Use Case

Fault isolation

Demo script

Version 1.0

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Use Case

1.1 Introduction

1.1.1 Story

This use case occurs in the context of a company called Forwardinc with locations across different countries.

Daily activities on the company requires data exchange between employees in the different locations and offices.

WAN connectivity between sites is provided by a Network Provider using an MPLS network, and company a central router to interconnect offices in the same region.

In this context, L2 network team receives a ticket that registers an incident related to communication problems between the offices of Michigan and Atlanta in the West Coast.

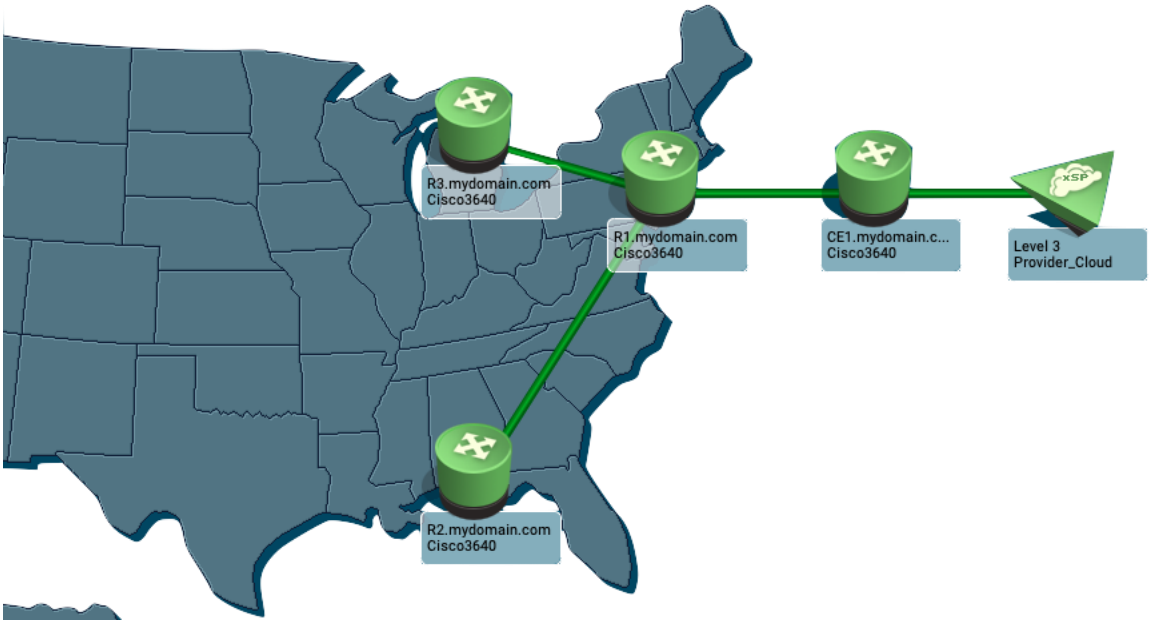
This use case will guide the L2 engineer in the process to research and troubleshoot the network issue and pinpoint the root cause.

1.1.2 Goal(s)

This use case highlights the capabilities of DX NetOps to make fault isolation in a L3 network using its patented Inductive Modeling Technology™ (IMT) and pinpoint the root cause of the problem.

1.1.3 Preparation

Following schema illustrate how Forwardinc interconnects Michigan (R3 router) and Atlanta (R2 router) offices in the West-Coast using the R1 router associated located in New York.

