

LYNX BUFFER MANAGEMENT

Project Buffer, Feeding Buffer(s), Milestone Buffer(s)

A-dato

High Performance Delivered

Buffer types in LYNX projects

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- ❑ Project Buffer
 - ❑ There is only 1 project buffer
- ❑ Feeding Buffers
 - ❑ There can be multiple feeding chains
 - ❑ Each feeding chain can have it's own feeding buffer
- ❑ Milestone Buffers
 - ❑ A deadline defined for a task is considered to be a “milestone”
 - ❑ The chain leading to a task with milestone will have a milestone buffer
- ❑ *Resource Buffers*
 - ❑ *Applied during the “staggering process” - not described in the document*

Example Project *before inserting buffers*

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The screenshot displays the Microsoft Project interface for a project named 'Ad Vermeulen, A-Dato - [Design Equipment 2.0 - by skill + MS buffer]'. The main view is a Gantt chart showing task dependencies from August to October 2013. Task 4, 'Integration 1', is highlighted with a red dashed box. A yellow callout box points to a date marker on the Gantt chart for '4 September'. Below the Gantt chart, the 'Task properties' window is open to the 'Constraint' tab, where the 'Deadline' is set to 'Wed 4 Sep 17:00', also highlighted with a red dashed box. A yellow callout box explains this deadline.

Property	Value
Project start	Sun 4 Aug
Calculated start	Mon 5 Aug 9:00
Calculated finish	Fri 20 Sep 17:00
Due date	Fri 1 Nov
Due date performance	30 days early
Project duration	35 days
Shortest path	30 days
Critical chain	35 days
Critical chain gap	
Project buffer	None
Resource hours	480h
Work remaining	480h

Task 4 "Integration 1" has a deadline (milestone) at Wednesday 4 September

“Views” dropdown box

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Select “Critical Chain View” if you want to review and focus on the tasks on the Critical Chain only.

ID	Name	Duration	Resources
1	Validation of Concept	[6 days]	Design
2	Develop Part 1	[3 days]	Development
3	Build Part 1	[3 days]	Engineering
4	Integration 1	[5 days]	Engineering, Development
9	Build 2	[2 days]	Engineering
10	Integration 2	[3 days]	Development, Engineering
11	Assembly	[4 days]	Engineering
14	Test	[6 days]	Development
15	Release	[3 days]	Design, Development, Engineering

Buffer controls

Buffercontrols are placed here

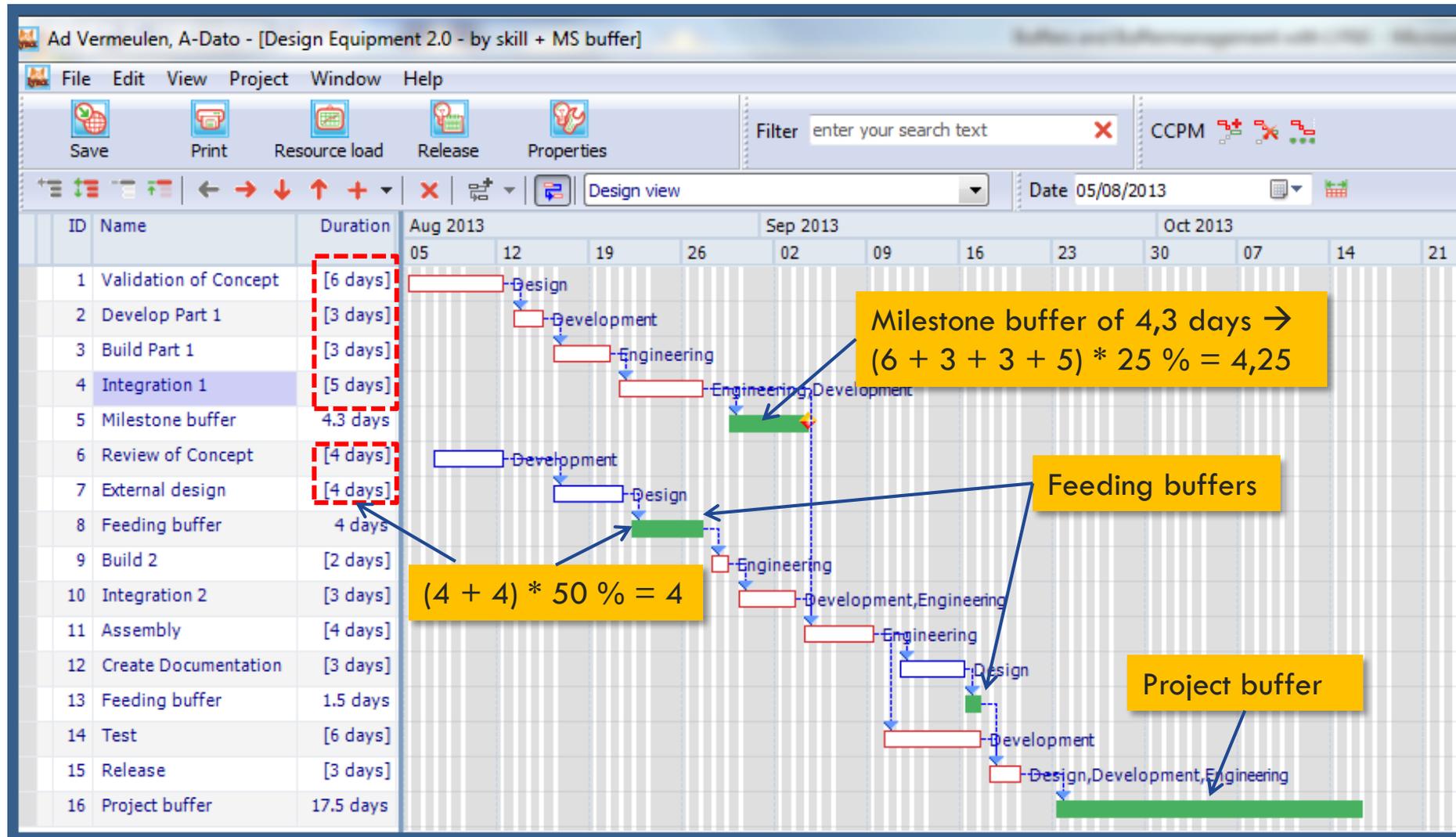
Select this button

Select buffertypes you want to insert and corresponding sizes (as a percentage)

