



# Benefits of Automation Using Embedded Event Manager (EEM)



## **Easy-to-use Cisco® IOS Tools for Network Engineers Managing Small and Medium-sized Networks**

Kumar Reddy ([kreddy@cisco.com](mailto:kreddy@cisco.com))

Commercial Systems Product Manager

Network Software and Systems Technology Group

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# Well Run Networks are Business Critical Resources



Source: Nemerts Research Virtual Workplace—  
Branch Office Strategies

# Today's Operations Challenges

## Operations

Proactively detect, identify & repair

Guarantee business continuity

Manage new business applications



## Tools

Commercial-class

Easy-to-use

Information-rich

Business-value



**Increasing Challenges for Small and Medium-sized Businesses**

**80% of IT budget is spent on maintenance and operations**

## Expertise

High productivity requirements

Scarce expertise

Automate basic tasks



## Deployment

Consistent

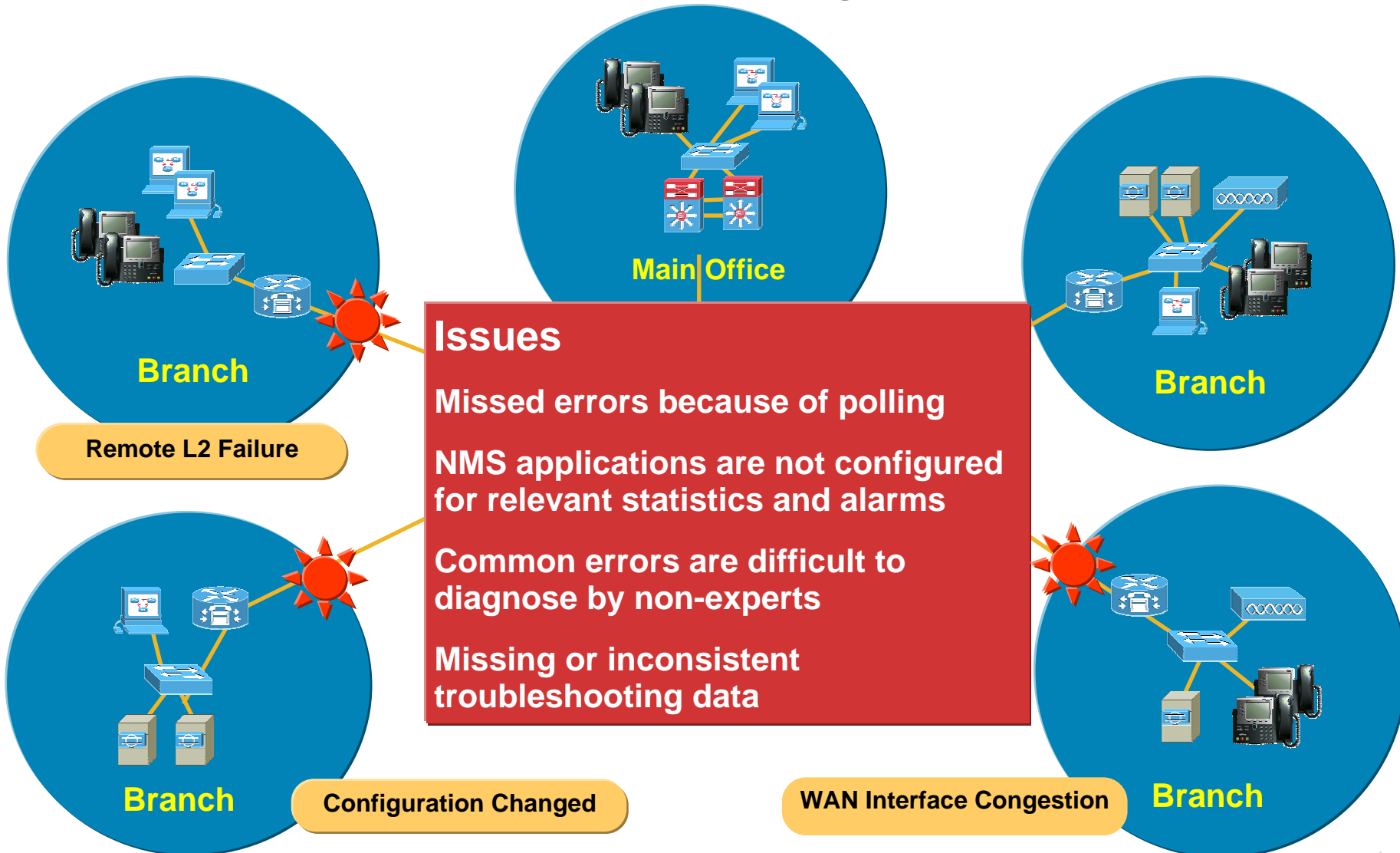
Repeatable



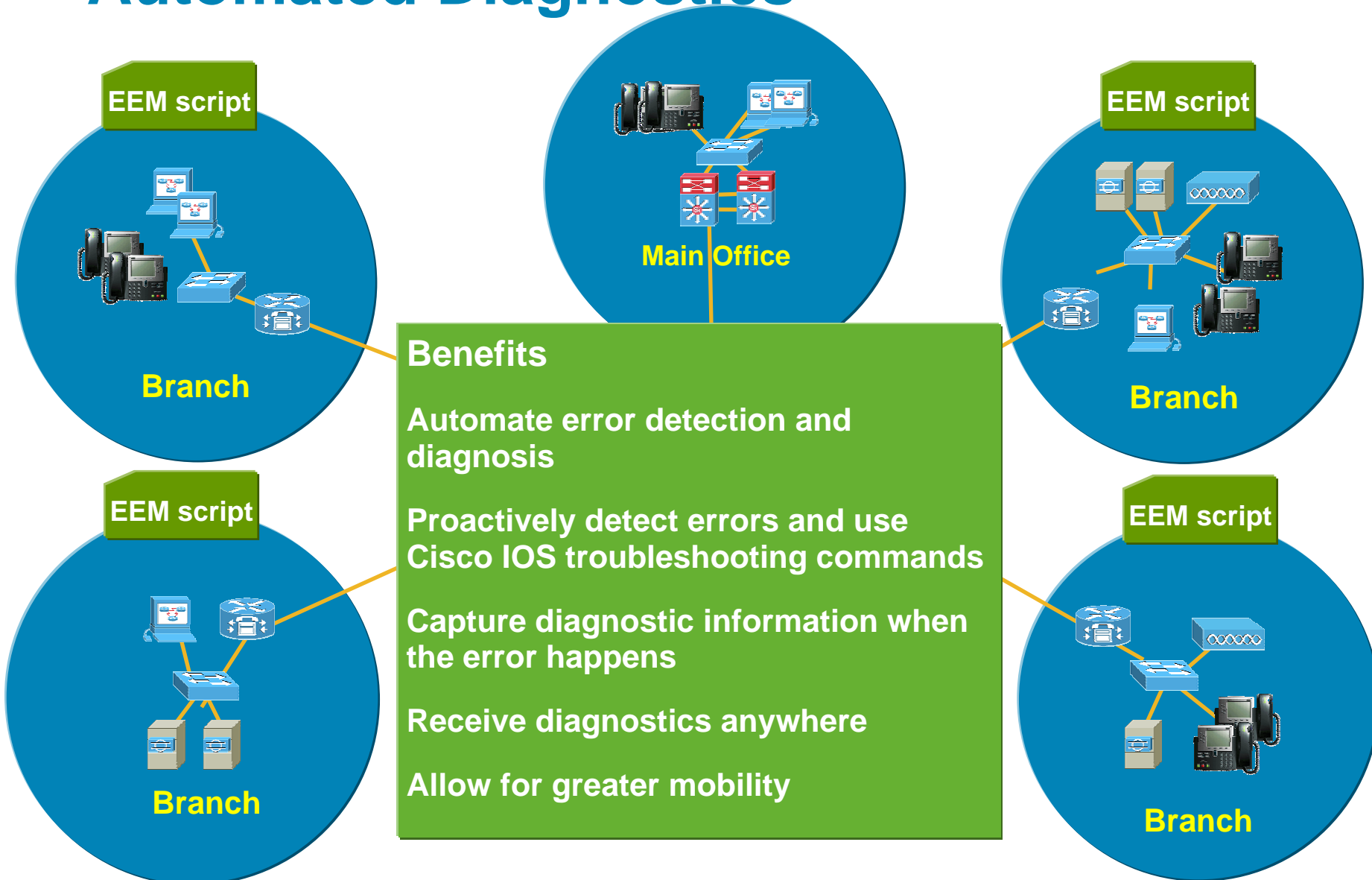
**Operational challenges are centered around diagnostics and monitoring**

