SD5953

Successful Project Management

Predecessors and Successors

School of Design
The Polytechnic University of Hong Kong

IMPORTANT

Please sit with the members of your final group project

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It is all About Connections...

But What Exactly Are We Connecting?

Explaining the Relationship between

Work Packages and ATOMIC Tasks

The Work Package – Part 1

- In Project Management, a Work Package (WP) is a subset of tasks in a project that can be logically grouped together, separated, and assigned as a unit for implementation.

- Work packages are defined by a number of attributes: Description, Required Resources, Effort Estimate, Duration Estimate, Schedule, Risks and Budget. This sometimes leads to their being misidentified as a Project. They are NOT a project because they lack meta-information such as a Charter and Scope. Think of them as more like “sprints”.

http://en.wikipedia.org/wiki/Work_package

The Work Package – Part 2

- In Project Management, Work Packages are often used as an intermediate (or macro) level tool for formally managing grouped inputs to a Project. Their impact on a project is usually tracked via a Work Authorization or Control Account.

- Work Packages are used extensively in Earned Value Management where actual progress made in the Work Package (called Earned Value) is compared to the Planned Value that should have been earned. The difference between the two forms the foundations of Project Variance Analysis.

http://en.wikipedia.org/wiki/Work_package

The ATOMIC Task

- An ATOMIC task cannot be decomposed further without losing information. To protect from this, ensure that your decomposed tasks always meaningfully answer **THE W5**:

Who

What

When

Where

Why

Task Relationships

Creating Information Via Proximity

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Predecessors and Successors

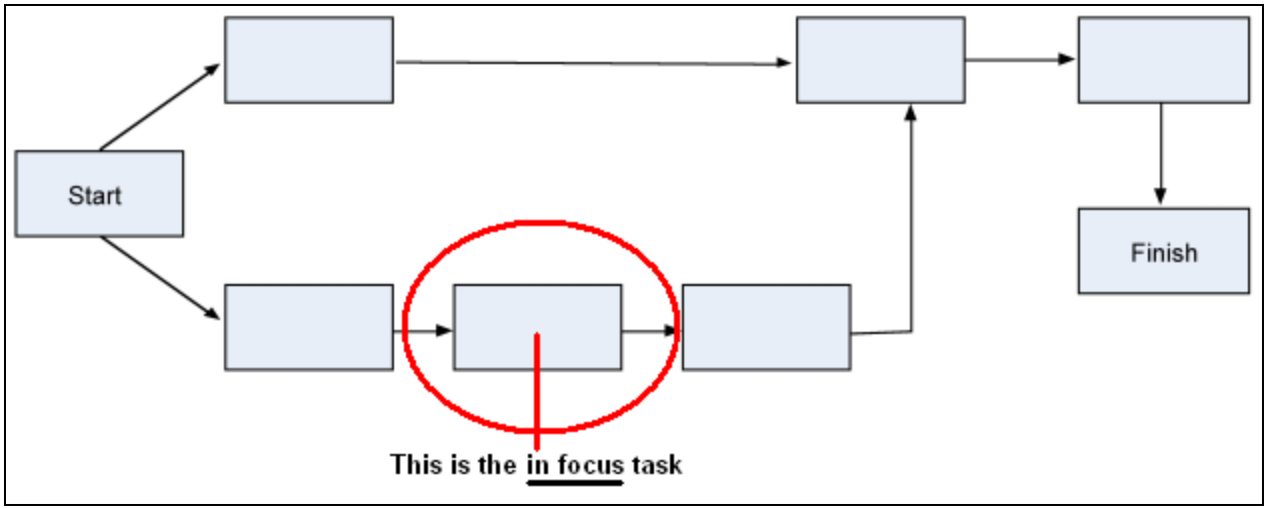
- ALL projects are composed of a series of actions taken over a period of time. Collectively, these actions (when completed) will accomplish the Scope of the project.

- A large part of the "art" of Project Management is effectively breaking down the Scope into a set of separate but highly related chains of tasks to be later delegated and actioned on.

- The location of steps within these chains determines their contextual link to each other, as predecessors or successors.

