

Scaling {yourapphere} on AWS

how we scale pikperfect.com

Bastian Widmer | @dasrecht



~ > whoami

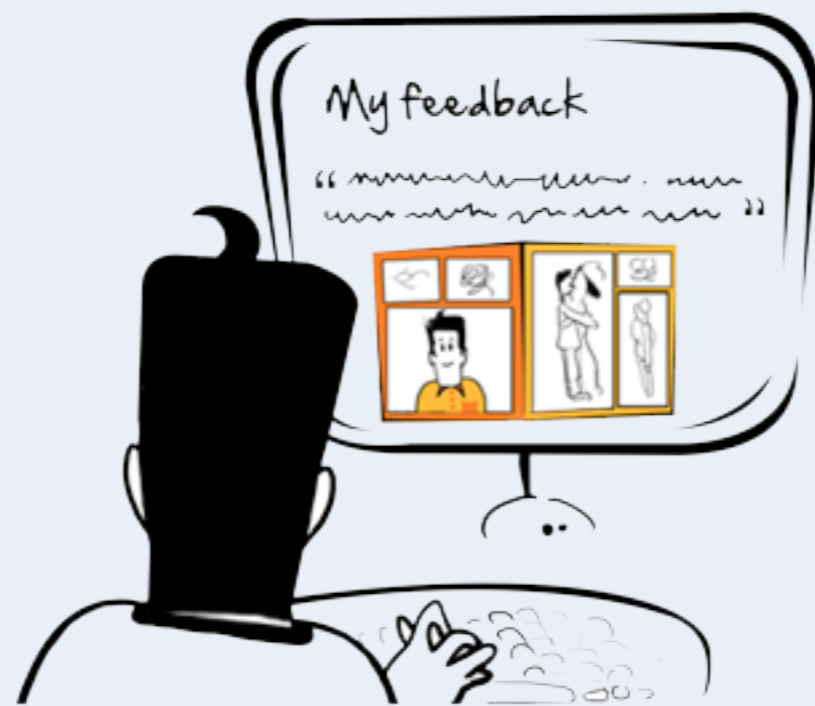
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- Working at Pikperfect as Head Tech

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Amazon Web Services?

Architect for Scalability 101

Fault Tolerance, Scalability and Costs

Fault Tolerance?

