freshworks

WHITEPAPER

Freshworks on Freshservice:

The ITOM Story

How Freshworks Network Operations Centre (NOC) used Freshservice to transform infrastructure and operations management (I&O), delivering operational excellence while reducing costs and complexity.

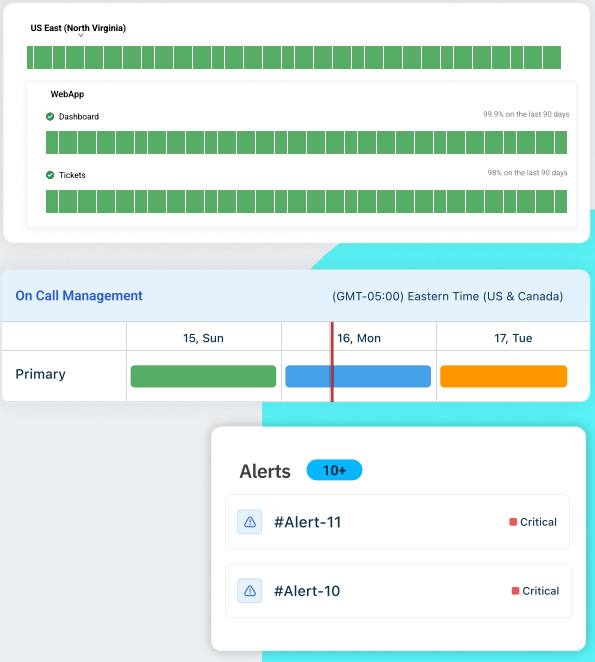




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CHAPTER ONE

Introduction

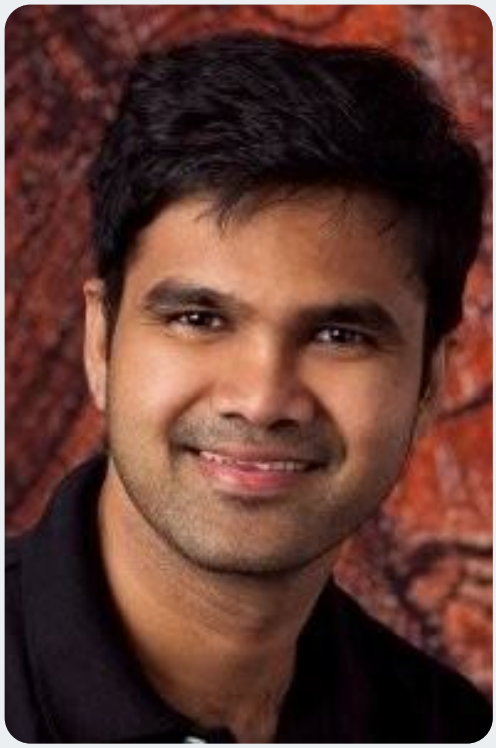
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Scaling up with ServiceOps, actualized by homegrown ITOM

Operational excellence is the foundation of business profitability. For modern organizations digitally catering to customers around the world, this translates to systems uptime. And the larger the organization, the greater the impact of that uptime and quality of services for end users.

At Freshworks, the implementation of Freshservice IT operations management at the Network Operations Center (NOC) is a milestone on that journey. Part of the Freshworks on Freshservice program, the implementation has been not only a strategic move to make Freshworks run on homegrown technology but a demonstration of the market fit of Freshservice as a ServiceOps solution for enterprise customers.

This is the story of that incredible journey.



The ITOM implementation in Freshworks NOC is a highlight of the Freshworks on Freshservice initiative. While Freshservice has largely been associated with IT service management, it is now known as a leading ServiceOps provider because of its newly developed capabilities in operations management. And getting the NOC to adopt them has validated our product philosophy.

Vishnu Parimi
Senior Director, Product Management



CHAPTER TWO

Executive summary

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Fewer incidents, faster resolution, enhanced agent experience

For modern organizations, uptime is essential for delivering a great customer experience. At Freshworks, this means delivering uninterrupted services to 68,000 customers across 120 countries via its diverse product portfolio. Achieving this in an increasingly complex, hybrid, and dynamic modern digital landscape is a remarkable feat made possible by its Network Operations Center (NOC).