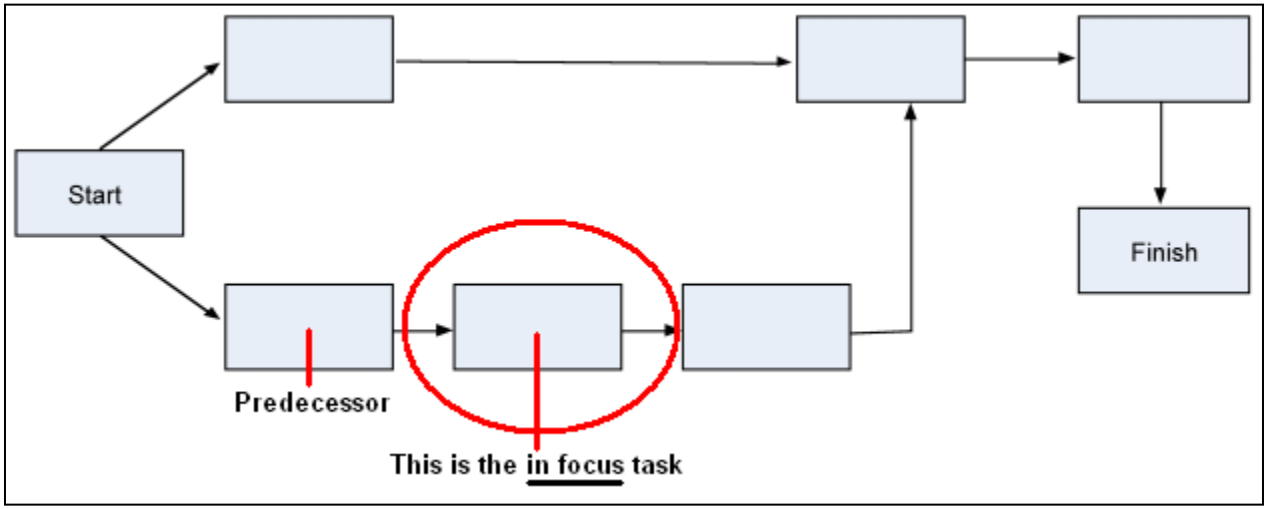
The Focus (or “in focus”) Task

- An <u>in focus</u> task means that it is currently under consideration.



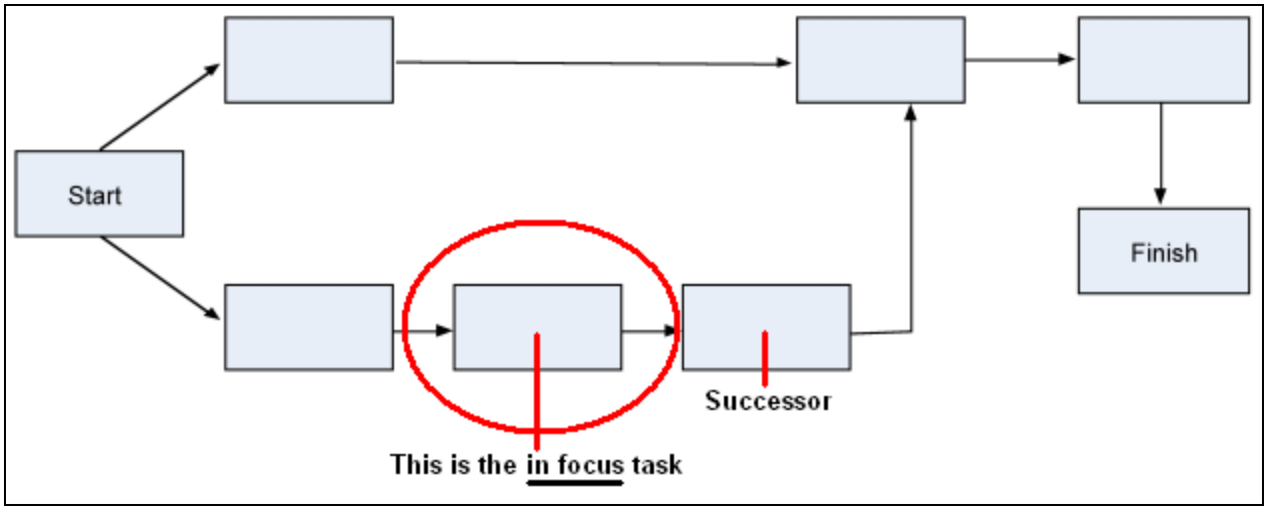
What is a Predecessor?

- A Predecessor is a task that comes BEFORE the Focus task.



