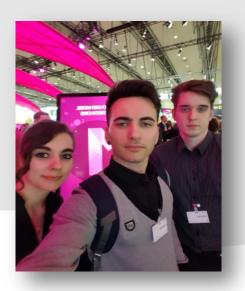


# "CLOUD KINDERGARTEN"



Apprentices starting with





# Agenda

- 1 Introduction
  - 1.1 Workflow
  - 1.2 Experiences
- 2 TelekomCLOUD + OpenStack
  - 2.1 Refcard Overview
  - 2.2 Our Deployment
- 3 OpenStack In Practice
  - 3.1 CI / CD in Git
  - 3.2 Video "Creating a tenant with OpenStack"
- 4 Q & A

# 1. Introduction

# 1. Introduction – Frank Klöker

#### Person

 Name Frank Klöker

 From Berlin

#### Education

• 27 years of experience in Operations

• 10 years Examiner on Chamber of Commerce and Industry

### Today

Applicationmanagement for Cloud hosting platform Vocation

personal point of contact for Apprentices

Deutsche Telekom AG Company

 Business Unit **Business Applications & Cloud Services** 



Introduction

FelekomCLOUD + **OpenStack** 

OpenStack In Practice

Q&A



-Cloud Kindergarten-ERLEBEN, WAS VERBINDET.

A. Perri, J. Schäfer, O. Klippel

# 1. Introduction – Oliver Klippel



#### Person

Name Oliver Klippel

• Age 23

From Berlin

#### Education

Abitur

• 1 semester computer science & 1 semester media computer science

Apprenticeship until 2018

### Today

Vocation IT specialist for systemintegration

Company Deutsche Telekom AG

• Business Unit Business Applications & Cloud Services



Introduction

TelekomCLOUD + OpenStack

OpenStack In Practice

Q & A



# 1. Introduction – Janika Schäfer



#### Person

Name Janika Schäfer

• Age 2

• From Berlin

#### Education

Apprenticeship to IT systems technician

• with Abitur

• finished 2015

## Today

• studying bachelor of engineering in communication & media computer science

Company Deutsche Telekom AG

Business Unit Business Applications & Cloud Services



Introduction

TelekomCLOUD + OpenStack

OpenStack In Practice

Q & A

# 1. Introduction – Adriano Perri



#### Person

Name Adriano Perri

• Age 23

From Berlin

## Education

Abitur

studied 2 semester geoecology

Apprenticeship until 2018

## Today

• Vocation management assistant in IT systems

Company Deutsche Telekom AG

• Business Unit Business Applications & Cloud Services



Introduction

TelekomCLOUD + OpenStack

OpenStack In Practice

Q&A



# 1.1 Workflow – A. Perri





- writing down (structured)
- comply with the corporate design
- use supporting illustrations

- **Documentation**
- gather information unfiltered
- screen information
- organize them

Conception

- what is important?
- what is asked for?
- time management

- Get an Overview
- understand the task/topic
- clear up questions
- get inspired by other refcards

Introduction

FelekomCLOUD + **OpenStack** 

OpenStack In Practice

Q & A

ERLEBEN, WAS VERBINDET.

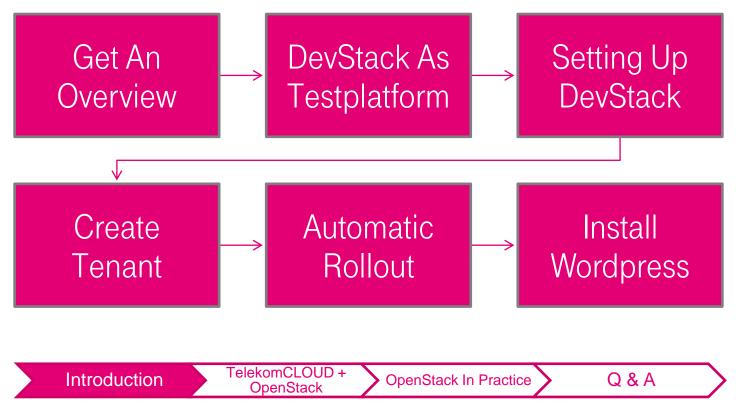
-Cloud Kindergarten-

A. Perri, J. Schäfer, O. Klippel

19.10.2016

# 1.1 Workflow – J. Schäfer And O. Klippel







# 1.2 Experiences

**Self-Management** 



**Tools To Use** 



**Find Solutions** 



**Discover Talents** 









Introduction

TelekomCLOUD + OpenStack

OpenStack In Practice

Cloud

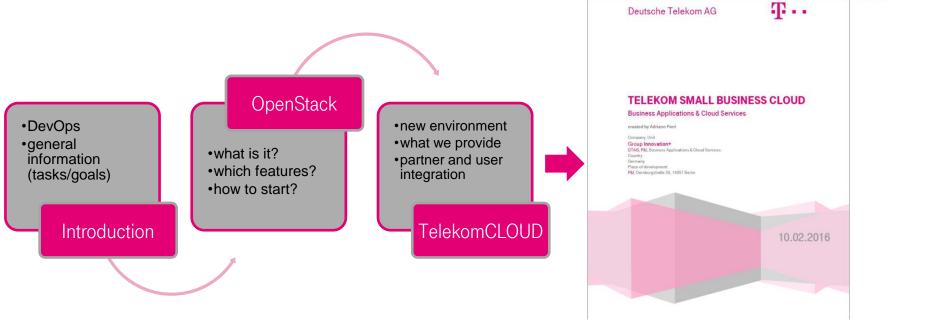
Q&A



# 2. TelekomCLOUD + OpenStack

# 2.1 Refcard – Overview





Picture: Refcard Telekom SMB Cloud



# 2.2 Our Deployment – Services We Use



Service Name	Function
Nova (Compute)	Virtual Machine Management
Neutron (Networking)	Network Management
Cinder (Block Storage)	Storage Resource Management
Keystone (Identity Service)	Identity Management
Glance (Image Service)	Image Management
RabbitMQ (Message Oriented Middleware)	Communication Management
Razor (Bare-Metal Provisioning)	Process Of Installing An Operating System
Ceph S3 (Object Storage)	Storage Resource Management





**ERLEBEN, WAS VERBINDET.** 

# 2.2 Our Deployment - Datacenter

- brand new datacenter Biere near Magdeburg
- largest cloud datacenter in Germany
- 40.000 m<sup>2</sup> area
- high security through complex security systems
- 12 emergency power generators
- high availability

we give the resources you need!