AWS Building Blocks

Inherently High Available and Fault Tolerant

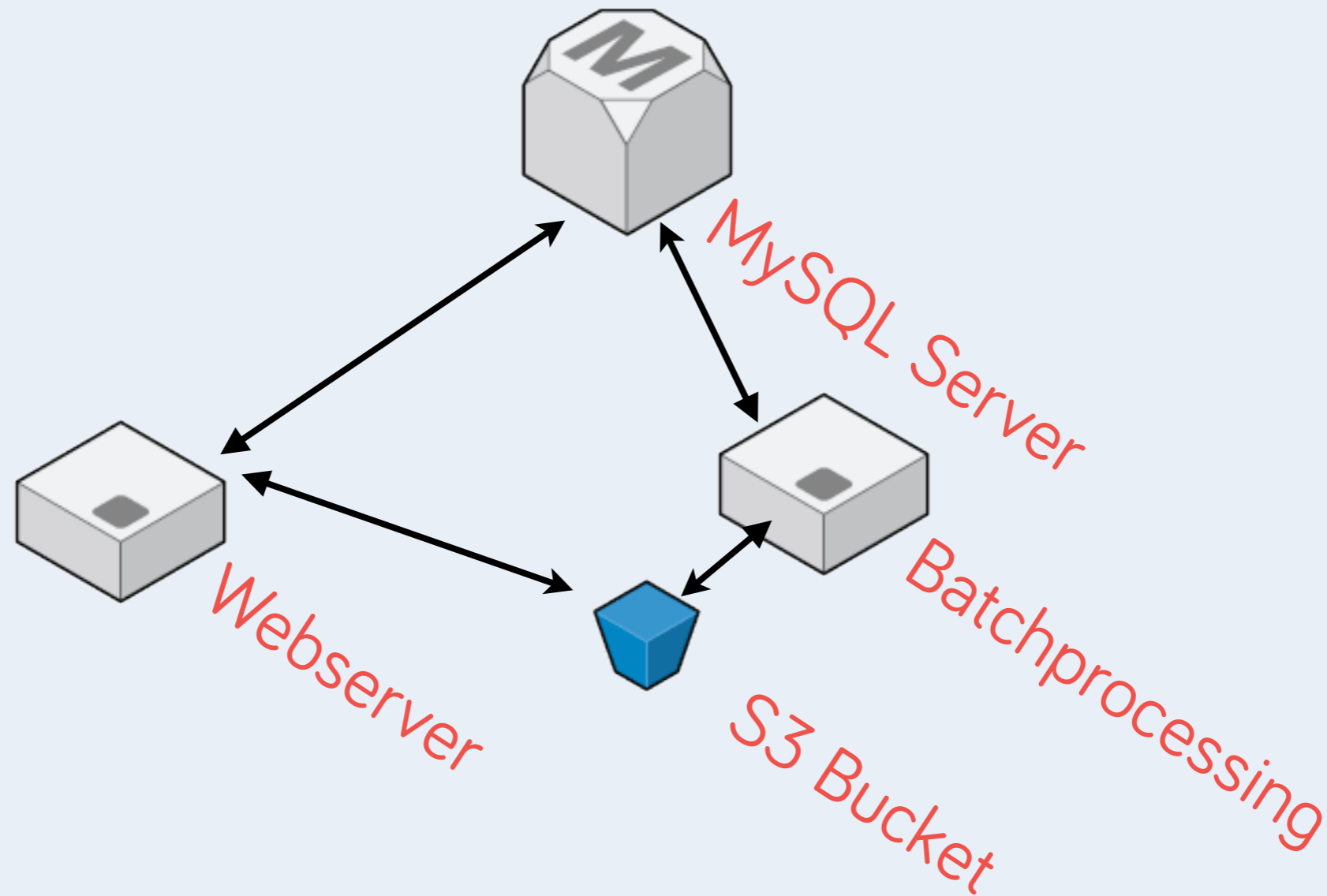
- Amazon S3
- Amazon DynamoDB
- Amazon CloudFront
- Amazon Route53
- Elastic Load Balancing
- Amazon SQS
- Amazon SNS

Fault Tolerant with the right Architecture

- Amazon EC2 / VPC
- Amazon EBS
- Amazon RDS

Let's start easy

The early days...



