

```
alvaroandrespinzoncortes@alvaros-imac stack2 % terraform apply
module.bedrock_kb.data.aws_caller_identity.current: Reading...
module.bedrock_kb.data.aws_caller_identity.current: Read complete after 0s [id=752227508740]
```

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:

+ create

Terraform will perform the following actions:

```
# module.bedrock_kb.aws_bedrockagent_data_source.s3_bedrock_bucket will be created
+ resource "aws_bedrockagent_data_source" "s3_bedrock_bucket" {
  + data_deletion_policy = (known after apply)
  + data_source_id       = (known after apply)
  + id                   = (known after apply)
  + knowledge_base_id    = (known after apply)
  + name                 = "s3_bedrock_bucket"

  + data_source_configuration {
    + type = "S3"

    + s3_configuration {
      + bucket_arn = "arn:aws:s3:::bedrock-kb-752227508740"
    }
  }
}

# module.bedrock_kb.aws_bedrockagent_knowledge_base.main will be created
+ resource "aws_bedrockagent_knowledge_base" "main" {
  + arn                = (known after apply)
  + created_at         = (known after apply)
  + failure_reasons    = (known after apply)
  + id                 = (known after apply)
  + name               = "my-bedrock-kb"
  + role_arn           = (known after apply)
  + tags_all           = {}
  + updated_at         = (known after apply)

  + knowledge_base_configuration {
    + type = "VECTOR"

    + vector_knowledge_base_configuration {
      + embedding_model_arn = "arn:aws:bedrock:us-west-2::foundation-model/amazon.titan-embed-text-v1"
    }
  }

  + storage_configuration {
    + type = "RDS"

    + rds_configuration {
      + credentials_secret_arn = "arn:aws:secretsmanager:us-west-2:752227508740:secret:my-aurora-serverless-BQ6kIZ"
      + database_name         = "myapp"
      + resource_arn          = "arn:aws:rds:us-west-2:752227508740:cluster:my-aurora-serverless"
      + table_name            = "bedrock_integration.bedrock_kb"

      + field_mapping {
        + metadata_field = "metadata"
        + primary_key_field = "id"
        + text_field     = "chunks"
        + vector_field    = "embedding"
      }
    }
  }
}

# module.bedrock_kb.aws_iam_policy.bedrock_kb_rds_access will be created
+ resource "aws_iam_policy" "bedrock_kb_rds_access" {
  + arn                = (known after apply)
  + attachment_count   = (known after apply)
  + description        = "IAM policy for Bedrock Knowledge Base to access RDS"
  + id                 = (known after apply)
  + name               = "bedrock_kb_rds_access"
  + name_prefix        = (known after apply)
  + path               = "/"
  + policy             = jsonencode(
    {
      + Statement = [
        + {
          + Action = [
            + "rds:DescribeDBClusters",
            + "rds:DescribeDBInstances",
            + "rds:DescribeDBSubnetGroups",
            + "rds:ListTagsForResource",
            + "s3:ListBucket",
            + "s3:GetObject",
          ]
          + Effect = "Allow"
          + Resource = "*"
        },
        + {
          + Action = [
            + "secretsmanager:GetSecretValue",
            + "secretsmanager:DescribeSecret",
          ]
          + Effect = "Allow"
          + Resource = "arn:aws:secretsmanager:us-west-2:752227508740:secret:my-aurora-serverless-BQ6kIZ"
        },
      ]
      + Version = "2012-10-17"
    }
  )
  + policy_id = (known after apply)
  + tags_all  = (known after apply)
}

# module.bedrock_kb.aws_iam_policy.rds_data_api_policy will be created
+ resource "aws_iam_policy" "rds_data_api_policy" {
  + arn                = (known after apply)
  + attachment_count   = (known after apply)
  + description        = "IAM policy for RDS Data API access"
  + id                 = (known after apply)
  + name               = "my-bedrock-kb-rds-data-api-policy"
  + name_prefix        = (known after apply)
  + path               = "/"
  + policy             = jsonencode(
    {
      + Statement = [
        + {
          + Action = [
            + "rds-data:ExecuteStatement",
            + "rds-data:BatchExecuteStatement",
            + "rds-data:BeginTransaction",
          ]
        }
      ]
    }
  )
  + policy_id = (known after apply)
  + tags_all  = (known after apply)
}
```

```

        + "rds-data:CommitTransaction",
        + "rds-data:RollbackTransaction",
    ]
    + Effect = "Allow"
    + Resource = "arn:aws:rds:us-west-2:752227508740:cluster:my-aurora-serverless"
  },
  + {
    + Action = [
      + "secretsmanager:GetSecretValue",
    ]
    + Effect = "Allow"
    + Resource = "arn:aws:secretsmanager:us-west-2:752227508740:secret:my-aurora-serverless-BQ6kIZ"
  },
  + Version = "2012-10-17"
}
)
+ policy_id = (known after apply)
+ tags_all = (known after apply)
}

