

ServiceNow Service Mapping

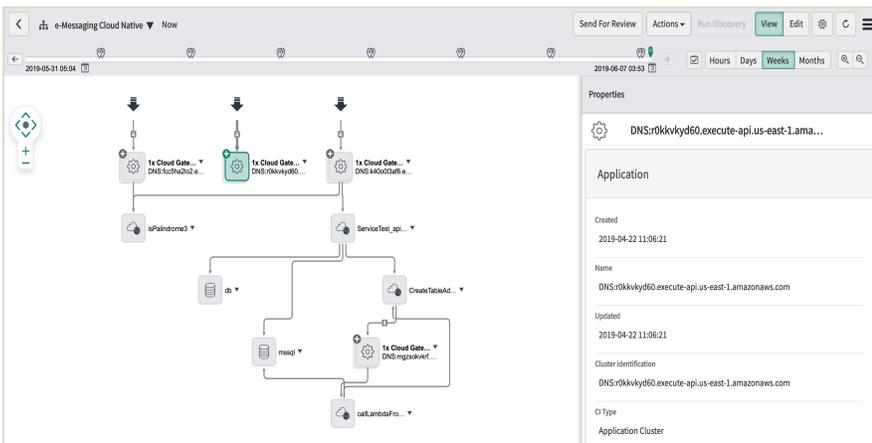
The IT challenge

IT organizations often don't have a complete understanding of how their business services are delivered. While traditional discovery tools find individual IT components, they don't show how these components work together and all their myriad interdependencies. IT is managing digital services that rely on multi-cloud, containers, and serverless infrastructure. They're always behind in understanding the true impact of resource changes to applications and services. This makes it difficult to diagnose and resolve service impairments and outages, or to prioritize the resolution of infrastructure issues based on service and business impact.

To create service visibility, IT organizations need to build service maps. These maps identify all the IT components that support a service—along with the relationships between these components. Building service maps is a labor-intensive, manual process that can take weeks per service. Each map needs extensive input from multiple subject matter experts and must be validated and reworked several times before it is accurate. By the time, the process is complete, the map is often obsolete because of further service topology changes. With hundreds of business services in an enterprise, manual mapping simply doesn't scale.

The ServiceNow solution

ITOM Visibility's Service Mapping feature provides IT with visibility into the IT infrastructure that makes up services. It creates accurate service maps, using patterns, tag-based mapping, traffic-based discovery, and even data ingestion from existing tools. All this data resides in ServiceNow® Configuration Management Database (CMDB) to show the mix of applications, IT components, and cloud services that support a service and how they are related. It guides users through the process of mapping multiple services in parallel and refining service maps, delivering IT service visibility faster than manual approaches. Service Mapping also automatically updates maps as changes occur across IT applications, infrastructure, and cloud services.



With Service Mapping, IT can finally have a service-aware view of its infrastructure to increase the availability of business services.

Visibility into IT services

IT staff can easily pinpoint the underlying causes of service issues and reliably evaluate the business and service impacts of planned infrastructure changes. Service Mapping creates focused service maps, starting with the service entry points and only including relevant infrastructure data that show how business services are delivered across complex, hybrid IT environments.

Reduce mapping efforts

IT can save large amounts of time and money through automated service mapping. A simple user interface, along with underlying processes for mapping multiple services in parallel, guides users through accelerated service mapping via bulk error handling and then gradual refinement, bringing quicker time to value.

Keep maps updated and accurate

With Service Mapping, IT always has the latest service topology information, and can also see how this topology changes over time. Service Mapping automatically updates the service maps as changes occur across IT applications and infrastructure, so the maps are always accurate.

Focused service mapping

Service Mapping finds IT infrastructure in the context of a business service. It creates a complete and accurate map of all applications, servers, databases, virtual machines, network connections, platform-as-a-service (PaaS) services, and other IT components that support the service.

The map also shows the service-level relationships that connect components into an end-to-end service topology, providing crucial data not available from infrastructure discovery tools. This patented approach automates and accelerates service mapping by focusing on what is important: the business service. Service Mapping also eliminates confusing and irrelevant infrastructure data, and delivers clear, concise, and complete service topology information. A simple user interface, and underlying processes for mapping multiple services in parallel, guides users through auto-mated service mapping, so IT can gain service visibility faster.

Always accurate and up to date

Once Service Mapping maps a service, it intelligently searches IT infrastructure, applications, and PaaS services for changes that affect the way services are delivered. When Service Mapping detects a change, it updates the related service maps in real time. Maps may also be enriched with mashups of other data sources. As a result, IT staff have immediate access to up-to-date service topology data—even in dynamic IT environments that are in a constant state of flux.

