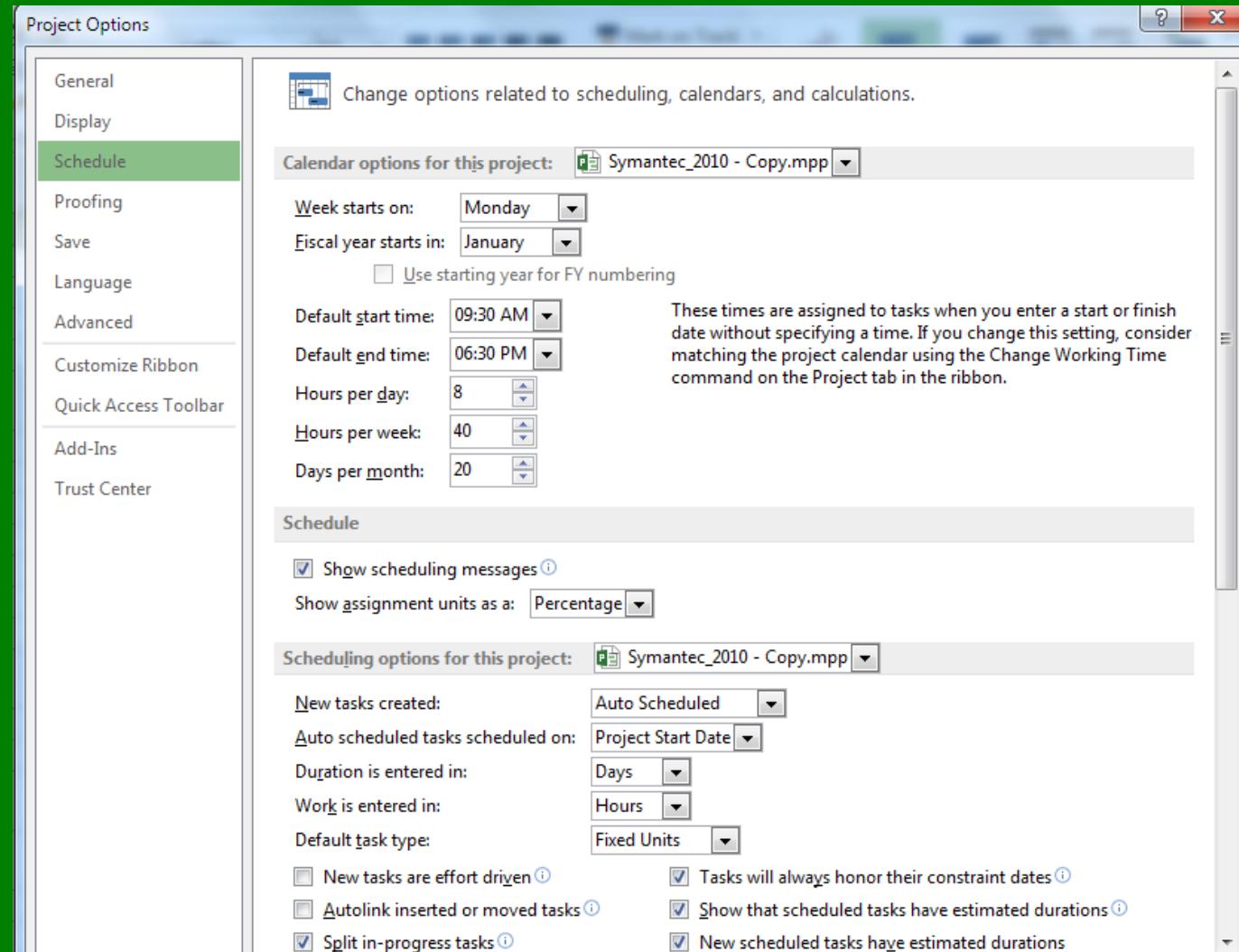
The screenshot shows the Microsoft Project application interface. The ribbon bar at the top has 'File' selected. A 'Project Options' dialog box is open over the main workspace. The 'General' tab is highlighted in the left sidebar of the dialog. The main area displays various configuration options:

- User Interface options:**
 - ScreenTip style: Show feature descriptions in ScreenTips
- Project view:**
 - Default view: Gantt with Timeline
 - Date format: 28 Jan '09
- Personalize your copy of Microsoft Office:**
 - User name: win7
 - Initials: w
 - Always use these values regardless of sign in to Office.
 - Office Theme: Colorful
- Start up options:**
 - Show the Start screen when this application starts

The main workspace shows a Gantt chart titled 'TRACKING GANTT'. The chart lists tasks from 0 to 21. Task 0 is the current selection, indicated by a green border. Task 11 is completed (black bar), while others are in progress (red bars). The right side of the workspace shows a detailed view of task 11, including its duration, start date (28-Jan-09), end date (04-Feb-09), and progress (100%).



File > Options -> Schedule



Imp : Using this option you can set the duration of day, week and month



File -> Options -> Customize Ribbon

Project Options

Customize the Ribbon.

Choose commands from: Popular Commands

Customize the Ribbon: Main Tabs

Main Tabs

- Task
 - + View
 - + Clipboard
 - + Font
 - + Schedule (Task)
 - + Tasks
 - + Insert
 - + Properties
 - + Editing
- Resource
- Report
- Project
- View
- Add-Ins
- + Developer
- Team
- Compare Projects

Add >>

<< Remove

New Tab

New Group

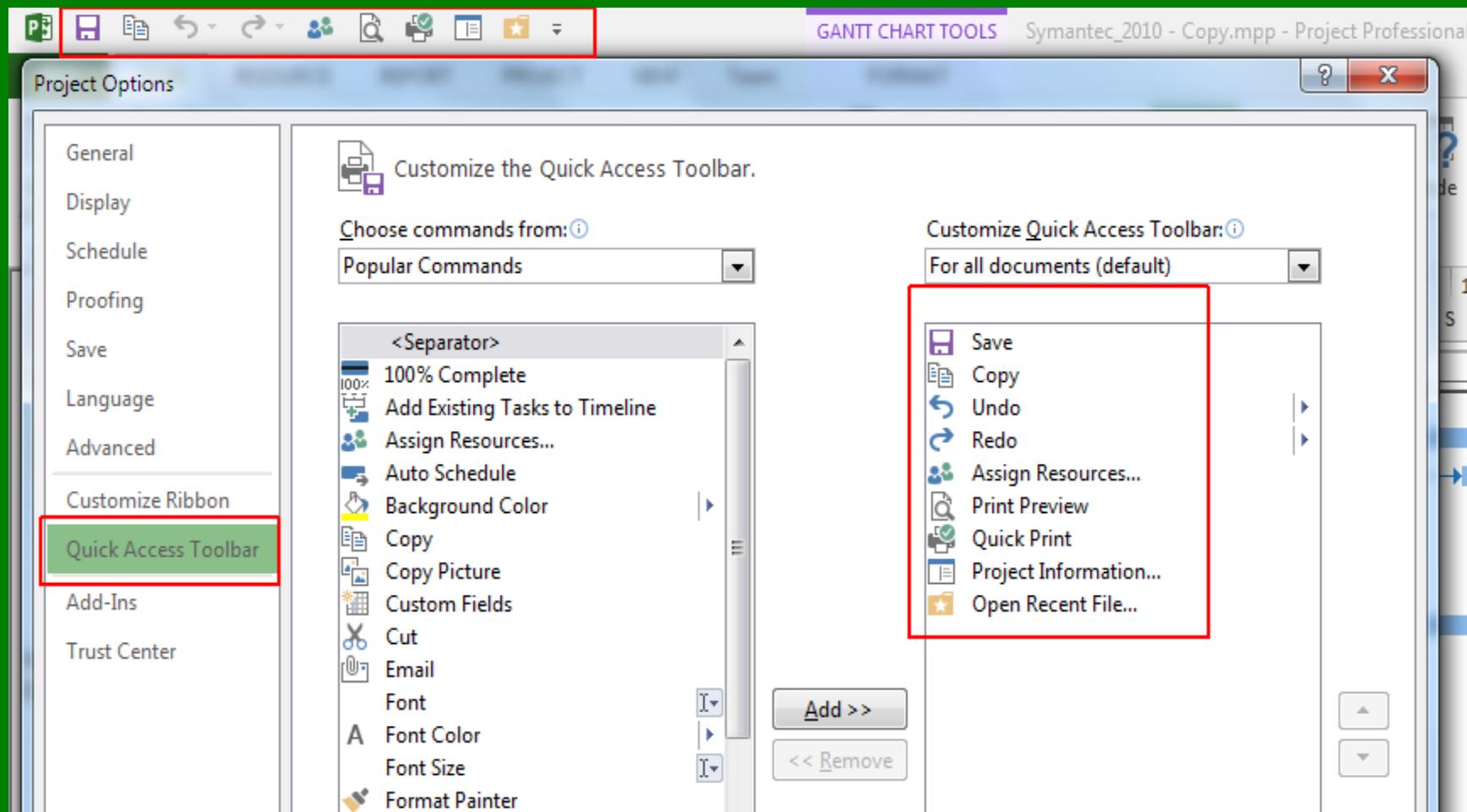
Rename...

Customizations: Reset Import/Export

General
Display
Schedule
Proofing
Save
Language
Advanced
Customize Ribbon
Quick Access Toolbar
Add-Ins
Trust Center

100% Complete
Add Existing Tasks to Timeline
Assign Resources...
Auto Schedule
Background Color
Copy
Copy Picture
Custom Fields
Cut
Email
Entire Project
Font
Font Color
Font Size
Format Painter
Indent
Information...
Insert Column
Level All
Link Tasks
Manually Schedule
Move Task
New
Open
Outdent
Paste
Print Preview
Project Information...

Project Options -> Quick Access Toolbar





Set Non-Working Days

Project -> Change Working Time -> Exceptions

The screenshot shows the Microsoft Project application interface. The 'PROJECT' tab is selected in the ribbon. A red box highlights the 'Change Working Time' button in the toolbar. The main window displays a project plan with tasks and their durations. A red box highlights the 'Exceptions' tab in the 'Change Working Time' dialog box, which is overlaid on the project plan. The dialog box shows a calendar for May 2013 with specific days highlighted as exceptions. The 'Exceptions' table lists various holidays and events:

Name	Start	Finish
1 Ganesh Chaturthi	09/09/2013	09/09/2013
2 Onam	16/09/2013	16/09/2013
3 M G Jayanti	02/10/2013	02/10/2013
4 Id	16/10/2013	16/10/2013
5 Lakshmi Puja	18/10/2013	18/10/2013
6 Bhai Duj	05/11/2013	05/11/2013
7 Chaat Puja	08/11/2013	08/11/2013

Defining Tasks

1. Creating Work Breakdown structures
2. Setting Up a Task
3. Setup a recurring Task
4. Importing Tasks
5. Insert and Delete Tasks
6. Enter repeating information in multiple tasks at once
7. Enter Task Notes
8. Link URL to a task



Defining Tasks

9. Estimate Duration
10. Set Elapsed Time
11. Define Summary Task
12. Indenting and Out denting tasks to n levels under Summary task
13. Setting up Using Milestones / why milestones are useful
14. Organizing Phases
15. Define Task Relationship
16. Linking Tasks
17. Lag and Lead Time





Work Breakdown Structure

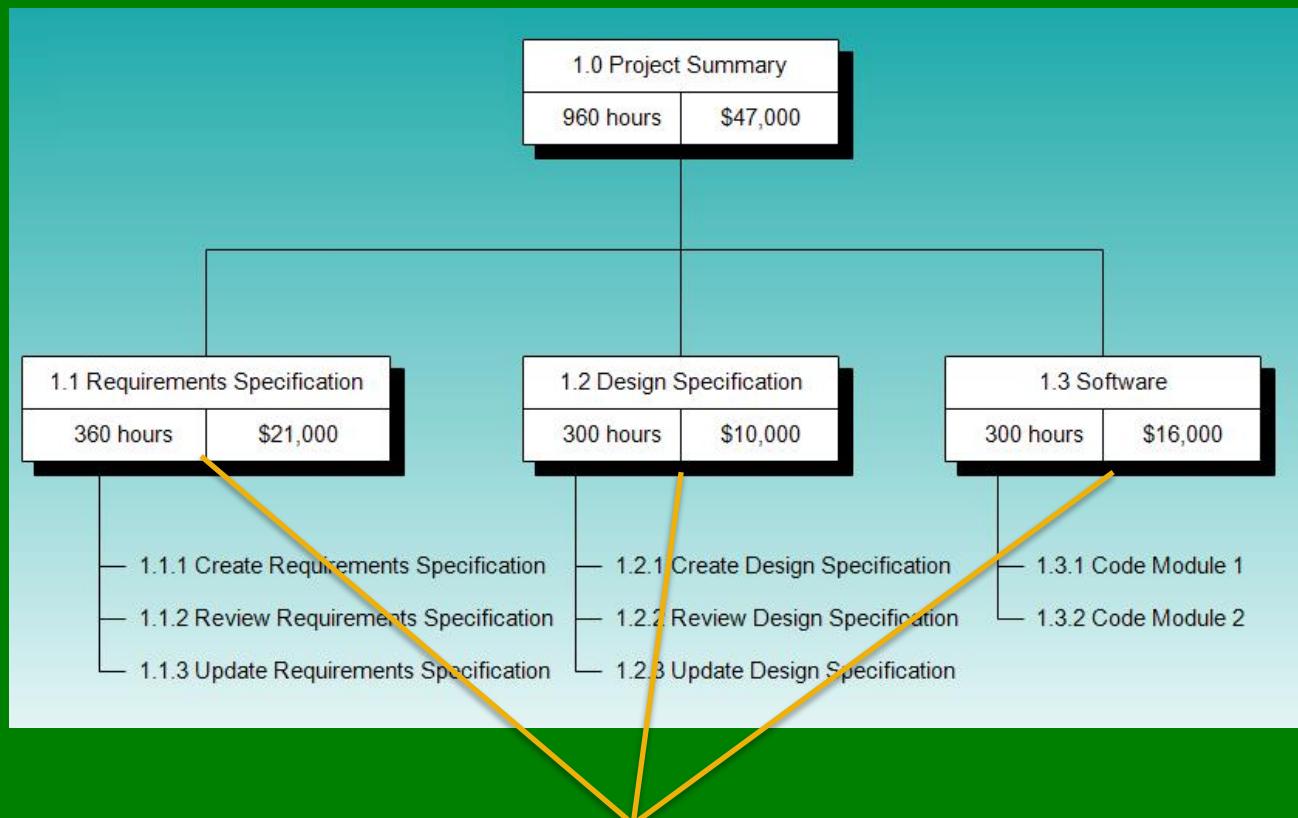
- Is deliverable oriented hierarchical decomposition of the work to be executed by the project team
- It helps accomplish the project objectives and create the required deliverables.
- It organizes and defines the total scope of the project



Work Breakdown Structures

- Is used for creating a project plan.
- A set of operations which contains the following:
 - **Task** – a unit of work.
 - **Dependency** – among two tasks, used to specify ordering.
 - **Resource** – people or machines, materials used to carry out work.
 - **Assignment /Mapping** – of resources to tasks, to execute the workflow.

Creating Work Breakdown Structures



Did you notice how the time and cost is getting divided (breaking up) as we move down ?

Creating Work Breakdown Structures

Task Name	Duration	% Complete	Start
Software Development	129 days	0%	Mon 02/09/13
1 Requirement Phase	24 days	0%	Mon 02/09/13
1.1 Requirement Gathering	12 days	0%	Mon 02/09/13
1.2 Req analysis	10 days	0%	Tue 17/09/13
1.3 Req specification - Draft	3 days	0%	Tue 01/10/13
1.4 Req specification - Review	2 days	0%	Mon 07/10/13
1.5 <New Task>	10 days	0%	Mon 02/09/13
2 Requirement Defined	0 days	0%	Tue 08/10/13
3 Planning	10 days	0%	Wed 09/10/13
3.1 Interview Users	5 days	0%	Wed 09/10/13
3.2 System Analysis	5 days	0%	Thu 10/10/13
3.3 Project Plan	7 days	0%	Mon 14/10/13
3.4 QA Plan	2 days	0%	Wed 23/10/13
3.5 Configuration management plan	2 days	0%	Wed 23/10/13
4 Planning completed	0 days	0%	Thu 24/10/13
5 Design	21 days	0%	Fri 25/10/13
5.1 Review product specification	3 days	0%	Fri 25/10/13
5.2 Develop functional specification	3 days	0%	Wed 30/10/13

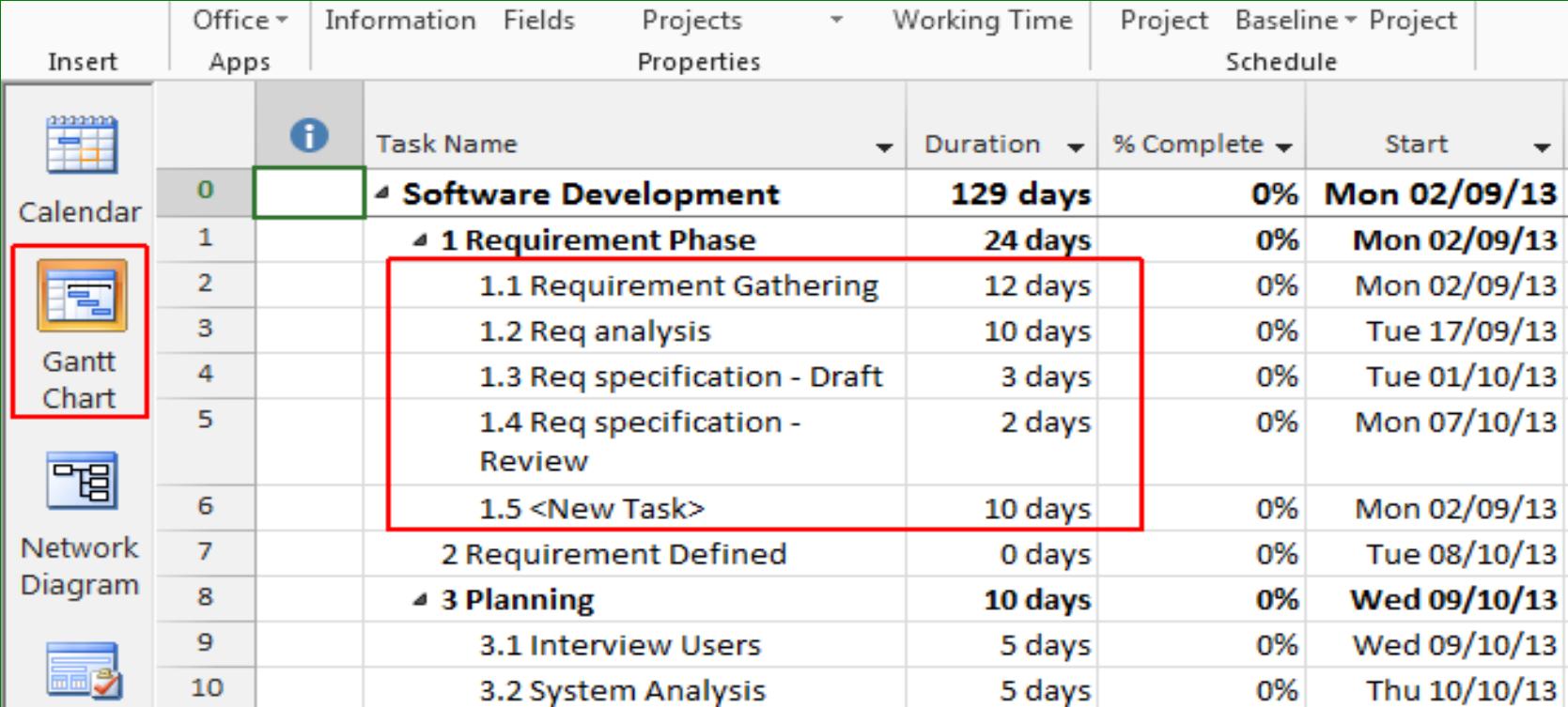
Work Breakdown Structure

Summary Task

Work Packages

- A WBS is deliverable oriented hierarchical decomposition of work to be executed by the project team
- Work Package is a project work at the lowest level of each branch of work breakdown structure
- A Summary Task is the logical grouping of tasks which are done together

Entering Tasks in the Gantt View



	Office	Information	Fields	Projects	Working Time	Project	Baseline	Project
Insert	Apps	Properties	Properties	Properties	Properties	Schedule	Schedule	Schedule
Calendar								
Gantt Chart								
Network Diagram								
0		i	Task Name		Duration	% Complete		Start
1			▲ Software Development	129 days		0%	Mon 02/09/13	
2			▲ 1 Requirement Phase	24 days		0%	Mon 02/09/13	
3			1.1 Requirement Gathering	12 days		0%	Mon 02/09/13	
4			1.2 Req analysis	10 days		0%	Tue 17/09/13	
5			1.3 Req specification - Draft	3 days		0%	Tue 01/10/13	
6			1.4 Req specification - Review	2 days		0%	Mon 07/10/13	
7			1.5 <New Task>	10 days		0%	Mon 02/09/13	
8			2 Requirement Defined	0 days		0%	Tue 08/10/13	
9			▲ 3 Planning	10 days		0%	Wed 09/10/13	
10			3.1 Interview Users	5 days		0%	Wed 09/10/13	
			3.2 System Analysis	5 days		0%	Thu 10/10/13	

- ◆ Enter Tasks into the entry table on the GANTT view
- ◆ Entry table is behind the GANTT chart and works just like a spreadsheet
- ◆ Can also enter tasks in the network diagram or the task usage views



Tables

- ◆ You can choose a variety of tables to view in conjunction with the Gantt view
- ◆ Entry, Cost, Schedule, Tracking, Earned value, Usage, Variance, Work, Hyperlink... are just some of the tables you can choose from
- ◆ Click on View on the Menu bar and then click on Table
- ◆ To view all the tables, click on More Tables...

Columns

- ◆ You can add columns to any table in the Gantt view
- ◆ Click on Insert and then Columns
- ◆ Select the column you want included in the table by clicking on the dropdown arrow associated with the first box and selecting the desired column name
- ◆ Click on OK
- ◆ That column will be included in the table to the left of the point where the selected cell appears

View -> Tables

Click on View on the Menu bar and then click on Table

The screenshot shows the Microsoft Project application interface. The 'VIEW' tab is highlighted with a red box. In the 'Format' ribbon, the 'Tables' icon is also highlighted with a red box. A dropdown menu titled 'Built-In' is open, showing various table formats. The 'Cost' option is selected and highlighted with a red box. The main workspace displays a task list with columns for Task Name, Fixed Cost, and Fixed Cost Accrual.

Task Name	Fixed Cost	Fixed Cost Accrual
Software Development	0.00₹	Prorated
1 Requirement Phase	0.00₹	Prorated
1.1 Requirement Ga	0.00₹	Prorated
1.2 Req analysis	0.00₹	Prorated
1.3 Req specificatio	0.00₹	Prorated
1.4 Req specification -	0.00₹	Prorated
1.5 <New Task>	0.00₹	Prorated
2 Requirement Define	0.00₹	Prorated
3 Planning	0.00₹	Prorated
3.1 Interview Users	0.00₹	Prorated
3.2 System Analysis	0.00₹	Prorated
3.3 Project Plan	0.00₹	Prorated
3.4 QA Plan	0.00₹	Prorated



Task types

- Automatically Scheduled Tasks
- Manually Scheduled Tasks
- Summary Tasks
- Sub Tasks
- Recurring Tasks
- Milestone Tasks
- Project Summary Task

Setting Up a Task

Other views		Planner	Other views					Group by:	None Group
Views		Resource Views			Data				
i	Task Name	Duration	Start	Finish	Predecessors	Reso			
	Software Development	129 days	02 Sep '13	10 Mar '14					
	1 Requirement Phase	24 days	02 Sep '13	08 Oct '13					
	1.1 Requirement Gathering	12 days	02 Sep '13	19 Sep '13					System
	1.2 Req analysis	10 days	17 Sep '13	30 Sep '13	2SS+9 days				System
	1.3 Req specification - Draft	3 days	01 Oct '13	04 Oct '13	3				System
	1.4 Req specification - Review	2 days	07 Oct '13	08 Oct '13	4				System
	1.5 <New Task>	10 days	02 Sep '13	17 Sep '13					
	2 Requirement Defined	0 days	08 Oct '13	08 Oct '13	1				
	3 Planning	10 days	09 Oct '13	24 Oct '13					
	3.1 Interview Users	5 days	09 Oct '13	15 Oct '13	7				System
	3.2 System Analysis	5 days	10 Oct '13	17 Oct '13	9SS+1 day				System
	3.3 Project Plan	7 days	14 Oct '13	24 Oct '13	10FS-3 days				Project

Be careful not to enter the hard dates. Enter duration and relation to the predecessor task, so that the scheduling engine can help you. The only date that you should strive to enter is the Project start date

Setup a Recurring Task

The screenshot shows the Microsoft Project application interface. The 'TASK' tab is selected in the ribbon. A 'Recurring Task Information' dialog box is open, overlaid on the main project view. The dialog box contains fields for 'Task Name' (Prepared and Send Reports), 'Duration' (2h), 'Recurrence pattern' (Weekly, every 1 week(s) on Friday), 'Range of recurrence' (Start: 02 Sep '13, End by: 10 Mar '14), and 'Calendar for scheduling this task' (None). The main project view shows a hierarchy of tasks from 'Software Development' to 'Design'.

Recurring Task Information

Task Name: Prepared and Send Reports Duration: 2h

Recurrence pattern

Daily Weekly Monthly Yearly Recur every 1 week(s) on: Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Range of recurrence

Start: 02 Sep '13 End after: 27 occurrences End by: 10 Mar '14

Calendar for scheduling this task

Calendar: None Scheduling ignores resource calendars

OK Cancel

Task

RESOURCE REPORT PROJECT VIEW Team FORMAT

Mark on Track Respect Links Inactivate Manually Schedule Auto Schedule

Inspect Move Mode

Summary Milestone Deliverable Insert Properties

Clipboard Font

Calibri 11

Paste Copy Cut Undo Redo Invert Selection

0x 25% 50% 75% 100%

B I U

Schedule

Information

Properties

Task Name

0 Software Development 129

1 1 Requirement Phase 24

2 1.1 Requirement Gathering 12

3 1.2 Req analysis 10

4 1.3 Req specification - Draft 3

5 1.4 Req specification - Review 2

6 1.5 <New Task> 10

7 2 Requirement Defined 0

8 3 Planning 10

9 3.1 Interview Users 5

10 3.2 System Analysis 5

11 3.3 Project Plan 2

12 3.4 QA Plan 2

13 3.5 Configuration management plan 2

14 4 Planning completed 0

15 5 Design 21 days 25 Oct '13 26 Nov '13

What is a recurring task ? Any ideas ?



Setup a recurring Task

14 Project Complete						
		0 days	10 Mar '14	10 Mar '14	31,42	
63	↻	15 Send Reports	123.25 days	06 Sep '13	07 Mar '14	
64	📅	15.1 Send Reports 1	2 hrs	06 Sep '13	06 Sep '13	
65	📅	15.2 Send Reports 2	2 hrs	13 Sep '13	13 Sep '13	
66	📅	15.3 Send Reports 3	2 hrs	20 Sep '13	20 Sep '13	
67	📅	15.4 Send Reports 4	2 hrs	27 Sep '13	27 Sep '13	
68	📅	15.5 Send Reports 5	2 hrs	04 Oct '13	04 Oct '13	
69	📅	15.6 Send Reports 6	2 hrs	11 Oct '13	11 Oct '13	
70	📅	15.7 Send Reports 7	2 hrs	21 Oct '13	21 Oct '13	
71	📅	15.8 Send Reports 8	2 hrs	25 Oct '13	25 Oct '13	
72	📅	15.9 Send Reports 9	2 hrs	01 Nov '13	01 Nov '13	
73	📅	15.10 Send Reports 10	2 hrs	11 Nov '13	11 Nov '13	
74	📅	15.11 Send Reports 11	2 hrs	15 Nov '13	15 Nov '13	
75	📅	15.12 Send Reports 12	2 hrs	22 Nov '13	22 Nov '13	
76	📅	15.13 Send Reports 13	2 hrs	29 Nov '13	29 Nov '13	



Insert and Delete Tasks

Insert Step 1

12	1.2.6 Introduction to MS Project Completed
13	1.3 Defining Tasks
14	1.3.1 Creating Work Breakdown structures
15	1.3.2 Setting Up a Task
16	1.3.3 Setup a recurring Task
17	1.3.4 Importing Tasks
18	1.3.5 Insert and Delete Tasks
19	1.3.6 Enter repeating information in multiple tasks at once
20	1.3.7 Enter Task Notes
21	1.3.8 Link URL to a task
22	1.3.9 Estimate Duration
23	1.3.10 Set Elapsed Time
24	1.3.11 Define Summary Task
25	1.3.12 Indenting and Outdenting tasks to n levels under Summary tasks
26	1.3.13 Setting up Using Milestones / why milestones are useful

Click Insert button here

Delete only one step!

12	1.2.6 Introduction to MS Project Completed
13	1.3 Defining Tasks
14	1.3.1 Creating Work Breakdown structures
15	1.3.2 Setting Up a Task
16	1.3.3 Setup a recurring Task
17	1.3.4 Importing Tasks
18	1.3.5 Insert and Delete Tasks
19	1.3.6 Enter repeating information in multiple tasks at once
20	1.3.7 Enter Task Notes
21	1.3.8 Link URL to a task
22	1.3.9 Estimate Duration
23	1.3.10 Set Elapsed Time
24	1.3.11 Define Summary Task

Select the task
Hit delete button

Insert Step 2

3	1.3 Defining Tasks	0.32
4	1.3.1 Creating Work Breakdown structures	1
5	1.3.2 Setting Up a Task	1
6	1.3.3 Setup a recurring Task	1
7	1.3.4 Importing Tasks	1
8	1.3.5 Insert and Delete Tasks	
9	1.3.6 Enter repeating information in multiple tasks at once	1
10	1.3.7 Enter Task Notes	1
11	1.3.8 Link URL to a task	1
12	1.3.9 Estimate Duration	1

Enter your new task here

This task got shifted down



Enter repeating information in multiple tasks at once

Step 1

A screenshot of the Microsoft Project application interface. A context menu is open over a column of task durations. The menu items are:

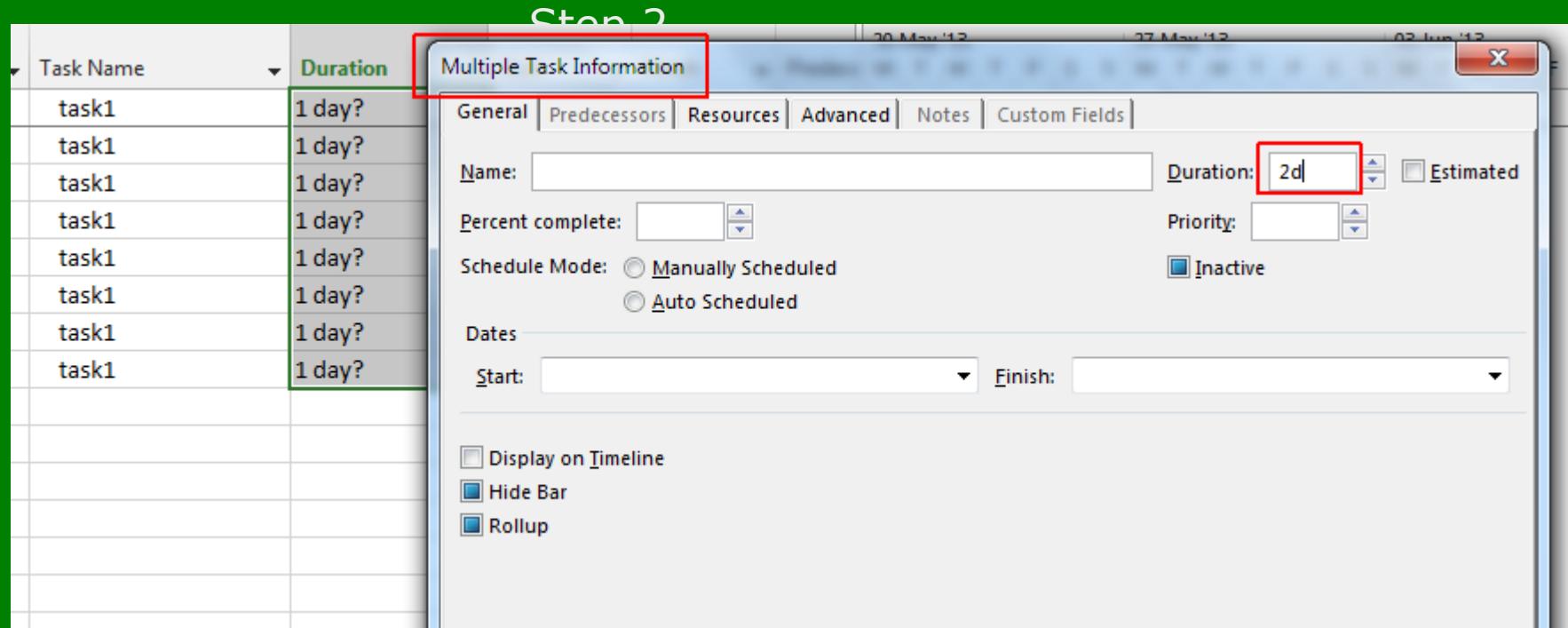
- Cut Cell
- Copy Cell
- Paste
- Paste Special...
- Scroll to Task
- Delete Task
- Inactivate Task
- Manually Schedule
- Auto Schedule
- Assign Resources...
- Fill Down
- Clear Contents
- Information... (highlighted with a red box)
- Notes...
- Add to Timeline
- Hyperlink...

The "Information..." option is highlighted with a red box.

Task Name	Duration
task1	1 day?

At the bottom of the screen, there is a status bar with the text "MANUALLY SCHEDULED".

Enter repeating information in multiple tasks at once



Expert advice :

- Use this ONLY to setup the Duration of similar tasks as you build up your plan.
- Fine tune these later with your team members when they are available



Enter Task Notes

The screenshot shows a Microsoft Project interface with a task list and a detailed task information dialog box.

Task List:

Task Name	Duration	Start	Finish	Predecessors	Resource Names
Software Development	129 days	02 Sep '13	10 Mar '14		
1 Requirement Phase	24 days	02 Sep '13	08 Oct '13		
1.1 Requirement Gathering	12 days	02 Sep '13	19 Sep '13	System Analyst	
1.2 Req analysis	10 days	17 Sep '13	30 Sep '13	2SS+9 days System Analyst	

Task Information Dialog (1.1 Requirement Gathering):

Notes Tab: This tab is highlighted with a red box. It contains the following fields:

- Name: Requirement Gathering
- Duration: 12 days
- Notes:
This is detailed information about the task

Resource Names: System Analyst, Project Manager

Task Notes are useful for storing the task details

Link URL to a task

A screenshot of the Microsoft Project application interface. A context menu is open over a task named "1.1 Requirement Gathering". The menu items are:

- Cut Cell
- Copy Cell
- Paste
- Paste Special...
- Scroll to Task
- Insert Task
- Delete Task
- Inactivate Task
- Manually Schedule
- Auto Schedule
- Assign Resources...
- Fill Down
- Clear Contents
- Information...
- Notes...
- Add to Timeline
- Hyperlink...**

The task "1.1 Requirement Gathering" is highlighted with a red box, and the "Hyperlink..." option at the bottom of the menu is also highlighted with a red box. A yellow arrow points from the text "Select a task" to the highlighted task name. Another yellow arrow points from the text "Select the Hyperlink option" to the "Hyperlink..." menu item.

Task Name	Duration	Start Date	End Date
1.1 Requirement Gathering	12 days	02 Sep	14 Sep
1.2 Req analysis	8 days	09 Sep	17 Sep
1.3 Req specification - I	7 days	16 Sep	23 Sep
1.4 Req specification - F	7 days	23 Sep	30 Sep
1.5 <New Task>			
2 Requirement Defined			
3 Planning			
3.1 Interview Users			
3.2 System Analysis			
3.3 Project Plan			
3.4 QA Plan			
3.5 Configuration management plan			
4 Planning completed			
5 Design			
5.1 Review product specification			
5.2 Develop functional specification			
5.3 prototyping			
5.4 Review functional s			
5.5 Incorporate feedback	2 days	20 Nov	22 Nov

1. Select a task
2. Right Click
3. Select the Hyperlink option

Why is this needed ?
Any guess from the team ..

Estimate Duration

0	Short Film Project	199.13 days	3/7/2005
1	Pre-Production	64.5 days	3/7/2005
2	Review script	1 wk	3/7/2005
3	Develop script breakdown and schedule	1.05 wks	3/14/2005
4	Develop production boards	3 wks	3/21/2005
5	Review production boards	1 wk	4/12/2005
6	Inactive Task	7 days	4/19/2005
7	Scout locations	2 wks	4/28/2005
8	Select locations	1.05 wks	5/12/2005
9	Hold auditions	1.05 wks	5/19/2005
10	Apply for filming permits	1 wk	5/27/2005
11	Reserve camera equipment	3 days	5/31/2005
12	Reserve sound equipment	3 days	5/31/2005
13	Pre-Production complete!	0 days	6/3/2005
14	Staff planning meeting	45.25 days	3/14/2005

You want to add task in	Use this abbreviation	It appears like this
minute	m	min
hour	h	hr
day	d	day
week	w	wk
month	mo	mon

Expert Advice

- Try to enter as much accurate durations as possible from your side.
- Do not hesitate to seek expert advice
- Involve members from the team that's going to work on those tasks
- Keep some reasonable slack for people to stretch themselves and unforeseen tasks that might pop up.

