



Reviewing & Analyzing CPM Construction Schedules



AK

Progress Update (Pay Estimate) Schedule Review



Schedule Review



AK

Labor Intensive
Time Sensitive





Schedule Review



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Importance

- ✓ Progress payments



Schedule Review



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Importance

- ✓ Progress payments
- ✓ Plan for performing the work



Schedule Review



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Importance

- ✓ Progress payments
- ✓ Plan for performing the work
- ✓ Document as-built progress



Schedule Review



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Importance

- ✓ Progress payments
- ✓ Plan for performing the work
- ✓ Document as-built progress
- ✓ Time extensions/delay analysis



Schedule Review



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Competing Objectives:

Schedule Management

Progress Payment

- Upfront Agreements
- Level of Detail



Schedule Review



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Failure to accurately update the
schedule makes it useless and
misleading

Garbage in - garbage out



Schedule Review



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Pay Estimate Process

- Based on actual work performance



Schedule Review



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Pay Estimate Process

- Based on actual work performance
- Updated by the contractor with input from the subcontractors



Schedule Review



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Pay Estimate Process

- Based on actual work performance
- Updated by the contractor with input from the subcontractors
- **Jointly reviewed by owner and contractor**



Schedule Review



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Process Starts with the Progress
Payment Submission



Schedule Review



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Contractor Updates Field Progress

- ⇒ Percent complete
- ⇒ Remaining duration
- ⇒ Actual starts and finishes
- ⇒ Status to data date



Schedule Review



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Informal Review with Owner

- ✓ Percent complete
- ✓ Remaining duration
- ✓ Actual start and finish dates



Schedule Review



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Formal Review with Owner

- ⇒ Advance copy of the Schedule to owner for internal review
- ⇒ Owner/contractor meeting
(review live schedule)
- ⇒ Contractor makes corrections
- ⇒ Final submission with Pay Estimate



Formal Review



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Formal Schedule/Pay Estimate Submission Documents (Electronic and hard copies)

- ✓ Narrative Report
- ✓ Schedule Reports
- ✓ CPM Schedule (electronic)



Submittal Requirements



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Narrative Report

- ✓ Critical path identified
- ✓ Problem areas, delays/impacts
- ✓ Corrective action(s)
- ✓ Schedule changes by activity



Submittal Requirements



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Schedule Reports

- ✓ Activity Report by ACT ID
- ✓ Logic Report
- ✓ Total Float Report
- ✓ Earnings Report
- ✓ S-Curve
- ✓ Primavera Schedule Report
- ✓ Schedule Comparison (Digger) Report



Submittal Requirements



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CPM Schedule

- ✓ Electronic (i.e. xer or prx file)



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**“How are things going at work?
During your colonoscopy, we found a shoe.”**

Schedule Management



Default Settings



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Retained Logic *vs.* Project Override

- ☺ Retained Logic: keeps predecessor logic intact
- ☹ Progress override: predecessor logic no longer valid



