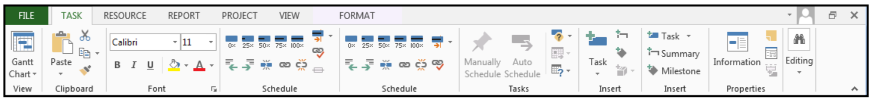
Project Planning

This quick reference is for Microsoft Project Standard 2013 on Windows 7

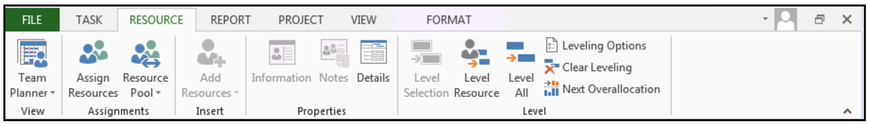
Quick Reference

Project 2013 Tabs

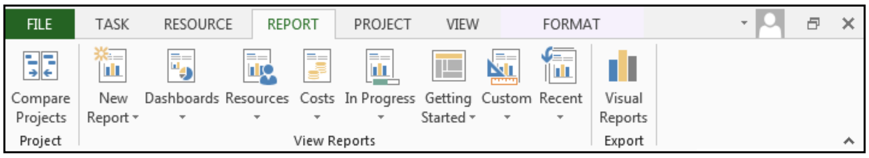
Task



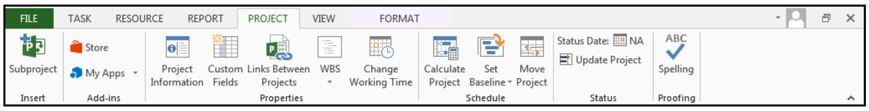
Resource



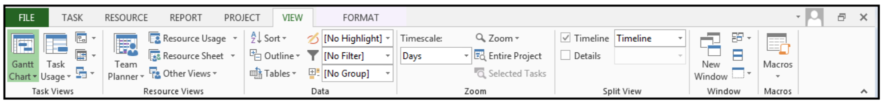
Report



Project



View



Format

Certification Test Goals

This module sets out essential concepts and skills relating to the ability to use
project management software to prepare project plans and monitor projects
including planning and managing time, costs, tasks, and resources.

Successful candidates will be able to:

- Understand the key concepts relating to managing projects.
- Use a project management application to create a new project and maintain an existing project.
- Create and schedule tasks and add project constraints and deadlines.
- Assign costs and create and assign resources to tasks.
- View the critical path, monitor progress and reschedule work.
- Prepare and print outputs, including charts and reports.

Keyboard Shortcuts

Purpose	Keyboard Shortcut
Open	CTRL+O
Save	CTRL+S
Print	CTRL+P
Close	CTRL+W
Undo	CTRL+Z
Redo	CTRL+Y
Help	F1
Switch between apps	ALT+TAB
Cut	CTRL+X
Copy	CTRL+C
Paste	CTRL+V
Hide subtasks	ATL+SHIFT+HYPHEN
Indent a selected task	ATL+SHIFT+RIGHT ARROW
Show subtasks	ATL+SHIFT+=
Show all tasks	ATL+SHIFT+*

1 Project Management Tools

1.1 Key Concepts

1.1.1 Understand the term project.

- A temporary and often collaborative activity that is carefully planned to achieve a particular aim.

1.1.2 Recognise the main elements of managing a project like:

- Planning the project
- Managing the schedule
- Communicating project information

1.1.3 Understand the advantages of using a project management application like:

- Efficient project design
- Ease of project plan maintenance
- Effective activity representation

1.1.4 Understand the tools and features of a project management application like:

- A Gantt chart is a type of bar chart that illustrates a project schedule, including start and finish dates.
- A network diagram is a model designed to analyse and represent the tasks involved in completing a project.
- A work breakdown structure is a tool used to define and group a project's tasks, so as to organise and define the total work of the project.

1.1.5 Recognise that managing projects involves balancing:

- Work
- Time
- Resources
- Cost

2 Project Creation

2.1 Working with Projects

2.1.1 Open a project management application.

- Click the Start button.
- Select All Programs.
- Click Microsoft Project 2013.

2.1.1 Close a project management application.

- Click the Close button in the upper-right corner of the Project 2013 program window.

2.1.1 Open projects

- Click the FILE tab.
- Click Open.
- Select project(s) to open and click Open.

2.1.1 Close projects

- Click the FILE tab.
- Click Close.

2.1.2 Save a project to a location on a drive.

- Click the FILE tab.
- Click Save.
- Create a file name and select the location.
- Click Save.