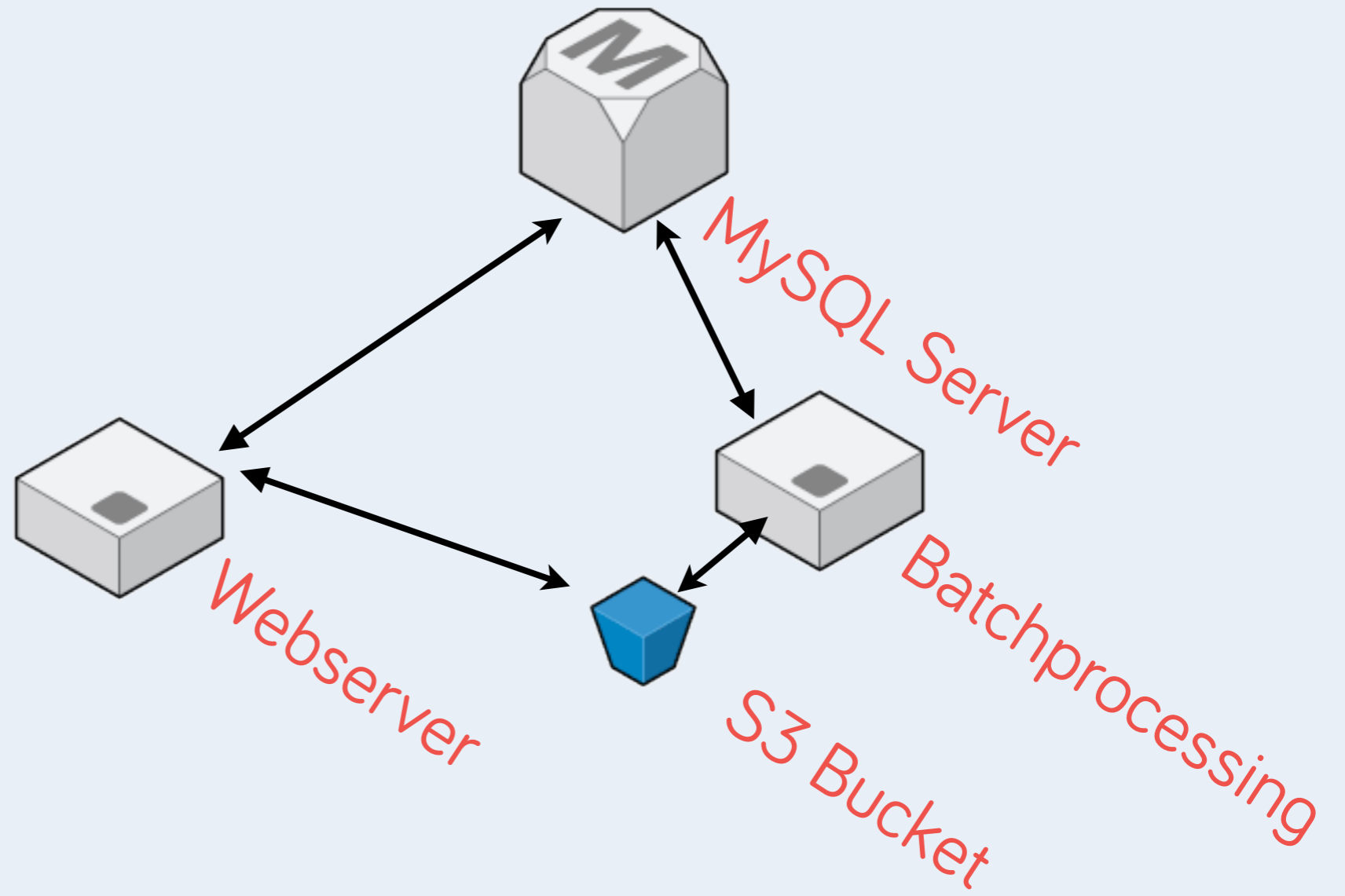
S3 - Uh fancy!