The NOC is the command center that keeps Freshworks firing on all cylinders. As Freshworks grew from a single-product company with a five-member team to a B2B enterprise with 5,000 employees, the NOC scaled its operations in tandem, hustling with homegrown tools and custom scripts. But every team reaches a stage where it requires a proper solution to unlock the next stage of its evolution. So did Freshworks' NOC.

The NOC's adoption of Freshservice's ITOM modules—spanning Alert Management, On-Call Management, and Major Incident Management—helped optimize operations in several ways:

- Alert noise reduced by **78%** using alert management, resulting in nearly **5,000** agent hours saved per year
- **60%** of agents' triage time saved per year by using automated triaging
- Avoided penalties of nearly $500K by keeping uptime above SLA of **99.8%**



The Freshservice implementation for operations management has unlocked several layers of operational efficiency for the NOC. The reduction in alert noise has been phenomenal. We are no longer constantly firefighting and can instead proactively work toward making our 24/7 NOC and SRE functions increasingly resilient and scalable in step with Freshworks' growth.

Sreedhar Gade
Vice President, Engineering



CHAPTER THREE

Freshworks Network Operations Center

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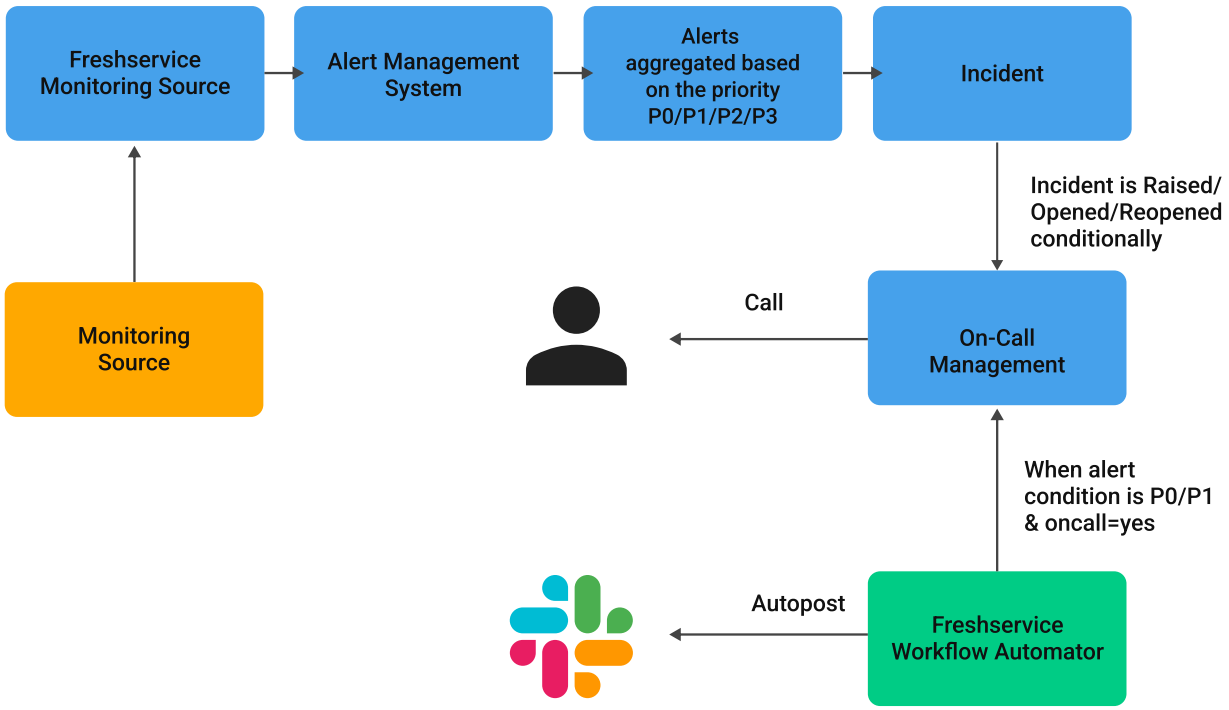
Efficient incident response to keep Freshworks on 24/7

