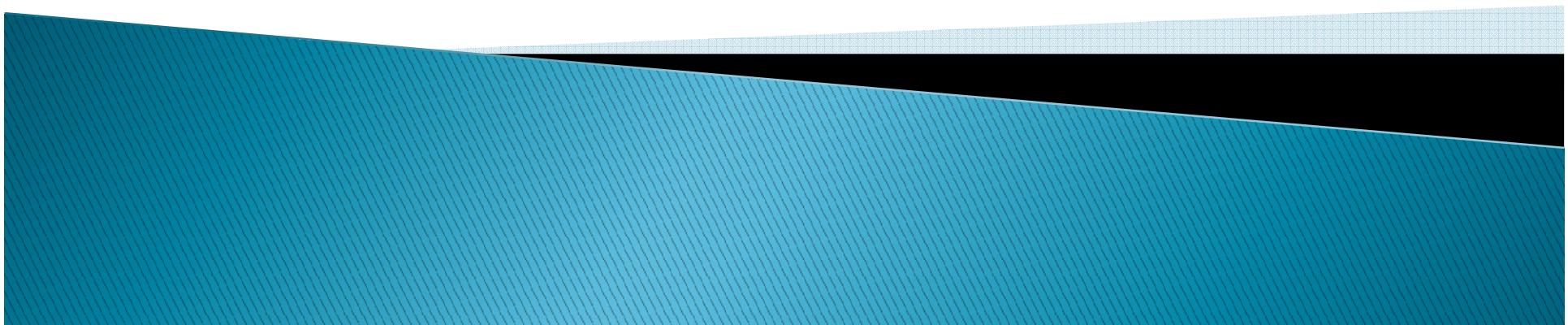
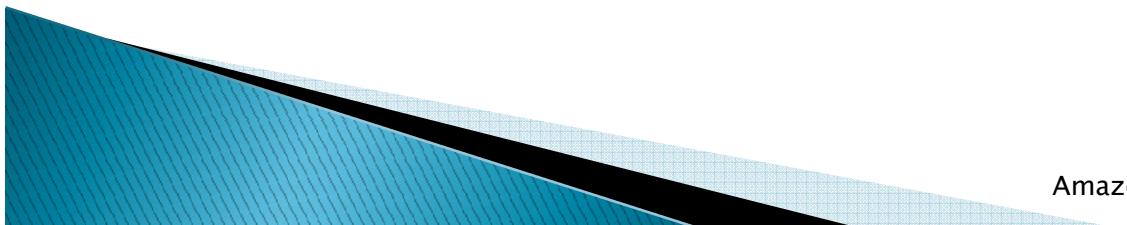


Amazon Relational Database Service



Ablauf

- ▶ Was ist Amazon RDS?
- ▶ Datenbank Typen
- ▶ DB Instanzen
- ▶ Features
- ▶ Kosten
- ▶ Live Demo
- ▶ Fazit

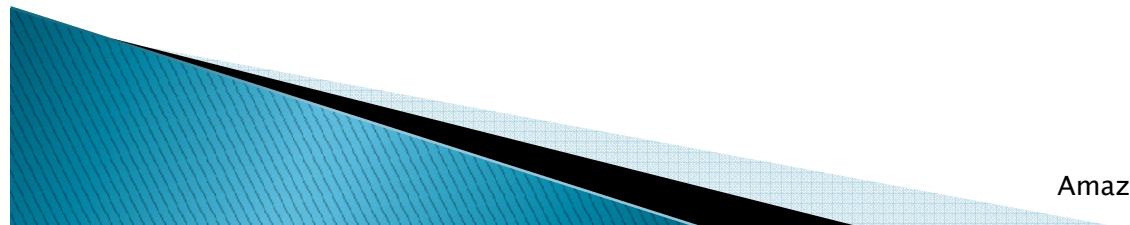


Was ist Amazon RDS?