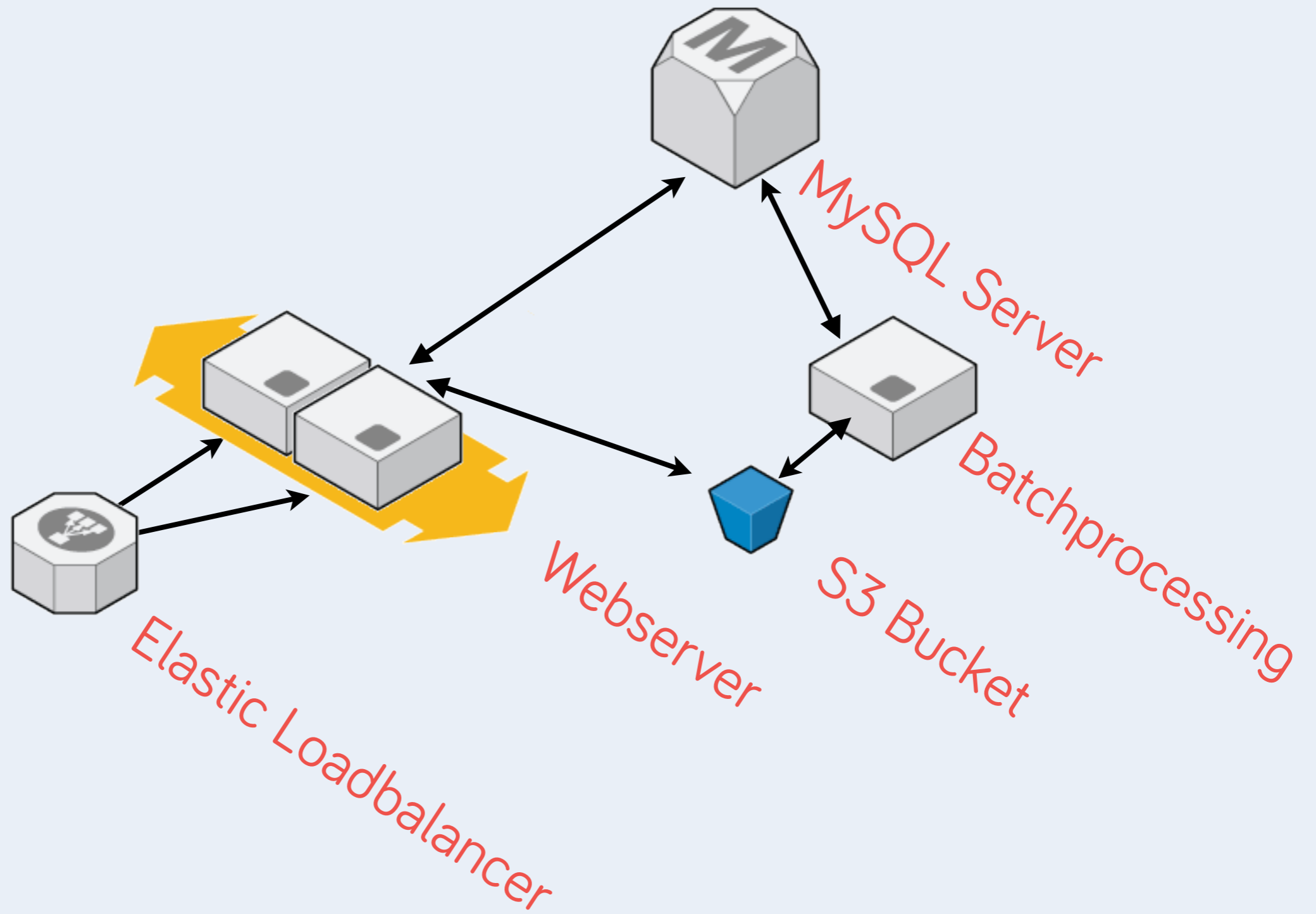
S3 Facts

- Fast Speeds
- Highly Durable
99.9999999999%
- Webserver
- Serving Static Content
- Reduced Redundancy
- Glacier
- Endless Storage
(Endless as in Endless as
your Credit Card Limit)
- Gets messy
- Needs some Thinking