```

module.bedrock_kb.aws_iam_role.bedrock_kb_role will be created

```

+ resource "aws_iam_role" "bedrock_kb_role" {
  + arn = (known after apply)
  + assume_role_policy = jsonencode(
    {
      + Statement = [
        + {
          + Action = "sts:AssumeRole"
          + Effect = "Allow"
          + Principal = {
            + Service = "bedrock.amazonaws.com"
          }
        },
      ]
      + Version = "2012-10-17"
    }
  )
  + create_date = (known after apply)
  + force_detach_policies = false
  + id = (known after apply)
  + managed_policy_arns = (known after apply)
  + max_session_duration = 3600
  + name = "my-bedrock-kb-role"
  + name_prefix = (known after apply)
  + path = "/"
  + tags_all = (known after apply)
  + unique_id = (known after apply)

  + inline_policy (known after apply)
}

```

module.bedrock_kb.aws_iam_role_policy_attachment.bedrock_kb_policy will be created

```

+ resource "aws_iam_role_policy_attachment" "bedrock_kb_policy" {
  + id = (known after apply)
  + policy_arn = "arn:aws:iam::aws:policy/AmazonBedrockFullAccess"
  + role = "my-bedrock-kb-role"
}

```

module.bedrock_kb.aws_iam_role_policy_attachment.rds_data_api_policy_attachment will be created

```

+ resource "aws_iam_role_policy_attachment" "rds_data_api_policy_attachment" {
  + id = (known after apply)
  + policy_arn = (known after apply)
  + role = "my-bedrock-kb-role"
}

```

module.bedrock_kb.aws_iam_role_policy_attachment.rds_policy_attachment will be created

```

+ resource "aws_iam_role_policy_attachment" "rds_policy_attachment" {
  + id = (known after apply)
  + policy_arn = (known after apply)
  + role = "my-bedrock-kb-role"
}

```

module.bedrock_kb.time_sleep.wait_10_seconds will be created

```

+ resource "time_sleep" "wait_10_seconds" {
  + create_duration = "10s"
  + id = (known after apply)
}

```

Plan: 9 to add, 0 to change, 0 to destroy.

Changes to Outputs:

```

+ bedrock_knowledge_base_arn = (known after apply)
+ bedrock_knowledge_base_id = (known after apply)

```

Do you want to perform these actions?

Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes

```

module.bedrock_kb.aws_iam_policy.bedrock_kb_rds_access: Creating...
module.bedrock_kb.aws_iam_policy.rds_data_api_policy: Creating...
module.bedrock_kb.aws_iam_role.bedrock_kb_role: Creating...
module.bedrock_kb.aws_iam_policy.bedrock_kb_rds_access: Creation complete after 1s [id=arn:aws:iam:752227508740:policy/bedrock_kb_rds_access]
module.bedrock_kb.aws_iam_policy.rds_data_api_policy: Creation complete after 1s [id=arn:aws:iam:752227508740:policy/my-bedrock-kb-rds-data-api-policy]
module.bedrock_kb.aws_iam_role.bedrock_kb_role: Creation complete after 1s [id=my-bedrock-kb-role]
module.bedrock_kb.aws_iam_role_policy_attachment.rds_policy_attachment: Creating...
module.bedrock_kb.aws_iam_role_policy_attachment.rds_data_api_policy_attachment: Creating...
module.bedrock_kb.aws_iam_role_policy_attachment.bedrock_kb_policy: Creating...
module.bedrock_kb.aws_iam_role_policy_attachment.bedrock_kb_policy: Creation complete after 0s [id=my-bedrock-kb-role-20241228212008304300000002]
module.bedrock_kb.aws_iam_role_policy_attachment.rds_policy_attachment: Creation complete after 0s [id=my-bedrock-kb-role-20241228212008304400000003]
module.bedrock_kb.aws_iam_role_policy_attachment.rds_data_api_policy_attachment: Creation complete after 0s [id=my-bedrock-kb-role-20241228212008304300000001]
module.bedrock_kb.time_sleep.wait_10_seconds: Creating...
module.bedrock_kb.time_sleep.wait_10_seconds: Still creating... [10s elapsed]
module.bedrock_kb.time_sleep.wait_10_seconds: Creation complete after 10s [id=2024-12-28T21:20:18Z]
module.bedrock_kb.aws_bedrockagent_knowledge_base.main: Creating...
module.bedrock_kb.aws_bedrockagent_knowledge_base.main: Creation complete after 4s [id=MX5URK2VPB]
module.bedrock_kb.aws_bedrockagent_data_source.s3_bedrock_bucket: Creating...
module.bedrock_kb.aws_bedrockagent_data_source.s3_bedrock_bucket: Creation complete after 0s [id=KL1MEL7A7U,MX5URK2VPB]

```

Apply complete! Resources: 9 added, 0 changed, 0 destroyed.

Outputs:

```

bedrock_knowledge_base_arn = "arn:aws:bedrock:us-west-2:752227508740:knowledge-base/MX5URK2VPB"
bedrock_knowledge_base_id = "MX5URK2VPB"

```