The NOC is responsible for incident response at Freshworks. In association with the Central Site Reliability Engineering (SRE) team, the NOC team keeps all Freshworks applications in its expansive product portfolio up and running at all times, including Freshservice, Freshdesk, Freshmarketer, Freshsales, and Freshchat. The 20-member team based in Chennai and Hyderabad works in shifts 24/7, 365 days a year. Their objective is to continually reduce the mean time to detect (MTTD) and mean time to resolve (MTTR), helping the Central SRE team achieve its availability target of 99.8% per month.

The NOC works within common service-level agreements (SLAs) across all Freshworks products. For P0 incidents, response time is five minutes. For P1 incidents, it is 15 minutes, and for P2 incidents, it is 45 minutes. Unofficially, the team aims to respond to all incidents within one minute.

Once the priority of an incident has been finalized, the associated on-call team is notified as specified by standard operating procedures (SOPs). The on-call system is triggered for every P0 incident. For P1 incidents, the on-call agent is alerted on a case-by-case basis. Not all SOPs are automated because of access control restrictions.

The NOC also publishes updates to the status page, informing all stakeholders of the status of each incident.





CHAPTER FOUR

The challenges

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Cognitive overload with alerts across multiple screens

The Network Operations Center was on the job long before the alert management module was developed. Keeping with the entrepreneurial spirit, they used Freshservice to aggregate alerts from multiple monitoring tools. Then they added a layer of custom automations on top of Freshservice to forward alerts to the associated agents and agent groups in relevant Slack channels.

As Freshworks' product portfolio grew, the team spun up new Freshservice instances to address the requirements of every new product. So, there was a Freshservice instance to address alerts related to Freshdesk, another for Freshsales, another for Freshservice itself, and so on. By early 2023, the NOC team was managing multiple Freshservice instances. Agents had to refer to these separate instances to understand the state of services across Freshworks' multiple products.

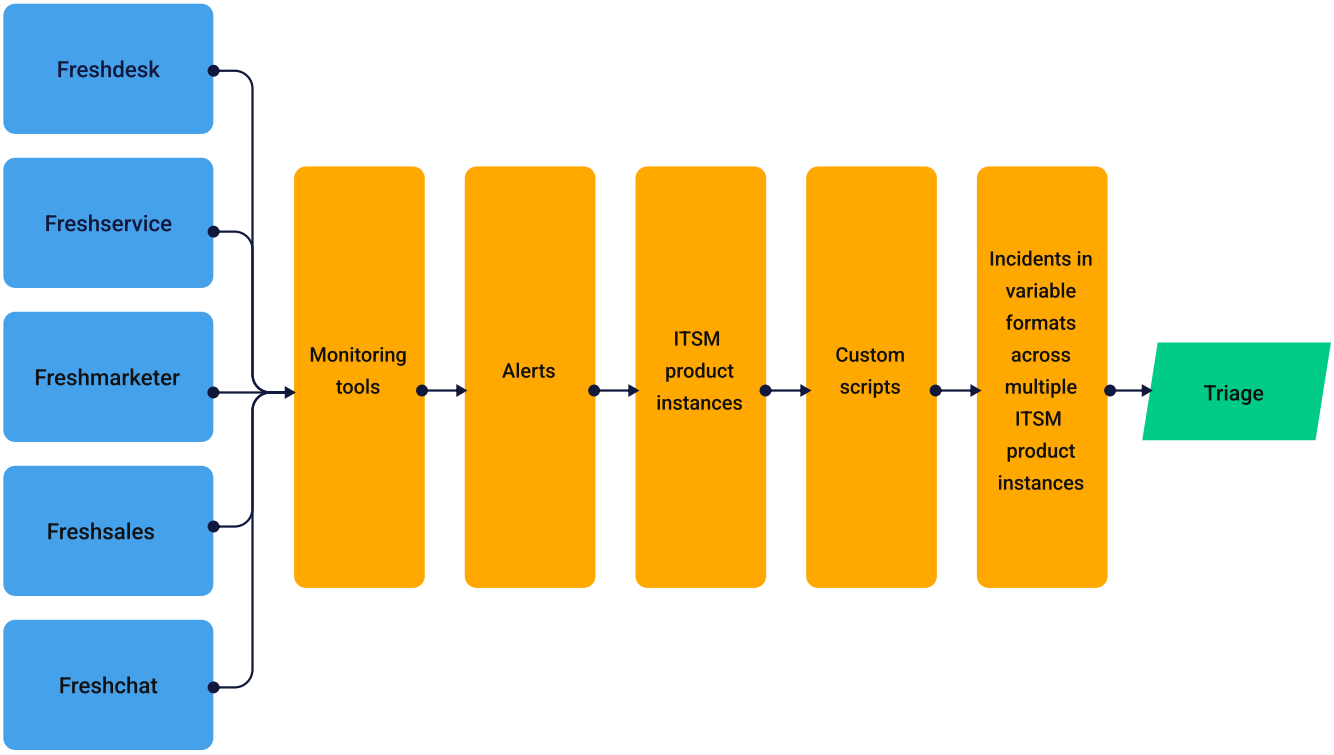
And that's not all.