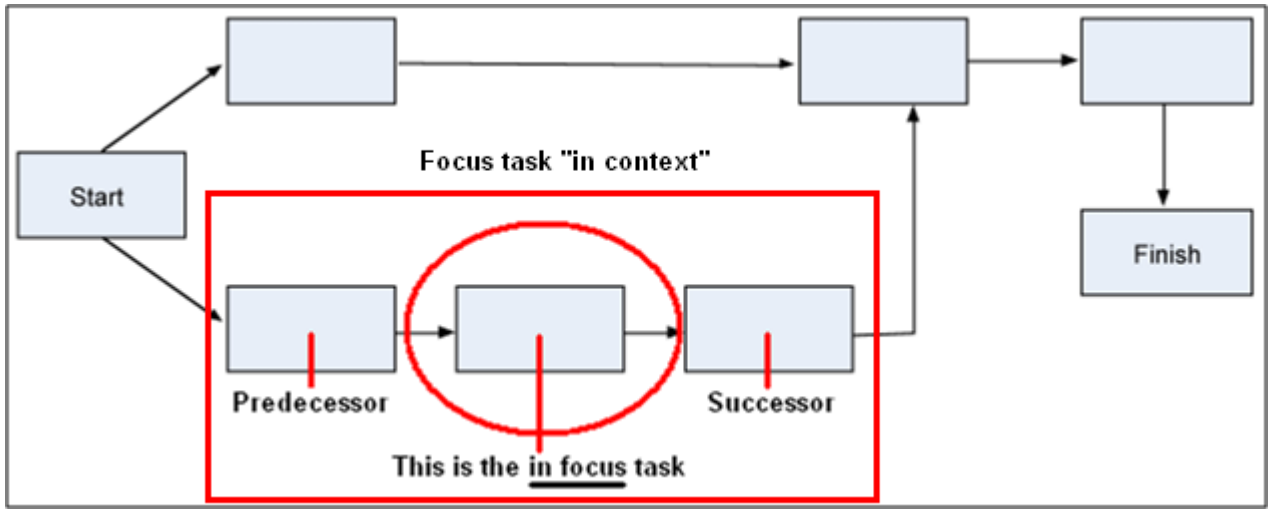
What is a Successor

- A Successor is a task that comes AFTER the Focus task.



Looking at a Focus Task "In Context"

- A Focus task is taken "in Context" when it is examined along with the implications of its Predecessor and Successor.



Connecting Tasks

The Different Forms of Task Sequencing

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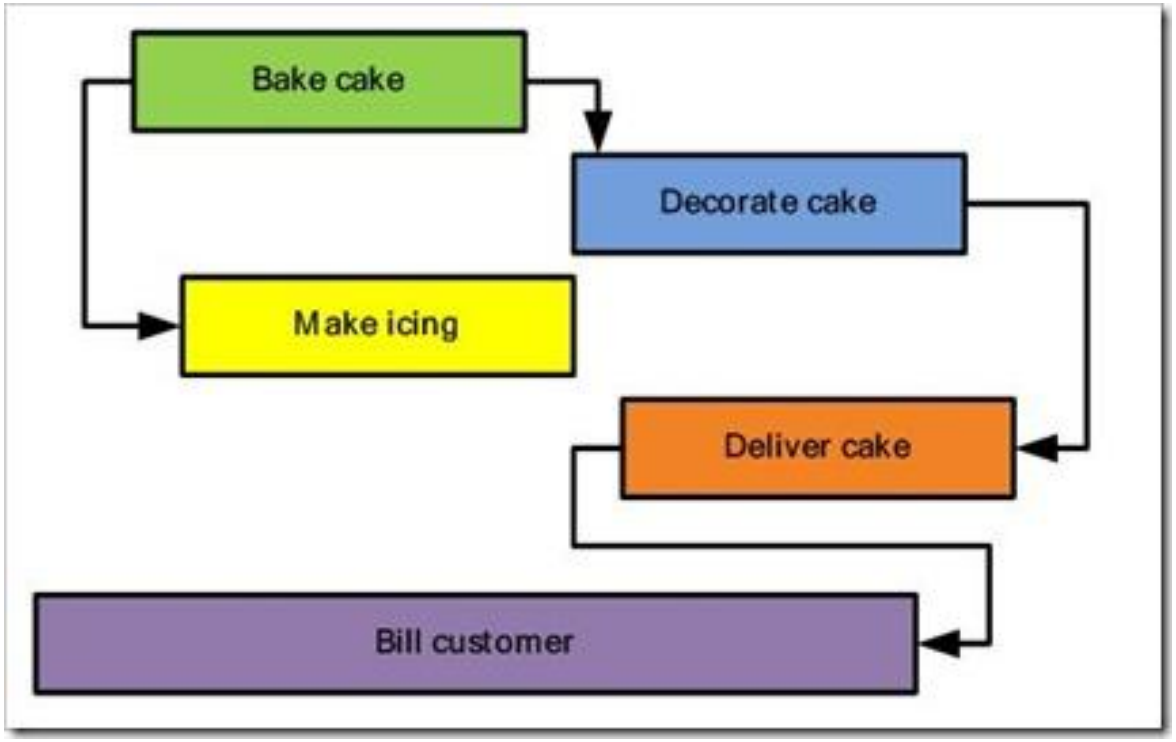
Example: Cake Sale Task Network

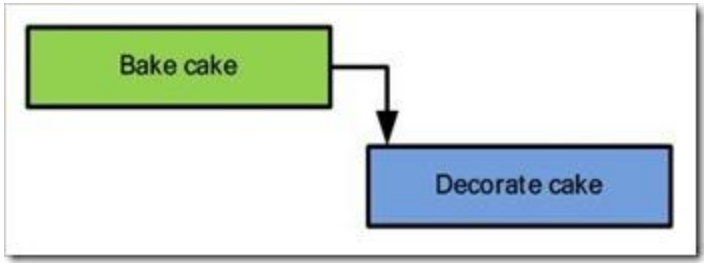


http://blogs.msdn.com/b/project/archive/2008/07/29/back-to-basics-understanding-task-dependencies.aspx

The Finish to Start Dependency

- The finish-to-start (FS) dependency is the most common type and is the default action in Microsoft Project.