- ▶ Web-Service von Amazon
- ▶ Erlaubt mieten von Datenbanken
- ▶ Einrichtung, Betrieb und Skalierung übernimmt Anbieter

Datenbank Typen

- ▶ MySQL
- ▶ Oracle
- ▶ SQL Server



DB Instanzen

Designation	Description
db.t1.micro	Micro DB Instance: 613 MB memory, up to 1 ECU, 64-bit platform, Low I/O Capacity. SQL Server only.
db.m1.small	Small DB Instance: 1.7 GB memory, 1 ECU (1 virtual core with 1 ECU), 64-bit platform, Moderate I/O Capacity
db.m1.large	Large DB Instance: 7.5 GB memory, 4 ECUs (2 virtual cores with 2 ECUs each), 64-bit platform, High I/O Capacity
db.m1.xlarge	Extra Large DB Instance: 15 GB of memory, 8 ECUs (4 virtual cores with 2 ECUs each), 64-bit platform, High I/O Capacity. MySQL only.
db.m2.xlarge	High-Memory Extra Large Instance: 17.1 GB memory, 6.5 ECU (2 virtual cores with 3.25 ECUs each), 64-bit platform, High I/O Capacity
db.m2.2xlarge	High-Memory Double Extra Large DB Instance: 34 GB of memory, 13 ECUs (4 virtual cores with 3.25 ECUs each), 64-bit platform, High I/O Capacity
db.m2.4xlarge	High-Memory Quadruple Extra Large DB Instance: 68 GB of memory, 26 ECUs (8 virtual cores with 3.25 ECUs each), 64-bit platform, High I/O Capacity

Features

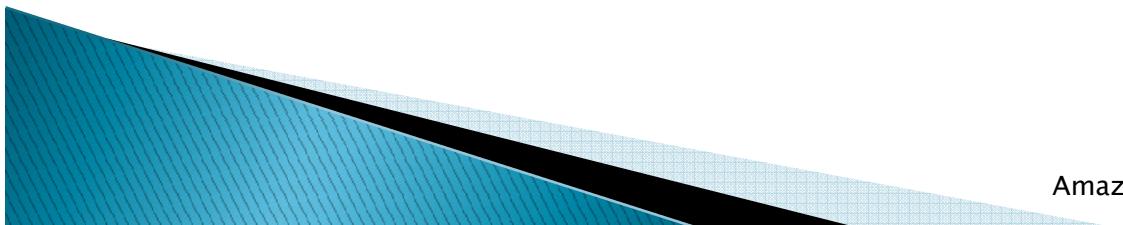
Automatisches Software–Patching

- ▶ Automatische Installation neuer Patches
- ▶ Alternativ kann Versionsmanagement für DB–Engines verwendet werden

Features

Backup und Restoration

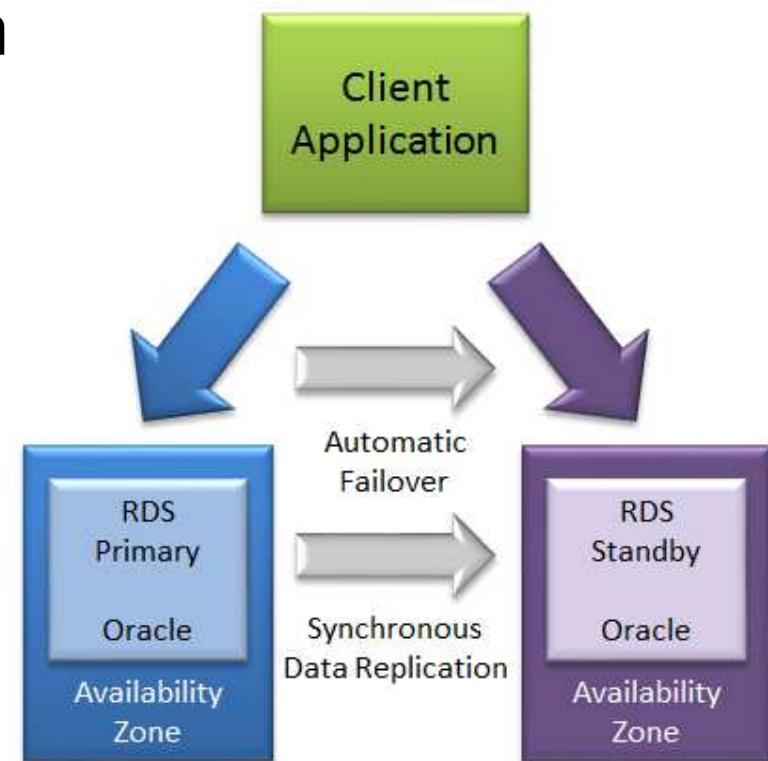
- ▶ Automatische Backups in vorgegebenen Zeitintervallen
- ▶ Aufbewahrung bis zu 35 Tage
- ▶ Wiederherstellbar ab 5 min durch Speichern der Transaktionslogs