Productivity losses from agents drowning in alert noise

Each alert was ingested into Freshservice via email and treated as a separate incident. This essentially meant that all alerts, including duplicate alerts, flapping alerts, and alert closures, required agent intervention. The NOC built custom scripts to address some of these issues, such as automatically closing incidents for which the associated alert had been resolved. However, before Freshservice's ITOM modules were implemented, the NOC was receiving nearly 200,000 alerts per month, which were converted to the same number of incidents. The alert noise and associated manual intervention took up significant agent bandwidth.

Absence of standardization affecting quick comprehension

In addition to this high volume, the format of alerts received from different monitoring tools was different. Without standardized alerts, agents struggled to compare equivalent fields in alerts received from multiple tools.



Lags in incident acknowledgment due to a manual on-call system

The NOC works with around 60 on-call agent groups comprising developers and site reliability engineers across multiple product lines. With each incident, the NOC triaged it and finalized its priority, then manually notified the associated developer and/or the SRE on-call via phone, as specified by priority-based SLAs.

To remediate incidents with known causes outside of business hours, the NOC resorted to SOPs, which required they follow pre-approved remediation steps. If the steps did not resolve the incident, only then would they inform the associated agent on-call.

For issues that spanned across products or originated in a single product but impacted others, the NOC coordinated among developers and SREs for those products. It provided information, clarity, and coordination of the incident response across multiple teams. The NOC also maintained a list of unacknowledged incidents, manually intervening multiple times until the issue was acknowledged.

This setup, while functional, was no longer scalable. NOC agents were perpetually triaging incoming incidents, deciphering the priority, and manually notifying and following up with on-call teams. The on-call agents ended up fielding multiple calls per day, often with many pertaining to a single issue, unnecessarily drawing their attention from tasks that mattered more. The 24/7 barrage of calls between the NOC and on-call teams did keep Freshworks always on but clearly it wasn't an optimal solution.

Excessive time spent manually creating post-incident reports

Tackling major incidents efficiently is one of the chief responsibilities of the NOC. Creating a post-incident report that includes the incident details, timeline, root-cause analysis, associated tasks, and next steps is essential. It captures the learnings from each incident and builds business resilience.

However, the NOC was not able to fully benefit from this best practice because the process was completely manual. Populating a document with all of these details manually took several hours per major incident and increased the likelihood of errors.





