

Slowdown is the New Outage (#sitno)

Marco Coulter, Technical Evangelist @marcocoulter

APPDYNAMICS

cisco.

1. Outages vs Slowdowns

2. Cost of Slowdowns

3. Insight Supports Resolution



#about_marco



THENEWSTACK Forbes





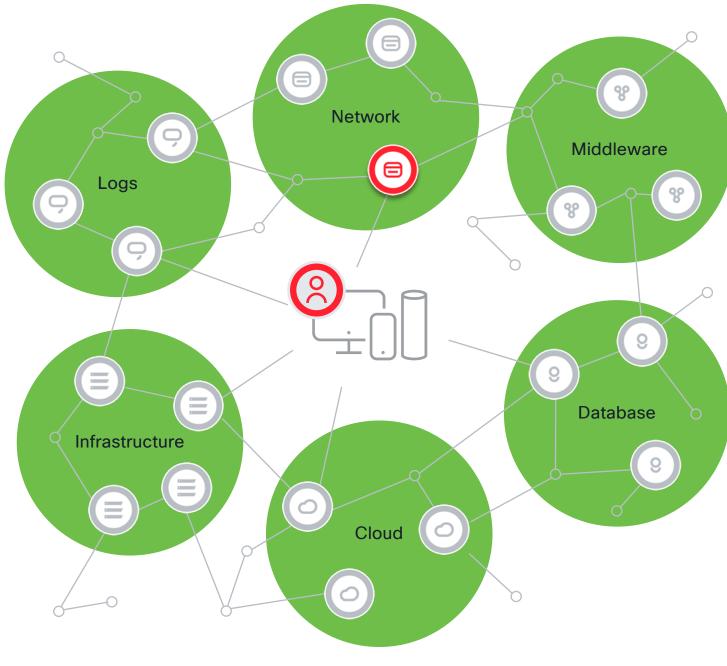
Marco Coulter Technical Evangelist @marcocoulter marco.coulter@appdynamics.com





Outages vs Slowdowns

Outages are Obvious

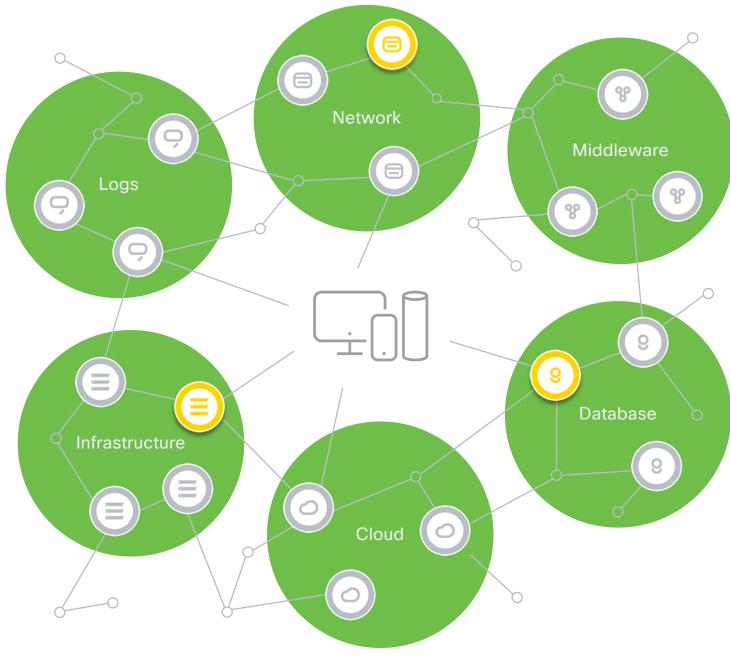


Outage Characteristics

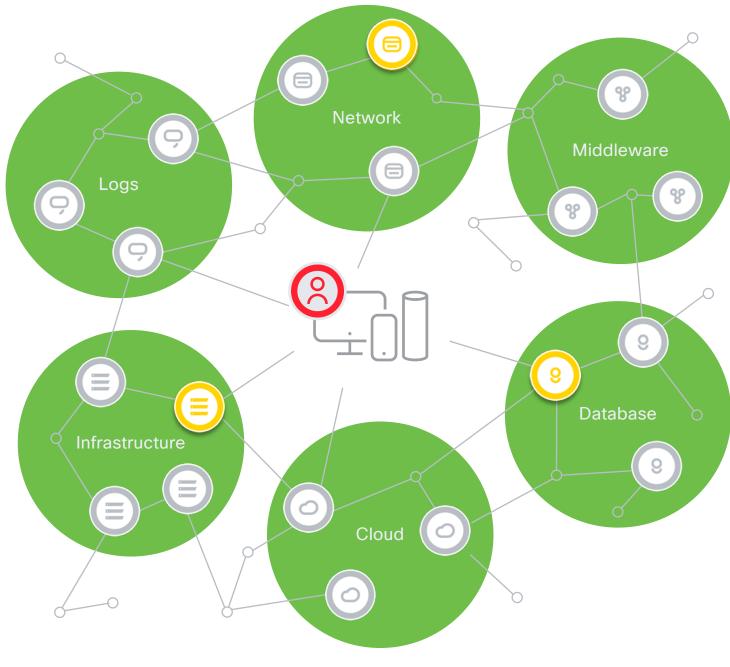
△ Trigger Panic Mode

△ The Final Straw

Slowdowns are Subtle



Slowdowns are Subtle



Slowdown Characteristics

Incremental

Can address without solving

△ The Camel

Cost of Slowdowns

Estimating Outage Cost

• What would a 1% error budget cost?

• 8760

- 99999
- 8.76
- 24x7
- 100M

"

"Every 100ms delay costs 1% of sales."

Greg Linden

Developer of Amazon's Recommendations

Estimating Slowdown Cost

- What would a 100ms slowdown cost?
- 8760
- 99999
- 8.76
- 24x7
- 100M

Insight Supports Resolution

Slowdown Diagnosis Challenges

- The insufficiency of dtrace
- Watchpoints vs breakpoints
- Complete customer experience view
- The cross-application business transaction

Functions Needed for Insight

Baseline of Normal Performance
Segmented Metrics of Customer Business Transactions
Levers for Code Isolation
Cross-silo Metric Observability
Overhead Minimization

✓ ML-trained Noise Filtering & Anomaly Detection

Slowdown Characteristics

○ Complete View of UX

T-shaped skills

Resolution Needs Insight Needs Context

The metric you don't watch will bite you

Further Reading

@marcocoulter

https://www.linkedin.com/in/marcocoulter https://techwhisperernyc.com • Slowdown is the New Outage <u>https://www.appdynamics.com/blog/</u> engineering/slowdown-new-outage-<u>sinto/</u>

• Successfully Deploying AIOps https://www.appdynamics.com/blog/ engineering/successfully-deployingaiops-part-1-deconstructing-mttr/

• 5 Critical Metrics When Deciding What To Automate In AIOps <u>https://www.forbes.com/sites/appdy</u> <u>namics/2019/07/08/5-critical-</u> <u>metrics-when-deciding-what-to-</u> automate-in-aiops/#34d23f091230

Question Time?

@marcocoulter

Thank you!

@marcocoulter