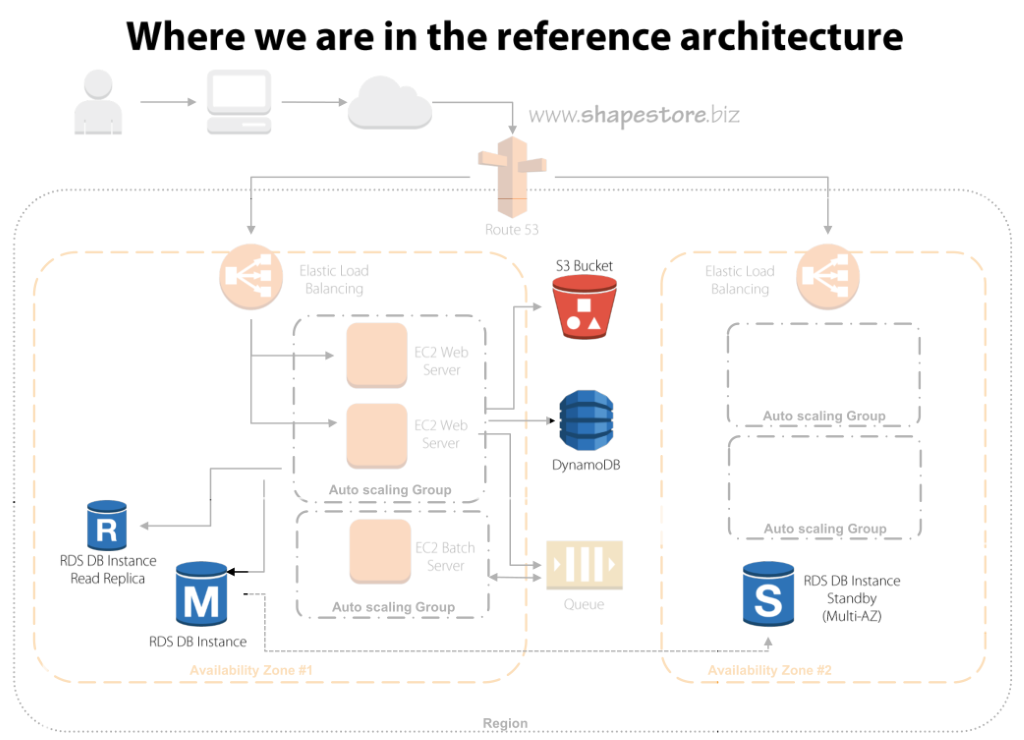
Lab 2: Using RDS with ASP.NET Applications



1. Launch a new MySQL RDS instance (NB: make sure it is in the region you want!)

* Micro instance
* Multi-AZ deployment-Yes
* Storage type = general purpose (ssd)
* 5GB storage
* DB Instance Identifier = DinoStoreInstance
* Master username = admin
* Master password = Walaginsondy1
* Security group = create new security group (NB: A security group allowing your current IP address to connect to your instance will be created. This will make it easier for you to connect to the instance and configure it.)
* Database name = dinostoredb
* Enabled automatic backups by selecting a period of days (NB: 0 = disabled)

1. In your dinostoredb instance detail, copy the endpoint connection string.

1. Go to RDS instance security group

* Set the inbound rule to MySQL and your IP address = check with ‘what is my ip’ (may be a problem behind the firewall)

1. In MySQL workbench add a new connection to connect with your new cloud database.

* Connection name = AWS DinoStore
* Hostname = the connection string from above (remove the ‘:3306’ from the end of the string)
* Enter the username Admin that you created
* Store the password you used in the vault
* Test the connect and OK

1. Connect to the AWS RDS in MySQL workbench

* Check out what is in your cloud db.
* Using the same SQL script from Lab #1, create the tables in the cloud
* Tip-> The script should be edited and the first two lines should be uncommented
* This also creates a new schema in the cloud = dinostoremembershipdb (NB: this table is populated automagically later.)
* Add products to the products table by uploading the CSV file with your correct cloud ImageReference field information.

1. Create a read-replica of your dinostoredb in the RDS dashboard instances screen, by selecting the dinostoredb and right click to get an action menu.

* DB instance identifier = dinostoreinstancereplica
* Keep DB instance class the same as the main db (=micro)
* Pick a different availability zone from the main db
* Complete and wait for the replica to finish
* Patience padawon…

1. In MySQL workbench, create a new connection to the replica

* Connection name = AWS DinoStore Replica
* Hostname = link from replica RDS
* Enter admin username and password
* Test connection, and OK.

1. Connect to the replica database and have a look around. It should be the same as the main db. Close the connection tab.

1. In Visual Studio:

* In the Web.config code make changes to use the new cloud database by changing the connection strings:
* Towards the bottom replace “127.0.0.1” with your RDS instance link from AWS for both the ‘DefaultConnection’ and ‘StoreSqlDb’.
* Add another line copied from above with name=”StoreSqlDbReplica” and the appropriate link to the cloud replica database.
* Make sure your code has the correct user ID and password for your cloud RDS instances!
* In the Default.aspx.cs code, under the ‘//connectstring for MySQL’ comment, change the ConfigurationManager.ConnectionStrings from ‘StoreSqlDb’ to StoreSqlDbReplica’. NB: this pulls the images from the replica database (reads only) which takes the load off the primary database, and leaves a few more cycles for writes.

1. Test the new databases and code changes by building the project, and opening it in a browser.

1. Check out the cloud membership database in MySQL workbench. There are no tables yet. So…

1. With the browser still open from above, create an account and add a user with all the details. NB: this will create the cloud membership database table, and create one for the custom table. You should now see ‘Logout’ available as it recognises that you are logged in.

1. In MySQL workbench, check out your cloud dinostoremembershipdb tables. Several should now exist.

* The my\_aspnet\_users table should have your new user in it.

1. Now make sure you have your working Dino Store website open in your browser.
2. Right click on your primary cloud RDS server and reboot it with failover. While it is booting:

* Check out your website by refreshing the page. Is it still OK? Why?
* Try logging in using the credentials you created above. Can you log in? Why?

1. Make sure everything is working after the reboot.