$8 \text{ hours task duration} \times 100\% \text{ assignment units (1 person)} = 8 \text{ man hours of work}$

$8 \text{ hours task duration} \times 200\% \text{ assignment units (2 persons)} = 16 \text{ man hours of work}$

Estimate Duration

1 Unit = 8 Man Hours		Work (In Hours)					Duration taken to complete task (in days)
8		Units @	8	16	24	32	
200%	0.5	1	1.5	2			
100%	1	2	3	4			
50%	2	4	6	8			
25%	4	8	12	16			

$8 \text{ hours task duration} \times 100\% \text{ assignment units (1 person)} = 8 \text{ man hours of work}$

$8 \text{ hours task duration} \times 200\% \text{ assignment units (2 persons)} = 16 \text{ man hours of work}$



Set Elapsed Duration

1.3.15 Define Task Relationship	5 mins	Wed 9/1
1.3.16 Linking Tasks	5 mins	Wed 9/1
1.3.17 Lag and Lead Time	5 mins	Wed 9/1
1.4 Defining Resources	2.69 days /ed 9/9	
1.4.1 Setting Up People	4 edays	Wed 9/1
1.4.2 Adjusting Availability	15 mins	Mon 9/1
1.4.3 Setting Up Equipment	10 mins	Mon 9/1
1.4.4 Setting Up Material	10 mins	Mon 9/1
1.4.5 Entering Pay Rates	10 mins	Mon 9/1
1.4.6 Assigning a Resource to a Task	10 mins	Mon 9/1
1.4.7 Adjusting individual Resources	10 mins	Mon 9/1
1.4.8 Assigning Resources	10 mins	Mon 9/1
1.4.9 Viewing Overallocations	10 mins	Mon 9/1

Why do we need this ? Any guess ?



Set Elapsed Duration

1.3.15 Define Task Relationship	5 mins	Wed 9/1
1.3.16 Linking Tasks	5 mins	Wed 9/1
1.3.17 Lag and Lead Time	5 mins	Wed 9/1
1.4 Defining Resources	2.69 days /ed 9/9	
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1.4.4 Setting Up Material	10 mins	Mon 9/1
1.4.5 Entering Pay Rates	10 mins	Mon 9/1
1.4.6 Assigning a Resource to a Task	10 mins	Mon 9/1
1.4.7 Adjusting individual Resources	10 mins	Mon 9/1
1.4.8 Assigning Resources	10 mins	Mon 9/1
1.4.9 Viewing Overallocations	10 mins	Mon 9/1

This adds up the days in terms of Absolute number of hours, instead of just man hours.



Set Elapsed Duration

In MS Project working day begins at 8:00am and finishes at 5:00pm allowing for 1 hour of lunch in between. It means remainder of each day is designated as non-working time.

To account for these times e.g for rented machinery (e.g. onsite generator) which is billed at continuous 24 hours period, we can use elapsed duration.

Simply add "e" in front of the duration code to account for the continuous effort.

<i>Duration</i>	<i>Elapsed duration code</i>
<i>Hours</i>	<i>eH, her, eHour</i>
<i>Days</i>	<i>eD, eDy, eDay</i>
<i>Weeks</i>	<i>eW, eWk, eWeek</i>
<i>Months</i>	<i>eM, eMo, eMonth</i>

Define Summary Task

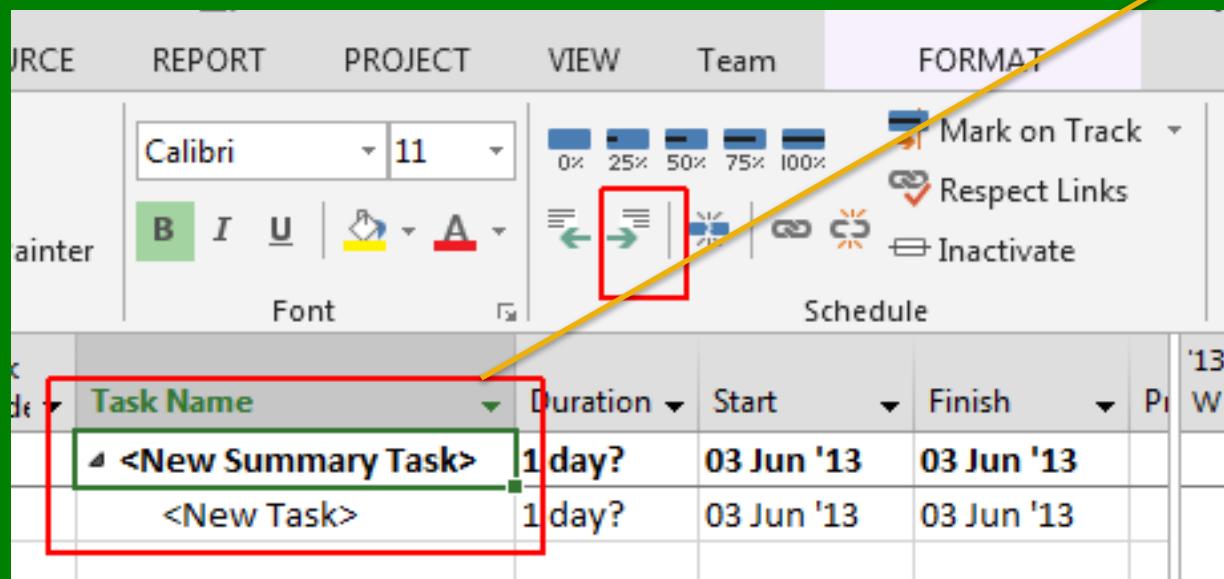
The screenshot shows the Microsoft Project ribbon with the 'FORMAT' tab selected. In the 'Tasks' group, the 'Auto Schedule' button is selected. A red box highlights the 'Summary' button. An orange arrow points from the text 'Use this' below to the 'Summary' button. A green box highlights the first task row in the Gantt chart.

Task Name	Duration	Start	Finish
<New Summary Task>	1 day?	03 Jun '13	03 Jun '13
<New Task>	1 day?	03 Jun '13	03 Jun '13

Use this

- For example, it is common to divide a manufacturing project into major phases of work such as procurement, pre-production, production and distribution.
- Summary Task help you define phase of the project
- It can also be described as a group of tasks which are done in a batch

Define Summary Task



A screenshot of the Microsoft Project application interface. The ribbon tabs at the top include SOURCE, REPORT, PROJECT, VIEW, Team, and FORMAT. The FORMAT tab is selected. Below the ribbon, there are font and schedule tools. A red box highlights the 'Font' section of the ribbon and the first row of the task table below. The task table has columns for Task Name, Duration, Start, Finish, and Progress. The first row contains the text '<New Summary Task>' and '1 day?'. The second row contains the text '<New Task>' and '1 day?'. The third row is partially visible.

Task Name	Duration	Start	Finish	Progress
<New Summary Task>	1 day?	03 Jun '13	03 Jun '13	
<New Task>	1 day?	03 Jun '13	03 Jun '13	

Notice this

Expert Advice

- When you start planning don't bother too much about summary tasks
- Just go ahead and dump all the tasks you have in your head
- When you see all the tasks in front of you the summary tasks will appear in your mind
- You create up to n levels but it's useful up to 3 levels

- For example, it is common to divide a manufacturing project into major phases of work such as procurement, pre-production, production and distribution.
- Summary Task help you define phase of the project
- It can also be described as a group of tasks which are done in a batch
- The summary has no duration of its own it gets this from the sub tasks !

Setting up Using Milestones

Why milestones are useful ?

1.2 Req analysis	10 days	17 Sep '13	30 Sep '13	233+5 day	System
1.3 Req specification - Draft	3 days	01 Oct '13	04 Oct '13	3	System
1.4 Req specification - Review	2 days	07 Oct '13	08 Oct '13	4	System
2 Requirement Defined	0 days	08 Oct '13	08 Oct '13	1	08/E
3 Planning	10 days	09 Oct '13	24 Oct '13		System
3.1 Interview Users	5 days	09 Oct '13	15 Oct '13	6	System
3.2 System Analysis	5 days	10 Oct '13	17 Oct '13	8SS+1 day	System



- Milestones typically have the completed or achieved at the end
- They essentially have zero duration and the last task in a phase
- They are represented by diamond symbol
- Can someone guess the logical difference between MSP and Road milestone ?

Expert Advice

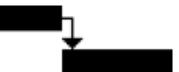
- Always setup milestones even if it seems silly at first
- When you later do reports for top bosses they are interested only in what has been completed.
- Bosses are not interested in what you have done they are only interested in what you have completed or achieved and milestones tell them that



Organizing Phases

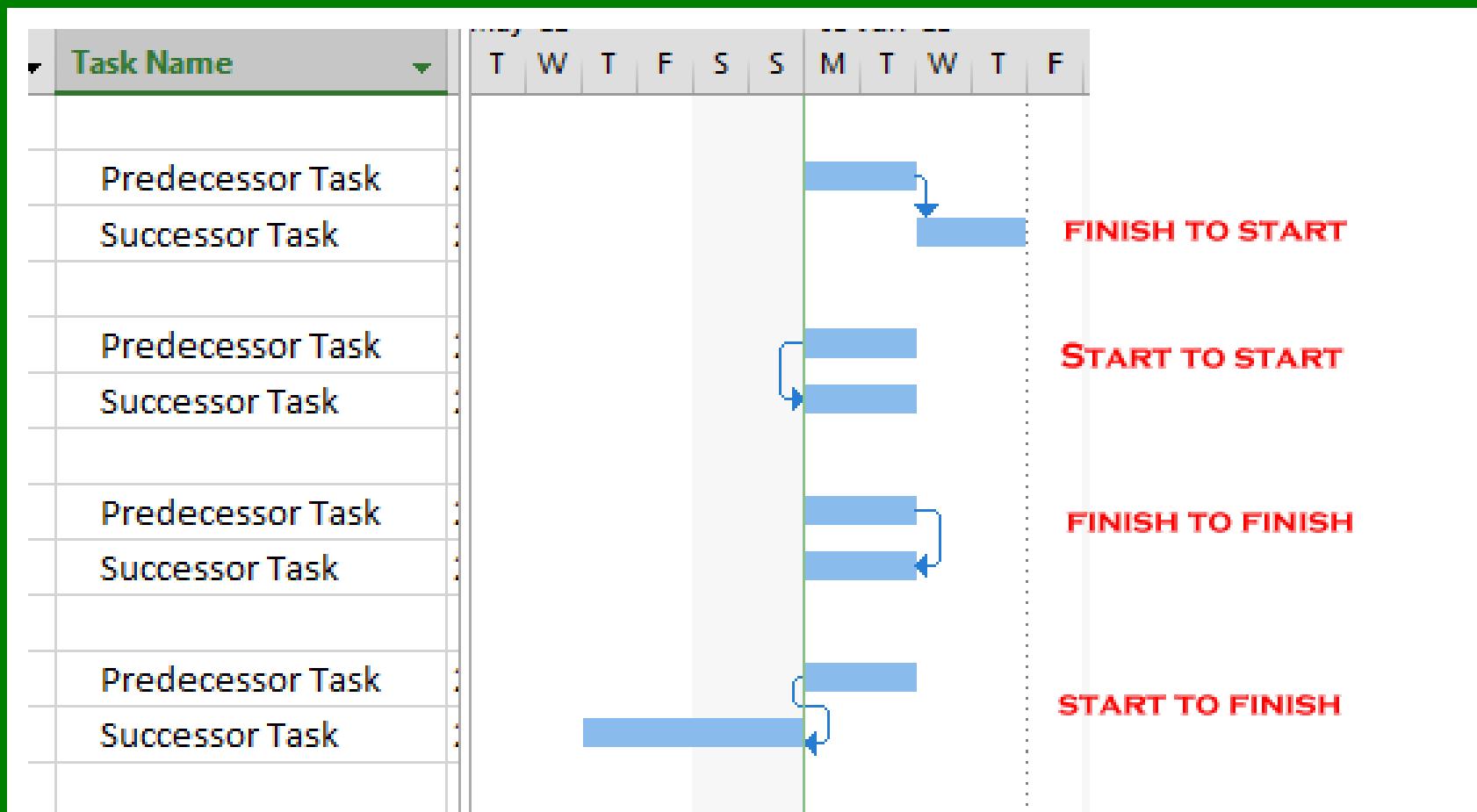
	Task Name	Duration	Start	Finish	Predecessor	
	Software Development	129 days	02 Sep '13	10 Mar '14		PROJECT NAME
✓	1 Requirement Phase	24 days	02 Sep '13	08 Oct '13		PHASE NAME
✓	1.1 Requirement Gathering	12 days	02 Sep '13	19 Sep '13		
✓	1.2 Req analysis	10 days	17 Sep '13	30 Sep '13	2SS+9 da	
✓	1.3 Req specification - Draft	3 days	01 Oct '13	04 Oct '13	3	
✓	1.4 Req specification - Review	2 days	07 Oct '13	08 Oct '13	4	
	2 Requirement Defined	0 days	08 Oct '13	08 Oct '13	1	
	3 Planning Phase	10 days	09 Oct '13	24 Oct '13		
	3.1 Interview Users	5 days	09 Oct '13	15 Oct '13	6	
	3.2 System Analysis	5 days	10 Oct '13	17 Oct '13	8SS+1 da	
	3.3 Project Plan	7 days	14 Oct '13	24 Oct '13	9FS-3 day	

Define Task Relationship (dependencies)

This task relationship	Means	Looks like this In the Gantt chart	Example
Finish-to-start (FS)	The finish date of the predecessor task determines the start date of the successor task.		A film scene must be shot before it can be edited.
Start-to-start (SS)	The start date of the predecessor task determines the start date of the successor task.		Reviewing a script and developing the script breakdown and schedule are closely related, and they should occur simultaneously.
Finish-to-finish (FF)	The finish date of the predecessor task determines the finish date of the successor task.		Tasks that require specific equipment must end when the equipment rental ends.
Start-to-finish (SF)	The start date of the predecessor task determines the finish date of the successor task.		The time when the editing lab becomes available determines when a pre-editing task must end. (This type of relationship is rarely used.)

Yes, you guessed it right relationships are important here too !

Define Task Relationship



Define Task Relationship

	i	Task Mode ▾	Task Name	Duration ▾	Start	Finish	Predecessor ▾	Resc Name	03 Jun '13	S	M	T	W	T
1														
2		➡	Predecessor Task	2 days	03 Jun '13	04 Jun '13								
3		➡	Successor Task	2 days	05 Jun '13	06 Jun '13	2							

Finish to Start

Define Task Relationship

	i	Task Mode ▾	Task Name	Duration ▾	Start ▾	Finish ▾	Predecessor ▾	Resc Nam	03 Jun '13	S M T W T
5		Predecessor Task	2 days	03 Jun '13	04 Jun '13					
6		Successor Task	2 days	03 Jun '13	04 Jun '13	5SS				
7										

Start to Start

Define Task Relationship

		Task Mode ▾	Task Name ▾	Duration ▾	Start ▾	Finish ▾	Predecessor ▾	Resc Nam	03 Jun '13	S	M	T	W	
8			Predecessor Task	2 days	03 Jun '13	04 Jun '13								
9			Successor Task	2 days	03 Jun '13	04 Jun '13	8FF							
10														

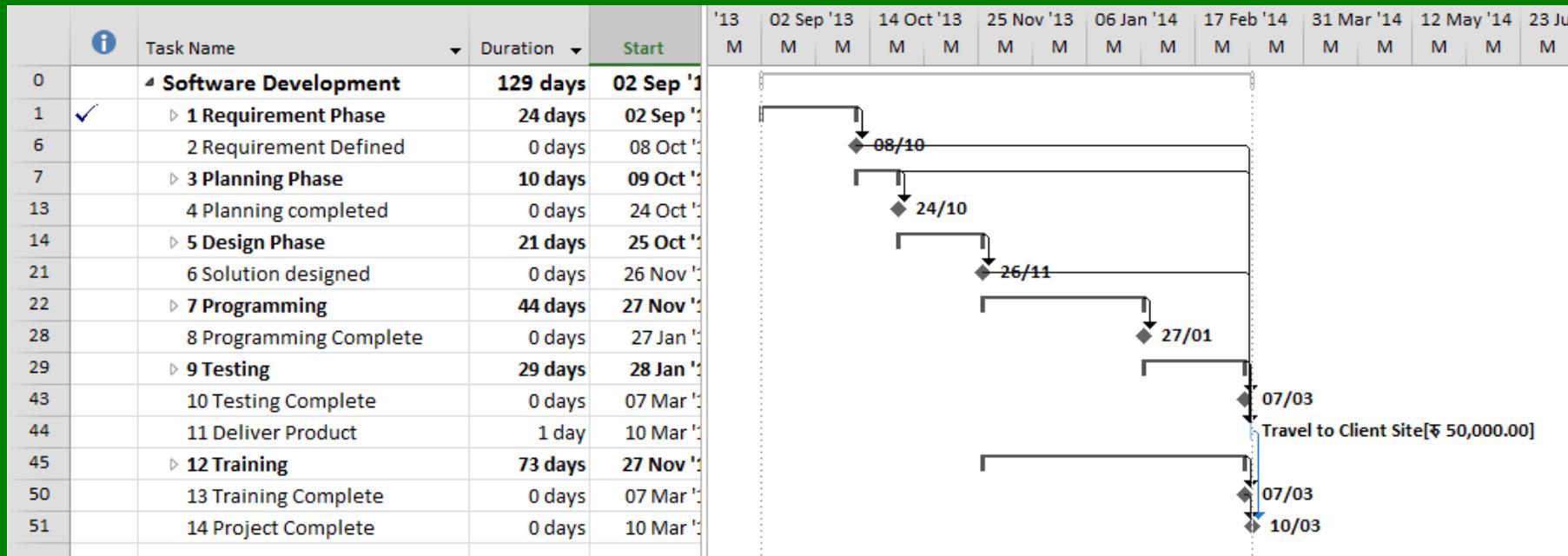
Finish to Finish

Define Task Relationship

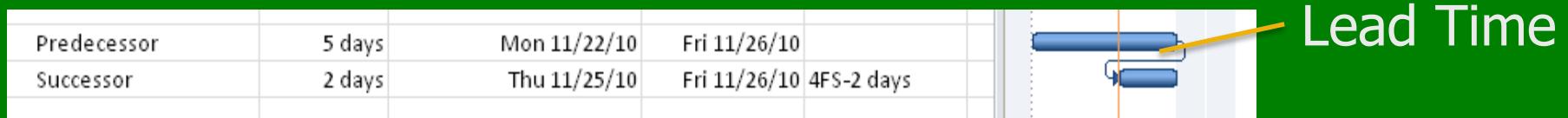
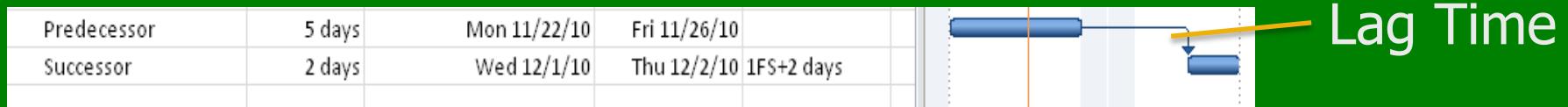
		Task Mode ▾	Task Name	Duration ▾	Start ▾	Finish ▾	Predecessor ▾	Resc Nam	03 Jun '13	S	M	T	W	
11			Predecessor Task	2 days	03 Jun '13	04 Jun '13								
12			Successor Task	2 days	30 May '13	03 Jun '13	11SF							

Start to Finish

Linking Tasks



Lag and Lead Time



Expert Advice

- You may enter lead time based upon past vendor deliveries during planning.
- Always confirm “Lead time” from your vendor or supplier after you are done with planning
- His hands could be full this time !

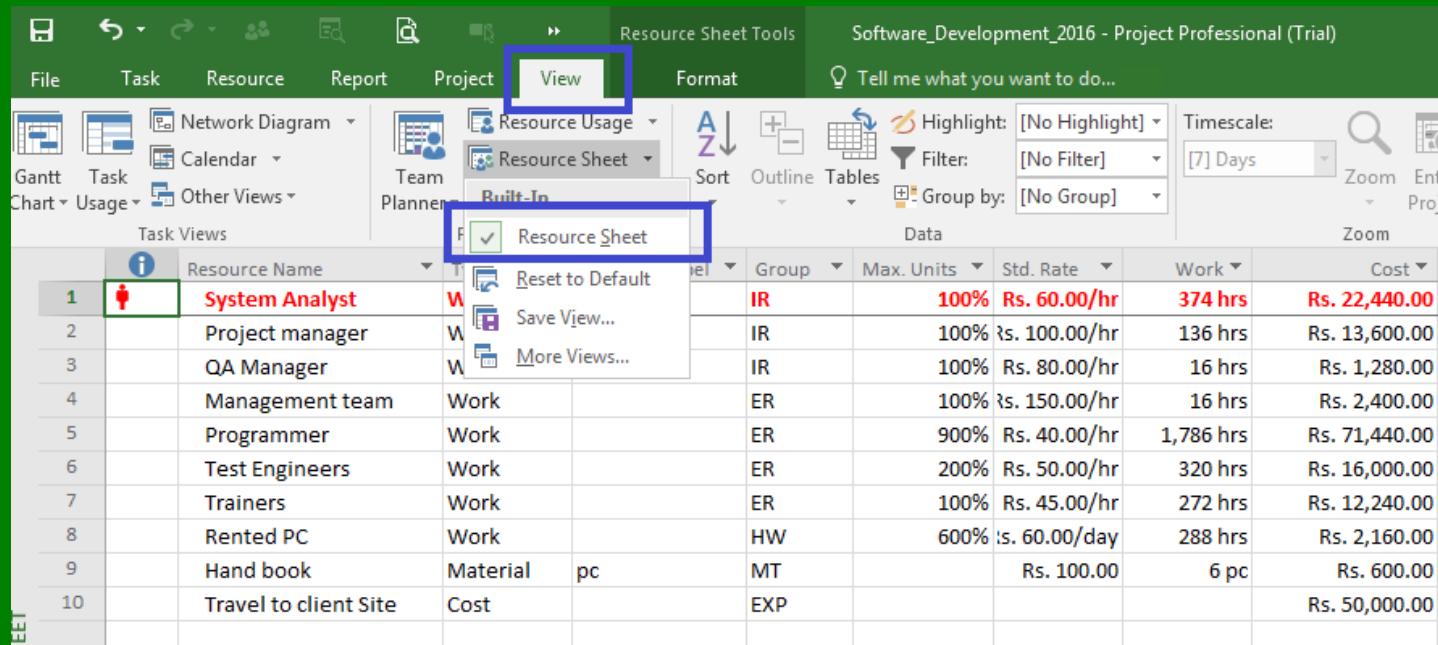


Defining Resources

1. Setting Up People
2. Adjusting Availability
3. Setting Up Material
4. Setting Up Cost Type
5. Entering Pay Rates
6. Assigning a Resource to a Task
7. Adjusting individual Resources
8. Assigning Resources
9. Viewing Over allocations
10. Resolve Over allocations
11. Assigning Material Resources
12. Setting Constraints
13. The Critical Path
14. Change Calendar for Tasks
15. Delete a Calendar
16. Change Timeline

Setting Up People

Go to View → Resource Sheet



Resource Name	Category	Group	Max. Units	Std. Rate	Work	Cost
System Analyst	Work	IR	100%	Rs. 60.00/hr	374 hrs	Rs. 22,440.00
Project manager	Work	IR	100%	Rs. 100.00/hr	136 hrs	Rs. 13,600.00
QA Manager	Work	IR	100%	Rs. 80.00/hr	16 hrs	Rs. 1,280.00
Management team	Work	ER	100%	Rs. 150.00/hr	16 hrs	Rs. 2,400.00
Programmer	Work	ER	900%	Rs. 40.00/hr	1,786 hrs	Rs. 71,440.00
Test Engineers	Work	ER	200%	Rs. 50.00/hr	320 hrs	Rs. 16,000.00
Trainers	Work	ER	100%	Rs. 45.00/hr	272 hrs	Rs. 12,240.00
Rented PC	Work	HW	600%	Rs. 60.00/day	288 hrs	Rs. 2,160.00
Hand book	Material	pc		Rs. 100.00	6 pc	Rs. 600.00
Travel to client Site	Cost	EXP				Rs. 50,000.00

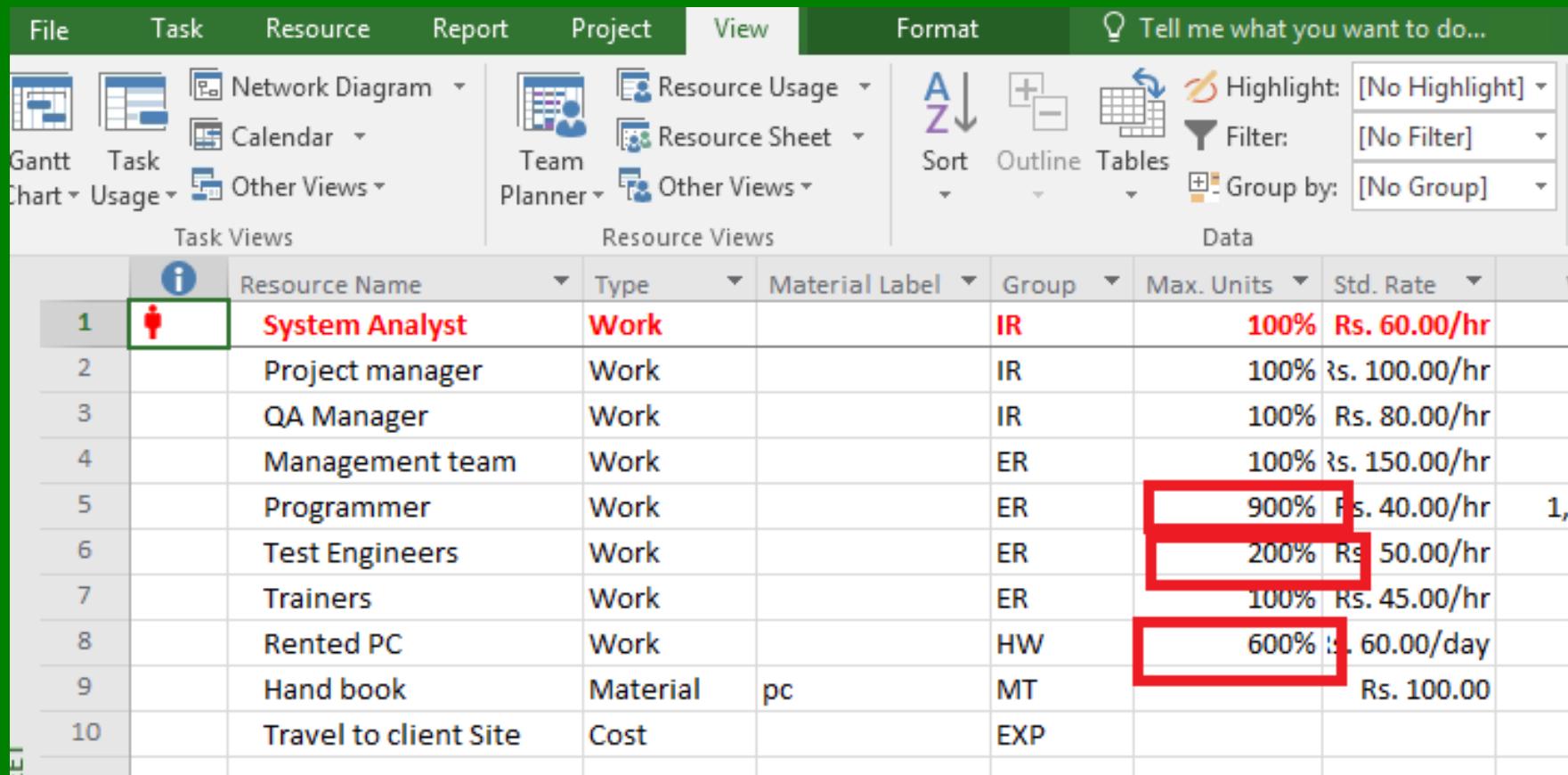
Notice the Std. Rate, Overtime Rate and Cost / Use why they are so?

Expert Advice

- Avoid using people's names directly
- Use their functionality and names in bracket
- e.g. Design Engineer (Rajeev Malhotra)
- Even a new comer in your company looking at your plan should find it easy to know what work is being done and by whom
- Project plan should focus on functionalities not personality.

Adjusting Availability

Go to View → Resource Sheet

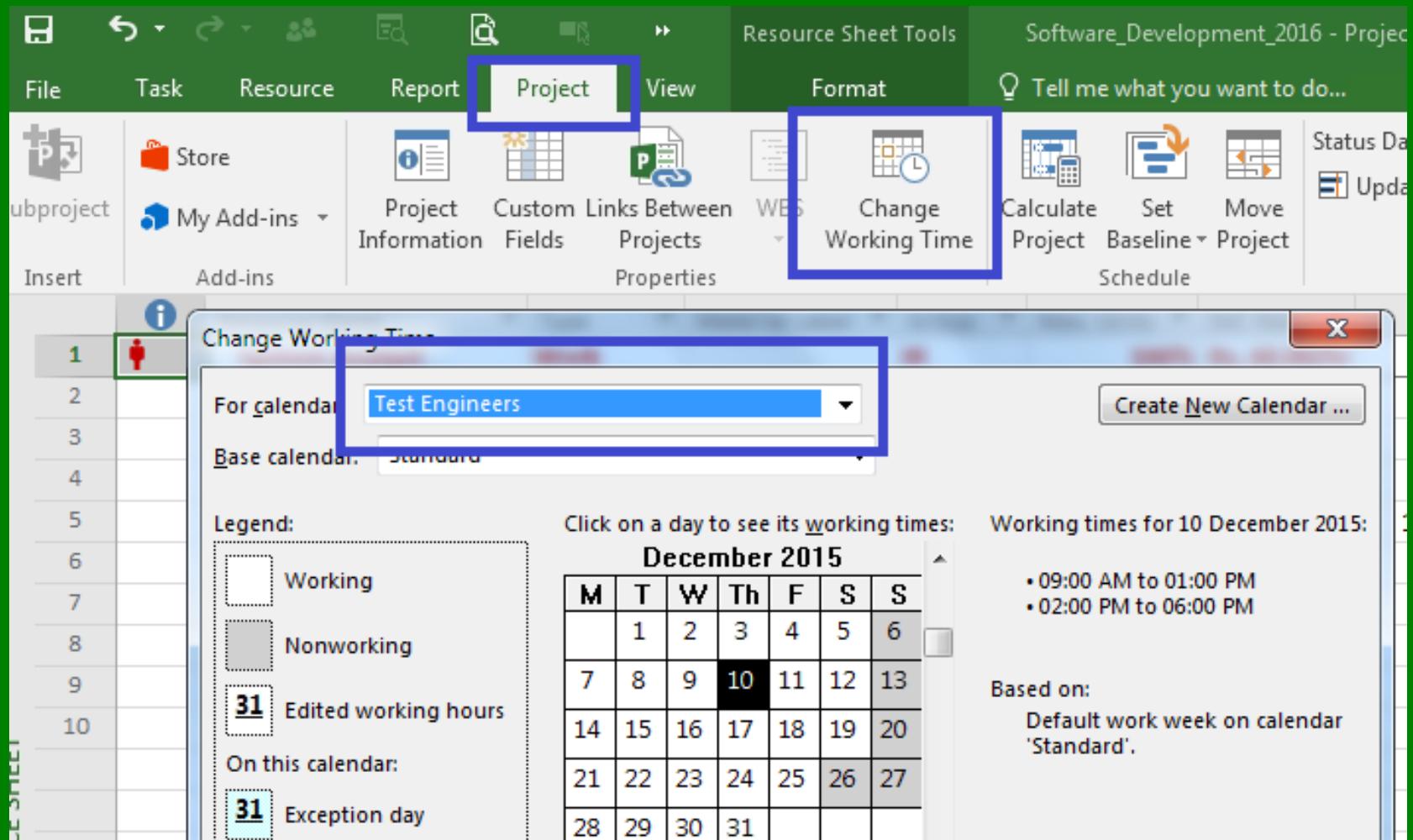


The screenshot shows the Microsoft Project application interface with the 'View' tab selected. The 'Resource Sheet' option under the 'View' tab is also selected. The main area displays a resource sheet with 10 rows of data. The columns include: Row#, Resource Name, Type, Material Label, Group, Max. Units, Std. Rate, and various other columns partially visible. The first resource, 'System Analyst', has its entire row highlighted with a green border. The 'Max. Units' column for the 'Programmer' resource is highlighted with a red border.

Row#	Resource Name	Type	Material Label	Group	Max. Units	Std. Rate	
1	System Analyst	Work		IR	100%	Rs. 60.00/hr	3
2	Project manager	Work		IR	100%	Rs. 100.00/hr	1
3	QA Manager	Work		IR	100%	Rs. 80.00/hr	1
4	Management team	Work		ER	100%	Rs. 150.00/hr	1
5	Programmer	Work		ER	900%	Rs. 40.00/hr	1,7
6	Test Engineers	Work		ER	200%	Rs. 50.00/hr	3
7	Trainers	Work		ER	100%	Rs. 45.00/hr	2
8	Rented PC	Work		HW	600%	Rs. 60.00/day	2
9	Hand book	Material	pc	MT		Rs. 100.00	
10	Travel to client Site	Cost		EXP			

Adjusting Availability via Resource Calendar

Go to Project → Change Working Time





Assigning a Resource to a Task

Go to Resource → Assign Resources

The screenshot shows the Microsoft Project application interface. The ribbon is visible at the top, with the 'Resource' tab selected. Below the ribbon is a toolbar with icons for Team Planner, View, Assign Resources, Resource Pool, Add Resources, Information, Notes, Details, Level Selection, Level Resource, Level All, and Level Selection. A red arrow points from the 'Assign Resources' icon in the toolbar down to the 'Assign Resources' dialog box. The dialog box has a title 'Assign Resources' and a sub-section 'Task: Requirement Analysis'. It includes a checkbox for 'Resource list options'. Below this is a table titled 'Resources from Software_Development_2016' with columns: Resource Name, F/D, Units, and Cost. A row for 'System Analyst' is selected, and the 'Assign' button is highlighted with a blue box. Other rows in the table include 'Management team', 'Programmer', 'Project manager', and 'QA Manager'. To the right of the table are buttons for 'Remove', 'Replace...', and 'Graph'.

Use this button
Or press Alt+F10

Select the appropriate person /material for the task

Assigning Resources

The image displays two side-by-side screenshots of a project management application's task assignment interface.

Screenshot 1 (Left): Shows a task named "Setup Cell Tower" with a duration of 1 day. The "Task Information" dialog is open, showing one resource assigned: "Tower Engineer1" at 100% units, costing Rs 3,200.00.

Resource Name	Assignment Owner	Units	Cost
Tower Engineer1		100%	Rs 3,200.00

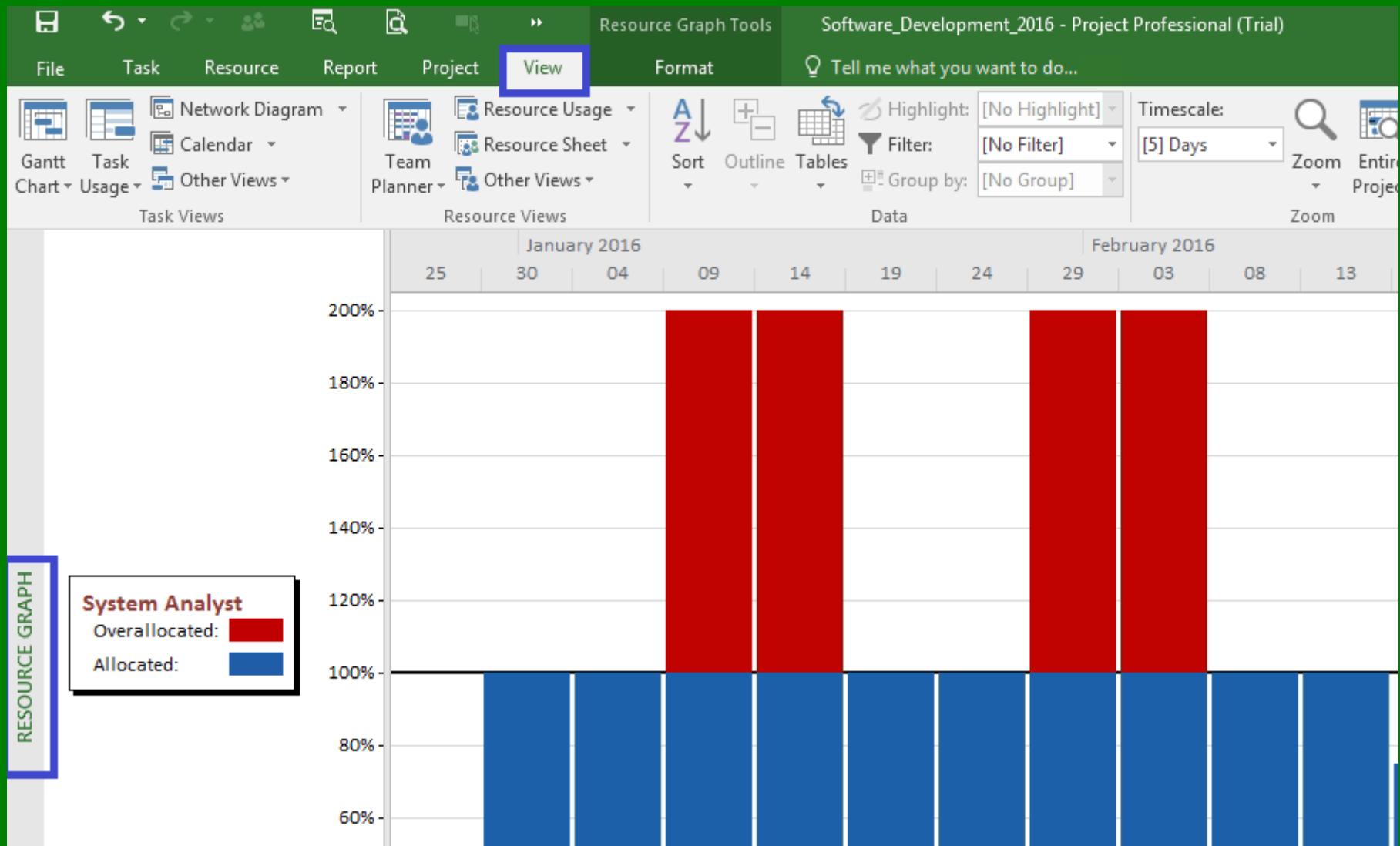
Screenshot 2 (Right): Shows the same task "Setup Cell Tower" but with a duration of 0.5 days. The "Task Information" dialog now shows two resources assigned: "Tower Engineer1" at 100% units, costing Rs 1,600.00, and "Tower Engineer2" at 100% units, costing Rs 1,600.00.

