

Technical Transfer



Tc10.1 What's New

Schedule Manager



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Process Execution Agenda

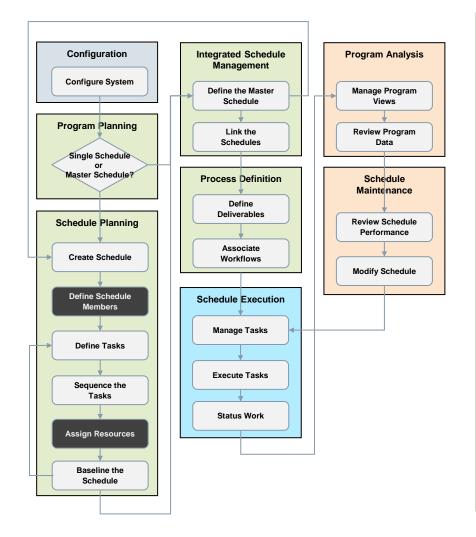
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What's New in Schedule Manager

- Schedule Planning
- Process Definition
- Schedule Execution
- Schedule Maintenance

Process Execution Agenda



What's New in Schedule Manager

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- Schedule Planning
- Process Definition
- Schedule Execution
- Schedule Maintenance



Save time when assigning resources to tasks

可以指派group / role成为Placeholder

Corganization Engineering Project Administration Simulation Administration

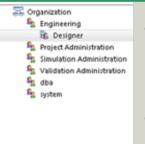
Select a group/role to create a *placeholder* assignment

Alternative to disciplines

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Save time when assigning resources to tasks

可以指派group / role成为Placeholder



- Select a group/role to create a *placeholder* assignment
- Alternative to disciplines

可以指派group / role到资源池

resource Pool Options

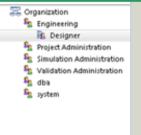
Any Member Specific Group

- Select a group/role to create a resource pool assignment
- Assign to "all" or assign to "any"

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Save time when assigning resources to tasks

可以指派group / role成为Placeholder



- Select a group/role to create a *placeholder* assignment
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可以指派group / role到资源池

Any Member

Specific Group

- assignAssign
- Select a group/role to create a *resource pool* assignment
 - Assign to "all" or assign to "any"

可以从项目组挑选成员

- - Assign users from project teams

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Save time when assigning resources to tasks

可以指派group / role成为Placeholder

Crganization Engineering Designer Project Administration Simulation Administration Simulation Administration States Adala System

- Select a group/role to create a *placeholder* assignment
- Alternative to disciplines

可以指派group / role到资源池

resource Pool Options

Any Member
 Specific Group

specific Group

- Select a group/role to create a resource pool assignment
- Assign to "all" or assign to "any"

可以自动成为时间表成员



System will automatically add users as schedule members

可以从项目组挑选成员

- Assign users from project teams

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Enhanced Assignment Dialog

Search for tasks

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多出了许多功能 & 人员指派的面页

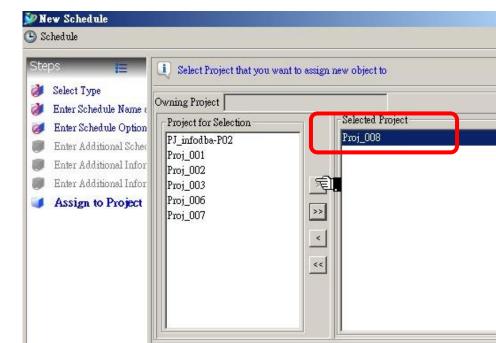
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Assign Project Team to Schedule

- Select member in Project Team 可以从Project Member来指派成员
- When creating a Schedule Last step

Assign Project Team to Schedule

Name	Status
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ALBERT.CHAO (albert.chao)	Privileged
ALVIN.LIN (alvin.lin)	Privileged
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BENIAMIN WIIENG (heniamin wueng)	Privileged
🖻 📲 PJL.116.tw.PJL	
WILLIAM.YL LEE (william.yl.lee)	Privileged
庄 🜆 Proj_008.Project Administrator 🐘	18-90
🛓 强 Project Administration Project Administrator	



