Creating Stacks Outputs Conditionally

The process involves conditionally defining stack outputs based on the environment. In the CloudFormation template, define an output named ReadReplicaEndpoint using Fn::GetAtt to reference the Endpoint.Address of the read replica. Add a description and associate the output with the EnvironmentIsProduction condition. Save and upload the template to the AWS CloudFormation console. Create a production stack named ProductionDatabaseStack, set the Environment to production, and verify the output includes the read replica endpoint. Delete the stack afterward. Repeat for a test stack named TestDatabaseStack with Environment set to test, confirming the read replica endpoint is absent.

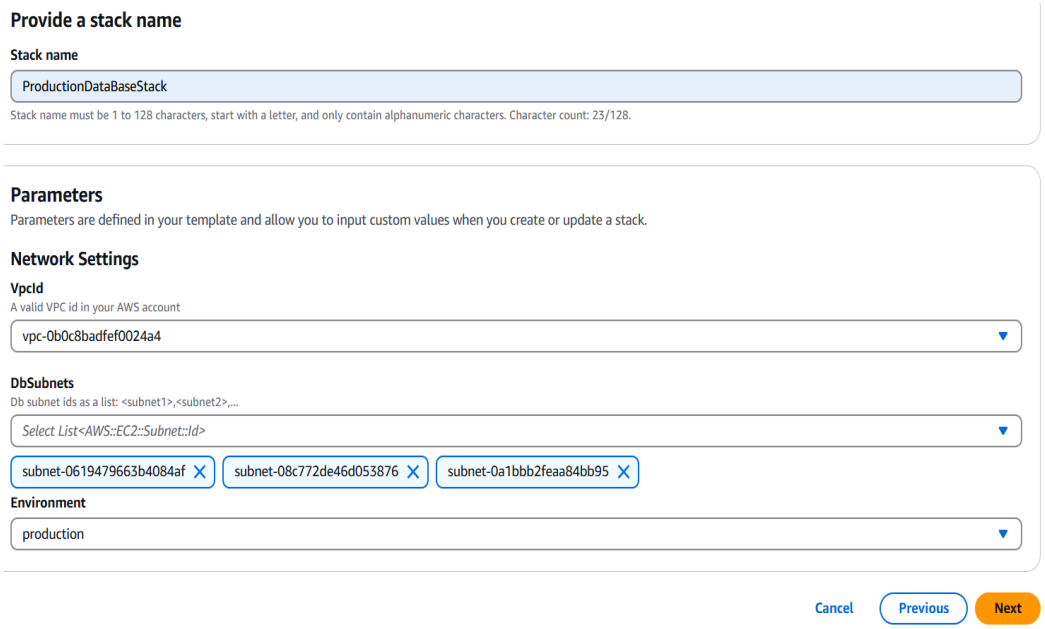
Activity

1. Find the template files in our GitHub repository under the same name as the heading for easy access and edits. Find and Save the attached template locally, open it in VS Code for edits.
2. Open the "**Creating Stacks outputs Conditionally"** of your CloudFormation template. Define an output for the read replica endpoint and name it ReadReplicaEndpoint. Use the Fn::GetAtt function to reference the Endpoint.Address attribute of the read replica resource. Add a description such as "The connection endpoint for the read replica." Ensure the output is created only in the production environment by associating it with the EnvironmentIsProduction condition. Add the Condition attribute at the same level as the Value and Description attributes, specifying the EnvironmentIsProduction condition.

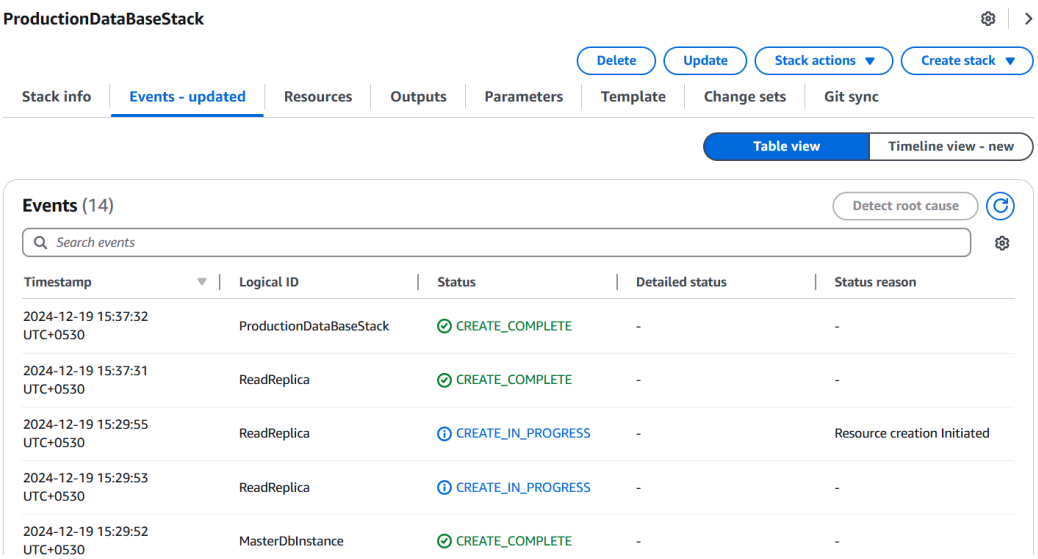
```
74  Outputs:
75    MasterDbId:
76      Value: !Ref MasterDbInstance
77      Description: Master database instance identifier
78    MasterDbEndpoint:
79      Value: !GetAtt [ MasterDbInstance, Endpoint.Address ]
80      Description: The connection endpoint of the master database instance
81    ReadReplicaEndpoint:
82      Value: !GetAtt [ ReadReplica, Endpoint.Address ]
83      Description: The connection endpoint for the read replica
84      Condition: EnvironmentIsProduction
```

