

# Overcoming Automation Fatigue: Best Practices for Accelerating Incident Resolution

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*IT & DATA MANAGEMENT RESEARCH,  
INDUSTRY ANALYSIS & CONSULTING*

# Overcoming Automation Fatigue: Best Practices for Accelerating Incident Resolution

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# Overcoming Automation Fatigue: Best Practices for Accelerating Incident Resolution

## The Dangers of Automation Fatigue

It is impossible to compete in today's dynamic marketplaces by relying solely on manual practices for managing IT processes. Enterprise IT services are the key enabler for any modern business to achieve organizational goals. However, this fact is increasingly placing pressure on network and IT operations to meet expanding SLA requirements for reliable and high-performing IT services. Unfortunately, even in the most controlled IT environments failures and incidents do occur, and any delay in detecting or resolving problems can severely impact business production and profitability. For instance, disrupted services can result in customer dissatisfaction that could damage the business reputation or may significantly increase risks to security and compliance achievement. They may also impede the agility of the business to meet changing conditions in the marketplace while increasing costs and time-to-value on the introduction of new products, services, and applications.

Typically, organizations try to improve incident resolution times by adopting automation, but automation alone can actually create more problems than it resolves and can only address a limited amount of incidents. Enabling effective automations is almost always harder than it seems. It requires an in-depth knowledge of the targeted IT processes which typically must incorporate details that only exist in the minds of knowledgeable IT professionals. To compensate for a lack of information, administrators often over-automate processes, making them difficult to manage and eminently error-prone because they are too complicated to modify or diagnose. Also, over-automated solutions only target very specific use cases and cannot be adapted to support changing or related requirements.

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The approach an organization takes to designing and implementing automation directly determines how much automation can be effectively introduced. Traditional IT Process Automation (ITPA) solutions employ a “closed loop” approach that only incorporates very specific capabilities, so they can do no more or less than the tasks were designed to perform. These solutions lack an understanding of the broader and more complex IT ecosystem where changes on any single system, application, or service can have a profound effect on a wide variety of other elements. Therefore, “closed loop” ITPA solutions are unable to reliably automate complex problem resolutions and typically can only address a small subset of the incidents that an organization faces. Similarly, an over-abundance of automation designed to support IT status and performance monitoring may assist in the identification of problems, but fail to provide an indication of how to resolve the issues because it lacks a holistic view of the infrastructure or knowledge.

## Accelerating Incident Resolution

Enabling effective incident management is like baking a cake – they require both a recipe and the proper ingredients. In the case of incident management, the “ingredients” are individual automated tasks and the “recipe” is the resolution process that combines the automated tasks with any manual tasks that need to be performed. It is essential that both process and automation work together in order to orchestrate effective problem management that leverages the combined knowledge of all key IT professionals in the organization. This is accomplished by automating individual steps rather than the entire complex process. A “step” can be identified as any series of tasks that are repeatedly performed. Individual steps are each developed based on information provided by the IT professional with key knowledge on the optimal method for performing the tasks.

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A process workflow (the “recipe” in our analogy) logically orders and combines both automated steps and manual steps and decisions to achieve a particular goal. With this modular approach, existing steps can be easily recombined based on different conditions to address a broad range of incidents. In this way, both simple and complex services can be diagnosed and resolved with automations linked together with a targeted process workflow.

This approach also greatly improves the manageability of the platform as individual steps are assigned to the appropriate administrator or team for optimal support. Administrator activities performed on or with automation steps can then be tracked and reported to facilitate accountability. Also, cross-team collaborations on an incident response are much easier to coordinate as there is a clear delineation of responsibilities – each team being responsible for the steps assigned to them. With this approach, escalations can be substantially reduced or eliminated entirely as level-1 support agents can orchestrate existing automated steps into new process workflows to resolve virtually any problem without needing to involve more knowledgeable (and expensive) level-2 support, level-3 support, or IT specialists.

