DevOps Pro Vilnius 2017

D DevOps Approach V DevOps Real World Experience P DevOps Tools K Keynote L Lunch Break **APRIL 6 • THURSDAY** K Keynote: Agile is dead! Long live DevOps 9:00am -10:00am Speakers: Martin Hinshelwood Agile is dead! Long live DevOps! Um.. ALM... um... There has been a plethora of "agile is dead" of late posts yet the long list of failed agile that has caused it smell very little like agile. What was missing? Come and find out how to make a success of your agile project, and what will immediately spell disaster... Paying lip service to a lexicon is no longer enough... 10:05am -D sudo install DevOps 10:50am Speakers: Mark Heinstek Let's do DevOps because it sounds cool and you are cool if you do it. But how to implement DevOps? Can you implement DevOps? What is DevOps anyway? DevOps is not an implementation. You cannot just simply give the command "sudo install DevOps". Moving towards a DevOps organisation is a journey. A journey with a lot of success and even more failures. This talk will bring you on this journey of successes and failures and provide you insights of real DevOps transitions. 10:05am -V Enterprise I.T. is dead, long live enterprise I.T. 10:50am Speakers: Yves Hwang It is foretold that by 2020 more than three-quarters of the S&P 500 companies will be comprised of businesses that are yet known to us. The term "software is eating the world" is thus aptly coined. This is an enterprise transformation story, sprinkled liberally with devops principles, illustrating one important cog in the wheel for improving an antiquated and inefficient old school practices. At the core lies the modern tale about ChatOps, build pipelines and continuous integration and deployment. Under the hood, the approach is grounded with Jenkins, Docker, AWS Elastic Beanstalk. and Jenkins Job Builder. This toolchain enables our teams to ship fast. In addition, the build pipeline is templated, reusable, and testable. This significantly speed up the process of configuring complex Jenkins jobs and enable highly parameterised build pipelines. Ultimately, this translates to reliability and scalability that allows the team to better support the business units in a highly efficient manner. Enterprises are forced to operate as a software shop and this presentation aims to share the findings, lessons with some hands-on, and the macabre journey that is enterprise transformation. P Docker Containers in the Microsoft Universe 10:05am -10:50am Speakers: Rainer Stropek With Windows Server 2016, Windows learns to speak Docker. In this session, Rainer Stropek, long-time Azure

Hall 2

Hall 5

Hall 1

Hall 5

MVP, and MS Regional Director, introduces Windows Server Containers. You see how to manage them from Windows and Linux with the Docker CLI. Additionally, Rainer will demonstrate Dockerfiles with containers on Windows. Note that Rainer assumes for this session that you already have basic knowledge about Docker and the Docker CLI.

10:50am -11:10am

Morning Break

Break

11:10am -11:55am

D Do You Even DevOps?

Hall 5

Speakers: Jeffery C Hackert

A question IT leaders have is how will I know when we are 'doing DevOps', how long will it take to see meaningful outcomes, how will I know if this is all working? In this talk, I will describe my experience facilitating large scale Enterprise IT DevOps transformations in Banking, Finance, and Gaming companies.

11:10am – 11:55am

V The Road to Continuous Deployment: a case study

Hall 1

Speakers: Michiel Rook

It's a situation many of us are familiar with: a large legacy, monolithic application, limited or no tests, slow & manual release process, low velocity, no confidence... A lot of refactoring is required, but management keeps pushing for new features.

How to proceed? Using examples and lessons learned from a real-world case, I'll show you how to replace a legacy application with a modern service-oriented architecture and build a continuous integration and deployment pipeline to deliver value from the first sprint. On the way, we'II take a look at the process, automated testing, monitoring, master/trunk based development and various tips and best practices.

11:10am – 11:55am

P Infrastructure is Code - Introduction to Azure Resource Manager

Hall 2

Speakers: Rainer Stropek

The Azure Resource Manager (ARM) is Microsoft orchestration engine for managing resources in the Azure cloud. From simple VMs to powerful PaaS services - ARM is responsible for creating and managing all your resource in Azure. In this session, Rainer Stropek, long-time Azure MVP and MS Regional Director, introduces ARM based on a series of demo. You will learn about ARM basics, ARM templates, ARM with PowerShell, and finally Azure CLI in Bash.

12:00pm – 12:45pm

D Heralding Change - How to Get Engineers on Board

Hall 2

Speakers: Anton Weiss

DevOps was born out of engineers' desire to work efficiently, to enable innovation and communication. In it's origin this was a people movement for the people sake. Now large enterprises realise this is how IT should be delivered and start on their DevOps journey. Suddenly the message of change has to arrive from the management. The talk will focus on how to deliver that message, how to deal with engineers' traditional wariness of efficiency initiatives arriving from above, how to escape the pitfalls of formalistic implementations many of us experienced with Agile.

