

## USE CASE

# Network Device Auto Remediation

## Network Management



**Orchestral.ai**  
AI-Driven Orchestration

### 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.
- If the auto-remediation workflow is unsuccessful, the IT ticket can be automatically given a higher priority that triggers the appropriate response from the appropriate operations personnel.

### Manual Remediation

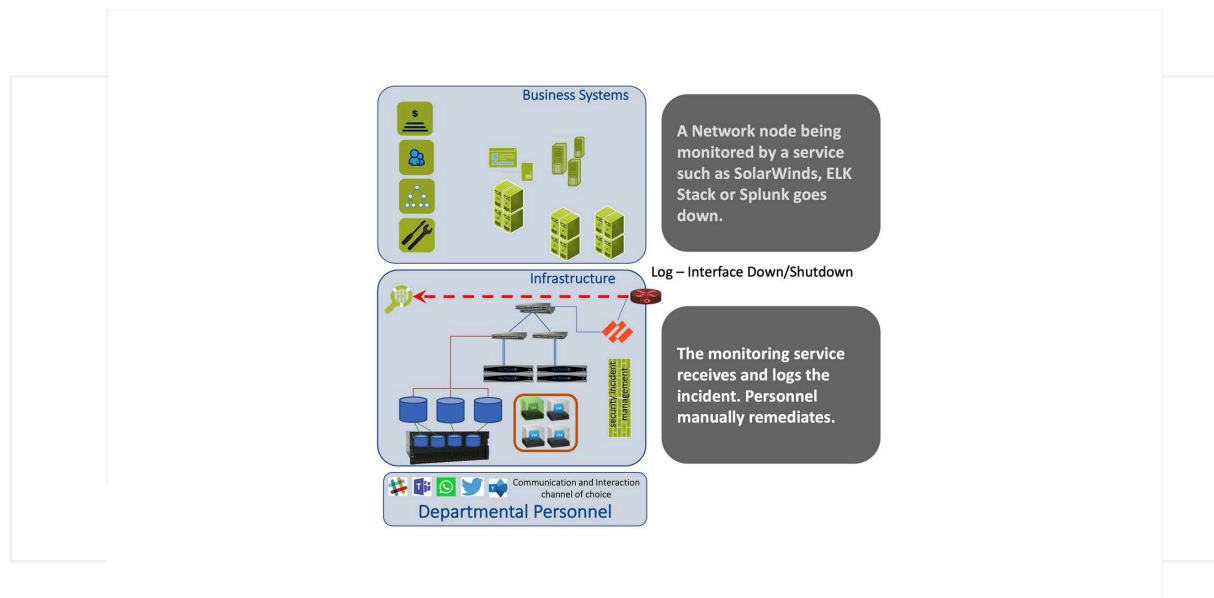


FIGURE 1: Interface Outage with Manual Remediation Response

## 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

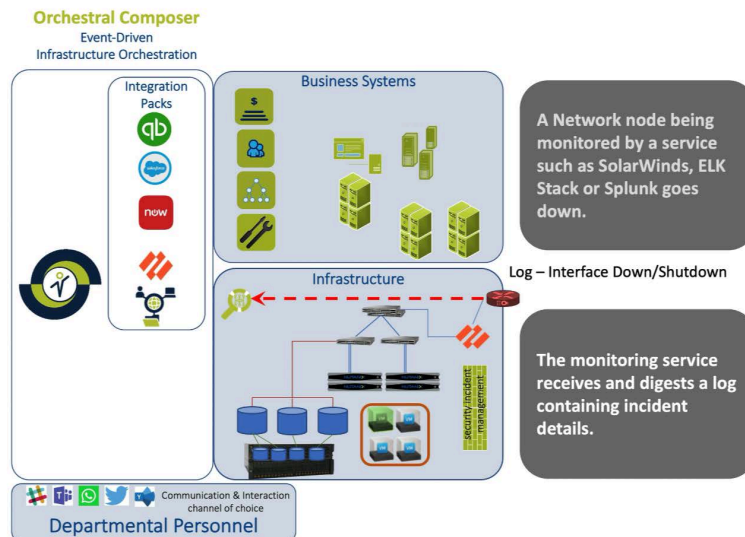


FIGURE 2: Interface Outage with Orchestral Composer Automated Event-Driven Auto-Remediation

## 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**  
AI-Driven Orchestration

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

©2022 Orchestral.ai, Inc. All rights reserved. Orchestral.ai and the Orchestral.ai logo are trademarks or registered trademarks of Orchestral.ai, Inc. in the United States and/or other countries. All other names are the property of their respective owners. For additional information on Orchestral.ai Trademarks please see <http://www.orchestral.ai/company/legal/trademarks>. Specifications and product availability are subject to change without notice.

©2022 Orchestral.ai, Inc. All rights reserved. | [www.orchestral.ai](http://www.orchestral.ai)

**Contact Us**

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