Agent Based Monitoring in a Remote Device Utilizing a Windows 11 Virtual Machine

October 17, 2025

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In this Lab I am creating a virtual reality where an “Employee” is working at a workstation/computer/device “remotely.” I have created an “Agent” to be a “Local Agent” and installed it on the workstation/computer/device to perform an assessment of vulnerabilities, and observe the results in our Tenable portal. In order to facilitate this in this “virtual reality” I have placed the file “start.txt” on the workstation/computer/device (aka: Virtual Machine) to create a potential vulnerability to find and resolve. This file named “start.txt” will trigger the scan Agent and begin the process of allowing this scan Agent to remove this file “start.txt.” We will be able to watch the file be removed from this workstation/computer/device in real time.

Tools Used:

- Tenable.sc / Nessus
- Microsoft Azure Virtual Machine

In this Lab I have provisioned a Windows 11 Virtual Machine using Microsoft Azure.

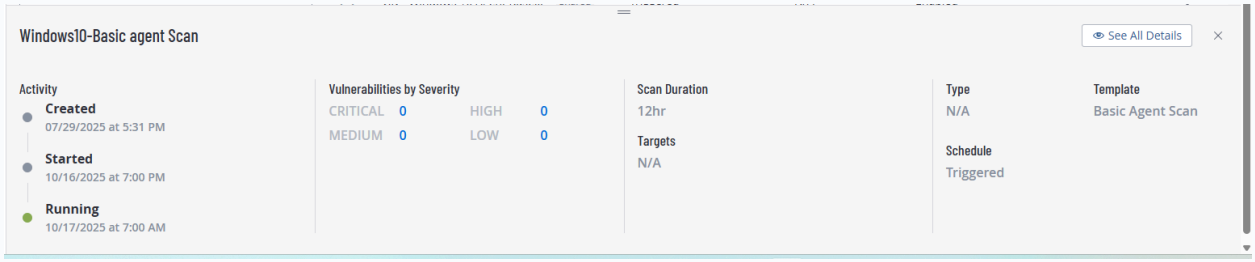
Virtual machine

Computer name	Win11VMBruce
Operating system	Windows (Windows 11 Pro)
VM generation	V2
VM architecture	x64
Agent status	Ready

Networking

Public IP address	-
Public IP address (IPv6)	-
Private IP address	10.1.0.170
Private IP address (IPv6)	-
Virtual network/subnet	Cyber-Range-2-VNet/Cyber-Range-2-Subnet

I have also utilized Tenable to create an Agent Based Scan.



Windows10-Basic agent Scan

See All Details

Activity

- **Created** 07/29/2025 at 5:31 PM
- **Started** 10/16/2025 at 7:00 PM
- **Running** 10/17/2025 at 7:00 AM