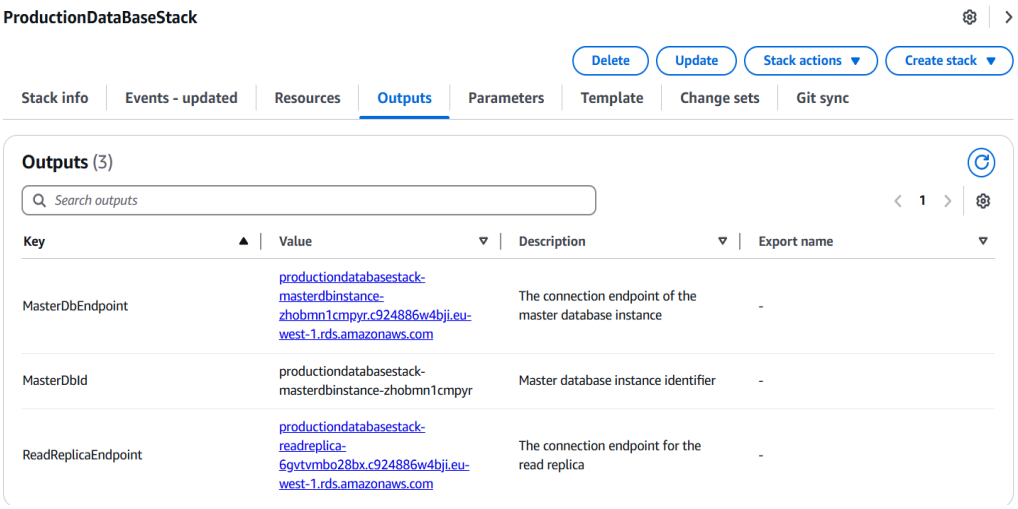
3. Save the template and upload it to the AWS CloudFormation console.

4. Create a production stack, name it ProductionDatabaseStack, and provide the necessary parameter values, including production for the Environment.

