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Tag-based discovery in Service Mapping

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3 minutes to read

Summarize [Beta]

GPT summary: This tool offers a brief overview. For more detailed information, refer to the full topic.

If your organization uses tags for asset management, you can use these tags to map application services.

A tag is a label that consists of a key-value pair. Your organization may use tags to categorize its assets, to enhance query and reporting capabilities. Discovery and Cloud Provisioning and Governance can discover tags used by all major cloud providers and container ecosystems. Once the tags are discovered, Service Mapping can create application services based on these tags. Typically organizations use tagging in virtualized, hyper-converged, or multi-cloud infrastructures.

Example of using tagging in organization infrastructure

Segment	Technology providers	What is tagged
Cloud	Amazon Web Services (AWS), Azure, Google Cloud Platform (GCP), IBM Cloud Platform	IaaS, PaaS, FaaS, CaaS resources
Hyper-converged	Nutanix	Virtual machines
Containers	Kubernetes, OpenShift Container Platform, AWS ECS	Containers
Virtualization	VMware vCenter	Virtual machines

Unlike other mapping methods, tag-based mapping does not require configuring credentials or providing users with elevated rights. You can effectively use tags to map multiple application services.

The tag-based discovery and mapping process consists of the following stages:

1. Discovery and Cloud Provisioning and Governance discover tags for cloud and resource CIs and then populate data for discovered tags into the Key Value [cmdb_key_value] table.
2. The administrator creates CI tag categories and defines tag keys that the categories contain. Tag categories contain tags with similar use, for example, tags related to different types of environments, if the organization uses "production" and "staging" tag values.
3. The administrator creates a tag-based service family and selects tag categories to use for its mapping. Only CIs that have discovered tag values for the selected tag categories become part of application services. The administrator can narrow the criteria down by defining the tag values in addition to tag categories. In this case, Service Mapping uses only CIs that have the matching values to create application services. CIs that have more than one tags assigned to them, can be part of multiple services.

   Note: When creating a service family for mapping services based on tags in domain-separated environment, you must pick the relevant leaf domain. Service Mapping populates tag-based services based on this service family only with CIs belonging to the leaf domain to which the service family belongs.

4. Service Mapping queries the CMDB for CIs with tag values that match the tag definitions for this tag-based service family.
5. Service Mapping creates service candidates based on the defined tags.
   Service Mapping populates tag-based services based on this service family only with CIs belonging to the leaf domain to which the service family belongs.
6. The administrator selects the service candidates to map and starts the mapping process.
7. Service Mapping adds new application services to the Tag-Based Application Service [cmdb_ci_service_by_tags] table.

   Important: Tag-based application services may not include relevant CIs, if these CIs do not have the correct tags assigned to them.

8. Service Mapping maps application services by creating connections between tagged CIs based on CI relationships. The Traversal Rules for Application Services [svc_traversal_rules] table contains information used for creating tag-based application services.

   Note: Service Mapping includes CIs that are part of these relationships even if these CIs do not have tags assigned to them.

You can create single tag-based application services using the Common Service Data Model (CSDM) flow as described in Populate application services using tags.

To create multiple tag-based services, follow the procedure covered in Map application services using tags with classic Service Mapping.

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