12:00pm – 12:45pm

V How to Build a Micro-services Infrastructure In 7 Days

Hall 5

Speakers: Gil Tayar

On December 2015, during an internal Wix Hackathon, we decided to rewrite our aging Micro-services infrastructure. This is our story. In this story, we will see how to build a modern infrastructure that enables you to deploy a self-servicing grid of computers on which micro-services can run and discover one another. I will show the nuts and bolts of building a MS infra. From an idea, down to implementation, specifically implementing: Deployment, Routing and load-balancing to the correct web app, RPC infrastructure, A CLI that ties everything together.

12:00pm – 12:45pm

P DevOps Zero to DevOps Hero with Visual Studio Team Services

Hall 1

Speakers: Martin Hinshelwood

Many teams don't yet have a basic build let alone an automated DevOps pipeline. In less than 90 minutes I will take an application from local builds to fully automated release pipeline with automated testing and full traceability of requirement quality.

Although almost everyone understands that they have to add DevOps practices at some point, many still don't start with them. Yes, you should have Source Control, an automated Build, automated Release, and monitoring in place almost before you start your project. Come and find out how easy it is to ditch Sprint Zero for a Sprint Awesome on day one!

12:45pm – 1:45pm

L Lunch Break

Break

1:45pm – 2:30pm

D Key DevOps Practices

Hall 1

Speakers: Ivan Evtukhovich

In our job as DevOps consultants, we are frequently asked a question by our clients: "What does DevOps consist of?" Acronym CAMS is not suitable enough to make DevOps sell, because nobody wants to buy "culture" and "knowledge sharing". So we recommend to our clients the following practices: Infrastructure As a Code, Continuous Delivery, Continuous Monitoring, Test Data Management and Automated Testing. In my presentation, I will talk about what we mean by those practices and also tell some of the cases of our work with the big Russian enterprises.

1:45pm – 2:30pm

V DevOps in World Leading Product Development

Hall 2

Speakers: Mikko Paukkila

DevOps and other best practices in world leading product (HW+SW) development. Experiences from efficient software development workflow – from planning, development, releasing, quality assurance and publishing etc. Currently working for Nokia OZO related things.

1:45pm – 2:30pm

P Building Microsoft Azure solutions

Hall 5

Speakers: Laurynas Dovydaitis

Microsoft Azure cloud platform offers a variety of services, but with all available Azure "cloud building blocks" it pretty hard to get lost. Where to start building your first solution? And it gets event messier if you have less background on specific Azure solutions and just want to run simple proof of concept for end to end scenario. Join this session to explore resources available for you to help getting started with solutions on Azure.

2:35pm – 3:20pm

D From Development to Production in 5 minutes: is your Company Ready?

Hall 5

Speakers: Carlos Leon

Containerizing your applications allows you to improve your time to market significantly. But is your company is actually ready for such a speed? Have you thought of the cultural changes that such a technology demands? Is your process flexible and fast enough to keep pace? how is your inter-team communication and collaboration? What is the level of trust that you have in your team? These questions were asked and answered for one of our customers in their journey to a rock-solid software delivery pipeline and I will share the story with you.

2:35pm – 3:20pm

P Skynet your Infrastructure with QUADS and Foreman

Hall 1

Speakers: Will Foster

The very small 2-person DevOps team within Red Hat Performance/Scale Engineering has developed a set of Open Source Python-based systems and network automation provisioning tools designed to end-to-end automate the provisioning of large-scale systems and network switches using tools like Foreman, Ansible, and other Open Source bits.

QUADS – or "quick and dirty scheduler" allows a normally overburdened DevOps warrior to fully automate large swaths of systems and network devices based on a schedule, even set systems provisioning to fire off in the future so they can focus on important things like Netflix and popcorn or not read your emails while your datacenter burns in an inferno of rapid, automated skynet provisioning. QUADS will also auto-generate up-to-date infrastructure documentation, track scheduling, systems assignments and more.

In this talk we'll show you how we're using QUADS (backed by Foreman) to empower rapid, meaningful performance and scale testing of Red Hat products and technologies. While QUADS is a new project and under constant development, the design approach to handling large-scale systems provisioning as well as the current codebase is consumable for others interested in improving the efficiency and level of automation within their infrastructure.

2:35pm – 11:20pm

P Upgrading to Puppet 4

Afternoon Break

Hall 2

Speakers: Martin Alfke

Puppet 4 did some major changes to the underlying DSL and the infrastructure stack. This talk will give you an overview on how to upgrade to Puppet 4 based on hands-on experience even on a weird code base.