- In this relationship, the second task in the relationship can't begin until the first task finishes.

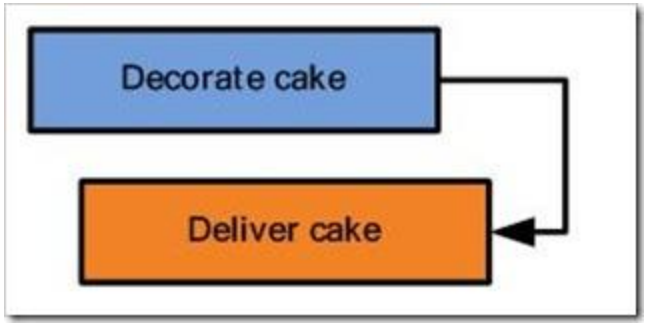


http://blogs.msdn.com/b/project/archive/2008/07/29/back-to-basics-understanding-task-dependencies.aspx

The Finish to Finish Dependency

- Finish-to-finish (FF) dependencies require that the first task be finished in order for the second task to finish.

- In this relationship, the second task can finish *any time* after the first task finishes.

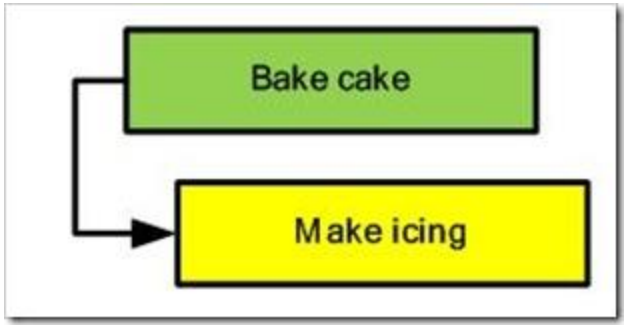


http://blogs.msdn.com/b/project/archive/2008/07/29/back-to-basics-understanding-task-dependencies.aspx

The Start to Start Dependency

- Start-to-start (SS) dependencies are for when the second task in the relationship can't begin until after the first task begins.

- In this relationship, the tasks do not have to begin at the same time, a lag is allowed.

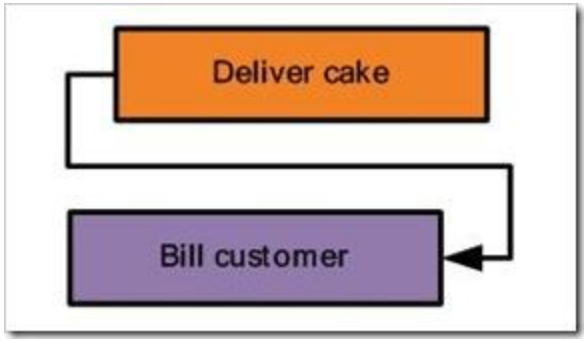


http://blogs.msdn.com/b/project/archive/2008/07/29/back-to-basics-understanding-task-dependencies.aspx

The Start to Finish Dependency

- Start-to-finish (SF) dependencies are for when the second task in the relationship can't finish until the first task starts.

- In this relationship, the second task can finish *any time* after the first task starts, even beforehand if that is appropriate.



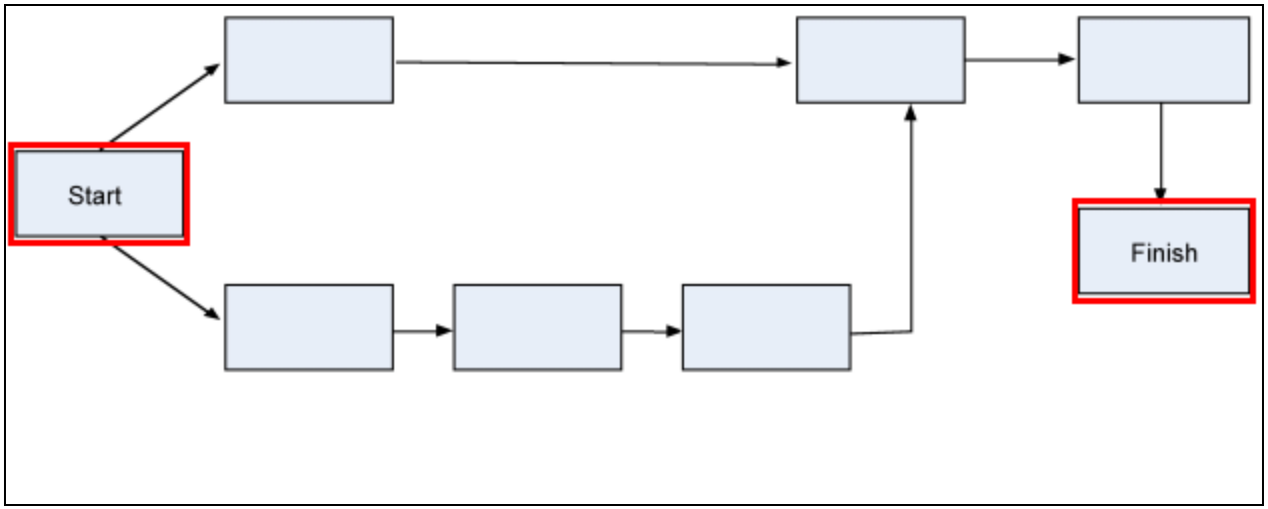
http://blogs.msdn.com/b/project/archive/2008/07/29/back-to-basics-understanding-task-dependencies.aspx