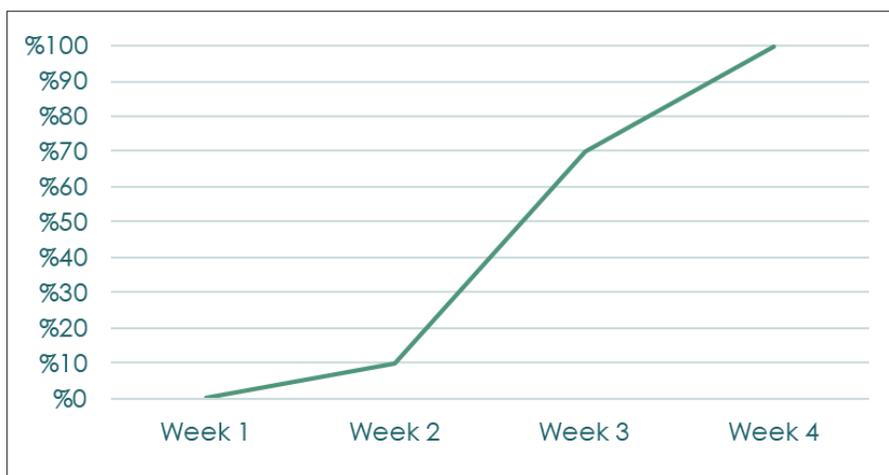
Service Mapping also maintains a complete history of service topology changes. This historical view allows users to see the changes made to a service between any two points in time. IT personnel can rapidly correlate changes with service issues—isolating problems more quickly, reducing mean time to recovery (MTTR), and improving service quality.

Advanced service mapping

Service Mapping uses traffic-based discovery to automatically generate initial maps and then uses machine-learning to refine results. It also has hundreds of component-specific patterns out of the box, which provide a deep understanding of a wide range of applications, infrastructure components, and PaaS services. Service Mapping also contains an easy-to-use pattern editor that allows customers to modify or create new patterns for IT components for which an existing pattern does not exist.



Service Mapping uses no-code patterns, tag-based mapping, traffic-based discovery, even data ingestion from existing tools to automatically generate initial maps and then uses machine-learning to refine results.



Bulk mapping, quality over time

Service Mapping can also discover and map the most intricate infrastructure topologies. It understands concepts such as clusters and enterprise buses and can trace services across these redundant and shared IT components. And instead of handling CI issues map by map, refining each by itself, the new approach is bulk discovery, mapping, and error-resolution handling to resolve each CI issue systemically for quicker time to value.

Tag-based Service Mapping

Tag-based service mapping provides a very effective way to build service maps based on tags, a technique widely used in cloud and container deployments for grouping resources. The tag-based approach is faster and more accurate than manual. IT operations can accurately map 100s of services and quickly gain visibility into cloud and containerized environments. It simplifies application context for Mode 2 operations.

Built for virtualization and cloud

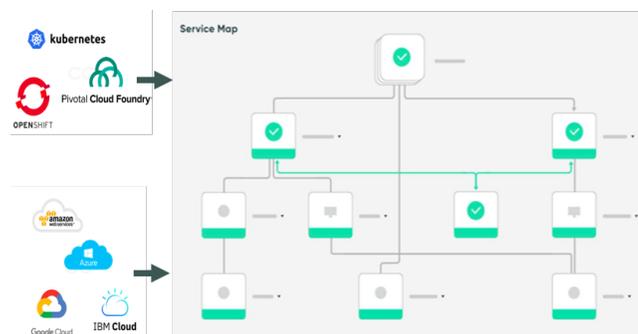
Service Mapping is specifically designed to discover and map business services in highly dynamic, virtualized IT environments. By integrating directly with virtualization management systems such as VMware vCenter and Citrix XenCenter, Service Mapping can detect and respond to change events as soon as they occur.

Unified discovery of hybrid infrastructure and services

Service Mapping is tightly integrated with ServiceNow® Discovery to form a unified collection architecture on the Now Platform® for discovering enterprise hybrid infrastructure and services. ServiceNow Discovery provides a comprehensive inventory of physical and logical assets within the IT infrastructure. These CIs and relationships are populated into the ServiceNow CMDB. Service Mapping then uncovers the hybrid IT infrastructure underlying business services and connects these CIs to form individual service maps. IT staff can drill down seamlessly from service maps into detailed asset information, which provides a powerful, integrated environment for resolving service issues and managing service changes.

ServiceNow CMDB integration

Service Mapping is also tightly integrated with the ServiceNow® CMDB, populating service maps into the CMDB to create a service-aware single system of record. With out-of-the-box integration with third party Application Performance Management tools, it speeds up IT's ability to create enterprise-wide service context.



Tag-based Service Mapping simplifies Mode 2 operations

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Service Mapping is specifically designed to discover and map business services in highly dynamic and hybrid environment

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