Features

Replizierung - Multi-AZ

- ▶ Erstellt 2. Datenbank in anderer AZ
- ▶ Umlenkung bei Ausfall
- ▶ Verdoppelung der Kosten



Features

Replizierung – Read Replica

- ▶ Nur MySQL
- ▶ Nutzt integrierte Replikations–Technologie
- ▶ Datenbank–Kopie mit asynchronem Schreiben
- ▶ Kombinierbar mit Multi–AZ

Features

Amazon Virtual Private Cloud

- ▶ Ermöglicht virtuelles Netzwerk innerhalb der Amazon Cloud
- ▶ Erlaubt virtuelle Netzwerktopologien mit anderen Amazon Diensten

Features

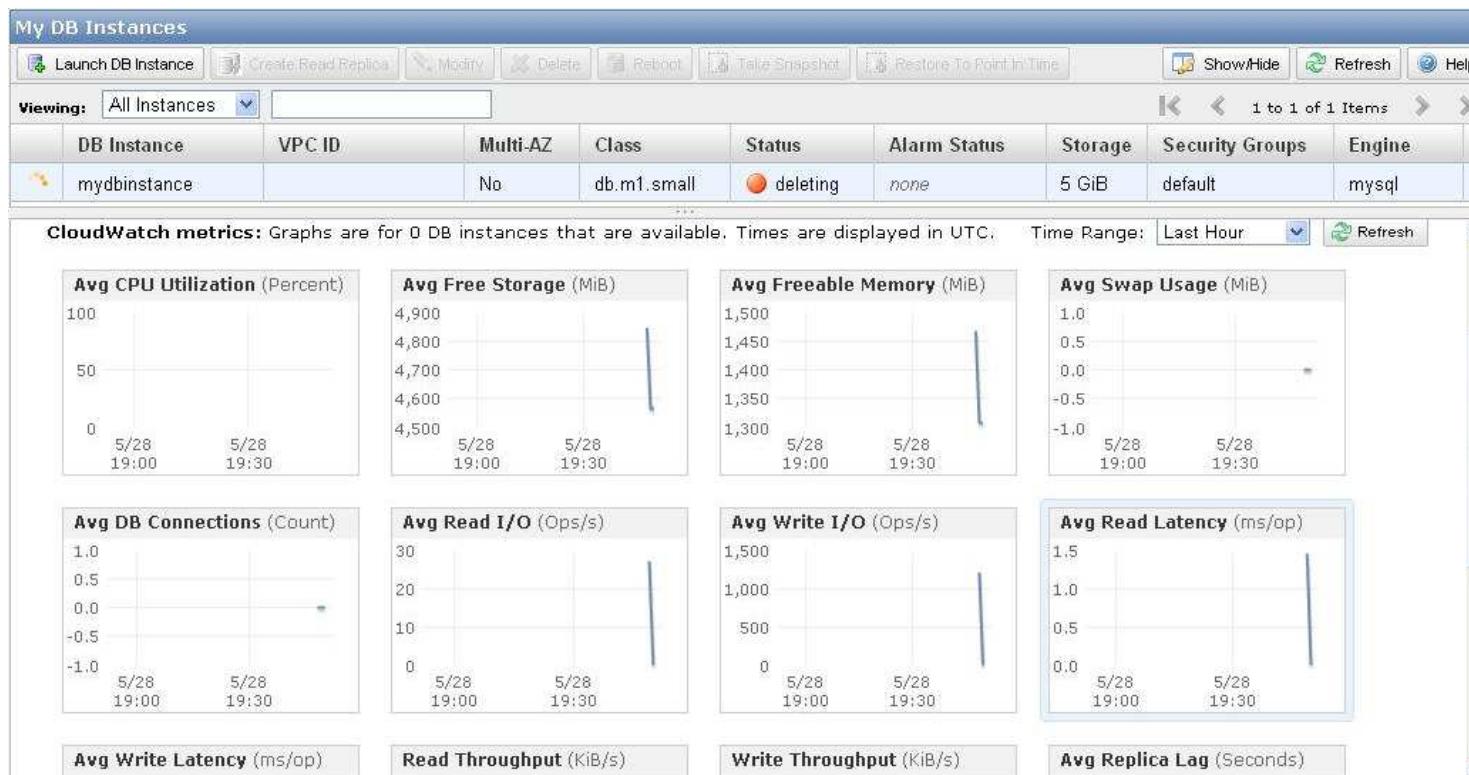
Amazon RDS API

- ▶ API zur Steuerung des Dienstes
- ▶ Für:
 - Web-Services
 - HTTP-Querry-based Requests
 - PHP
 - Java
 - Ruby
 - Python
 - .NET

Features

DB Instance Monitoring

- ▶ Web-Anwendung für Verwaltung und Monitoring



Kosten

- ▶ Abhängig von Availability Zone, DB Type und DB Instanz
- ▶ Schwankungen bei MySQL Small DB Instance zwischen 0,105\$/h in Virginia zu 0,15\$/h in Irland
- ▶ Wahl zwischen On Demand und Reserved Instance