The screenshot displays the Primavera P6 interface with two dialog boxes open. The 'Project properties' dialog is in the 'Critical Chain' tab, showing options for 'Automatically detect and mark critical chain tasks' (checked) and 'Automatically shorten task durations' (unchecked). Under 'Buffer creation', 'Insert feeding buffer(s) (%)' is set to 50, 'Insert project buffer (%)' is set to 50, and the 'Insert buffers' button is highlighted with a red dashed box. The 'Recalculate buffers' dialog is also open, with 'Automatically detect and mark critical chain tasks' checked. It lists three buffer types: 'Insert feeding buffers' (checked) with a size of 50%, 'Insert milestone buffers' (checked) with a size of 25%, and 'Insert project buffers' (checked) with a size of 50%. The values 50, 25, and 50 are circled in red. A yellow callout box points to the 'Insert buffers' button in the first dialog, and another yellow callout box points to the 'Recalculate buffers' dialog. A third yellow callout box points to the 'Insert buffers' button in the first dialog. The background shows a Gantt chart and a project summary table.

Property	Value
Project start	Sun 4 Aug
Calculated start	Mon 5 Aug 9:00
Calculated finish	Fri 20 Sep 17:00
Due date	Fri 1 Nov
Due date performance	30 days early
	35 days
	30 days

Result for example project



Release project

Change Status “Not started” → “Released” (possible for users with role “space owner”)

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Ad Vermeulen, A-Dato - [Design Equipment 2.0 - by skill + MS buffer]

File Edit View Project Window Help

Save Print Resource load Release Properties

Filter enter your search text

ID	Name	Duration	Jul 2013	Aug 2013	Sep 2013
1	Validation of Concept	[6 days]			
2	Develop Part 1	[3 days]			
3	Build Part 1	[3 days]			
4	Integration 1	[5 days]			
5	Milestone buffer	4.3 days			
6	Review of Concept	[4 days]			
7	External design	[4 days]			
8	Feeding buffer	4 days			
9	Build 2	[2 days]			
10	Integration 2	[3 days]			
11	Assembly	[4 days]			
12	Create Documentation	[3 days]			
13	Feeding buffer	1.5 days			
14	Test	[6 days]			
15	Release	[3 days]			
16	Project buffer	17.5 days			

Design view

Project properties

General Dates Scheduling Resource availability Critical chain

General project properties

Description Design Equipment 2.0 - by skill + MS buffer

Reference CC 2.0

Status Not started
Not started
Released
Paused
Completed
Aborted

Calendar Edit New

Hours per day

Project manager Ad Vermeulen, A-Dato Invite

Shared with User Access Add Revoke

OK Cancel

Release the project via “Properties” and then by changing the status from “not started” to “released”.

Result of releasing the Example Project

LYNX has inserted columns by buffer type. For each task LYNX will calculate the corresponding buffer penetrations.

Active task view

- Active task view
- Active task view (filtered)
- Current longest chain view
- Critical chain view
- Milestone buffer [5], Feeding chain of
- Baseline view
- Active + baseline combined

ID	Name	Buffers	Aug 2013	Sep 2013
1	Validation of Concept	0% 0% n/a	05 12 19 26	02 09
2	Develop Part 1	0% 0% n/a		
3	Build Part 1	0% 0% n/a		
4	Integration 1	0% 0% n/a		
5	Milestone buffer	n/a 0% n/a		
6	Review of Concept	0% n/a 0%		
7	External design	0% n/a 0%		
8	Feeding buffer	n/a n/a 0%		
9	Build 2	0% n/a n/a		
10	Integration 2	0% n/a n/a		
11	Assembly	0% n/a n/a		
12	Create Documentation	0% n/a 0%		
13	Feeding buffer	n/a n/a 0%		
14	Test	0% n/a n/a		
15	Release	0% n/a n/a		
16	Project buffer	0% n/a n/a		

