

Using IT Infrastructure Library to Sharpen NSM Processes

IT Infrastructure Library, a strategic standard that influences process development, will likely become an important part of network and systems management evaluations and will have everyone speaking the same language.

Core Topic

Enterprise Management: Infrastructure and Application Management

Key Issue

How will application management software, services and architectures evolve?

IT management process maturity and process workflow integration are critical success factors for network and systems management (NSM) product deployment (see "Process Definition: Forethought Not Afterthought," COM-14-1870). IT Infrastructure Library (ITIL) is a major asset because it helps define a common language and terminology to describe services, roles and processes for IT infrastructure management, and it provides templates for them.

Many NSM vendors understand the crucial link between process maturity and the success of any NSM product implementation. A growing number of these vendors, although focusing on process development generally, are interested specifically in ITIL. Most ITIL attention is coming from IT service desk vendors such as Peregrine Systems, FrontRange Solutions and Network Associates Technology. In addition, among the NSM "Big Four" vendors, Hewlett-Packard stands out as a strong ITIL supporter.

Enterprises that are assessing NSM vendor support for customer process development and implementation need to keep in mind the three main components of that support:

- Implementation services that help a customer develop management processes
- Product support for workflows that correspond to customer management processes
- Specific support for ITIL nomenclature and ITIL process definitions

Process Development Services

Enterprises that are investing in management software products want to improve the overall availability of their IT infrastructure

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and the efficiency of their IT operations groups. A major reason for the failure of these product deployments is the lack of well-defined processes within the IT operations group for basic management disciplines such as problem, asset, configuration, change, capacity and service-level management. NSM vendors have found that this lack of process development impedes the initial management software deployment and the sale of follow-on products.

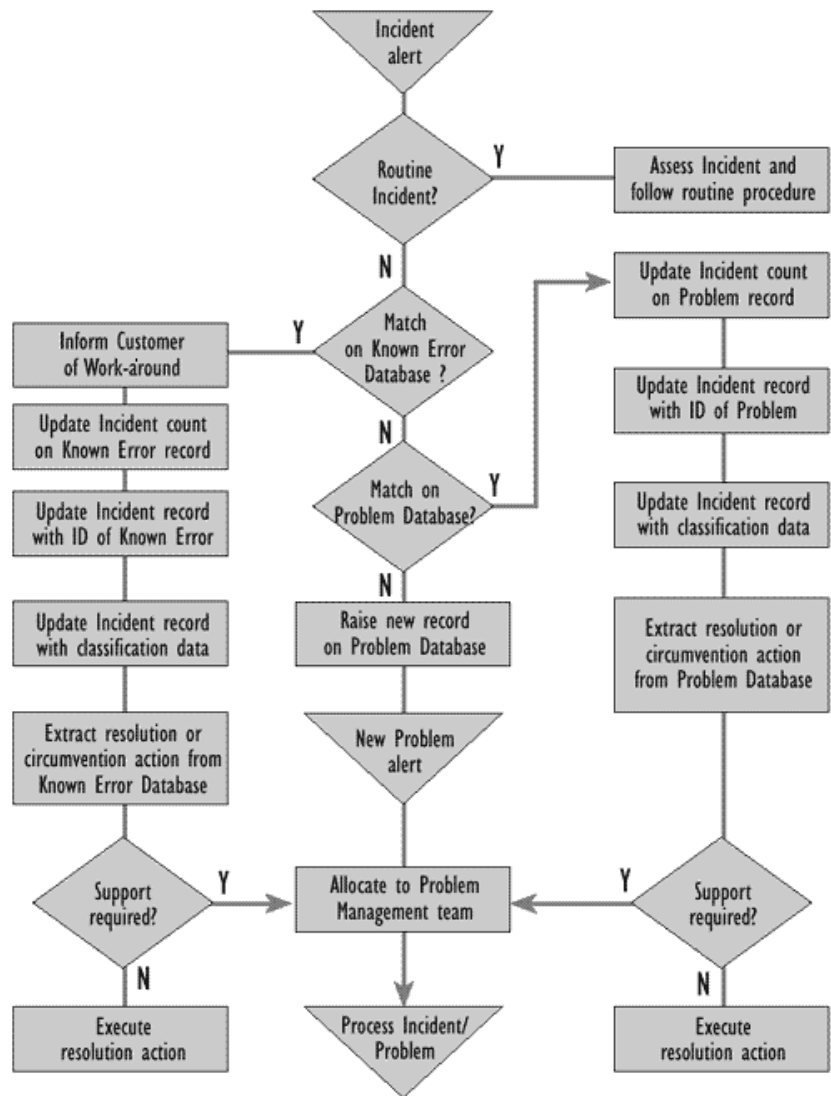
Many NSM vendors view process development services as strategic capabilities that are necessary to grow the management software business, whether training people internally or forming partnerships with service providers to do the process implementation. Independent management service providers have also been required to develop a competency in management processes. To expand their business models beyond subscription services, some are using that competency to offer consulting services to enterprises to help them in the development and documentation of core management processes. The value of ITIL here is that it provides a common framework for the standardization and evaluation of service offerings. The adoption of ITIL terms and process templates provides a common frame of reference for vendors and customers, helps jump-start a process consulting service and improves a vendor's marketability in European markets — where ITIL is most popular.