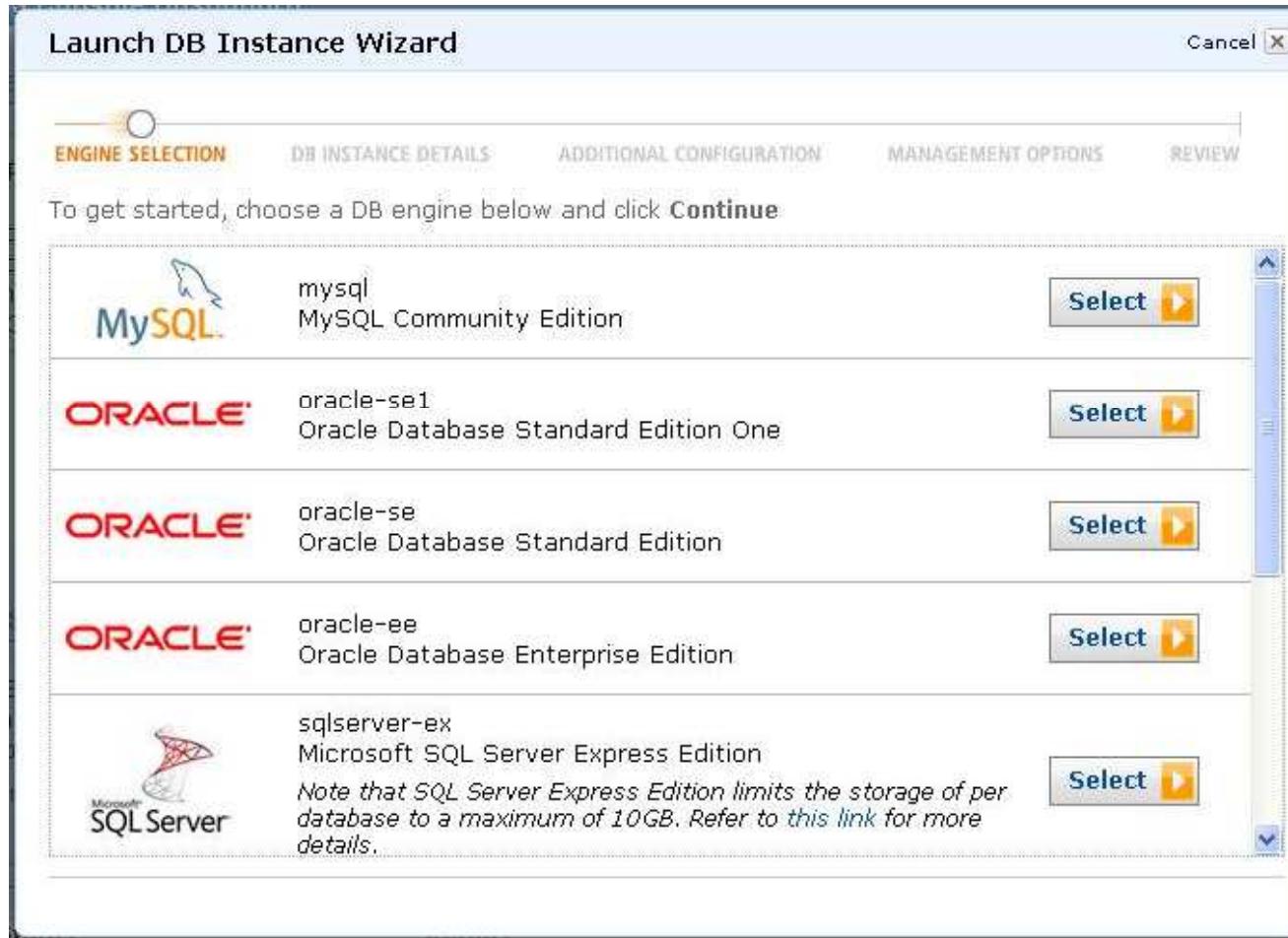
Kosten MySQL - Irland - On Demand

DB Instance-Klasse (On-Demand)	Preis pro Stunde
Small DB Instance	\$0,115
Large DB Instance	\$0,455
Extra Large DB Instance	\$0,920
High-Memory DB Instance-Klasse	
Extra Large DB Instance	\$0,655
Double Extra Large DB Instance	\$1,315
Quadruple Extra Large DB Instance	\$2,630

Kosten MySQL – Irland – Reserved Instance

	Laufzeit 1 Jahr		Laufzeit 3 Jahre	
	Vorabzahlung	Stundensatz	Vorabzahlung	Stundensatz
Small (Standard)	\$69	\$0,066 pro Stunde	\$106	\$0,052 pro Stunde
Large	\$276	\$0,264 pro Stunde	\$425	\$0,208 pro Stunde
Extra Large	\$552	\$0,530 pro Stunde	\$850	\$0,415 pro Stunde
Extra Large (High Memory)	\$353	\$0,386 pro Stunde	\$548	\$0,305 pro Stunde
Double Extra Large (High Memory)	\$706	\$0,773 pro Stunde	\$1.096	\$0,611 pro Stunde
Quadruple Extra Large (High Memory)	\$1.412	\$1,546 pro Stunde	\$2.192	\$1,221 pro Stunde

Aufsetzen einer DB



Aufsetzen einer DB

Launch DB Instance Wizard

Cancel

ENGINE SELECTION **DB INSTANCE DETAILS** ADDITIONAL CONFIGURATION MANAGEMENT OPTIONS REVIEW

To get started, choose a DB Instance engine and class below

Engine: mysql

License Model: General Public License

DB Engine Version: 5.5.8

DB Instance Class: db.m1.small

Multi-AZ Deployment: No

Auto Minor Version Upgrade: Yes No

Provide the details for your RDS Database Instance.

Allocated Storage:* 5 GB (Minimum: 5 GB, Maximum 1024 GB)
Higher allocated storage may improve IOPS performance.

DB Instance Identifier:* mydbinstance (e.g. mydbinstance)

Master User Name:* masteruser (e.g. awsuser)

Master User Password:* (e.g. mypassword)

[« Back](#) **Continue**

Aufsetzen einer DB

Launch DB Instance Wizard

Cancel 

ENGINE SELECTION DB INSTANCE DETAILS **ADDITIONAL CONFIGURATION** MANAGEMENT OPTIONS REVIEW

Provide the optional additional configuration details below.

Database Name: (e.g. mydb)

Note: if no database name is specified then no initial mysql database will be created on the DB Instance.