Resource Name	Assignment Owner	Units	Cost
Tower Engineer1		100%	Rs 1,600.00
Tower Engineer2		100%	Rs 1,600.00

What happens to task duration /cost when more resources are assigned ?

Viewing Over allocations

View → Other Views -> Resource Graph



Viewing Over allocations

What if this happens ?

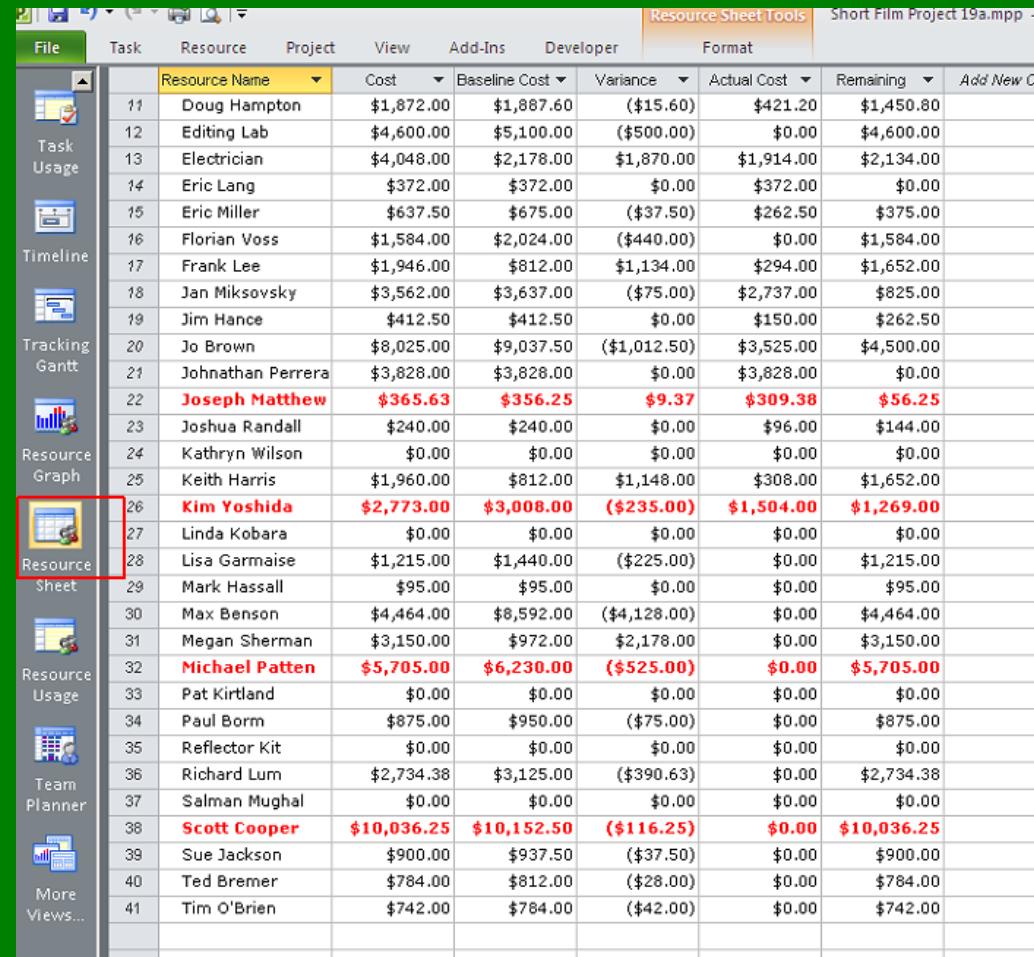
Task Name	Duration	Start	Finish	Predecessors	Resource Names	W	T	F	S	S	M	T	W	T	F	S	S	
Set up cell tower 1	1 day	Fri 9/11/09	Mon 9/14/09		Tower Engineer1													
Set up cell tower 2	1 day	Fri 9/11/09	Mon 9/14/09		Tower Engineer1													

Go to View → Resource Sheet

5		Printed Circuit Boards	Material		PCB				Rs 250.00				Rs 0.00	Prorated				
6		Transformer Coil Rolls	Material		TCR					Rs 1,200.00				Rs 0.00	Prorated			
7		Generator	Work		G			100%	Rs 0.00/hr		Rs 0.00/hr	Rs 1,500.00	Prorated	Standard				
8		Hi Fi Cell Tower Engine	Work		HF			50%	Rs 2,000.00/hr		Rs 0.00/hr	Rs 0.00	Prorated	Standard				
9	◆ Tower Engineer1	Tower Engineer1	Work		TE1			100%	Rs 0.00/hr		Rs 0.00/hr	Rs 0.00	Prorated	Standard				
10	◆ This resource should be leveled based on a Day by Day setting.				TE2			100%	Rs 0.00/hr		Rs 0.00/hr	Rs 0.00	Prorated	Standard				

- This was easier to know here because we knew
- But mostly when we setup a big plan and allocate resources, we won't know it has happened
- MS Project does not raise alarm but let's you correct it

Viewing Over allocations

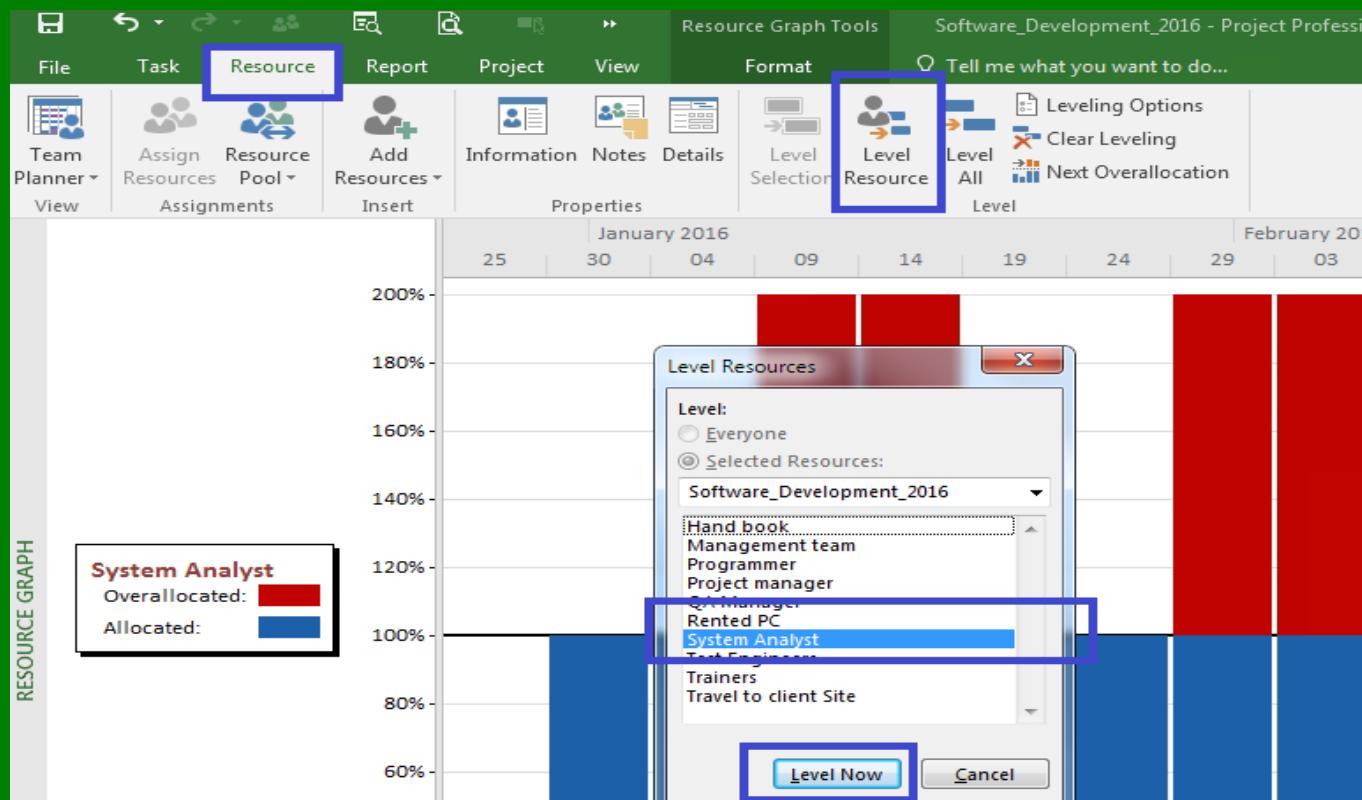


	Resource Name	Cost	Baseline Cost	Variance	Actual Cost	Remaining	Add New Cost
11	Doug Hampton	\$1,872.00	\$1,887.60	(\$15.60)	\$421.20	\$1,450.80	
12	Editing Lab	\$4,600.00	\$5,100.00	(\$500.00)	\$0.00	\$4,600.00	
13	Electrician	\$4,048.00	\$2,178.00	\$1,870.00	\$1,914.00	\$2,134.00	
14	Eric Lang	\$372.00	\$372.00	\$0.00	\$372.00	\$0.00	
15	Eric Miller	\$637.50	\$675.00	(\$37.50)	\$262.50	\$375.00	
16	Florian Voss	\$1,584.00	\$2,024.00	(\$440.00)	\$0.00	\$1,584.00	
17	Frank Lee	\$1,946.00	\$812.00	\$1,134.00	\$294.00	\$1,652.00	
18	Jan Miksovsky	\$3,562.00	\$3,637.00	(\$75.00)	\$2,737.00	\$825.00	
19	Jim Hance	\$412.50	\$412.50	\$0.00	\$150.00	\$262.50	
20	Jo Brown	\$8,025.00	\$9,037.50	(\$1,012.50)	\$3,525.00	\$4,500.00	
21	Johnathan Perrera	\$3,828.00	\$3,828.00	\$0.00	\$3,828.00	\$0.00	
22	Joseph Matthew	\$365.63	\$356.25	\$9.37	\$309.38	\$56.25	
23	Joshua Randall	\$240.00	\$240.00	\$0.00	\$96.00	\$144.00	
24	Kathryn Wilson	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
25	Keith Harris	\$1,960.00	\$812.00	\$1,148.00	\$308.00	\$1,652.00	
26	Kim Yoshida	\$2,773.00	\$3,008.00	(\$235.00)	\$1,504.00	\$1,269.00	
27	Linda Kobara	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
28	Lisa Garmaise	\$1,215.00	\$1,440.00	(\$225.00)	\$0.00	\$1,215.00	
29	Mark Hassall	\$95.00	\$95.00	\$0.00	\$0.00	\$95.00	
30	Max Benson	\$4,464.00	\$8,592.00	(\$4,128.00)	\$0.00	\$4,464.00	
31	Megan Sherman	\$3,150.00	\$972.00	\$2,178.00	\$0.00	\$3,150.00	
32	Michael Patten	\$5,705.00	\$6,230.00	(\$525.00)	\$0.00	\$5,705.00	
33	Pat Kirtland	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
34	Paul Borm	\$875.00	\$950.00	(\$75.00)	\$0.00	\$875.00	
35	Reflector Kit	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
36	Richard Lum	\$2,734.38	\$3,125.00	(\$390.63)	\$0.00	\$2,734.38	
37	Salman Mughal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
38	Scott Cooper	\$10,036.25	\$10,152.50	(\$116.25)	\$0.00	\$10,036.25	
39	Sue Jackson	\$900.00	\$937.50	(\$37.50)	\$0.00	\$900.00	
40	Ted Bremer	\$784.00	\$812.00	(\$28.00)	\$0.00	\$784.00	
41	Tim O'Brien	\$742.00	\$784.00	(\$42.00)	\$0.00	\$742.00	

- This was easier to know here because we knew
- But mostly when we setup a big plan and allocate resources, we won't know it has happened
- MS Project does not raise alarm but let's you correct it

Resolve Over allocations

We can't have one person working in two places at the same time !
How do we set this right ?



Expert Advice

- Mostly use the manual method only
- Because there could be some critical task which cannot be shifted to a later date but another person could be arranged high priority basis to do the task on the same date itself
- After you are done manually use the automatic method

- MS Project will go through your plan and shift the dates of the tasks
- Alternately you can also go through the dates of the over allocated resources and arrange for and provide alternate resources manually



Assigning Material Resources

Resource Name	Type	Initials	Max. Units	Std. Rate	Ovt. Rate	Cost/Use	Accrue At	Base Calendar
Specialist Engineer	Work	SE	50%	Rs 1,500.00/hr	Rs 0.00/hr	Rs 0.00	Prorated	Standard
Tower Engineer1	Work	TE1	100%	Rs 400.00/hr	Rs 0.00/hr	Rs 0.00	Prorated	Standard
Tower Engineer2	Work	TE2	100%	Rs 400.00/hr	Rs 0.00/hr	Rs 0.00	Prorated	Standard
Tower Power Unit	Material	T		Rs 500,000.00		Rs 0.00	Prorated	

Setup Cell Tower 0.5 days 9/23/2009 9/23/2009

Assign Resources

Task: Setup Cell Tower

+ Resource list options

Resources from MS_Project_Training_Schedule_2007_version01.mpp

Resource Name	R/D	Units	Cost
Tower Engineer1		100%	Rs 1,600.00
Tower Engineer2		100%	Rs 1,600.00
Tower Power Unit		1	Rs 500,000.00
Assembly line workers			
Cartage			
Generator			
PCB Design Engineer			
Printed Circuit Board			
Project Manager			
Shop floor assistant			

Hold down Ctrl and click to select multiple resources

Assign Remove Replace... Graphs... Close Help

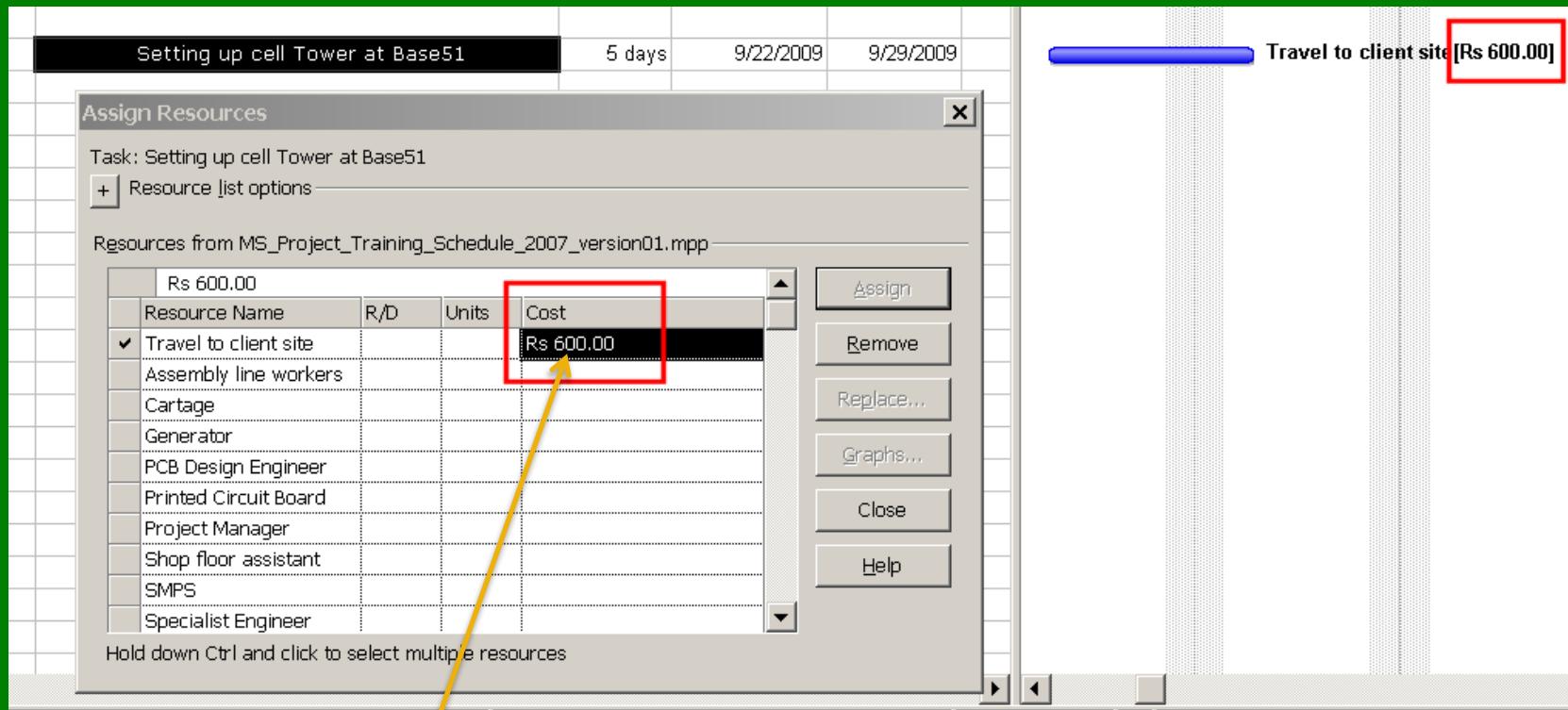
Did you notice the duration ?



Calculating costs

- ◆ Fixed costs
 - Enter these in the cost table
 - From the VIEW menu item change to the cost table
 - Enter fixed costs for Task
- ◆ Variable costs
 - Enter resource hourly rates (or daily, Monthly)
 - MS Project will calculate automatically

Assigning Cost Type



The actual cost has to be entered manually when applied to a task

Setting Constraints

The screenshot shows a Microsoft Project Gantt chart and a 'Task Information' dialog box. The Gantt chart lists various project tasks with their start and end dates. The 'Task Information' dialog is open for task 'Interview Users'. The 'Advanced' tab is selected. The 'Name:' field contains 'Interview Users'. The 'Deadline:' field is set to 'NA'. The 'Constraint type:' dropdown is set to 'Start No Earlier Than' and the 'Constraint date:' dropdown is set to '09 Oct '13'. Other fields include 'Task type: Fixed Units', 'Calendar: None', 'WBS code: P1.3.1', and 'Earned value method: % Complete'. Buttons for 'Help', 'OK', and 'Cancel' are at the bottom.

Expert Advice

- After entering the tasks look at your contract documents carefully and set constraints for...
- Look for deliverables that have to delivered by a certain date or it attracts penalty
- Look for tasks that **MUST** be started on a fixed date because some engineer is arriving from abroad
- Benefit : MS Project will alert you in case of re-scheduling affects any of these jobs
- This is defined as limitation or restriction of time



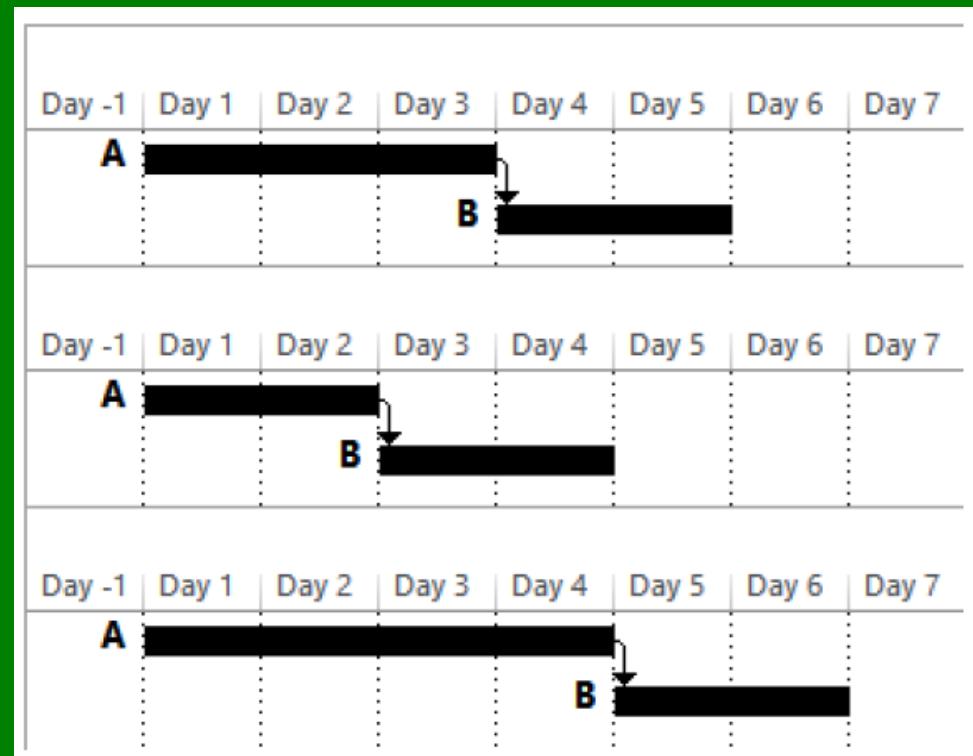
Setting Task Constraints



- ◆ Every task that you enter into Project has some type of constraint applied to it. A constraint determines the degree to which that task can be rescheduled. There are three categories of constraints:
 - ◆ Flexible constraints
 - As Soon As Possible (ASAP)
 - As Late As Possible (ALAP)
 - ◆ Inflexible constraints
 - Start No Earlier Than (SNET)
 - Start No Later Than (SNLT)
 - Finish No Earlier Than (FNET)
 - Finish No Later Than (FNLT)
 - ◆ Semi-flexible constraints
 - Must Start On (MSO)
 - Must Finish On (MFO)

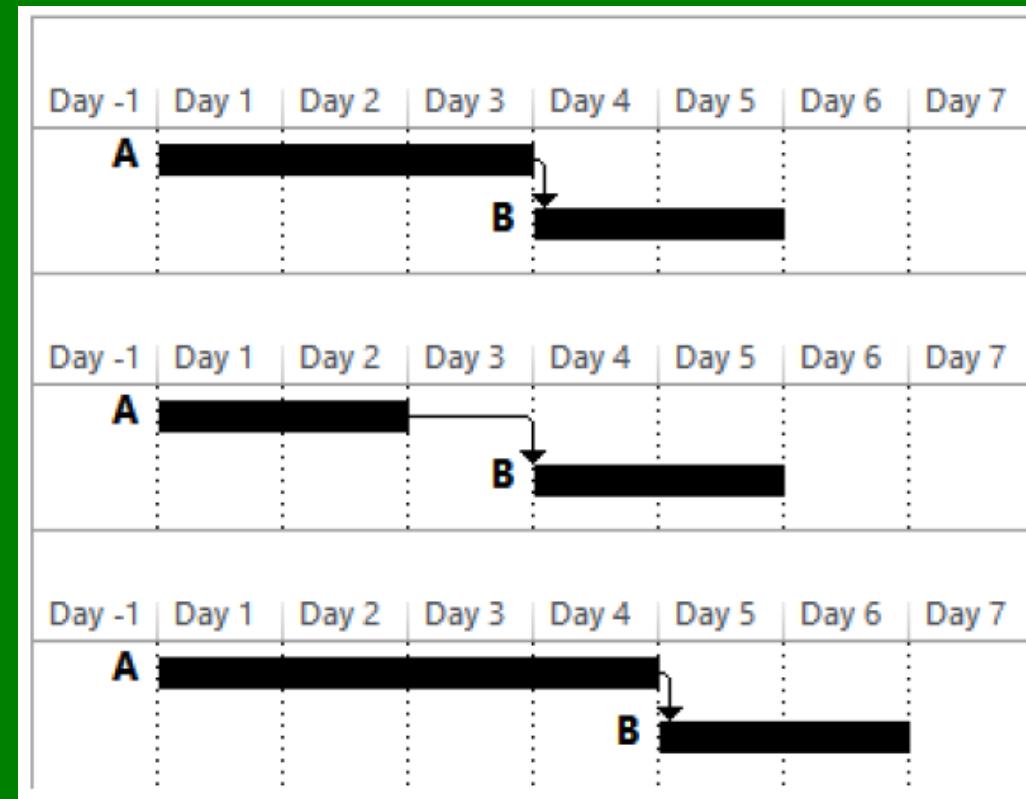
Flexible constraints

- ◆ Tasks A and B are linked and task B has an ASAP constraint applied. As the duration of task A shrinks or grows, the start date of task B is automatically adjusted accordingly.



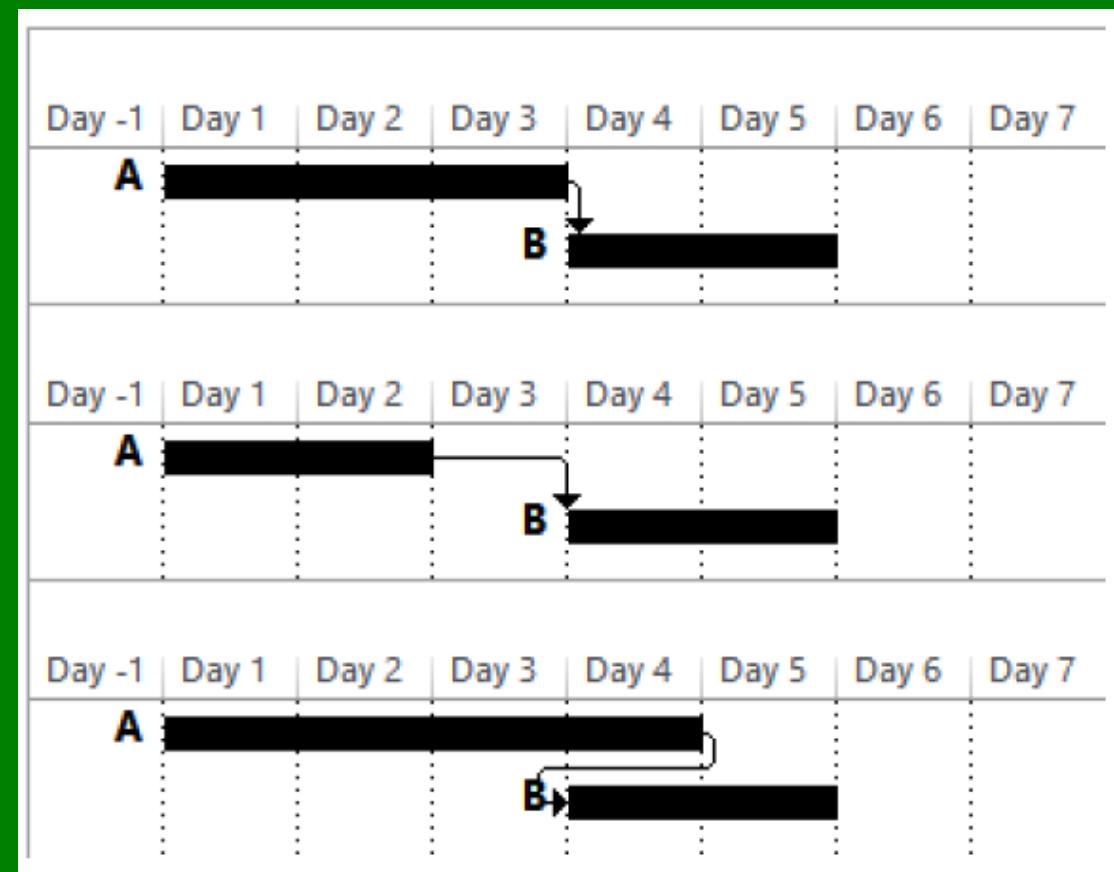
Semi-flexible constraints

- ◆ Tasks A and B are linked and task B has an SNET constraint set to Day 4 applied. If Task A's duration decreases, the start of Task B is unaffected. However, if Task A's duration extends, Project adjusts Task B's start date automatically.



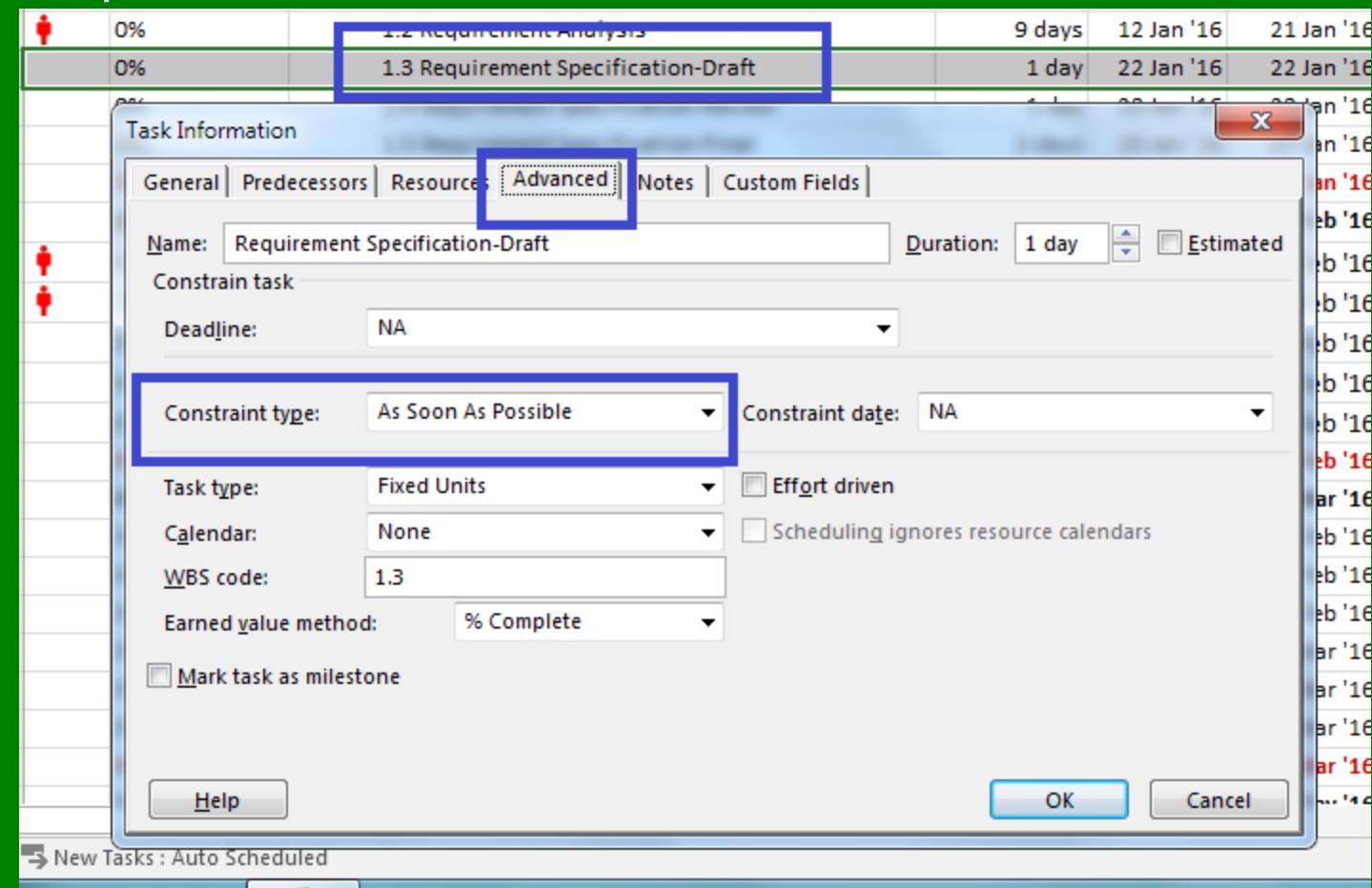
Inflexible constraints

- ◆ Tasks A and B are linked and task B has an MSO constraint set to Day 4 applied. If task A's duration decreases or increases, the start of task B is unaffected.

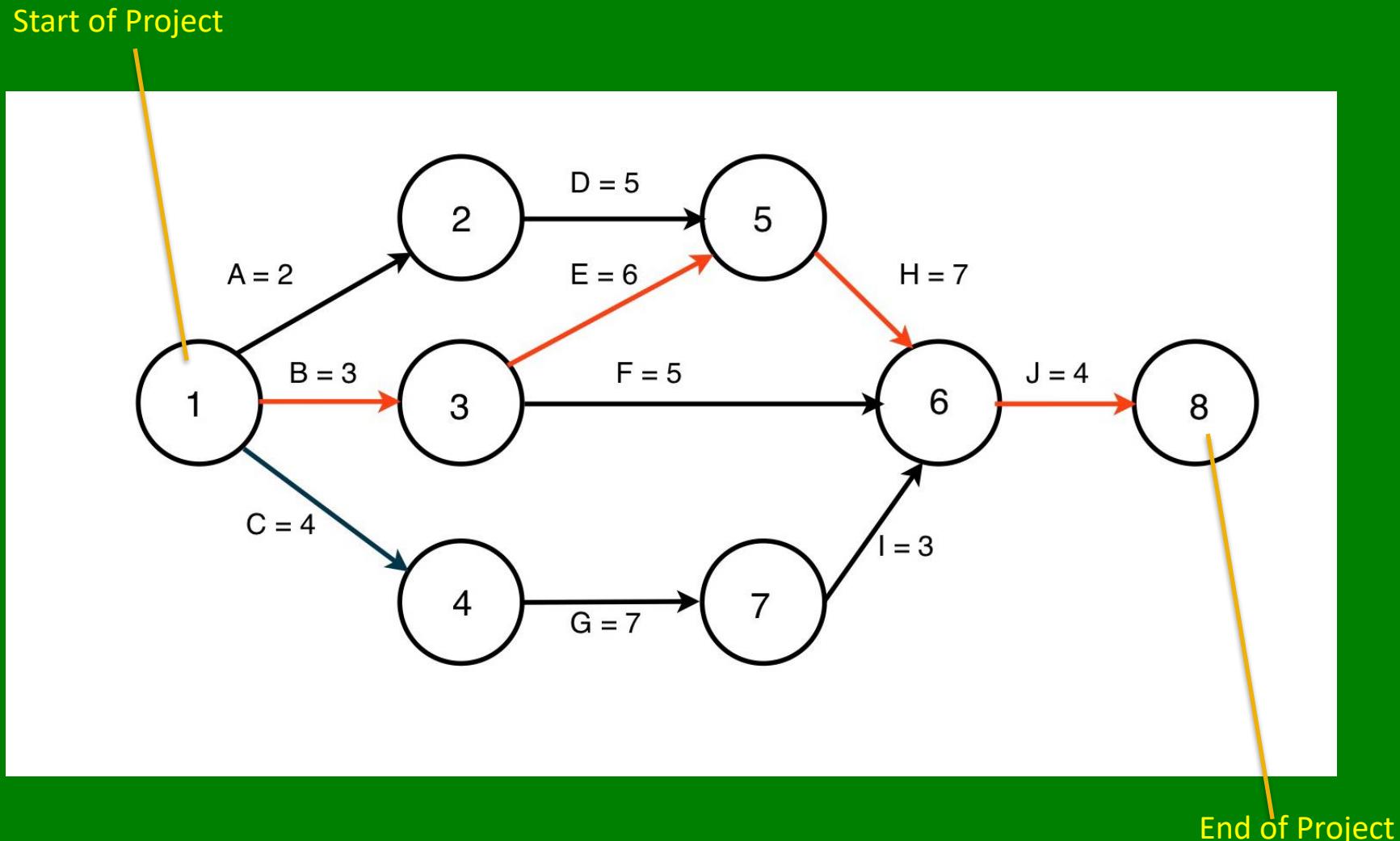


Setting Constraints

- Double click on any task and go to task property. In the advance tab constrain can be defined based on requirements.



The Critical Path



Why is it critical ? Any ideas team ?



The Critical Path

“This is the longest duration path through the project plan having the activities with zero slack time (float), and represents the shortest duration in which the project can be completed.

All activities on critical path must be completed on schedule for the entire project to be completed on schedule.