Default Settings

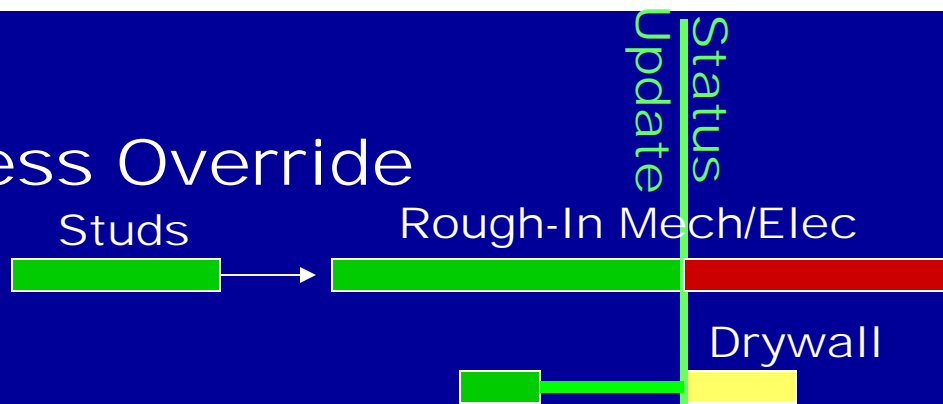


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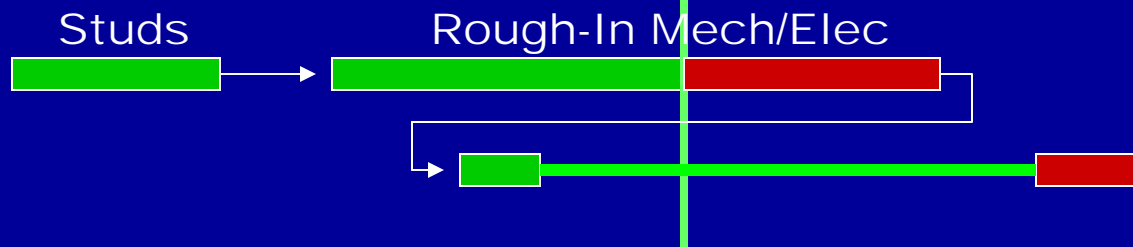
As Planned



Progress Override



Retained Logic



Source: Project Management Institute, Aug 2003

Schedule Management



Default Settings



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Retained Logic

⇒ P3/P6: Tools/Schedule/Options

P3: Retained Logic

Select Tools/Schedule

Select

Schedule/Level Calculation Options

General | Advanced

Automatic scheduling and leveling

Schedule automatically
 Level automatically
 Off

When scheduling activities apply

Retained logic
 Progress override

Calculate start-to-start lag from

Actual start
 Early start

Schedule durations

Contiguous
 Interruptible

Show open ends as

Critical
 Noncritical

Calculate total float as

Most critical
 Start float
 Finish float

OK Cancel Help

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float
AD09500	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09501	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09502	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09503	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09504	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09505	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09506	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09507	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09508	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09509	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09510	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09511	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09512	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09513	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09514	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09515	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09516	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09517	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09518	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09519	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09520	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09521	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09522	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09523	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09524	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09525	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09526	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09527	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09528	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09529	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09530	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09531	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09532	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09533	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09534	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09535	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09536	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09537	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09538	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09539	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09540	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09541	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09542	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09543	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09544	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09545	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09546	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09547	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09548	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09549	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4
AD09550	MECH/ELECTRICAL - LEVEL 1 - BTHR, COMM	10	22FEB07	07MARCH07	-4

P6: Retained Logic Select Tools/Schedule

Activities

Schedule

Project(s) to schedule: 1

Current Data Date: 10-Jan-06

Project Forecast Start Date:

Set Data Date and Forecast Start to Project Forecast Start during scheduling

Log to file

C:\Documents and Settings\Owner.YOUR-FFAB0B1A1FV...

Buttons: Cancel, Schedule, View Log, Help, Options...

Select →

Schedule Options

General | Advanced

Ignore relationships to and from other projects

Make open-ended activities critical

Use Expected Finish Dates

Schedule automatically when a change affects dates

Level resources during scheduling

Recalculate assignment costs after scheduling

When scheduling progressed activities use

Retained Logic Progress Override Actual Dates

Calculate start-to-start lag from

Early Start Actual Start

Define critical activities as

Total Float less than or equal to: 0

Longest Path

Calculate float based on finish date of

Each project Opened projects

Compute Total Float as

Finish Float = Late Finish - Early Finish

Calendar for scheduling Relationship Lag

Predecessor Activity Calendar

Activity	Duration	Start	Finish	Progress	Forecast Start
SK0345(ERECT AAC PANELS - ALONG...	15	15	0%	06-Dec-	
SK0346(ERECT AAC PANELS - COMPL...	0	0	0%		
-3	253	253		14-Feb-	
AD0110(CLOSEUP INSPECTION IN W...	3	3	0%	22-Jan-	
AD0912(FRAME INT STUDS - LEVEL 1 ...	10	10	0%	28-Dec-	

Project ID	Total Float	WBS	Activity ID	Activity Name
INIT	0	INIT EMVAF - ...	AD15100	MECH IN WALL - LEVEL 1 - EXT W...
INIT	-3	INIT EMVAF - ...	AD16100	ELECT & SP SYSTEM IN WALL - LE...