Vulnerabilities by Severity

CRITICAL	0	HIGH	0
MEDIUM	0	LOW	0

Scan Duration
12hr

Targets
N/A

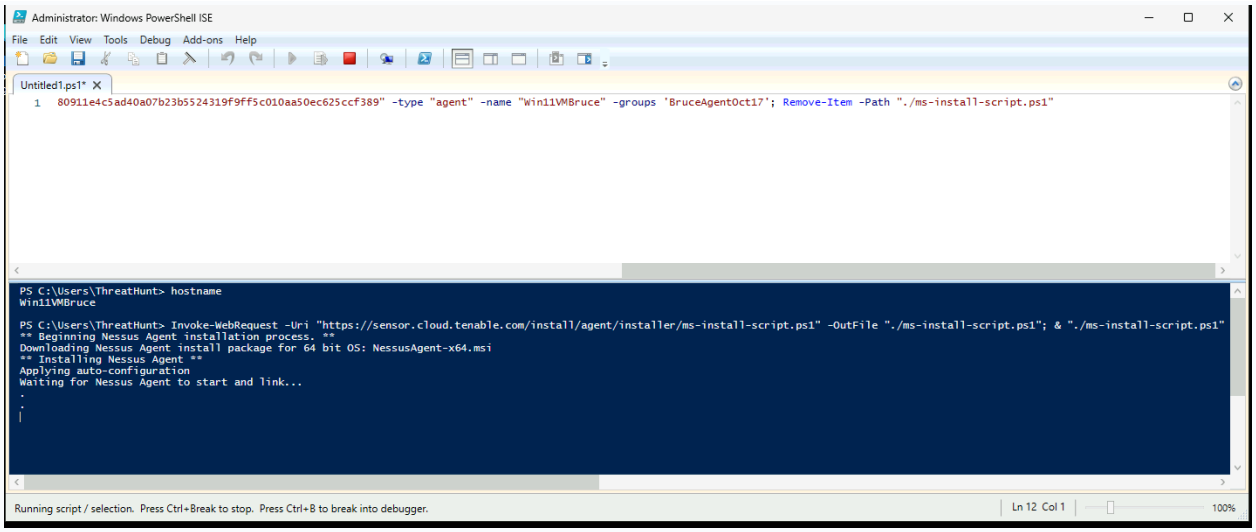
Type
N/A

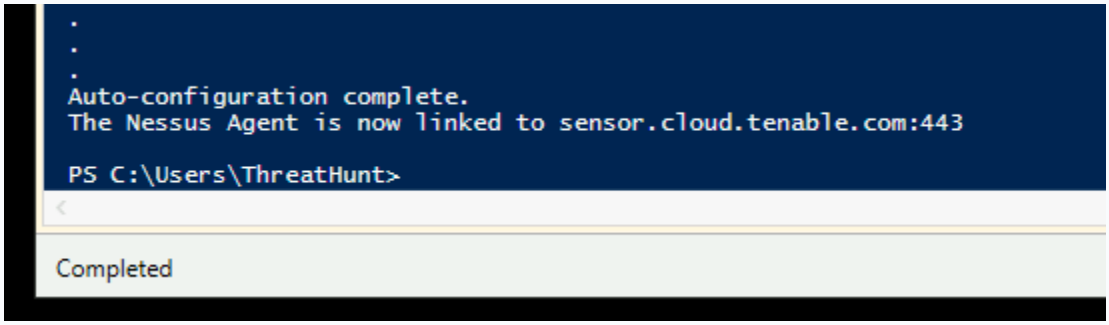
Schedule
Triggered

Template
Basic Agent Scan

This command is provided within Tenable under: settings -> Sensors -> Nessus Agents -> +Add Nessus Agent, on the right side of the screen I find the Windows command and highlight and copy it. I will open PowerShell ISE on the Virtual Machine and the run the command:

Invoke-WebRequest -Uri "https://sensor.cloud.tenable.com/install/agent/installer/ms-install-script.ps1" -OutFile "./ms-install-script.ps1"; & "./ms-install-script.ps1" -key "58aab372289ac80911e4c5ad40a07b23b5524319f9ff5c010aa50ec625ccf389" -type "agent" -name "Win11VMBruce" -groups 'BruceAgentOct17'; Remove-Item -Path "./ms-install-script.ps1"