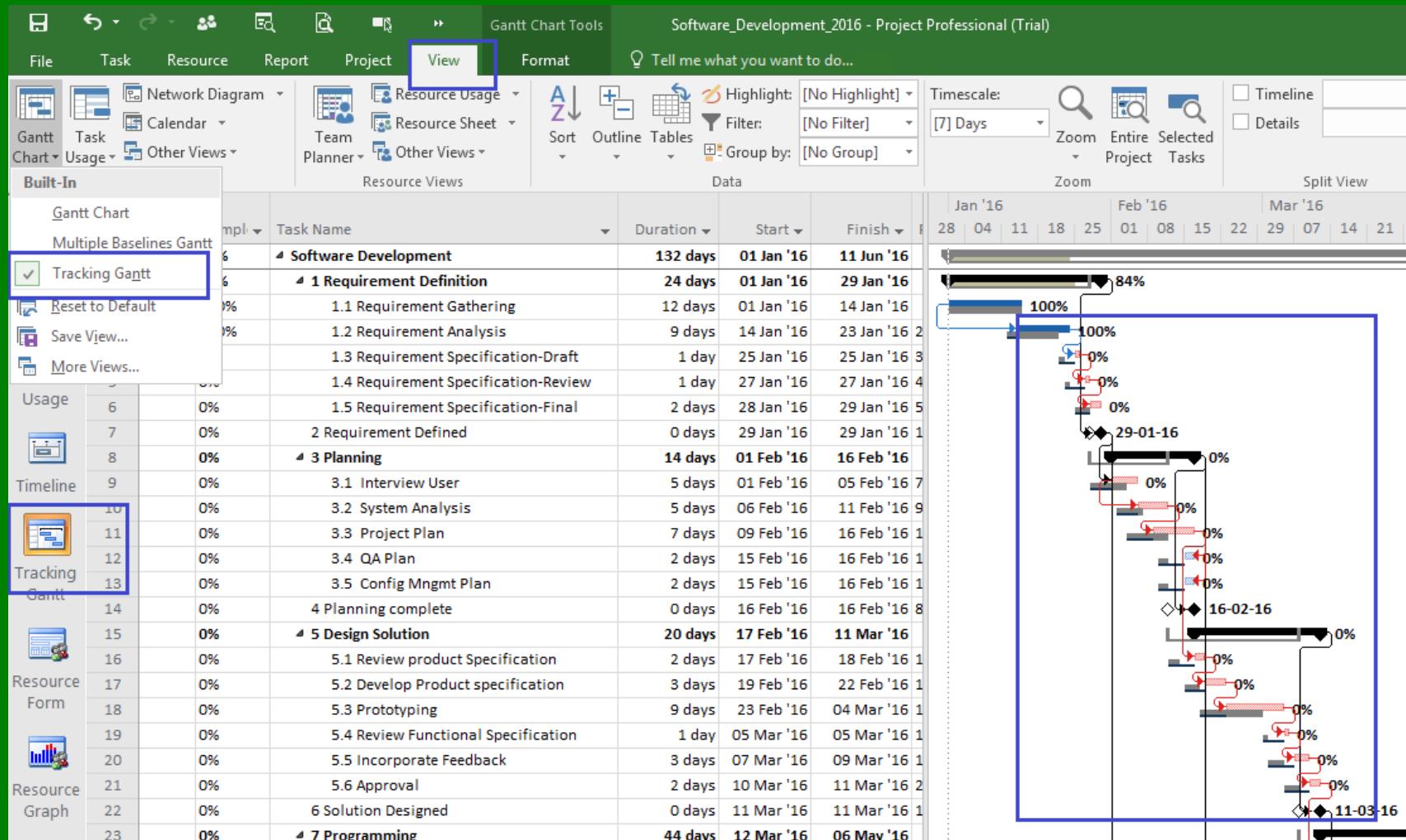
If an activity on the critical path is delayed, then entire project will be delayed by the amount of delay time.”



The Critical Path



View Bar → Tracking Gantt



Expert Advice

- Keep a watch on the tasks falling on the critical path to ensure delivery as per plan

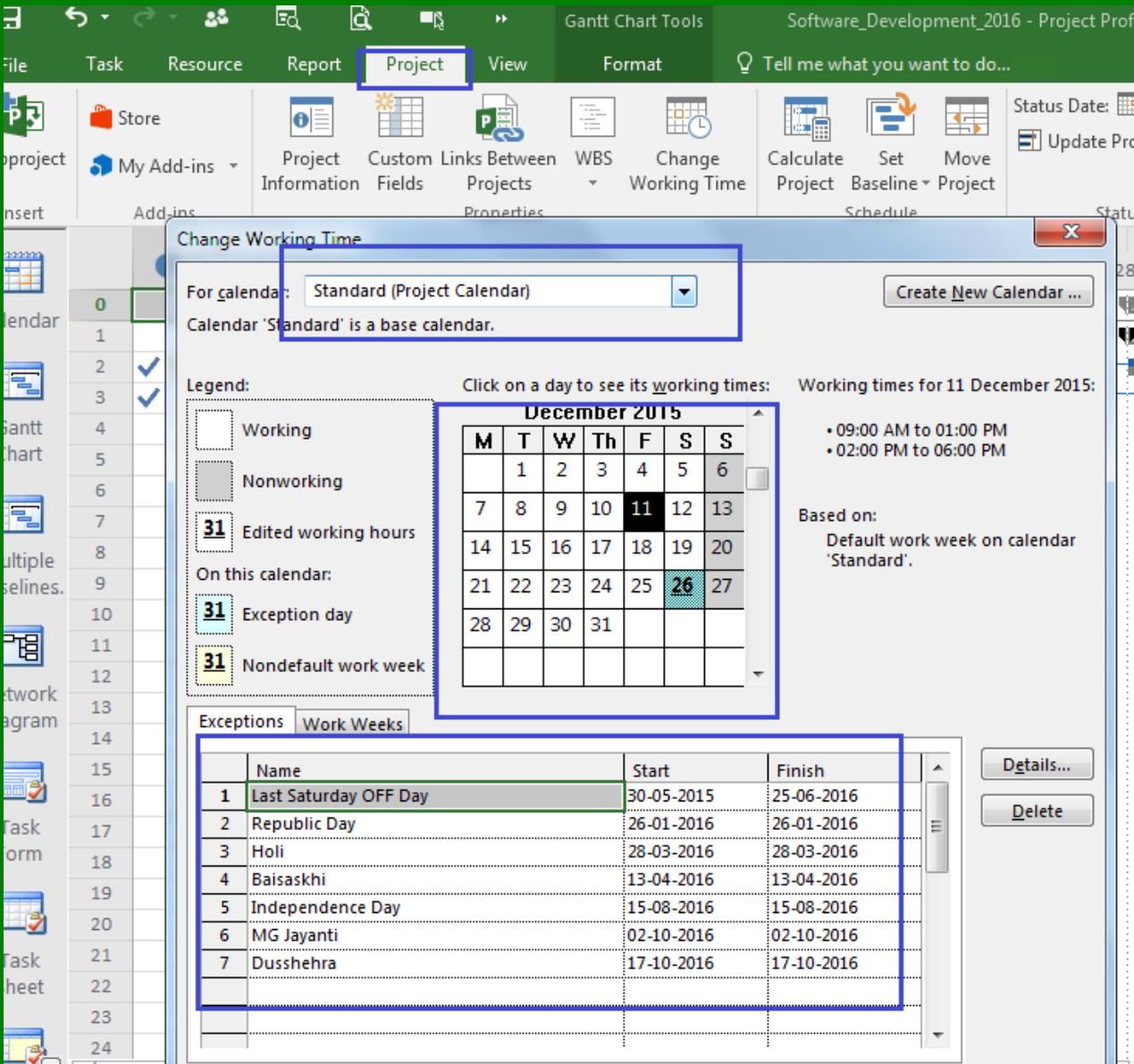


The Calendar

Default Settings

- 5 days per week
- 8 hours per day
- Morning work time 8:00 to 12:00
- Afternoon work time 13:00 to 17:00
- Weekends off (Sat and Sun)
- No Holidays

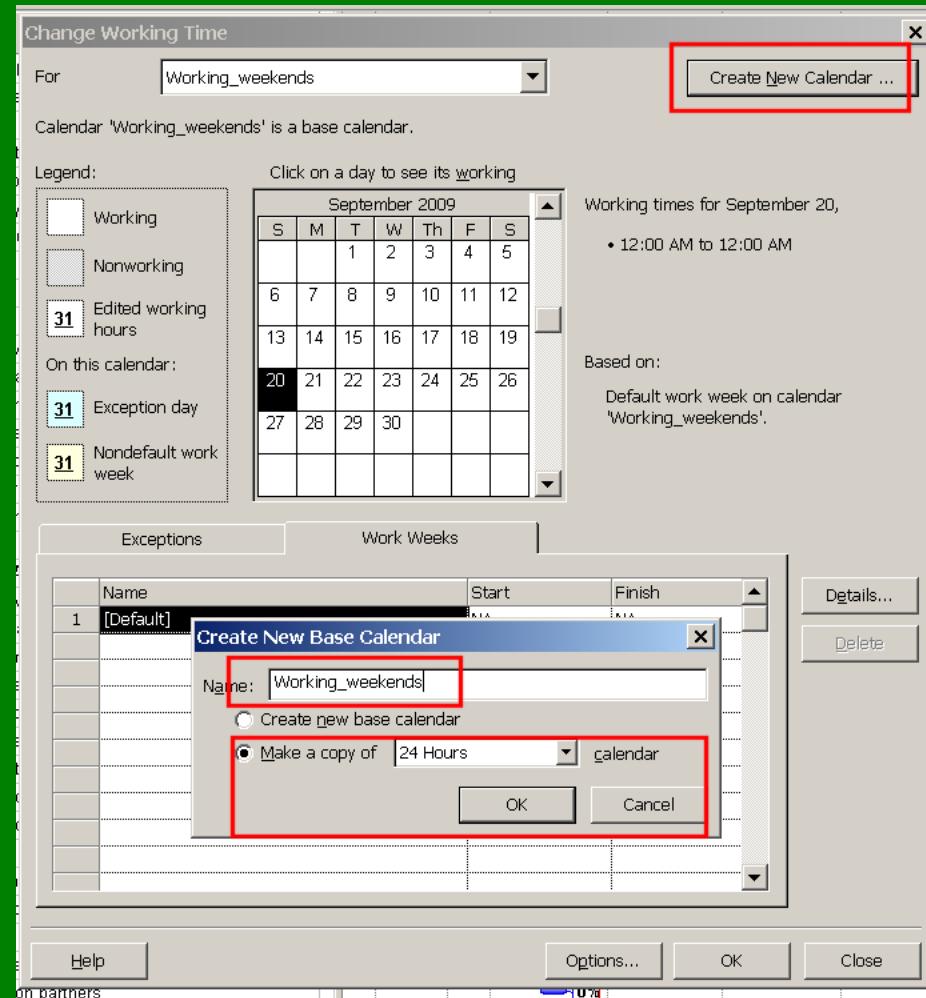
The Calendar



- Periods when work is allowed
- Different types of calendars
 - Standard Normal business hours (8 hrs shift/day)
 - Night Shift
 - 24 Hours (2-3 shifts per day)
- Consider when planning calendars
 - Vacations
 - National, state, etc. holidays

Change Calendar for Tasks

Project → Change working time

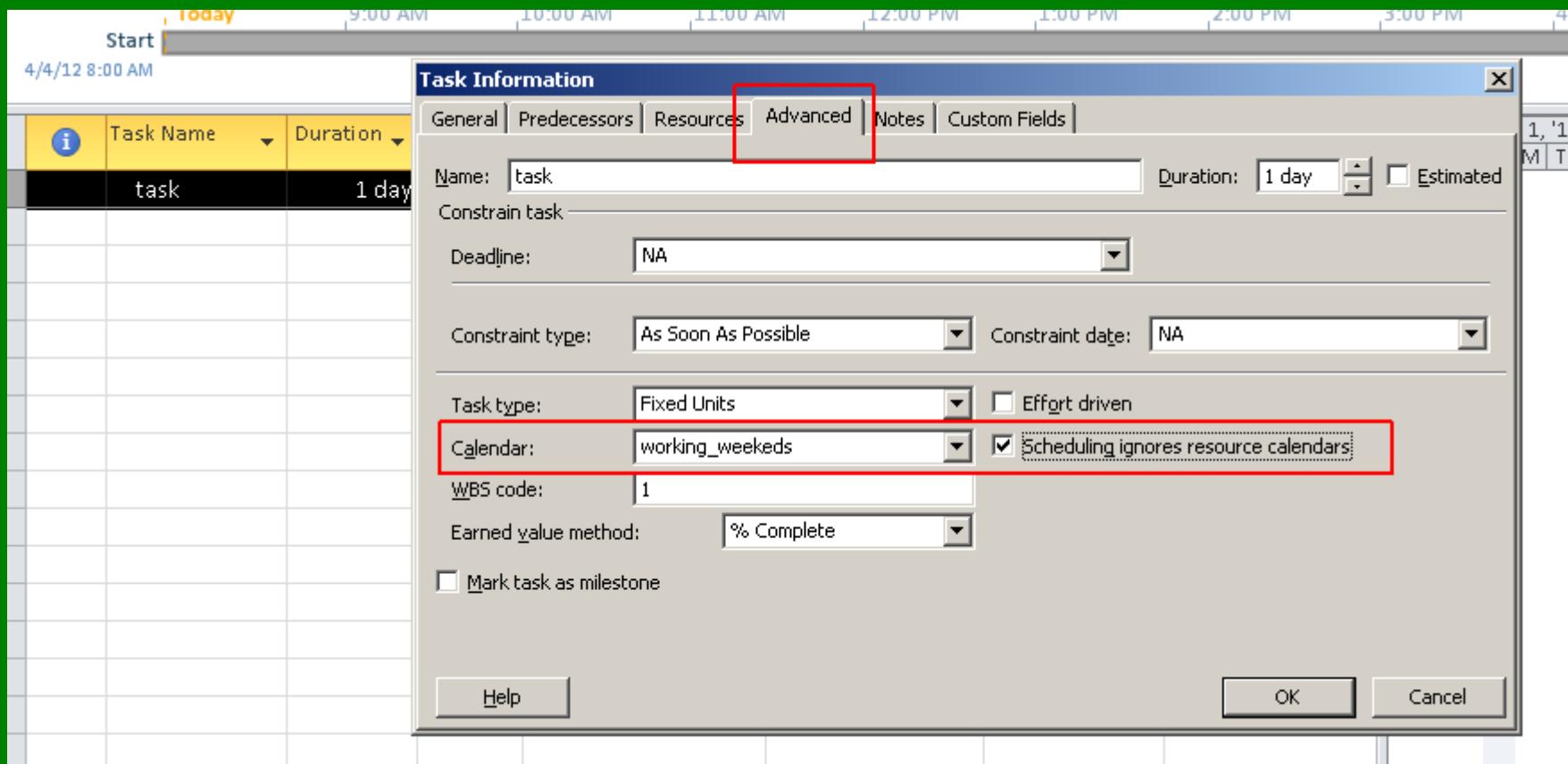


These can be used for rented piece of equipments that work through the week or some task that is done over the weekend.



Change Calendar for Tasks

Task → Advanced → Calendar





Change Calendar for Holidays

Project → Change Working Time → Exceptions

The screenshot shows the Microsoft Project application interface. The ribbon at the top has the 'Project' tab selected. Below the ribbon is a toolbar with various icons. The main area displays a 'Change Working Time' dialog box. The dialog box includes a legend for 'Working', 'Nonworking', and 'Edited working hours'. It also shows a calendar for December 2015 with specific working times for December 10th. A table at the bottom lists various holidays with their start and finish dates.

For calendar: Standard (Project Calendar) [Create New Calendar ...](#)

Calendar 'Standard' is a base calendar.

Legend:

- Working
- Nonworking
- 31 Edited working hours

On this calendar:

- 31 Exception day
- 31 Nondefault work week

Click on a day to see its working times: Working times for 10 December 2015:

December 2015

M	T	W	Th	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Working times for 10 December 2015:

- 09:00 AM to 01:00 PM
- 02:00 PM to 06:00 PM

Based on:

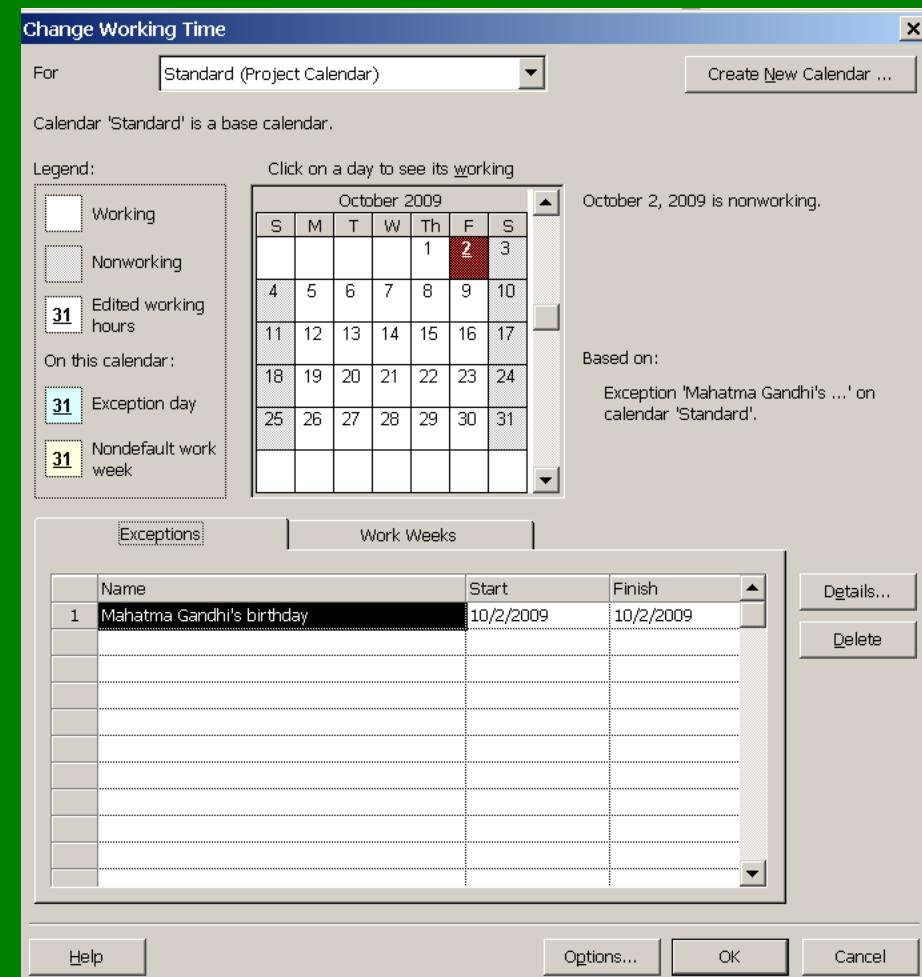
Default work week on calendar 'Standard'.

Exceptions Work Weeks

Name	Start	Finish
1 Last Saturday OFF Day	30-05-2015	25-06-2016
2 Republic Day	26-01-2016	26-01-2016
3 Holi	28-03-2016	28-03-2016
4 Baisakhi	13-04-2016	13-04-2016
5 Independence Day	15-08-2016	15-08-2016
6 MG Jayanti	02-10-2016	02-10-2016
7 Dussehra	17-10-2016	17-10-2016

[Details...](#) [Delete](#)

Change Calendar for Tasks



Why do we need to change the standard calendar ? Any Guess?



Delete a Calendar

File → Info -> Organizer → Calendar

Software_Development_2016 - Project Professional (Trial)

Info

New

Open

Save

Save As

Print

Share

Export

Close

Account

Options

Manage Accounts

Organizer

Project Web App Accounts
You're not connected to Project Web App

Organize Global Template
Move views, reports, and other elements between project files and the global template.

Organizer

Views Reports Modules Tables Filters Calendars Maps Fields Groups

'Global.MPT': Best Practice Analyzer, Burndown, Cash Flow, Cost Overruns, Cost Overview, Create reports, Critical Tasks, Earned Value Report, Get started with Project, Late Tasks, Milestone Report, Organize tasks, Overallocated Resources, Project Overview, Resource Cost Overview, Resource Overview

'Software_Development_2016': Cash Flow, CC_Comparison, CC_Resource_task, CC_Task_vs_Cost, CC_Task_vs_Work, Cost Overview, CR_Cost_Table, CR_Resource_Type_Pie, CR_Resource_vs_Cost, CR_Resource_vs_Work, CR_Resources, CR_Task_vs_Work, Create reports, Critical Tasks, Milestone Report, Organize tasks

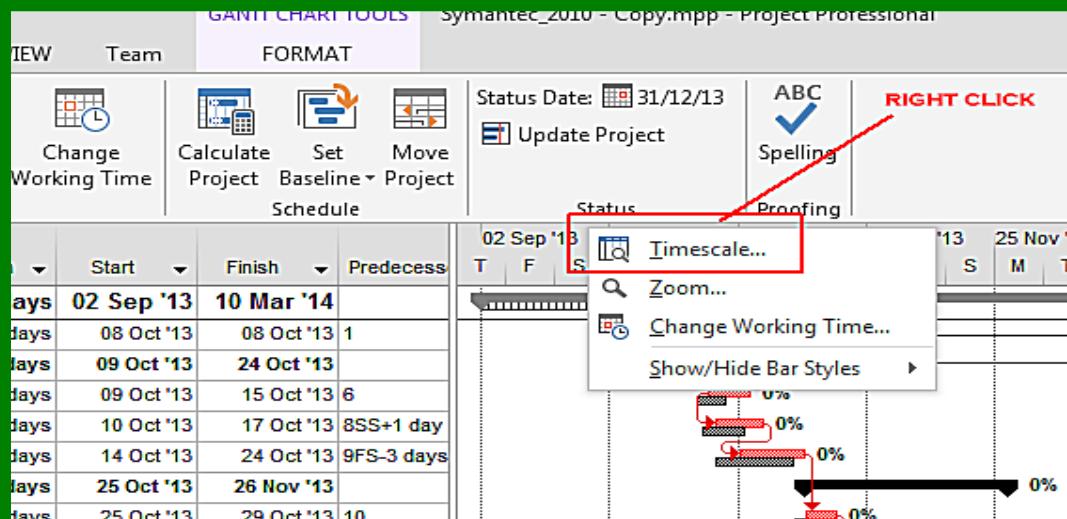
Copy >>, Cancel, Rename..., Delete..., Help

Reports available in:

Expert Advice

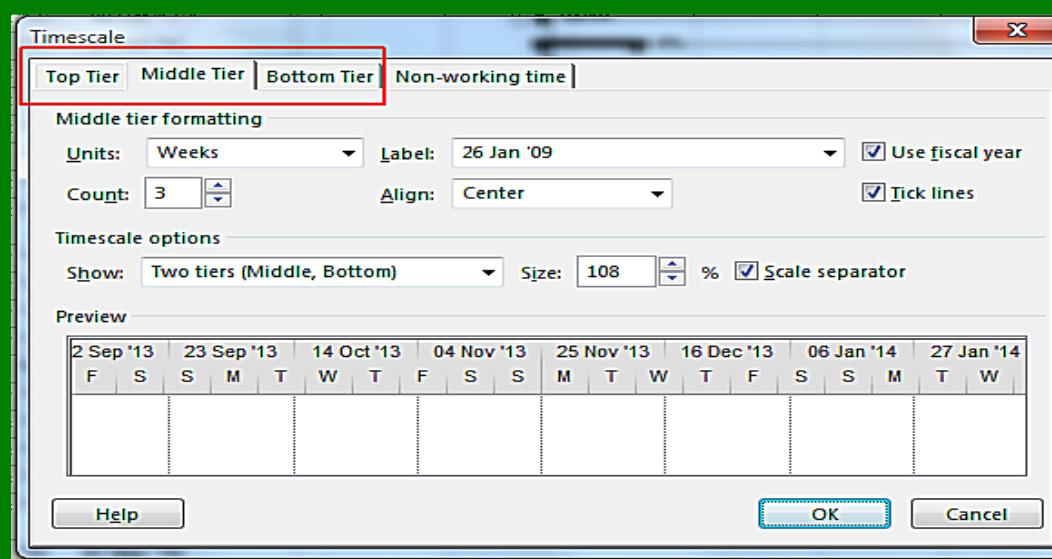
- Delete a calendar only when you are sure it's not being used by any resource
- e.g. you delete calendar(s) from a project which you got from a colleague to use as a template instead of starting from scratch
- A calendar does not make the .mpp file fat

Change Timescale



Time scale can be changed by right clicking on the top.

It has three tiers top, middle and bottom.

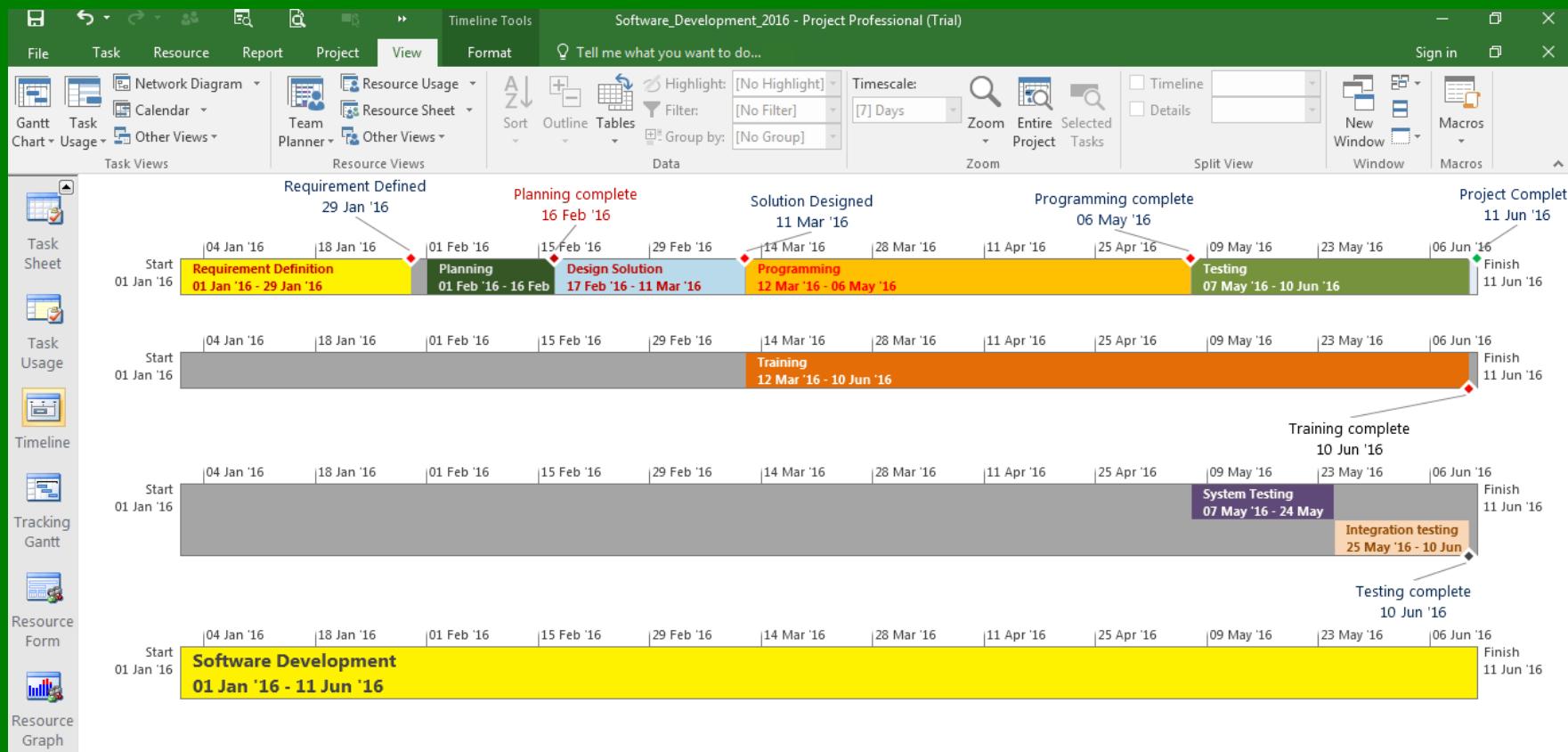




Ok, now it's time for Timeline



MSP 2019 can have multiple timelines in one view



Compression

Why and How ?



Compression



- Fast Tracking !
- Crashing !?



Compression

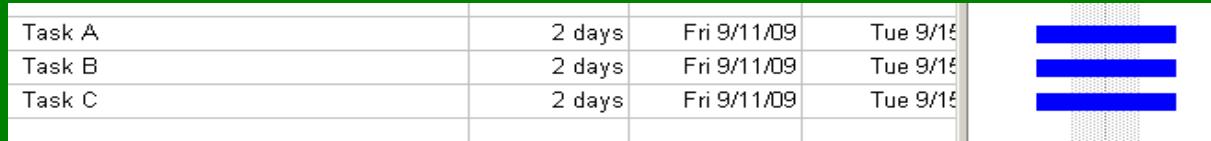
Fast Tracking

A schedule compression technique in which activities normally performed in a sequence are now setup to be done in parallel.

Before



After



Compression

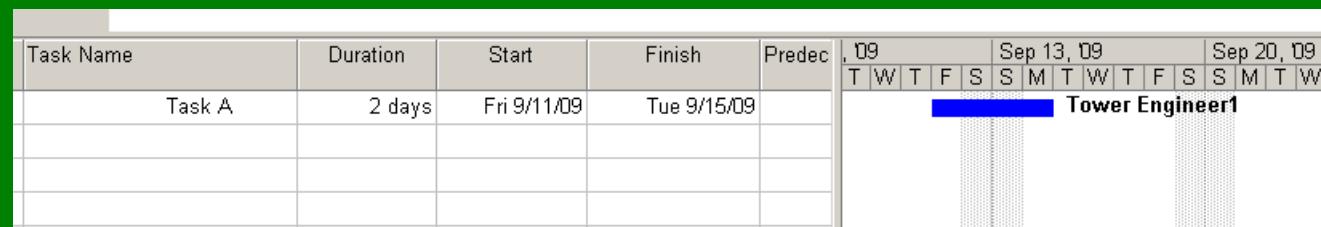
Crashing

A schedule compression technique in which more resources (men/material) are applied to speed up certain tasks.

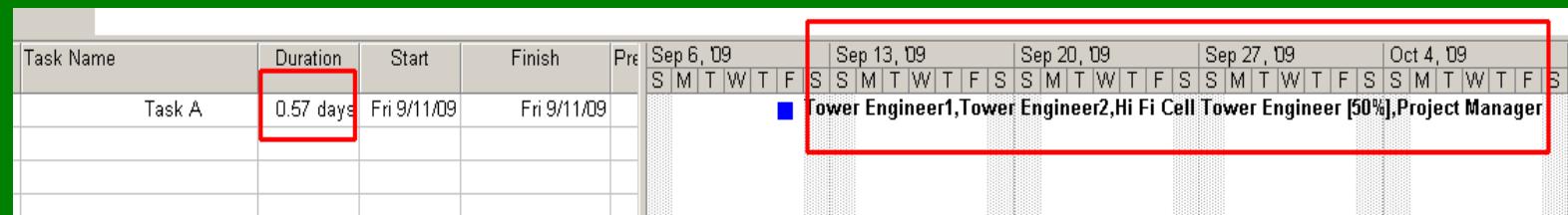
Expert Advice

- Crashing increases the project cost
- Beyond a certain point it does help
 - e.g. a car won't drive any faster if you applied two drivers to drive it !

Before



After

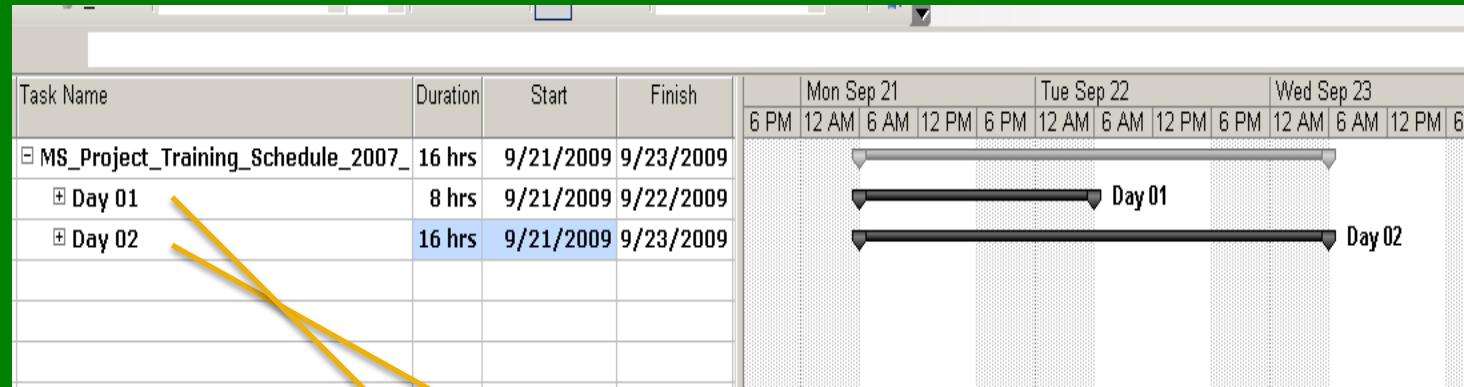




Setting Base line and Tracking Project Progress

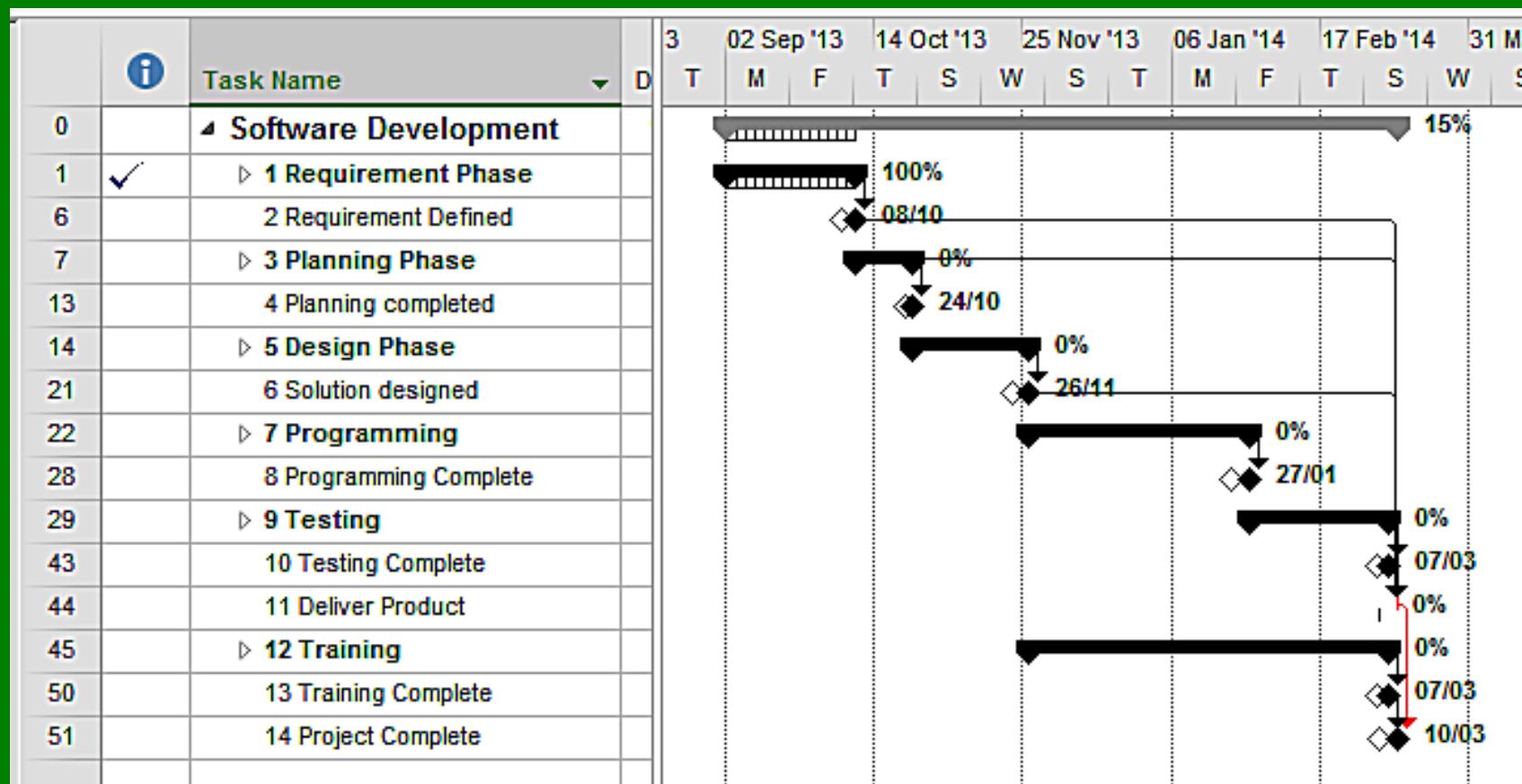
1. Linking Summary Tasks
2. Importance of linking Summary Task
3. Saving a Baseline
4. Tracking Project Schedule
5. Entering a Completion Percentage
6. Entering Actual Completion Values
7. Updating the Baseline
8. Change Project Duration
9. Interrupting Work (Split Task)
10. Changing Task Types
11. Entering Deadlines
12. Entering Fixed Costs
13. Compare progress in the Tracking Gantt against baseline

Linking Summary Tasks

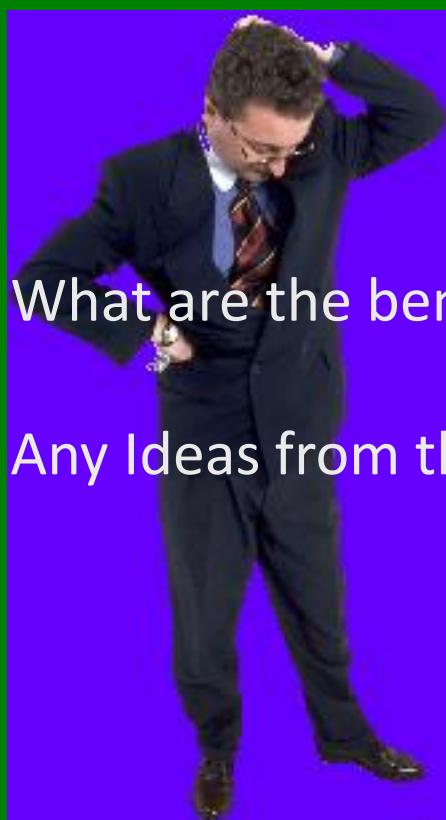


Can we do training for Day1 and Day2 on the same day?