Default Settings



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Percent Complete and Remaining Duration (RD) Not Linked

⇒ Update percent complete and RD independently



Default Settings



P3: %Complete & RD not linked
Select: Tools / Options / Autocost Rules

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The screenshot shows the Primavera Project Planner software interface. The 'Tools' menu is open, and the 'Options' sub-menu is selected. Within the 'Options' sub-menu, the 'Autocost Rules...' option is highlighted. The main window displays a project activity list with columns for Activity ID, Activity Description, Total Float, and N. The activity AD09420 is selected. The 'Predecessors' and 'Successors' dialog boxes are also visible, showing activity relationships.

Activity ID	Activity Description	Total Float	N
AD15200	MECH/F.P. OVHD - LEVEL 1 -	-4	
AD16200	ELEC OVHD - LEVEL 1 - BTH	-4	
AD09160	ABOVE CLG R.I. INSPECTION	-4	
AD09260	GWB - LEVEL 1 - BTHR & JA	-4	
AD09320	TAPE/FLOAT/TEXTURE - LEV	-4	
AD09420	PRIME/1ST FINISH PAINT - LE	-4	
AD09310	TAPE/FLOAT/TEXTURE - LEV	-4	
AD09410	PRIME/1ST FINISH PAINT - LE	-4	
AD09400	PRIME/1ST FINISH PAINT - LE	-4	
AD01200	PREGRID INSPECTION - LEVE	-4	
AD09500	CEILING GRID - LEVEL 1	-4	

Activity Details for AD09420:

ID: AD09420 | Description: PRIME/1ST FINISH PAINT - LEVEL 1 - BTHR, C

OD: 2 Pct | 0.0 Cal | 1 | ES: 24JAN07

RD: 2 Type | Task | LS: 18JAN07

Wrpk: PAIN | Resp: AD | Area: | Modf: | Bidi: 0001

BU: A | 09900

Phow: | Catw: | Fow: | Ceno: | Test: | Plan: | Hamm: | WBS:

Predecessors:

Activity ID	Rel	Lag	TF	Description
AD09320	* FS	0	-4	TAPE/FLOAT/TEXTURE - LEVEL 1 -

Successors:

Activity ID	Rel	Lag	TF	Description
9310	* FS	0	-4	TAPE/FLOAT/TEXTURE - LEVEL 1 -
9620	* FS	0	1	CERAMIC TILE - BATHROOMS - LEV
0100	FS	0	1	TOILET PARTITIONS - LEVEL 1

nt



Default Settings



AK

P3: RD and % complete not linked

Automatic Cost/Resource Calculation Rules for INIT

Identifier: Date:

Link remaining duration and schedule percent complete

Freeze resource units per time period

Add actual to ETC Subtract actual from EAC

Allow negative ETC

When quantities change, use current unit prices to recompute costs:

Budget Actual to date Estimate to complete

Use the update percent complete against budget to estimate

Actual quantity to date Actual cost to date

Link actual to date and actual this period

Link budget and EAC for non-progressed activities

Calculate variance as: Budget - EAC EAC - budget

Perform these calculations during each schedule computation

Apply these rules when moving from one Cell to another
 Resource

Un-Select
Box



Default Settings



AK

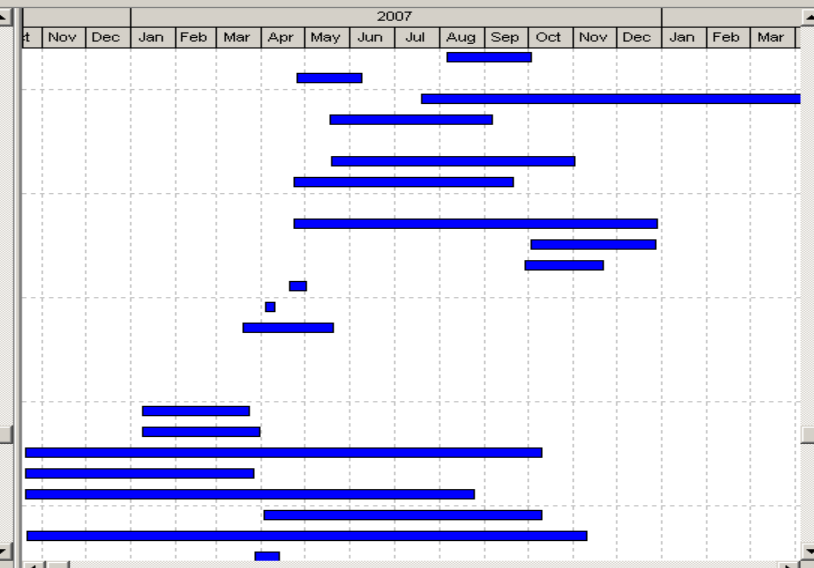
Primavera : C18B_c (F22-A LO Maintenance Hangar)

File Edit View Project Enterprise Tools Admin Help

Activities

Layout: Activities by Status

Activity ID	Activity Name	Activity % Complete	Planned Duration
02042	Form/Rebar Concrete Footings for 9 Line Canopy	100%	5d
02040	Form Concrete Footings for Building	100%	73d
02038	Infrastructure Comm Modification Support	95%	82d
02036	Subgrade Dirtwork at Apron and Towway	100%	76d
02035	complete subgrade at parking lot	0%	1d
02034	Subgrade Dirtwork at Parking Lot	100%	82d
02032	Backfill & Compact at Foundations	100%	79d
02031	Excavate, Mine, Haul Classified Fill for Hangar2	0%	2d
02030	Excavate, Mine, Haul Classified Fill for Hangar	100%	131d
02025	Tent and Heat	100%	14d
02024	Install Winter Heating	100%	15d
02020	Excavate Hangar Footprint	100%	15d
02011	Temporary Fencing	100%	3d
02010	Clear and Grub Site	100%	21d
01410	Final Inspection and Clean-up	0%	3d
01407	Pre-Final Punchlist Work-off	0%	5d
01405	Pre-Final Inspection	0%	3d
01306	Submit SWPPP / NOI to ADEC & EPA	100%	25d
01305	Safety, QC and Environmental Work Plans	100%	30d
01304	Fire Alarm System - Shop Drawings	100%	90d
01303	Fire Protection System - Shop Drawings	100%	90d
01302	Paint Booth Equipment - Shop Drawings	100%	90d
01301	Concrete Rebar - Shop Drawings	100%	108d
01300	Structural Steel - Shop Drawings	100%	60d
01290	Corns of Engineers Backcheck Review	100%	7d



- Add
- Delete
- Cut
- Copy
- Paste
- Resources
- Rsrc by Role
- Roles
- Activity Codes
- Predecessors
- Successors
- Steps

General Status Resources Predecessors Successors Relationships

Activity 1262 Infrastructure Contract Design 95% Submittal Project C18B_c

Activity Type Task Dependent Duration Type Fixed Duration & Units % Complete Type Physical Activity Calendar C18B - 1 - Design

wbs C18B_c F22-A LO Maintenance Hangar Responsible Manager Entire Enterprise Primary Resource

P6: Ensure Duration type = Fixed Duration & Units
% Complete Type = Physical



Default Settings



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Primavera : Dev_proj 109-1 (CINQ Power Router Design)