Milestone Buffer

Feeding Buffer

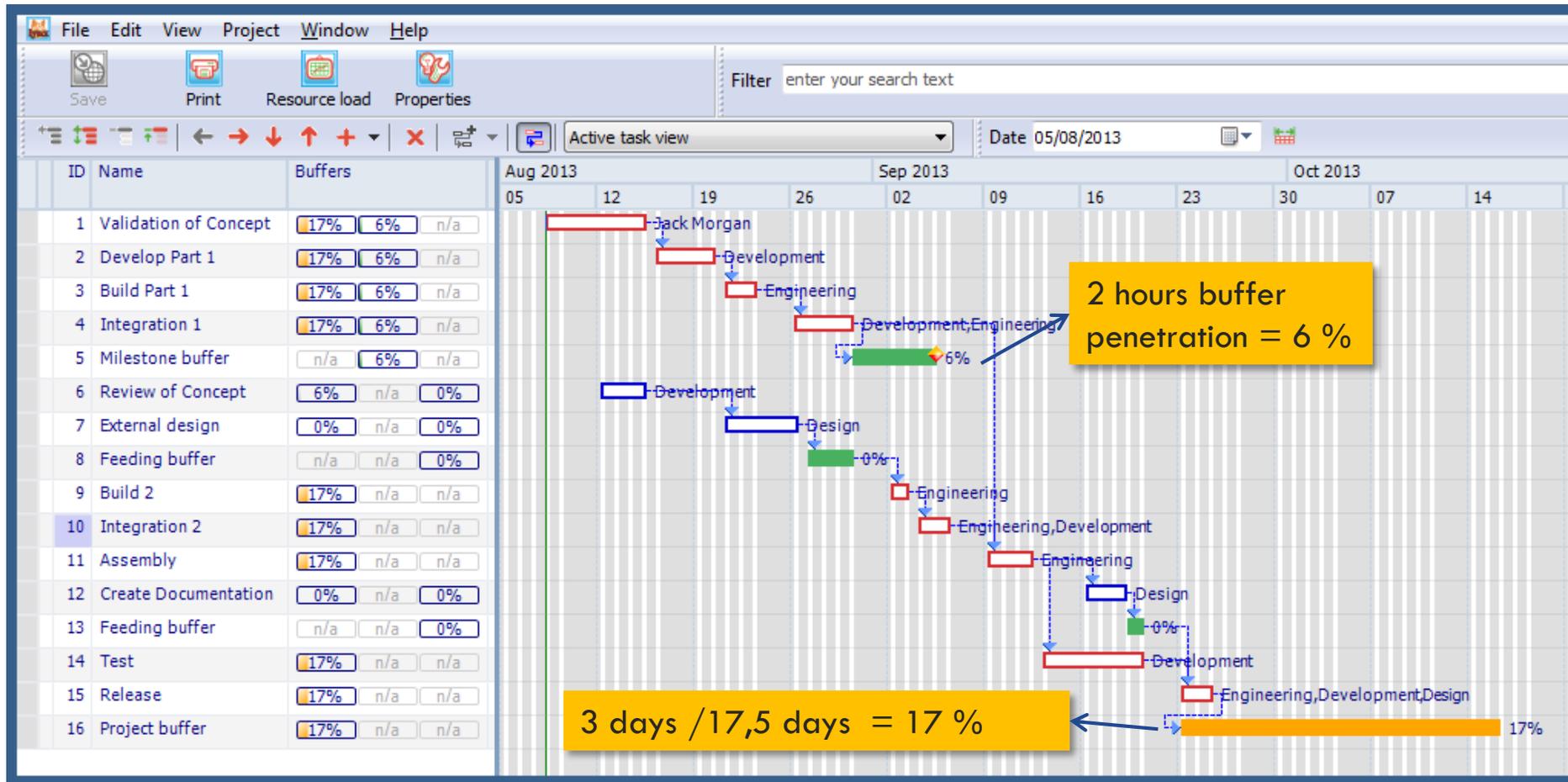
Feeding Buffer

Project Buffer

LYNX has added several extra views.

Time → + 3 days

(Monday 5 August → Thursday 8 August 9 AM)

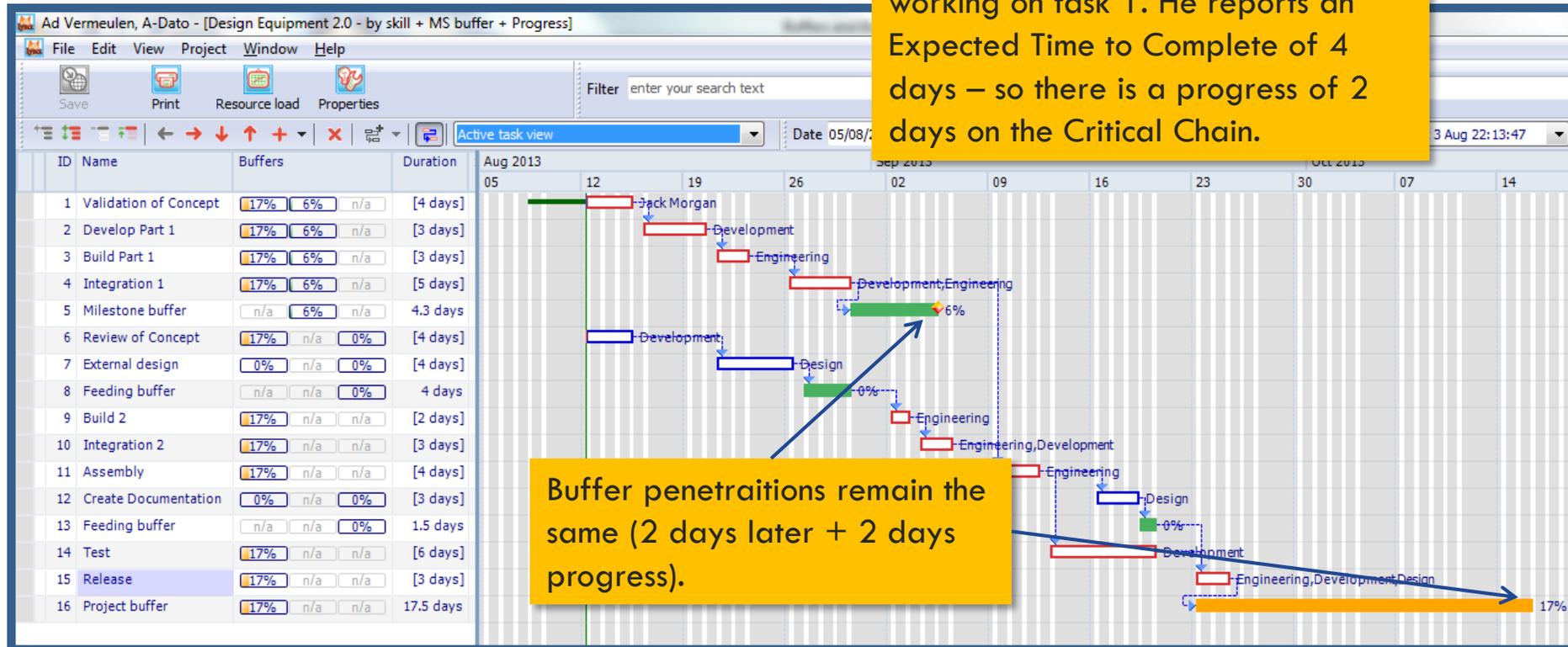


No progress has been made yet on any task on the Critical Chain

Time → + 5 days (3 + 2)

