



Time Control in Workflow

Workflow Designer
IBM FileNet Business Process
Manager



Workflow deadline



- A time limit for the completion of the entire workflow
 - Specified in Workflow Properties on the Advanced tab –Specified in minutes, hours, days, or weeks
 - Time value is relative to when the workflow is launched.
 - When a workflow deadline expires, an entry is made in the event log and workflow status shows overdue.
- Optionally, you can specify a reminder be sent before the deadline expiration.
 - Specified reminder is a time relative to the deadline expiration. –Reminder is sent to the assigned tracker for the workflow.

Step deadline



- A time limit for the workflow participant to complete a step
 - Specified for a step in step properties Deadline tab
 - Available only for Activity steps.
 - Time value is relative to the time that the step is routed to the participant.
 - Specified in minutes, hours, days, and weeks or by using a time expression
- Each step deadline is independent.
- Optionally, you can specify a reminder be sent before a step deadline expires.
 - Specified reminder is a time relative to the deadline expiration.
 - Email is sent to tracker and workflow participant.
 - Reminders are available only for steps assigned to a participant.

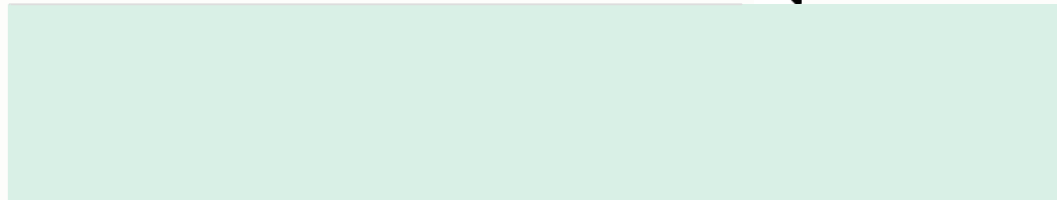
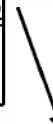
Step deadline expiration

- When a step deadline expires

- Overdue status is displayed for the item in Inbox or Public Queue.
- Tracker status shows overdue icon.
- If specified, the deadline submap is executed.
- Optional email notification for tracker and participant is sent.
- An entry is made in the event log.

Status
! Overdue

In step properties Deadline tab, specify the submap to execute if the deadline expires.



Participant notification



- Must enable email notification for the workflow definition, if you want participants to be notified of deadlines and reminders
 - Advanced Workflow Property setting
 - Email notification must be configured by the system administrator.
- For a workflow deadline and reminder
 - Workflow participants are **not** notified of workflow deadlines.
 - The tracker is notified, if email notification is enabled for the workflow.
 - The tracker must enable workflow deadline and reminder notification in user preferences.
- For step deadlines and reminders
 - Workflow participants and trackers can be notified.
 - User must enable step deadlines and reminders notification in user preferences to receive an email.

Using workflow and step deadlines



- If you use a workflow deadline and step deadlines in a workflow definition
 - Avoid overlapping deadlines.
 - Ensure that total step deadline time does not exceed the workflow deadline time.
- Not an error if this occurs –Resulting overlapping messages might be confusing for users.

Timer functions



- Define a period of time during which a specified series of steps must process.
 - You control how processing proceeds if the time period expires. –
- Multiple timers can be active at the same time in a workflow.
 - For each timer, you define an expiration time and optional submap to execute.
- Timer system functions
 - Work together to define and control the timer behavior
 - Are located in the Timer Palette
- BeginTimer, SuspendTimer, ResumeTimer, EndTimer, EndAllTimers

Begin and end timers

- BeginTimer

- Indicates beginning of series of steps to be executed before a specified time

- Includes properties to specify:

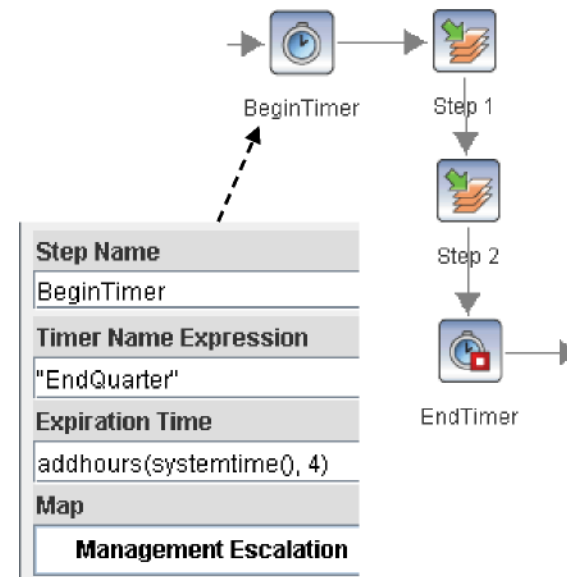
- Name of timer
 - Expiration time
 - Map called if timer expires
 - EndTimer

