

APPLYING CONSTRAINTS

LYNX CCPM Project Plans

A-dato

High Performance Delivered

Available Constraints

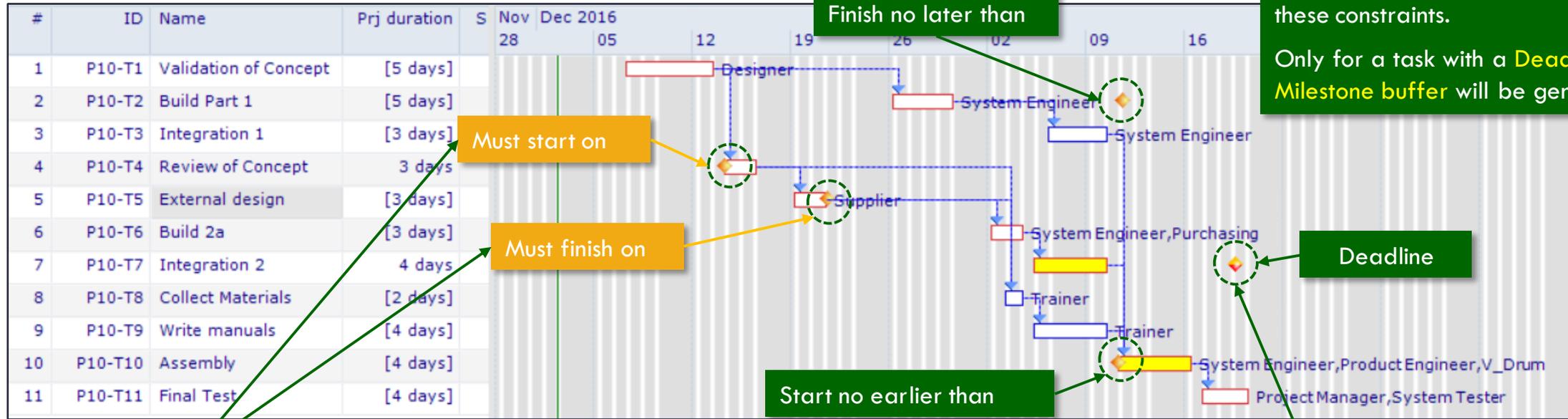
As late as possible / As soon as possible → controlled by LYNX (CCPM) Scheduling Settings

In **CCPM Mode** the following constraints are controlled by the defined "Project Properties" for Scheduling behavior for the Critical Chain and Feeding Chains and cannot be controlled by the user:

- As late as possible
- As soon as possible

ID	Name	Duration	Start	End
1	P10-T1	Validation of Concept	[5 days]	05
2	P10-T2	Build Part 1	[5 days]	12
3	P10-T3	Integration 1	[3 days]	19
4	P10-T4	Review of Concept	3 days	
5	P10-T5	External design	[3 days]	
6	P10-T6	Build 2a	[3 days]	
7	P10-T7	Integration 2	4 days	

Recommended Constraints in CCPM



Finish no later than and a Deadline have the same “scheduling” effect. LYNX will try to push all task before these constraints.

Only for a task with a Deadline a Milestone buffer will be generated.

The “Must” constraints are not recommended, as they pin tasks to fixed positions that cannot move, which eliminates flow and flexibility from the plan.

Constraint: As soon as possible | Date: | Deadline:

As soon as possible
 As late as possible
 As soon as possible
 Do not level
 Finish no earlier than
 Finish no later than
 Ignore task
 Must finish on
 Must start on
 Start no earlier than
 Start no later than

Recommended Constraints in CCPM Mode

Other possible Constraints

Do not level/Ignore Task

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The screenshot shows the Microsoft Project interface with a Gantt chart and a task list. The task list is as follows:

#	ID	Name	Prj duration
1	P10-T1	Validation of Concept	[5 days]
2	P10-T2	Build Part 1	[5 days]
3	P10-T3	Integration 1	[3 days]
4	P10-T4	Review of Concept	3 days
5	P10-T5	External design	[3 days]
6	P10-T6	Build 2a	[3 days]
7	P10-T7	Integration 2	4 days
8	P10-T8	Collect Materials	[2 days]
9	P10-T9	Write manuals	[4 days]
10	P10-T10	Assembly	[4 days]
11	P10-T11	Final Test	[4 days]

The 'Constraint' dialog box is open, showing the following options:

- As soon as possible
- As late as possible
- As soon as possible
- Do not level
- Finish no earlier than
- Finish no later than
- Ignore task
- Must finish on
- Must start on
- Start no earlier than
- Start no later than