CHAPTER FIVE

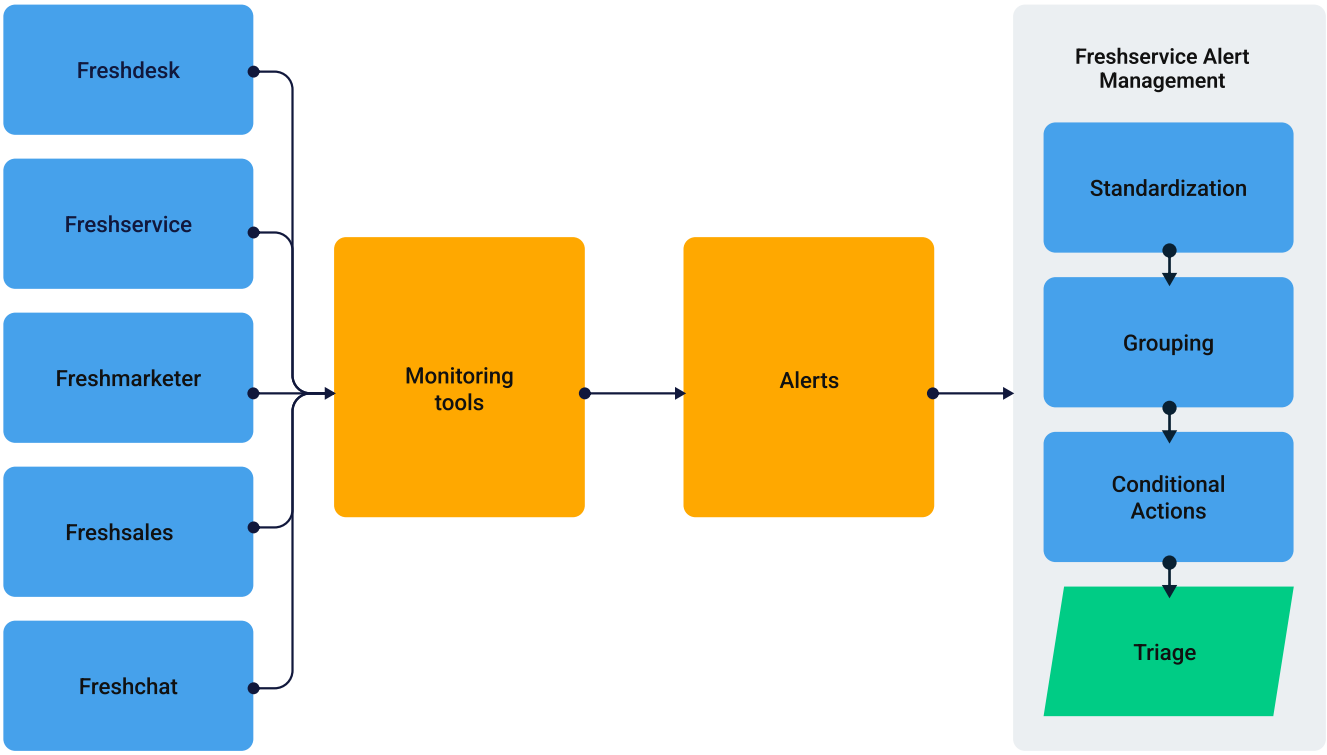
The solution

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Minimize alert noise, standardize alerts, and automate actions with Alert Management

The initiative to adopt Alert Management gained momentum in August 2023. From multiple Freshservice instances, the NOC moved to a single instance: a unified Freshservice portal. The migration involved configuring alerts for all 40 services across Freshworks products in Alert Management.