File Edit View Project Enterprise Tools Admin Help

Projects

Layout: General Layout

Project ID	Project Name	Location	Start
US			Apr-18-07 A
RSCSD	Revise Speed Control System Des...	USA	May-10-07
Dev_proj 109-1	CINQ Power Router Design	USA	May-10-07 A
Power4g	4g Power Set 900kw	USA	Apr-18-07 A
APAC			Jan-21-00 A
Middle East			Apr-18-07 A
Europe			Apr-03-00 A
No Location			Feb-26-09

2006: Jun Jul Aug Sep Oct Nov Dec 2007: Jan Feb Mar Apr May Jun Jul A

Activities

Default Price / Unit for activities without resource or role Price / Units: \$0.00/h

Activity percent complete based on activity steps

Link Planned and At Completion for not started activities

Reset Planned Duration and Units to Remaining
 Reset Remaining Duration and Units to Planned

Resource Assignments

When updating Actual Units or Cost

Add Actual to Remaining
 Subtract Actual from At Completion

Recalculate Actual Units and Cost when duration % complete changes

Update units when costs change on resource assignments

Link Actual and Actual This Period Units and Cost

P6: Un-Select "Recalculate Actual Units and Cost when duration % complete changes"

Portfolio: All Projects | User: admin | Data Date: May-10-07 | Access Mode: Shared | Baseline: Current Project

Start | InBox - Microsoft O... | Reference Chapter 7 | Module 3_Progress ... | 05Chapter INST.ppt | Primavera Projec... | Document1 - Micros... | 2:10 PM



Default Settings



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Primavera P6 Issue

The value of work completed for each activity is not automatically calculated when % complete and remaining duration are unlinked; it must be calculated manually.



Schedule Report



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Print Primavera Schedule Report
prior to reviewing progress
schedule



Schedule Report



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P3: Tools/Schedule/Schedule Now

The screenshot shows the Primavera Project Planner interface. The main window displays a project schedule with the following data:

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Total Float
AD15200	MECH/F.P. OVHD - LEVEL 1 - BTHR &	5	04JAN07	10JAN07	-4
AD16200	ELEC OVHD - LEVEL 1 - BTHR & JAN.	5			
AD09160	ABOVE CLG R.I. INSPECTION - LEVEL 1 -	2			
AD09260	GWB - LEVEL 1 - BTHR & JAN. CEILING	3			
AD09320	TAPE/FLOAT/TEXTURE - LEVEL 1 -	4			
AD09420	PRIME/1ST FINISH PAINT - LEVEL 1 -	2			
AD09310	TAPE/FLOAT/TEXTURE - LEVEL 1 - INT	8			
AD09410	PRIME/1ST FINISH PAINT - LEVEL 1 - INT	5			
AD09400	PRIME/1ST FINISH PAINT - LEVEL 1 - EXT	3			
AD01200	PREGRID INSPECTION - LEVEL 1	2			
AD09500	CEILING GRID - LEVEL 1	10			

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

- Data date: 10JAN06
- Scheduling report:
 - Constraints
 - Open ends
 - Activities with out-of-sequence progress
- Run report series: [Dropdown]

An orange arrow points to the 'Schedule Now' button with the text 'Select'.

At the bottom of the interface, the 'Classic Schedule Layout' and 'All Activities' options are visible.



Schedule Report



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P6: Tools/Schedule/Schedule Now

Schedule

Project(s) to schedule: 1

Current Data Date: 10-Jan-06

Project Forecast Start Date:

Set Data Date and Planned Start to Project Forecast Start during scheduling

Log to file

Log to file path: C:\Documents and Settings\Owner.YOUR-FFAB0B1A1FV\...

Buttons: Cancel, Schedule, View Log, Help, Options...