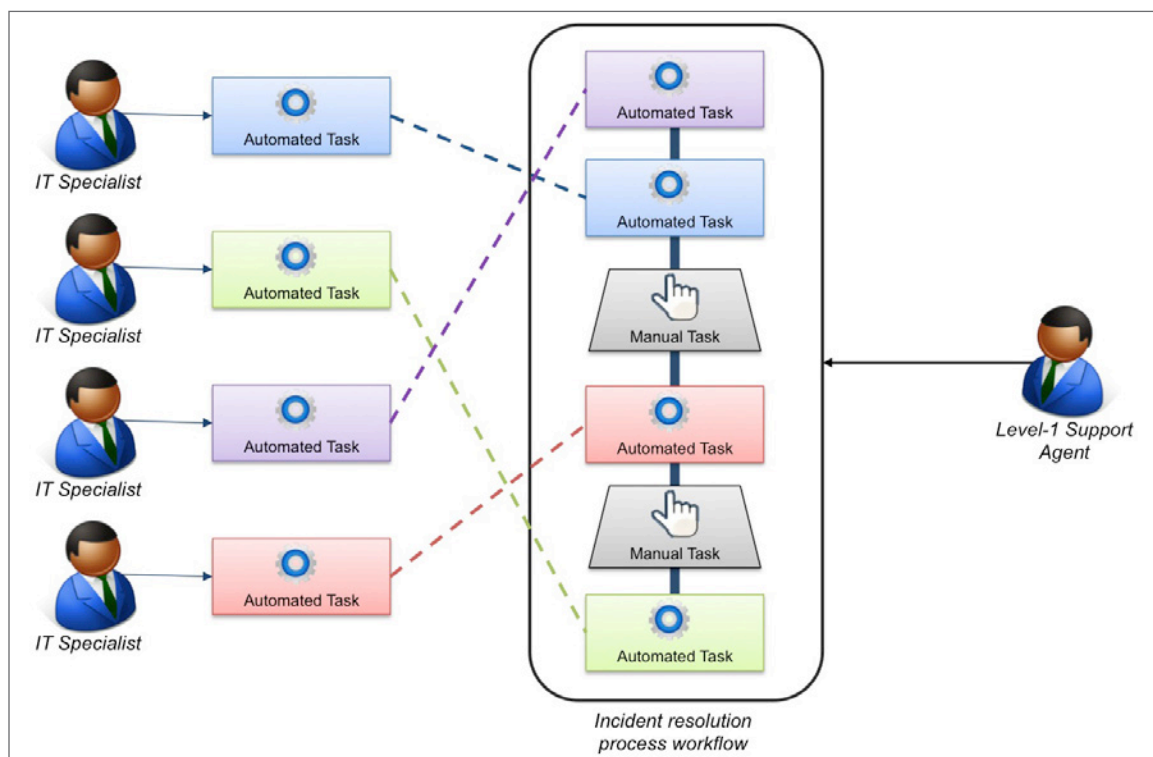


Figure 1. Leveraging the knowledge of IT specialists with process workflows

## Effective Incident Management with Resolve Systems

Recognizing the importance of managing incident response processes in addition to automation, Resolve Systems provides the RESOLVE Software System which is a comprehensive suite consolidating process management, automation, and collaboration to deliver prompt incident resolution. The solution is designed as a framework for enabling all incidents to be easily and quickly resolved through process guidance and automation. Both the small percentage of incidents that can be resolved with just automation and the remainder that require a combination of both automation and manual steps can be orchestrated with the RESOLVE platform.

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The RESOLVE Software System allows intuitive incident response workflows to be created quickly and easily. The included drag-and-drop development tools and forms-based interface simplify the creation of new automations, while pre-built automations are included out of the box that can be customized to perform a variety of common tasks. Logical decision trees are created that choreograph both automated jobs and manual tasks while defining the “who, what, where, and when” of the resolution process. The decision trees can be duplicated and individual steps modified to address very particular events without having to rebuild the entire process. Included collaboration and integrated process improvement tools also enable the guided procedures and automations to be continuously kept up-to-date as content evolves in response to demand and usage.

With the RESOLVE platform, incident resolution processes can operate effectively across multiple different types of technologies and systems. All actions and steps are recorded for historical reference and help provide a clear identification of the state of the process. The solution also directly integrates with third-party applications (such as ticketing and event management systems) to accommodate existing operational processes. Actions can be taken on network devices, servers, applications, and related systems.