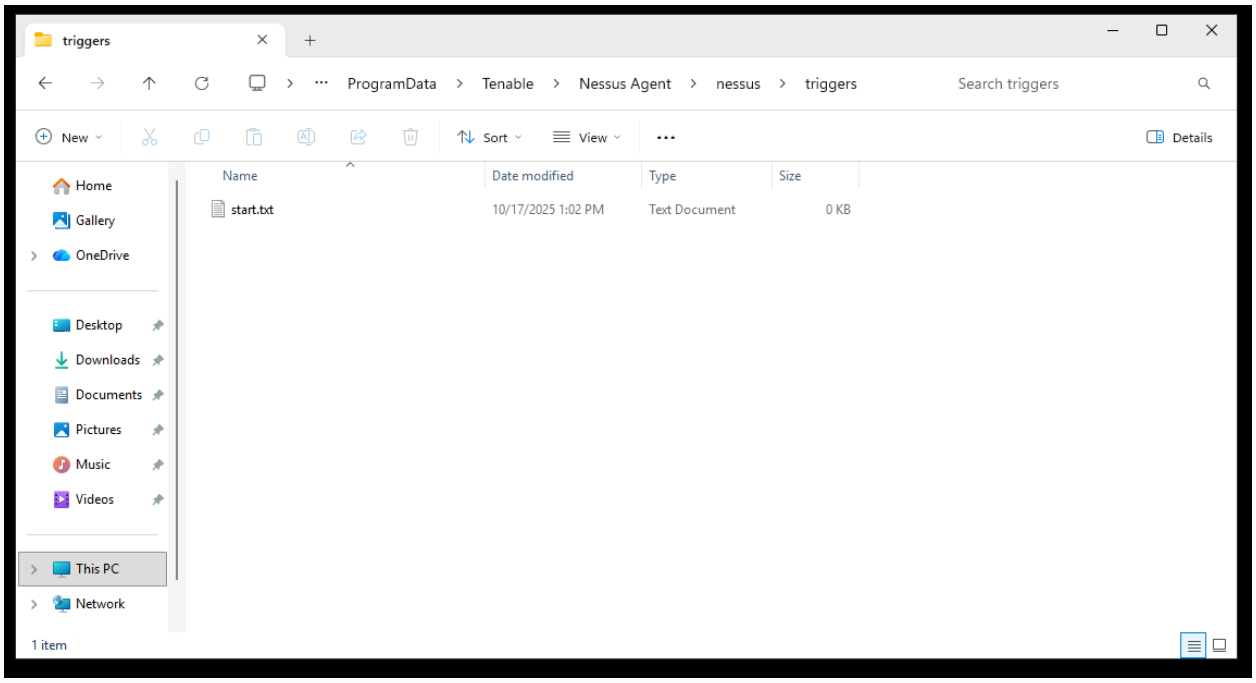


The Agent is now properly installed on my Virtual Machine. Now I will give the Agent the file: “start.txt” to trigger the scan and initiate the process of removing the file “start.txt.”

I will demonstrate the file path taken and the commands to install the file: “start.txt” here:

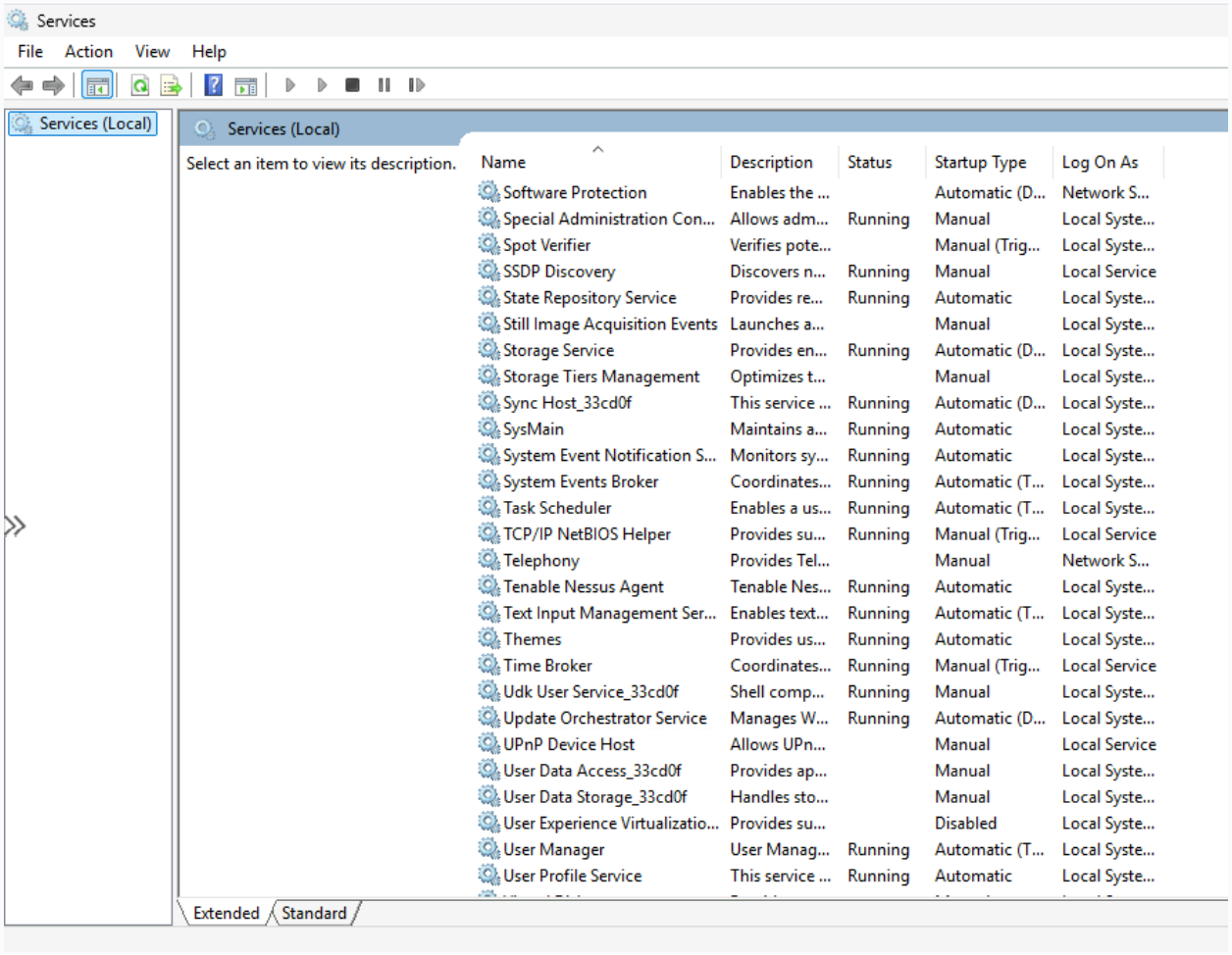
```
PS C:\Users\ThreatHunt> cd \
PS C:\> cd ProgramData
PS C:\ProgramData> cd Tenable
PS C:\ProgramData\Tenable> cd '.\Nessus Agent\'
PS C:\ProgramData\Tenable\Nessus Agent> cd nessus
PS C:\ProgramData\Tenable\Nessus Agent\nessus> cd triggers
PS C:\ProgramData\Tenable\Nessus Agent\nessus\triggers> New-Item -Name start.txt


    Directory: C:\ProgramData\Tenable\Nessus Agent\nessus\triggers


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----        10/17/2025   1:02 PM              0 start.txt


PS C:\ProgramData\Tenable\Nessus Agent\nessus\triggers>
```

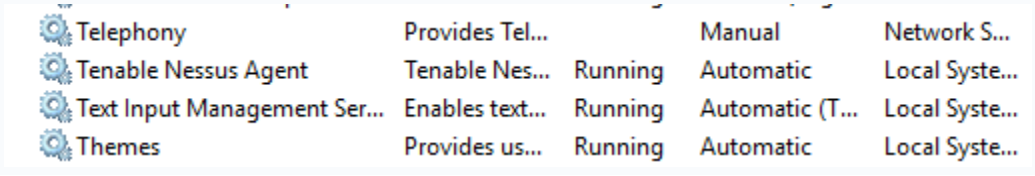
I have successfully created the file to trigger the scan Agent.



I check to ensure that Tenable is running by opening the Command Line and running:

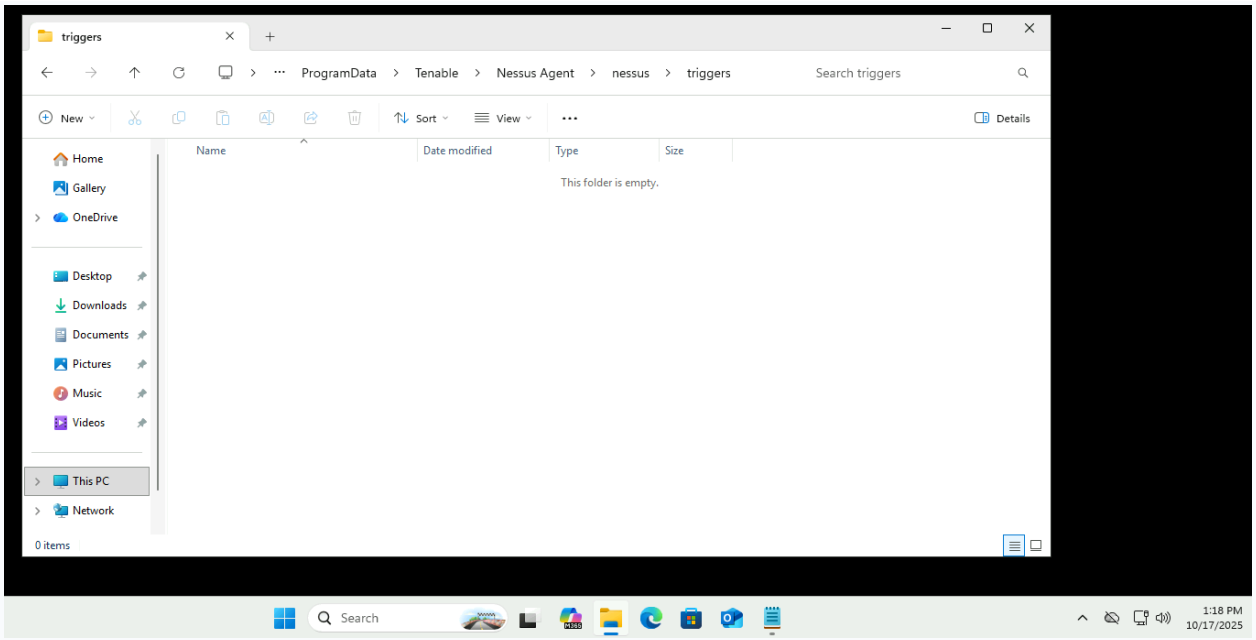
services.msc



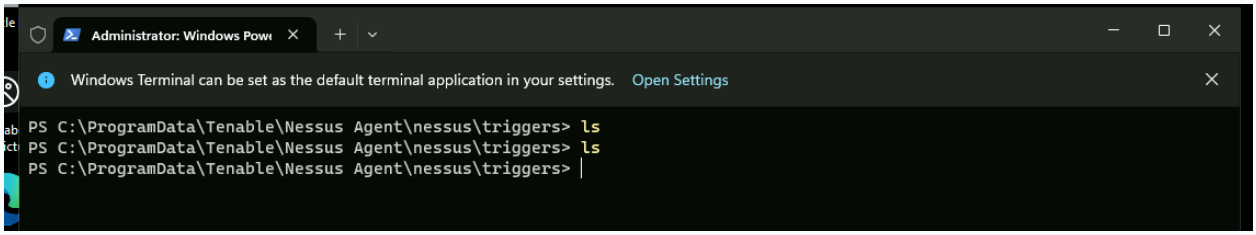


The Tenable Nessus Agent is confirmed in these screenshots as running within our Virtual Machine.

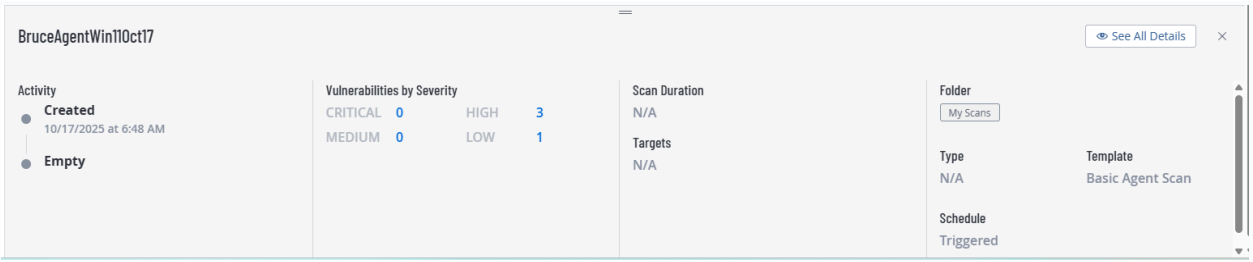
The Agent has been triggered, and the file has been removed:



Confirming this in the Command Line:



Confirming that Tenable has discovered the file “start.txt” and has performed the necessary actionsand discovered “Vulnerabilities by Severity”:



In the following screenshots Tenable shows that the Asset has been discovered in the bottom right under Asset Details and also within the “Vulns by Asset” tab:

tenable Vulnerability Management | Scans > Scan Details

Quick Actions

BruceAgentWin11Oct17

VULNERABILITY MANAGEMENT SCANS

Edit | Trash

Summary | Vulns by Plugin | Vulns by Asset | History

This is a Rule-based Agent scan configuration, and is launched by the Agent based on a set of triggers. Rule-based scans do not have a scan time window, and Agents can upload results at any time. You can view an aggregate of all vulnerabilities found in 12 hour windows here; visit Findings to view and export all vulnerability and audit results.

Description

No description found

Triggers

FILE NAME
start.txt

0 CRITICAL VULNERABILITIES
3 HIGH VULNERABILITIES
0 MEDIUM VULNERABILITIES
1 LOW VULNERABILITIES

Scan Details

STATUS	Enabled
MODIFIED TIME	10/17/2025 at 6:48 AM
CREATED TIME	10/17/2025 at 6:48 AM
TEMPLATE	Basic Agent Scan

Agent Details

GROUPS
BruceAgentOct17

Asset Details

ASSETS SEEN
1

tenable Vulnerability Management | Scans > Scan Details

Quick Actions

BruceAgentWin11Oct17

VULNERABILITY MANAGEMENT SCANS

Edit | Trash

Summary | Vulns by Plugin | Vulns by Asset | History

Filters | Search | 1 Asset | Saved Searches

1 Asset | 1 to 1 of 1 | Page 1 of 1

NAME	IPV4 ADDRESS	VULNERABILITIES	VULNERABILITIES	CRITICAL	HIGH
win11vmbruce	10.1.0.170		116	0	3

0 CRITICAL VULNERABILITIES
3 HIGH VULNERABILITIES
0 MEDIUM VULNERABILITIES
1 LOW VULNERABILITIES

Scan Details

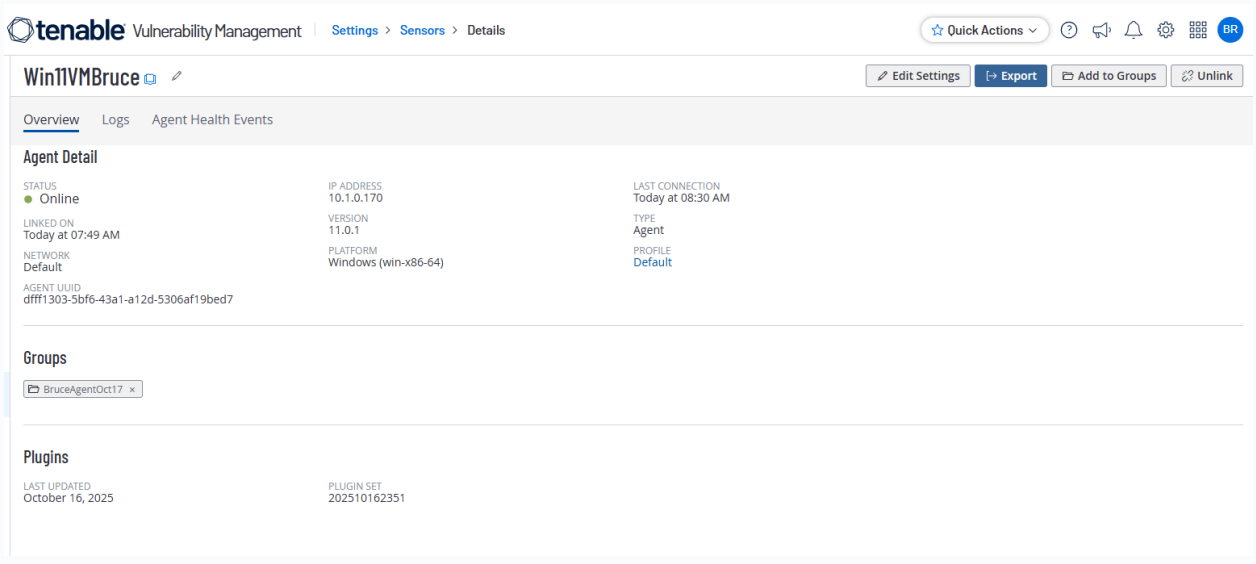
STATUS	Enabled
MODIFIED TIME	10/17/2025 at 6:48 AM
CREATED TIME	10/17/2025 at 6:48 AM
TEMPLATE	Basic Agent Scan