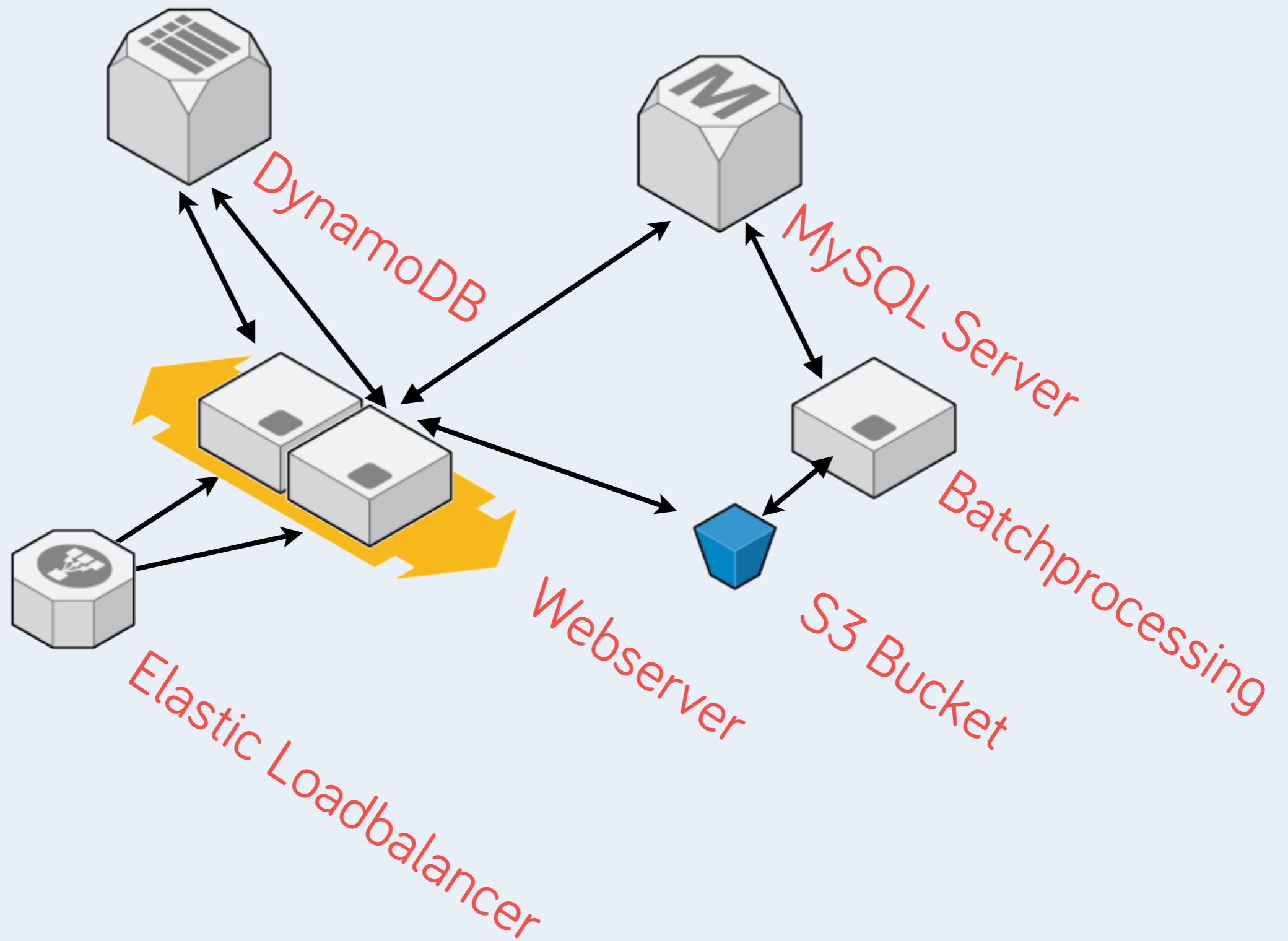
Look at your Webapplication.

... and now back to me





What about the
Sessions?



AWS PHP SDK

```
{  
  "require": {  
    "aws/aws-sdk-php": "2.*"  
  }  
}
```

```
require 'vendor/autoload.php';

use Aws\DynamoDb\DynamoDbClient;
use Aws\DynamoDb\Session\SessionHandler;

$dynamoDb = DynamoDbClient::factory(array(
    'key'      => '<aws access key>',
    'secret'   => '<aws secret key>',
    'region'   => '<region name>',
));

$sessionHandler = SessionHandler::factory(array(
    'dynamodb_client' => $dynamoDb,
    'table_name'      => 'sessions',
));
$sessionHandler->register();
```

Reference : <http://s.nrdy.ch/dynamodb-sessions>

```
$sessionHandler->createSessionsTable(5, 5);
```