Activity ID	Activity Name	Remaining Duration	Activity % Complete	Early Start
AD1620[EL		5	0%	04-Jan-07
AD1622[EL		10	0%	08-Mar-07

Project ID	Total Float	WBS	Activity ID	Activity Name
INIT	0	INIT EMVAF -...	AD15100	MECH IN WALL - LEVEL 1 - EXT WALL
INIT	-3	INIT EMVAF -...	AD16100	ELECT & SP SYSTEM IN WALL - LEVE

Project ID	Total Float	WBS	Activity ID	Activity Name	Relat
INIT	-3	INIT EMVAF -...	AD09200	GWB - LEVEL 1 - EXT WALLS	FS



Schedule Report



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Primavera Look - [Untitled-Sheet 1 of 4]

File Edit View Window Help

Activity Date Constraint

Activity	Date	Constraint
BA13090		Hammock Activity
HI05000		Hammock Activity
HI05005		Finish Milestone
HI13020		Hammock Activity
HI13600		Hammock Activity
OA01005	02FEB06	Early Start Constraint
OA01010	27JAN06	Early Start Constraint
OA01011	14FEB06	Early Start Constraint
OA01015	18JAN06	Early Start Constraint
OA01020	17FEB06	Early Start Constraint
OA02000	07FEB06	Early Start Constraint
OA03000	01MAR06	Start-On Constraint
OA07000	03APR06	Start-On Constraint
OA08000	15MAY06	Start-On Constraint
OA13000	01MAR06	Start-On Constraint
OA13010	15MAY06	Start-On Constraint
OA13015	08MAY06	Start-On Constraint
OA15000	01MAY06	Start-On Constraint
PM01000		Start Milestone
PM01000	10JAN06	Early Start Constraint
PM01001		Start Milestone
PM01001	07FEB06	Early Start Constraint
PM01005		Finish Milestone
PM01010		Start Milestone
PM01998		Finish Milestone
PM01998	01AUG07	Late Finish Constraint
SK03460		Finish Milestone

Open end listing -- Scheduling Report Page: 3

Activity PM01000 has no predecessors

Activity OA01999 has no successors

Scheduling Statistics for Project INIT:
Schedule calculation mode - Retained logic
Schedule calculation mode - Contiguous activities
Float calculation mode - Use finish dates
SS relationships - Use early start of predecessor

Schedule run on Tue Sep 11 11:04:41 2007
Run Number 3213.

Line: 1 Col: 1



Schedule Report



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Constraints

- ⇒ Look for constraints that are added, deleted or changed.
- ⇒ Ideally, only two constraints required: Project start and finish activities.
- ⇒ Additional constraints will override critical path logic.



Schedule Report



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Open ends

- ⇒ Activities with no predecessors and/or successors
- ⇒ Two open ends in every schedule: start and finish activities
- ⇒ Open ends will not show up on critical path



Schedule Report



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Out-of-sequence work

- ⇒ Successor activities start before predecessor logic is satisfied.
- ⇒ It's not possible to accurately report remaining durations. Creates discontinuous critical paths.



Schedule Report



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Out-of-Sequence work

As-Planned



As-Built





Schedule Comparison (Digger) Report



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Print Digger
Report prior to
reviewing
progress
schedule

DIGGER 3.0
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www.hstsoftware.com

SCHEDULE COMPARISON REPORT

Registered For Sole Use To: DWK
USACE
605039

Comparison between projects R060 and R070
Entire Project, Including Subprojects Compared
Report Title: FTRW69 REA File Comparison
Comparison Run Completed: 5/15/2008 at 1:52:24 PM

AUTOCOST RULES AND SCHEDULE LOGIC SECTION

Linking RD and PCT has NOT changed and remains Y
Freezing Units Per Time has NOT changed and remains N
Add Actual to ETC or Subtract Actual from EAC has NOT changed and remains Subtract Actual
Allowing Negative ETC has NOT changed and remains N
When qtys change, use current unit prices to compute budget has NOT changed and remains Y
When qtys change, use current unit prices to compute actual to date has NOT changed and remains Y
When qtys change, use current unit prices to compute estimate to complete has NOT changed and remains Y
Use update % complete against budget to estimate actual quantities to date has NOT changed and remains Y
Use update % complete against budget to estimate actual cost to date has NOT changed and remains Y
Calculate variance has NOT changed and remains Budget-EAC
Perform calculations during each schedule compilation has NOT changed and remains N
Link budget and EAC for non-progressed activities has NOT changed and remains Y
Apply rules when moving from one cell/resource has NOT changed and remains Cell
Schedule logic has NOT changed and remains Retained
Interruptable/Non-interruptable durations has NOT changed and remains non-interruptable