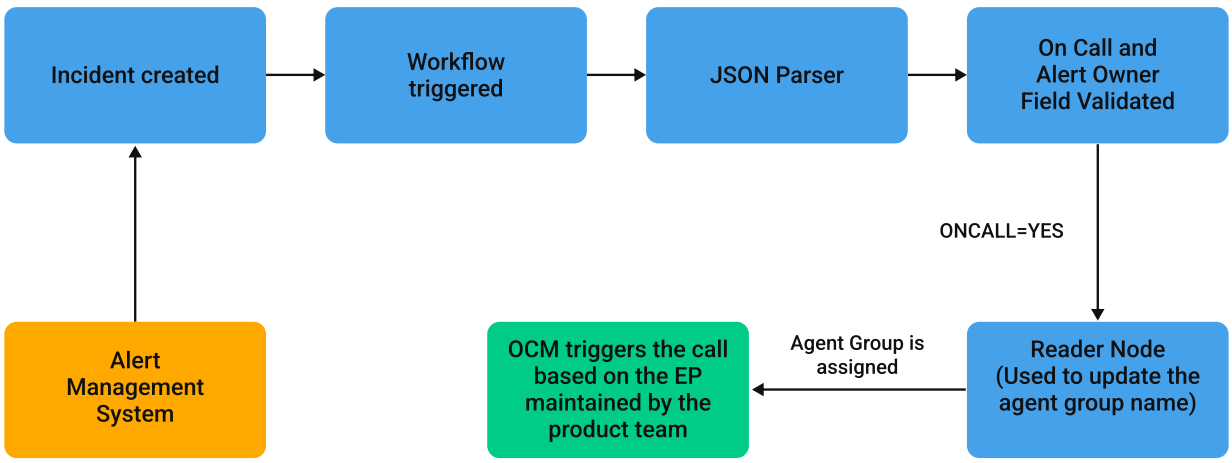
- The first benefit was improved issue comprehension via alert standardization. Alert Management standardized the alerts by mapping the values used by monitoring tools to the ones used within Freshservice. A standardized view with all alerts from all monitoring tools displayed in a uniform format has helped agents quickly compare and study alerts, reaching the root cause of outages faster.
- The second and biggest benefit is noise reduction. Before Alert Management, the NOC dealt with nearly **200,000 alerts per month**. Now, it averages **50,000 alerts per month**—a phenomenal decrease in alert noise.
- Third, the NOC freed up precious agent bandwidth by automating conditional actions on alerts. The automation kicked into action based on alert properties. In addition to eliminating dependence on agents, this also improved the accuracy of actions and helped reduce the time to resolve.



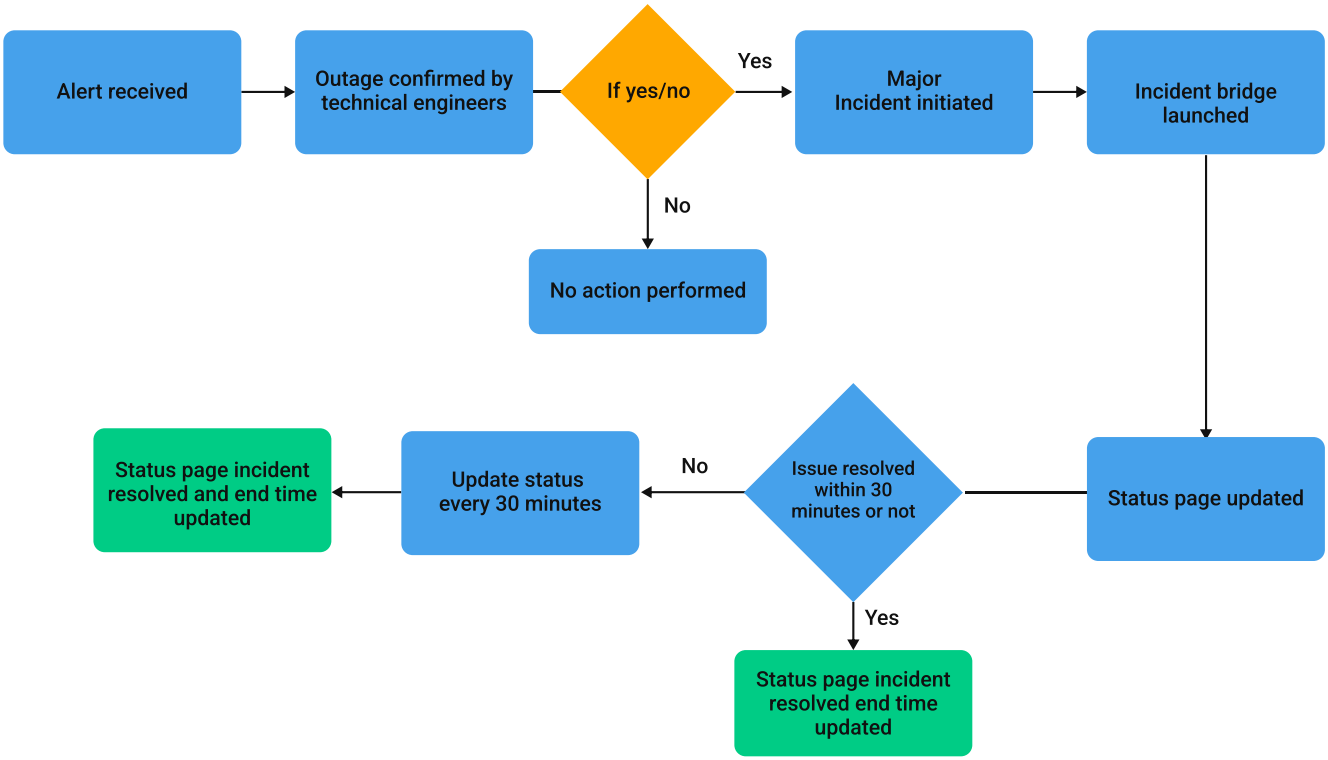
Automate and streamline escalation with On-Call Management