Product Support for Process Workflow

Enterprises often get caught up in a "chicken and egg" question of whether to choose management software first and build the process around it or to start with the process design and then choose tools that will implement and automate the documented management processes. The answer is to start with the process design, because having tools without the workflow process is like having a solution without knowing the problem. Once the processes appropriate to the enterprise are documented and the integration points are identified, it then becomes an exercise in aligning multiple management tools from multiple NSM vendors with the relevant process steps. Choosing processes first and tools second also gives an enterprise the freedom to change vendors or substitute new tools for specific process steps when desired, as opposed to vendors trying to sell integration to pursue a lock-in strategy.

Workflow within the problem management process is often successfully integrated today, including two-way communication between service desk tools and enterprise event management systems (see Figure 1).

Figure 1
ITIL Problem Management Incident-Matching Process Workflow



Source: ITIL Problem Management Guide. Reproduced with the permission of the Office of Government Commerce.

In the long term, complete workflow integration for end-to-end service management will be possible. This will include:

- Definition of user service expectations
- Population of service desk parameters
- Provisioning of the service
- Deploying the required monitoring instrumentation with appropriate thresholds set
- Service-level alerting and reporting

However, support for workflow process integration for most NSM tools is still very lightweight. Integration often focuses simply on sending data to the service desk for trouble ticket creation or sending traps to the event console for operator notification.

Product Support for ITIL

The most-basic form of ITIL product support is the adoption of ITIL nomenclature within the product. ITIL nomenclature support is implemented by adopting ITIL-defined terms for product functions and for data that is externalized by an NSM product. For example, in ITIL problem management processes, there is a strict definitional difference among:

- *Incident*: An operational event that is not part of the standard operation of a system. It will have an impact on the system, although this may be slight and may even be transparent to users.
- *Problem*: A condition identified from multiple incidents exhibiting common symptoms, or from a single incident, indicative of a single error, for which the cause is unknown.
- *Known Error*: A condition identified by the successful diagnosis of the root cause of a problem.

Although these may seem to be subtle differences, when used consistently among vendors and products, this can be very helpful in supporting integration and the ability to hand off data to another vendor's product in the workflow.

ITIL process support is quite a different matter from nomenclature support and requires a more-significant commitment and engineering investment on the part of the vendor. A management process is instantiated as a workflow within an NSM product. Therefore, ITIL process support will be implemented within the workflow management capabilities of an NSM product. A product's ability to support ITIL processes is determined by the NSM product's ability to implement workflows (see "ITIL Product Certification: Does It Mean Anything?" SPA-12-9556).

Workflow Capabilities

IS organizations that are implementing ITIL need to evaluate the workflow capabilities of NSM products to determine if there are any meaningful opportunities for NSM product and ITIL process integration. At the most basic level, the NSM product will need to have a workflow engine that is flexible enough for the user to define ITIL-compliant processes. A more-advanced form of support would be for the NSM product to contain predefined ITIL-compliant workflows. An NSM vendor that is only adopting terminology is just "crawling" toward the goal of management process maturity, while an NSM vendor with a competent ITIL workflow structure integrating its multiple products is "walking." An NSM vendor that is integrating workflow across multivendor products based on ITIL is "running" to reach the goal.

Bottom Line: IS organizations should evaluate NSM vendors by the services they offer for ITIL management process development and by their product support for ITIL in the areas of nomenclature and workflow. It is important to look at the capabilities of a vendor's service organization or service partners because they will likely implement the management processes.