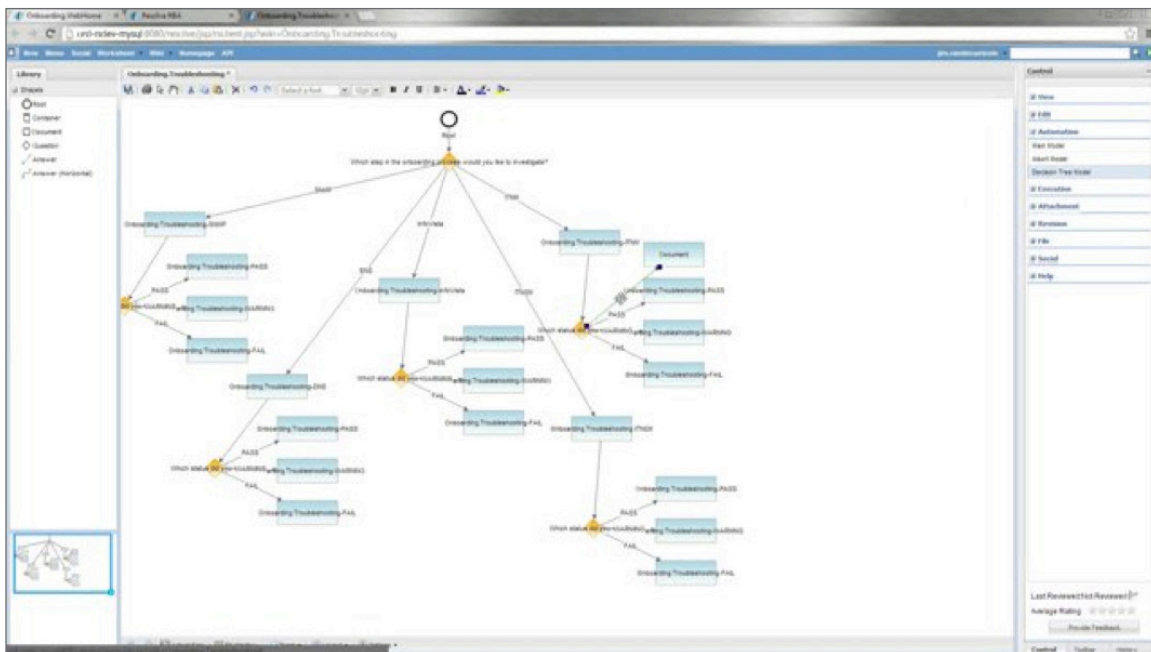


Figure 2. Simplified process management with RESOLVE Software System drag-and-drop logical decision trees

## EMA Perspective

For supporting any IT management requirements, the use of automation is only as effective as the people managing the process. To improve problem identification and remediation times, organizations must empower IT operations agents with the elemental building blocks to achieve a clear path to resolution. The RESOLVE Software System delivers the modular approach to orchestrating incident management that will decrease time-to-resolution of events while reducing staff efforts and related costs. The approach minimizes the number of incidents that require manual resolution and empowers level-1 agents to resolve problems themselves, without escalation. EMA recommends any organization seeking to optimize incident resolution to adopt the RESOLVE Software System to enable a simple and unified approach that establishes control over the resolution process and the individual automation steps, increasing overall customer satisfaction and boosting the business's reputation.

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## About RESOLVE Systems

Headquartered in California, Resolve Systems is a global software company innovating how automation can be utilized by network and IT operations organizations to dramatically improve the ability to diagnose and resolve issues as they happen. The company's flagship RESOLVE Software System provides comprehensive capabilities for applying automation to all incident resolution procedures in network and IT operations, including the full automation of select procedures for complete machine execution, and the partial automation of engineer-driven procedures, where automated steps can be embedded into guided manual procedures. RESOLVE also drives collaboration, feedback and continuous improvement to processes, critical to maintaining complex, constantly changing operational environments. RESOLVE is accelerating incident resolution at major corporations around the globe, including Charter, Earthlink, Virgin Media and T-Mobile. For more information, please visit [www.resolve.systems](http://www.resolve.systems)

## About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals and IT vendors at [www.enterprisemanagement.com](http://www.enterprisemanagement.com) or [blogs.enterprisemanagement.com](http://blogs.enterprisemanagement.com). You can also follow EMA on [Twitter](#), [Facebook](#) or [LinkedIn](#).

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### Corporate Headquarters:

1995 North 57th Court, Suite 120  
Boulder, CO 80301  
Phone: +1 303.543.9500  
Fax: +1 303.543.7687  
[www.enterprisemanagement.com](http://www.enterprisemanagement.com)  
2990.112014