

Session

# How to Health Check your Azure Environment

Eric Berg

Lead Architect - Team Azure | Microsoft MVP CDM & Azure  
SoftwareONE | COMPAREX



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## ERIC BERG



Lead Architect – Team Azure at SoftwareONE | COMPAREX



Azure, Datacenter and Hybrid Cloud Management



Azure, System Center, Windows Server and Client



info@ericberg.de



@ericberg\_de | @GeekZeugs



www.ericberg.de | www.geekzeugs.de



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## AGENDA

- HEALTH CHECK
- OLD IT VS. NEW CLOUD WORLD
- EXAMPLES / DEMO
- MANUAL STEPS
- AUTOMATION TOOLS
- DEMO
- FRAMEWORK

# HEALTH CHECK



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## HEALTH CHECK?!

- an occasion when a **doctor or nurse** examines **someone's body**, takes **blood tests**, etc. in order to **make sure** the person has **no health problems...**
- an occasion when an **IT Expert** examines **someone's IT landscape**, with **doing tests**, etc. in order to **make sure** the environment has **no health problems...**
- **Health = Security ?!**

# HEALTH CHECK?!

Health is even more:

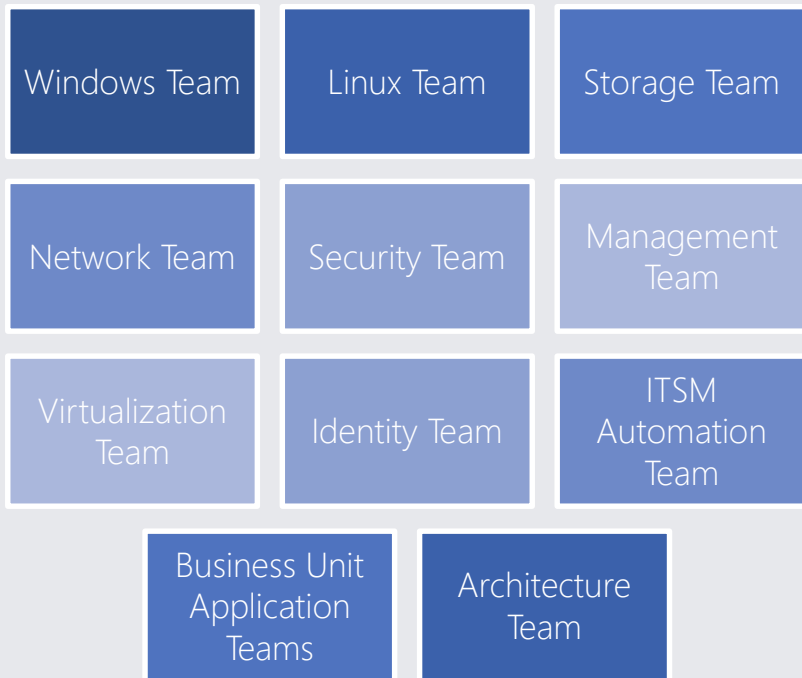
- **Decision Making on IT**
- **Service and Financial Reporting**
- **Monitoring**
- **Policies and Compliance**
- **Standards and Practices**
- **Tools**
- **Security**
- ...

# OLD IT VS. NEW CLOUD WORLD



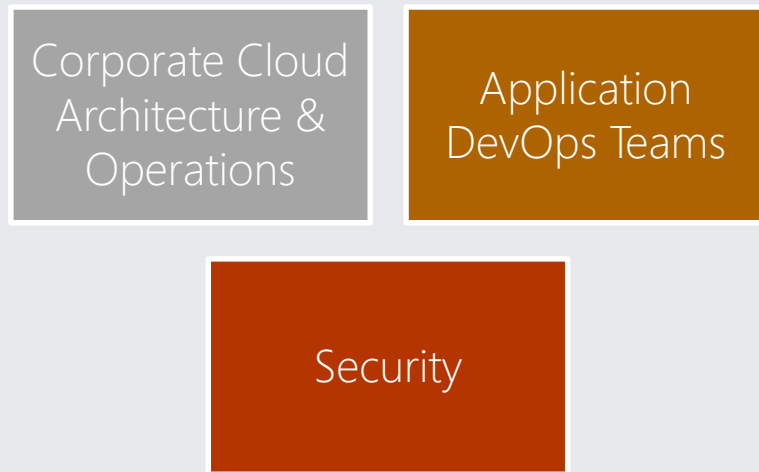
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## OLD IT



VS.