可以直接指派Project Team给项目

Page 10

Assign Task by Project Team member

Assign user based on Project Team Member

Link to project member, Easier assignment

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Assign thru Resource Pool

- Assign task by Group/Role
- Placeholder

Placeholder用来控制是否要事先指派人员

- Check Requires to assign user before task launched
- Uncheck send to resource pool

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Assign by Qualified user

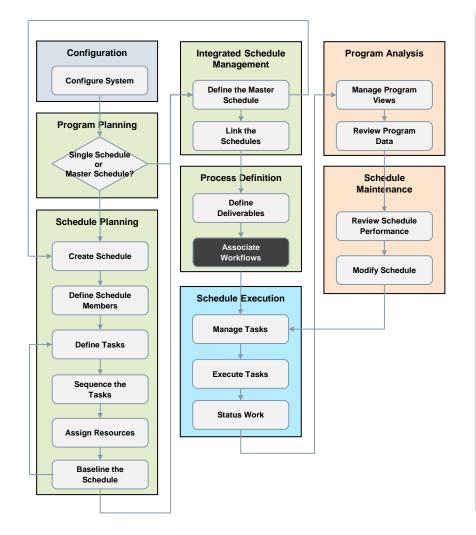
- Define Task Qualification
- Search Qualified user for assignee



可以搜寻合格的资源

Task Assignment						Organization Project Teams Disciplines Qualifications Search
Assign All Tasks						Search Criteria
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Process Execution Agenda



What's New in Schedule Manager

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- Schedule Planning
- Process Definition
- Schedule Execution
- Schedule Maintenance

What's New in Schedule Manager Associate workflow process to schedule task

Save time by automating schedule tasks with workflow processes

Assign process owner & privileged user

Assign Privilege User

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Privilege User

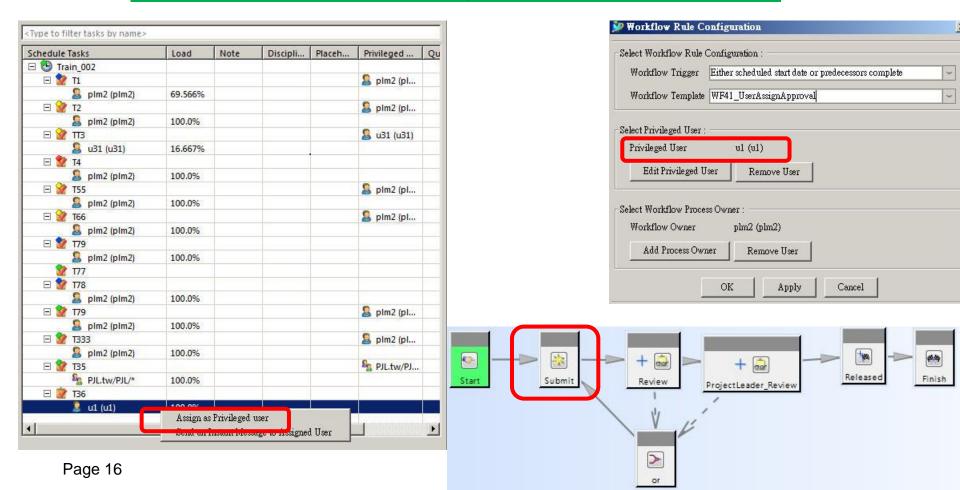
- 4 🚟 Organization
 - 4 🍇 Engineering
- The process owner can default to the coordinator creating the schedule task
- The coordinator can specify any user as the process owner (does not need to be a schedule member)
- The privileged user can be a named user or a resource pool and must be an assignee to the schedule task

Workflow Trigger	Either scheduled start date or predecessors complete	~
Workflow Template	WF41_UserAssignApproval	-
elect Privileged User :		
Privileged User	ul (ul)	
Edit Privileged U	ser Remove User	
elect Workflow Proce	s Owner :	
	plm2 (plm2)	
Workflow Owner	hnurs (hnurs)	

