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WORK at LIGHTSPEED™

Your Schrödinger's Cat Problem:
Accomplishing Real Configuration Change Monitoring.

CHRISTIAN MALONE
MANAGER – INTEGRATION & MONITORING ARCHITECTURE
Discovery Communications

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servicenow

Agenda

- What is Configuration Change Monitoring?
- What are shadow changes?
- Who is changing your CI's?
- What tools are they using to make those changes?
- Where can we plug that data into ServiceNow?

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Speaker Introduction



NAME: Christian Malone

TITLE: Manager – Integration & Monitoring Architecture

FUNCTION: Global Technology & Operations

COMPANY: Discovery Communications

EXPERIENCE: 20 years leading technology teams including Nasa, Apple, & Discovery Communications

EXPERTISE: Strategy, design, and development for infrastructure, applications, and experience

ACHIEVEMENTS: Completed first overhaul of deployment process. Reduced customer service response time by x%. Developed ServiceNow app that does …

CURRENT PROJECTS: Integrating CMDB data sources. Cloud & playout monitoring & event management. Automating existing processes

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Session Overview



Objectives

- Improve your change and service health by integrating the tools creating shadow changes in your environment.



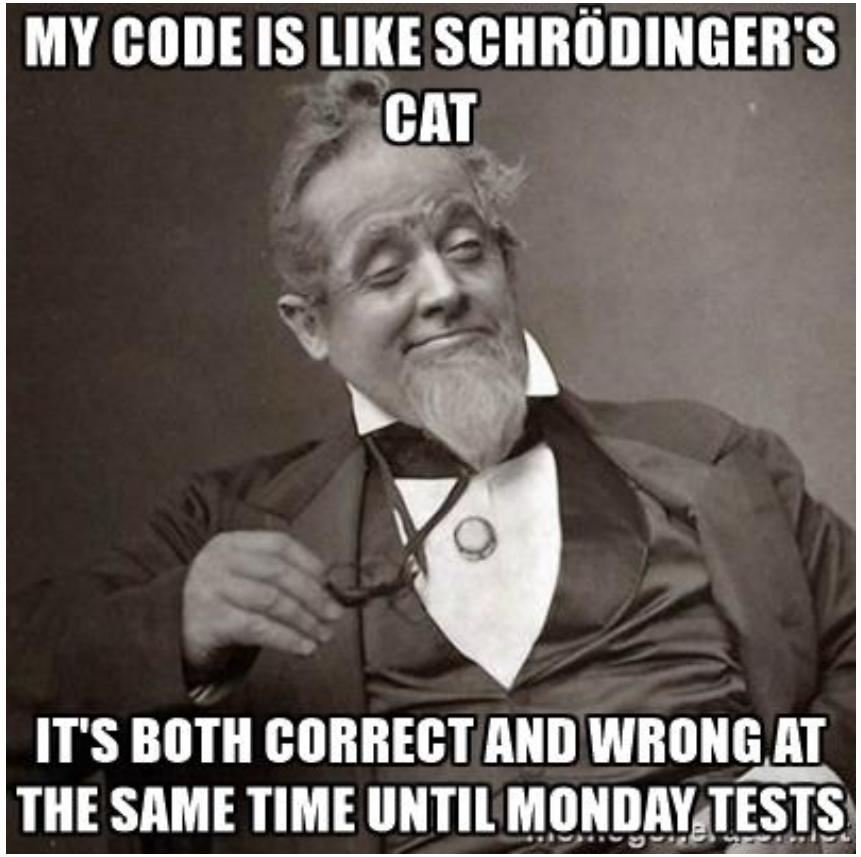
What You Will Learn

- Learn how configuration monitoring differs from standard CMDB data.
- Identify sources of configuration monitoring in your environment.
- Demonstration of integrating network switch configuration changes into my CMDB.
- Other methods to integrate shadow changes into your ServiceNow.

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Challenges and Goals

- Changes often occur outside of change / CAB process.
- Shift away from infrequent to frequent changes.
- Adopting configuration management tools such as Puppet/Ansible.
- Adopting devops process of Continual Integration with tools such as GitHub/Jenkins.
- Correlating changes with service degradations and outages.



