

What is Problem Management?

ITIL defines a Problem as:

[the] unknown underlying cause of one or more Incidents

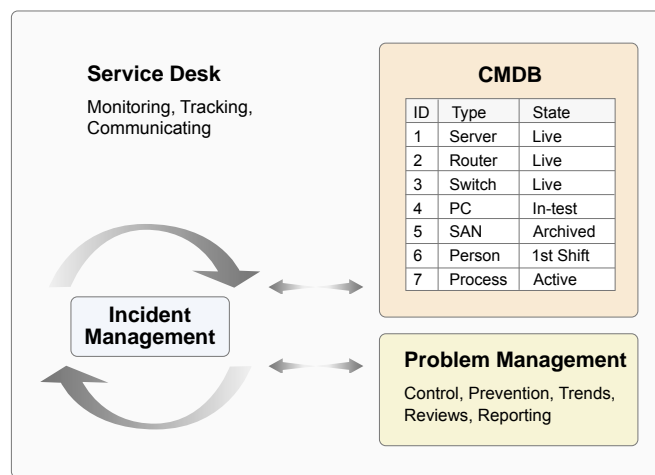
From this definition Problem Management can be described as processes that:

... minimize the adverse impact of Incidents and Problems on the business... [and] prevent recurrence of Incidents related to these errors... [by seeking] the root cause

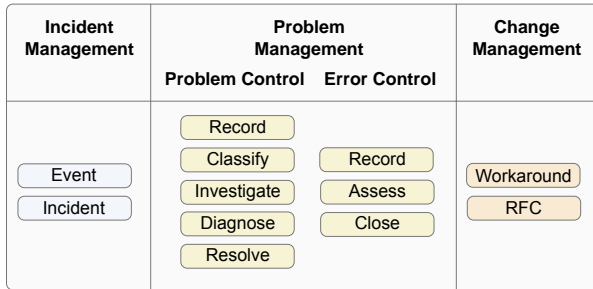
If Incident Management is the engine that drives the Service Desk, then Problem Management is the fuel that powers the engine. Often confused, Incident and Problem Management are complimentary processes that operate within and behind the more visible functions of the Service Desk. In contrast, Problem Management is focused on the identification of root causes and may involve lengthy investigation or analysis; Incident Management is primarily concerned with speed and restoring services to the user as quickly as possible. In comparison, both Incident and Problem Management generate records which must be linked not only to each other but to Configuration Items (CIs) in the Configuration Management Database (CMDB). For Problem Management to be effective, various Disciplines must be permitted to interact, as depicted below.

To better appreciate the distinct role Problem Management plays in the lifecycle of an incident it is necessary to more closely

examine two key processes: Problem Control and Error Control. During Initial Classification under Incident Management, if an event is determined to have been caused by a known error, a workaround or change should be available and the incident can be closed. Alternatively, if an event is determined to have been caused by an unknown error or no determination can be made, then Incident Management hands off to Problem Management; this is where Problem and Error Control take over. Problem Control is primarily responsible for the Investigation and Diagnosis necessary to transform unknown errors into known errors by identifying the root cause and possibly a workaround. The now, known error is then passed to Error Control for assessment and formulation of a Request for Change (RFC). The intent, where feasible, is to utilize Change Management to replace the workaround with a more permanent solution. Problem and Error Control within the context of these Disciplines are shown in the following diagram.



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When these Disciplines do not interact or when the necessary records are not created and tied to CIs within the CMDB, Problem Management ceases to be effective. In the rush to solve problems this second point, concerning the importance of record keeping, is often lost. The fact that synergy alone is not enough becomes obvious when the nature of workarounds and RFCs is examined. First, the considerable effort that may have gone into Investigation and Diagnosis cannot be leveraged or reused to resolve subsequent events without knowledge capture. Second, the true value of Problem Management lies in its ability to move from reactive to proactive through trend analysis, threshold review, and reporting associated with the solutions it develops. Without effective Problem Management an organization will be unable to respond to events reactively and have no chance to accumulate the data necessary to operate proactively. Fortunately, Plexent and itDNA can help.

The Plexent Approach

itDNA builds on the Problem Management concepts outlined in the ITIL standard and, by leveraging our framework, Plexent can apply ITIL to your organization. If you are just getting started with Problem Management you may require help to ensure the hand offs to and from the other Disciplines are smooth and fast. For organizations with well established Problem Management processes, you may be ready to move from reactively responding to events to proactively identifying potential root causes before they create a significant impact or breach of Service Level Agreements (SLAs.) Whatever your Problem Management maturity, Plexent can take you to the next level by bringing all of the pieces together.

Much more than just a framework, itDNA brings real-world tools and techniques to bear on your concerns. Backed up by itDNA's maturity models and rich, intellectual property knowledge base, Plexent's project management combines with proven policies and procedures to provide standardized services within the following Problem Management Elements:

- Fault Monitoring
- Fault Recovery
- Problem Analysis
- Root Cause Analysis

As depicted in the first diagram above, Problem Management is reliant upon Incident Management to function effectively. It also interacts with the Service Desk to provide user-facing functionality and Configuration Management as the source and destination for key pieces of data. The second diagram highlights the additional interactions necessary to use the solutions identified by Problem Management. These include Change Management, which is shown, and Release Management, which is not. In addition to the beneficial results from interaction with these Disciplines, other benefits of a mature Problem Management program include:

- Stable and continuous services
- Increased productivity
- Faster incident closure
- Solution reuse
- Improved change and release quality
- Better allocation of limited n-tier support specialists

Problem Management is a compelling addition for organizations of all sizes and maturities. Small or less mature organizations can take advantage of the speed and cost savings it affords when operated in a reactive mode. Large and mature organizations can realize even greater benefit by using the knowledge accumulated while reactive to employ Problem Management proactively. For those not sure where they fall on the continuum, Plexent provides assessment services to pinpoint your location. Leveraging the intelligence in our itDNA, we can help you evaluate where you are today, where you would like to take your organization, and the surest path to get there.

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