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Assign task thru workflow

- Privileged User v.s. Process Owner
- First Do Task would be assigned by Privileged user
 - 建议第一次设定时,别忘了设 Privileged User

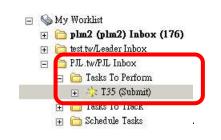


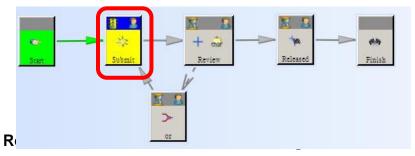
Assign thru Resource Pool

Assign task by Resource Pool Option

Subscribe to claim job 若指派了

Organization Project Teams Disciplines Qualificat Workflow Rule Configuration Type to filter tasks by name: X Schedule Tasks Load Note Discipli... Placeh. Privileged ... Qu <Type to filter Organization by Group, Role, User Na 🖃 🕒 Train_002 Select Workflow Rule Configuration 🖃 💓 T1 🚨 plm2 (pl.. A 134 + 8 69.566% Sa 151 Workflow Trigger Either scheduled start date or predecessors complete plm2 (plm2) + 🖂 🤡 T2 2 plm2 (pl... Sa 152 + 8 plm2 (plm2) 100.0% 153 Workflow Template WF41_UserAssignApproval ~ 🗉 🤡 ттз 🚨 u31 (u31) 154 🚨 u31 (u31) 16.667% 155 🖃 💇 T4 157 Select Privileged User 8 100.0% plm2 (plm2) 168 🖃 🔡 T55 S plm2 (pl., Privileged User PJL.tw/PJL/* 5 FE168 FI 2 plm2 (plm2) 100.0% + AI IA 🖂 🤡 T66 🚨 plm2 (pl.. Edit Privileged User Remove User 🖃 🍇 PJL Spim2 (pim2) 100.0% 🕀 🌆 PJ E 🐓 179 PJM 8 plm2 (plm2) 100.0% Select Workflow Process Owner 🛨 🎦 test 8 177 Remove + 🍇 test2 E 💓 178 Workflow Owner plm2 (plm2) 8 plm2 (plm2) 100.0% Placeholder Assignment E 😭 179 B plm2 (pl... Add Process Owner Remove User B plm2 (plm2) 100.0% Resource Pool Options/Placeholder Option 🖃 💓 ТЗЗЗ pim2 (pl., 2 plm2 (plm2) 100.0% O Any Member O All Me OK Apply Cancel 🖃 😭 T35 PJL.tw/PJ. PJL.tw/PJL/ 100.0% Specific Group O Any Group



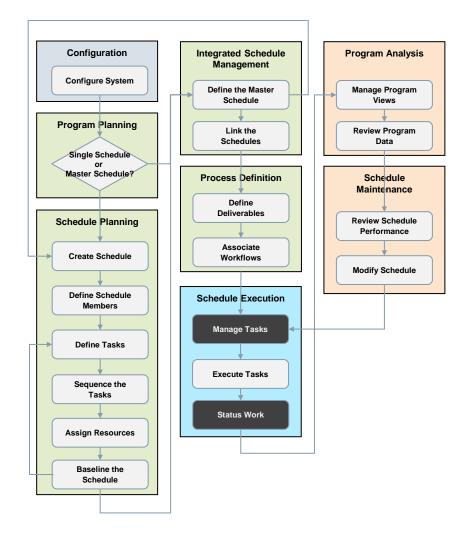


资源池,则必须先接受工作

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Process Execution Agenda



What's New in Schedule Manager

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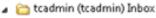
Increase resource productivity

All task assignments available in the worklist

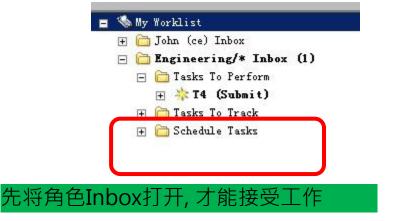
What's New in Schedule Manager

Manage task assignments and status work

🖌 🌭 My Worklist



- b 🛅 Tasks to Perform
- b 🛅 Tasks to Track
- b Chedule Tasks
- Engineering/Designer Inbox
- Single location for resources to access workflow tasks and schedule tasks
- Resources can "claim" tasks assigned to resource pools