(Monday 5 August → Monday 12 August 9 AM)

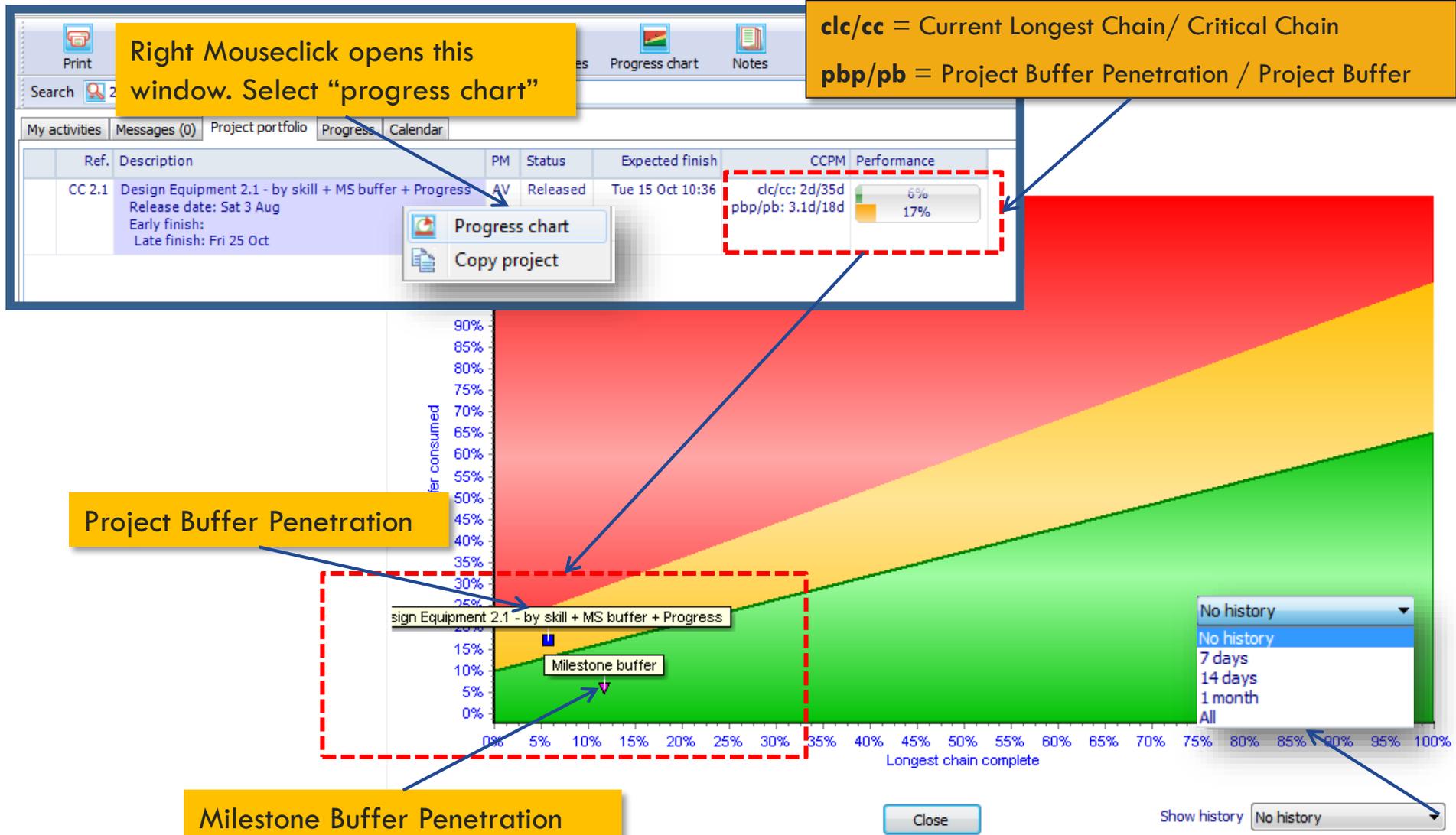
Jack Morgan (designer) has started working on task 1. He reports an Expected Time to Complete of 4 days – so there is a progress of 2 days on the Critical Chain.



Buffer penetrations remain the same (2 days later + 2 days progress).

How does LYNX show progress?