## NEW CLOUD WORLD





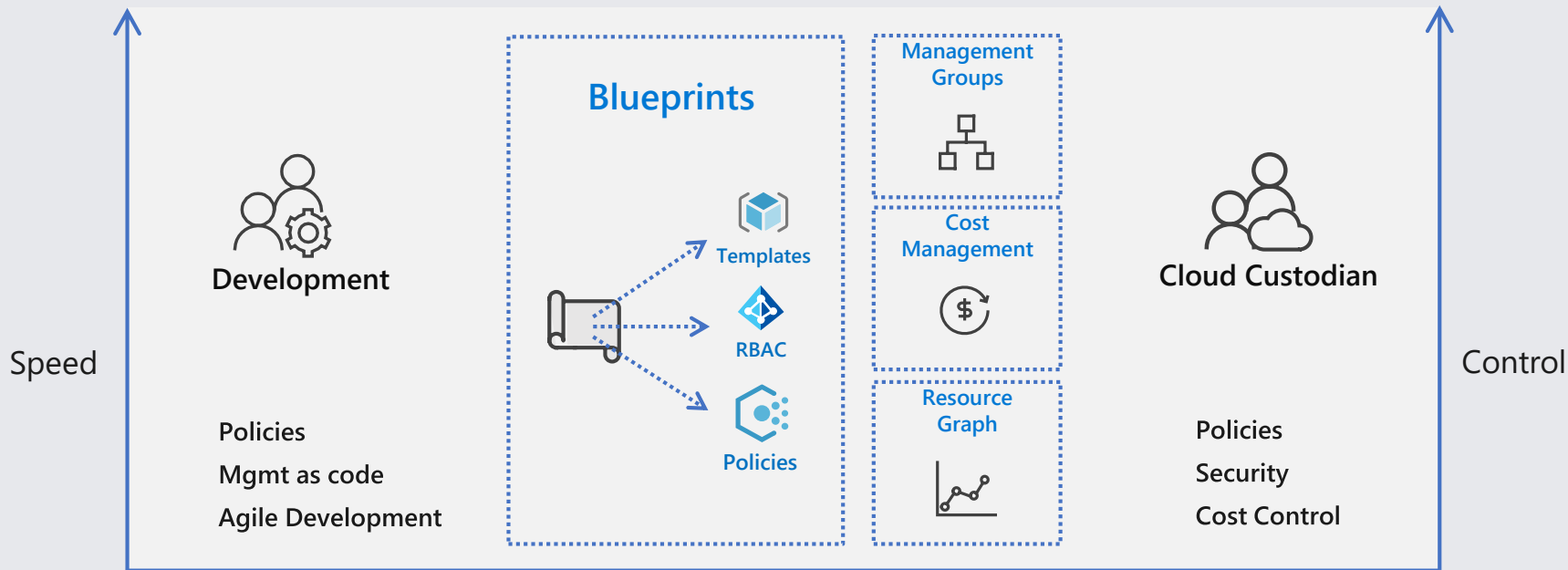
# TRADITIONAL APPROACH NEEDS RETHINKING

## Speed versus Control



# BUILT-IN MODERN GOVERNANCE

**Speed** and **Control**



OLD IT



VS.

