

LEVEL OF EFFORT (LOE) TASKS

Handling Management or Long Duration Tasks with
Task Type LOE with Auto-expand

A-dato

High Performance Delivered

Introduction Task Type “Level of Effort” (LOE)

Typically long duration tasks to include for example management and coordination activities

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- LOE Tasks have a different “scheduling” behavior and characteristics:
 - Duration may span a phase or the complete project duration, and also increases when a project duration increases
 - Coordination or Management start with the start of a project or phase, rather than as late as possible (per CCPM scheduling)
 - Are excluded from the Critical Chain scheduling: LOE Tasks are never “Critical”
 - Typically represent an average “load “(e.g. 20 %) over a longer time period

- LYNX Task Type “Level of Effort” with **Auto expand** advantages:
 - Allows to track also Management Effort and Resource load
 - Resulting in a complete picture of all tasks and effort within a project
 - Automates the Etc process



Task Management for LOE Tasks with Auto expand

Summary

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- For the Task Manager role:
 - Status of LOE Tasks should be set to started
 - The Etc is counted down automatically until 0 remaining duration
 - Once the Etc is 0, status of the LOE task should be set to “Completed”
 - Use the “Unit percentage” to control the remaining work as is expected

- For the Project Manager role:
 - Can be added in the schedule, like normal tasks
 - Monitor the “unit-percentages” for getting an adequate resource load



Select Task Type Level of Effort and Auto expand

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The screenshot displays a Microsoft Project window titled "Project with LOE and Auto-expand". The main view is a Gantt chart showing a task hierarchy. The task list on the left includes:

#	ID	Name	Size
1	LOE-T1	T0	
2	LOE-T3	Coordination LOE	
3	LOE-T2	T1	
4	LOE-T4	T2	
5	LOE-T5	T3	
6	LOE-T6	Integration	
7	LOE-T7	Integration Completed	
8	LOE-T11	Installation	
9	LOE-T12	Handover	

The Gantt chart shows the "Coordination LOE" task (LOE-T3) with a duration of 20 days, starting on Sep 18, 2017, and ending on Oct 8, 2017. It is assigned to a "Project Manager" resource. Below it, several sub-tasks are shown, including "Designer", "Mechanical Engineer", and "System Engineer".

The "Task Properties" dialog box is open for the selected task "Coordination LOE". The "Tasktype" dropdown menu is open, showing the following options:

- Normal
- Feeding buffer
- Milestone buffer
- Project buffer
- Summary task
- Level of effort (highlighted)
- Workpackage

The "Auto expand" checkbox is checked. The "Task manager(s)" field is set to "A-dato Consulting, A-dato".

Control Estimated "Workload" by setting the unit percentage

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Duration (24 days) is automatically calculated from the length of the chain between T1 and T7

The screenshot displays a project management interface. On the left, a task list table shows the following tasks and durations:

#	ID	Name	Duration
1	LOE-T1	T0	[0 days]
2	LOE-T3	Coordination LOE	[24 days]
3	LOE-T2	T1	[4 days]
4	LOE-T4	T2	[10 days]
5	LOE-T5	T3	[10 days]
6	LOE-T6	Integration	[10 days]
7	LOE-T7	Integration Completed	[0 days]
8	LOE-T11	Installation	[10 days]
9	LOE-T12	Handover	[10 days]

The Gantt chart shows a sequence of tasks: T0 (0 days), T1 (4 days), T2 (10 days), T3 (10 days), Integration (10 days), Integration Completed (0 days), Installation (10 days), and Handover (10 days). The 'Coordination LOE' task is highlighted in blue and spans from the start of T1 to the end of T7.

The task details panel for 'Coordination LOE' shows the following resource requirements:

Resource/Skill	Estimated time	Units	Status
S: Project Manager [*Sven Cramer:48h]	level of effort - 48h	25%	Not started

The effort is calculated from the unit %: 25 % of 24 days = 48 hrs (assuming 40 hours per week)

LOE Resource Load

Project with LOE and Auto-expand

Save Cards view Print Resource load Release Prop

#	ID	Name	Prj duration
1	LOE-T1	T0	[0 days]
2	LOE-T3	Coordination LOE	[24 days]
3	LOE-T2	T1	[4 days]
4	LOE-T4	T2	[4 days]

2 LOE-T3 Coordination LOE

Not started
Started
Completed
Paused
Aborted
Ready to start?