# Common Diagnostic Problems

Lack of appropriate tools to manage small networks



# Automated Diagnostics



# Use Cisco IOS to Simplify Network Operations for Commercial Businesses

Easy-to-use tools for network engineers managing small and medium-sized networks

- 20 new EEM scripts for Cisco ISRs
- Pro-actively detect

Configuration changes directly on customers' routers

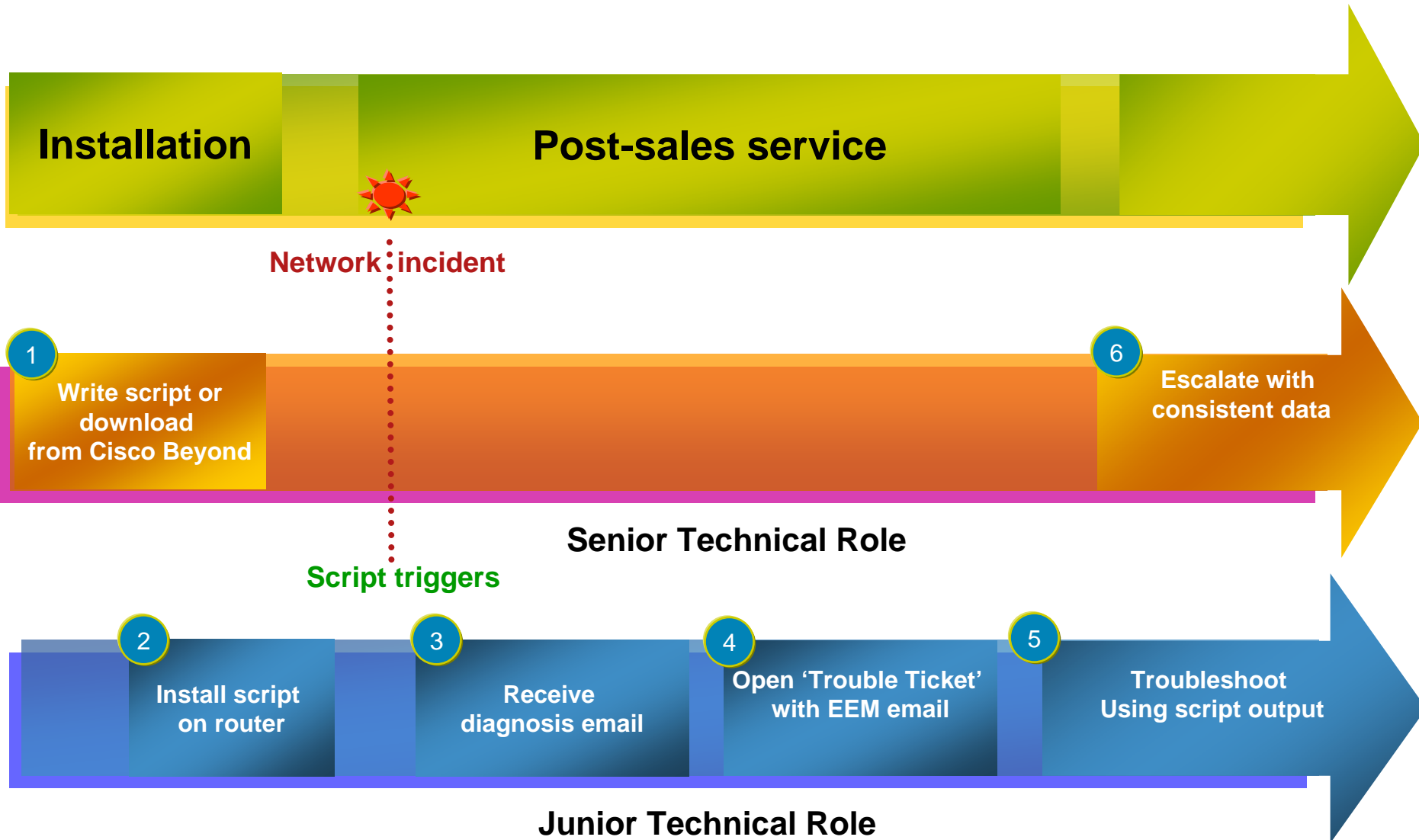
Automatically detect common error conditions

Automate troubleshooting and diagnostics

Detect transient errors



# Using Automated Diagnostics Tools for Busy Engineers





# Cisco IOS EEM at a Glance



- Register script for an **Event**

## **Event Example:** VPN failure

A VPN failure is defined as failure to reach a set of remote peer's tunnel interface(s)

- If the event occurs, the router runs the script
- A script can take an **Action**

## **Action Example:**

Run IOS commands then send an email along with diagnostic information to operations staff

- Many scripts may be registered at once
- The action is entirely customizable according to your best practices

**Note:** EEM is part of Cisco IOS. It allows Network Administrators to automate responses to specific events that occur on an ISR router or Cisco 6500 Series Switch



# Where to Find New Tools and Collateral

NEW

- 20 complete scripts
- Commented source files for each script
- 8 Video on demands
- FAQ
- Best Practices whitepaper
- Partner training slides
- **Lab training on Partner eLearning Connection planned**

[www.cisco.com/go/ioscommercial](http://www.cisco.com/go/ioscommercial)



# Summary - Business Benefits of Automated Diagnostics

- Enable junior techs and enforce best practices
- Lower costs – use what you've paid for
- Consistent methodology
- Scale operations – do more without being there
- Ultimately leads to more customer uptime
- Scripting is also a business opportunity
  - Customize a customer's network operation
  - Differentiate from other solution providers