NEW CLOUD WORLD



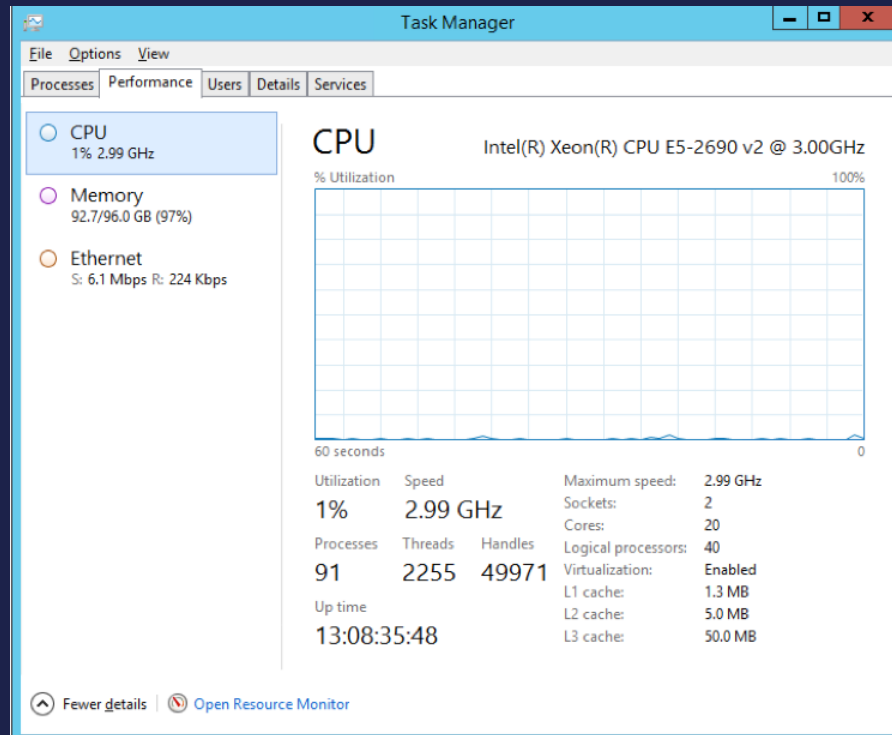
# EXAMPLES / DEMO



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## EXAMPLES – NOTHING NEW 😊

- **Never touch a running system**



## EXAMPLES – NOTHING NEW 😊

- **Never touch a running system**
- **Never touch an old file**

Name

▼ JPG File (14)