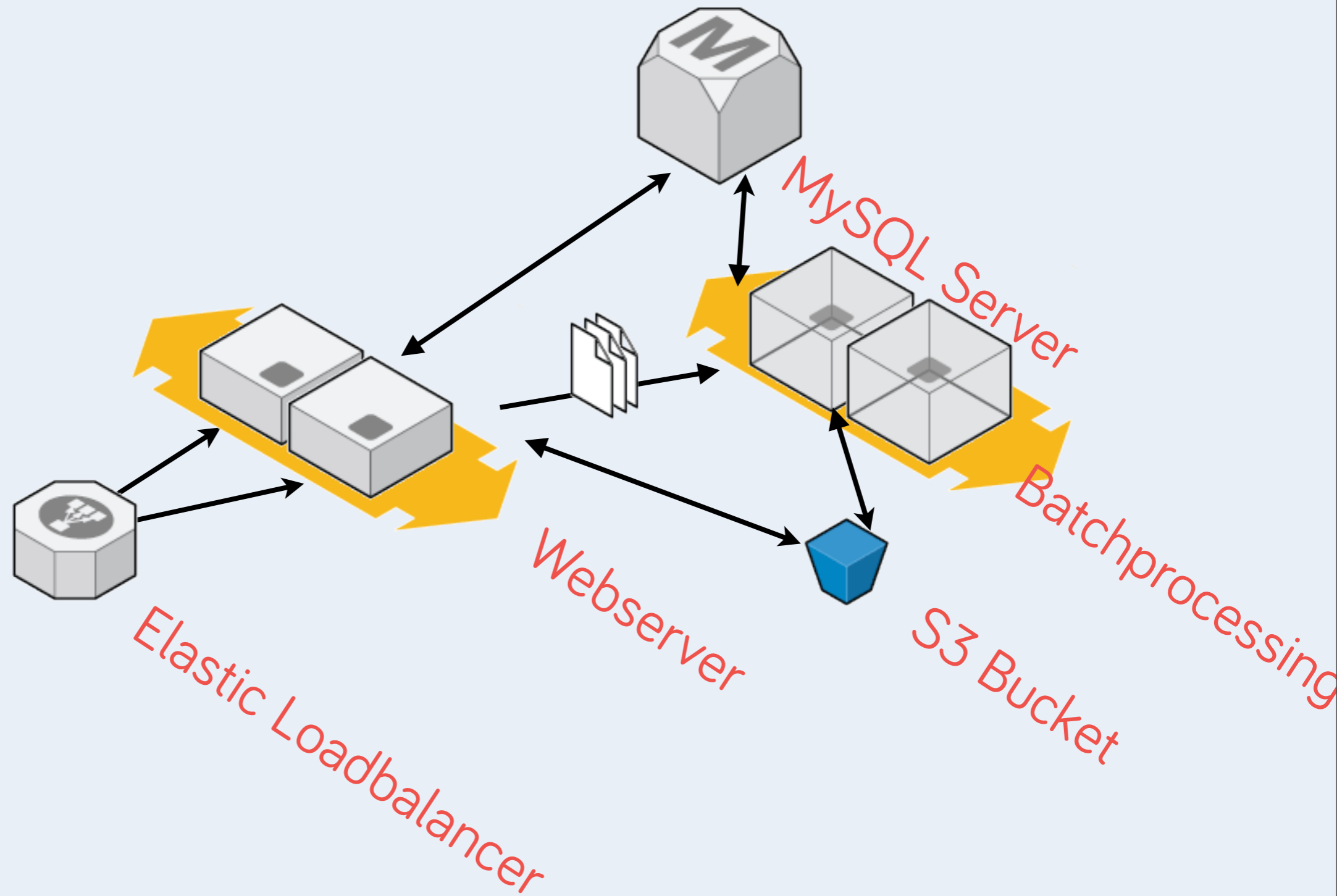
Reference : <http://s.nrdy.ch/dynamodb-sessions>