Agent Details

GROUPS
BruceAgentOct17

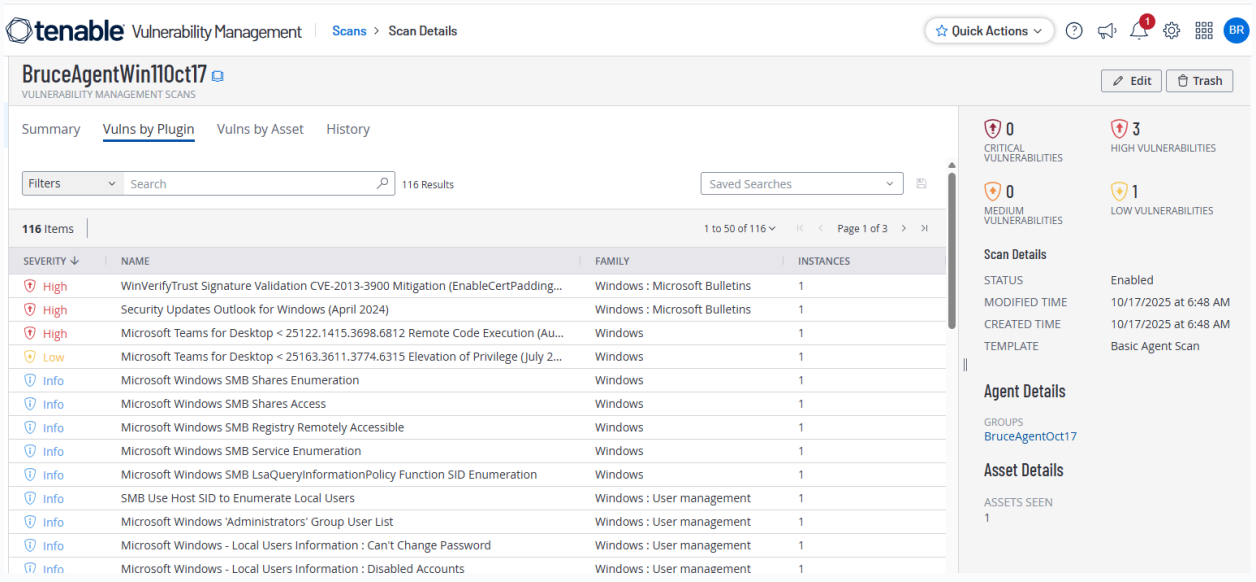
Asset Details

ASSETS SEEN
1



I have included this screenshot of the output for the Agent through Tenable as well.

I have also included this list of vulnerabilities that were found by this Agent:



Concluding this Lab and moving forward, the vulnerabilities can be remediated at this point. I can scan the results of my remediations by adjusting our scan criteria.

This Lab demonstrates my ability to work with Enterprise grade tools, setting up and utilizing real world tools and techniques to successfully create and deploy an Agent in Tenable for use with remote workstations/computers/devices for Vulnerability Management and Remediation.