This transition started in Q4 2023 and involved onboarding around 60 on-call teams across Freshworks to On-Call Management. To accomplish this move, the Freshworks ITOM engineering squad studied the requirements of each team and configured schedules and shifts accordingly. The implementation resulted in three significant benefits.

- First, the on-call notification is automatically triggered based on incident content. This eliminates delays and errors due to human judgment. NOC agents no longer need to analyze every alert and figure out if it should be escalated to on-call agents—and if it does, which on-call agent group to be contacted. This has **saved significant mental bandwidth** that can now be used for higher-order tasks.
- Second, NOC agents no longer need to manually call on-call agents. On-Call Management automatically triggers notifications on **phone**, **SMS**, and **WhatsApp**. And if the notification isn't acknowledged, the system follows up per a predefined notification frequency.
- Third, NOC agents no longer struggle to identify whom to escalate an incident to if the primary on-call agents are unresponsive. On-Call Management automatically escalates the incident to the secondary and tertiary on-call agents until an acknowledgment is registered. Even if the tertiary on-call agents fail to respond, the escalation repeats across all three levels until the incident is acknowledged. This approach ensures that **no incident falls through the cracks** and allows NOC agents to focus on triaging issues.



Aggregate learnings with post-incident reporting in Major Incident Management



The NOC onboarded the Major Incident Management module in December 2023. There are three significant advantages of this move.

- First, the Major Incident ticket type has enabled the NOC to **isolate critical issues** and drive an urgent incident response.
- Second, the automatic measurement of metrics such as mean time to acknowledge (MTTA) and mean time to resolve (MTTR) has **eliminated errors** in calculation and added rigor in the team's quest to improve operational efficiency.
- The third and biggest benefit of Major Incident Management is **automated post-incident reporting**. Automatically populating incident details in the report saves significant time and improves accuracy. Tasks, if added to a major incident, are also added to the report, consolidating all relevant information in one easy-to-access repository.

The team also uses the summarizer and resolution notes generator features of **Freddy AI Copilot**, powered by generative AI. These innovations have elevated the quality of documentation while simplifying the associated processes, helping the NOC focus on what it does best: incident response.



Freshservice ITOM became available to us at the right moment, when Freshworks' growth demanded a dedicated ITOps tool. The Alert Management module, combined with automated escalation via the on-call solution, has significantly reduced manual intervention. The post-incident reporting functionality has been a great time-saver.

