Seeding in a microservice architecture

Wer liefert was?

Darius Murawski

About Me

- Working at Wer liefert was in Hamburg

- Twitter: @dariusmurawski
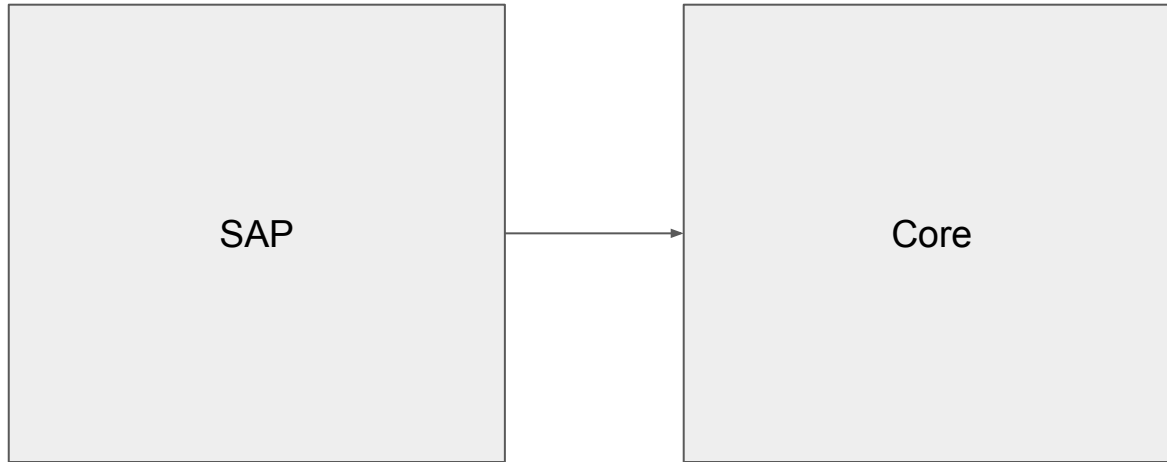
- Developer since 2014 at Wer liefert was?