Linking Summary Tasks



Importance of linking Summary Task



What are the benefits of linking summary tasks ?

Any Ideas from the team here ?



Saving a Baseline



The screenshot shows the Microsoft Project Professional interface. The 'Project' tab is selected in the ribbon. A blue box highlights the 'Set Baseline' button in the 'Project' tab's ribbon group. Another blue box highlights the 'Set Baseline' dialog box, which is open over the Gantt Chart. The dialog box has the following settings:

- Set baseline:** Selected.
- Baseline (last saved on 09 Dec '15):** A dropdown menu.
- Set interim plan:** Unselected.
- Copy:** Scheduled Start/Finish.
- Into:** Start1/Finish1.
- For:**
 - Entire project
 - Selected tasks
- Roll up baselines:**
 - To all summary tasks
 - From subtasks into selected summary task(s)
- Buttons:** Help, OK, Cancel.

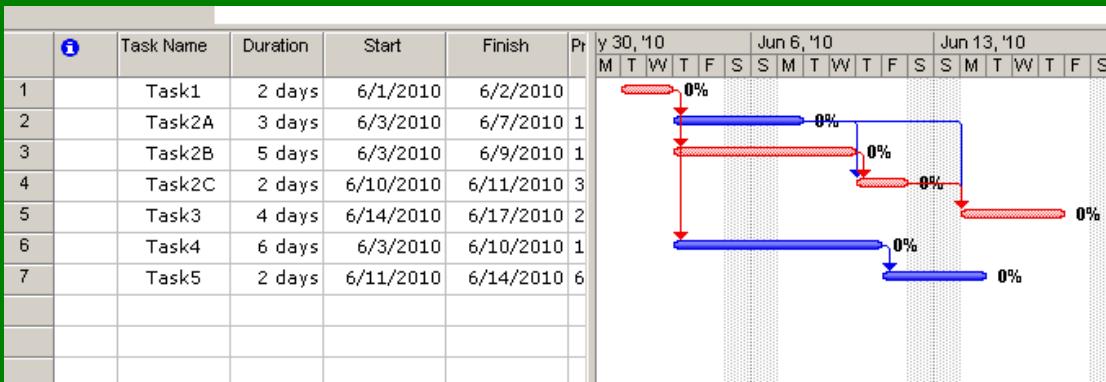
The Gantt Chart displays various tasks with their start and finish dates. A specific task, '1 Requirement Definition', is highlighted with a blue border. The chart shows progress percentages (e.g., 84%, 100%) and resource assignments.

Values which are saved in baseline

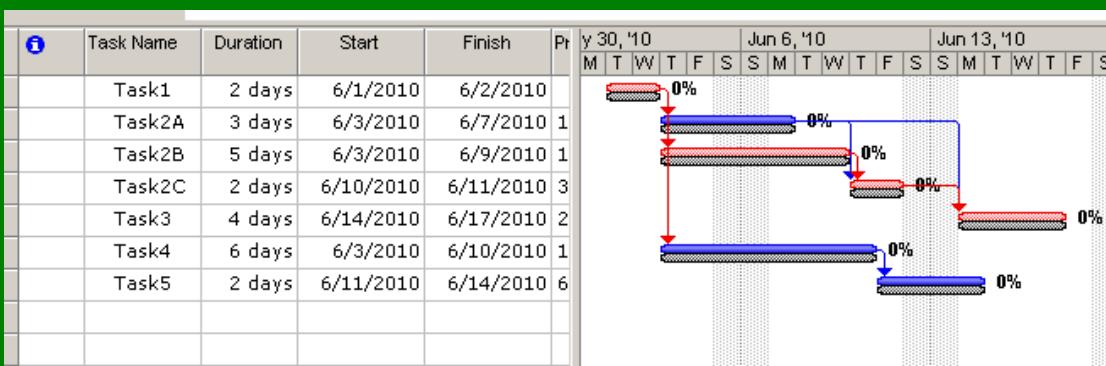
- Task Fields : start, finish, cost
- Resource : work, cost
- Assignment : start, finish, work, cost

Saving a Baseline

Before Saving a Baseline

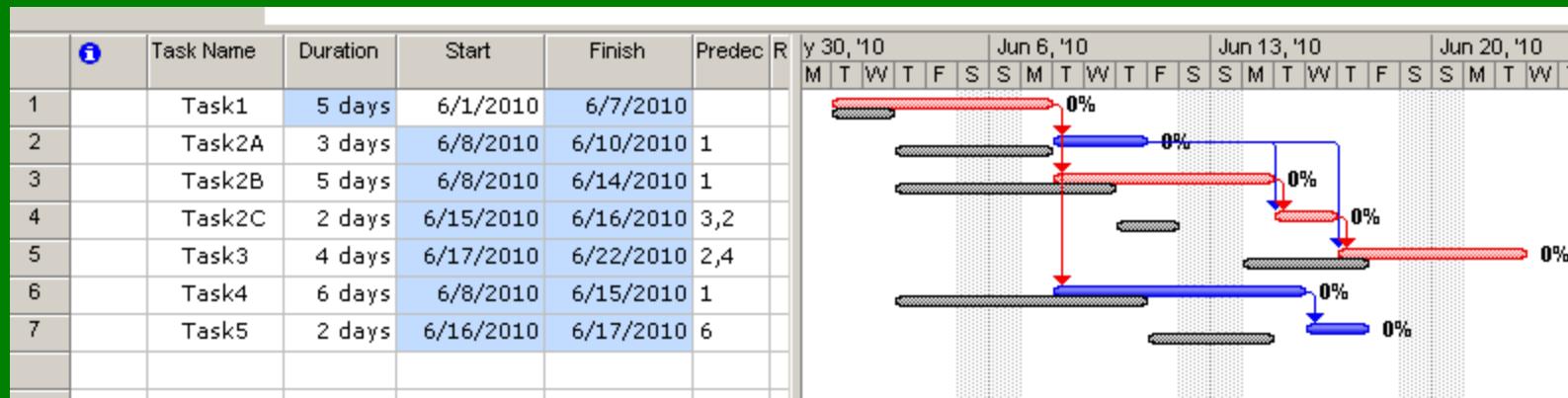


After Saving a Baseline



What is the benefit
of a baseline ?

Saving a Baseline



The baseline visually shows the shift in task timelines and also shows the variance in cost tables.



Saving a Baseline

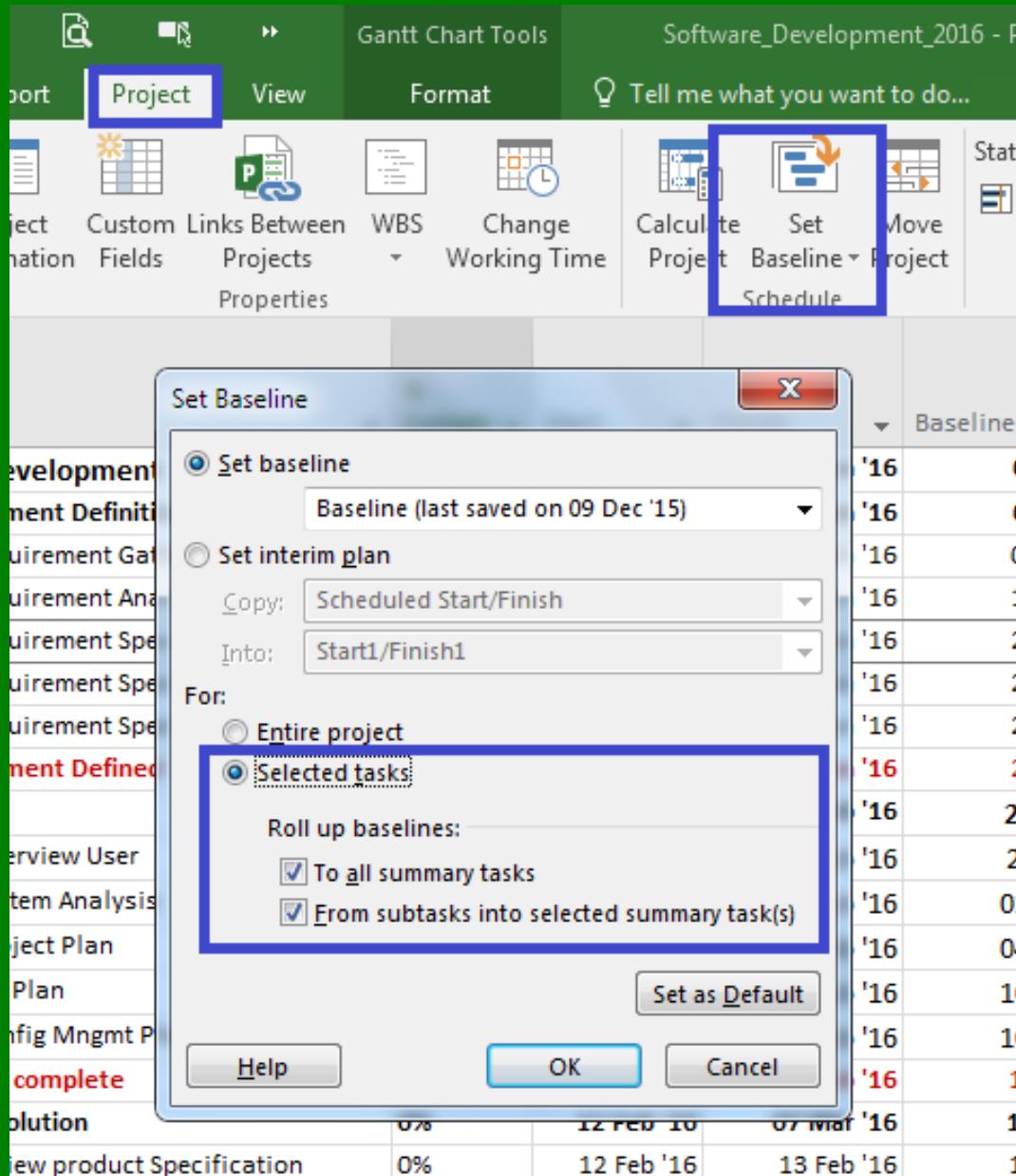
View → Tables → Variance



Screenshot of Microsoft Project Professional 2016 showing the Gantt Chart view. The ribbon is visible at the top with the 'View' tab selected. A context menu is open over a task in the Gantt chart, specifically over the 'Cost' column header. The menu is titled 'Built-In' and includes options like 'Entry', 'Hyperlink', 'Schedule', 'Tracking', 'Variance' (which is highlighted with a blue border), 'Work', 'Summary', and 'Usage'. The main Gantt chart table shows tasks from 'Software Development' to 'Config Mngmt Plan' across several columns including Start Date, Baseline Finish Date, Start Var., and Finish Var.

Start	Baseline Finish	Start Var.	Finish Var.
Jan '16	07 Jun '16	0 days	0 days
Jan '16	27 Jan '16	0 days	0 days
Jan '16	14 Jan '16	0 days	0 days
Jan '16	21 Jan '16	0 days	0 days
Jan '16	22 Jan '16	0 days	0 days
Jan '16	23 Jan '16	0 days	0 days
Jan '16	27 Jan '16	0 days	0 days
Jan '16	27 Jan '16	0 days	0 days
Jan '16	11 Feb '16	0 days	0 days
Jan '16	03 Feb '16	0 days	0 days
Feb '16	06 Feb '16	0 days	0 days
Feb '16	11 Feb '16	0 days	0 days
Feb '16	11 Feb '16	0 days	0 days
Feb '16	10 Feb '16	0 days	0 days
Feb '16	11 Feb '16	0 days	0 days

Updating the Baseline

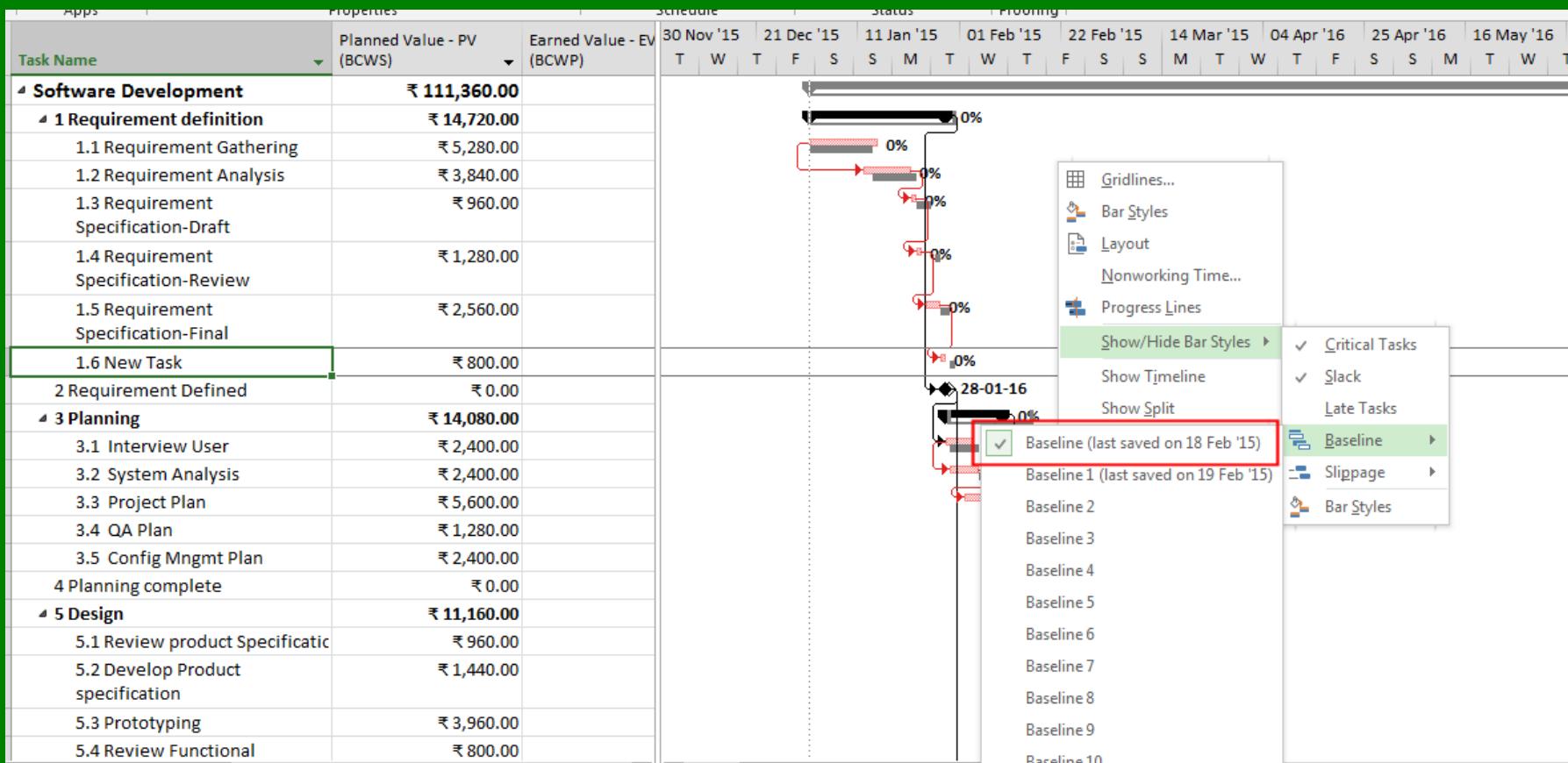


Expert Advice

- Updating the baseline for tasks is better than doing for the entire project
- In case of major changes to the project save another baseline
- It is advisable to plan well in details than to alter baselines
- You can save upto 10 additional baselines.

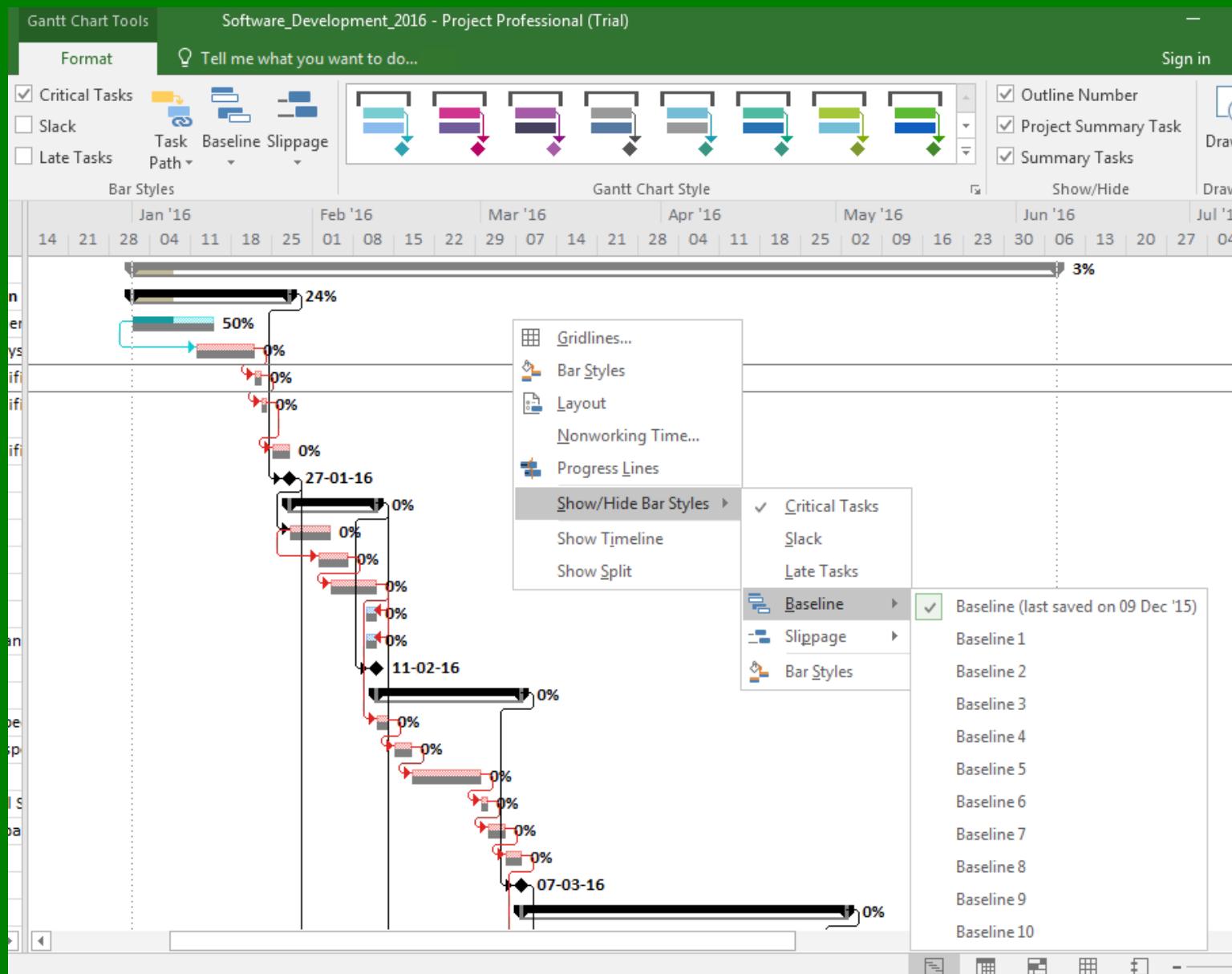


Switching Baselines





Switching Baselines





Tracking Project Schedule



Select Tasks → Mark On Track

The screenshot shows a Microsoft Project interface with a Gantt Chart view. A task named "1.2 Requirement Analysis" is selected and highlighted with a blue border. An "Update Tasks" dialog box is open over the Gantt chart, also highlighting the selected task. The dialog box contains fields for Name, Duration, % Complete, Actual duration, Remaining duration, Start date, and Finish date. The "Name" field is set to "Requirement Analysis", "Duration" is "9d", and "% Complete" is "0%". The "Actual" section shows "Start: NA" and "Finish: NA". The "Current" section shows "Start: 12 Jan '16" and "Finish: 21 Jan '16". The Gantt chart below shows a task "5.1 Review product Specification" with a duration of 2 days, starting on 12 Feb '16.

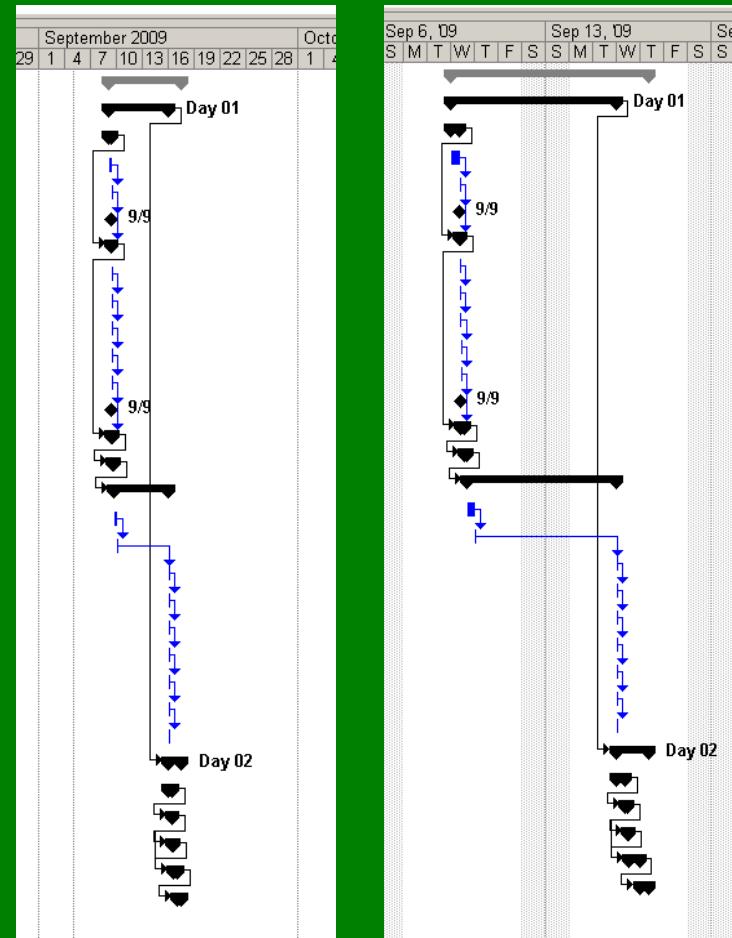
% Compl.	Task Name	Duration	Start
7%	Software Development	128 days	01 Jan '16
48%	1 Requirement Definition	22 days	01 Jan '16
100%	1.1 Requirement Gathering	12 days	01 Jan '16
0%	1.2 Requirement Analysis	9 days	12 Jan '16
0%	1.3 Requirement Specification-Draft	1 day	22 Jan '16

Update Tasks

Name:	Requirement Analysis	Duration:	9d
% Complete:	0%	Actual dur:	0d
		Remaining dur:	9d
Actual		Current	
Start:	NA	Start:	12 Jan '16
Finish:	NA	Finish:	21 Jan '16

Select Task before selecting Update tasks option

Tracking Project Schedule



Expert Advice

- Be sure before you make several changes to the already much shared plan
- FYI MS Project 2019 can undo 99 levels of steps
 - You cannot undo after save
 - It also highlights the other affected successor tasks

Did you notice the difference ?



Entering a Round Completion Percentage

The screenshot shows a Microsoft Project Gantt Chart window titled "Software_Development_2016 -". The ribbon menu is visible with tabs like File, Task, Resource, Report, Project, View, Format, and a search bar. The "Task" tab is selected. The main area displays a Gantt chart with tasks listed by row index (0 to 5) and task name. A context menu is open over the third task, "1.2 Requirement Analysis", which has a completion percentage of 0%. The menu includes options for Cut, Copy, Paste, Format Painter, and various scheduling and linking tools. The "Format" tab is highlighted in the ribbon.

		% Compl.	Task Name	Duration	Start	Finish	
0		7%	Software Development	128 days	01 Jan '16	07 Jun '16	
1		48%	1 Requirement Definition	22 days	01 Jan '16	27 Jan '16	
2	✓	100%	1.1 Requirement Gathering	12 days	01 Jan '16	14 Jan '16	
3	✗	0%	1.2 Requirement Analysis	9 days	12 Jan '16	21 Jan '16	2
4		0%	1.3 Requirement Specification-Draft	1 day	22 Jan '16	22 Jan '16	3
5		0%	1.4 Requirement Specification-Review	1 day	23 Jan '16	23 Jan '16	4



Entering a Completion Percentage

What is the immediate affect ?

The screenshot shows the Microsoft Project application interface. The ribbon is visible with tabs like Task, Resource, Report, Project, View, Team, Format, Schedule, Tasks, and Insert. The 'Format' tab is selected. In the 'Schedule' section of the ribbon, there is a dropdown menu with options: 0%, 25%, 50%, 75%, and 100%. The '100%' option is highlighted with a red box. Below the ribbon, the main workspace displays a Gantt chart and a table of tasks. Task 7, '3 Planning Phase', has a duration of 10 days, starting on 09 Oct '13 and finishing on 24 Oct '13. Task 8, '3.1 Interview Users', has a duration of 5 days, starting on 09 Oct '13 and finishing on 15 Oct '13. The progress bar for task 8 is fully blue, indicating 100% completion. A red box highlights the progress bar for task 8.

	Task Name	Duration	Start	Finish
7	3 Planning Phase	10 days	09 Oct '13	24 Oct '13
8	3.1 Interview Users	5 days	09 Oct '13	15 Oct '13

Is there another way to do this ?

Entering Actual Completion Values

Task → Mark on Track

The screenshot shows the Microsoft Project 2010 interface. The ribbon tabs are FILE, TASK (selected), RESOURCE, REPORT, PROJECT, VIEW, Team, and FORMAT. The GANTT CHART TOOLS tab is also selected. In the ribbon, the 'Mark on Track' button is highlighted with a red box. A dropdown menu for 'Mark on Track' is open, showing three options: 'Mark on Track', 'Manually Schedule', and 'Auto Schedule'. Below the ribbon is a toolbar with various icons for font, alignment, and scheduling.

The main area displays a Gantt chart with tasks listed in rows. Task 8, '3.1 Interview Users', is currently selected. The 'Update Tasks' dialog box is open over the Gantt chart, also highlighted with a red box. The dialog box contains fields for Name (Interview Users), Duration (5d), % Complete (0%), Actual dur. (0d), Remaining dur. (5d), and actual start and finish dates (NA and 09 Oct '13 respectively).

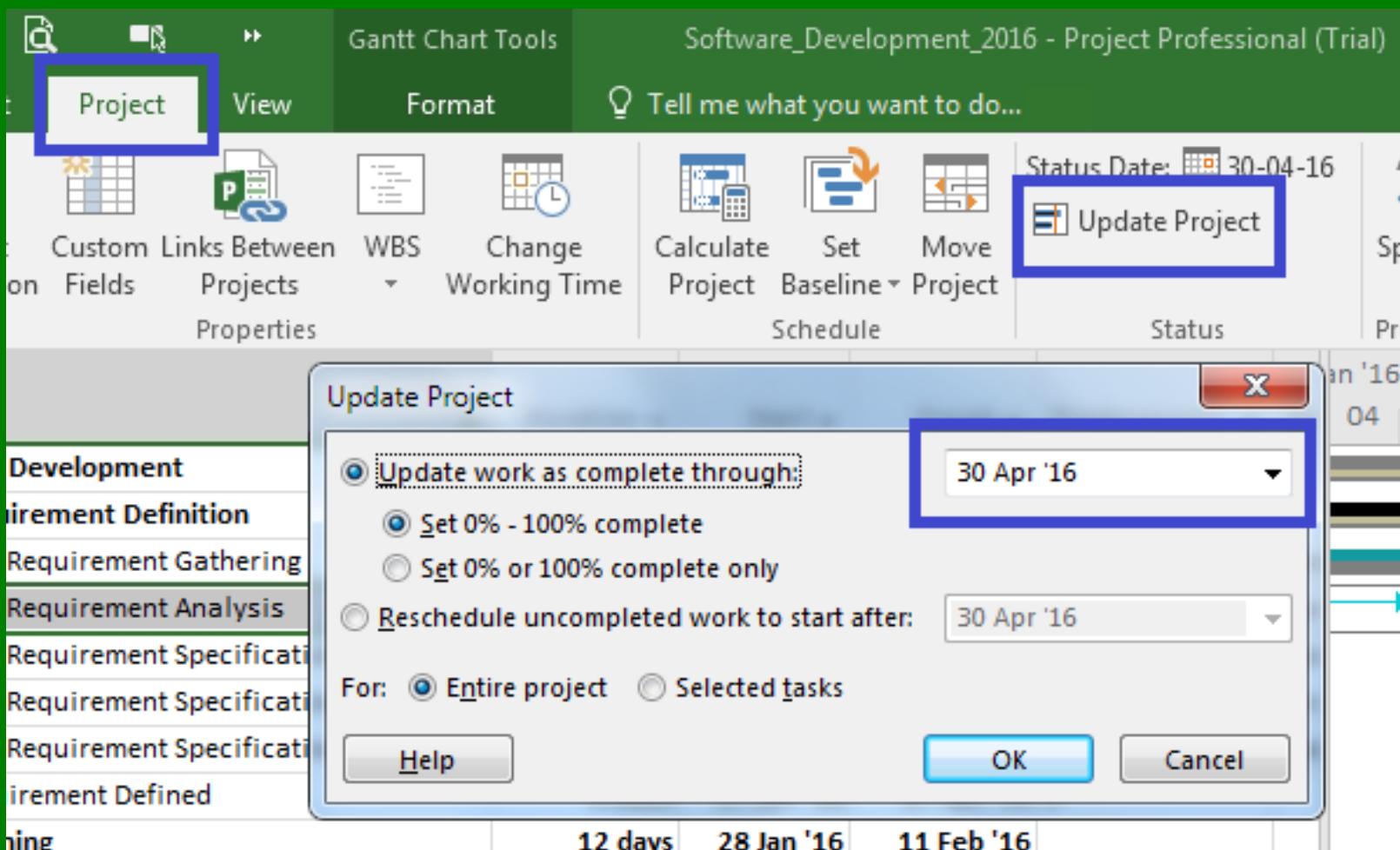
Task ID	Task Name	Duration	Start	Finish
7	3 Planning Phase	10 days	09 Oct '13	24 Oct '13
8	3.1 Interview Users	5 days	09 Oct '13	15 Oct '13
9	3.2 System Analysis	5 days	10 Oct '13	17 Oct '13
10	3.3 Project Plan			
11	3.4 QA Plan			
12	3.5 Configuration management plan			
13	4 Planning completed			
14	5 Design Phase			
15	5.1 Review product specification			
16	5.2 Develop functional specification			
17	5.3 prototyping			
18	5.4 Review functional specs	1 day	19 Nov '13	19 Nov '13



Update Project



Project → Update Project



The project status is marked as complete for all tasks as on the selected date.

Or you may pre-select certain tasks and then use the other option of "Selected tasks"



Check Project Information

File → Info

Symantec_2010 - Copy.mpp - Project Professional

Info

Symantec_2010 - Copy
D: » Workarea

Project Web App Accounts
You're not connected to Project Web App

Manage Accounts

Organize Global Template
Move views, reports, and other elements between project files and the global template.

Organizer

Project Information ▾

Start Date	02/09/2013
Finish Date	10/03/2014
Schedule from	Start
Current Date	Today
Status Date	31/12/2013
Last Modified	Today
Project Calendar	Standard
Priority	500

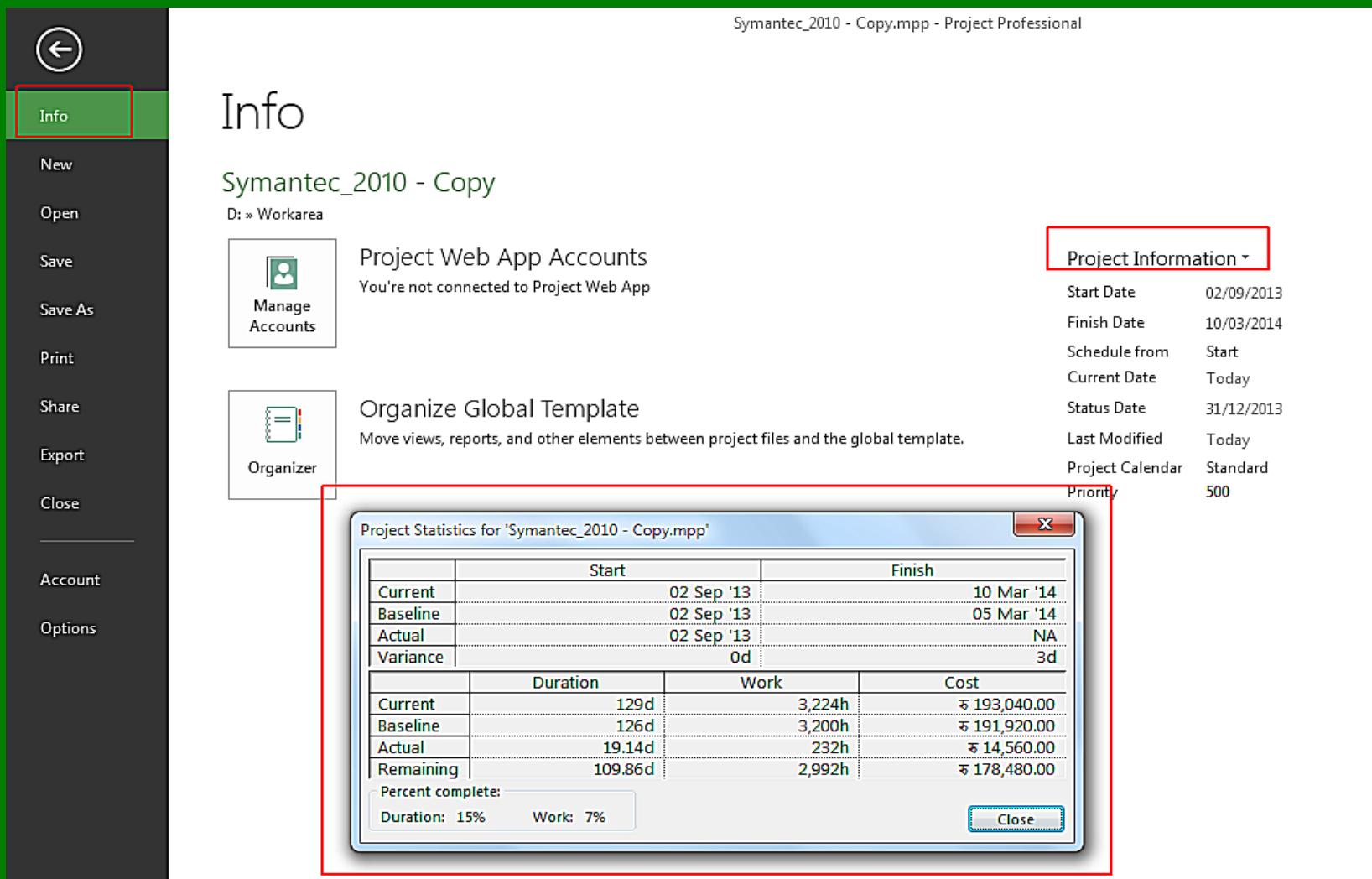
Project Statistics for 'Symantec_2010 - Copy.mpp'

	Start	Finish
Current	02 Sep '13	10 Mar '14
Baseline	02 Sep '13	05 Mar '14
Actual	02 Sep '13	NA
Variance	0d	3d

	Duration	Work	Cost
Current	129d	3,224h	₹ 193,040.00
Baseline	126d	3,200h	₹ 191,920.00
Actual	19.14d	232h	₹ 14,560.00
Remaining	109.86d	2,992h	₹ 178,480.00

Percent complete:
Duration: 15% Work: 7%

Close





Setting Project Status Date

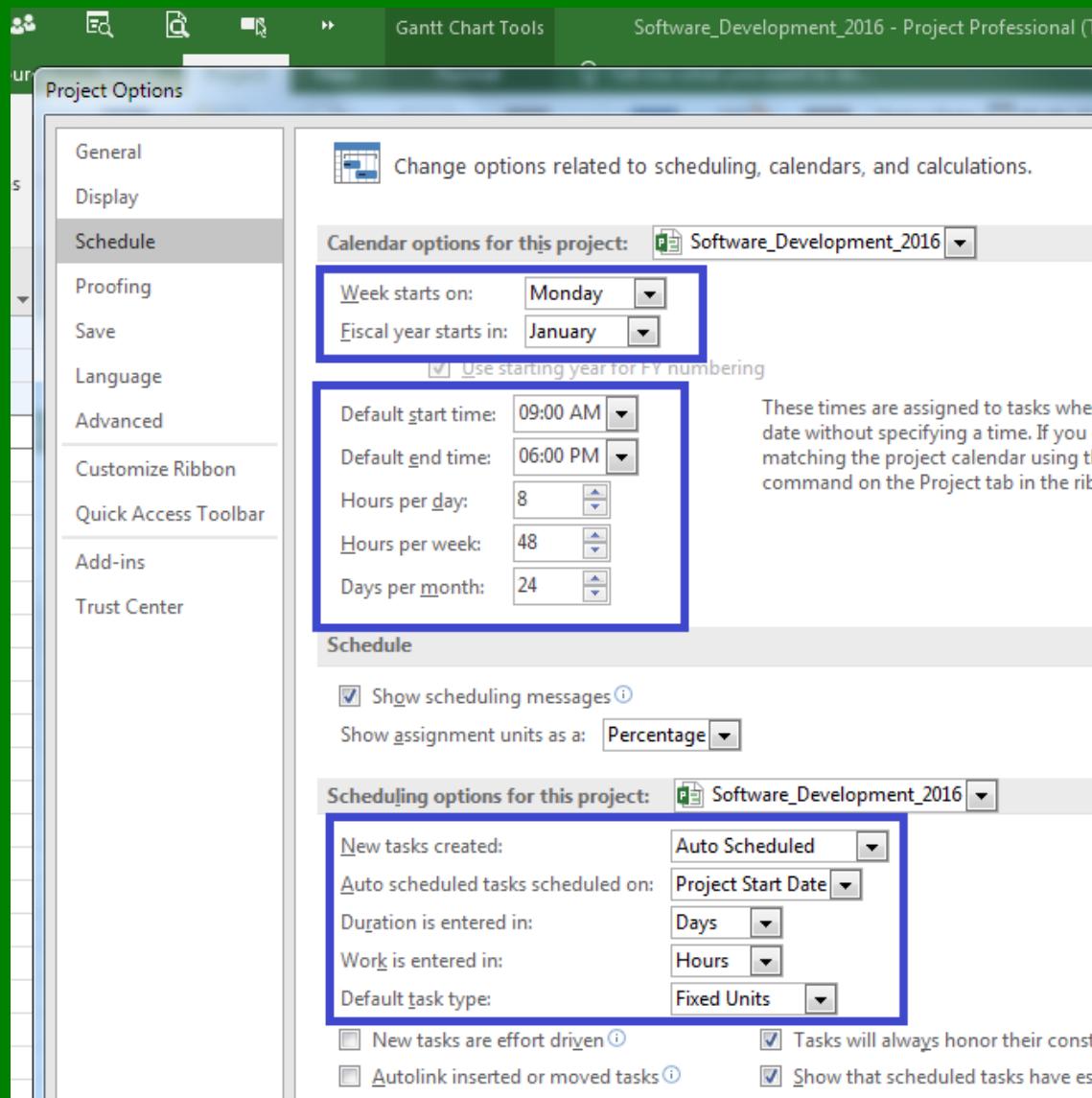
Project → Project Information

By default the status is given for the current date i.e. today. In case you would like to see status as on some previous date. Select the option as depicted below.

