Overview

Deadlines and estimated durations in a linear workflow scenario

In this scenario, a linear workflow has 10 steps. You want to track whether a job is on time or behind schedule from the time that the job enters the workflow until it completes the **PrintJobs** step. The first three steps process a job immediately. Four steps each take 5 minutes to process a job. One step takes 10 minutes to process a job. You set estimated durations for those eight steps. You do not set estimated durations for the two steps that follow the **PrintJobs** step. You also want to know if a job does not meet its printing deadline. You place a **SetDeadline** step near the start of the workflow.

Linear PDF workflow

SetJobPropsFromTextFile: 1 second.
DetectInputDataStream: 1 second.
SetDeadline: makes **PrintJobs** the deadline step; sets the deadline time to 35 minutes from the time that the job was submitted (Deadline date = Relative to property value; Property = Time submitted; Plus or minus = 35 minutes); 1 second.
CountPages: 5 minutes.
RunExternalProgram: runs a program for the accounting department; 5 minutes.
PrintSetup (lets the operator verify that the requested paper is loaded in the trays): 5 minutes.
CreatePageRanges: 5 minutes.
PrintJobs: 10 minutes.
RetainCompletedJobs: no estimated duration.
RemoveJobs: no estimated duration.

With this workflow, you can see the deadline date and time, the deadline step, the deadline outcome, the percent complete, the tracking status (**On schedule** or **Behind schedule**), the predicted completion time, and the predicted outcome.

When a job completes the **PrintSetup** step, the job is 50 percent complete because 3 steps with durations of 5 minutes have run of the 30-minute total. Based on the two remaining steps with estimated durations, RICOH ProcessDirector sets the **Predicted completion time** property to 15 minutes from the time when the job completes the **PrintSetup** step.

If the job completes the **CountPages** step within 5 minutes and 3 seconds after starting the **SetJobPropsFromTextFile** step, the **Tracking status** of the job is **On schedule**. If the job completes the **RunExternalProgram** step within 10 minutes and 3 seconds after starting the **SetJobPropsFromTextFile** step, the **Tracking status** of the job remains **On schedule**. If the job does not complete the **PrintSetup** step within 15 minutes and 3 seconds of starting the **SetJobPropsFromTextFile** step, RICOH ProcessDirector sets the **Tracking status** of the job to **Behind schedule**. If the **Tracking status** of a job is **Behind schedule**, the row for the job in the Jobs table is colored yellow.

RICOH ProcessDirector calculates the predicted outcome for a job by using the estimated durations, the current date and time, and the deadline for the job. When a predicted outcome is **May miss**, RICOH ProcessDirector adds an orange dot to the **Schedule risk** column for the job in the Jobs table.

If the job has not started the **PrintJobs** step 26 minutes after the job was submitted to the workflow, RICOH ProcessDirector sets the predicted outcome to **May miss**. The predicted outcome changes because the deadline is for 35 minutes and the estimated duration of the **PrintJobs** step is 10 minutes. RICOH ProcessDirector estimates that the duration of the job is going to be 36 minutes.

If a job misses its deadline, RICOH ProcessDirector adds a red dot to the **Deadlines** portlet and to the **Schedule risk** column for the job in the Jobs table.

Parent topic: Usage scenarios for Deadline Tracker