Special Task Cases

Special Cases - Part 1 (Start & Finish)

- Only the Start and Finish events may be missing a Predecessor or a Successor, respectively.

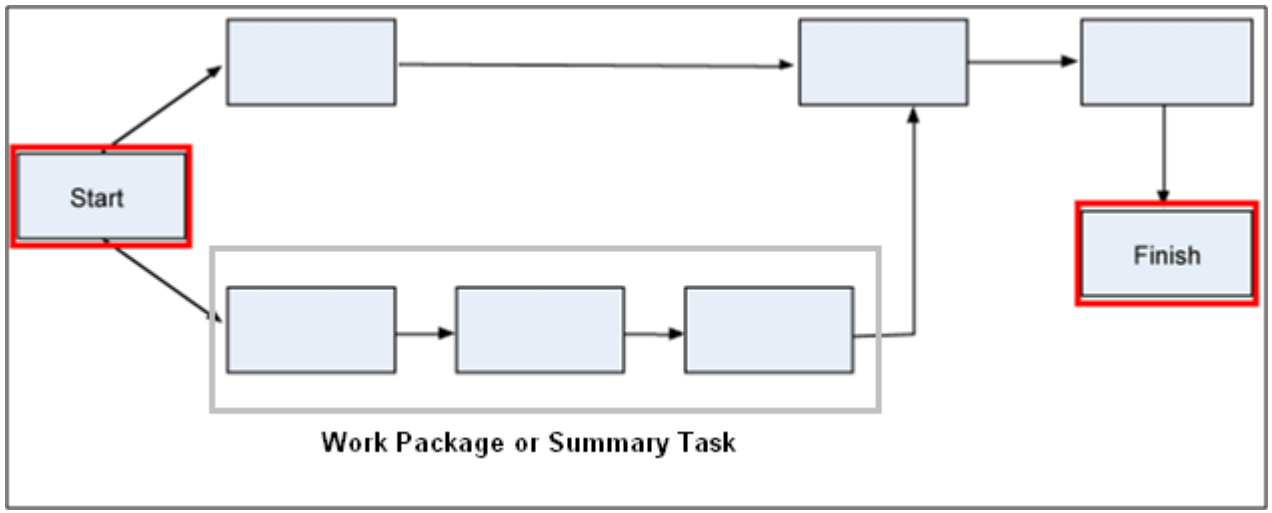
- Technically speaking, they are not tasks. They are notations.



Special Cases - Part 2 (Summary Tasks)

- Summary Tasks (or Work Packages) are used to organize tasks into “chains of tasks” that can be assigned on a macro basis.

- Technically speaking, they are not tasks. They are notations.