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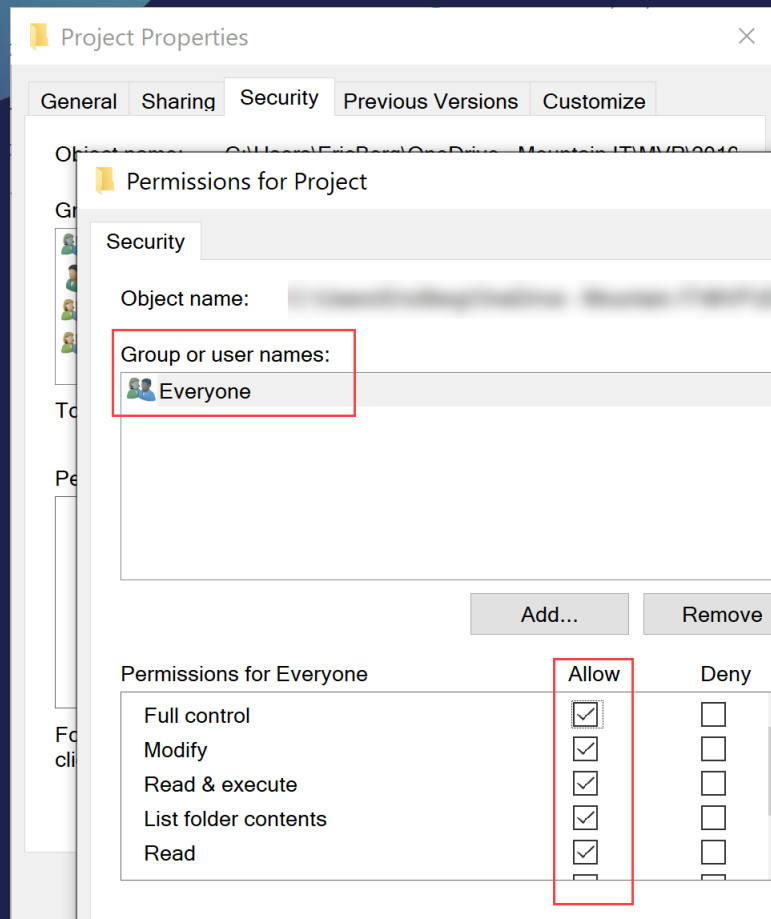
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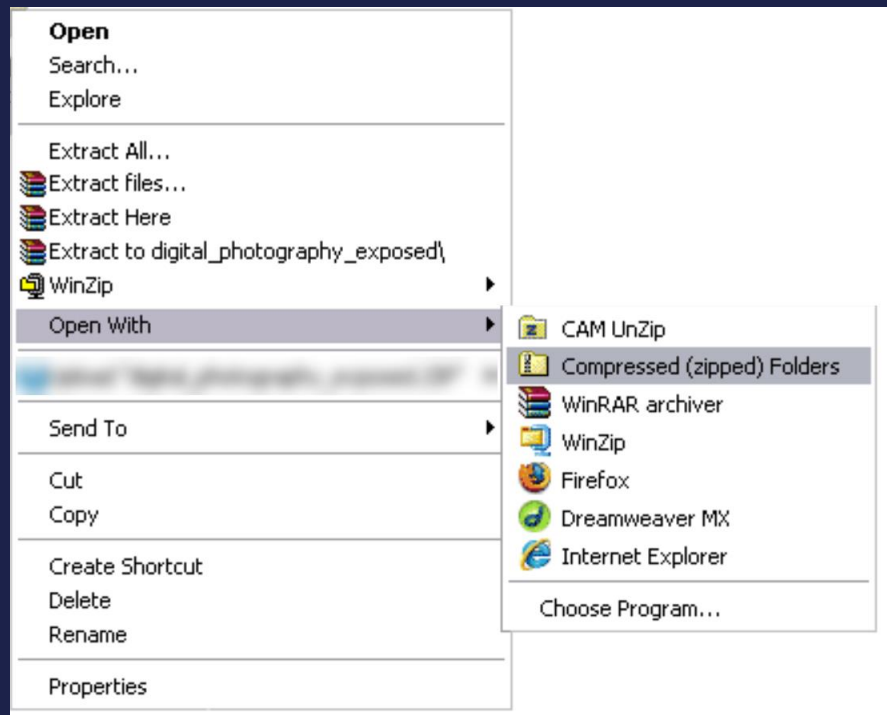
## EXAMPLES – NOTHING NEW 😊

- **Never touch a running system**
- **Never touch an old file**
- **There are never enough rights**



## EXAMPLES – NOTHING NEW 😊

- **Never touch a running system**
- **Never touch an old file**
- **There are never enough rights**
- **Use the right tool**
- ...