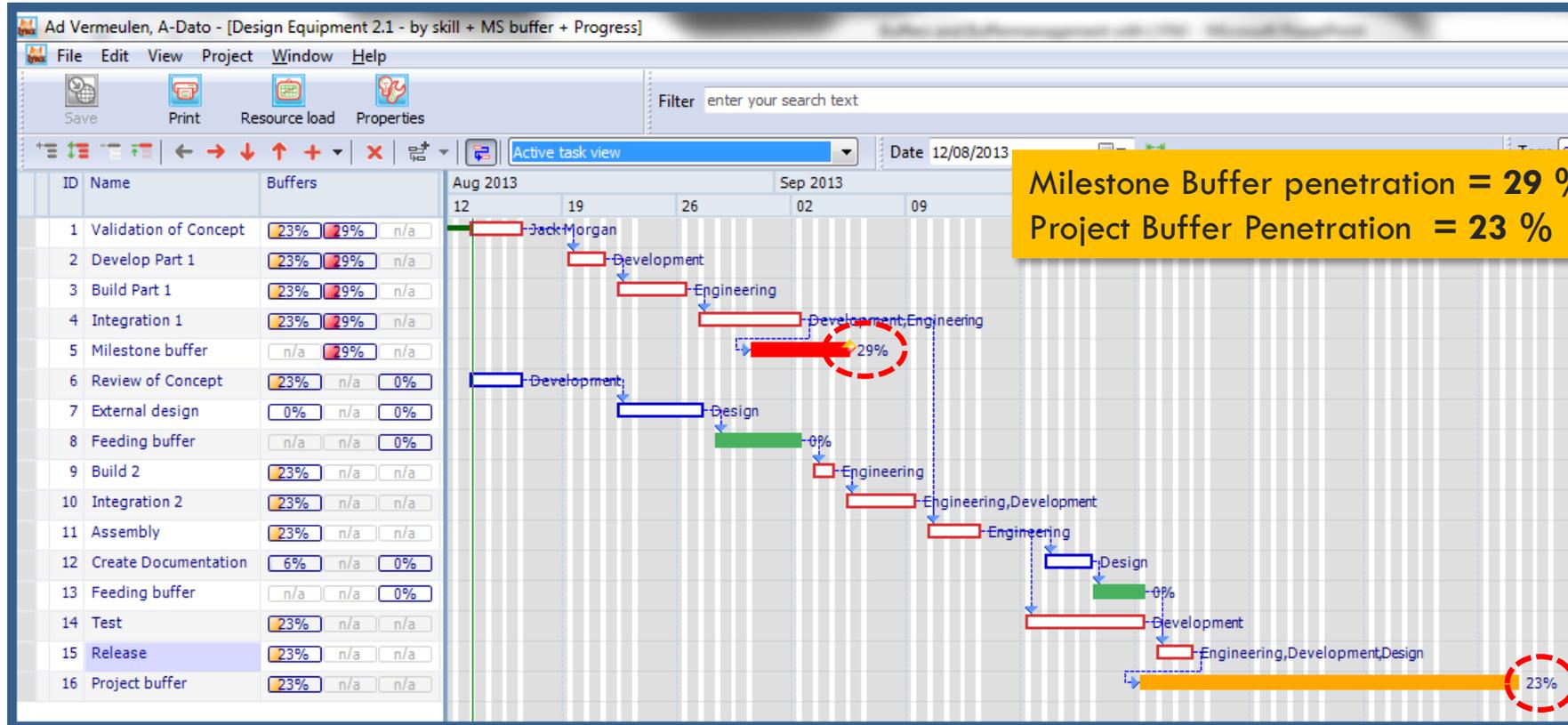
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Time → + 6 days

(Monday 5 August → Tuesday 13 August 9 AM)

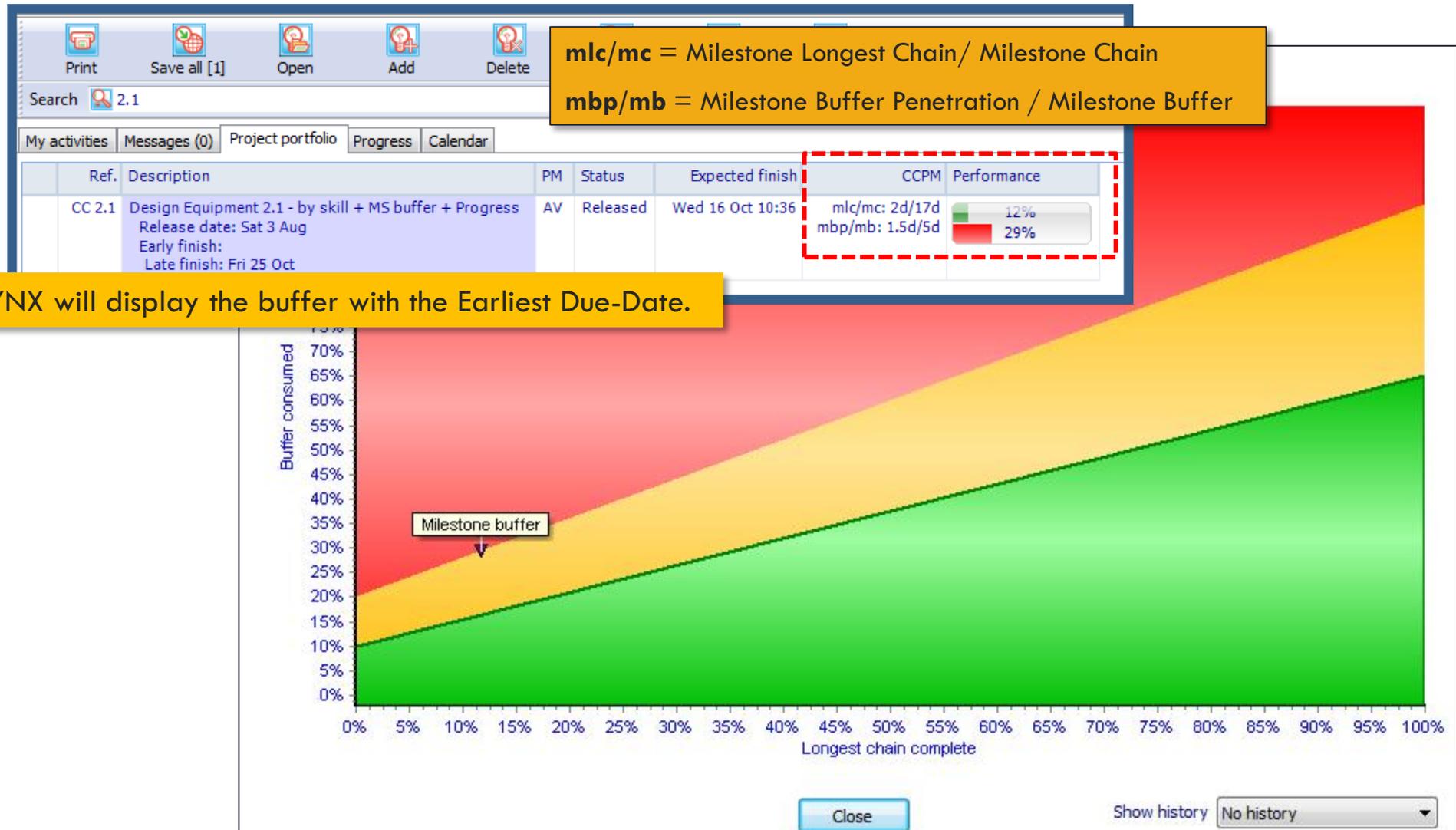
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How does LYNX show progress?