Task Network Troubleshooting

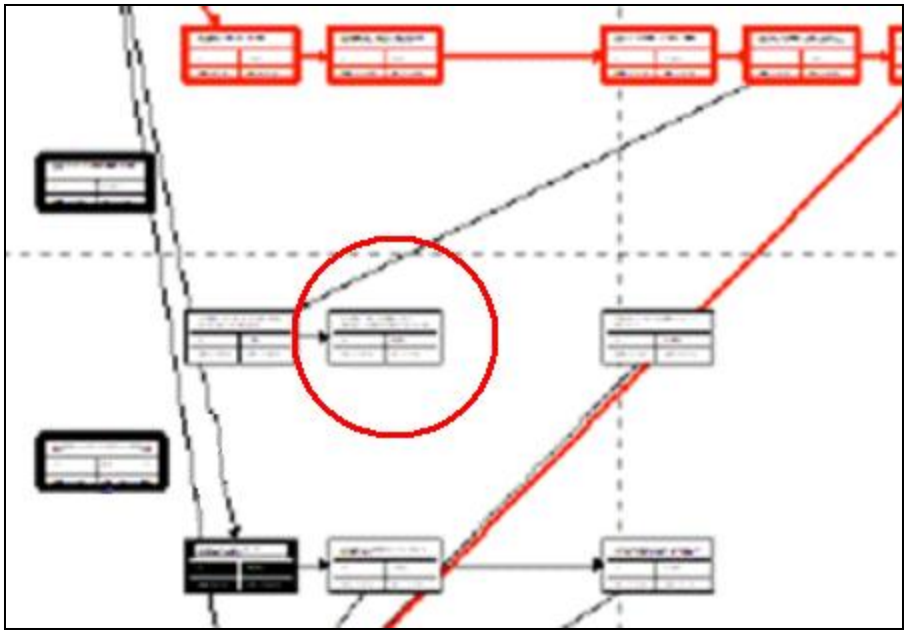
A Danger: Dangling Tasks

- A dangling task is a task which has no successor. Only the SCOPE is allowed to have no successor, so you can think of a dangling task as an unintentional “dead end” in the project.

- Dangling tasks negatively impact the ability of MS-PROJECT to work properly because it looks to the software like there are two “ends” to the project, which is technically impossible.

How to Find Dangling Tasks

- Dangling Tasks can be hard to spot in the default view, so the easiest way to find them is to switch to the network diagram.



VIEW | NETWORK DIAGRAM

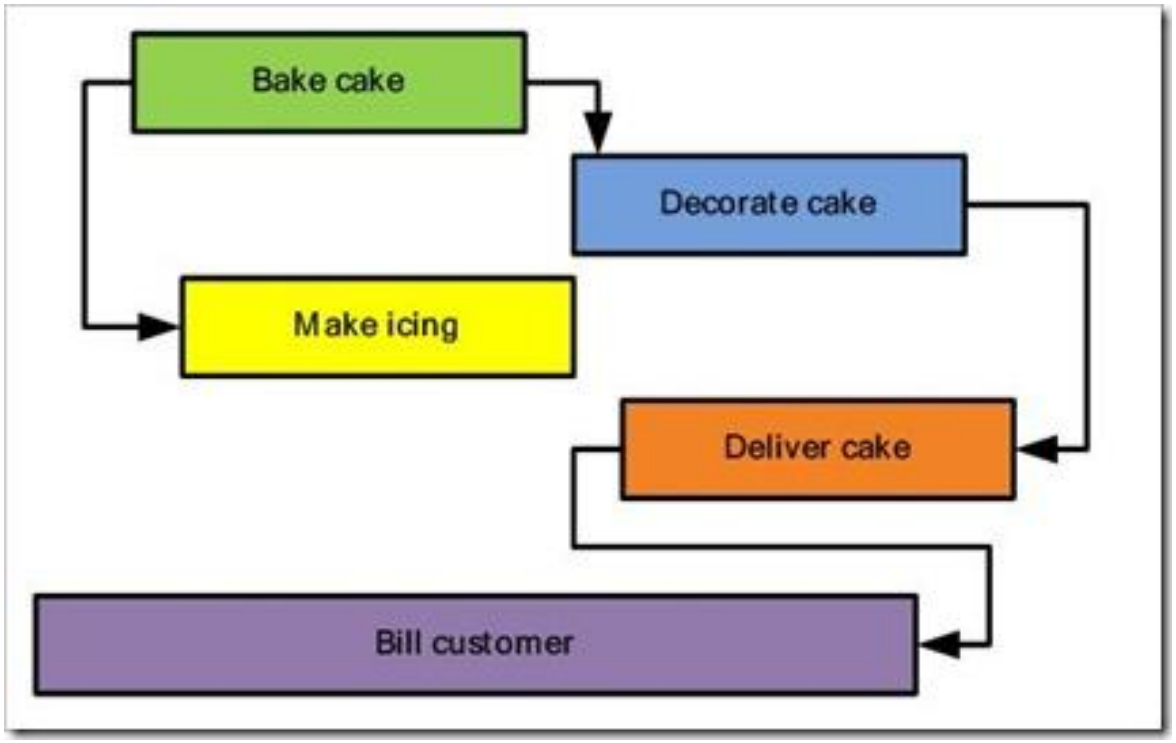
YouTube Tutorials

- 271 - Microsoft Project 2007 (Constraints & Dependencies)
  - http://www.youtube.com/watch?v=EGbAVn5nQdk
- 272 - Microsoft Project 2010 (5 Lessons Learned)
  - http://www.youtube.com/watch?v=ysD4Drml5Y4