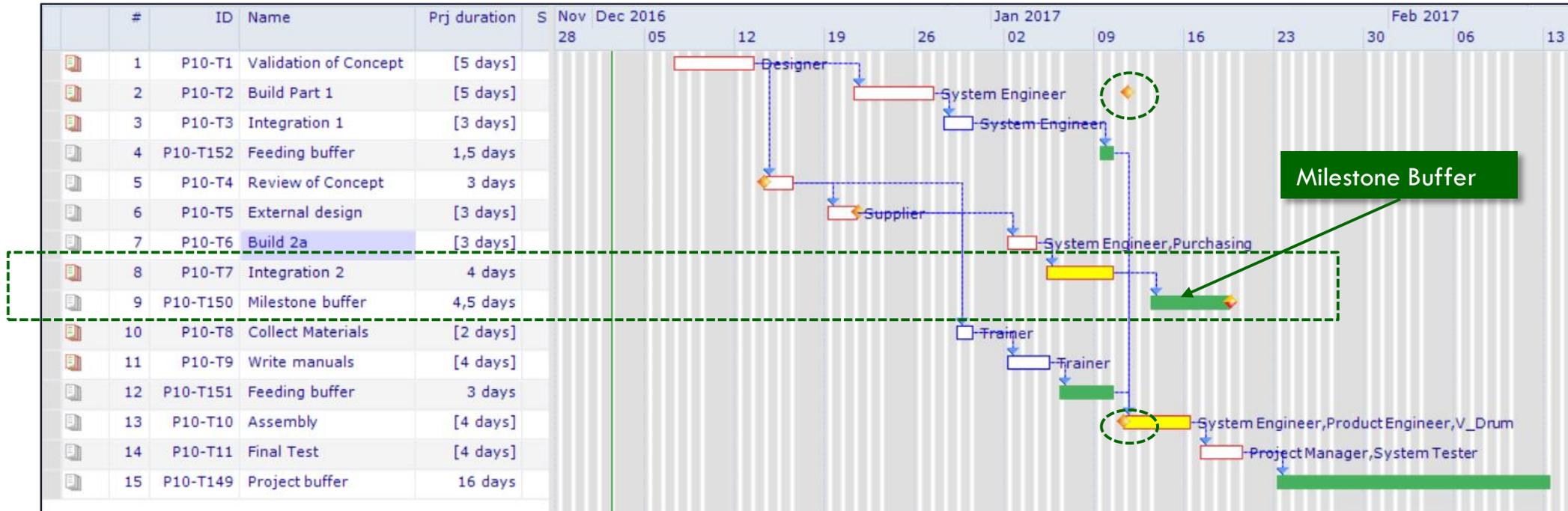
Two green callout boxes provide explanations:

- Task with the Constraint "Ignore Task" are not included in the resource load anymore. Better alternative is to remove such a task from the plan.**
- Do Not Level means possible resource dependencies will be ignored when calculating a Critical Chain. The normal dependencies (predecessors and successors) remain.**

Plan after calculation and adding buffers

Milestone buffer is inserted task with a deadline

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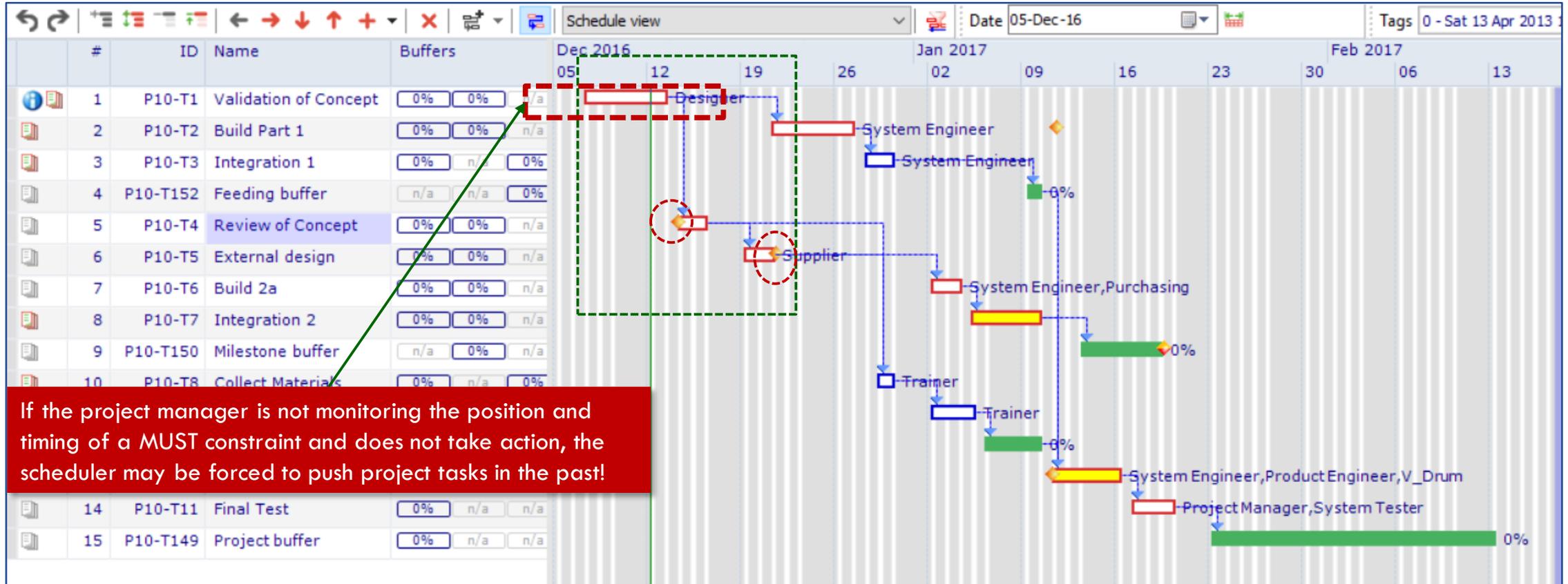


