

IT Discovery for Air-Gapped Networks

The IT challenge

Many organizations have air-gapped or extremely segmented networks that are not linked to other networks through Internet or dedicated connectivity. These environments are usually created for heightened security requirements and/or when certain locations are physically challenging to electronically connect.

When trying to discover IT resources and inventory network, hardware, and software assets, traditional agentless pull approaches do not work due to no connectivity. Historically, organizations rely on extensive manual processes to transfer out of these types of networks which is time and labor intensive. Finally, correlating the air-gapped or segmented network data with the rest of the IT infrastructure is very challenging.

Why air-gapped networks are challenging for discovery

The segmented networks typically cause four primary issues for discovery:

- No direct communication to the primary location(s) to share data
- Require local-execution method (typically IT experts) to gather inventory data on location
- Data collected must be readable by security officer for inspection before leaving the air-gapped network
- Need an efficient combination/consolidation method to transfer data for normalization and reporting across entire IT estate

The ServiceNow solution

ServiceNow® IT Operations Management (ITOM) and IT Asset Management (ITAM) are leading solutions that historically leveraged agentless-based capabilities. With the introduction of Agent Client Collector, ServiceNow provides a discovery option that solves the challenges for air-gapped networks such as inventory of laptops on a remote oil rig or an extremely secure location.

Agent Client Collector (ACC) is utilized for instance-level script management and data ingestion. Your IT team would deploy the ACC scripts into the air-gapped network with your current processes for software distribution. With the text combiner capability, your team can concatenate, review, and parse the pertinent discovered IT data, removing sensitive data if necessary.

Once the collected data is ready to be shared, it can easily be imported into a consolidated reporting engine that combines the air-gapped data with the rest of the organization's discovered data.

Key benefits of discovered IT data in air-gapped networks

With a complete and comprehensive view of discovery data across the entire estate, organizations can achieve better results including:

- Improving day-to-day management with an accurate and up-to-date CMDB with comprehensive visibility
- Minimizing manual process and expertise required for segmented networks
- Reducing cost of software with better management of resources
- Increasing service availability and reducing MTTR with a complete view

Single system of truth for IT resource

Discover your entire IT infrastructure, creating a complete, up-to-date, and accurate record in your CMDB, ensuring data integrity and consistency including both traditional and air-gapped networks.

Reduce manual processes for on-site IT expert

Eliminate the need for recurring manual data gathering methods by leveraging an intuitive agent across the lifecycle of the IT asset.

Scalable and secure

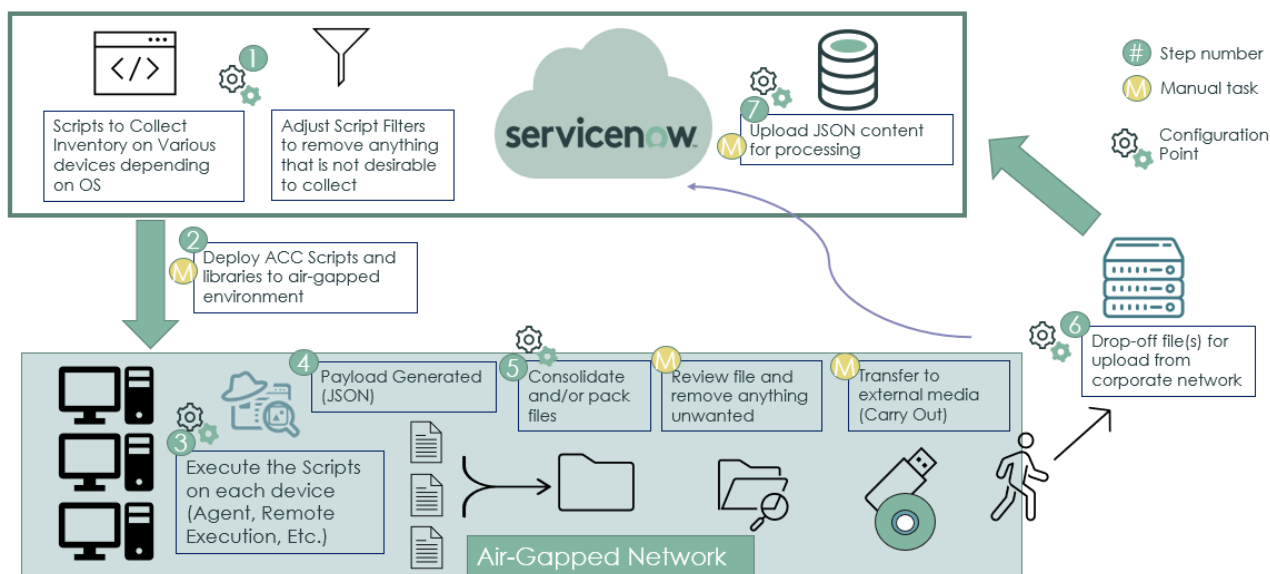
Agent Client Collector is simple to deploy by leveraging your existing software deployment methods for air-gapped networks. Your IT and security experts can review consolidated files and remove anything not wanting to be shared for security or other reason. Agent Client Collector supports ITOM, ITAM, ITSM, Security Operations, and more.

Drive operational excellence

Works seamlessly with other ServiceNow products to help you fix outages faster, strengthen change processes, reduce risk, optimize infrastructure spend, and minimize software compliance issues.

Typical air-gapped network deployment with ServiceNow Discovery

This deployment example focuses on how you can add IT asset and resource discovery from an air-gapped or extremely segmented network to your organization-wide data within the ServiceNow CMDB. This approach simplifies the collection and correlation of difficult-to-reach air-gapped assets and provides a holistic view across the entire IT estate.



Typical Agent Client Collector deployment option for air-gapped networks

The high-level steps for deployment in this environment type include:

- Select the scripts to collect inventory on various devices. Use your existing software deployment methods to deploy the ACC scripts in the air-gapped environment
- Execute the deployed scripts on each device (agent, remote, execution, etc.)
- Generate the payload automatically in an easy-to-read JSON format
- Consolidate and/or pack the files for selected devices
- Review the files with the security team and remove anything sensitive and/or unwanted data
- Transfer the data to external media to carry out of air-gapped network
- Import the files for processing on a connected network
- Process the imported JSON data and add to ServiceNow CMDB following policy-driven processes

To learn more, visit www.servicenow.com/ITOM or speak with your ServiceNow representative.

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