Interactive Exercise

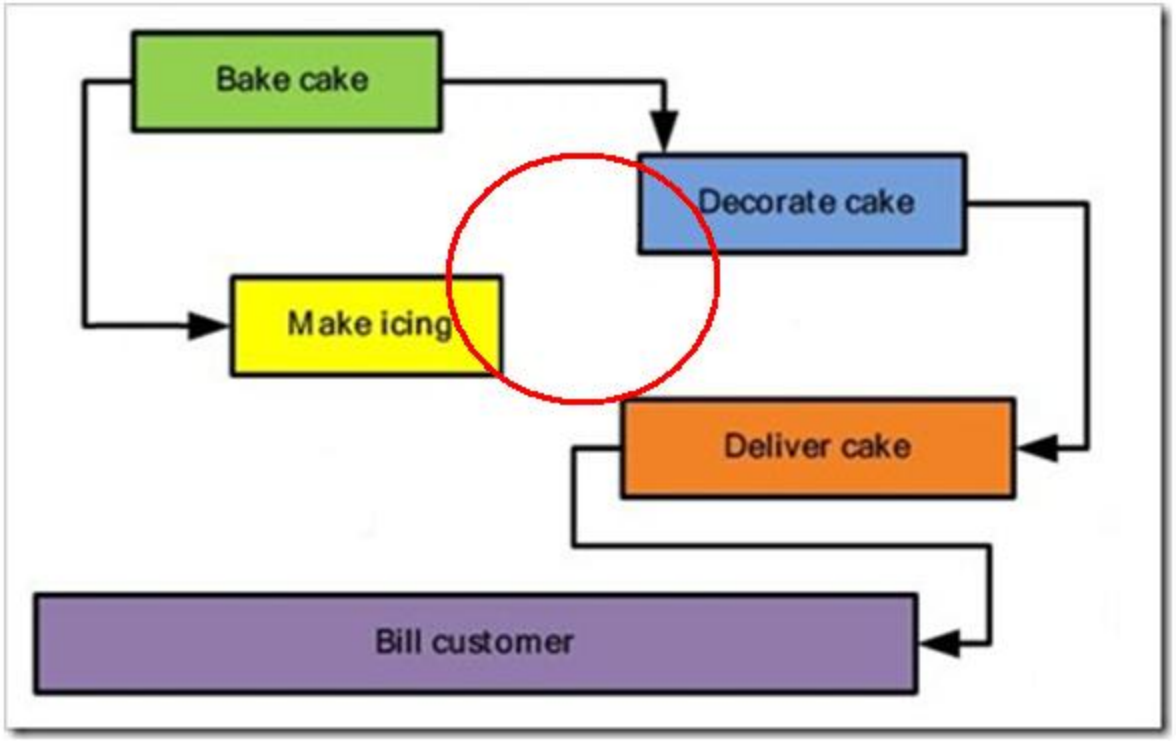
Fixing a "Troubled" Task Network

Cake Sale: Task Network



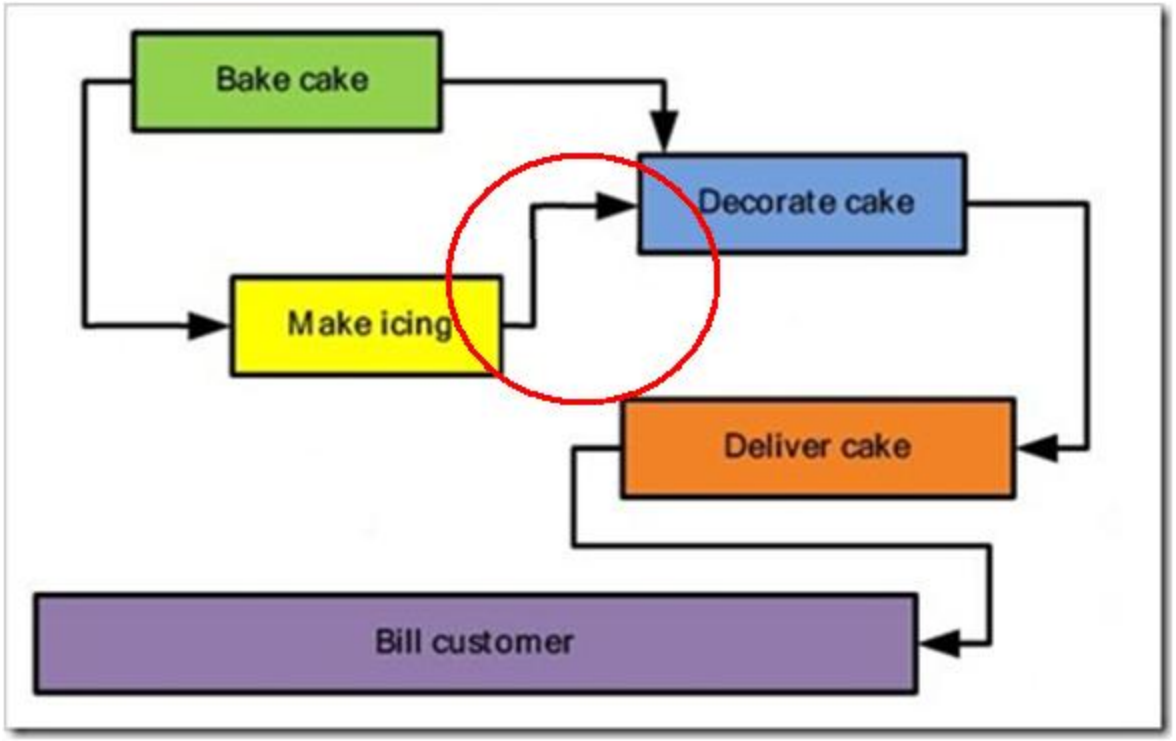
DO YOU SEE ANY PROBLEM(S) WITH THIS TASK NETWORK?