Gaurav Singh
Senior Director, Reliability Engineering





CHAPTER SIX

The result

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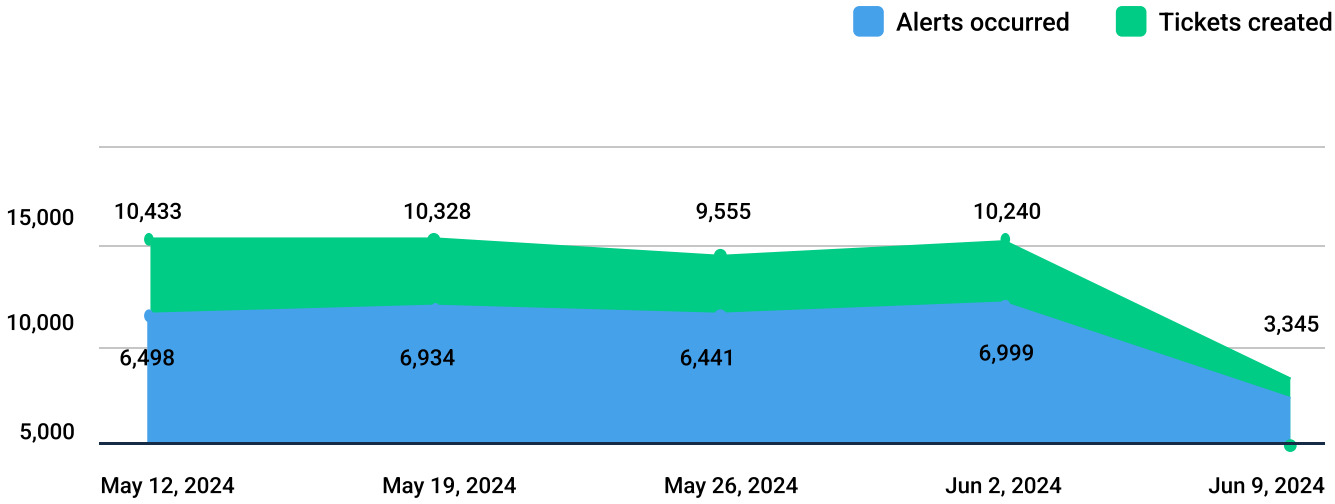
Higher efficiency with significant agent hours saved

The ITOM implementation at Freshworks' NOC has improved the efficiency of its services, **potentially saving a half-million dollars in SLA penalty payouts.** And eliminating manual tasks has saved **22,000 agent hours**. These cumulative benefits are a result of several factors, notably:

- **Alert noise reduction:** From 192K to 44K alerts per month
- **Triage time reduction:** From about five minutes to triage an alert and forward it to the relevant product team to two minutes

30-day trend for alert and ticket creation

Alerts created	Incidents created from alerts
43,901	29,119



RAW Alerts	RAW Alerts - Aggregated	Incident	MIM - Total
Total alert log count	Total alerts	Total tickets	Total tickets
192,945	43,957	29,196	6

Reduction in alert noise over 30 days using the Alert Management module: 192,000 raw alerts to 44,000 alerts. Of these 44,000 alerts, around 29,000 were promoted to incidents.



CHAPTER SEVEN

Conclusion

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A milestone in the pursuit of operational efficiency

The implementation of Freshservice's IT operations management modules at Freshworks' Networks Operations Center isn't yet fully completed. However, the organization is already reaping the benefits, demonstrating the advantages of having ITOM capabilities on an IT service management platform like Freshservice.

This mammoth project involved many different teams and stakeholders and risked high negative impact on customer experience. But with Freshservice, the transition turned out to be seamless and successful.

This implementation has freed up significant time and resources for the Network Operations Center, enabling them to focus on making Freshworks **increasingly resilient** to service degradation. With the increased clarity from access to complete context, the Freshworks NOC—in association with the Central SRE team—can look forward to **fewer incidents** and **faster resolutions**. For Freshworks and its customers using its myriad products, this is an absolute win-win.

Business benefits of the ITOM implementation	
Alert noise reduction per month by using Alert Management System	**78%**
Agent hours saved per year because of alert noise reduction	**~5,000**
Reduction in time taken to triage an alert and forward it to the relevant team	**From 5 minutes to 2 minutes**
Agent's triage time saved per year by using automated triaging	**60%**
Agent hours saved per year by elimination of manual tasks	**22,000**
Penalties avoided by keeping uptime above SLA of **99.8%**	**~$500,000**



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