2.1.2 Save a project under another name to a location on a drive.

- Click the FILE tab.
- Click Save As.
- Enter a new file name over the existing file name and select the location.
- Click Save.

2.1.3 Save a project as another file type like: template, web page, spreadsheet, CSV, XML, text file, pdf.

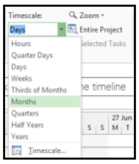
- Click the FILE tab.
- Select Save As.
- Click on the Save as type drop-down menu and select a file type.
- Click Save.

2.1.4 Change between project view modes like: Ganttchart, network diagram.

- On the TASK tab, in the View group, click the Gantt Chart arrow below the Gantt Chart button.
- Click Gantt Chart or Network Diagram to switch to the selected view.

2.1.5 Use magnification/zoom tools.

- On the VIEW tab, in the Zoom group, click the Timescale drop-down box arrow. Select a time unit.



- This can also be done using the Zoom Slider on the bottom right cormer of the screen. Drag the Zoom slider right to increase the tiescale. Drag the Zoom slider left to decrease the timescale.

2.2 Starting a New Project

2.2.1 Create a new project based on default template.

- Click the FILE tab.
- Click New.
- Click Blank project.

2.2.1 Create a new project based on other available template.

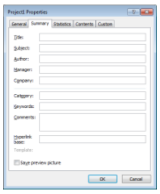
- Click the FILE tab.
- Click New.
- Search for templates or click on a template.
- In the preview dialog box, click Create.

2.2.2 Understand how choosing to schedule from a start date, finish date will impact on the project schedule.

- Schedule from a start date - All tasks will start as soon as possible by default.
- Schedule from a finish date – Tasks on the critical path are started as late as possible by default.

2.2.3 Enter basic project information such as start date or finish date, scheduling options and project properties like: project title, project manager.

- Click the FILE tab.
- Click Info.
- Click Project Information and Advanced Properties. Project properties dialog box will appear where you can key in information such as Project Title and Project Manager.



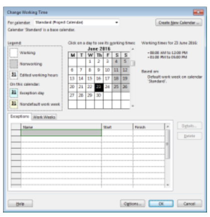
- Enter a project title in the Title text box.
- Enter a project manager in the Manager text box.
- Click OK.

2.2.4 Set up calendar options like: base calendar.

- On the PROJECT tab, in the Properties group, click the Project Information button.
- Select a calendar from 24 Hours, Night Shift, Standard.
- Click OK.

2.2.4 Set up calendar options like: working time.

- On the PROJECT tab, in the Properties group, click the Change Working Time button.
- Click the Work Weeks tab.
- Double-click on [Default] in the Name column.
- Edit a day(s) working time.
- Click OK.



2.2.4 Set up calendar options like: nonworking time.

- On the PROJECT tab, in the Properties group, click the Change Working Time button.
- Click the Work Weeks tab.
- Double-click on [Default] in the Name column.
- Edit a day(s) non-working time.
- Click OK.

3 Tasks

3.1 Creating Tasks

3.1.1 Create tasks.

- Click into an empty Task Name field.
- Enter a task name.

3.1.1 Modify tasks.

- Click into a Task Name field.
- Enter additional task name content or delete existing task name content.

3.1.2 Copy tasks

- Click on a task in the Task Name column.
- On the TASK tab, in the Clipboard group, click the Copy button.
- Click on a new location within the Task Name column.
- On the TASK tab, in the Clipboard group, click the Paste button.

3.1.2 Move tasks

- Click on a task in the Task Name column.
- On the TASK tab, in the Clipboard group, click the Cut button.
- Click on a new location within the Task Name column.
- On the TASK tab, in the Clipboard group, click the Paste button.
- Move can also be done by selecting task to move and then drag up or down to new location.

3.1.2 Delete Tasks

- Select the row containing the task to delete.
- Press the Delete key, or right-click and select Delete Task.

3.1.3 Create subtasks and summary tasks.

- To create a subtask, on the TASK tab, in the Schedule group, click the Indent Task button (right green arrow button).
- To create a summary task, on the TASK tab, in the Schedule group, click the Outdent Task button. (left green arrow button)

3.1.3 Modify subtasks and summary tasks.

- To modify a summary task to be a subtask, on the TASK tab, in the Schedule group, click the Indent Task button. (right green arrow button).
- To modify a subtask to be a summary task, on the TASK tab, in the Schedule group, click the Outdent Task button. (left green arrow button)

3.1.3 View subtasks and summary tasks.

- To view subtasks, on the VIEW tab, in the Data group, click the Outline button.
- Click All Subtasks.
- To hide subtasks, click Hide Subtasks.