Database Port:

Choose a VPC: Only VPCs with a DB Subnet Group(s) are allowed

Availability Zone:

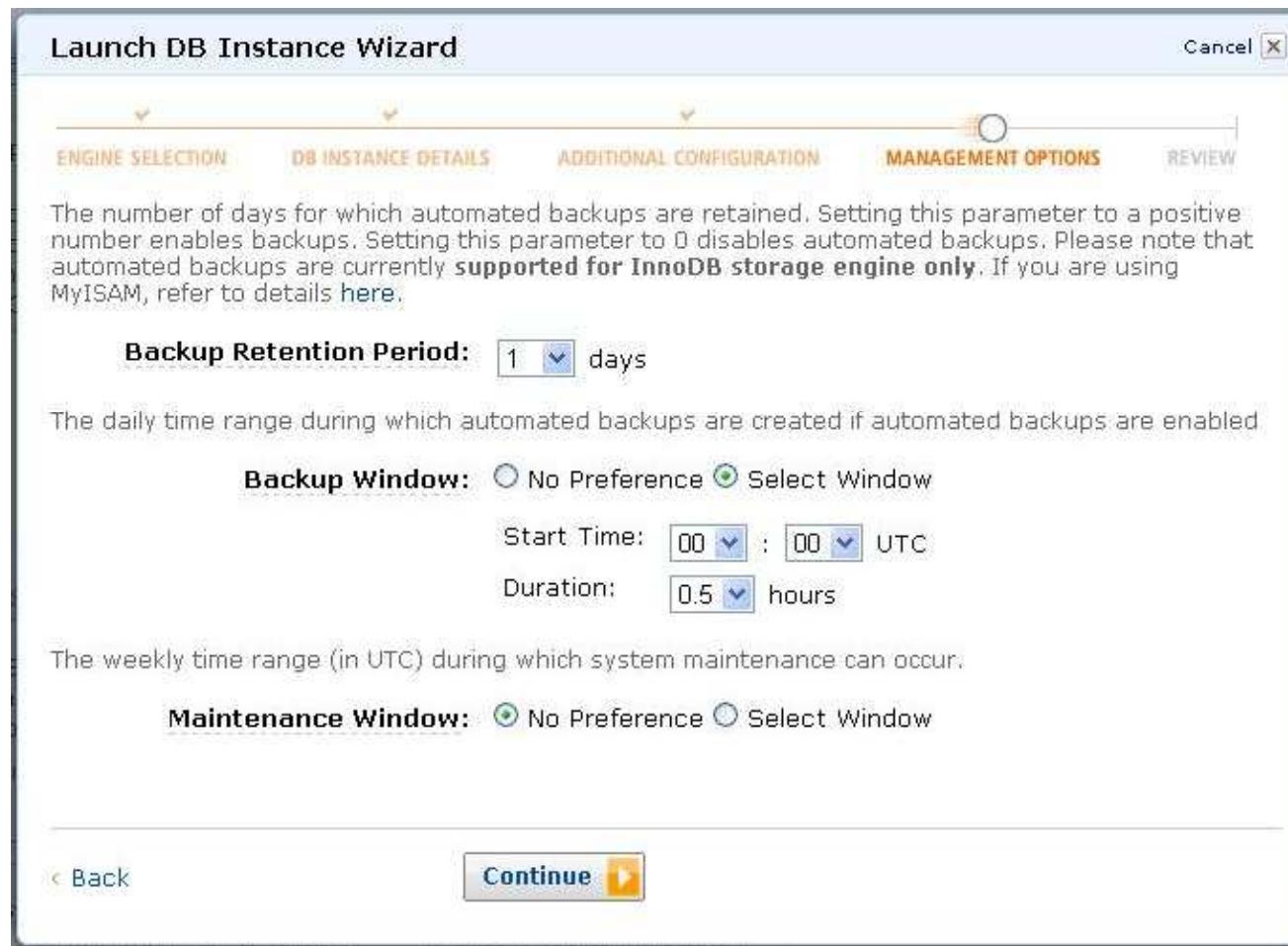
If you have custom DB Parameter Groups or DB Security Groups you would like to associate with this DB Instance, select them below, otherwise proceed with default settings.

