

# Network Device Auto Remediation Network Management

## Situation: A Network Interface Has Failed

- A network interface has gone down triggering actions to discover why the interface failed.
- Was this a manual or intentional shutdown or was it due to some kind of testing underway or due to a critical failure of a network device?
- When the root cause of the network outage is unknown, IT staff will default to prioritizing the problem as urgent and take actions accordingly.
- IT operations personnel are broadly activated to help remediate the situation even if the problem ultimately proves to be outside of their areas of responsibility.

## Composer Benefits



Provides fully audited process where all incident data is captured in the ITSM system and operators have insight into the appropriate remediation action.



Greatly reduces network downtime as the auto-remediation workflow executes in seconds as opposed to merely alerting and extending the downtime as manual operator intervention is activated.



It reduces both downtime costs and IT team stress by automatically assigning incident tickets a priority level, letting the team know if immediate action is needed or if they can stand by.

## Manual Remediation



A Network node being monitored by a service such as SolarWinds, ELK Stack or Splunk goes down.

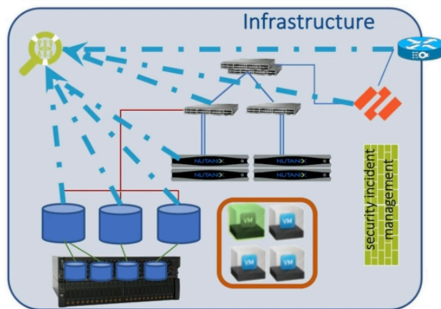


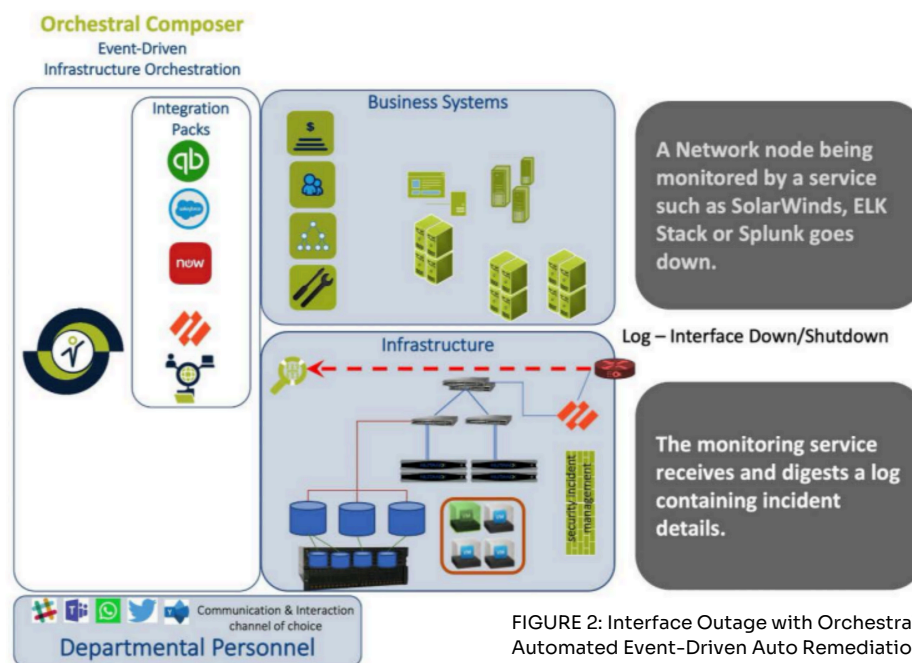
FIGURE 1: Interface Outage with Manual Remediation Response

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## Orchestral.ai's Composer Solution

Orchestral.ai provides a completely automated solution for this problem. Orchestral Composer automatically executes new or existing remediation workflows that IT operations teams have developed while leveraging existing infrastructure tooling and management platforms that have been deployed.

## Event-Driven Auto-Remediation



## Composer Event-Driven Auto-Remediation

1. Composer informs the operations teams about the interface outage through Chatops or similar alerting/ communications tool and indicates the start of an auto-remediation workflow.
2. Composer collects state information on the router before and after the auto-remediation action.
3. Composer zips the two "pre" and "post" state files as artifacts of the incident.
4. If the interface has been successfully restored: Composer then opens a service ticket with priority "Low" on the ITSM ticketing system and attaches the troubleshooting artifacts for further analysis.
5. If the interface has not been successfully restored: Composer opens a service ticket with priority "High" on the ITSM ticketing system and attaches the troubleshooting artifacts for further analysis.
6. Lastly, Composer informs the operations team through Chatops of the new incident created and the ticket number for follow up action.



**Orchestral.ai**  
Conquer Complexity in Enterprise IT

Orchestral.ai is a team of like-minded technology professionals possessing a combined experience of over 100 years in the IT industry.

Contact Us: For more information, please contact our Client Development Team at [info@orchestral.ai](mailto:info@orchestral.ai)

## About Us

Orchestral's mission is to enable IT infrastructure & operations teams to more effectively manage the complex mission critical processes that their organizations depend upon for day-to-day operations. We accomplish this today with the Orchestral Platform - an integrated suite of automation, orchestration and Explainable Artificial Intelligence (XAI) technologies designed to empower enterprises to start their transition toward Autonomous IT Infrastructure.