3.1.4 Understand task duration options:

- Elapsed task duration is based on a 24-hour day and a 7-day week, including holidays and other nonworking days.
- Duration is the active working time to complete a task.
- Effort is the amount of work required to carry out a task; for example, two people working for three days is 6 days effort (or work).
- Estimated task duration is the estimated working time to complete a task, shown by a ?; for example, 1 day?

3.1.5 Set task duration.

- In the Duration column, click on the Duration for a task.
- Enter the duration required; for example 1D for 1 day.
- Press the Return key.

3.1.5 Modify task duration.

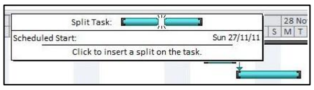
- In the Duration column, click on the Duration for the task to modify.
- Change the duration or delete the duration.
- Press the Return key.

Duration in	Time unit abbreviation
Minutes	M
Hours	H
Days	D
Weeks	W
Months	Mon

3.1.6 Split tasks.

- On the TASK tab, in the Schedule group, click the Split Task button.

- In the Gantt Chart, click the location on a task to create a split.
- Drag the mouse button from the start of the split to the location where you want work on the task to begin again.



3.1.7 Understand the term milestone.

- A reference point used to mark a point in time or a major event in a project.

3.1.8 Create project milestones.

- On the TASK tab, in the Insert group, click the Milestone button.

3.1.9 Create, modify recurring tasks.

- Click the first empty field in the Task Name column.
- On the TASK tab, in the Insert group, click the Task arrow below the Task button.
- Click Recurring Task.
- Enter the recurring task information.
- Click OK.

3.2 Scheduling and Relationships

3.2.1 Understand logical relationships between tasks: finish to start, start to start.

- Finish to start – The second task cannot start until the first task finishes.

- Start to start – The second task can start as soon as the first task starts.

3.2.2 Create relationships between tasks: finish to start.

- To create a finish to start relationship, select the desired tasks to create a relationship between them.
- On the TASK tab, in the Schedule group, click the Link Tasks button.

3.2.2 Create relationships between tasks: start to start.

- To create a start to start relationship, select the tasks to create a relationship between them.
- On the TASK tab, in the Schedule group, click the Link Tasks button.
- In the Gantt Chart, double-click on the link between the two tasks.
- Pick the dependency type Start-to-Start (SS) from the Type list.

3.2.2 Modify relationships between tasks: finish to start, start to start.

- In the Gantt Chart, double-click on the link between the two tasks.
- Change dependency type to Start-to-Start (SS) or Finish-to-Start (FS).
- Click OK.

3.2.2 Delete relationships between tasks: finish to start, start to start.

- In the Gantt Chart, double-click on the link between the two tasks.
- Click Delete.

3.2.3 Understand the terms lead time, lag time.

- Lead time – An overlap between tasks that have a dependency.
- Lag time - A delay between tasks that have a dependency.

3.2.4 Add task lag time, lead time.

- On the TASK tab, in the Properties group, click the Information button.
- In Task Information, click the Predecessors tab and select the relevant lag cell.
- To enter lead time, type a negative number or negative percentage, such as -2d for two days of lead time.
- To enter lag time, type a positive number or percentage, such as 50% for half the predecessor task's duration in lag time.
- Click OK.

3.2.4 Edit task lag time, lead time.

- On the TASK tab, in the Properties group, click the Information button.
- In Task Information, click the Predecessors tab and select the relevant lag cell.
- To edit lead time, type a negative number or negative percentage.
- To edit lag time, type a positive number or percentage.
- Click OK.

3.3 Constraints and Deadlines

3.3.1 Understand task constraint options like:

- As late as possible – Task will start as late as possible based on other constraints and relationships
- As soon as possible - Task will start as soon as possible based on other constraints and relationships
- Must finish on – Task will finish on the specified date
- Must start on – Task will start on the specified date

3.3.2 Add constraints to tasks.

- On the TASK tab, in the Properties group, click the Information button.
- In the Task Information, click the Advanced tab.
- Choose a Constraint type and a Constraint date.
- Click OK.

3.3.2 Modify constraints to tasks.

- On the TASK tab, in the Properties group, click the Information button.
- In the Task Information, click the Advanced tab.
- Modify the Constraint type and Constraint date.
- Click OK.