The screenshot shows the Microsoft Project ribbon with the 'Project' tab selected. Below the ribbon, the 'Project Information' dialog box is open, displaying various project settings. The 'Status date' field is currently set to '30 Apr '16' and is highlighted with a blue selection bar. Other visible fields include 'Start date' (01 Jan '16), 'Current date' (10 Dec '15), 'Finish date' (07 Jun '16), 'Schedule from' (Project Start Date), 'Calendar' (Standard), 'Priority' (500), and 'Department' (empty dropdown).

Change Project Duration

File → Options → Schedule



Expert Advice

- Choose as per your convenience
- There is no hard and fast rule for this
- You may choose from minutes to months as per the length of your project

Interrupting Work (Split Task)

What could be the reasons that we might need this ?

- Use the split task button to drag the unfinished part of the task
- To re-schedule the entire task just drag it to the target date

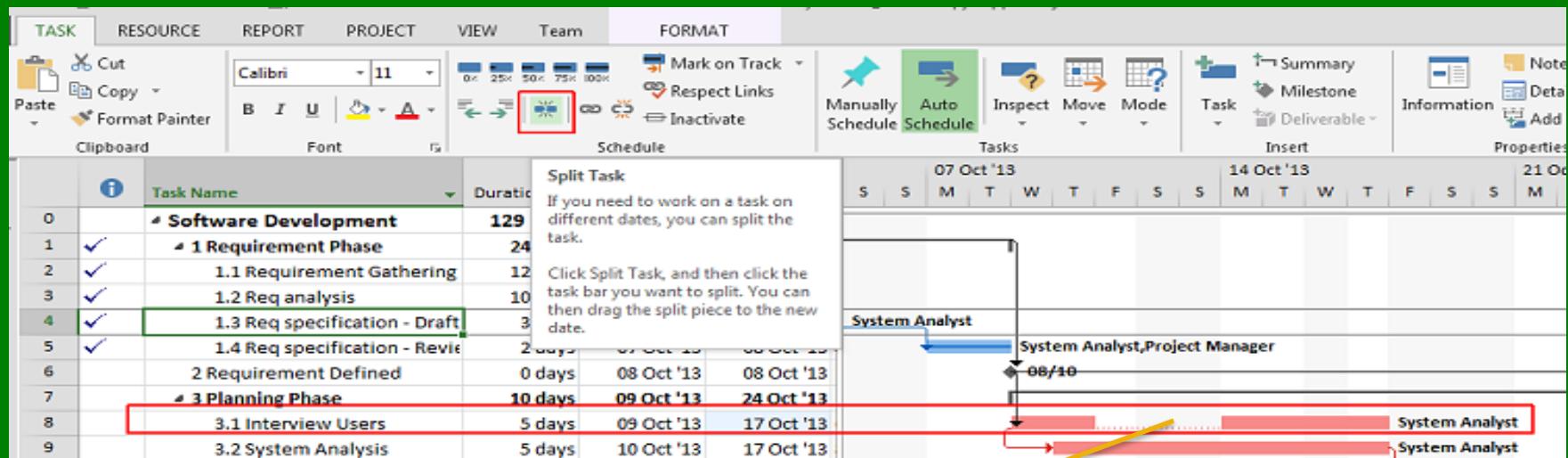
The screenshot shows the Microsoft Project application interface. The ribbon tabs include TASK, RESOURCE, REPORT, PROJECT, VIEW, Team, FORMAT, and various Insert and Properties buttons. A context menu is open over a task named "1.3 Req specification - Draft". The menu title is "Split Task" with the sub-instruction: "If you need to work on a task on different dates, you can split the task. Click Split Task, and then click the task bar you want to split. You can then drag the split piece to the new date." The Gantt chart displays tasks from Oct 7 to Oct 21. Task 1.3 is split into two segments: one from Oct 7 to Oct 10 assigned to "System Analyst", and another from Oct 10 to Oct 13 assigned to "System Analyst, Project Manager". Task 3.1 is also highlighted with a red border.

Task Name	Duration
Software Development	129
1 Requirement Phase	24
1.1 Requirement Gathering	12
1.2 Req analysis	10
1.3 Req specification - Draft	3
1.4 Req specification - Revise	2 days
2 Requirement Defined	0 days
3 Planning Phase	10 days
3.1 Interview Users	5 days
3.2 System Analysis	5 days

- It does **not** affect the duration of the task, which in turn does affect the effort cost.
- It helps re-schedule other dependent tasks

Interrupting Work (Split Task)

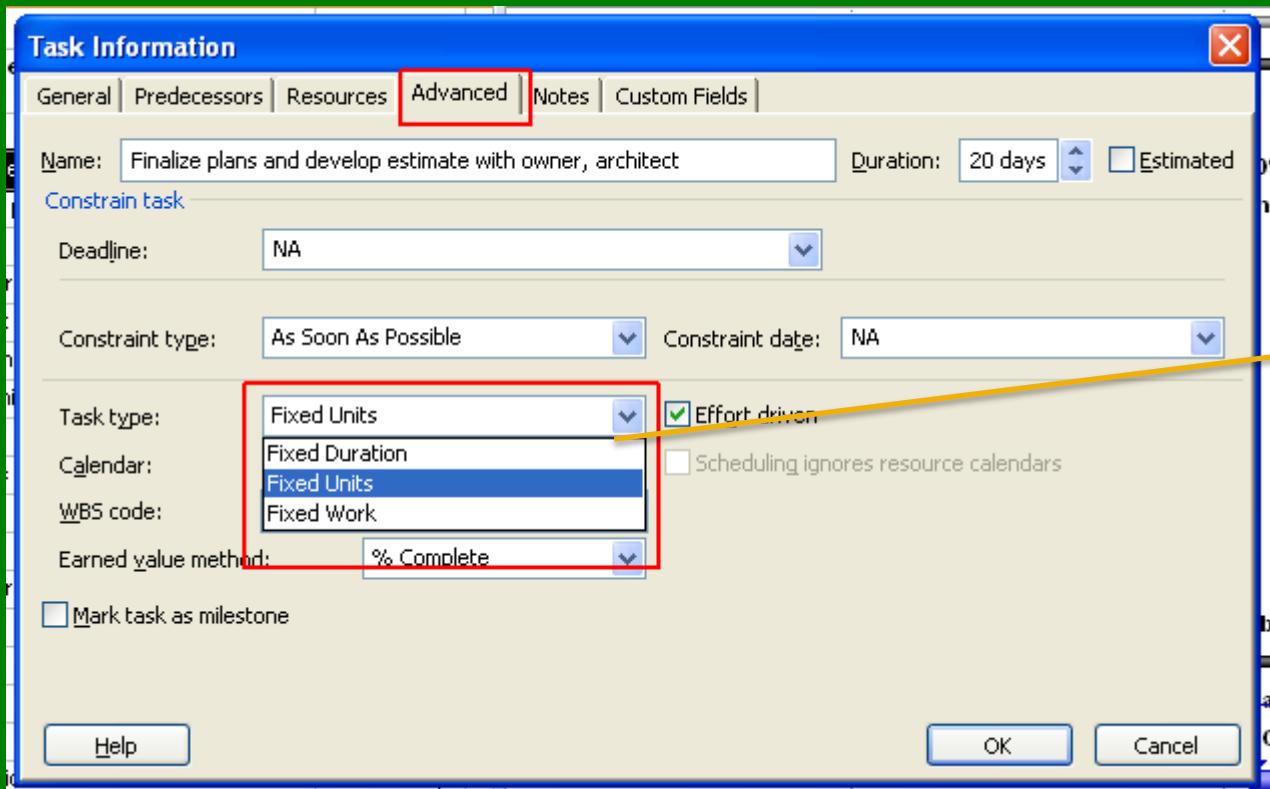
What could be the reasons that we might need this ?



Expert Advice

- Always enter a note detailing why this task was delayed

Changing Task Types



For all tasks, after you assign a resource, the task is scheduled according to the formula
Duration = Work / Units.

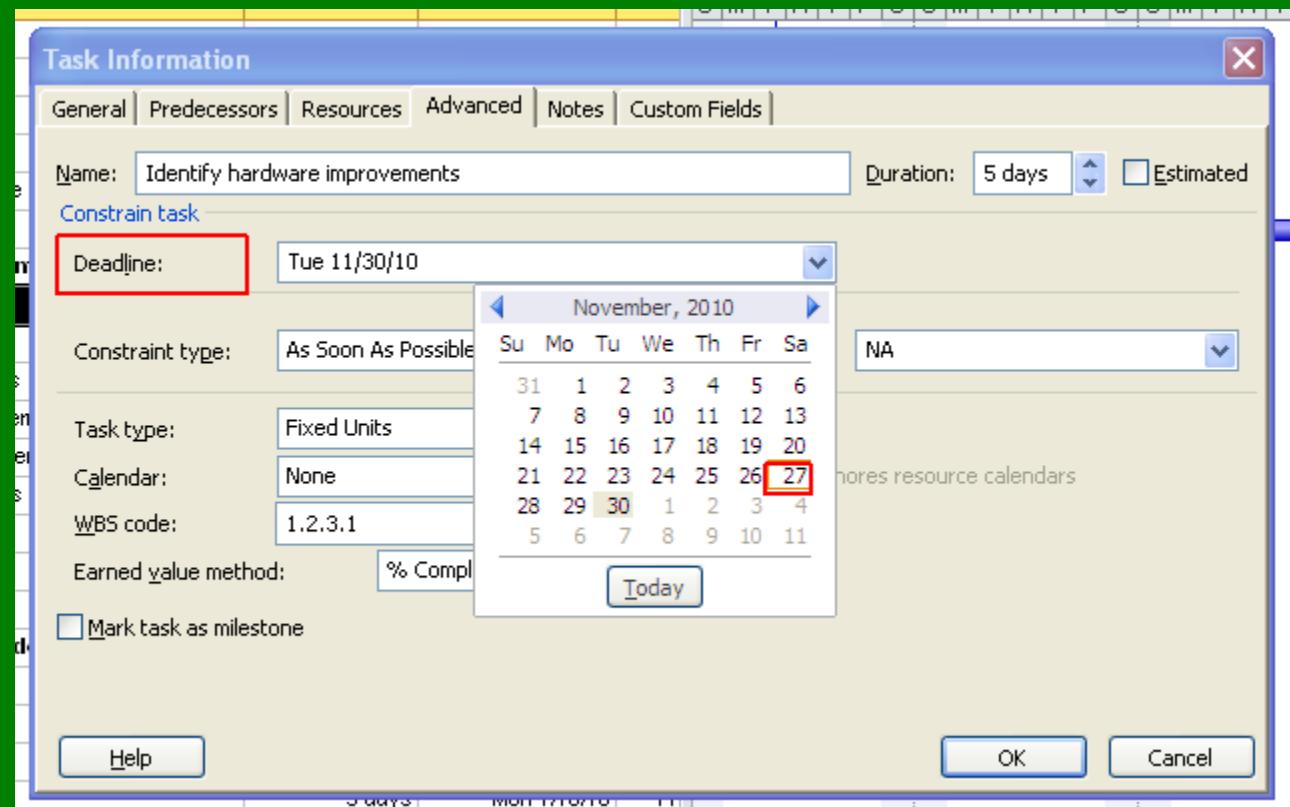
Microsoft Project uses one of three task types as default i.e Fixed Units

Each of the task types affects scheduling when you edit one of the three elements as follows.

In a...	If you revise units...	If you revise duration...	If you revise work...
Fixed-units task	Duration is recalculated.	Work is recalculated.	Duration is recalculated.
Fixed-work task	Duration is recalculated.	Units are recalculated.	Duration is recalculated.
Fixed-duration task	Work is recalculated.	Work is recalculated.	Units are recalculated.



Entering Deadlines



Are Deadlines flexible or do they constrain the project schedule ?



Entering Deadlines

No they don't
They just let you know which tasks missed the completion dates

The screenshot shows the Microsoft Project interface. A task named "Deadline Missed Task" is selected. The "Task Information" dialog box is open, specifically the "Advanced" tab. The "Deadline" field is set to "Tue 9/8/09". A yellow arrow points from this field to a resource bar on the right side of the screen, which is labeled "Tower Engineer1".

Do you
know what
this little
arrow is ?



Entering Fixed Costs

View -> Tables -> Cost

The screenshot shows the Microsoft Project application interface. The 'VIEW' tab is selected in the ribbon. In the 'Format' section, the 'Tables' button is highlighted with a red box, and the 'Cost' checkbox is also checked and highlighted with a red box. The main area displays a Gantt chart with tasks and their fixed costs. The 'Fixed Cost' column is highlighted with a red box.

	Task Name	Fixed Cost	Fixed Cost Accrual
0	Software Development	₹ 0.00	Pro
1	1 Requirement Phase	₹ 0.00	Pro
2	1.1 Requirement Gathering	₹ 0.00	Pro
3	1.2 Req analysis	₹ 0.00	Pro
4	1.3 Req specification - Draft	₹ 0.00	Pro
5	1.4 Req specification - Review	₹ 0.00	Pro
6	2 Requirement Defined	₹ 0.00	Pro
7	3 Planning Phase	₹ 0.00	Pro
8	3.1 Interview Users	₹ 1,500.00	Pro
9	3.2 System Analysis	₹ 0.00	Pro

Why you might need this ? Any ideas from the team ?



View Total Costs for Task



View menu → Tables -> Cost

Screenshot of Microsoft Project Professional 2016 showing the 'Cost' table.

The 'View' tab is selected in the ribbon, and the 'Tables' dropdown is open, with 'Cost' selected.

The table displays project tasks and their associated costs:

Task Name	Fixed Cost	Total Cost	Variance	Remaining	Actual Cost
Software Development	Rs. 0.00	Rs. 1,160,000.00	Rs. 0.00	Rs. 186,400.00	Rs. 192,160.00
1 Requirement Definition	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 8,640.00	Rs. 14,400.00
1.1 Requirement Gathering	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 5,760.00
1.2 Requirement Analysis	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 4,320.00
1.3 Requirement Specification-Draft	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 480.00
1.4 Requirement Specification-Review	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 1,280.00
1.5 Requirement Specification-Final	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 2,560.00
2 Requirement Defined	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00
3 Planning	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 14,080.00
3.1 Interview User	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 2,400.00
3.2 System Analysis	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 2,400.00
3.3 Project Plan	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 5,600.00
3.4 QA Plan	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 1,280.00
3.5 Config Mngmt Plan	Rs. 0.00	Rs. 2,400.00	Rs. 0.00	Rs. 0.00	Rs. 0.00
4 Planning complete	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00	Rs. 0.00
5 Design Solution	Rs. 0.00	Rs. 11,160.00	Rs. 0.00	Rs. 0.00	Rs. 0.00
5.1 Review product Specification	Rs. 0.00	Rs. 960.00	Rs. 0.00	Rs. 0.00	Rs. 0.00



View Total Costs for Resources

1. View menu → Tables -> Cost
2. Select “Resource Sheet” etc.
3. Group by “Resource Type”

Symantec_2010 - Copy.mpp - Project Professional

RESOURCE REPORT PROJECT **VIEW** Team FORMAT

Resource Diagram Resource Usage Resource Sheet Other Views

Sort Outline Tables Filter Group by

Highlight Timescale Days Zoom Entire Selected Project Tasks

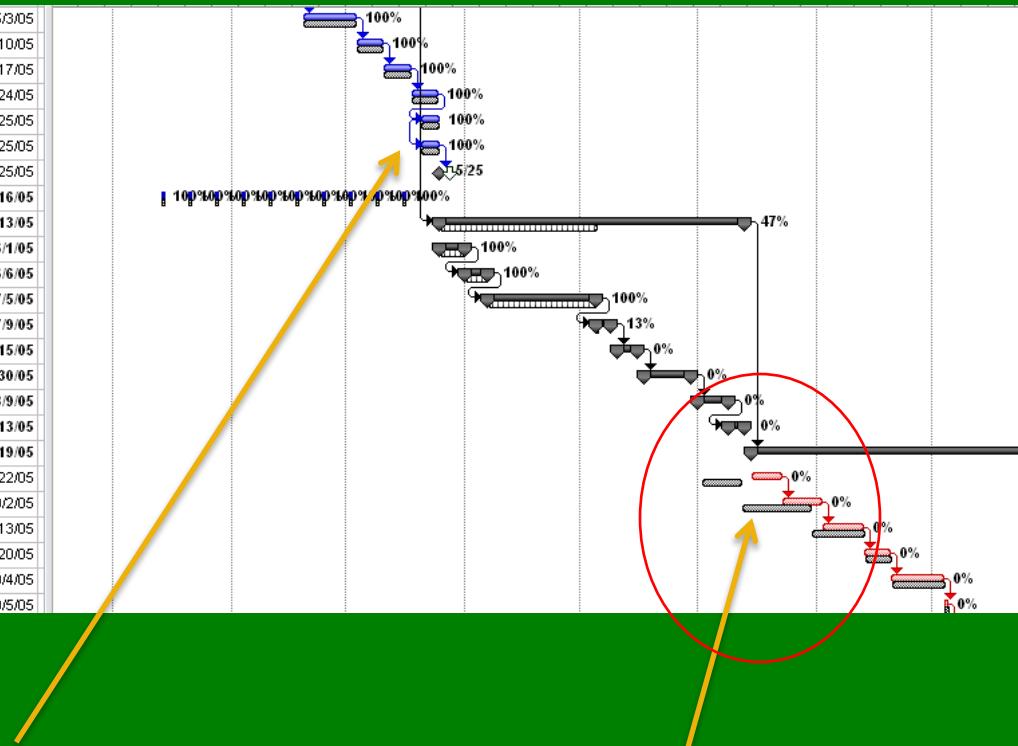
Timeline Details

Resource Views Data Zoom

Resource Name	Type	Material Label	Initials	Group	Max. Units	Std. Rate	Work	Cost	Baseline Cost	Accrued
System Analyst	Work		S	Grp1	200%	₹ 60.00/hr	398 hrs	₹ 23,880.00	₹ 21,960.00	Prorata
Project Manager	Work		P	Grp1	100%	₹ 100.00/hr	128 hrs	₹ 12,800.00	₹ 13,600.00	Prorata
QA Manager	Work		Q	Grp1	100%	₹ 80.00/hr	16 hrs	₹ 1,280.00	₹ 1,280.00	Prorata
Management Team	Work		M	Grp2	100%	₹ 150.00/hr	16 hrs	₹ 2,400.00	₹ 2,400.00	Prorata
Programmer	Work		P	Grp2	900%	₹ 40.00/hr	1,762 hrs	₹ 70,480.00	₹ 70,480.00	Prorata
Test Engineer	Work		T	Grp2	200%	₹ 50.00/hr	344 hrs	₹ 17,200.00	₹ 17,200.00	Prorata
Trainer	Work		T	Grp3	100%	₹ 45.00/hr	272 hrs	₹ 12,240.00	₹ 12,240.00	Prorata
Rented PC	Work		R	Grp3	600%	₹ 60.00/day	288 hrs	₹ 2,160.00	₹ 2,160.00	Prorata
Handbooks	Material		H	Grp3		₹ 100.00	6	₹ 600.00	₹ 600.00	Prorata
Travel to Client Site	Cost		T	Grp3				₹ 50,000.00	₹ 50,000.00	Prorata

Compare progress in the Tracking Gantt against baseline

6	Scout locations	Tue 4/19/05	Tue 5/3/05
7	Select locations	Tue 5/3/05	Tue 5/10/05
8	Hold auditions	Tue 5/10/05	Tue 5/17/05
9	Apply for filming permits	Wed 5/18/05	Tue 5/24/05
10	Reserve camera equipment	Fri 5/20/05	Wed 5/25/05
11	Reserve sound equipment	Fri 5/20/05	Wed 5/25/05
12	Pre-Production complete!	Wed 5/25/05	Wed 5/25/05
13	+ Staff planning meeting	Mon 3/14/05	Mon 3/16/05
24	+ Production	Wed 5/25/05	Sat 5/13/05
25	+ Scene 7	Wed 5/25/05	Wed 6/1/05
31	+ Scene 3	Wed 6/1/05	Mon 6/6/05
37	+ Scene 1	Tue 6/7/05	Tue 7/5/05
43	+ Scene 2	Tue 7/5/05	Sat 7/9/05
49	+ Scene 5	Mon 7/11/05	Fri 7/15/05
55	+ Scene 6	Mon 7/18/05	Sat 7/30/05
61	+ Scene 8	Mon 8/1/05	Tue 8/9/05
67	+ Scene 4	Tue 8/9/05	Sat 8/13/05
73	+ Post-Production	Mon 8/15/05	Mon 12/19/05
74	Log footage	Mon 8/15/05	Mon 8/22/05
75	Record rough narration	Tue 8/23/05	Fri 9/2/05
76	Paper edit footage	Fri 9/2/05	Tue 9/13/05
77	Rough cut edit	Tue 9/13/05	Tue 9/20/05
78	Fine cut edit	Tue 9/20/05	Tue 10/4/05
79	Hold formal approval showing	Tue 10/4/05	Wed 10/5/05



Which one is the baseline ?

Why it looks like this ?



Formatting Project Details

1. Sorting Project Details
2. Grouping Project Details
3. Filtering Project Details
4. Customizing Tables
5. Customizing Views



Sorting Project Details

The screenshot shows the Microsoft Project application interface. The ribbon at the top has tabs: FILE, TASK, RESOURCE, REPORT, PROJECT, and VIEW. The VIEW tab is highlighted with a red box. Below the ribbon, there are several icons for different views: Network Diagram, Gantt Chart, Task Usage, Calendar, Other Views, Resource Usage, Team Planner, Resource Sheet (which is also highlighted with a red box), and Other Views. On the left, a sidebar lists Task Views: Calendar, Gantt Chart, Network Diagram, Task Form, and Task Sheet. The main area is titled "Resource Views" and shows a table with columns: Resource Name, Type, and Material Label. A context menu is open over the "Resource Name" column header, with "Sort A to Z" selected (also highlighted with a red box). Another context menu is open over the "Filters" section, listing various resource types with checkboxes. Most checkboxes are checked, except for "Handbooks". The table data includes rows for Work, Work, Work, Work, Work, Work, Work, Work, Material, and Cost.

Resource Name	Type	Material Label
Handbooks	Work	
Management Team	Work	
Programmer	Work	
Project Manager	Work	
QA Manager	Work	
Rented PC	Work	
System Analyst	Work	
Test Engineer	Work	
Trainer	Material	
Travel to Client Site	Cost	



Grouping Project Details

Screenshot of Microsoft Project software showing the Resource Sheet view with grouping applied.

The ribbon tabs shown are: TASK, RESOURCE, REPORT, PROJECT, VIEW (highlighted), TEAM, and FORMAT.

The View tab dropdown shows: Network Diagram, Resource Usage, Resource Sheet (selected), Team Planner, and Other Views.

The Group by dropdown menu is open, showing options: [No Group], Assignments Keeping, Complete and Incomplete, Resource Group (highlighted), Resource Type, Standard Rate, Clear Group, New Group By..., and More Groups... (with Maintain Hierarch checked).

The Resource Sheet table has the following data:

	Resource Name	Type	Material Label	Initials	Group	Max. Units	
1	System Analyst	Work		S	Grp1	2	
2	Project Manager	Work		P	Grp1	1	
3	QA Manager	Work		Q	Grp1	1	
4	Management Team	Work		M	Grp2	1	
5	Programmer	Work		P	Grp2	5	
6	Test Engineer	Work		T	Grp2	2	
7	Trainer	Work		T	Grp3	100%	₹ 45.00/hr
8	Rented PC	Work		R	Grp3	600%	₹ 60.00/day
9	Handbooks	Material		H	Grp3		₹ 100.00
10	Travel to Client Site	Cost		T	Grp3		



Filtering Project Details

View -> Filter -> Select Filter

The screenshot shows the Microsoft Project Professional interface. The ribbon is visible at the top with tabs: TASK, RESOURCE, REPORT, PROJECT, and VIEW (which is highlighted with a red box). Below the ribbon are two groups of views: Task Views (Network Diagram, Calendar, Other Views) and Resource Views (Resource Usage, Resource Sheet, Other Views). On the far right of the ribbon, there are filter and group by options. A dropdown menu is open under the 'Filter' button, showing 'Completed Tasks' as the selected option (highlighted with a red box). The main area displays a Gantt chart with five tasks listed:

	Task Name	Duration	% Complete
1	1 Requirement Phase	24 days	100%
2	1.1 Requirement Gathering	12 days	100%
3	1.2 Req analysis	10 days	100%
4	1.3 Req specification - Draft	3 days	100%
5	1.4 Req specification - Review	2 days	100%

Filtering Project Details

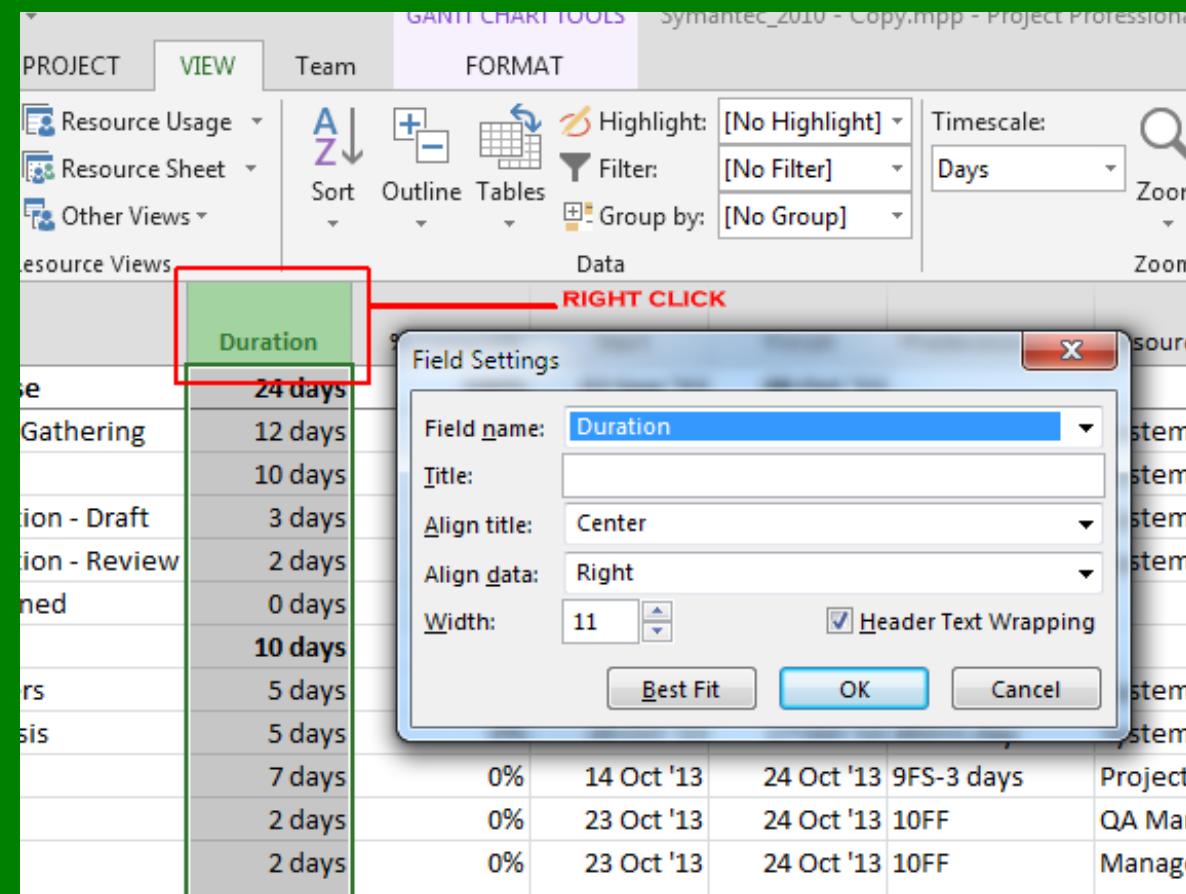
View → Filter → AutoFilter

The screenshot shows the Microsoft Project Professional interface with the 'VIEW' tab selected. The 'Filter' button in the ribbon is highlighted with a red box. A dropdown menu is open from the 'Filter' button, showing various filtering options. The 'Display AutoFilter' option at the bottom of the list is also highlighted with a red box.

Task Name	Duration	% Complete	Start
1 Requirement Phase	24 days	100%	02 Sep '13
1.1 Requirement Gathering	12 days	100%	02 Sep '13
1.2 Req analysis	10 days	100%	17 Sep '13
1.3 Req specification - Draft	3 days	100%	01 Oct '13
1.4 Req specification - Review	2 days	100%	07 Oct '13
2 Requirement Defined	0 days	0%	08 Oct '13
3 Planning Phase	10 days	0%	09 Oct '13
3.1 Interview Users	5 days	0%	09 Oct '13
3.2 System Analysis	5 days	0%	10 Oct '13
3.3 Project Plan	7 days	0%	14 Oct '13
3.4 QA Plan	2 days	0%	23 Oct '13
3.5 Configuration management plan	2 days	0%	23 Oct '13
4 Planning completed	0 days	0%	24 Oct '13
5 Design Phase	21 days	0%	25 Oct '13
			26 Nov '13

Customizing Tables

Right Click on Table Header → Field Settings



Try to change the name of the column % Complete to Percent Complete



Customizing Tables

CHART TOOLS FORMAT

Highlight: [No Highlight] Timescale:

Tables Filter: Calibri 11

Group by: B I E A

Data

	Complete	Start
100%	02 Sep '13	
100%	02 Sep '13	
100%	17 Sep '13	
100%	01 Oct '13	
100%	07 Oct '13	
0%	08 Oct '13	
0%	09 Oct '13	
0%	09 Oct '13	
0%	10 Oct '13	
0%	14 Oct '13	
0%	23 Oct '13	
0%	23 Oct '13	
0%	24 Oct '13	24 Oct '13 7
0%	25 Oct '13	26 Nov '13
0%	25 Oct '13	29 Oct '13 10
0%	30 Oct '13	01 Nov '13 15
0%	04 Nov '13	18 Nov '13 16
0%	19 Nov '13	19 Nov '13 17
0%	20 Nov '13	22 Nov '13 18
0%	25 Nov '13	26 Nov '13 19
0%	26 Nov '13	26 Nov '13 14
0%	27 Nov '13	27 Jan '14

GANNT CHART TOOLS FORMAT

Highlight: [No Highlight] Timescale:

Outline Tables Filter: [No Filter]

Group by: [No Group]

Data

% Complete	Work	Start
100%	232 hrs	02 Sep '13
100%	96 hrs	02 Sep '13
100%	80 hrs	17 Sep '13
100%	24 hrs	01 Oct '13
100%	32 hrs	07 Oct '13
0%	0 hrs	08 Oct '13
0%	168 hrs	09 Oct '13
0%	40 hrs	09 Oct '13
0%	40 hrs	10 Oct '13
0%	56 hrs	14 Oct '13
0%	16 hrs	23 Oct '13
0%	16 hrs	23 Oct '13
0%	0 hrs	24 Oct '13
0%	168 hrs	25 Oct '13
0%	24 hrs	25 Oct '13
0%	24 hrs	30 Oct '13
0%	72 hrs	04 Nov '13
0%	8 hrs	19 Nov '13
0%	24 hrs	20 Nov '13
0%	16 hrs	25 Nov '13
0%	0 hrs	26 Nov '13
0%	1,736 hrs	27 Nov '13



Customizing Views



View → Other Views-> More Views -> Edit

Screenshot of Microsoft Project Professional (Trial) showing the process of customizing views.

The ribbon tabs shown are: Home, Insert, Design, Project, View, Format, and Tell me what you want to do... The View tab is selected.

The "Other Views" button in the Resource Views group of the View tab is highlighted with a blue box.

A "More Views" dialog box is open, listing various views: Resource Sheet, Resource Usage, Task Details Form, Task Entry, Task Form, Task Name Form, Task Sheet, Task Usage, Team Planner, Timeline, and Tracking Gantt. The "Tracking Gantt" view is selected and highlighted with a blue box.

The "Edit..." button in the "More Views" dialog box is highlighted with a blue box.

A "View Definition in 'Software_Development_2016'" dialog box is open, containing the following settings:

- Name: Tracking Gantt
- Screen: Gantt Chart
- Table: Cost
- Group: No Group
- Filter: All Tasks
- Highlight filter (checkbox)
- Show in menu (checkbox, checked)

Buttons in the "View Definition" dialog box include Help, OK, and Cancel.

The main Gantt chart table shows project tasks and their financial details. One task, "5.1 Review product Specification", is highlighted with a blue box.



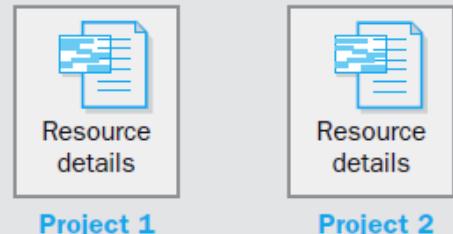
Working with Multiple Projects



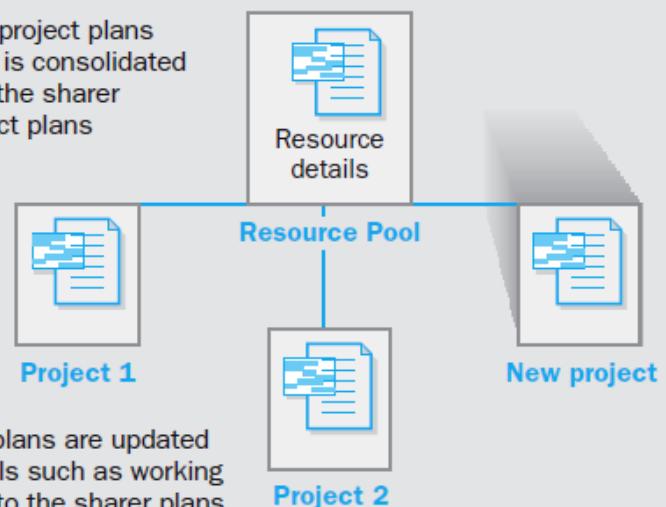
1. Sharing Resources across Projects
2. Setting up resource pool in a pool file
3. Picking up resources in multiple projects from the pool file
4. Consolidating Projects

Sharing Resources across Projects

Before a resource pool is created, each project contains its own resource information. This may lead to overallocation and duplication of resource information for the resources assigned to both projects.

