

# Parameters for Creating a Project

## Task Relationships

Finish-To-Start (FS) – The successor starts when the predecessor finishes.

Example 1: Software is installed after the shipment is received.

Example 2: Software development starts after requirements finish.

Example 3: Paint fence can't start until construct fence finishes.

Example 3: Level concrete can't begin until Pour foundation finishes.

Start-To-Start (SS) – The successor starts when the predecessor starts.

Example 1: Software and hardware purchase occur at the same time.

Example 2: Develop software requirements and hiring engineers occur at the same time.

Finish-To-Finish (FF) – The successor finishes when the predecessor finishes.

Example 1: Inspect electrical can't finish until add wiring finishes.

Start-To-Finish (SF) – The successor finishes when the predecessor starts.

Example 1: Groundbreaking will occur when obtaining permits finishes.

Example 2: When a bus arrives (start) is when waiting for a bus finishes.

Example 3: You start paying your bills when you receive your pay check..

## Lead and Lag Time

Lead (-1d or -50%) – Allocate delay to allow tasks to overlap

Example 1: When you pave and stripe a street, you do not have to complete the paving before starting the striping.

Lag (1d or 50%) – Allocate some time between tasks to provide distance.

Example 1: Cement must dry x days before building starts.

## Flexible Constraints

As-Soon-As-Possible (ASAP)

This is the default that is assumed for all tasks

Example 1: Schedule carpenters when foundation is complete.

As-Late-As-Possible (ALAP)

Example 1: This is when you start preparing taxes.

## Semi-Flexible Constraints

Finish-No-Earlier-Than (FNET)

Example 1: Don't start watering the grounds until after the rainy season.

Finish-No-Later-Than (FNLT)

Example 1: Finish taxes no later than April 15.

Start-No-Earlier-Than (SNET)

Example 1: Don't start taxes before January 1.

Start-No-Later-Than (SNLT)

Example 1: Finish project on date before scheduled inspectors arrive.

## In-Flexible Constraints

Must-Start-On (MSO)

Example 1: Software development begins when the software programmer is hired

Must-Finish-On (MFO)

Example 1: All employees are laid off on the date the company is closed.