3.3.2 Delete constraints to tasks.

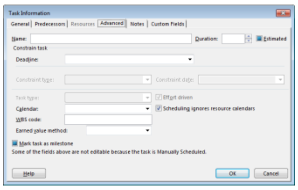
- On the TASK tab, in the Properties group, click the Information button.
- In the Task Information, click the Advanced tab.
- Modify the Constraint type to As Soon As Possible.
- Click OK.

3.3.3 Understand the term deadline.

- The latest date by which a task should be completed.

3.3.4 Create a deadline.

- On the TASK tab, in the Properties group, click the Information button.
- In the Task Information, click the Advanced tab.
- Enter a date into the deadline box or click a deadline from the Deadline drop-down box.



- Click OK

3.4 Notes, Hyperlinks

3.4.1 Add a note for a task.

- Select a task.
- On the TASK tab, in the Properties group, click the Information button.
- Click the Notes tab and enter the information you want.
- Click OK.

3.4.1 Edit a note for a task.

- Select a task.
- On the TASK tab, in the Properties group, click the Information button.
- Click the Notes tab and edit the information you want.
- Click OK.

3.4.1 Remove a note for a task

- Select a task.
- On the TASK tab, in the Properties group, click the Information button.
- Click the Notes tab and delete the text of the note.
- Click OK.

3.4.2 Insert a hyperlink for a task.

- Right-click on the task and select Hyperlink.
- Select the file, location or e-mail address to hyperlink to.
- Click OK.

3.4.2 Edit a hyperlink for a task.

- Edit a hyperlink for a task.
- Right-click on the task and select Hyperlink.
- Edit the file, location or e-mail address to hyperlink to.
- Click OK.

3.4.2 Remove a hyperlink for a task.

- Right-click on the task and select Hyperlink.
- Click Clear Hyperlink.
- Click OK.

4 Resources and Costs

4.1 Resources

4.1.1 Identify resource types like:

- People
- Materials
- Equipment

4.1.2 Understand the relationship between duration, work and resource. Understand that if one element changes there is an impact on another element.

- Duration multiplied by Resource Units equals Work.
  16 hours X 300% = 48 hours
- Work divided by Resource Units equals Duration.
  48 hours / 300% = 16 hours
- Work divided by Duration equals Resource Units.
  48 hours / 16 hours = 300%
- If one element of the formula changes there is an impact on another element, for example an increase in duration will lead to an increase in work.

4.1.3 Create, delete resources.

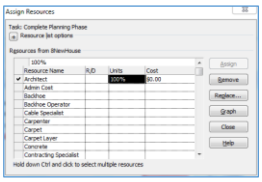
- Click on the TASK tab, click on the Gantt Chart view, and select Resource Sheet.
- In the RESOURCE tab, go to the Insert group, and click on the Add Resources button. Select a Resource.
- Enter or delete the details of a resource.
- Press the Return key.

4.1.3 Modify resource details like: name, type, units, rates.

- Click on the TASK tab, click on the Gantt Chart view, and select Resource Sheet.
- Click on the resource to be modified.
- In the Resource Information dialog box modify details like name, type, units, rates.

4.1.4 Add resource assignments and associated units.

- Select a task.
- On the RESOURCE tab, in the Assignments group, click the Assign Resources button.



- Select the resource to assign and enter the units required.
- Click Assign.

4.1.4 Remove resource assignments and associated units.

- Select a task.
- On the RESOURCE tab, in the Assignments group, click the Assign Resources button.
- Select the resource to remove.
- Click Remove.

4.1.4 Replace resource assignments and associated units.

- Select a task.
- On the RESOURCE tab, in the Assignments group, click the Assign Resources button.
- Select the resource to replace.
- Click Replace.
- Choose a new resource.
- Click OK.

4.2 Costs

4.2.1 Understand the terms fixed cost, variable cost.

- Fixed cost is a set cost for a task regardless of task duration or work performed by a resource.

- Variable cost is a cost that changes throughout the project depending on its availability or use.

4.2.2 Assign, modify fixed costs.

- In the task list, assign, modify the fixed cost in the Fixed Cost column for the relevant task.
- Press the Return key.

4.2.3 Assign, modify variable costs.

- On the RESOURCE tab, in the View group, click the Resource Sheet button.
- Enter the costs required for the resource.
- Press the Return key.
- In the task list, assign the resource to a task and view the Cost column for the task.
- Press the Return key.

5 Project Monitoring

5.1 Critical Path

5.1.1 Understand the terms critical task, critical path.

- Critical task - A task on the critical path
- Critical path - A sequence of tasks that must all be completed on time for the project to finish on schedule.