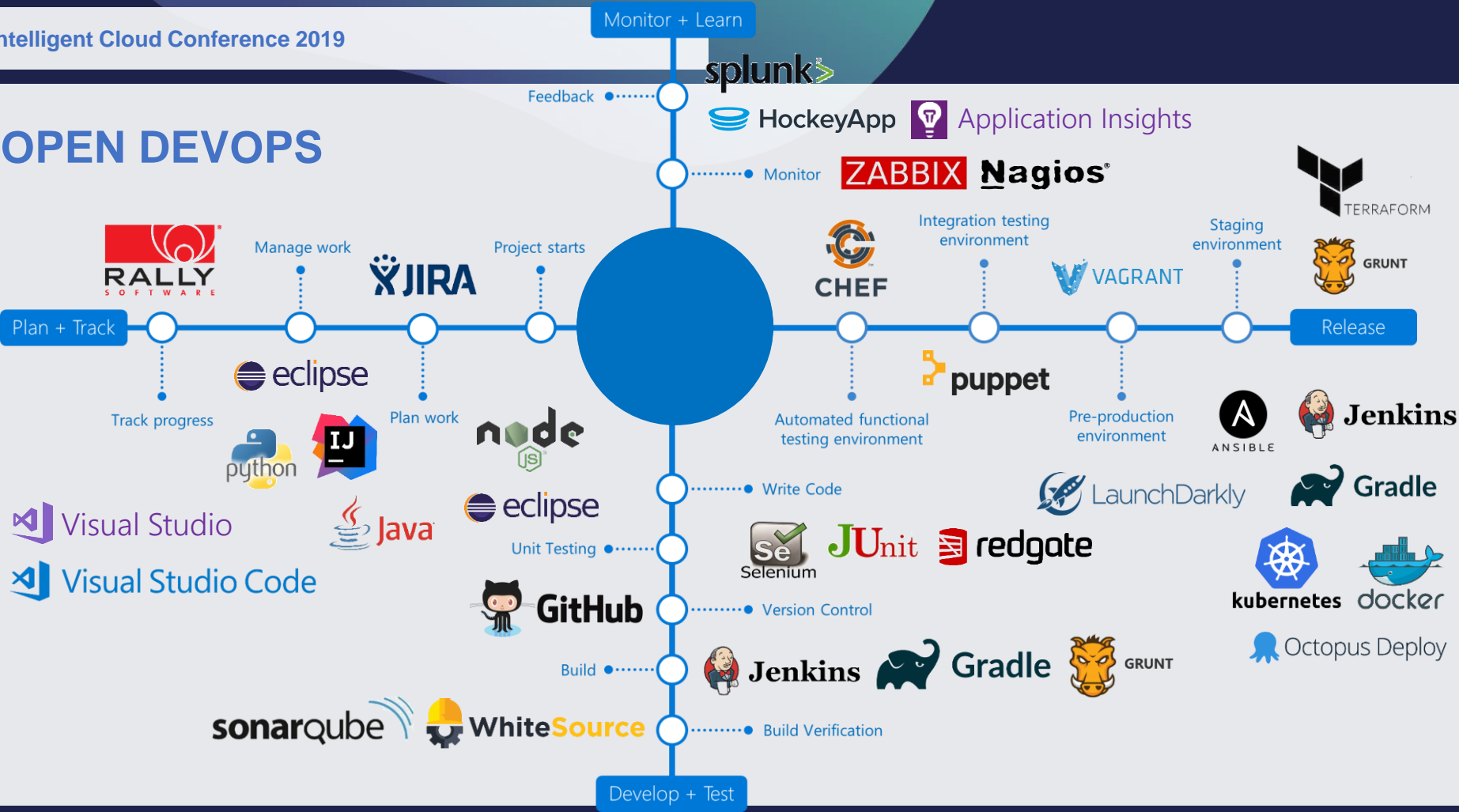


## EXAMPLES – CLOUD

- **Running Resources without usage**
- **Empty Resource Groups**
- **Too many Owners**
- **4 DevOps Stacks “in use”**



# OPEN DEVOPS



## EXAMPLES – CLOUD

- **Running Resources without usage**
- **Empty Resource Groups**
- **Too many Owners**
- **4 DevOps Stacks “in use”**
- **No cost control**
- **No policy set up**
- **No logging and auditing**
- **No monitoring**
- **No clue of shared responsibility model**
- **...**



DEMO



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# MANUAL STEPS



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## MANUAL STEPS

- Check Role-Based Access Controls
- Check Resource Groups – Naming, Location, Usage
- Check Resources – Naming, Location, Usage
- Check Tags
- Check Security
- Check Updates
- Check Activity Logs
- Check Cost Management
- ...



