CONNECTWISE

Probe Templates for Automate

Overview

In terms of network devices, the probe has three responsibilities:

- **Discovery**: What devices are on the network in the probe's range of responsibility.
- **Detection**: For the devices the probe is aware of, determine the device's make and model using detection templates.
- **Collection**: For detected devices, collect information as specified by collection templates.

Each probe has a variety of configuration information that defines the probe's area of responsibility. After reviewing the information below, refer to Configuring Probe Templates for information on accessing probe templates and conducting an SNMP walk.

Discovery

Devices are discovered by testing all IP addresses that the probe is responsible for. Testing involves attempting to ping the device, as well as attempting to access typical open ports (e.g. ftp, http, telnet) on the device.

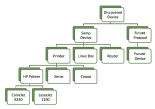
Once a device is detected, the probe attempts to determine the device's MAC address. If the device is SNMP enabled (and accessible), the MAC address can be learned by walking the device's interface table. If the device cannot be accessed via SNMP, the probe uses ARP (Address Resolution Protocol), but this only works if the device is on the same subnet.

Once a device is discovered, it is transmitted to the ConnectWise Automate® server for storage in the central database. The server will perform some data integrity checking to ensure that devices are not added more than once.

Detection

Device Library Tree

Once a device is discovered, the probe attempts to determine the make/model of the device by going through the Known Devices tree. A subset of the tree is shown below:



Each of the top level (SNMP device) tests are applied to the discovered device. From there, the device proceeds down the tree, as far as possible. For example, a LaserJet 1160 printer would be detected in the following manner:

Step	Answer	Outcome
Does device support SNMP?	Yes	Device is SNMP Device. Try next level tests.
Is device a router?	No	Try next SNMP test.
Is device a Linux box?	No	Try next SNMP test.
Is device LaserJet 1160	Yes	Device is HP LaserJet 116- There are no further tests for this device type.

As the Automate system knowledge base increases, more devices will be added to this tree, as well as corresponding detection templates to correctly assign the device.

Note: The above device tree is an example of the tree that is a part of the standard Automate installation. You are free to create your own device library to suit your particular needs. However, the probe's search mechanisms have been optimized around this layout, so changing the library layout may result in less than optimal probe performance.

Detection Templates

Detection Templates have the following information:

- **Name**: A description of the template, for visual and diagnostic purposes only
- **Protocol**: The protocol this template uses is SNMP. The current version of Automate only supports SNMP.
- **Applies To**: The device in the Known Device tree this template should be run against
- **Results In**: If the template successfully goes through its validation rules, what new device in the **Known Device** tree should be applied to the test device
- **TestSet**: One or more validation tests that should be run against the device. All tests must pass for the template to transition the device type.

For more information, visit Detection Templates.

Collection

Once a detection template has been completed to detect devices, collection templates can be created to collect data on the device with the use of OIDs. This data can be used for trending, troubleshooting, etc. For more information, visit Collection Templates.