The MTTR Chronicles

Evolution of SRE Self Service Operations Platform

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Agenda

- SRE @ VMC on AWS
- Square One
- βeta
- Connecting the Dots
- Virtual War Room
- Around the Corner
- Takeaways
SRE @ VMC on AWS
Hybrid Cloud Challenge
SaaS vs Individual Multi Environment Infrastructure at Scale

SRE is focused on ensuring services are homogeneous as they scale.

Complexity and variability increase risk to the SLAs.

SaaS Scales Horizontally

Networking

Compute

Storage

SaaS Scales Horizontally
SaaS vs Individual Multi Environment Infrastructure at Scale

SaaS Service continues to scale horizontally with the number of customers
Each customer environment scales vertically

Each customer environment is provisioned as a homogenous environment.

Each environment quickly deviates as utilization, features, network access, and resource bounds vary significantly.
The MTTR Challenge

MTTR directly correlates to meeting your SLAs and SLOs

Information and automation is Key

The right information at the specific time
An Extensible, Dynamic, and Collaborative platform to reduce MTTR and improve operational efficiency for unique and constantly changing environments
Square One
Problems at Hand

Problems

- Information silos
- High Context Switch
- Cross team Collaboration
- Time consuming Postmortem & RCA

Effects

- Longer MTTR == More Impact to the Customer
- High Operational Toil
- Cumbersome impact assessment
- Past learnings not used effectively

Data Gathering and Triaging

- Incident Observed

Remediation

- MTTR SLA
- Incident Resolved
Automated Remediation
Challenges

What are the information sources?

What data should be displayed?

How should the data be displayed?

How to leverage this for users beyond SRE?
βeta: Services under a roof

How to correlate data & make it work @ scale?
Connecting the Dots: Single Pane of Glass
Connecting the Dots ...

**Changes**

- Cause, Symptom & Action at a single place
- Display appropriate data
- Intuitive UI : Realtime & Responsive
- Integration with BI* & ticketing service

**Results**

- Increase in user adoption. Easier onboarding
- Easier correlation & minimal context switch
- Data Driven Decisions & Trend Analysis
- ~20% improvement in MTTR (on initial release !!)

How to collaborate better?

*BI = Business Intelligence*
Virtual War Room
Central Place for Incident Remediation

One integrated platform

Agility, Consistency and Control @ SCALE

Effective Collaboration with Service Owners

More focus on development

Results
Takeaways to Empower your SRE

Avoid information Silos
Do not reinvent tools
Display what’s necessary
Automate ! Integrate ! Collaborate !
Learn from past incidents
Cap operational work
More Code, Less Toil !

"Build the platform for your Organization!"
Thank You

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