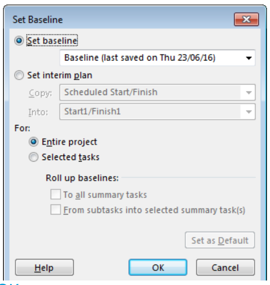
5.1.2 Identify critical tasks and show the critical path.

- On the FORMAT tab, in the Bar Styles group, check the Critical Tasks checkbox.
- Critical tasks will now appear in red on the Gantt chart.

5.2 Monitoring Progress and Rescheduling

5.2.1 Create, save a baseline.

- On the PROJECT tab, in the Schedule group, click the Set Baseline button.
- Click Set Baseline.
- In the Set Baseline dialog box, click Set Baseline and click for the Entire project or Selected tasks.



Click OK.

5.2.1 Clear a baseline.

- On the PROJECT tab, in the Schedule group, click the Set Baseline button.
- Click Clear Baseline.
- In the Clear Baseline dialog box, click on a baseline in the Clear baseline plan drop-down box.
- Click to clear for the Entire project or Selected tasks.
- Click OK.

5.2.2 Show, hide progress line.

- On the FORMAT tab, in the Format group, click the Gridlines button.
- Click Progress Lines.
- Select, deselect to display a current progress line.
- Select, deselect to display at recurring intervals.
- Click OK.

5.2.3 Show columns like: % complete, fixed cost, deadline.

- On the FORMAT tab, in the Columns group, click the Insert Column button.
- Select a column type.

5.2.3 Hide columns.

Select the column to hide.

- On the FORMAT tab, in the Columns group, click the Column Settings button.
- Click Hide Column.

5.2.4 Sort tasks.

- On the VIEW tab, in the Data group, click the Sort button.
- Select a sort type to apply or select Sort By to create a custom sort.

5.2.4 Filter tasks.

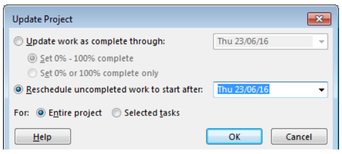
- On the VIEW tab, in the Data group, click the Filter drop-down menu box.
- Select a built in filter to apply or select More Filters for additional filter options.

5.2.5 Update task progress.

- On the TASK tab, in the Schedule group, click the desired % Complete button.

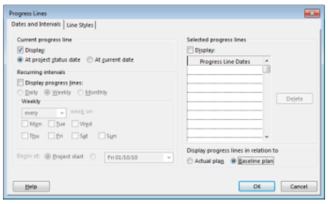
5.2.6 Reschedule incomplete work.

- On the PROJECT tab, in the Status group, click the Update Project button.
- Click Reschedule uncompleted work to start after and select a date.
- Select either to reschedule for the entire project or selected tasks.
- Click OK.



5.2.7 Display current project schedule and baseline.

- On the FORMAT tab, in the Format group, click the Gridlines button and click Progress Lines.
- Select to display the Current progress line.
- Select to display progress line in relation to the Baseline plan.



- If the baseline is not visible, on the FORMAT tab, in the Bar Styles group, click the Baseline button and click a baseline to view.
- Click OK.

6 Prepare Outputs

6.1 Setup

6.1.1 Change page orientation: portrait, landscape.

- On the FILE tab, click Print.
- Click Portrait Orientation or Landscape Orientation.

6.1.1 Change paper size.

- On the FILE tab, click Print.
- Select a paper size.

6.1.2 Change page margins: top, bottom, left, right.

- On the FILE tab, click Print.
- Click Page Setup.
- On the Margins tab, enter a top, bottom, left, right margin.
- Click OK.

6.1.3 Prepare a Gantt chart, network diagram for print using options like: columns to print, notes.

- On the FILE tab, click Print.
- Click Page Setup.
- Click the View tab.
- To print all sheet columns, check the print all sheet columns checkbox.
- To print a specified number of columns, check the print first [insert required number] columns on all pages option and enter the required number.
- Check the print notes checkbox to print notes.
- Click OK.

6.2 Print

6.2.1 Preview a Gantt chart, network diagram, report.

- On the FILE tab, click Print.
- A preview is available on screen.

6.2.2 Print a Gantt chart, network diagram, report from an installed printer using output options like: entire document, specific pages, number of copies.

On the FILE tab, click Print.

Click the Print button.

To print the complete project, under Settings, select Print Entire Project.

To print specific pages, under Settings, select Print Specific Pages and enter specific page numbers and/or page ranges (dates) to print.

Under Copies, enter the number of copies to print.

Click Print.

For more information,
visit: **www.ecdl.org**