A Start no Earlier Than Constraint pushes the task and its subsequent chain toward the future (without pinning the task at a fixed position)

Project = Released

Impact “Must” Constraints → Scheduler cannot move tasks

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Recommendation: avoid using “Must” constraints in CCPM plans.

Milestone Monitoring and Management

Milestone “Feeding Chain Tasks”

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#	ID	Name	Buffers
1	P10-T1	Validation of Concept	0% 0% n/a
5	P10-T4	Review of Concept	0% 0% n/a
6	P10-T5	External design	0% 0% n/a
7	P10-T6	Build 2a	0% 0% n/a
8	P10-T7	Integration 2	0% 0% n/a
9	P10-T158	Milestone buffer	n/a 0% n/a

Milestone constraint: Fri 13 Jan 2017 19:30, feeding chain: 13 day

Milestone constraint: Fri 13 Jan 2017 19:30, feeding chain: 4 days

After completing T1, still 13 days Feeding Chain Tasks towards the Milestone remain:
 (T4(3d)+ T5(3d) + T6(3d) + T7(4d))

My activities

Milestone Constraint Management and Monitoring

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The screenshot displays a software interface for task management. On the left, a table lists tasks with columns for ID, Description, Start date, Milestone constraint, Priority, and RTS. The first task, 'Validation of Concept', is highlighted with a dashed green box. A green arrow points from this task to the 'Task details' panel on the right. The 'Task details' panel shows information for 'ID P10-T1', including its description, project, manager, and scheduled dates. A dashed green box highlights the 'Milestone constraint' field in the details, which matches the value in the table. Below the details, there are tabs for 'Resourcing', 'Notes (8)', 'Documents (0)', 'Custom fields', and 'Working hours'. The 'Resourcing' tab is active, showing the role 'Resource Mike Dempsey', skill 'Designer', and resource '* Mike Dempsey'. The status is 'Not started' and the effort is '5 days/40h'. The expected completion is 'Thu 15 Dec 17:00 at 100%'.

ID	Description	Start date	Milestone constraint	Priority	RTS
P10-T1	Validation of Concept D3 Product development	Today 9:00 [w49]	Fri 13 Jan 2017 19:30 [-13 days]	High	Yes
P10-T10	Assembly D3 Product development	Wed 4 Jan 2017 9:00 [w1]		Medium	No
P10-T11	Final Test D3 Product development	Tue 10 Jan 2017 9:00 [w2]		Medium	No

Task details

ID P10-T1
Description Validation of Concept
Project D3 Product development
Project manager A-dato Consulting, A-dato
Scheduled dates Today 9:00 - Thu 15 Dec 17:00
Milestone constraint Fri 13 Jan 2017 19:30 [-13 days]
Last update Mon 25 Jul 10:56 by A-dato Consulting
Task manager Robin Porter, LYNX GmbH
Sven Cramer, A-dato

Resourcing | Notes (8) | Documents (0) | Custom fields | Working hours

Designer

Your role Resource Mike Dempsey
Skill Designer
Resource(s) * Mike Dempsey
Status Not started
Effort 5 days/40h
Please enter the 'expected time to complete' for this task
Expected completion Thu 15 Dec 17:00 at 100%