**NOW THINK ABOUT LARGE SCALE – MORE THAN xxx SUBSCRIPTIONS – HAPPY HEALTH CHECK**

# AUTOMATION TOOLS



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# MAIN RULES

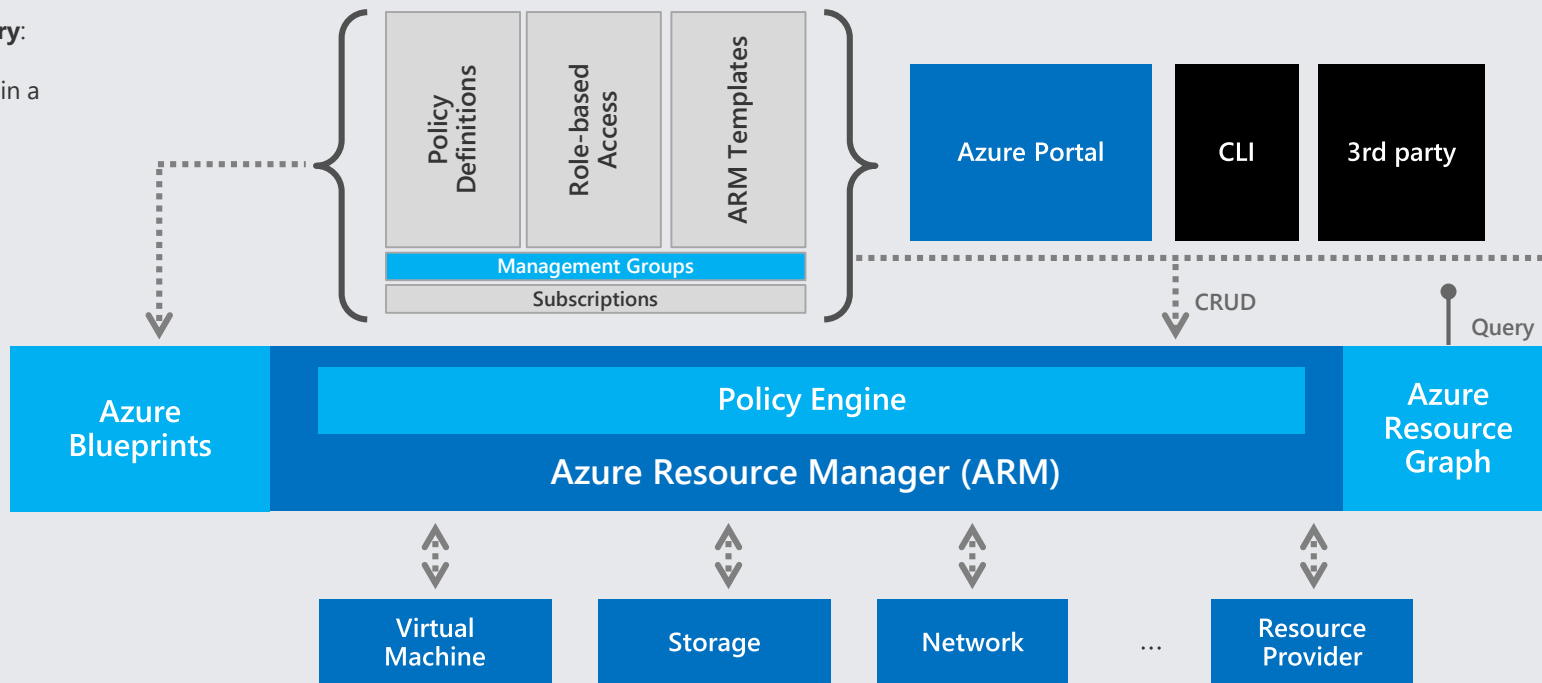
- YOU NEED AZURE GOVERNANCE AS BASIS FOR HEALTH CHECK
- IMPLEMENT GOVERNANCE IN TOOLS
- IMPLEMENT GOVERNANCE IN MINDS
- AUDIT AND KEEP LOGS FOR ANALYSIS
- ESTABLISH A CODE FIRST PRACTICE
- HEALTH CHECK AS YOUR DAILY BUSINESS
- RENAME HEALTH CHECK TO CLOUD OPERATIONS :-)



