1 Automated backups enable RDS to take a daily, incremental snapshot of your database.
2 AWS manages these snapshots for you, ensuring they are protected and available for recovery
1 Introduction 3 The first backup is a full snapshot, and subsequent backups are incremental, meaning they only store changes made since the previous backup.
Automated Backups 4 This approach saves storage space and reduces backup time
1 Automated backups are stored in Amazon S3 within the same AWS Region as your RDS instance.
2 Location and Storage 2 AWS manages these backups transparently, and they aren't directly accessible to users
3 Instead, they are controlled through the RDS console, CLI, or API for ease of use and security
1 The backup retention period determines how long your backups are stored.
2 You can set this retention period from 1 to 35 days (the default is usually 7 days)
Backup Retention Period 3 If set to 0 days, automated backups are disabled
4 AWS will automatically delete any backups older than the retention period, keeping only the most recent data available for restoration
1 Automated backups are scheduled during a specified daily backup window.
2 You can define this window, or AWS will automatically assign one.
Scheduled Backup Window 3 During this window, RDS takes a full snapshot if needed and performs any incremental backups
4 The backup window is especially useful for minimizing performance impacts, as it lets you specify a low-traffic time when the database may experience minimal use
1 By default, automated backups remain in the original AWS Region
2 You can replicate automated backups to another AWS Region to help with disaster recovery.
RDS Backup Backup replication 3 Snapshots and transaction logs are replicated immediately after they are available in the source
4 Automated backup replication is not supported for Multi-AZ DB clusters
5 There are no additional data transfer charges for backups stored within the same AWS Region, but charges apply for snapshot copies across regions
1 RDS provides backup storage up to the size of the DB instance's storage for free.
5 Costs Associated with Automated Backups 2 If your DB instance has 200 GB of storage, you get 200 GB of backup storage for free
Additional storage beyond this free allocation incurs a charge, which includes both automated backups and manual snapshots
1 You can quickly restore your database to the latest backup available within your retention period.
1 Restoring to Latest Backup 2 This recovery method is fast and typically suitable for instances where a recent copy of the database is needed
Restoration Options 1 With automated backups enabled, RDS allows you to restore your database to any specific point in time within the backup retention period
2 Point-in-Time Recovery (PITR) 2 PITR is useful for recovery from unexpected data changes or corruption.
For example, if accidental deletions or modifications occur, you can restore the database to just before the event happened
1 While automated backups have a limited retention period, you can create manual snapshots anytime. 7 Manual Snapshots for Longer Retention
These snapshots are user-initiated and are retained until explicitly deleted, making them useful for long-term backups or before significant changes to the database.