

PipelineExecution: Dependent Activity runs even when depended activity fails

Last updated by | Jackie Huang | Jan 4, 2022 at 12:24 AM PST

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Issue

Dependent Activity runs even when depended activity fails. Activity B depends on Activity A but still it runs and succeeds even when A fails

Resolution

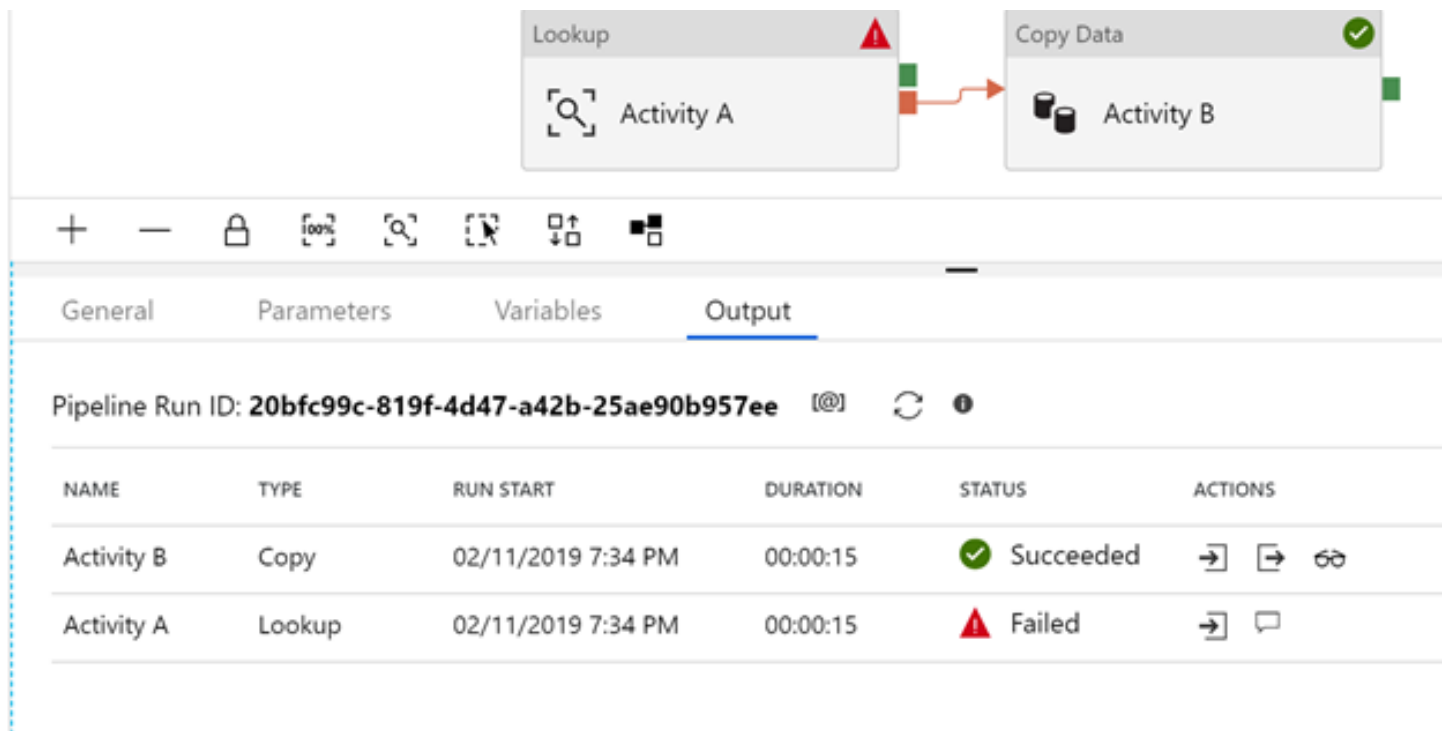
By Design Activity Dependency defines how subsequent activities depend on previous activities, determining the condition whether to continue executing the next task. An activity can depend on one or multiple previous activities with different dependency conditions.

The different dependency conditions are: Succeeded, Failed, Skipped, Completed.

For example, if a pipeline has Activity A -> Activity B, the different scenarios that can happen are:

- Activity B has dependency condition on Activity A with succeeded: Activity B only runs if Activity A has a final status of succeeded
- **Activity B has dependency condition on Activity A with failed: Activity B only runs if Activity A has a final status of failed**
- **Activity B has dependency condition on Activity A with completed: Activity B runs if Activity A has a final status of succeeded or failed**
- Activity B has dependency condition on Activity A with skipped: Activity B runs if Activity A has a final status of skipped. Skipped occurs in the scenario of Activity X -> Activity Y -> Activity Z, where each activity runs only if the previous activity succeeds. If Activity X fails, then Activity Y has a status of "Skipped" because it never executes. Similarly, Activity Z has a status of "Skipped" as well.

For Demonstration of highlighted behavior(which is by design), see below screenshots.