Messages (0) General Constraint Dates Resource requirements Dependencies Custom fields Visual Tracking Workpackage

Requirements (edit)

Resource/Skill	Estimated time	Units	Status	Estimate
S: Project Manager [Sven Cramer:48h]	level of effort - 48h	25%	Not started	

Team members

Skill	Resource	Units

Team cannot be set, skill is not a team

Resource load - Project with LOE and Auto-expand

Options

Range Project Task Week 4 weeks Quarter 6 Months Year Other

FILTER Resource Mgr. Skill Experience Product Group _Location

Reload all all none none none

Resources (65): Outsourced,24 hour Production Machine,ASIC Analog Designer,ASIC Analog IP Designer,ASIC Analog Layouter,ASIC Architect,ASIC Dig

Total work: 512h Projects: 0 Tasks: 7

Sep 2017 18 25 Oct 2017 02 09 16 23 30 Nov 2017 06 13 20 27 Dec 2017 04 11 18 25

Project Manager Average: 9% Work: 48h/0h Unallocated: 472h

100% 0%

Resource: Sven Cramer

System Engineer Average: 5% Work: 80h/80h Unallocated: 1480h

100% 0%

Resources (3): BarryHuberts,Broeksteeg Mark,de BoerTjarko

Resource load /Resource gantt/

A load of 25 % is displayed over 24 days (= 48 hours)

Project Manager

S: Project Manager [Sven Cramer:48h]

LOE Task Management

LOE Tasks have standard Task Behavior related to dependencies

LYNX checks dependencies to determine "Ready to Start" status also for LOE Tasks!

#	ID	Name	Buffers	Prj duration
1	LOE-T1	T0		
2	LOE-T3	Coordination LOE	0% n/a	[24 days]
3	LOE-T2	T1	0% n/a	[4 days]
4	LOE-T4	T2	0% 0%	[4 days]
5	LOE-T18	[FB] T2	n/a 0%	
6	LOE-T5	T3	0% n/a	[10 days]
7	LOE-T6	Integration	0% n/a	[10 days]
8	LOE-T7	Integration Completed	0% n/a	[0 days]
9	LOE-T11	Installation	0% n/a	[10 days]
10	LOE-T12	Handover	0% n/a	[10 days]
11	LOE-T17	Project buffer	0% n/a	

Also an LOE task is only to be started when it is ready Ready to Start.

The successor task is to be started, when the LOE task is marked as completed.

#	Successor	Relation
8	Integration Completed	Finish -> St

Ettc (Estimated Time To Complete) behavior of LOE Task *Auto expand updates Ettc automatically!*

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Duration of the LOE Task reduced to 20 days, because Task LOE-T2 has been completed.

#	ID	Name	Buffers	Prj duration
1	LOE-T1	T0		
2	LOE-T3	Coordination LOE	0% n/a	[20 days]
3	LOE-T2	T1		
4	LOE-T4	T2	0% 0%	[4 days]
5	LOE-T18	[FB] T2	n/a 0%	
6	LOE-T5	T3	0% n/a	[10 days]
7	LOE-T6	Integration	0% n/a	[10 days]
8	LOE-T7	Integration Completed	0% n/a	[0 days]
9	LOE-T11	Installation	0% n/a	[10 days]
10	LOE-T12	Handover	0% n/a	[10 days]
11	LOE-T17	Project buffer	0% n/a	

Resource/Skill	Estimated time	Units	Status	Estimated time to complete
S: Project Manager [*Sven Cramer:40h]	level of effort - 48h	25%	Started	level of effort - 40h

Remaining workload is 40 hours

My activities – LOE Task Management

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My activities Messages (0) Project portfolio Active tasks Calendar Configure Reporting

Show design packages enter your search text Cards >>

ID	Description	Task type	TM	Priority	RTS	Resources
LOE-T2	e, T1 Project with LOE and Auto-expand	Normal	AC		Yes	Designer [4 days, not started]
LOE-T3	Coordination LOE Project with LOE and Auto-expand	Level of effort	AC		Yes	Project Manager [24 days, not started]