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Context – Visible and Shadow Changes

Visible changes ARE recorded in ServiceNow	Shadow changes ARE NOT currently recorded in ServiceNow
Change and/or Catalog Requests	CI configuration changes
CMDB updates	Patching OS/Firmware
Incident, Problems	Application and database code releases
Alerts, Outages	IP, DNS, Routing changes

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Datasources – Configuration Monitoring

- Puppet
- Network monitoring
- Patching systems
- Infoblox
- Tripwire etc
- Custom scripts



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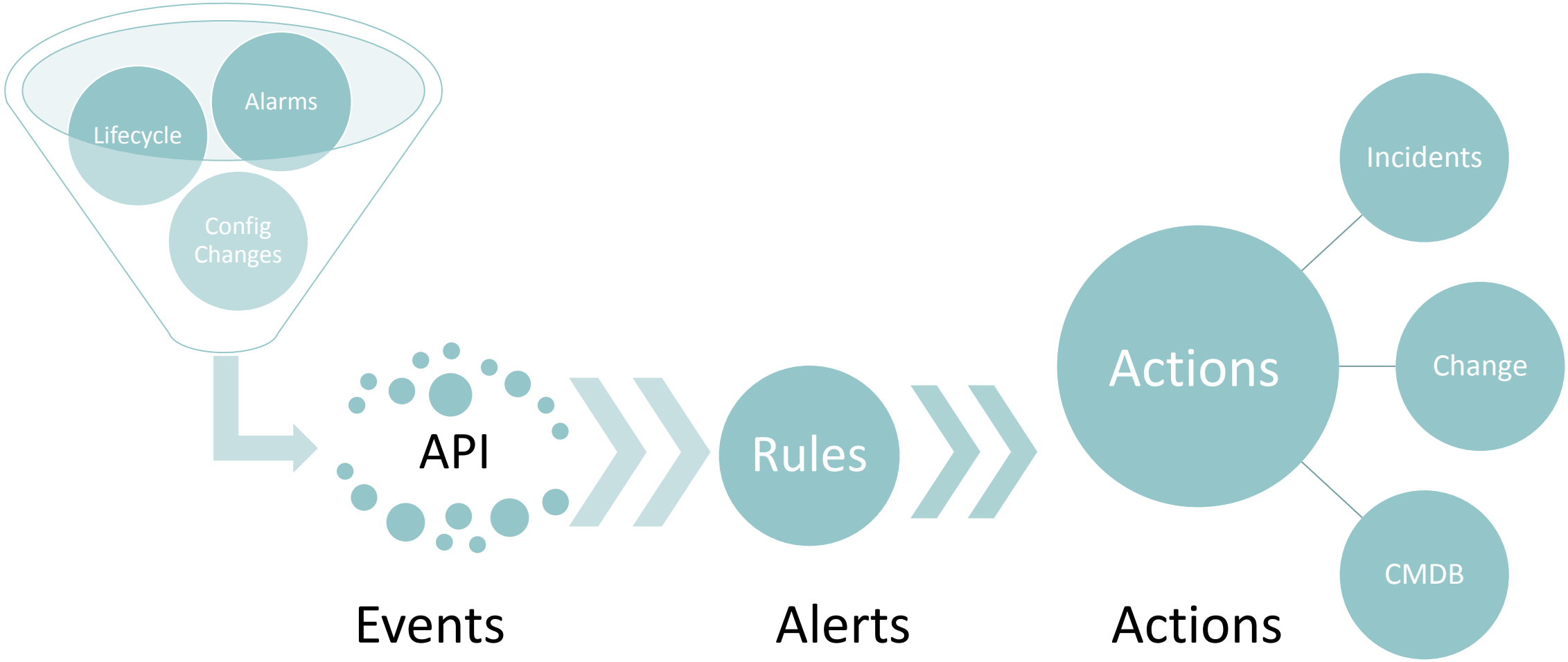
Datasources – Source Control & Application

- Agile/SDLC artifacts
- Git
- Jenkins
- APM
- Instrumented code
- Custom scripts



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Solution – Integrating Change Datasources



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Solution – Updating ServiceNow with Change Datasource

Module	Pros	Cons
Discovery/ServiceWatch	Built in and fully supported	Code for anything custom
Change module	Built in and fully supported	Code for anything custom
Event Management	Flexible rules against raw data	Need to manage lifecycle of alerts
Table or Scripted API	Customizable for any workflows	Resources to design, build & maintain
CMDB Lifecycle API	Easy built-in API for just one field	Limited to Lifecycle status and actions

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Solution – Demo

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Put It All Together

- Document integration using first toolset as example
- Backlog sources of shadow changes and prioritize them
- Consider both configuration management and source control tools
- Integrate one source into agile process quarterly
- Improve operational awareness with CMDB Lifecycle API
- Enhance Event Management for more custom event inputs



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Top Takeaways

1

Review your change process and how many shadow changes might be occurring

2

Identify which teams are making the most shadow changes and what tools they use to make them

3

Integrate those tools into your ServiceNow change and/or CMDB for full benefit

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Thank You

CHRISTIAN MALONE
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Q & A

CHRISTIAN MALONE
MANAGER – INTEGRATION & MONITORING ARCHITECTURE
Discovery Communications

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Thank You

Christian Malone

Manager – Integration & Monitoring Architecture

Discovery Communications

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