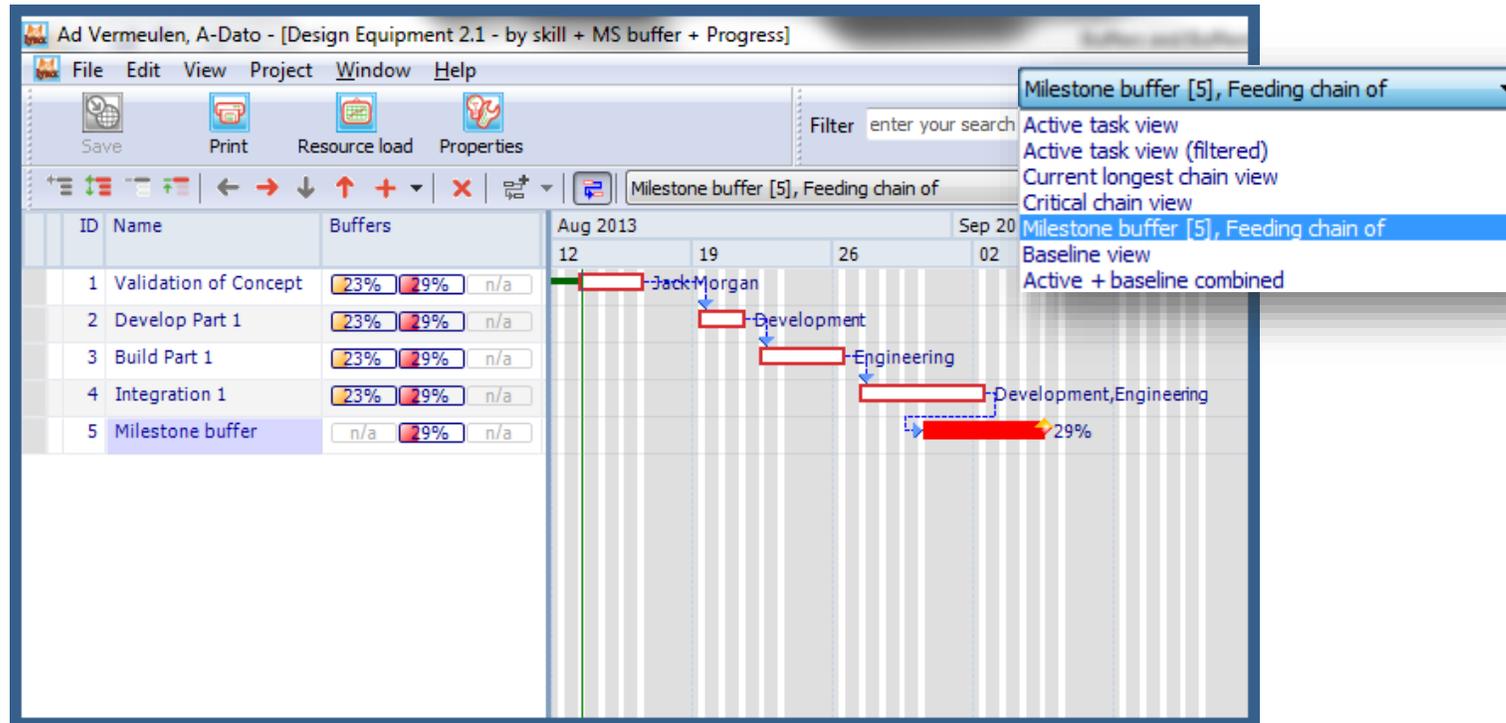
LYNX will display the buffer with the Earliest Due-Date in the project portfolio tab