Task details

ID LOE-T3
Description Coordination LOE
Project Project with LOE and Auto-expand
Project manager A-dato Consulting, A-dato
Scheduled dates Mon 2 Oct 9:00 - Thu 2 Nov 17:00
Milestone constraint n/a
Last update Sun 24 Sep 12:22 by A-dato Consulting
Task manager A-dato Consulting, A-dato

Resourcing Notes (0) Custom fields Working hours Workpackage

Project Manager

Your role Task manager
Skill Project Manager
Resource(s) *Sven Cramer

Status Not started
Ettc Auto expand - 48h remaining
This task is set to 'Auto expand'. The # hours to complete this task are calculated from the duration
Expected completion Thu 2 Nov 17:00 at 25%
Scheduled duration Level of effort - 48h

LOE Task need to be set to "Started" when they are "RTS", like any other task.

Ettc will be calculated automatically until 0!

My activities

Set LOE Task to "Completed" once Etc = 0

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The screenshot shows a software interface with a navigation bar at the top containing 'My activities', 'Messages (0)', 'Project portfolio', 'Active tasks', 'Calendar', 'Configure', and 'Reporting'. Below the navigation bar is a search bar with the text 'enter your search text' and a 'Cards >>' button. A table lists tasks with columns for ID, Description, Task type, TM, Priority, RTS, and Resources. One task is highlighted: ID LOE-T3, Description 'Coordination LOE Project with LOE and Auto-expand', Task type 'Level of effort', TM 'AC', Priority (green circle), RTS 'Started', and Resources 'Project Manager [, started]'. To the right is a 'Task details' panel for ID LOE-T3, showing description, project name, project manager, scheduled dates, milestone constraint, last update, and task manager. Below this is a 'Project Manager' section with fields for 'Your role' (Task manager), 'Skill' (Project Manager), and 'Resource(s)' (No resource assigned). The 'Status' is 'Started' and 'Etc' is 'Auto expand - 0h remaining'. A green dashed box highlights the 'Etc' field and its description. A green box with white text is overlaid on the screenshot, stating: 'LOE Task need to be set to completed, once the Etc is counted down to 0.'

ID	Description	Task type	TM	Priority	RTS	Resources
LOE-T3	Coordination LOE Project with LOE and Auto-expand	Level of effort	AC		Started	Project Manager [, started]

Task details

ID LOE-T3
Description Coordination LOE
Project Project with LOE and Auto-expand
Project manager A-dato Consulting, A-dato
Scheduled dates Fri 27 Oct 9:00 - Fri 27 Oct 9:00
Milestone constraint n/a
Last update Sun 24 Sep 12:36 by A-dato Consulting
Task manager A-dato Consulting, A-dato

Resourcing Notes (0) Custom fields Working hours Workpackage

Project Manager

Your role Task manager
Skill Project Manager
Resource(s) No resource assigned
Status Started
Etc Auto expand - 0h remaining
This task is set to 'Auto expand'. The # hours to complete this task are calculated from the duration
Expected completion n/a
Scheduled duration Level of effort - 0h

LOE Task need to be set to completed, once the Etc is counted down to 0.

Task Progress by Task Manager Report

HTML Reporting

XML reporting

Options

Edit template Refresh

Preview Save report

Schedule Filter(s)

Templates

Search...

- Lynx - Task progress by taskmanager
 - Lynx
 - Notifications

Tasks last progress

Created by: A-dato Consulting, A-dato
 Date: 25-Sep-17 12:44:41

Legend	Edit
Tasks updated since 1 workday(s) ago	
Tasks updated between 1 and 2 workdays ago	
Tasks updated 2 workday(s) ago and before	



Taskmanager: A-dato Consulting, A-dato

Luid	Project	Active task	Critical	Changed by	Perc	Updated
1709A-T1	WIP Project A	Task 1	Yes	A-dato Consulting	100%	30-09-2017
LOE-T11	Project with LOE and Auto-expand	Installation	Yes	A-dato Consulting		30-09-2017
LOE-T3	Project with LOE and Auto-expand	Coordination LOE	No	A-dato Consulting	LoE	ettc: 0 h

Once the LOE Task has an Etc of 0 hours, the Task need to be set to be completed.

LOE Task appear at the bottom of the Task Progress Report.