DB Parameter Group: default.mysql5.5

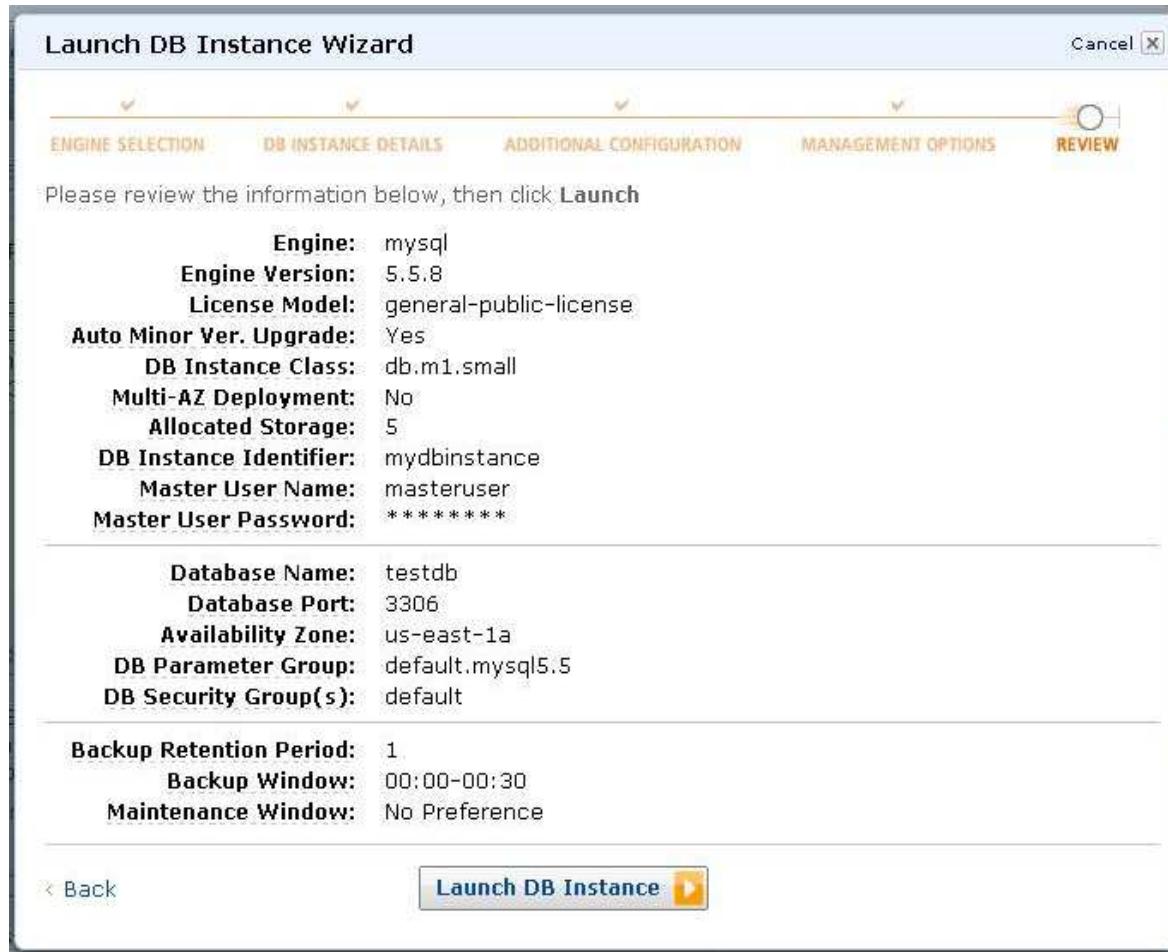
DB Security Groups: default

 Back Continue 

Aufsetzen einer DB



Aufsetzen einer DB



Fazit

- ▶ Gute Verwaltung
- ▶ Für Privatanwender zu teuer
- ▶ Möglicherweise für Mittelstand rentabel

Quellen

- ▶ <http://aws.amazon.com/de/rds/>
Amazon Relational Database Service (Amazon RDS)
- ▶ <http://docs.amazonaws.com/AmazonRDS/latest/UserGuide>Welcome.htm>
Amazon Relational Database Service User Guide
- ▶ <http://aws.amazon.com/de/rds/faqs/>
Amazon RDS – FAQ
- ▶ http://aws.amazon.com/articles/3586?_encoding=UTF8&jiveRedirect=1
Getting Started with the AWS SDK for Java
- ▶ <http://docs.amazonaws.com/AWSJavaSDK/latest/javadoc/index.html>
AWS SDK for Java API Reference – 1.3.10
- ▶ <http://docs.amazonaws.com/AmazonRDS/latest/GettingStartedGuide/SigUp.html>
Amazon Relational Database Service Getting Started Guide

**Danke für Ihre
Aufmerksamkeit**