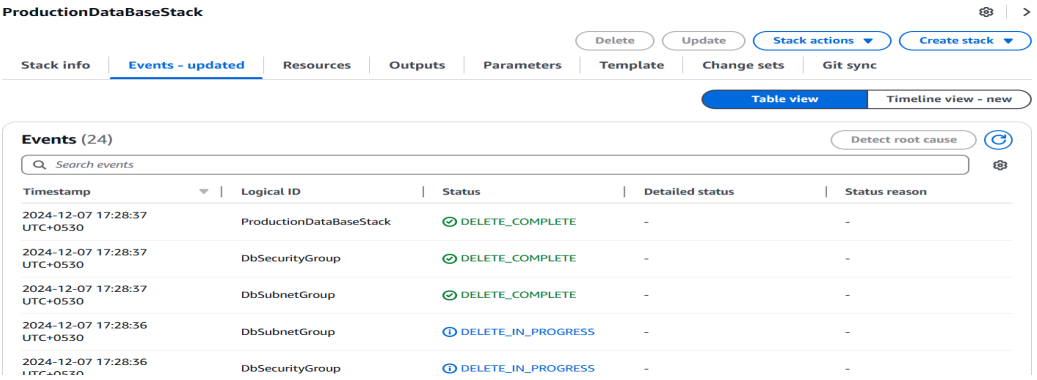


5. Wait for the stack creation to complete and verify the read replica endpoint appears in the outputs.

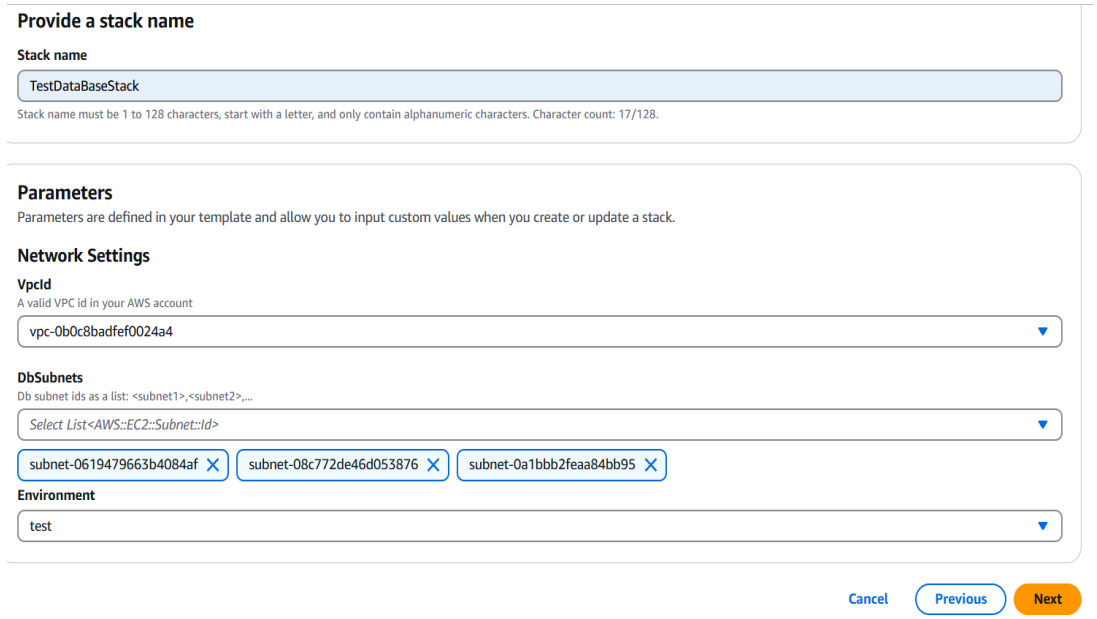




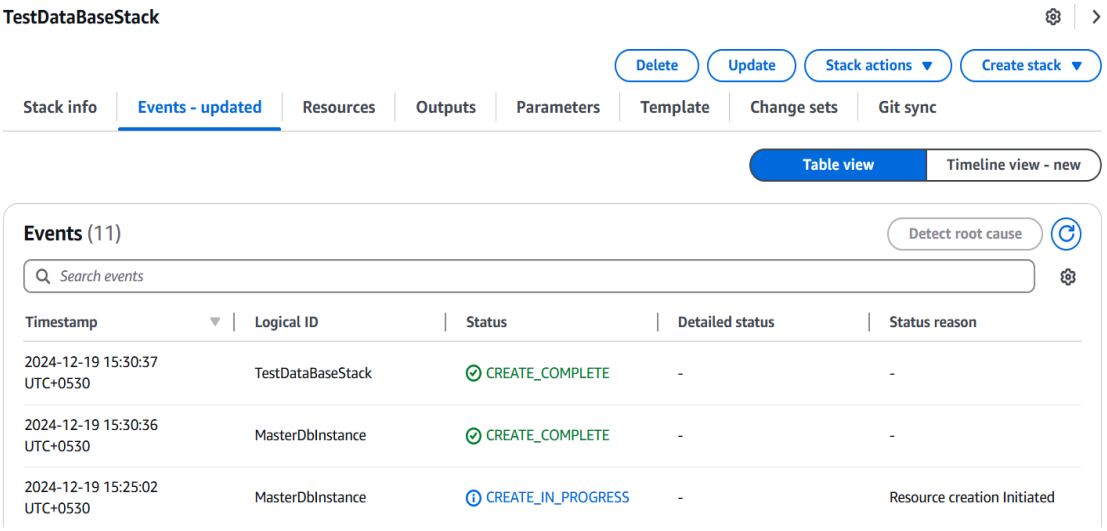
6. Delete the production stack after verification.

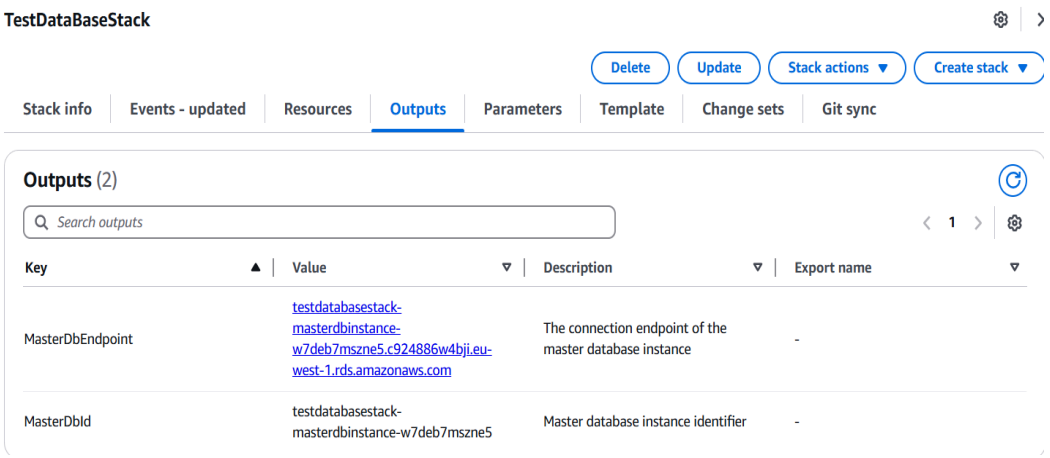


7. Create a test stack, name it TestDatabaseStack, and provide a test for the Environment parameter.



8. Wait for the stack creation to complete and confirm the read replica endpoint is absent in the outputs.





9. Delete the test stack after verification.