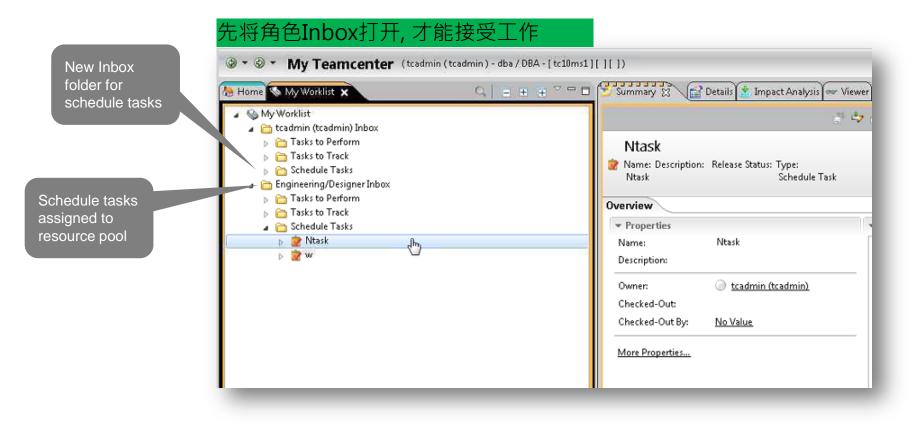






Manage task assignments and status work

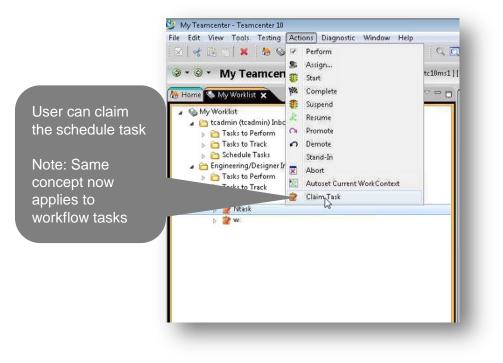
See schedule task assignments from worklist





Manage task assignments and status work

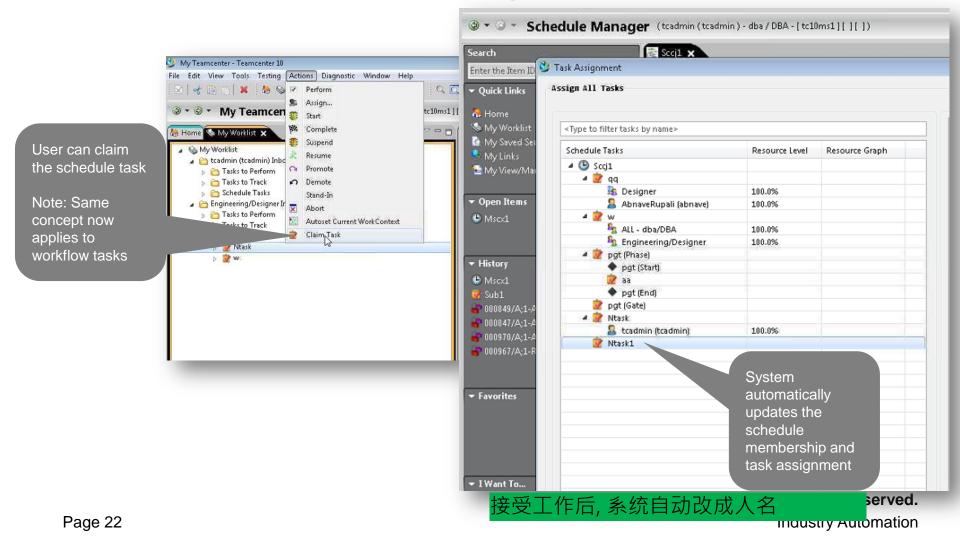
Claim schedule task resource pool assignments from worklist