SUMMARY SECTION

The : revised project start date: 12Oct04
The : revised project finish date:
The : base project data date: 01Oct05
The : revised project data date: 30Apr06
The : revised project latest scheduled EF date: 13Jul07
The : revised project master calendar type: Days
All : sport durations such as OD, RD, TF, FF, etc are in: Days
The : revised project resource/cost decimal places: 2
The : number of activities in the base schedule: 658
The : number of activities in the revised schedule: 701
The : number of relationships in the base schedule: 937
The : number of relationships in the revised schedule: 907
The : lowest value of total float in base schedule: -285
The : lowest value of total float in revised schedule: 0
1. : number of deleted activities: 105
2. : number of added activities: 148
3. : number of OD changes: 20
4. : number of RD changes: 61
5. : number of percent changes: 64
6. : number of TF changes: 197
7. : number of FF changes: 61
8. : number of Cal changes: 14
9. : number of description changes: 14
10. : number of actual start changes: 45
11. : number of actual finish changes: 48
12. : number of resources deleted: 68
13. : number of resources added: 126
14. : number of original budget quantity changes: 0
15. : number of actual quantity to date changes: 0
16. : number of forecast quantity changes: 0
17. : number of original budget cost changes: 5
18. : number of actual cost to date changes: 21
19. : number of forecast cost changes: 5
20. : number of resource percent changes: 32
21. : number of deleted relationships: 342
22. : number of added relationships: 312
23. : number of relationship lag changes: 3
24. : number of driving relationship changes: 57
25. : number of constraint changes: 0
26. : number of critical activity changes: 9
27. : number of MBS deletions: 0

Project Differences Report

Comparing EMVAF - HP Job 7006059 to EMVAF - HP Job 7006059
Executed by admin
Date Tue Dec 29 13:52:18 GMT-05:00 2009

General Project Data

Field Name	[EMVAF - HP Job 7006059] [0701]	[EMVAF - HP Job 7006059] [INIT]
Must Finish By Date	2007/08/29 05:00	2007/07/31 05:00
Date Date	2007/01/31 12:00	2006/01/10 08:00

General Activity Data

Activity Id	Activity Name	New Free Float	Old Free Float
H116400	ELEC - TRIMOUT ALL SYSTEMS - CORR 138 WEST	72.0	208.0
BA03085	FRP - BWS WALL - LOBBY	Value not specified in the database	0.0
BA14000	DRILL ELEVATOR SHAFT / INSTALL CASING	Value not specified in the database	0.0
H103430	FRP - STEM WALL - GL K	Value not specified in the database	0.0
H116510	FIRE ALARM - VESDA SYSTEM AT INNER CHAMBER	200.0	136.0
S102210	UTILITIES - 6 WL - EAST	Value not specified in the database	0.0
S103110	FRP - PAD - TRANSFORMER T-1	Value not specified in the database	0.0
AD01150	CLOSEUP INSPECTION IN WALL - LEVEL 2 - EXT WALLS	32.0	40.0
BA02010	BACKFILL BASEMENT WALLS TO ELEV 65'	Value not specified in the database	0.0

Primavera : 0701 (EMVAF - HP Job 7006059)