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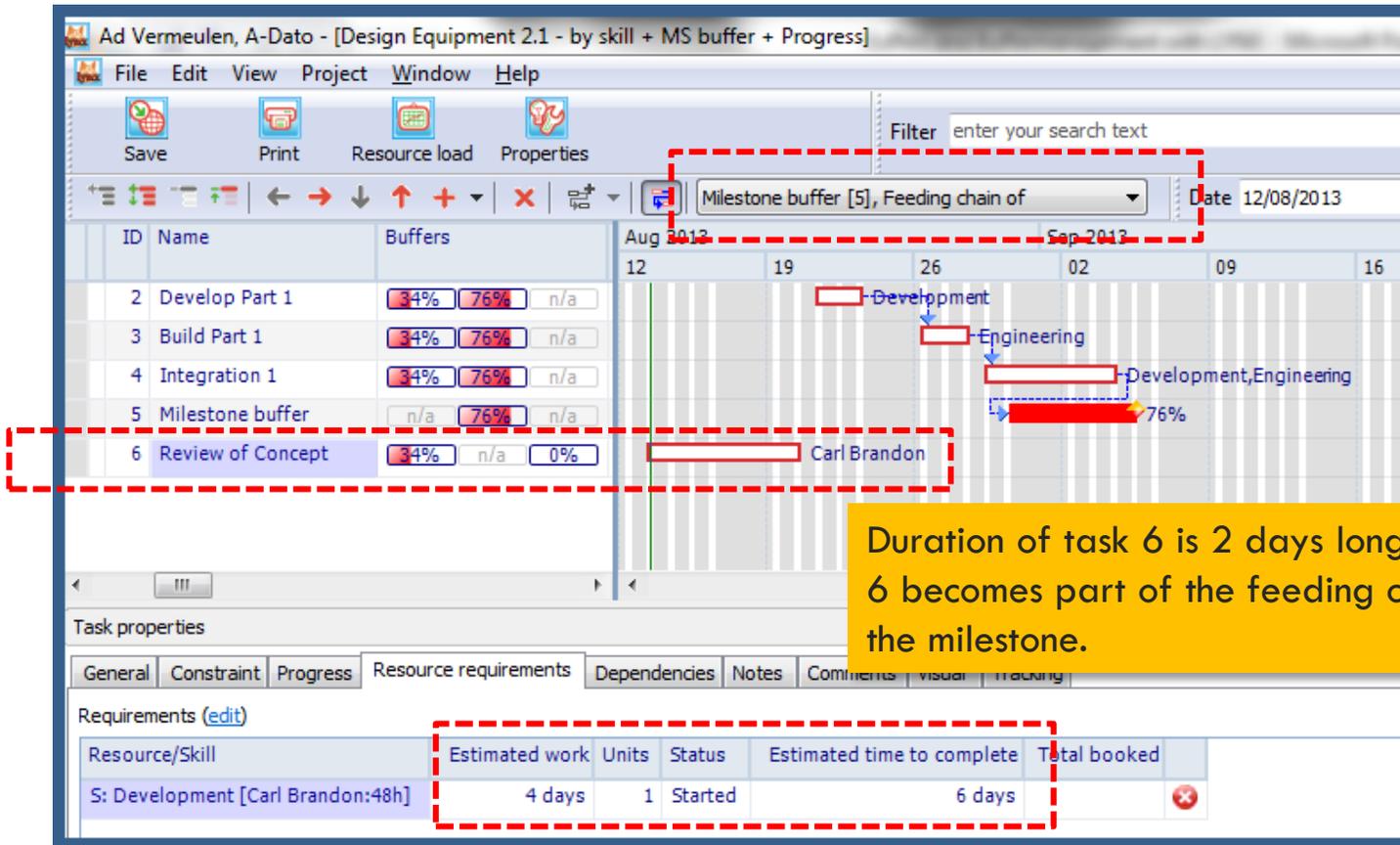
Milestone Buffer Feeding Chain View

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LYNX shows the current longest milestone feeding chain

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Duration of task 6 is 2 days longer. Tasks 6 becomes part of the feeding chain for the milestone.

Effect “Automatic Buffer Consumption” when inserting buffers

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Ad Vermeulen, A-Dato - [Design Equipment - by skill - 3 buffers]

File Edit View Project Window Help

Save Print Resource load Release Properties

Design view

ID	Name	Duration
1	Validation of Concept	[6 days]
2	Develop Part 1	[3 days]
3	Build Part 1	[3 days]
4	Integration 1	[5 days]
5	Milestone buffer	4.3 days
6	Review of Concept	[6 days]
7	External design	[6 days]
8	Feeding buffer	6 days
9	Build 2	[2 days]
10	Integration 2	[3 days]
11	Milestone buffer	5.8 days
12	Assembly	[4 days]
13	Create Documentation	[5 days]
14	Feeding buffer	2.5 days
15	Test	[6 days]
16	Release	[3 days]
17	Project buffer	17.5 days

Aug 2013

05 12 19 26

Which kind of buffers do you want to be created?

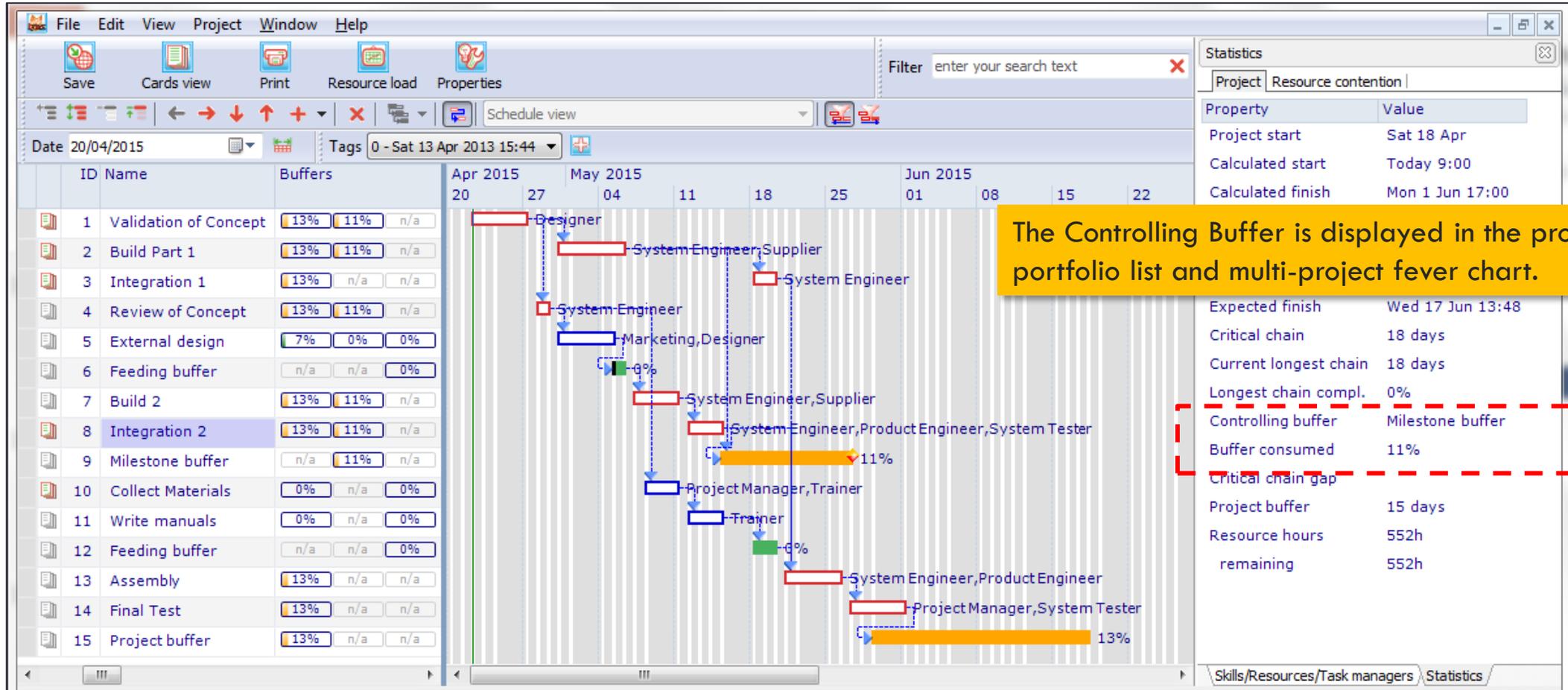
- Insert feeding buffers
feeding buffer size (%) 50
- Consume feeding buffers when they extend the duration of the CC
- Insert milestone buffers
milestone buffer size (%) 25
- Consume milestone buffers when they extend the duration of the CC
- Insert project buffers
project buffer size (%) 50

