## Viewing rule set execution history

You can view a rule set's execution history in Rule Debugger to determine at which point, and why, a particular execution encountered problems.

Each time a rule set is executed, information about each event and action that occurred as part of that particular execution is stored in the Prinergy system's database. You can later view the details about any particular execution of a rule set in Rule Debugger. This is especially useful when you want to understand where and why an execution failed or was stopped.

When you open a rule set in Rule Debugger, the **Rule Set Execution History** pane lists each execution of the rule set that has occurred since the rule set was last modified. The most recent execution is selected.

**Note:** Execution history is retained only as far back as the last time the rule set was modified. If the **Rule Set Execution History** pane is empty, the rule set has either never been run or has not been run since it was last modified. If you want to keep a rule set's execution history after you modify the rule set, make a copy of the rule set, modify it, and use hot swapping to replace the old rule set with the new one. The old rule set is renamed and its execution history is retained.

Executions are grouped by date, and the following information appears for each execution:

- Icons representing the rule set's trigger event and the execution status. Examples of execution statuses are **Done** and **Exception**.
- The time the rule set was run.
- Whether the rule set was run at the system level or on a particular job and the name of the job.

Executions that completed successfully are automatically deleted from the database after two days. Executions that completed with an exception are automatically deleted after four days. An execution that has not yet completed (for example, because the rule set includes a **Timer** action that delays the completion of the execution for more than four days) is not deleted, even if the execution started more than four days ago.

If an execution of an enabled rule set completes while you are viewing the rule set's execution history in Rule Debugger, the list of executions in the **Rule Set Execution History** pane is automatically updated.

When you select an execution, the **Execution Path** pane lists each event that was triggered and each action that occurred during the selected execution.

Meanwhile, the workspace (the upper-right pane) provides a graphical representation of the rule set and the selected execution history. When you select an action in the rule set, the corresponding rule is selected in the **Execution Path** pane. As well, when you click an action in the rule set, the path through the rule set to that action for the selected execution is highlighted in blue, even when the execution path spans rule chains within the rule set. Any actions not triggered during the selected execution appear in gray.

If you select an execution that is still in progress, and then the execution completes while you are viewing it, the execution trace shown in the workspace is automatically updated. If the execution encounters multiple pause points (for example, the rule set includes a **Timer** action to archive separations after five days and another **Timer** action to purge archived separations after 10 days), the workspace will show the execution as having reached the first pause point (the first **Timer** action in the example) but will not update again until the execution is complete.

When you select a rule in the **Execution Path** pane or an action in the workspace, the **Event** and **Action** tabs at the bottom of Rule Debugger display information about the selected instance of the action and the event that triggered it. For more information, see Viewing a rule set's execution details.

**Note:** The **Rule Set Execution History** pane in also displays XML validation errors. For example, if you write XML that does not adhere to the schema, and you validate using the **ReadXML** action, Prinergy will fail upon reading the XML file and the information will be shown in the **Rule Set Execution History** pane with a red cross.