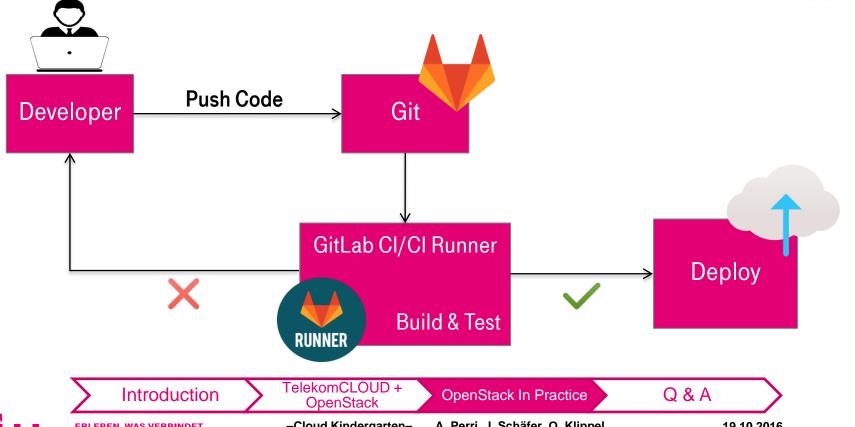


# 3. OpenStack In Practice



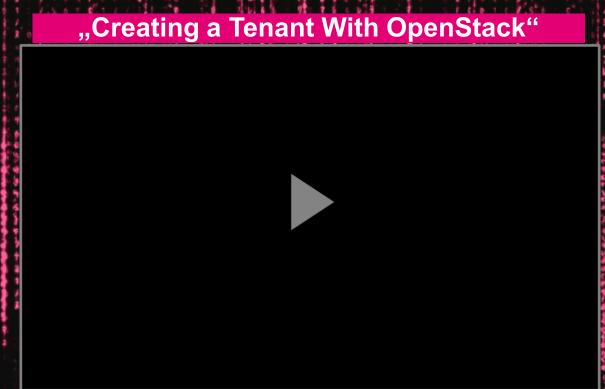
# 3.1 OpenStack In Practice – CI/CD In Git





# 3.2 OpenStack In Practice - Video





Introduction

TelekomCLOUD + OpenStack

OpenStack In Practice

Q & A

-Cloud Kindergarten-

A. Perri, J. Schäfer, O. Klippel

# Thank You For Your Attention!!



# Sources



#### Information

- https://www.openstack.org/
- https://dzone.com/refcardz/getting-started-openstack-most
- http://cloud-computing-blog.eu/was-ist-jetzt-eigentlich-cloud-computing/
- Other Sources: AiolosSystemDescription.pdf; Telekom Small Business Cloud\_Refcard for ISVs.pdf

#### **Pictures**

- http://www.ofekcloud.com/media/images/1e7b5ca3-8b2e-4e2e-9898-5df978f0218aimage14.jpeg ( Slide #10 CC)
- http://www.all-stars.de/blog/wp-content/uploads/2014/04/planung.jpg (Slide #10 Planning)
- http://www.maclife.de/ratgeber/microsoft-office-ios-jetzt-icloud-unterstuetzung-10062588.html (Slide #10 Office Tools)
- http://yourdost.com/blog/2016/02/how-to-become-more-creative.html (Slide #10 Creative)
- http://www.embritas.lt/project/duomenu-apdorojimo-centras/?lang=de (Slide #14 Datacenter Biere)
- https://www.openstack.org/brand/openstack-logo/logo-download/ (Slide #10,#1 OpenStack Logo)
- <a href="https://gitlab.com/uploads/project/avatar/250833/runner\_logo.png">https://gitlab.com/uploads/project/avatar/250833/runner\_logo.png</a> (Slide #16 Git Runner Logo)
- https://d30y9cdsu7xlg0.cloudfront.net/png/27703-200.png (Slide #16 Developer)
- <a href="https://gitlab.com/uploads/project/avatar/13083/gitlab-logo-square.png">https://gitlab.com/uploads/project/avatar/13083/gitlab-logo-square.png</a> (Slide #16 GitLab Logo)
- https://www.brand-design.telekom.com/icon-library/ (Slide #16 cancel, confirm, cloudupload)
- https://de.pinterest.com/pin/556053885218068326/
  (Slide #18 Background)



# 4. Questions & Answers

## Contact











Janika Schäfer

E-Mail

janika-schaefer@telekom.de

Deutsche Telekom AG Dernburgstr. 50 14057 Berlin

**Oliver Klippel** 

#### E-Mail

oliver.klippel@telekom.de

Deutsche Telekom AG Dernburgstr. 50 14057 Berlin

#### **Adriano Perri**

#### E-Mail

adriano.perri@telekom.de

Deutsche Telekom AG Dernburgstr. 50 14057 Berlin

#### Frank Klöker

#### E-Mail

frank.kloeker@telekom.de

Deutsche Telekom AG Dernburgstr. 50 14057 Berlin