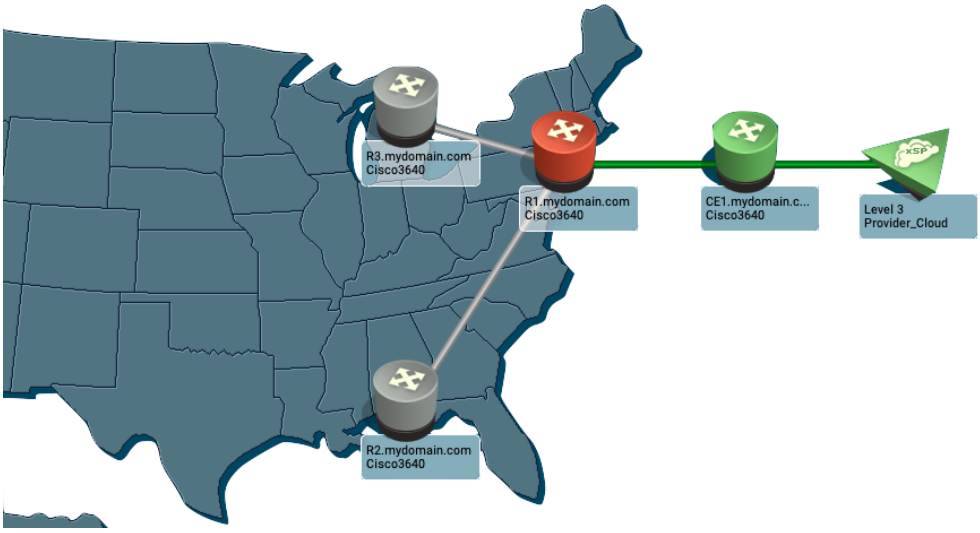


1.2 Demo Script

With access to Spectrum console, Ryan navigates to the container corresponding to United States network in the topology.

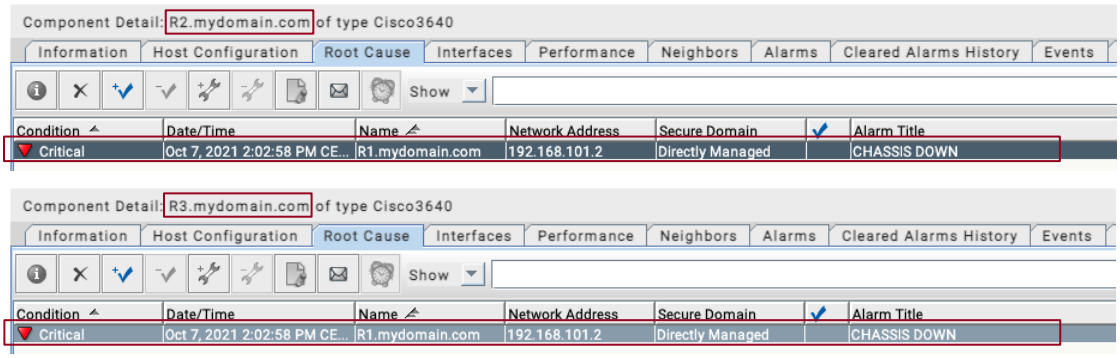
Ryan observes that condition status for routers in Michigan and Atlanta is suppressed.

Ryan decides to start the analysis with the router in Atlanta because it is origin of the ticket.

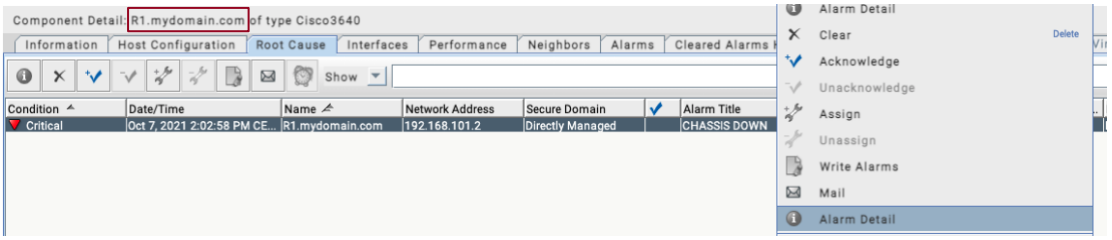


Ryan realizes that Root Cause tab is enabled for the R2 router that pinpoints an outage in R1 router as the root cause.

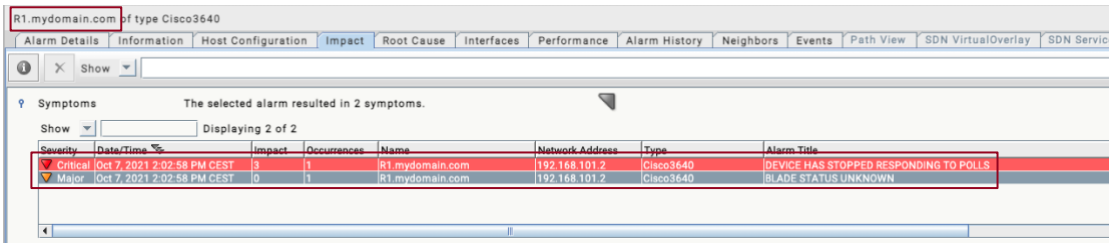
Doing the same steps with the router at the Michigan office, Ryan concludes that R1 unavailability is causing the communication problem.



With the root cause of the issue defined, Ryan drill down into the details of the alarm asserted in the R1 router to understand if there are additional symptoms impacting others.



Impact analysis reveals that the alarms associated to R1 were marked as symptoms reducing the noise.



Revision History

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Initial document version.

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