What's New in Schedule Manager Manage task assignments and status work



Claim schedule task resource pool assignments from worklist



What's New in Schedule Manager Manage task assignments and status work



Increase resource productivity

利用Workflow自动将项目工作的状态更新

Object	State	Status	Status Indi
TT_Schedule	In Progress	Needs Atten	•
🔄 过 Phase I	In Progress	In Progress	•
🔄 🔤 🎦 Phase II	In Progress	Late	0
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- Workflow-schedule task interaction can be configured so that workflow status will set the schedule task status
- Saves time for resources no need to manually update WIP status
- Saves time for coordinators no need to drill into workflow process



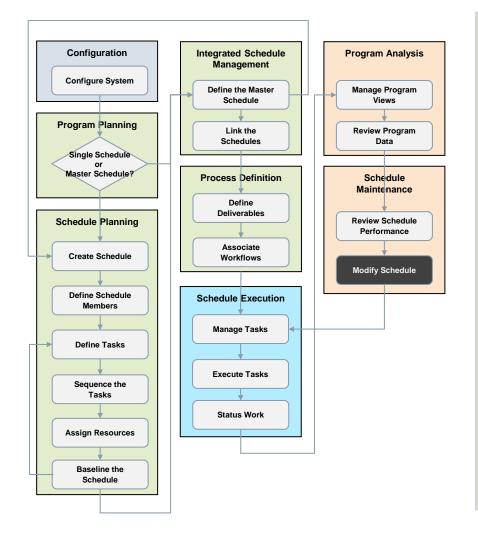
Manage task assignments and status work

Use workflow to set the schedule task status

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Preferences List Filters sm_w		Click on the "Edit" button to modify the muon and update any field in order for the "Save" buttor to be enabled. Note that the page of "field must not be empty. Click on the "Save" but to save the definition of the existing preference.	n
Filter by category Filter by protection scope		Name Value Location Protection Sco SIV_WORKFLOW_STATUS_MAP Site Site	ope 🖃
Name SM_WBS_FORMAT_PREF	Location	Category Environment Type Multiple Schedule Manager Disabled String Multiple	9
SM_WBS_INITIAL_PREF SM_WORKFLOW_STATUS_MAP	Site Site	Description Defines the workflow status rules mapping between the Workflow Task and Schedule Task statuses. The format for valid values is "workflow_task_status.schedule_task_status".	*
		Values In Process.in_progress Completed.complete	
		Late.late Abort d.aborted	▼
Preferences found: 3		Aborted.aborted	•

Industry Automation

Process Execution Agenda



What's New in Schedule Manager

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Keep the schedule on track... with less work



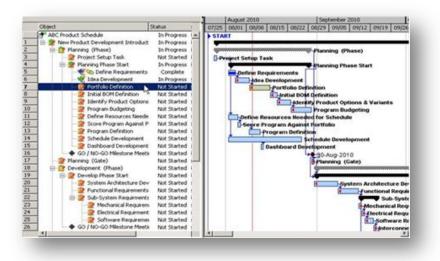
- Sometimes, it's best just to go with the flow
- System will set a task's scheduled start / finish date to the actual start / finish date
- Less time spent by coordinators adjusting the plan to match reality
- Makes the system more effective at automatically starting tasks per the schedule

实际工作日期与计划工作日期连结

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Actual date to schedule date linking





How it works:

- The task's actual date is updated (by user or by the system)
- 2. The task's schedule date is updated by the system to the value of the actual date
- 3. The system treats this like any schedule date update...
- 4. The finish date is rescheduled
- 5. Dependent tasks are rescheduled

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Keep the schedule on track... with less work



- Sometimes, it's best just to go with the flow
- System will set a task's scheduled start / finish date to the actual start / finish date
- Less time spent by coordinators adjusting the plan to match reality
- Makes the system more effective at automatically starting tasks per the schedule



- "All hands stop"
- New schedule / schedule task state
- Ideal for dynamic environments where scheduling decisions happen quickly
- Results in an immediate, irreversible cessation of all schedule or schedule task activities