# AZURE GOVERNANCE ARCHITECTURE

## 1. Environment Factory:

Deploy and update cloud environments in a repeatable manner using composable artifacts



## TOOLS TO USE

- AZURE POLICY
- AZURE RESOURCE GRAPH
- AZURE AUTOMATION
- AZURE MONITOR
- AZURE SECURITY CENTER
- AZURE ADVISOR
- AZURE AD PIM
- AZURE AD MFA
- ...



DEMO



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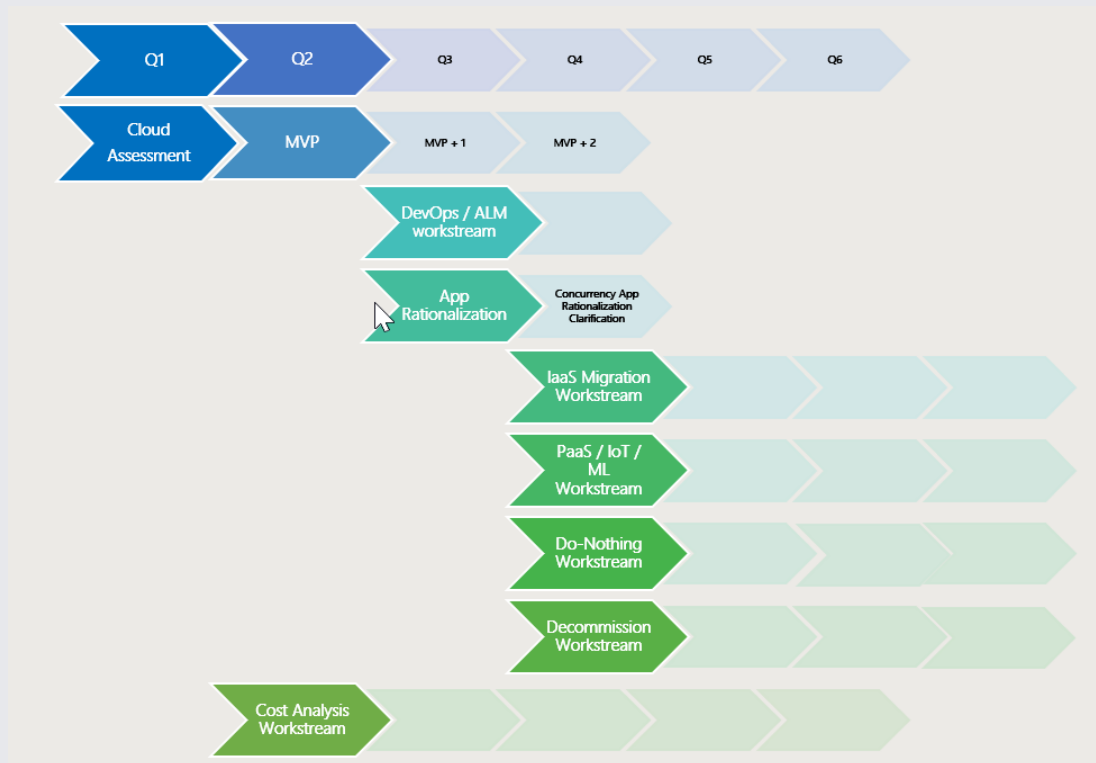
# FRAMEWORK



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# FRAMEWORK

- Bring the tools together
- Build your workflows
- Define your output
- Alerts - Logs - LogicApps
- Integrate in Tool-Stacks
- ...



THANK YOU!!!



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