OK Cancel

There can be multiple Milestones en Milestone Buffers

Controlling Buffer Information

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Project portfolio additional views

Multi-Project Progress information

Buffer filter added to Project Portfolio View

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The screenshot shows a software interface with a menu bar (File, Edit, Window, Help) and a toolbar with icons for Save all, Reporting, Open, Add, Delete, Properties, Progress chart, Notes, and Resource load. Below the toolbar is a search bar with 'Status: Released'. The main area has tabs for My activities, Messages (0), Project portfolio, Active tasks, Calendar, and Configure. A 'Filter' section includes 'Show all', 'Not started', and 'Released' buttons, followed by a 'Buffers' dropdown menu. The dropdown menu is open, showing options: 'Show project buffer' (selected), 'Show most critical buffer', 'Show project buffer', and 'Show all buffers'. Below the menu is a table with the following data:

Ref.	Description	Start	End	Expected finish	CCPM	Performance
D1	D1 Product Development resource hours: 672h remaining: 544h - 80%	6 Apr	Thu 9 Jul	Fri 10 Jul	clc/cc: 14d/53d pbp/pb: 11,7d/27d	26% 43%
D2	D2 Product Development resource hours: 1448h remaining: 1308h - 90%	Sun 26 Apr	Thu 24 Sep	Mon 21 Sep	clc/cc: 11,5d/83d pbp/pb: 9,5d/42d	14% 23%
WP1	New Heating Control resource hours: 566h remaining: 502h - 88%	Sun 26 Apr	Mon 29 Jun	Thu 25 Jun	clc/cc: 3,3d/34d pbp/pb: 1,8d/17d	10% 10%
D3	D3 Product development resource hours: 520h remaining: 520h - 100%	Today	Fri 3 Jul	Thu 25 Jun	clc/cc: 0d/29d pbp/pb: 0d/15d	0% 0%

Show all buffers

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The screenshot shows a software interface with a menu bar (File, Edit, Window, Help) and a toolbar with icons for Save all, Reporting, Open, Add, Delete, Properties, Progress chart, Notes, and Resource load. Below the toolbar is a search bar with the text "Status: Released". A navigation bar contains tabs for My activities, Messages (0), Project portfolio, Active tasks, Calendar, and Configure. A filter bar shows "Filter" with options for Show all, Not started, and Released, and a dropdown menu for "buffers" set to "Show all buffers". The main area is a table with columns: Ref., Description, PM, Status, Start, End, Expected finish, CCPM, Performance, and Milestone buffers. The table lists four tasks: D1 Product Development, WP1 New Heating Control, D2 Product Development, and D3 Product development. Each task row includes resource hours remaining and percentage, and performance metrics with progress bars.

Ref.	Description	PM	Status	Start	End	Expected finish	CCPM	Performance	Milestone buffers
D1	D1 Product Development resource hours: 672h remaining: 544h - 80%	SH	Released	Sun 26 Apr	Thu 9 Jul	Tue 21 Jul	clc/cc: 14d/53d pbp/pb: 18,8d/27d	<div style="width: 26%;"><div style="width: 70%;"></div></div>	
WP1	New Heating Control resource hours: 566h remaining: 502h - 88%	SC	Released	Sun 26 Apr	Mon 29 Jun	Mon 6 Jul	clc/cc: 3,3d/34d pbp/pb: 8,8d/17d	<div style="width: 10%;"><div style="width: 51%;"></div></div>	
D2	D2 Product Development resource hours: 1448h remaining: 1308h - 90%	AV	Released	Sun 26 Apr	Thu 24 Sep	Wed 30 Sep	clc/cc: 11,5d/83d pbp/pb: 16,5d/42d	<div style="width: 14%;"><div style="width: 39%;"></div></div>	
D3	D3 Product development resource hours: 520h remaining: 520h - 100%	AV	Released	Mon 27 Apr	Fri 3 Jul	Mon 6 Jul	clc/cc: 0d/29d pbp/pb: 7d/15d	<div style="width: 0%;"><div style="width: 47%;"></div></div>	<div style="width: 0%;"><div style="width: 100%;"></div></div> <div style="width: 0%;"><div style="width: 27%;"></div></div>

Progress chart

Same Filters as in the Project Portfolio view

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