

NETWORK DEVOPS TRANSFORMATION

DEVOPS TERMINOLOGY, ROLES AND STRATEGY

5.3.21



AGENDA

WHAT IS DEVOPS?

DEVOPS TRANSFORMATION ROLES

DEVOPS TRANSFORMATION GOAL

DEFINE SPECIFIC DEVOPS ROLES

THE PATH TO SUCCESS

NEXT STEPS

QUESTIONS

What is DevOps?

What is DevOps?



Developers & Testers



IT Operations

WHAT IS DEVOPS?

- DevOps brings together the **development** and **operations** groups for a faster, more accurate, and more responsive software delivery experience.
- Success relies heavily on collaboration between all team members involved in a particular project.
- The DevOps approach encourages more collaboration between the **operations** and **development** teams, ensuring everyone's objectives are more aligned.

What is DevOps?



WHAT DOES DEVELOPMENT IN DEVOPS MEAN?

Primary objective is to convert ideas into a product that solves end-users' problems.

- Requirements gathering
- Design
- Development
- Testing
- Product Backlog refinement
- Ensuring continuous delivery

What is DevOps?



WHAT DOES OPS IN DEVOPS MEAN?

Primary objective is to deploy the product and manage it throughout the product's life.

- Configuration management of network gear
- Managing outages
- Managing backups and security
- Deployment and maintenance

Transformational Leadership & The Kernel Team

TRANSFORMATIONAL LEADERSHIP

Who they are

- Managers focused on the growth of their employees and teams
- Create a vision of a better path forward for our organization
- Inspire and Motivate their employees and teams
- Reformers who can explain the why behind DevOps
- DevOps culture builders

Responsibilities

- Budgeting
- Performance reviews
- Career Development
- Specific functional skills development of staff
- Hiring
- Capacity planning

THE KERNEL TEAM

Who they are

- A group of skilled technical leaders who support the transformation
- Coach, lead by example and coordinate the activities of their teams with the big picture
- They will be backed and incentivized to cooperate by the Transformational Leaders
- In exchange, they will escalate the big picture of the direction our organization is and should be moving in

Responsibilities

- SME's who fully understand and contribute to the architecture, design and development of the CI/CD infrastructure and its workflows
- Perform in depth testing and development in preparation for product release
- Determine the specific tools required for CI/CD workflows
- Vision for automating manual, repeatable processes which evolves into an ADO Feature/Story
- Highly collaborative both within Network Teams and many other Teams (Cloud Landing Zone's, Core services, etc) across the organization
- Lead, guide and mentor junior DevOps engineers on all CI/CD processes

#1 Goal in DevOps Transformation



OUR MAIN GOAL

The ultimate goal of DevOps transformation is arriving at the self-organizing system in which teams collaborate effectively simply because that's how things are done, simply because they trust, understand and respect each other.

This is a beautiful vision. As beautiful as a large codebase with zero bugs.

- Anton Weiss, Principal Consultant and CEO at Otomato



DevOps Lead Roles

DEVELOPMENT LEAD

- A step above a software developer
- Were once developers themselves
- The mid-point in the path between being a developer and being the solutions architect
- Rooted in the reality of the code and the capabilities of the developers they have working on the project
- Lead and mentor junior developers through problems they don't understand
- In many organizations the development lead isn't burdened with the formal administrative management of employees, they are instead freed to focus their time on helping developers be successful

TEST AUTOMATION LEAD

- Software developer
- Responsible for turning new requirements into code
- Unit and build testing, deployment and ongoing monitoring
- Look for processes that can be automated to increase reliability
- Use software programs to test applications and minimize the chance of human error
- Identify bugs and create ADO stories to fix them

DEVOPS LEAD

- Handles the entire DevOps lifecycle
- Design and develop scaling strategies, automation scripts, and solutions to implement, streamline and execute the software
- Possess sound knowledge of various tools and technologies used by other team members
- Liable for automating all the manual tasks for developing and deploying code and data to implement continuous deployment and continuous integration frameworks
- Responsible for creating software deployment strategies
- Stays abreast of industry trends and best practices by conducting research, tests and execute new techniques which can be reused and applied to the software development project
- Develops self-service solutions for the engineering department to deliver software with excellent quality and speed

The Path to Successful DevOps Transformation



VALUE & UNDERSTAND OUR PEOPLE

In unsuccessful DevOps initiatives the organization fails to realize that people are the most important component of the equation, these organizations often assign members to their new DevOps teams before they have fully understood and documented both the soft and technical skills required for a high-performing DevOps team. They fail to realize that not all personnel have the acumen or desire necessary for success in a highly fluid and collaborative environment.

- Gerry Leitao, VP Capgemini North America





TEAMWORK MAKES THE DREAM WORK

- Culture of sharing, learning and experimentation
- Open lines of communication
- Highly collaborative
- DevOps is a team sport and when things go wrong everyone steps in to make it right.
- No one wants to look bad, if they know they'll be shamed for making a mistake, they'll shut down, and all your DevOps gains will be lost.
- Create a culture that celebrates wins and forgives and forgets losses.





WHAT'S NEXT

LOOKING AHEAD

NEXT STEPS

- Weekly standup/touch base with the Kernel Team and Transformational Leaders
- Ensure we're communicating and understanding each other's processes
- Determine if there's anything needed to support each other as we progress
- Shouldn't be strictly focused on technical aspects but more on processes, procedures and project requirements
- Focus on roadblocks, needed training, budgeting, and capacity across our teams
- Ensure that we prevent any disconnect from the reality of our work
- Create Network DevOps Lead communication pathways:
 - Email DL
 - Membership would mirror our current ADO PR approval group: "Network Cloud Leads"
 - Add new members as we progress with our DevOps transformation
- Teams channel for questions
- ServiceNow group

Questions?

SOURCES

- The 4 roles of DevOps leadership - Anton Weiss <https://jaxenter.com/4-roles-devops-leadership-134912.html>
- What is DevOps: Get an in-depth Understanding of DevOps <https://www.simplilearn.com/tutorials/devops-tutorial/what-is-devops>
- How to Build DevOps Culture: A Guide for CXOs <https://www.netsolutions.com/insights/how-to-build-devops-culture/>
- Anatomy of a Software Development Role: Development Lead | Developer.com <https://www.developer.com/project-management/anatomy-of-a-software-development-role-development-lead/>
- DevOps Lead Engineer Job roles and responsibilities <https://www.invensislearning.com/blog/devops-lead-engineer-job-roles-responsibilities/>
- 7 key DevOps roles organizations need for a successful transition <https://techbeacon.com/devops/7-devops-roles-you-need-succeed>

THANK YOU



JENNA SPRATTLE



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