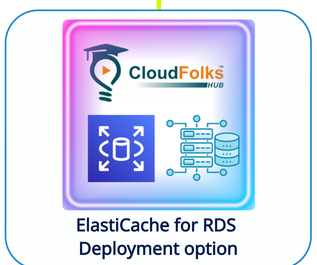

ElastiCache for RDS Deployment option

1. Introduction
   1. After selecting the cluster type (Redis or Memcached) in Amazon ElastiCache for RDS, the next option you'll see is the Deployment Mode.
   2. This step helps you decide how the cache will be set up to manage data and ensure availability
   3. There are two options
      1. Serverless Cache
      2. Design Your Own Cache
2. Serverless Cache
   1. Introduction
      1. This is a fully managed option where AWS automatically handles everything for you
      2. This option is supported by both Redis and Memcached
   2. Key Features
      1. Automatic Scaling — Resources scale up or down based on your application's needs
      2. No Configuration Needed — You don't need to manually set up nodes, shards, or replicas
      3. Pay-as-You-Go — You only pay for the cache resources you use
   3. Best For
      1. Applications with unpredictable or fluctuating traffic
      2. Quick and Hassle-Free Deployments:
      3. Scalable Applications Without Management Overhead:
3. Design Your Own Cache
   1. Introduction
      1. The Design Your Own Cache option provides full control over your cache setup.
      2. This option allows you to customize the number of nodes, shards, replicas, and other advanced settings.
      3. Additionally, you can select between
         1. Cluster Mode Enabled (Supported only by Redis)
         2. Cluster Mode Disabled (Supported by both Redis and Memcached)
   2. Key Features
      1. Advanced Control and Customization
         1. Gain full flexibility to design your cache infrastructure to suit your specific workload requirements.
         2. You can tailor performance, cost, and scalability by choosing the node types, configuring replicas, and defining the overall architecture
      2. Cost Optimization — Design an architecture that balances performance and cost, such as minimizing replicas for smaller workloads or leveraging advanced node types for higher efficiency in larger deployments
      3. Controlled Scalability
         1. While Serverless Cache automatically scales resources without user input, Design Your Own Cache allows you to define and control the scalability of your infrastructure.
         2. You can decide the number of nodes, shards, and replicas to match your application's specific performance and capacity requirements
   3. Best For
      1. Applications with Predictable Workloads
      2. Use Cases Requiring Custom Infrastructure
      3. Cost-Sensitive Deployments