Auto-magicking the humans out of things

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Introduction

Currently working for Extreme Networks post Brocade acquisition and specialise in automation, event-driven automation and network orchestration.

Blogger for half a decade, Tech Field Day delegate, podcaster with Ivan Pepelnjak, software developer and network engineer and lover.

I also love the sound of my own voice and like to share stuff using it.

Automagicking The Humans Out Of Things: 15 minute hoedown!

Automagicking The Humans Out Of Things

I don't want anyone to lose their job.

You have more important things to do than chase your tail.

As a measure of the impact, I expect to see rudimentary tasks minimised.

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STOP CREATING VLANS BY HAND!

Automagicking The Humans Out Of Things

Things to share. Any guesses?

1.
2.

Automagicking The Humans Out Of Things

Things to share. Any guesses?

1. Be a developer
    2.

Automagicking The Humans Out Of Things

Things to share

1. ~~Be a developer~~
   2.

Automagicking The Humans Out Of Things

Things to share

1. ~~Be a developer~~

2. Use common sense and logic

Guide to Automagicking Humans Away

Automation, especially event driven, is a data collection, analysis and transformation problem.

We take an input, make a decision and do something with it.

Guide to Automagicking Humans Away

The Path:

- Intimately understand the task at hand.

- Create an engineering flow chart.

- Digitise the flow chart on a platform.

Digitised flow charts allow re-use (aka `rinse and repeat`)

How is the automation kicked off?

Event Driven Automation

Currently, users of automation kick off automation on demand.

Years of oops and ahhh sh*t have introduced safety nets into organisations globally.
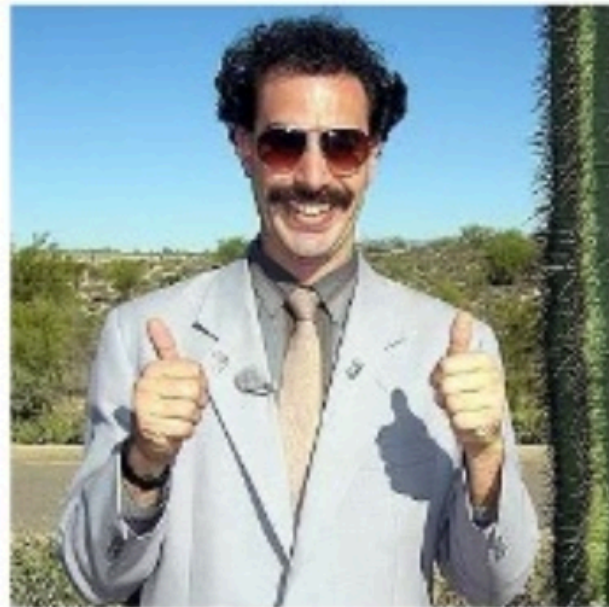
Event Driven Automation

No single answer, but a selection of signals, signal humans to do things:

- Internal Customer Signal

- External Customer Signal

- Network Event Signals (Syslog / NETCONF / MDT etc)

- Date/Time

...but why do this stuff manually?

The Right Way

Challenge the risk with value.

Pick something that when FULLY automated delivers REAL value instead of a perverts wet dream.
Harsh words, but too much of this stuff fails because of lack of value.

Start simple, call out the risk transparently, show the value.
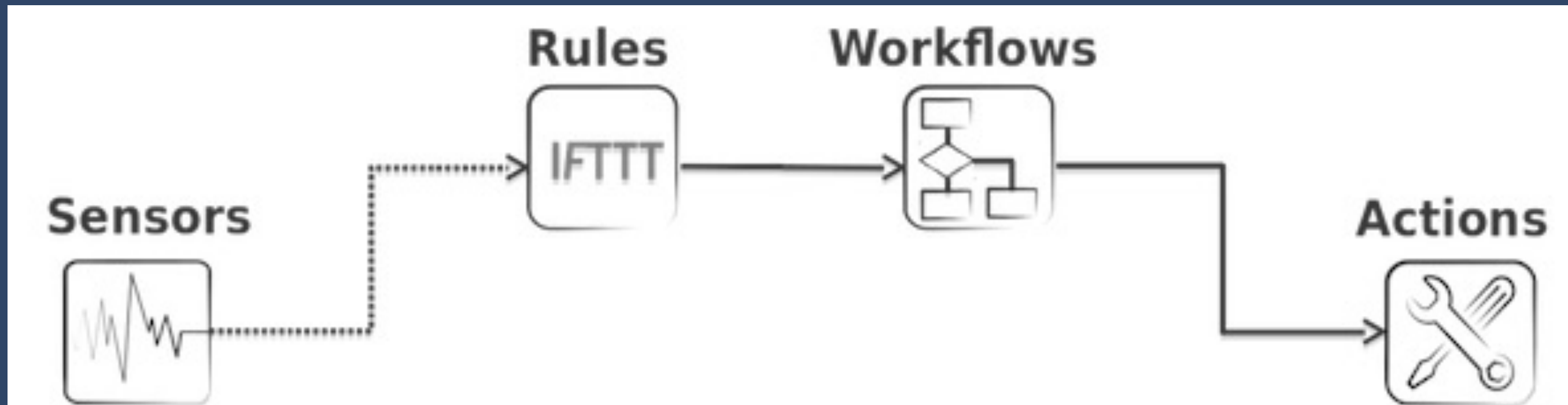
A Starting Point?

Examples

- Consume a webhook from a security device to quarantine a user and disable accounts

- Consume a syslog feed from a network device to create a trouble ticket on *down* events

- Consume MDT UDP data for usage correlation and threshold alerting

A Starting Point?

Use mechanical sympathy: In other words, lay out your flow chart with empathy to the tools you use.

Here's StackStorm's pipeline:

A Starting Point?

Start small, think big.

Focus; do not use a shotgun wanting to achieve surgical accuracy.

Be realistic, truthful and honest.Humans make mistakes, sometimes, automation can fail.

Q&A

Simple Demo!

Take a Syslog feed from a data-centre device and create a trouble ticket when a certain pattern is matched.

Syslog -> Analyse for patterns -> Create Ticket
laid over
Sensor -> Rule -> Action

Mechnical Sympathy In Action!

Live Demo!!!...!!!!!..!

Close

Be brave and do not think glory comes for free. It does not.

HOWEVER...

You can install StackStorm for free.

You can install the syslog `Ghost2logger` and `Zendesk` packs for free.

Time: 30 minutes for working demo. What have you got to lose?

Thank You