Geolocation Monitoring

Using a Powershell script and custom service

N-able

Table of Contents

Geolocation Information

Overview

N-able Technologies has developed a script and a custom service that allows to get the public IP of a computer, and with that get the geo-location information for it.

To use it, the script must be run at periodic interval (we recommend every 6 hours, but the actual schedule is customizable), and a custom service must be deployed.

It is important to note that the script gets a geographical location based on the IP address, so this will be approximate. This is meant to get a general location of the computer.

Requirements

This script was tested on all current Microsoft Windows OS :

- Windows XP, Windows Vista, Windows 7, Windows Server 2003 (R2), Windows Server2008 (R2).
- Windows 8 and Windows Server 2012 are not currently supported.

Additionally, the script requires Powershell 2.0 and Microsoft .net 4

Workflow

The script when run on a local computer uses the services from freegeoip.net to get the public IP address, as well as the country, state, city and general geographical coordinates of the IP address.

Deployment

Importing and configuring the script

1. Download the Get External IP and Location script from the N-able Resource Center (http://nrc.n-able.com) under COMMUNITY > Custom Services Policies section.
2. Import the Powershell script into the N-Central Script Repository
   a. From the Service Organization Level (orange), go to the configuration menu, then to **Scheduled Tasks**,
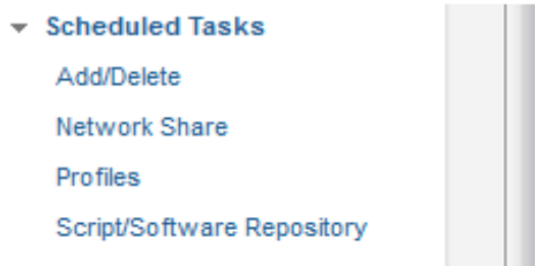
   b. Select **Script/Software Repository**
   c. Click ADD and choose scripting, then click on BROWSE to select the script

   d. Once uploaded, it will be available for use

3. Create a Scheduled Task profile (as detailed below) to run the script every 6-12 hours (or as needed).
   a. From the Customer level (green), go to the configuration menu, then to Scheduled Tasks, and click on profiles. Select ADD scripting task
      i. Enter a name
      ii. Select the script from the repository list
      iii. Select the rule on which to apply the profile.
      iv. Select the schedule and set it to recurring

v. Select Custom if it needs to be scanned more frequently than hourly, and add all the times that are required, and leave the other fields default (every day, every month).

vi. If desired, select notifications to be sent if the task fails to run.
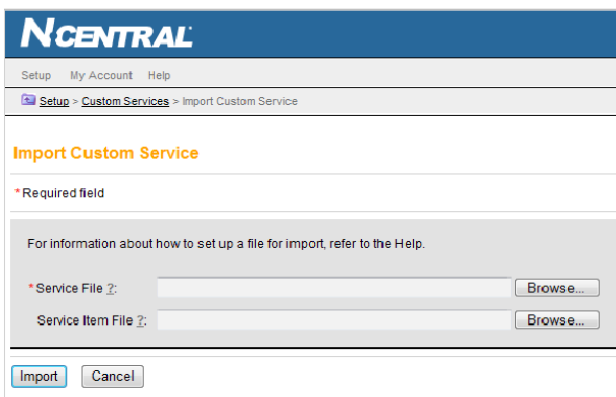vii. Save the task. The task will now run at the specified times.

## Importing and configuring the custom service

To import the custom service:

1. log on to the NAC by going to httpS://YOURSERVER:10000 and logging in with your product administrator

2. go to **Custom Services** within the services section on the left

   Services
   - Default Timeout Intervals
   - Default Parameters
   - Default Service Thresholds
   - Default Validation Strings
   - Log Service Configuration
   - Service Scan Interval Limits
   - Time-to-State and Default Scan Intervals
   - Custom Services
   - System Health Monitor
   - Service Control
   - State Priority Management
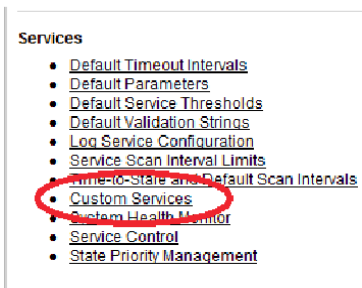
3. Click on IMPORT SERVICE   [Import Service]

4. Click on BROWSE and select the service file (xml file), then click on IMPORT

   NCENTRAL

   Setup   My Account   Help

   Setup > Custom Services > Import Custom Service

   Import Custom Service

   * Required field

   For information about how to set up a file for import, refer to the Help.

   * Service File ?:   [   ] [Browse...]

   Service Item File ?:   [   ] [Browse...]

   [Import] [Cancel]

5. The service is now imported. Go to the N-Central GUI and select the device where to add the service. Go to the STATUS tab and click on ADD

Properties	Status	Asset

   Services

   [Add] [Delete] [Create Service Te...]

   ☐   **Service** ⬦
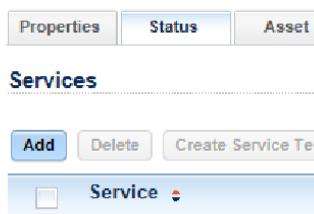
6. From the list, enter a 1 besides IP Address and GeoLocation

   | IP Address and GeoLocation | 1 | 0 |

7. Click on OK at the bottom of the list

8. The service will now report on the script data.

Data being monitored

Information contained within the custom service

The monitor will record 8 data points in WMI for N-Central to poll.

1. External IP : public ip address
2. Country Code : 2 digit universal country code
3. Country Name: long country name
4. Region Code : 2 digit universal province/state code
5. Region Name : long province/state name
6. City : city name
7. Latitude : geographical latitude
8. Longitude : geographical longitude