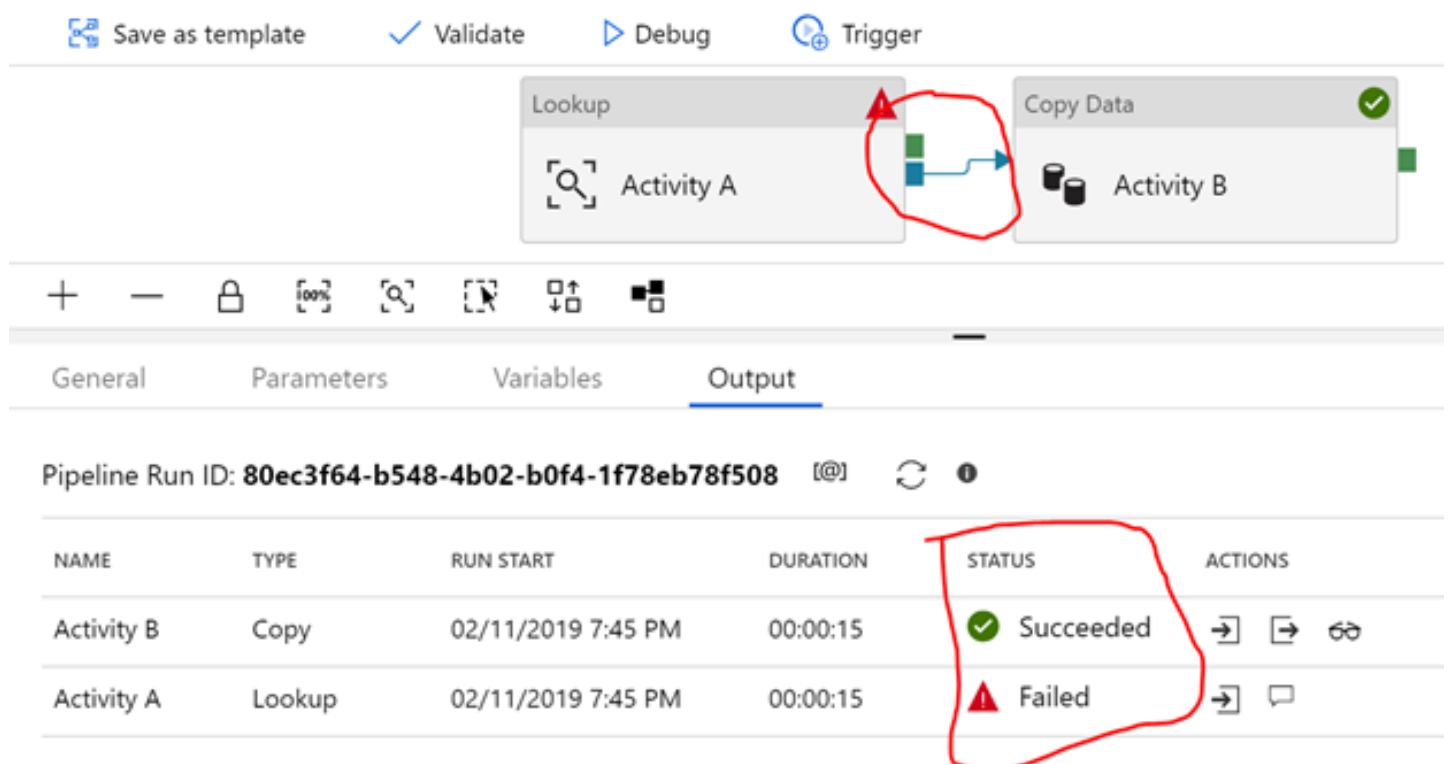
The screenshot shows a pipeline with two activities: Activity A (Lookup) and Activity B (Copy Data). Activity A has a red triangle icon indicating failure, while Activity B has a green checkmark indicating success. A red arrow points from Activity A to Activity B, signifying a dependency. Below the pipeline diagram is a table showing the execution details.

NAME	TYPE	RUN START	DURATION	STATUS	ACTIONS
Activity B	Copy	02/11/2019 7:34 PM	00:00:15	✓ Succeeded	→ ↗ ⌂
Activity A	Lookup	02/11/2019 7:34 PM	00:00:15	⚠ Failed	→ 💬

Activity B(copy) depends on Activity A(lookup) status of Failed to run . Red Arrow between two activities indicates that Failed is the dependency condition.

In the below screenshots , it demonstrates that when dependency condition between two activities is Completed , either Failed or Succeeded status of first activity(Activity A) is good for Activity B to run. Blue arrow indicates Completed condition for dependency.

As a part of it below screenshot shows B runs when A **fails** with the dependency condition being set to '**Completed**'



The screenshot shows the same pipeline as above, but with a blue arrow pointing from Activity A to Activity B, indicating a 'Completed' dependency condition. A red box highlights the 'STATUS' column in the table below, showing that Activity B succeeded despite Activity A failing.

NAME	TYPE	RUN START	DURATION	STATUS	ACTIONS
Activity B	Copy	02/11/2019 7:45 PM	00:00:15	✓ Succeeded	→ ↗ ⌂
Activity A	Lookup	02/11/2019 7:45 PM	00:00:15	⚠ Failed	→ 💬

below screenshot shows B runs when A **succeeds** with the dependency condition being set to 'Completed'

Lookup

Activity A

Copy Data

Activity B

+

−

🔒

100%

🔍

🖱️

↕️

🧩

General

Parameters

Variables

Output

Pipeline Run ID: 8c2b961c-f2ac-4191-860f-c7fa2e7da0bd

NAME	TYPE	RUN START	DURATION	STATUS	ACTIONS
Activity B	Copy	02/11/2019 7:49 PM	00:00:15	✔️ Succeeded	🔗 ➡️ ⌂
Activity A	Lookup	02/11/2019 7:48 PM	00:00:16	✔️ Succeeded	🔗 ➡️

Additional Information:

- **Icm References:** [Icm Link](#)
- **Author:** muralid
- **Reviewer:** vimals
- **Keywords:**

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