- Ends one specified timer

- EndAllTimers

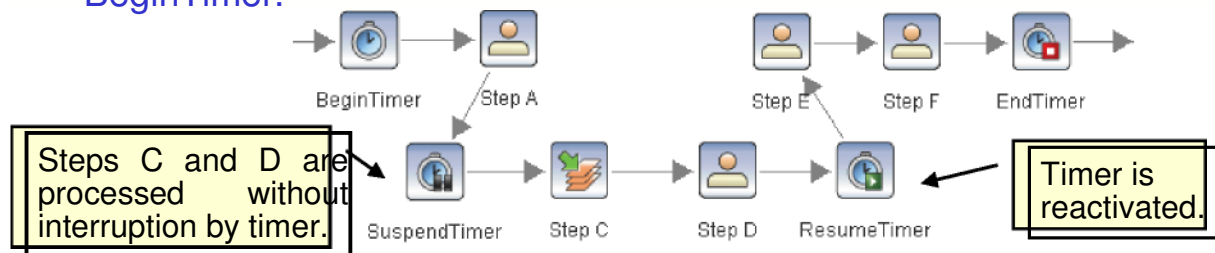
- Ends all timers for the work

- item –Requires no parameters



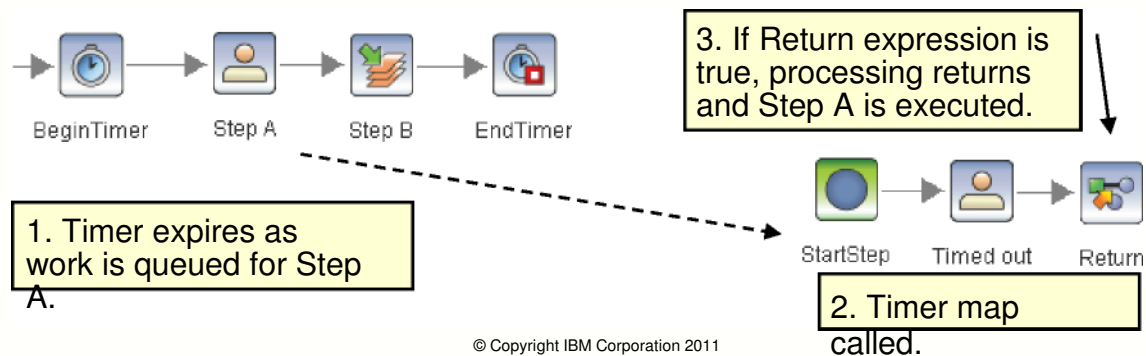
Suspend and resume timers

- SuspendTimer
 - Starts suspension of timer
 - Sequence continues without interruption until ResumeTimer, even if timer expires.
 - Timer continues to count down during suspension.
- ResumeTimer
 - Ends suspension
 - If timer has expired, system executes the submap specified in BeginTimer.



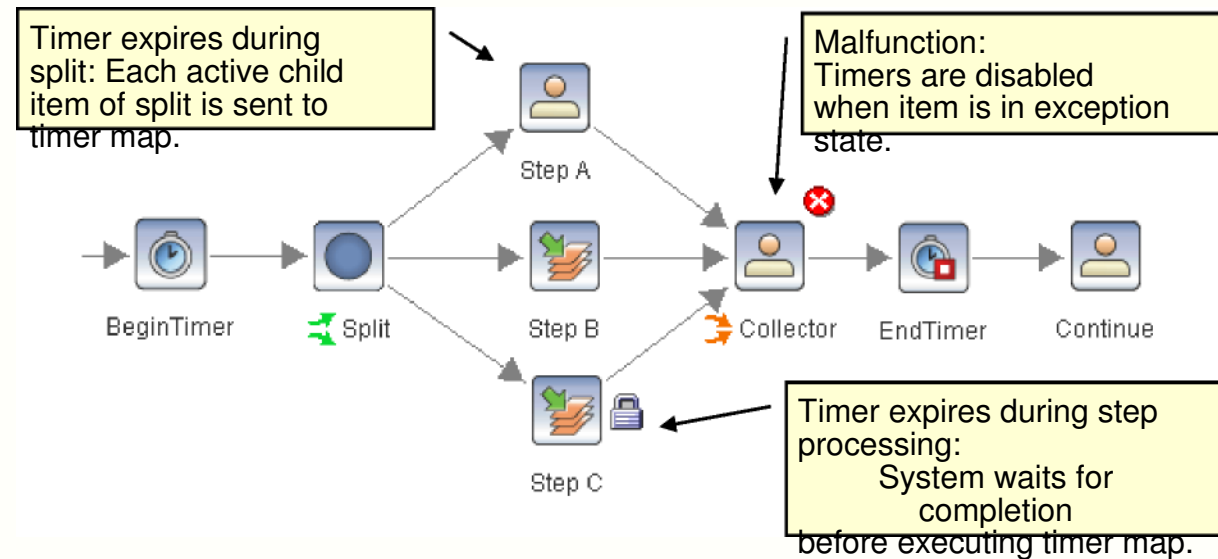
Expired timers

- Timer map is called if a timer expires and has not been suspended.
 - Timer map is processed and contains an implicit or explicit return.
- After the timer map completes and, depending on the return option, processing resumes at one of two states:
 - At the state when the timer map was called or at the next state
- Add a Return system function with Return expression equals true to the timer map.
 - If you want to retry the step that was queued when timer expired



Design considerations for using timers

- Expired timers do **not** preempt work in progress.
- Expired timers do **not** preempt exceptions.
- Expired timer does preempt Delay or WaitForCondition processing.



Delay system function

- Suspends processing of work item
- Resumes processing at specified time
 - Use a time expression to indicate the delay expiration time. –Using a specific time limits the workflow reusability.
- Work item waits in Delay system queue.