Decoupling

by using Messaging

Some Quotes

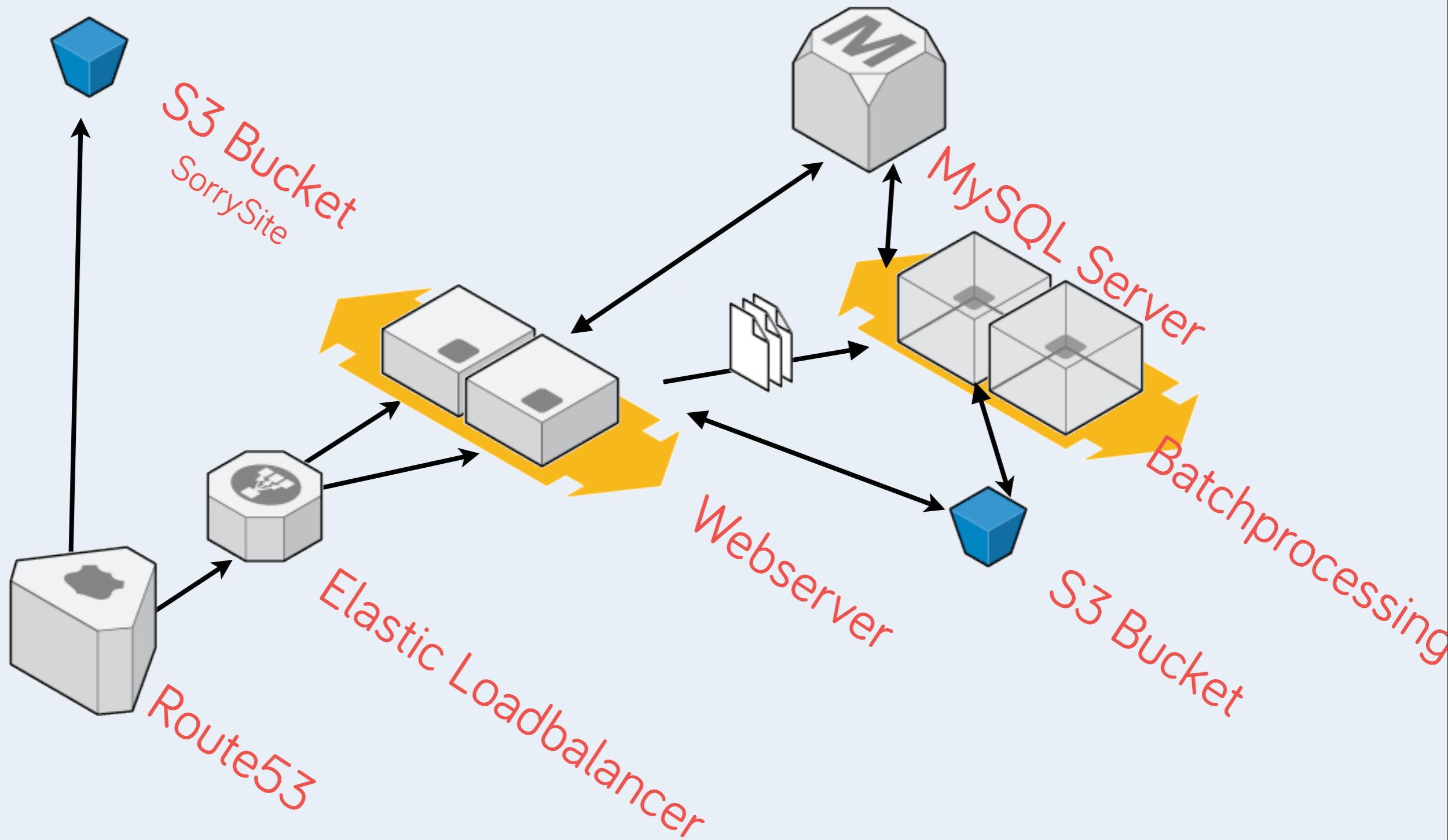
- „Messaging makes everything possible!“
 - Alvaro Videla - @old_sound - JSDays
- „Decoupled systems are easier to maintain, test and replace“
 - Emanuel Winblad - @ManneW - PHPDays



D N S

Route53

- Latency Based DNS Responses
- Cheap 0.50\$/month
- Backend Checks



Conclusions

- shutdown backend systems
- „own the base - rent the spike“
- make leverage of spot instances
- Decouple „do one thing and do it well“
- CLEAN UP!

Thanks for attending !



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Questions - Discussion

Slides can be found on
bastianwidmer.ch/slides