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Task abort

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Schedule abort

- Schedule status is set to abort
- All planned and in progress tasks have status set to abort
- All active workflows are aborted

Summary task abort

- All planned and in progress tasks have status set to abort
- All active workflows are aborted

Task abort

Workflow is aborted

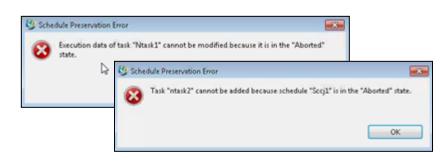
Notifications are sent to resources

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Task abort

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Schedule abort

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Summary task abort

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Task abort

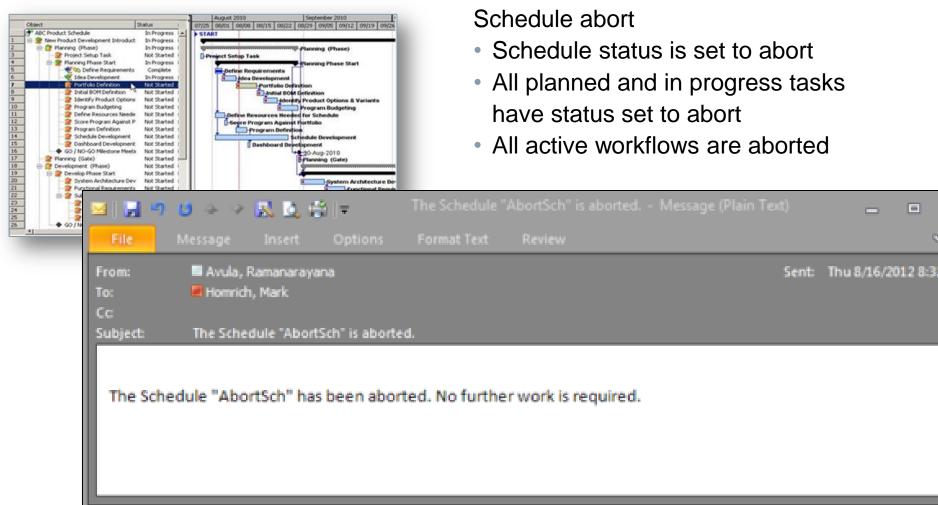
Workflow is aborted

Notifications are sent to resources

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Task abort



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Keep the schedule on track... with less work





- Preference-controlled, state-based behavior that determines when a schedule or task can be updated or deleted
- Maintain schedule (structure) integrity
- Prevent schedule modifications
- Preferences
 - SM_PREVENT_DELETE_STATES
 - SM_PREVENT_UPDATE_STATES

可以设定修改的过滤条件

Preference "SM_PREVENT_DELETE_STATES" Valid values are: in_progress, aborted, complete, closed

For example, set in_progress in this Preference Then task with this status cannot be deleted

Preference "SM_PREVENT_UPDATE_STATES" Valid values are: in_progress, aborted, complete, closed

For example, set in_progress in this Preference Then task with this status cannot be updated

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Keep the schedule on track... with less work



- Preference-controlled, state-based behavior that determines when a schedule or task can be updated or deleted
- Maintain schedule (structure) integrity
- Prevent schedule modifications
- Preferences
 - SM_PREVENT_DELETE_STATES
 - SM_PREVENT_UPDATE_STATES



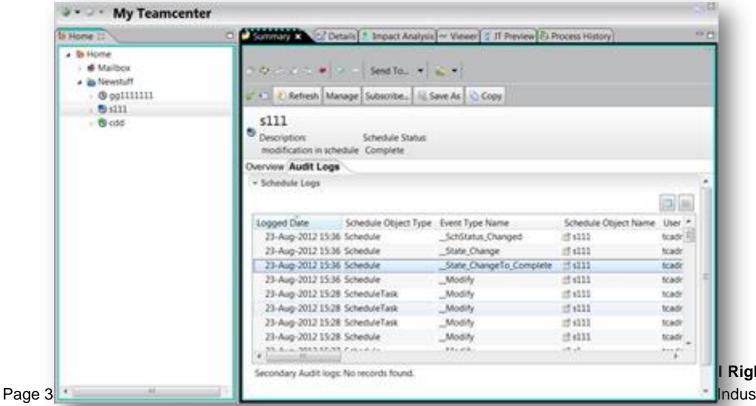
- The two most commonly asked project scheduling questions
 - Where am I? How did I get here?
- Select the system and user actions to be recorded by audit manager
- Process history can be viewed from the schedule context (as well as the item context)

