WHITEPAPER



Why MTTR Matters





What all engineering teams should know about MTTR

In the IT world, uptime is everything. So when technology fails, your first thought should be how to utilize incident management knowledge to fix the situation and minimize downtime.

It takes 18.5 hours on average to resolve a data center incident such as downtime. How much will that cost you?

- One minute of downtime can cost over \$8K
- In 2015, the average cost of a data center outage was \$740K
- Outages disrupt productivity of business and employees
- Human error is the biggest contributor to downtime

What is MTTR?

IT teams whose main goal is to resolve incidents need to minimize MTTR –Mean Time To Resolution. Teams want to ensure ITIL (information technology infrastructure library) and ITSM (information technology service management) best practices are followed in order to manage incidents effectively.

The need for critical alerting

Even in the best scenario however, failures are still part of the game. Reality dictates that have a plan to receive critical alerts through your incident management tools to inform you that an event has occurred. Following the alert, you would be able to quickly deploy your team to fix the issue. Yet an ideal response is not easily achieved. There are many roadblocks to decreasing MTTR, including:

- engineers not being alerted to incidents or missing alerts
- excessive delays in getting the message to engineers
- insufficient data accompanying an alert



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Who cares about MTTR?

MTTR is of importance to everyone who deals with incident resolution. MTTR is a valuable metric that can be used to measure how long it takes teams to resolve an incident after it has been reported. Typical incidents include servers being down, a component running too slowly, and software failing to deploy or deploy correctly.

Here's how 3 different groups experience MTTR:

IT Teams – MTTR is used by countless IT organizations to delve into issues such as why the repair time for components is too high. For these teams, MTTR often means the time until a failed or broken part is replaced.

DevOps – According to Payal, MTTR is a "true indicator of how good [the team is] getting with handling change." When a deployment goes wrong or unusual activity occurs on the server, the DevOps team should be prepared to handle the issue in a time span agreed to by management. There will inevitably be spikes when the DevOps team encounters an issue it has never faced before, but the goal is to have MTTR decrease over time.

MSPs – Managed service providers are constantly looking at MTTR because it defines their efficiency. MSPs look across the range of issues from monitoring to testing to constantly minimize MTTR. According to Kaseya, "The key is to reduce the variability in time spent resolving issues." MTTR is a valuable metric that can be used to measure how long it takes teams to resolve an incident after it has been reported.





Issues impeding effective MTTR

While the importance of MTTR is generally acknowledged, there are many impediments to effective management.

Lack of effective monitoring tools. There is often no baseline for how your system should operate. In this situation, ITIL's framework for providing best practices for aligning IT with business needs has been degraded. Instead your teams use homegrown tools to monitor and create a baseline. Without robust monitoring and alerting tools you are unable to truly understand your monitoring system.

No escalation. A lack of automation in alerting impedes workflow and incident resolution. If the first person alerted is unable to get to the incident, a system needs to be put in place to escalate the alert.

Audit trails. No trail exists of who was alerted based on what criterion. Looking back, management is unable to see a history of the cause of the most recent alert and who was notified and in which order.

Scheduling tools. Management cannot coordinate who needs to be alerted based on the type of incident. Instead, the whole team is alerted regardless of their ability to provide insight or assistance.

Excessive alerting. Team receives too many false positives and inevitably begins to ignore alerts and eventually start to miss important ones.

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How to improve your MTTR

Identify problems quickly. Invest in monitoring tools that will capture the problem as soon as it occurs. Identifying the root cause is typically the biggest reason for MTTR variability and the one which has the highest cost associated with it.

Integrate OnPage alerting tool with monitoring tools. OnPage's escalations and redundancies leave no critical alert unnoticed, enabling action as soon as an alert is received. Ensure that information goes to the right person, at the right time, every time. When a monitoring system detects an issue, use OnPage to make sure the alerting process is automated.

Alerts need to be differentiated as High or Low. This reduces alert fatigue and increases sensitivity to alerts. Make sure engineers know when an alert is low priority so they don't spend time on resolving an issue that stands in the way of resolving a higher priority incident.

Measure how long it takes to resolve issues and put strategies in place to improve them. If MTTR is too high for your organization, you can only start addressing the issue by measuring how long it takes until an issue is identified (MTTI), how long it takes until an issue is acknowledged (MTTA), and then how long it takes until the issue is resolved (MTTR).

Track everything. Monitor from the time an incident is reported, the time the alerts are sent out, the time it takes to respond to the alert and the time taken to resolve an incident. With a tool like OnPage, with audit trails and reporting capabilities, tracking your team's progress is easy and accurate.

OnPage escalations and redundancies leave no critical alert unnoticed, enabling action as soon as an alert is received





Conclusion

Effective incident management is key to improving MTTR. If incident management is not correctly handled and MTTR continues to rise, then the true bottom line (revenue) will take a beating along with corporate reputation.

Rather than remaining helpless in the battle to improve MTTR, this whitepaper details the key components for IT professionals to consider and implement.

To learn more about OnPage: Incident Alert and Management System visit:

www.OnPage.com