File Edit View Project Enterprise **Tools** Admin Help

Activities

- Time Approval...
- Top Down Estimation...
- Reorganize Now Shift+F2
- Apply Actuals...
- Schedule ... F9
- Level Resources... Shift+F9
- Update Progress...
- Summarize
- Job Services...
- Store Period Performance...
- Global Change...
- Monitor Thresholds...
- Issue Navigator...
- Reports
- Report Wizard...
- Publish
- Check Project Integrity...
- Recalculate Assignment Costs...
- Set Language...
- Claim Digger**

Activity ID	Remaining Duration	Early Start	Early Finish	Total Float	At Completion Total Cost	Variance - BL1 Finish
AD02000	0	31-Jan-07	31-Jan-07	-7	\$81,300	-167
BA13130	1	31-Jan-07	31-Jan-07	-7	\$44,404	-83
BA13140	1	31-Jan-07	31-Jan-07	-7	\$81,214	-89
SK16010	4	31-Jan-07	05-Feb-07	-7	\$25,800	-27
HI07000	0	06-Feb-07	06-Feb-07	-7	\$186,600	-29
HI09000	3	06-Feb-07	08-Feb-07	-7	\$19,500	0
HI09010	6	09-Feb-07	16-Feb-07	-7	\$38,700	0
HI09110	5	19-Feb-07	23-Feb-07	-7	\$32,300	0
HI09210	2	26-Feb-07	27-Feb-07	-7	\$11,400	0
HI15200	3	28-Feb-07	02-Mar-07	-7	\$43,200	-35
HI15400	0	28-Feb-07	28-Feb-07	-7	\$46,733	-52
HI15440	7	28-Feb-07	08-Mar-07	-7	\$60,500	0
HI15310	5	05-Mar-07	09-Mar-07	-7	\$69,100	-26
HI15450	3	09-Mar-07	13-Mar-07	-7	\$25,800	0
HI16200	5	12-Mar-07	16-Mar-07	-7	\$43,200	0
HI15460	5	14-Mar-07	20-Mar-07	-7	\$43,200	0
HI16210	3	19-Mar-07	21-Mar-07	-7	\$25,800	0

Filter All: near critical path TF < 20

2006 2007

Oct Nov Dec Jan Feb

STRUC / E
RF - WALLS
RF - WALLS
ELECT - R
ROOFING
FUR & R
FUR &
TAF
PA
M
MI

General Status Resources Relationships Codes Notebook

Activity BA13140 RF - WALLS - TEM CELL Project 0701

Activity Type Task Dependent Duration Type Fixed Duration & Units % Complete Type Physical Activity Calendar 0701 - 1 - 5 Day Work Week

WBS 0701 EMVAF - HP Job 7006059 Responsible Manager Education Primary Resource DOLLARS US Dollars

Portfolio: All Projects User: admin Data Date: 31-Jan-07 Access Mode: Shared Baseline: Current Project

P6: Schedule Comparison Report
Select: Tools / Claim Digger



Schedule Comparison (Digger) Report



AK

Deleted or Added Activities

- ⇒ Makes it hard to compare schedules, i.e. no longer comparing "apples to apples" and lose history.
- ⇒ Must have a good reason, i.e. break larger activity into smaller more manageable activities (Smaller ODs must total up to original OD).



Schedule Comparison (Digger) Report



AK

Original Durations (OD)

- ⇒ ODs should never change.
- ⇒ Invalidates time impact and delay analyses.



Schedule Comparison (Digger) Report



AK

Calendars

- ⇒ Document all calendar changes.
- ⇒ Changing calendars can give the appearance of making up time, i.e. going from a 5 day to 6 day work.
- ⇒ P6: Create a new calendar rather than modifying existing calendars.



Schedule Comparison (Digger) Report



AK

Actual start/finish dates

⇒ Should not change between updates.



Schedule Comparison (Digger) Report



AK

Logic changes

- ⇒ Review with owner.
- ⇒ Logic changes should reflect actual work being performed.
- ⇒ Necessary to correct out of sequence work.



Progress Schedule Review



AK

Conversion Problems

$P3 \rightarrow P6$

and

$P6 \rightarrow P3$



Progress Schedule Review



AK

Example