Update / maintain the schedule

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Contextual signoff & process history

Schedule level



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Update / maintain the schedule



Contextual signoff & process history

Schedule task level

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		Secondary Audit logs	no recerci namo.								

Update / maintain the schedule

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Contextual signoff & process history

What's logged

Create schedule Modify schedule Delete schedule Create task Modify task Delete task Create task dependency Modify task dependency Delete task dependency Create schedule deliverable Modify schedule deliverable Delete schedule deliverable Delete schedule deliverable Modify task deliverable Delete task deliverable Create schedule membership Modify schedule membership Delete schedule membership Create task resource assignment Modify task resource assignment Delete task resource assignment Add workflow template to a task Change the workflow template Remove workflow template from task Launch Workflow Task Status Change Task State Change Task Scheduling Data Change Task Execution Data Change Schedule Status Change Schedule State Change Task State to Not Started Task State to In Progress Task State to Complete Task State to Closed Task State to Abort Schedule State to Not Started Schedule State to Complete Schedule State to Closed Schedule State to Abort Create schedule baseline

Schedule Manager Performance Teamcenter 11.2



Project Goals 重新改写, 放弃继承Item, 以数据库表格&新逻辑方式

- Move the business logic from the client to the server, so the product behaved like a Teamcenter citizen and create a base for Active Workspace development
- Simplify the data model to a light weight WSO based architecture to lay a foundation for a much faster performance and scalability of the Schedule Manager product.
- Support legacy published APIs and provide new published APIs

Project Summary

- Large and complex project that achieved all goals successfully
- Completed benchmarking performance of all use cases in Tc11.2 and Tc10.1.2
- Significant improvements (ranging 10 to 225 times) observed to have been achieved in 11.2 with the WSO based re-architecture project in every one of those use cases.

Schedule Manager Performance Teamcenter 11.2



Performance Details 全新&优异的性能表现

	Time taken (seconds)		Improvement Tc10.1/Tc11.2	
Performance Use Case	Tc10.1	Tc11.2	Times (X)	Percentage
Load schedule of 3000 tasks, 3000 resource assignments	90	7	12.9	92.2%
insert new task in 3000 task schedule	27	L	27.0	90.3%
copy paste 20 tasks in 3000 task schedule	190	3.85	49.4	98.0%
Indent 20 tasks in 3000 task schedule	36.86	3	12.3	91.9%
Delete 20 tasks in 3000 task schedule	65	5	13.0	92.3%
Create dependency in 3000 task schedule	5	0.5	10.0	90.0%
Delete dependency in 3000 task schedule	4	0.5	8.0	87.5%
Insert sub schedule in 3000 task schedule	140	8.8	15.9	93.7%
Detach sub schedule in 3000 task schedule	41	3.6	11.4	91.2%
Copy paste single task in 3000 task schedule	25	0.47	53.2	98.1%
Indent single task in 3k task schedule	17.83	1.15	15.5	93.6%
Delete single task in 3k task schedule	28	1.01	27.7	96.4%
Assign single resource to task in 3000 task schedule	3	0.48	6.3	84.0%
Shift 3000 task schedule	600	36.37	16.5	93.9%
Modify leaf-level task start date, no dependencies in 3000 task schedule	15	0.5	30.0	96.7%
Modify leaf-level task start date, with 20 dependent tasks	5	1.06	4.7	78.8%
Drag 20 tasks (with dependencies)	7	3	2.3	57.1%
Assign single resource to multiple tasks	15	0.85	17.6	94.3%
Assign multiple resources to multiple tasks	15	3.44	4.4	77.1%



Technical Transfer



Thank you

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