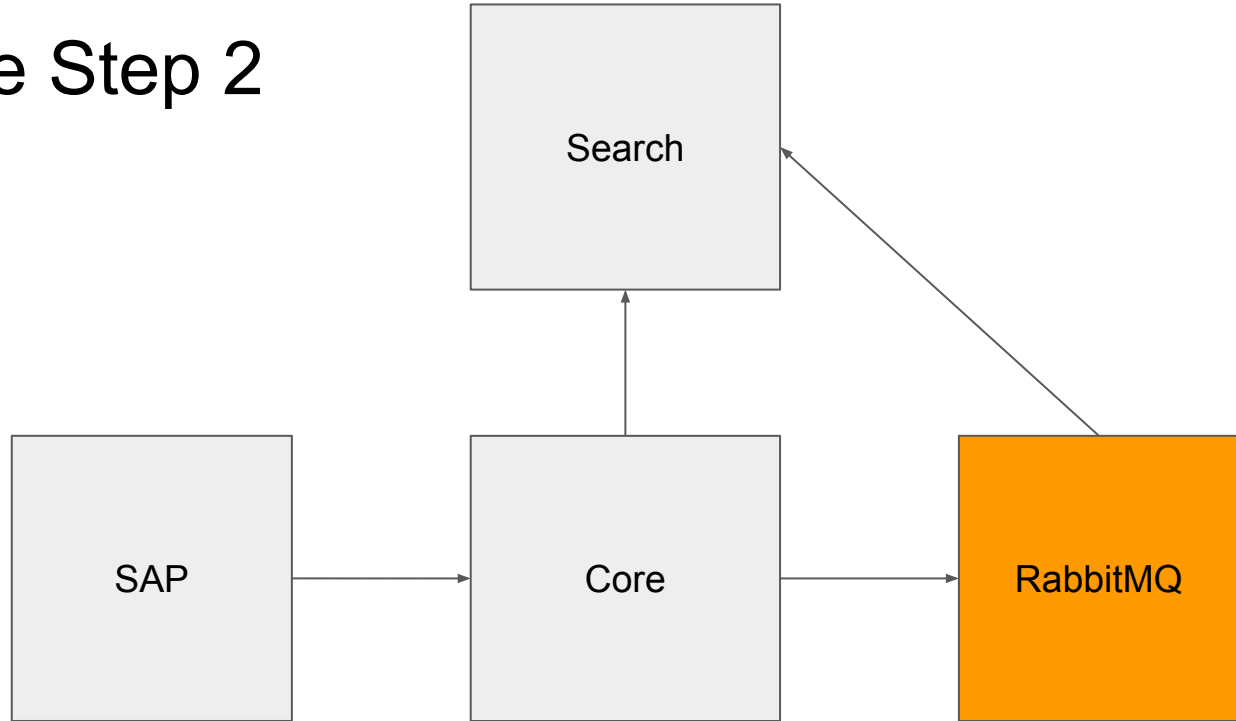# About wer liefert was

- B2B Search Engine
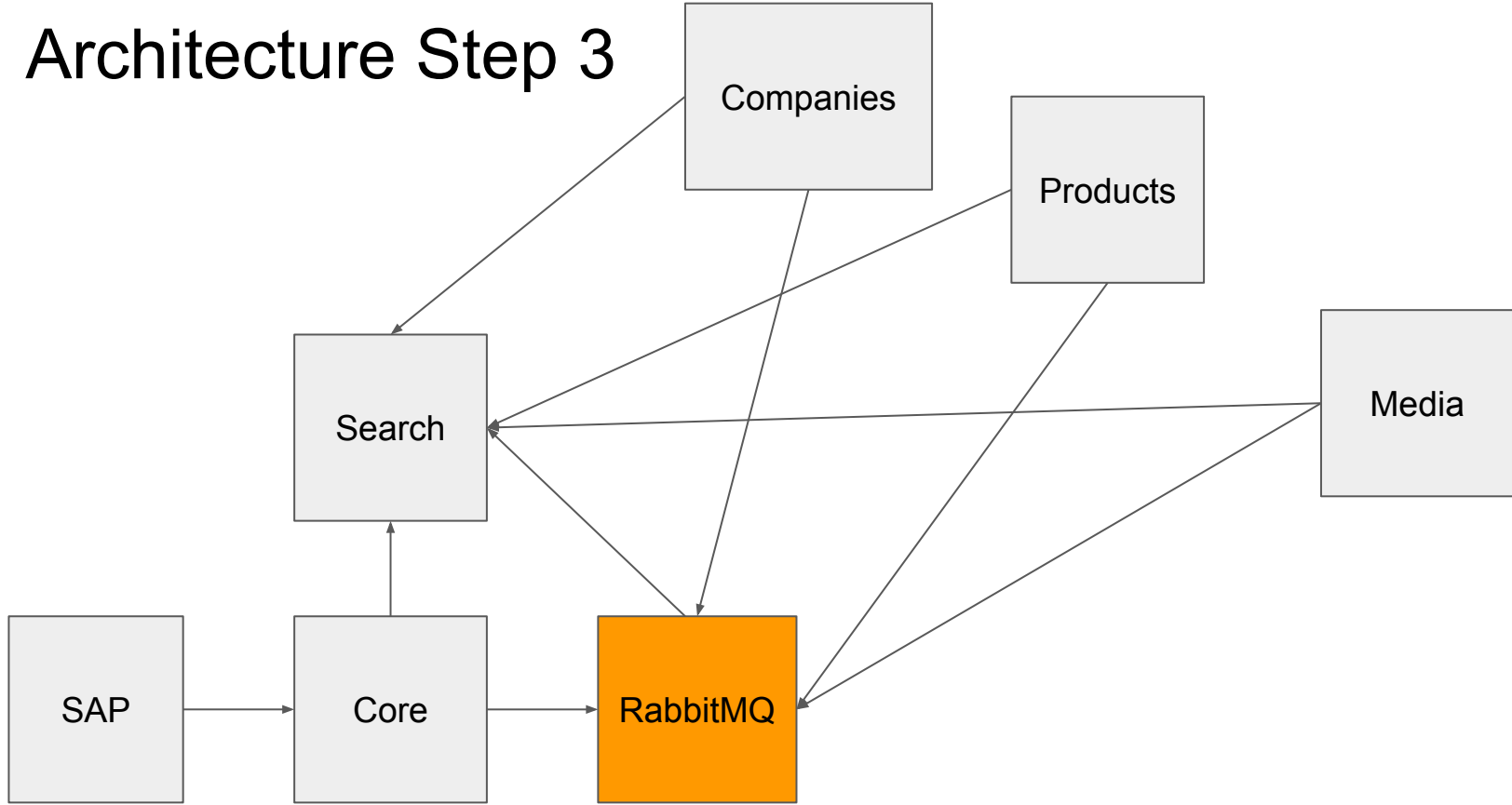
- Main office in Hamburg

Seeding

- rake db:seed

Architecture Step 1

Architecture Step 2

Architecture Step 3

Architecture Step 4

- Even more Apps
- Even harder to seed
- Data getting inconsistent in seeds
- Try a better approach!

Global Seeds Requirements

- Consistency over all apps
- Consistency over all models
- Easy extensible
- Run only the apps that you need
- No worker

Implementation

```ruby
module WlwSeeds
  class Model
    include Virtus.model

    def self.all
      raise 'abstract method, override on your model'
    end
  end
end
```

Implementation

```ruby
module WlwSeeds
  class Product < Model
    attribute :company_id, Integer
      def self.all

        [set_a]
      end
    end
  end
end
```

Implementation

```ruby
def self.set_a
    result = []
    COMPANY_IDS.each do |company_id|
     PRODUCT_COUNT_IN_ONE_CATEGORY.times do |index|
      id = company_id.to_i * 1_000 + (index + 1) # 1_011_001, 1_011_002, 1_011_003...
      result << new(MAX_PRODUCT.merge(id:                  id,
                             company_id:              company_id,
                             product_variant_cluster_id: id,
                             product_category_id:       ProductCategory.test_schrauben_klein.id,
                             short_description:        " Company: #{company_id}, Index: #{index}",
                             name:                 " Company: #{company_id}, Index: #{index}",
                             state:               'published'))
     end

end
```

Implementation in ProductCategory

```
def self.test_schrauben_klein
  new(
    id: 110_001,
    name: {
      'de' => 'Test Schrauben Klein',
      'en' => 'Test screws small'
    },
    full_name: {
      'de' => 'Test Schrauben Klein',
      'en' => 'Test screws small'
    },
    parent_id: test_schrauben_test.id,
    leaf: true,
    product_types: ['Kleine Schrauben']
  )
end
```

Done!

No

Global Seeds Downsides

- Update the gem always?
- How to handle different branches and state of seed?

Global Seeds Client

- Run the generation on CI with branches!
- Fetch it with a client!
- Map it in your app!
- Only use this client as dependency

With the Client

```ruby
WlwSeedsClient::Logger.out('get seed data.')
product_seed_data = WlwSeedsClient.all('product')

WlwSeedsClient::Logger.out('create products (.) and images (:):')
product_seed_data.each do |product|
  product_instance = Product.new(
    id: product.data[:id],
    company_id: product.data[:company_id],
    description: product.data[:description],
    minimum_order_volume: product.data[:minimum_order_volume],
    name: product.data[:name],
    payment_options: product.data[:payment_options]

...
```

Thank you

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