3:20pm – 3:40pm

Break

3:40pm – 4:25pm

DevOps at Scale applied in Bunnyworld

Hall 2

Speakers: Uldis Karlovs-Karlovskis

DevOps at Scale as a problem to solve is becoming more relevant every day but there isn't that much of information how to do it for real. Also techy people get into technology and forget what DevOps is really about. This talk abstracts from technology and focuses purely on culture and organisational topics in a fun way. "So... meet delivery lead John. He got a brilliant idea how basically from nothing to make the cutest bunny in the world."

3:40pm – 4:25pm

V Prometheus Is Good for Your Small Startup

Speakers: Ignacio Pérez Carretero

ShuttleCloud is a small startup specialized in email and contacts migrations. We developed a reliable migration platform in high availability used by clients like Gmail, GContacts and Comcast. For example, Gmail alone has imported data for 3 million users with our API and we process hundreds of terabytes every month. In this talk, we'll explain our journey from having near-zero monitoring to having all of our infrastructure monitored with the necessary metrics and alerts. We will share with the audience some of the mistakes we did and what lessons we have learned. We currently have around 200 instances monitored with a comfortable cost-effective in-house monitoring stack based on Prometheus.

We want to demonstrate that you don't need to have a big fleet to embrace Prometheus and that it is a non-expensive solution for monitoring.

3:40pm – 4:25pm

P Utilizing Docker to create MicroPerimeter for ZeroTrust Security

Hall 1

Hall 5

Speakers: Kayra Otaner

Utilizing Docker & Container technologies we can bring following capabilities closer to the app layer:

- · Monitor: How to collect IDS/NetFlow data from both network devices and hosts
- Analyze: How to analyze NetFlow and various other log metrics utilizing ElasticSearch
- · Detect: How to detect anomalies and aberrant traffic/activity
- Respond

These capabilities were previously only available at hardware/switch layer, now we're seeing SDN (Software Driven Networking) transformation thanks to Dockerization of our platforms.

4:30pm – 5:15pm

K Keynote: DevOps = Effectiveness First!

Hall 5

Speakers: Alexander Schwartz

In this talk, we explore in detail how efficiency and effectiveness are related to DevOps and the traditional separation of Development and Operations.

Companies are usually aiming for high efficiency and predictability. This seems to make sense in the first place, as no one wants to be inefficient, right? But wait a second, the ask for efficiency might be a source of a permanent conflict with the DevOps idea. The focus on "synergy effects" and "good utilization" – which is a focus on efficiency – is often one of the main motivations for creating silos in the organization, for the classical separation between Dev and Ops. Quite often those structures are neither effective nor efficient in the long run. On the other hand, with DevOps done right one can achieve a high level of effectiveness: Horizontal scaling, that is, increasing for a team their coverage of the value stream from idea to production, brings naturally the focus on doing the right thing for the customer. Furthermore, by improving the efficiency of an effective process, DevOps can enable companies to achieve a significant competitive advantage. Especially the Continuous Delivery pipeline can be a strong engine for delivering features and improvements to enable innovation and a high operational excellence.

What can I learn in this session?

- You can gain a better understanding how the DevOps approach yields to good organizational setups;
- You learn some good arguments, why the traditional approach is suboptimal, and understand the mechanics that lead to ineffective and inefficient structures;
- · You learn good arguments for selling DevOps better;
- You learn ideas which help you to make the right choices in your DevOps journey.

5:15pm – 6:00pm

K Keynote: Sell me this DevOps

Speakers: Mark Smalley

This presentation explores DevOps from a business value perspective, giving you a better understanding of the potential benefits of "devopsing" your organization: more speed, stability and fun (seriously!). But how do you sell DevOps to business executives?

Not all organizations will get these benefits: if you work in a relatively stable environment, you might be wasting your money. Looking at DevOps as medication, what are the curable symptoms, the right dosage, side-effects, and warnings? And is it addictive?

DevOps is grounded in the Theory of Constraints that identifies the most important bottleneck in the way of achieving a goal and then improves it until it is no longer the limiting factor. Yet DevOps only addresses part of the IT value chain. What about the functional requirements, value realization by the users, and the relationship with IT's business partners? What is your biggest bottleneck? Is an investment in DevOps (shock horror!) just sub-optimization?

Takeaways

- 1. What kind of organization should invest in DevOps and which benefits can reasonably be expected;
- 2. A value proposition that you can sell to business executives.
- 3. Where DevOps fits in the bigger IT picture and what's needed to avoid sub-optimization.

Hall 5