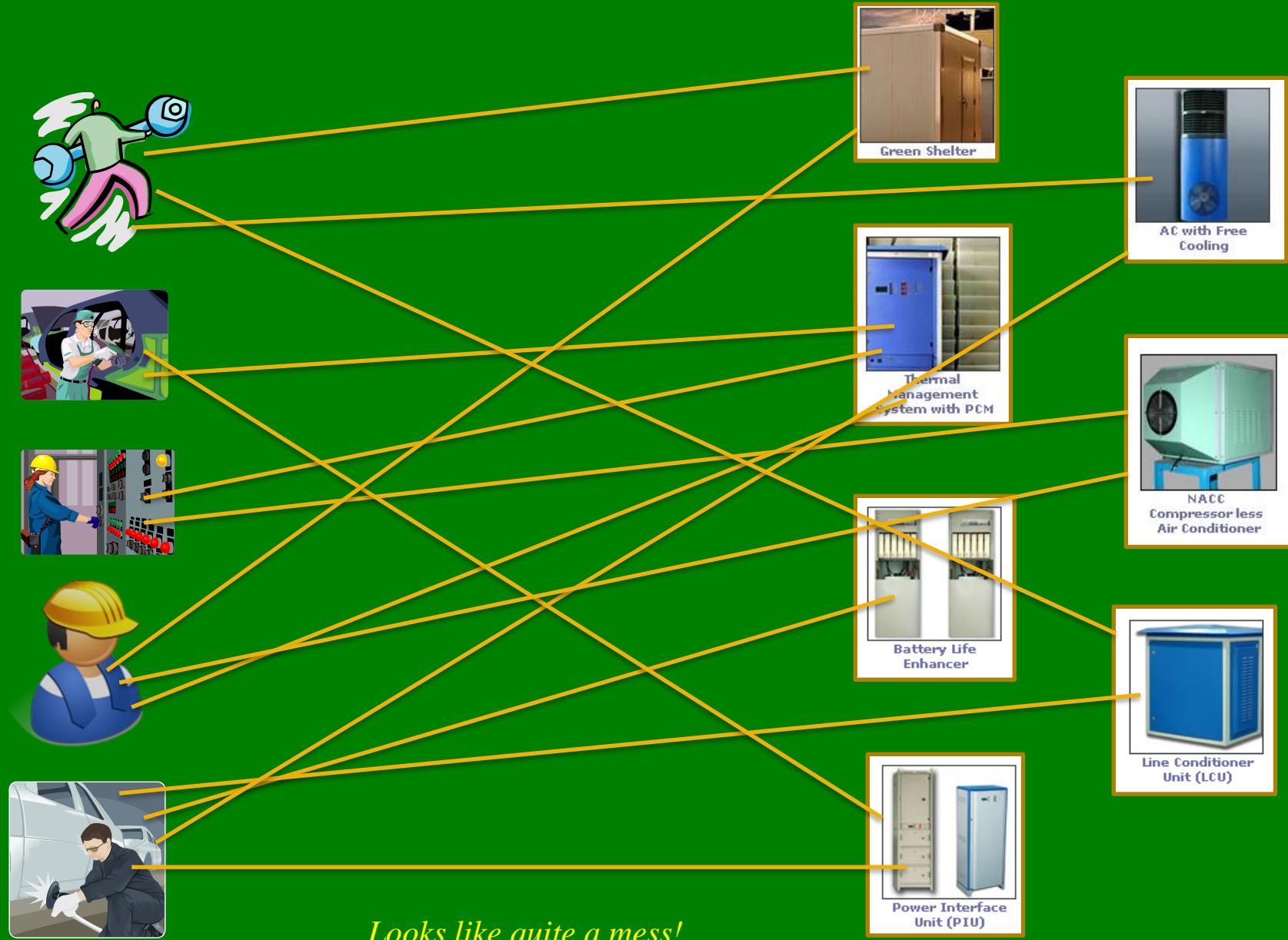


After a resource pool is created and project plans are linked to it, resource information is consolidated in the resource pool and updated in the sharer project plans. You can link new project plans to the resource pool as well.

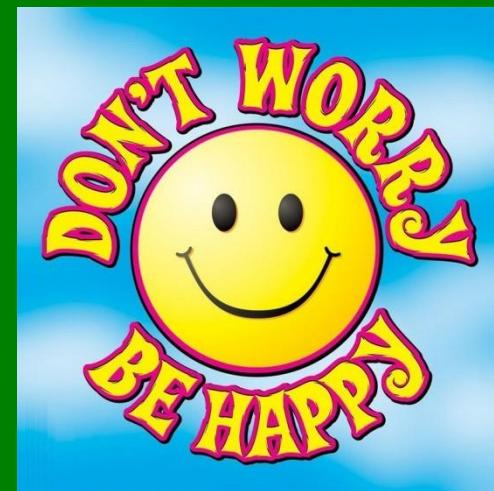


Assignment details from the sharer plans are updated to the resource pool. Resource details such as working time and standard rate are updated to the sharer plans.

Sharing Resources across Projects



Setting up resource pool in a pool file



We have a work around for this, let's work it out.

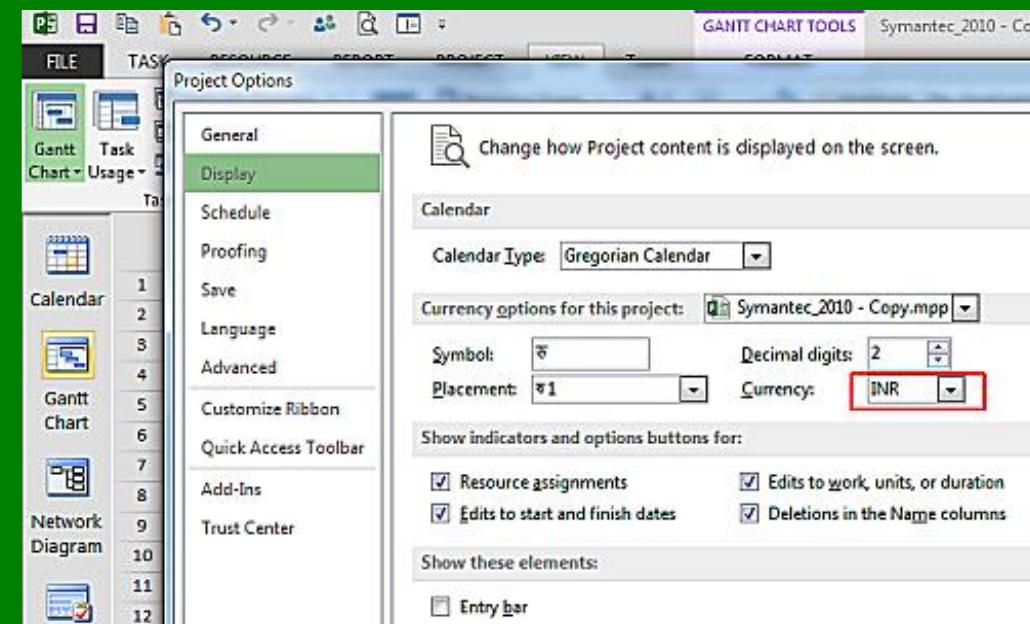
Picking up resources in multiple projects from the pool file

File → Options -> Display

1. Add resources to pool file

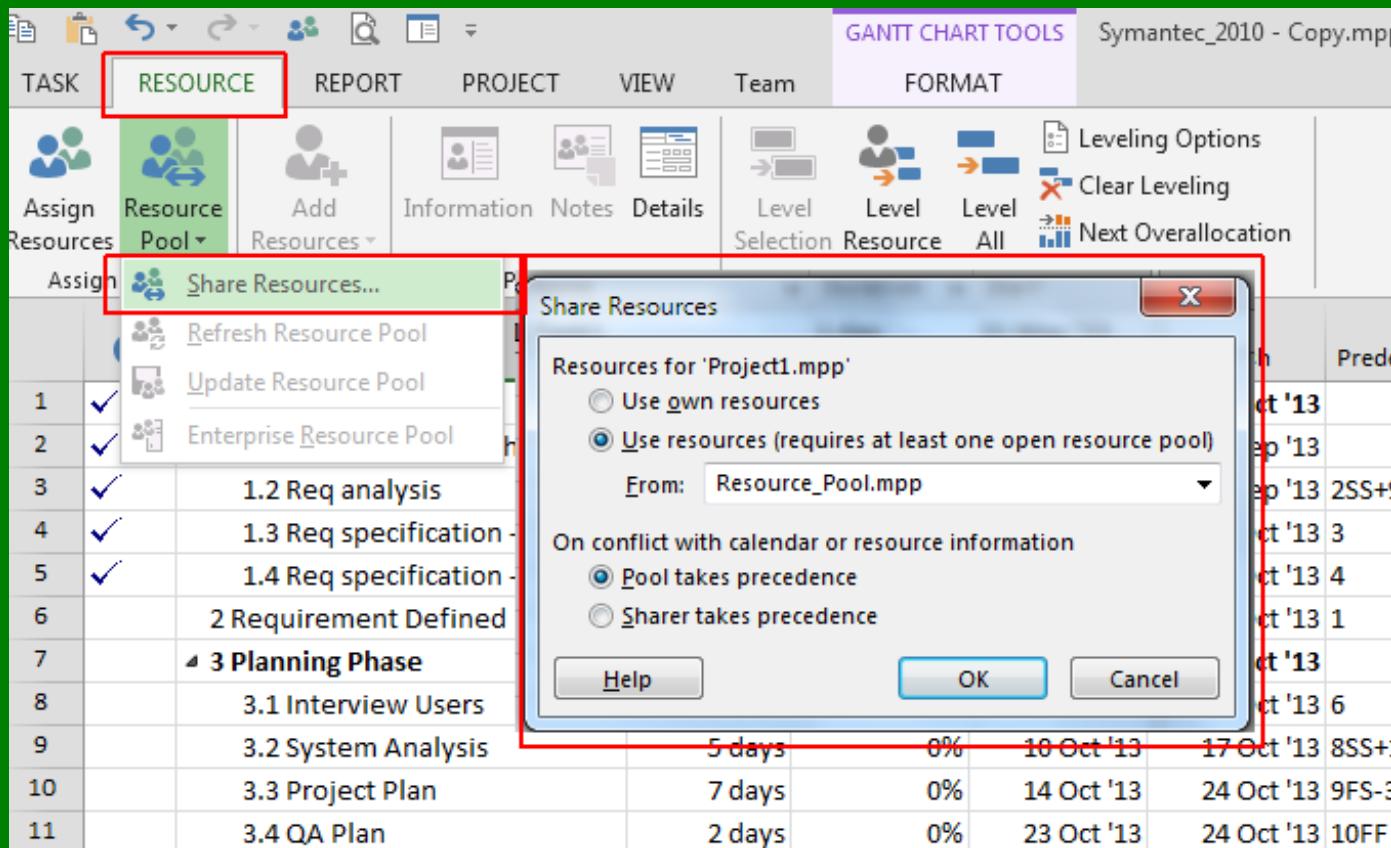
Resource Name	Type	Material Label
Engineer1	Work	
Engineer2	Work	
Engineer3	Work	
Engineer4	Work	
Engineer5	Work	
Engineer6	Work	
Engineer7	Work	
Engineer8	Work	
Engineer9	Work	
Engineer10	Work	
Engineer11	Work	
Engineer12	Work	
Engineer13	Work	
Engineer14	Work	
Engineer15	Work	
Machine Tool1	Work	
Machine Tool2	Work	
Machine Tool3	Work	
Machine Tool4	Work	
Machine Tool5	Work	
Machine Tool6	Work	
Machine Tool7	Work	
Machine Tool8	Work	
Machine Tool9	Work	
Machine Tool10	Work	
Machine Tool11	Work	
Machine Tool12	Work	
Machine Tool13	Work	
Machine Tool14	Work	
Machine Tool15	Work	

2. Set currency in POOL to Rs.



Picking up resources in multiple projects from the pool file

Resource -> Share Resources



Note : Keep pool file open in another window

Picking up resources in multiple projects from the pool file

5. View → Resource Sheet

	Resource Name	Type
1	Engineer1	W
2	Engineer2	W
3	Engineer3	W
4	Engineer4	W
5	Engineer5	W
6	Engineer6	W
7	Engineer7	W
8	Engineer8	W
9	Engineer9	W
10	Engineer10	W
11	Engineer11	W
12	Engineer12	W
13	Engineer13	W
14	Engineer14	W
15	Engineer15	W
16	Machine Tool1	W
17	Machine Tool2	W
18	Machine Tool3	W
19	Machine Tool4	W
20	Machine Tool5	W
21	Machine Tool6	W
22	Machine Tool7	W
23	Machine Tool8	W
24	Machine Tool9	W
25	Machine Tool10	W
26	Machine Tool11	W
27	Machine Tool12	W
28	Machine Tool13	W
29	Machine Tool14	W
30	Machine Tool15	W
31	Project Manager	W
32	PCB Design Engineer	W
33	Shop floor assistant	W
34	Assembly Line workers	W
35	Printed Circuit Boards	M
36	Transformer Coil Rolls	M



Picking up resources in multiple projects from the pool file

Assign Resource

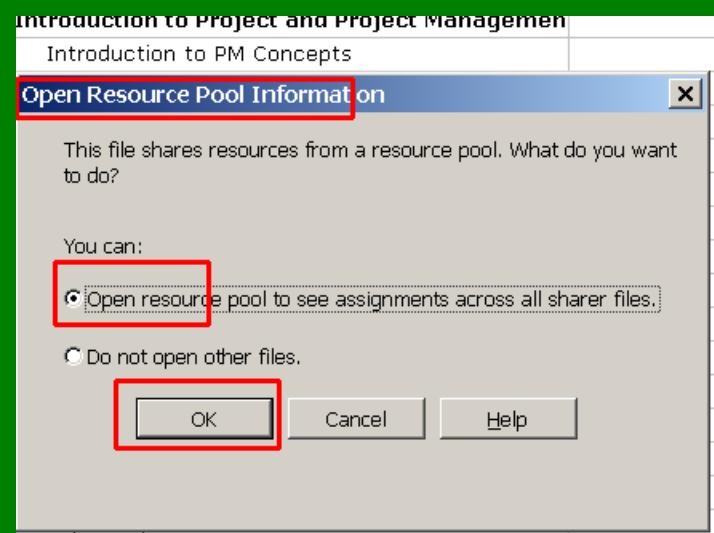
Project1.mpp									
Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/L	Cost/Hr
Developer1	Work		D		100%	₹ 150.00/hr	₹ 0.00/hr		
Developer2	Work		D		100%	₹ 200.00/hr	₹ 0.00/hr		
Developer3	Work		D		100%	₹ 300.00/hr	₹ 0.00/hr		

Resource_Pool.mpp [Read-Only]									
Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/L	Cost/Hr
Developer1	Work		D		100%	₹ 150.00/hr	₹ 0.00/hr		
Developer2	Work		D		100%	₹ 200.00/hr	₹ 0.00/hr		
Developer3	Work		D		100%	₹ 300.00/hr	₹ 0.00/hr		

Picking up resources in multiple projects from the pool file

Expert Advice

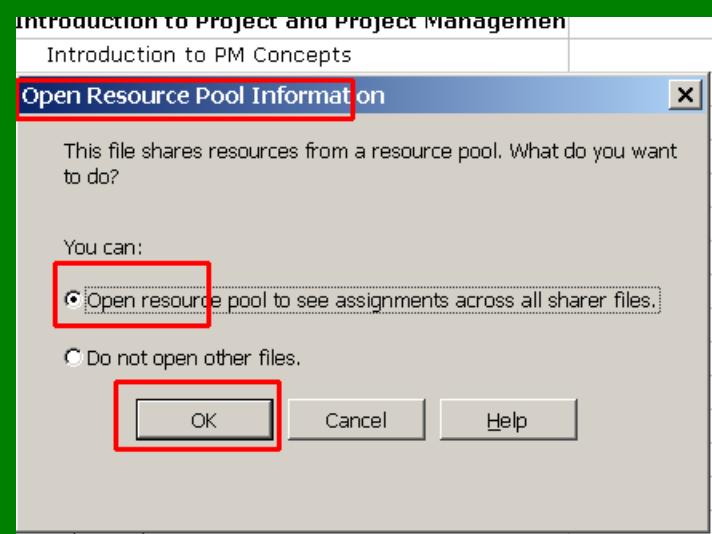
- When you open the project file next time MS Project will ask your for opening the associated POOL file
- Let it open the resources pool file this time and every time so as to keep the status of the shared resources update across all the projects



Picking up resources in multiple projects from the pool file

Expert Advice

- When you open the project file next time MS Project will ask your for opening the associated POOL file
- Let it open the resources pool file this time and every time so as to keep the status of the shared resources update across all the projects





Consolidating Projects

The screenshot shows the Microsoft Project application interface with two open projects:

- Symantec_2010 - Copy.mpp**: This project includes a table of contents, a ribbon menu, and a Gantt chart. The Gantt chart displays tasks from requirement gathering to planning, with resources assigned to specific tasks. A resource named "System Analyst, Project Manager" is shown working on tasks 1.2, 1.3, and 1.4.
- HMIS_Augmentation_Training.mpp**: This project also has a table of contents, ribbon menu, and Gantt chart. The Gantt chart shows a sequence of tasks for a one-day training session, starting with an "Inaugural speech by ADG (Mrs. Madhubala)" and followed by several short tasks related to SAS introduction and benefits.



Consolidating Projects

View → New Window

The screenshot shows the Microsoft Project interface with two Gantt charts displayed. The top chart is for the project "Symantec_2010 - Copy.mpp". The bottom chart is for the project "HMIS_Augmentation_Training.mpp".

The "VIEW" tab is selected in the ribbon, and the "New Window" button in the "Window" group is highlighted with a red box.

A "New Window" dialog box is open, listing the projects being consolidated:

- HMIS_Augmentation_Training.mpp
- Symantec_2010 - Copy.mpp

The "View" dropdown in the dialog box is set to "Gantt with Timeline".

Both Gantt charts show tasks and their timelines. The tasks in the bottom chart are currently selected.

Task Name	Duration	Start	Finish	Predecessors	Resource
1 Requirement Phase	24 days	02 Sep '13	08 Oct '13		
1.1 Requirement Gathering	12 days	02 Sep '13	19 Sep '13	1	Sys
1.2 Req analysis	10 days	17 Sep '13	30 Sep '13	2SS+9 days	Sys
1.3 Req specification - Draft	3 days	01 Oct '13	04 Oct '13	3	Sys
1.4 Req specification - Review	2 days	07 Oct '13	08 Oct '13	4	Sys
2 Requirement Defined	0 days	08 Oct '13	08 Oct '13	1	
3 Planning Phase	10 days	09 Oct '13	24 Oct '13		
3.1 Interview Users	5 days	09 Oct '13	17 Oct '13	6	Sys
3.2 System Analysis	5 days	10 Oct '13	17 Oct '13	8SS+1 day	Sys

Task Name	Duration	Start	Finish	Predecessors	Resource
1 Day 1	1 day	12 Jun '13	12 Jun '13		
1.1 Inaugural speech by ADG (Ms. Madhubala)	20 mins	12 Jun '13	12 Jun '13		

Consolidating Projects

The consolidated Project plan provides A bird's eye view of all the projects

Note : Ensure that the consolidated Projects have same Currencies

Look at the other Views of the Consolidated projects Vs. the individual Views

Cost, Resource Sheet, Task Sheet etc.

Task Name	Duration	Start	Finish
Summary	193.81 days	12 Jun '13	10 Jul '13
HMIS_Augmentation_Training	5 days	12 Jun '13	17 Jun '13
Day 1	1 day	12 Jun '13	12 Jun '13
Day 2	1 day	13 Jun '13	13 Jun '13
Day 3	1 day	14 Jun '13	14 Jun '13
Day4	1 day	15 Jun '13	15 Jun '13
Day 5	1 day	17 Jun '13	17 Jun '13
Software Development	129 days	02 Sep '13	10 Nov '13
Requirement Phase	24 days	02 Sep '13	08 Sep '13
Requirement Defined	0 days	08 Oct '13	08 Oct '13
Planning Phase	10 days	09 Oct '13	24 Oct '13
Planning completed	0 days	24 Oct '13	24 Oct '13
Design Phase	21 days	25 Oct '13	26 Nov '13
Solution designed	0 days	26 Nov '13	26 Nov '13



Printing & Viewing

1. Printing Views
2. Printing Reports
3. Print Page Setup from the print preview option
4. Show View Bar
5. View Calendar
6. View Gantt Chart
7. View Network Diagram
8. View Task Usage
9. View Tracking Gantt
10. View Resource Sheet
11. View Resource Usage
12. View Hide Task Outline Numbers
13. Insert (View) Hide Various Information Columns
14. Expand Contract the timeline view on the right
15. View More Views..



Printing Views

Ctrl + P

	Resource Name	Type	Material Label	Initials	Group	Max. Units	Std. Rate	Work	Cost
1	System Analyst	Work		S	Grp1	200%	₹ 60.00/hr	398 hrs	₹ 23,880.00
2	Project Manager	Work		P	Grp1	100%	₹ 100.00/hr	128 hrs	₹ 12,800.00
3	QA Manager	Work		Q	Grp1	100%	₹ 80.00/hr	16 hrs	₹ 1,280.00
4	Management Team	Work		M	Grp2	100%	₹ 150.00/hr	16 hrs	₹ 2,400.00
5	Programmer	Work		P	Grp2	900%	₹ 40.00/hr	1,762 hrs	₹ 70,480.00
6	Test Engineer	Work		T	Grp2	200%	₹ 50.00/hr	344 hrs	₹ 17,200.00
7	Trainer	Work		T	Grp3	100%	₹ 45.00/hr	272 hrs	₹ 12,240.00
8	Rented PC	Work		R	Grp3	600%	₹ 60.00/day	288 hrs	₹ 2,160.00
9	Handbooks	Material		H	Grp3		₹ 100.00	6	₹ 600.00
10	Travel to Client Site	Cost		T	Grp3				₹ 50,000.00



Printing Views (Ctrl +P)

Software_Development_2016 - Project Professional (Trial) ? - X Sign in

Print

Copies: 1

Print

Printer: HP Deskjet 3540 series (Network) (redirected 2) Ready Printer Properties

Settings

Print Entire Project Print the project from start to finish

Dates: 01-Jan-16 to 07-Jun-16

Pages: 1 to 2

Landscape Orientation

A4 21 cm x 29.7 cm

Page Setup

1 of 2

The screenshot shows a Microsoft Project window titled "Software_Development_2016 - Project Professional (Trial)". On the left, a vertical ribbon menu is open with the "Print" option highlighted by a blue box. Below it, the "Printer" section shows "HP Deskjet 3540 series (Network) (redirected 2)" is selected and ready. Under "Settings", "Print Entire Project" is chosen, and the print range is set from "01-Jan-16" to "07-Jun-16". The "Pages" field shows "1 to 2". The "Orientation" is set to "Landscape" and the "Size" is "A4 21 cm x 29.7 cm". The main area displays a Gantt chart with tasks listed in rows. The first few tasks are: 0 Software Development, 1 Requirement Gathering, 1.1 Requirements Analysis, 1.2 Requirements Specification-Draft, 1.3 Requirements Specification-Review, 1.4 Requirements Specification-Final, 2 Requirement Defined, 2.1 Planning Phase, 2.2 System Analysis, 2.3 Project Plan, 2.4 QA Plan, 2.5 Config Mgmt Plan, 3 Planning Complete, 4 Design Phase, 4.1 Identify Product Scope Definition, 4.2 Define Product Architecture, 4.3 Prototyping, 4.4 Review Functional Specification, 4.5 Incorporate Feedback, 4.6 Parallel, 4.7 System Design, 5 Programming, 5.1 Develop Product Specification, 5.2 Identify Design Parameters, 5.3 Assign Development Staff, 5.4 Coding, 5.5 Code Review and Testing, 5.6 Documenting Components, 5.7 Testing, 6 System Testing, 6.1 Review code, 6.2 Test Component module, 6.3 Identify Data, 6.4 Test And Fix Code, 6.5 Implementing new features code, 6.6 User testing or critique, 6.7 Integration testing, 6.8 System Testing, 6.9 Identify gaps, 6.10 Modify code, 6.11 Review code. The tasks are color-coded by category and some have red markers. The Gantt chart shows progress bars for each task across various months.



Printing Reports



Screenshot of Microsoft Project software interface showing a Gantt chart and a report view.

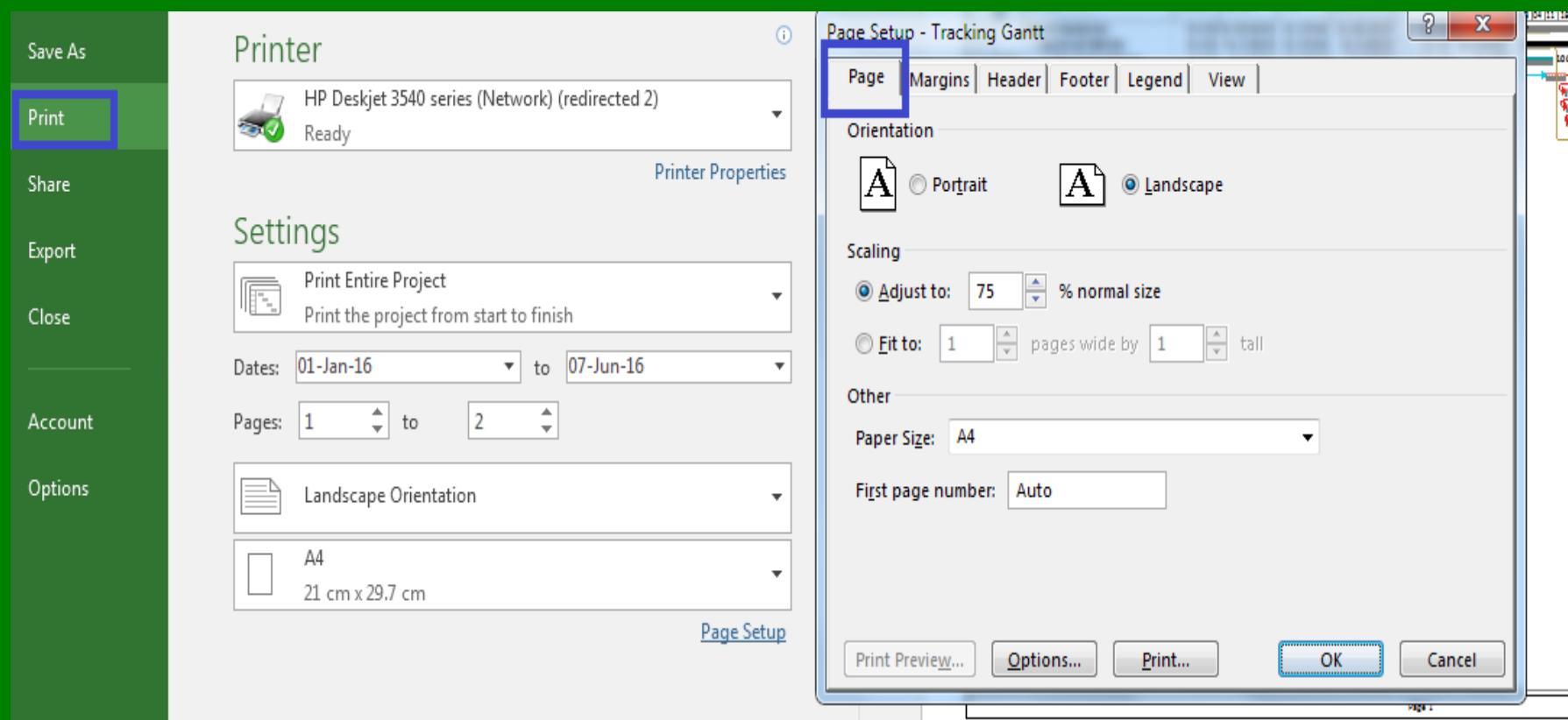
The ribbon menu is visible with the following tabs: File, Task, Resource, Report (selected), Project, View, Format, and Tell me what you want to do. The Report tab is highlighted with a blue box.

The ribbon also includes icons for Compare Projects, New Report, Dashboards, Resources, Costs, In Progress, Getting Started, Custom, Recent, Visual Reports, and Export.

The main area displays a Gantt chart and a detailed report table:

	i	Task Name	Fixed Cost	Total Cost	Actual
0		Software Development	Rs. 0.00	Rs. 192,160.00	Rs. 5,760.00
1		1 Requirement Definition	Rs. 0.00	Rs. 14,400.00	Rs. 5,760.00
2	✓	1.1 Requirement Gathering	Rs. 0.00	Rs. 5,760.00	Rs. 5,760.00
3	!	1.2 Requirement Analysis	Rs. 0.00	Rs. 4,320.00	Rs. 0.00
4		1.3 Requirement Specification-Draft	Rs. 0.00	Rs. 480.00	Rs. 0.00
5		1.4 Requirement Specification-Review	Rs. 0.00	Rs. 1,280.00	Rs. 0.00
6		1.5 Requirement Specification-Final	Rs. 0.00	Rs. 2,560.00	Rs. 0.00
7		2 Requirement Defined	Rs. 0.00	Rs. 0.00	Rs. 0.00

Print Page Setup from the print preview option





Printing Customized Reports

Microsoft Office Project 2019 includes 29 predefined reports, but if none of them meet your information needs, you can use a template to create a custom report.



Printing Customized Reports



Reports → Custom

Software_Development_2016 - Project Professional (Trial)

File Task Resource Report Project View Design Tell me what you want to do...

Compare Projects New Dashboards Resources Costs In Progress Getting Started View Reports

Report Tools

Custom Recent Visual Reports

CC_Comparison
CC_Resource_task
CC_Task_vs_Cost
CC_Task_vs_Work
CR_Cost_Table
CR_Resource_Type_Pie
CR_Resource_vs_Cost
CR_Resource_vs_Work
CR_Resources
CR_Task_vs_Work
More Reports...

Cost

A pie chart titled "Cost" showing the distribution of costs across different tasks. The values are: Programming (69920), Testing (17600), Planning (15000), Design Solution (14400), Training (14080), and Requirement Definition (11160). The chart has a dark background and a legend at the bottom.

Task	Cost
Requirement Definition	11160
Planning	14400
Design Solution	14080
Training	15000
Testing	17600
Programming	69920

Cost

A bar chart titled "Cost" showing the cost for each task. The bars are blue and labeled with their respective values: Requirement Definition (11160), Planning (14400), Design Solution (14080), and Programming (69920). The chart has a dark background and a legend at the bottom.

Task	Cost
Requirement Definition	11160
Planning	14400
Design Solution	14080
Programming	69920

Printing Customized Reports

Print

Copies: 1

Print

Printer: HP Photosmart C3100 series Offline

Print Entire Project: Print the project from start to finish

Dates: 02/09/2013 to 10/03/2014

Pages: 1 to 1

Landscape Orientation

A4: 21 cm x 29.7 cm

Page Setup

CR-01

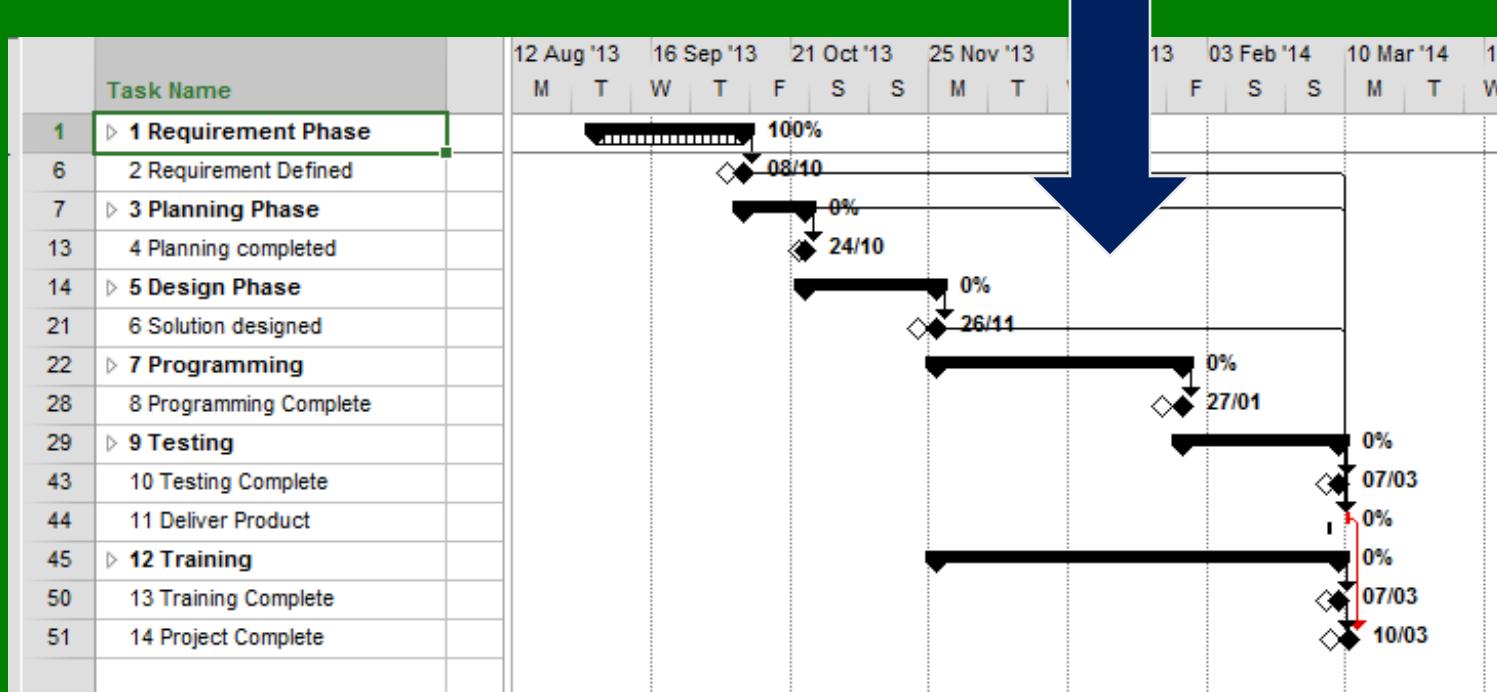
Actual Work

Remaining Work

Work

View Gantt Chart

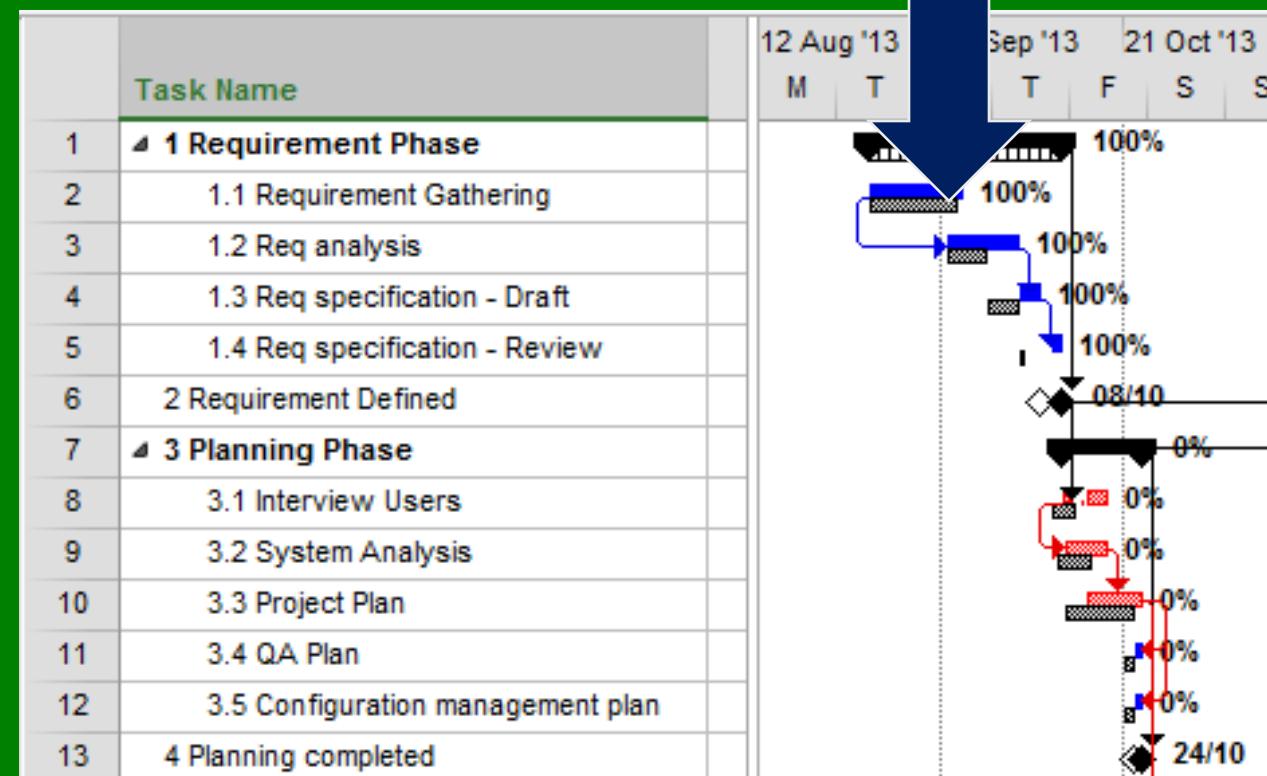
Gantt Chart of Summary tasks



A Gantt chart is a type of bar chart that illustrates a project schedule. Gantt charts illustrate the relations and start / finish dates of the tasks.

View Gantt Chart

Gantt Chart of Tasks





View Calendar

Software Development_2016 - Project Professional (Trial)

File Task Resource Report Project **View** Format Tell me what you want to do...