Cake Sale: What's Missing? Part 1



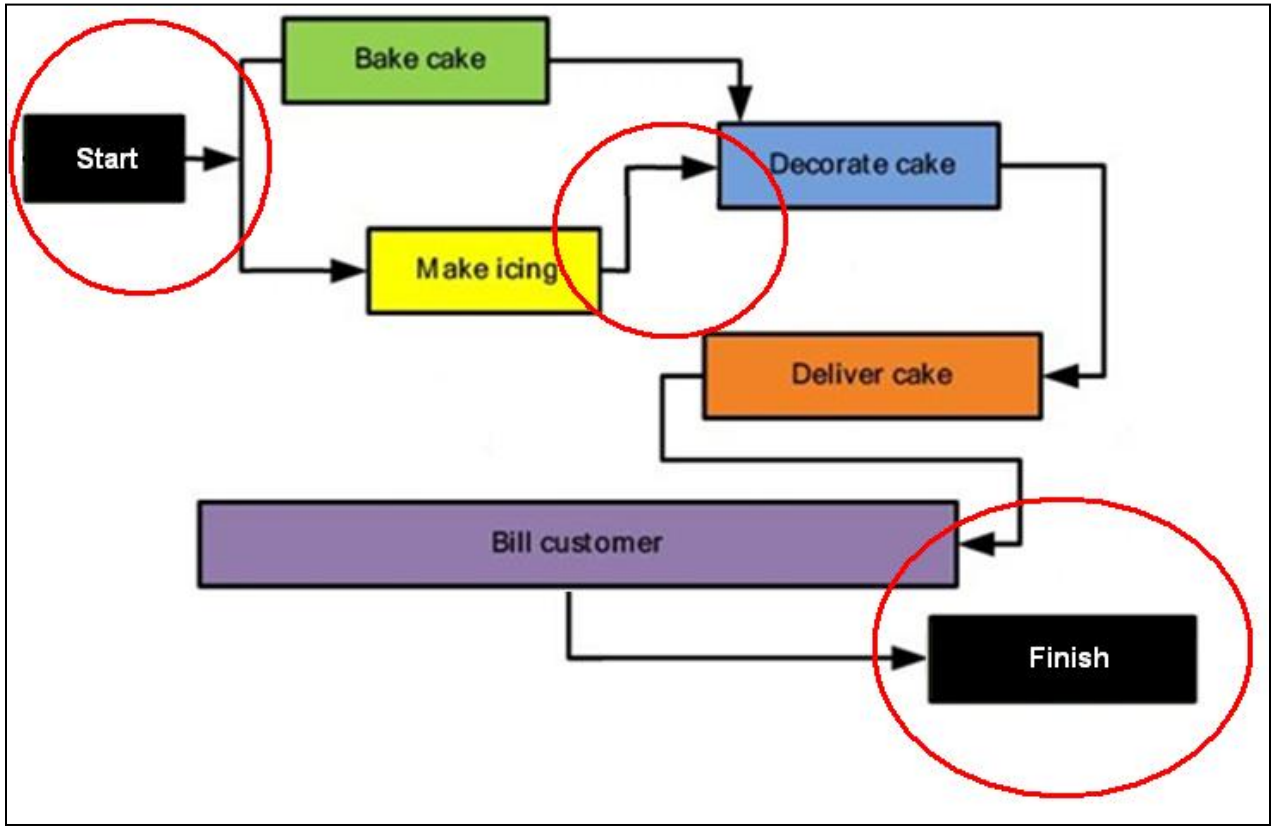
WHERE DOES THE ICING GO? THIS IS A DANGLING DEPENDENCY!

Cake Sale: What's Missing? Part 1



ALWAYS ELIMINATE "DANGLING" DEPENDENDIES!

Cake Sale: What's Missing? Part 2



ALSO - ALWAYS SHOW WHERE THE "ENDS" OF THE PROJECT ARE!

Questions?

Please Watch the Videos

Then Do LAB D

LAB 04

- Watch the videos mentioned in the two preceding lectures

Thank You