Gantt Task **Calendar** Network Diagram Resource Usage Resource Sheet Team Planner Other Views

Sort Outline Tables Highlight: [No Highlight] Filter: [No Filter] Group by: [No Group] Timescale: 7 Days Zoom Entire Selected Project Tasks

Timeline Details

Task Views Resource Views Data Zoom Split View

Month Week Custom

May 2016

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09 Test Component module, 3 days	10	11	12	13 Identify Gaps, 3 days	
16 Test And Fix Codes, 2 days	17	18 Re-Test Modified codes, 2 days	19 System testing complete	20 Test Module integration, 3 days	
23	24	25	26	27 Identify gaps, 3 days	
Test Module integration, 6 days					Finalize Training Material, 3 days
30 Identify gaps, 3 days	31	01 Jun Modify code, 3 days	02	03 Finalize Training Material, 3 days	04 Retest
Finalize Training Material, 3 days		Train users, 6 days			
06 Re-test Modify code, 2 days	07	08	09	10	

CALENDAR

April 2016

M	T	W	T	F	S	S
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May 2016

M	T	W	T	F	S	S
			1			
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June 2016

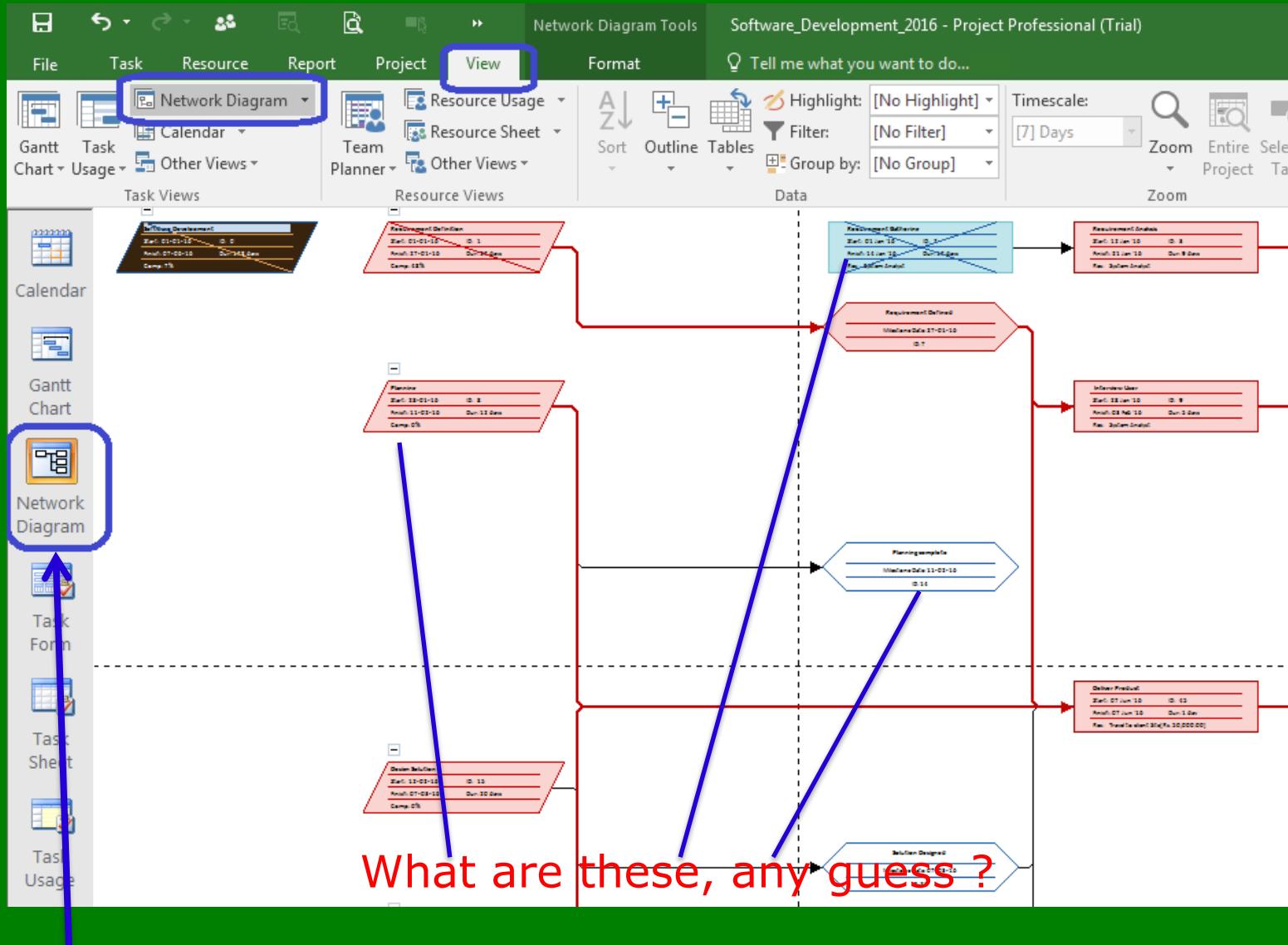
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			



View Network Diagram

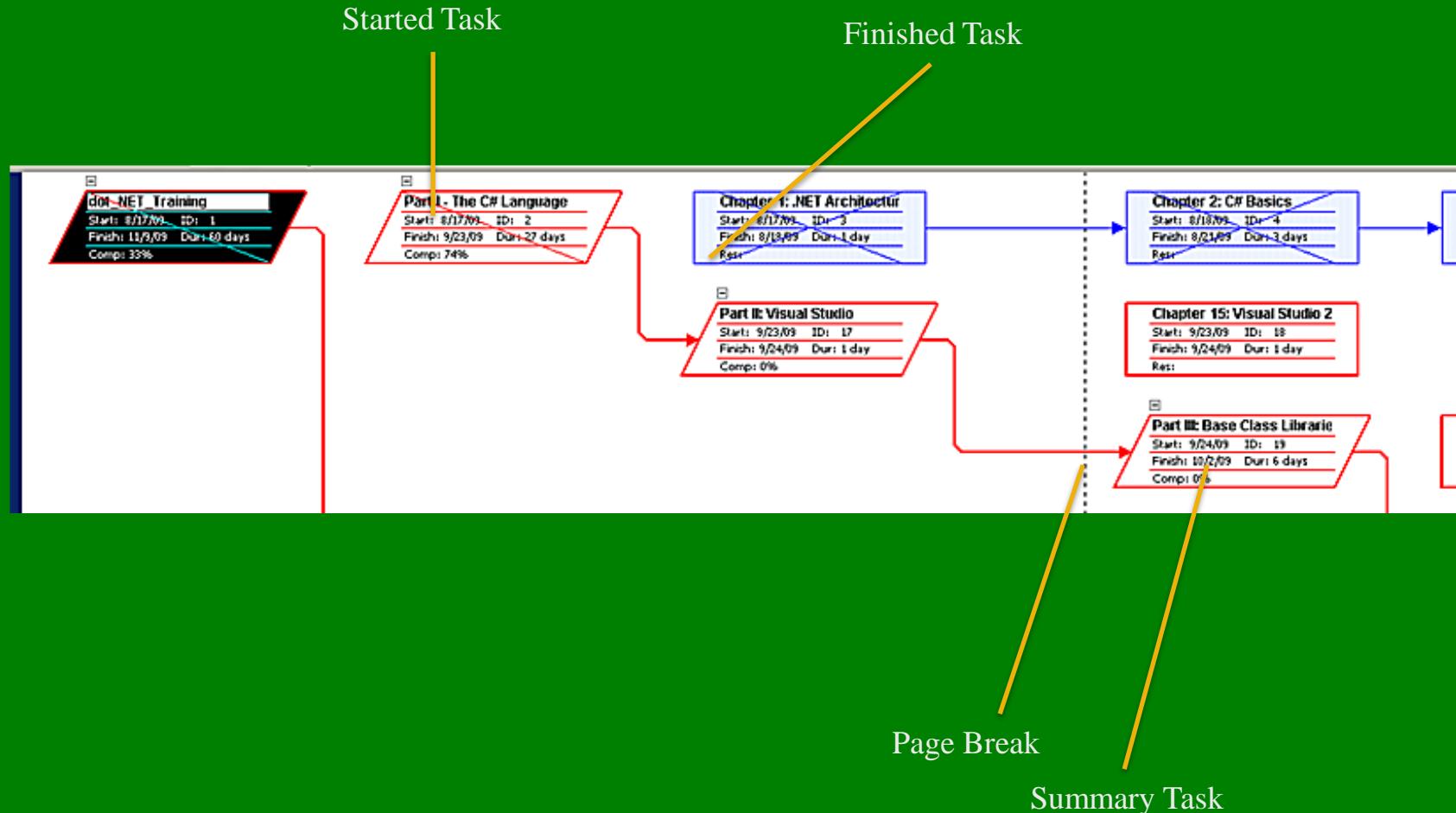
Network Diagram: A diagram that shows dependencies between project tasks. Tasks are represented by boxes, or nodes, and task dependencies are represented by lines that connect the boxes. In Project, the Network Diagram view is a network diagram.) an orderly appearance, Microsoft Office Project 2003 prevents Network Diagram boxes from crossing page breaks.

View Network Diagram



You get this by clicking on the "Network Diagram" icon

View Network Diagram





View Network Diagram

Expert Advice

- *This is the best place where you can spot the hot spots in your project*
- *Take a print out and hang it in your cubicle to impress your boss*





View Task Usage



The screenshot shows the Microsoft Project Professional interface in 'Task Usage' view. The ribbon at the top has 'Task Usage' selected in the 'Task Views' group. The main area displays a hierarchical list of tasks and their details. A specific task, 'System Analyst' at level 3, is highlighted with a green box and a blue border. The right side of the screen shows a detailed timeline for the selected task, with columns for day, start time, end time, and duration.

Task Name	Work	Duration	Start Date	End Date
Software Development	3,208 hrs	128 days	04 Jan '16	26 Feb '16
Requirement Definition	224 hrs	22 days		
Requirement Gathering	96 hrs	12 days		
System Analyst	96 hrs			
Requirement Analysis	72 hrs	9 days		
System Analyst	72 hrs			
Requirement Specification-Draft	8 hrs	1 day		
System Analyst	8 hrs			
Requirement Specification-Review	16 hrs	1 day		
System Analyst	8 hrs			
Project manager	8 hrs			
Requirement Specification-Final	32 hrs	2 days		
System Analyst	16 hrs			
Project manager	16 hrs			
Requirement Defined	0 hrs	0 days		
Planning	168 hrs	12 days		
Interview User	40 hrs	5 days		
System Analyst	40 hrs			
System Analysis	40 hrs	5 days		
System Analyst	40 hrs			
Project Plan	56 hrs	7 days		
Project manager	56 hrs			

Task usage shows task wise allocation of resources

View Resource Usage

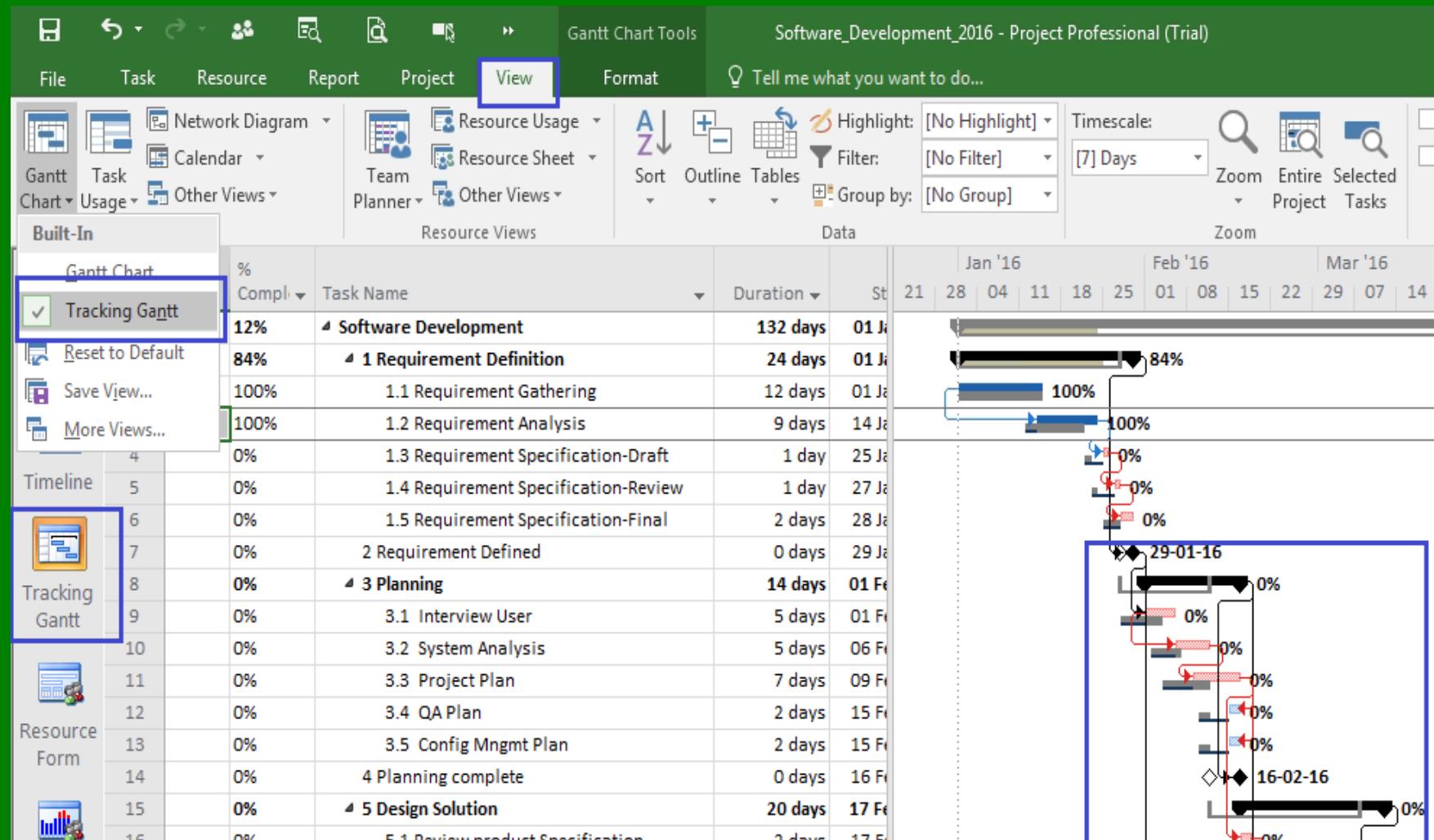
The screenshot shows the Microsoft Project Professional interface with the 'Resource Usage' view selected. The ribbon at the top has tabs for File, Task, Resource, Report, Project, View, Format, and a search bar. The 'View' tab is highlighted with a blue box. Below the ribbon, there are two main sections: 'Task Views' and 'Resource Views'. In the 'Resource Views' section, the 'Resource Usage' icon is highlighted with a blue box. The main area displays a resource usage grid. The columns include Resource Name, Work, and a grid for the week starting 11 Jan '16. The 'Work' column shows hours allocated to tasks. The grid shows work hours for various tasks assigned to 'System Analyst' and other resources.

	Resource Name	Work	11 Jan '16	Mon 11-01	Tue 12-01	Wed 13-01	Thu 14-01	Fri 15-01	Sat 16-01	Sun 17-01
1	Unassigned	0 hrs	Work							
	System Analyst	374 hrs	Work	8h	16h	16h	16h	8h		
	Requirement Analysis	72 hrs	Work							
	Requirement Specification-Draft	8 hrs	Work							
	Requirement Specification-Review	8 hrs	Work							
	Requirement Specification-Final	16 hrs	Work							
	Review product Specification	16 hrs	Work							
	Develop Product specification	24 hrs	Work							
	Prototyping	54 hrs	Work							
	Requirement Gathering	96 hrs	Work	8h	8h	8h	8h			
	Interview User	40 hrs	Work							
	System Analysis	40 hrs	Work							
2	Project manager	136 hrs	Work							
3	QA Manager	16 hrs	Work							
4	Management team	16 hrs	Work							

Resource usage shows resource wise allocation of tasks



View Tracking Gantt



Note : Tracking Gantt is useful if you have saved a baseline



View Resource Sheet



Screenshot of Microsoft Project Professional showing the Resource Sheet view.

The ribbon tabs visible are: File, Task, Resource, Report, Project, View (selected), Format, and Tell me what you want to do... .

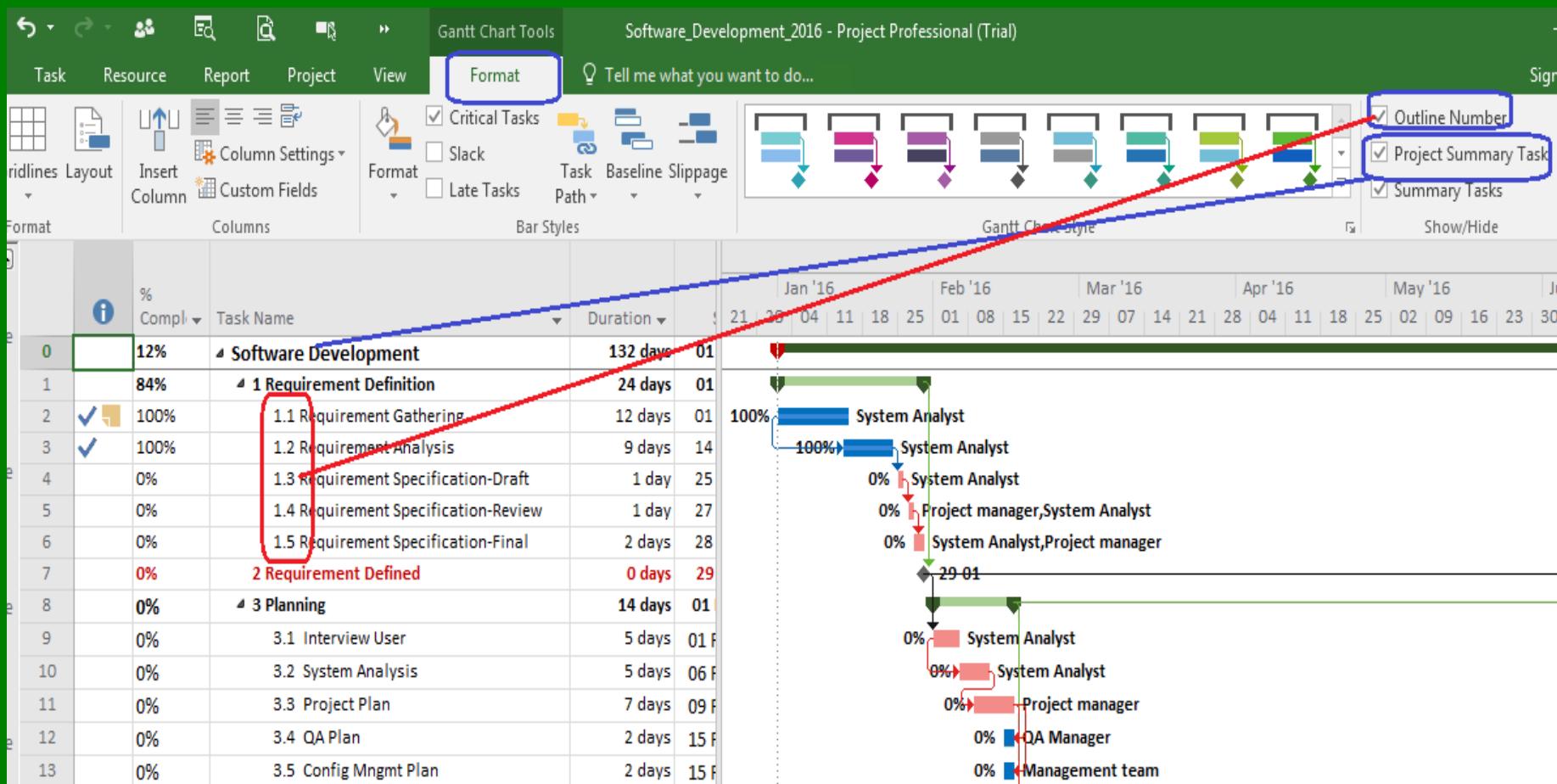
The View tab has a dropdown menu open, showing options: Network Diagram, Resource Usage, Resource Sheet (selected and highlighted with a blue box), Team Planner, and Other Views.

The Resource Sheet view displays the following data:

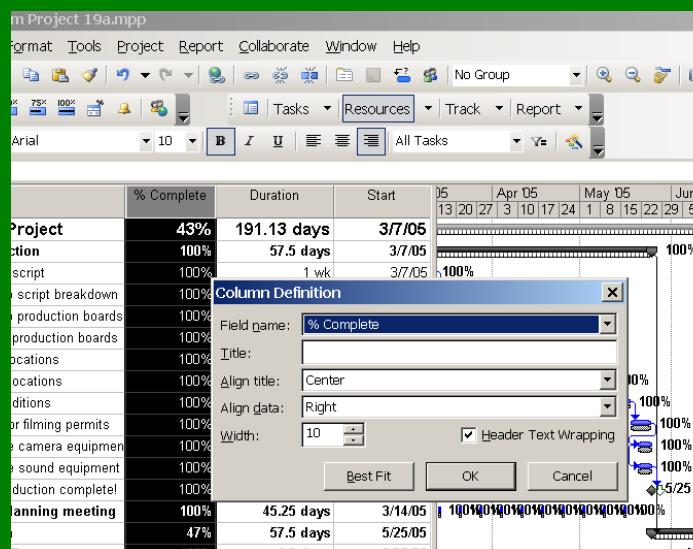
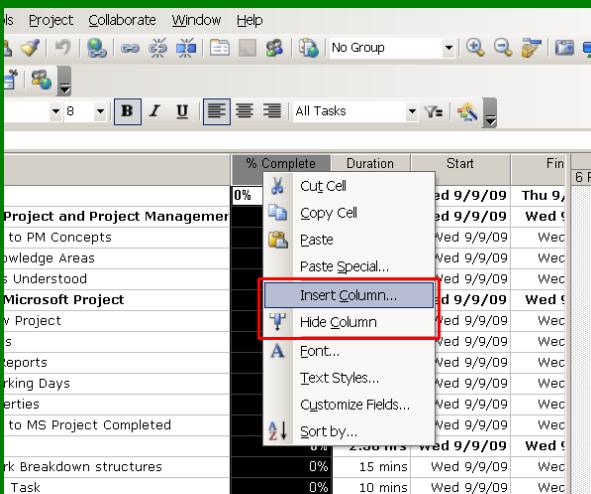
	Resource Name	Type	Material Label	Group	Max. Units	Std. Rate	Work	Cost
1	System Analyst	Work		IR	100%	Rs. 60.00/hr	374 hrs	Rs. 22,440.00
2	Project manager	Work		IR	100%	Rs. 100.00/hr	136 hrs	Rs. 13,600.00
3	QA Manager	Work		IR	100%	Rs. 80.00/hr	16 hrs	Rs. 1,280.00
4	Management team	Work		ER	100%	Rs. 150.00/hr	16 hrs	Rs. 2,400.00
5	Programmer	Work		ER	900%	Rs. 40.00/hr	1,786 hrs	Rs. 71,440.00
6	Test Engineers	Work		ER	200%	Rs. 50.00/hr	320 hrs	Rs. 16,000.00
7	Trainers	Work		ER	100%	Rs. 45.00/hr	272 hrs	Rs. 12,240.00
8	Rented PC	Work		HW	600%	Rs. 60.00/day	288 hrs	Rs. 2,160.00
9	Hand book	Material	pc	MT		Rs. 100.00	6 pc	Rs. 600.00
10	Travel to client Site	Cost		EXP				Rs. 50,000.00

View Task Outline Numbers

Format -> Outline Number



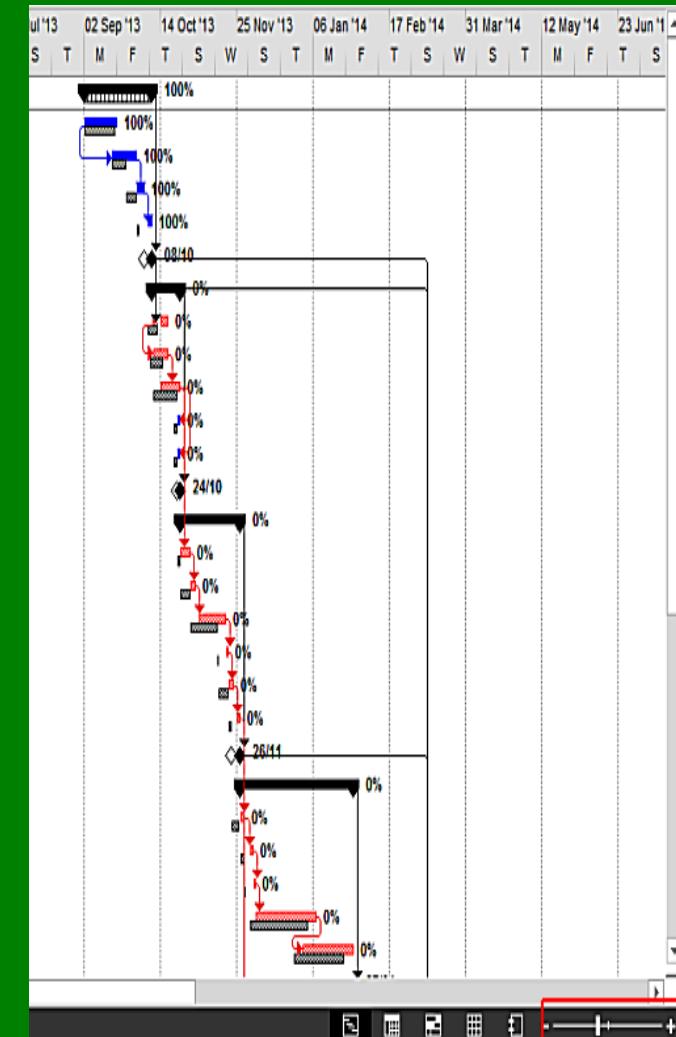
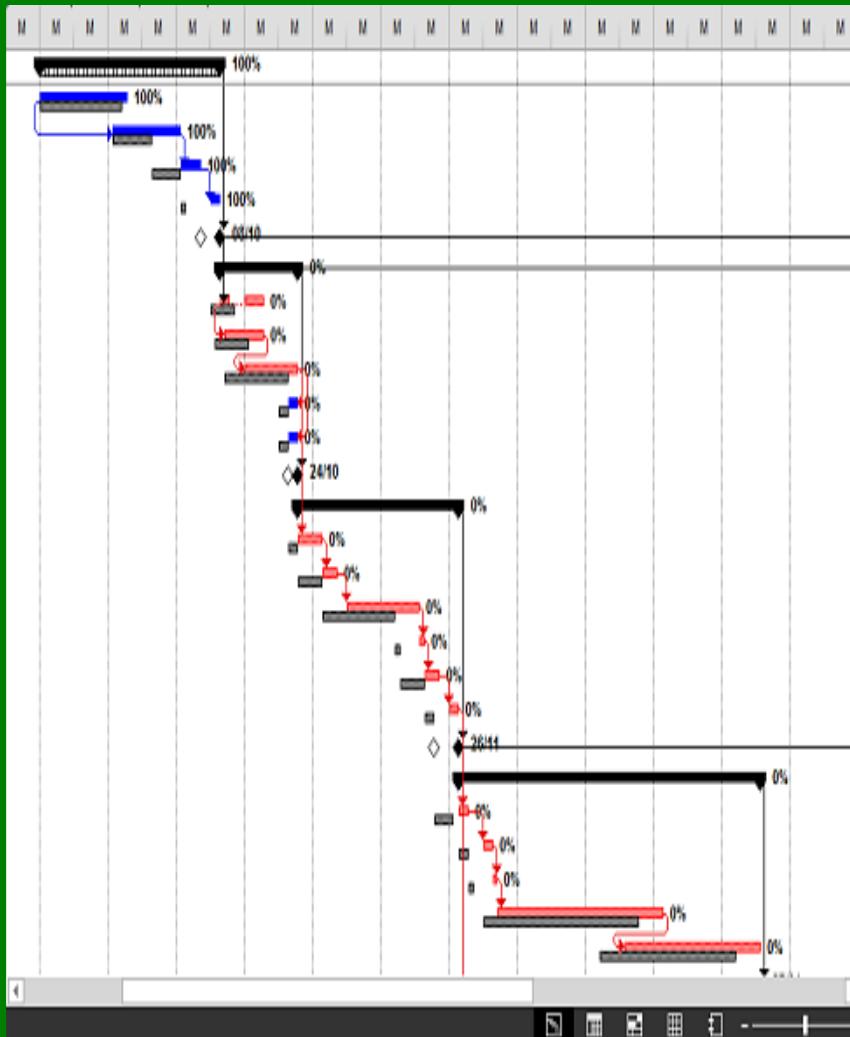
Insert (View) Hide Various Information Columns



Expert Advice

- *Insert the “% Complete” column next to the task name when you start tracking your project*

Expand Contract the timeline view on the right





View More Views..



Screenshot of Microsoft Project Professional 2016 showing the "More Views" dialog box.

The "View" tab is selected in the ribbon. The "Calendar" view is currently selected in the Task Views section, indicated by a red box.

The "More Views" dialog box is open, listing various project views:

- Bar Rollup
- Calendar
- Descriptive Network Diagram
- Detail Gantt
- Gantt Chart
- Gantt with Timeline
- Leveled Gantt** (highlighted with a red box)
- Milestone Date Rollup
- Milestone Rollup
- Multiple Baselines Gantt
- Network Diagram

Buttons at the bottom of the dialog box include "Apply" and "Cancel".

The main workspace shows a Gantt chart for a project named "Software_Development_2016". The chart displays tasks such as "Software Development", "Requirement Definition", and "System Analyst" across three months (Jan '16 to Mar '16). Resource assignments are shown as bars above the tasks, with names like "System Analyst", "Project manager", and "Management team".

Go ahead and discover



Cool Tips and Tricks

Reports → Visual Reports



Screenshot of Microsoft Project showing the "Visual Reports" feature.

The ribbon menu is visible with the "REPORT" tab selected. A blue box highlights the "REPORT" tab. Another blue box highlights the "Visual Reports" icon in the "REPORT" tab's ribbon group.

A "Visual Reports - Create Report" dialog box is open. Its title bar is also highlighted with a blue box.

The dialog box contains the following elements:

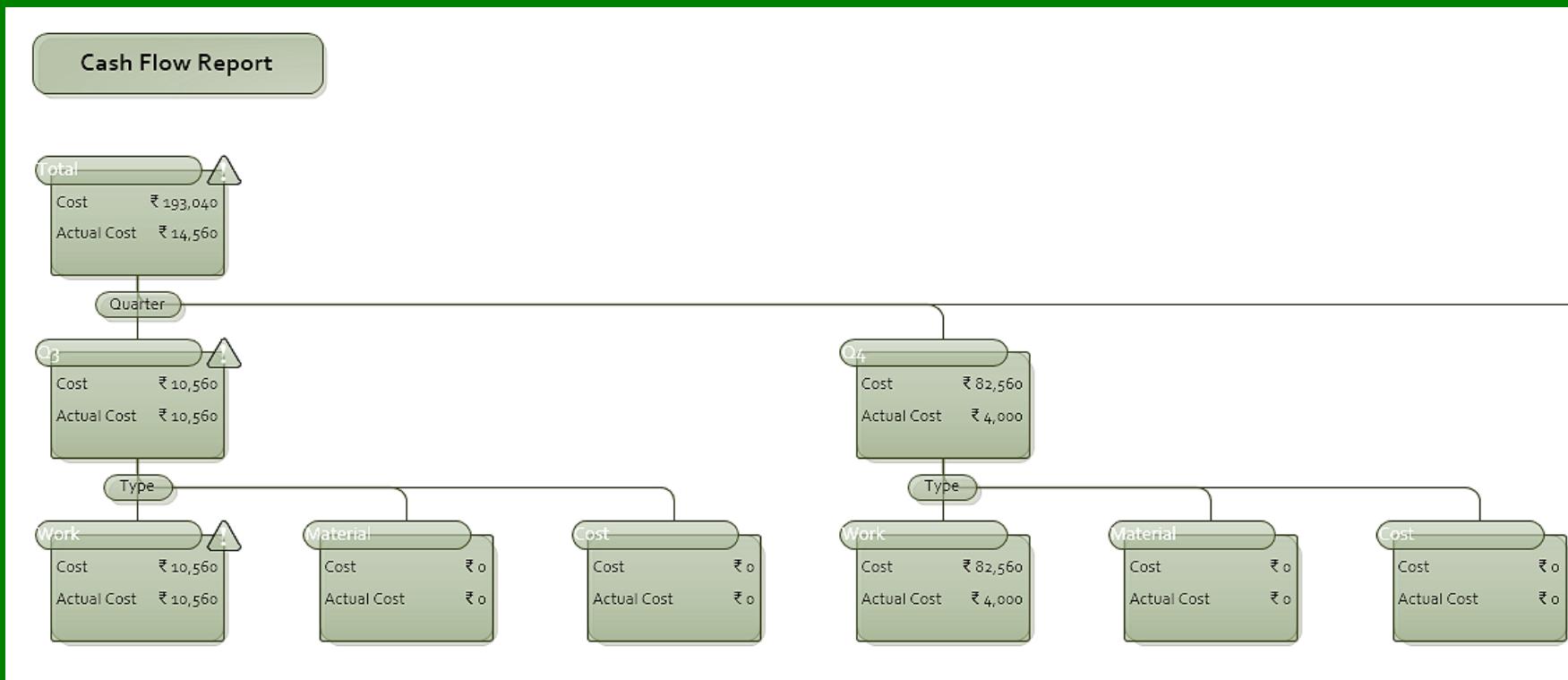
- Select Template**:
Show report templates created in: Microsoft Excel Microsoft Visio
- Task Summary**, **Resource Summary**, **Assignment Summary** tabs (Task Usage is selected)
- All**, **Task Usage**, **Resource Usage**, **Assignment Usage** buttons (Task Usage is selected)
- Baseline Cost Report**, **Critical Tasks Status R**
Baseline Report (Metric), **Critical Tasks Status R**
Baseline Report (Metric), **Critical Tasks Status R**
Baseline Report (US), **Earned Value Over T**
Baseline Report (US), **Resource Availability I**
Baseline Work Report, **Resource Availability I**
Budget Cost Report, **Resource Availability I**
Budget Work Report, **Resource Availability I**
Cash Flow Report, **Resource Cost Summ**
Cash Flow Report (Metric), **Resource Remaining I**
Cash Flow Report (Metric), **Resource Status Repo**
Cash Flow Report (US), **Resource Status Repo**
Cash Flow Report (US), **Resource Status Repo**
Critical Tasks Status Report (Metric), **Resource Status Repo**
- New Template...**, **Edit Template...**, **Manage Template...** buttons
- Sample**: A small bar chart showing resource usage data.
- Select level of usage data to include in the report:** Weeks
- Include report templates from:** (dropdown menu)
- Modify...** button



Cool Tips and Tricks

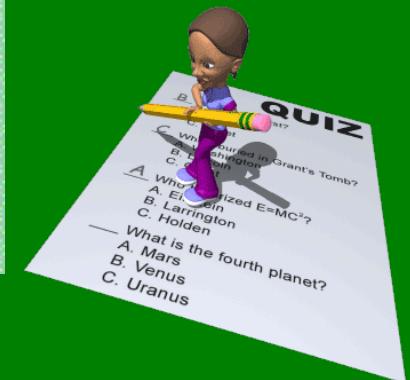
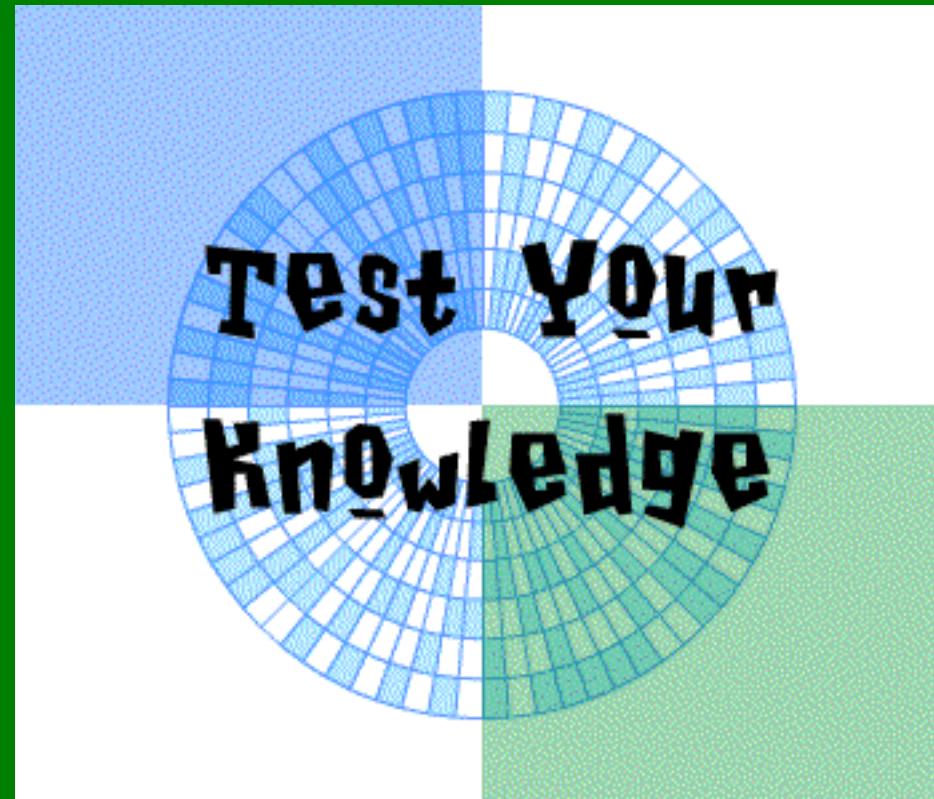
Visual Reports

Reports → Visual Reports





Quiz Time



Sign Off



Plan well to manage better