# README for HPC Diagnostics Samples

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## DriverVersionCheck

This diagnostic takes the parameters *Network*, which is the network connection name to check (“Enterprise”, “Application” or “Private”) and *DriverVersion* which gives the expected driver version of this network’s adapter. DriverVersion can be a regular expression (regex), so not only literal versions such as “6.1.7600.16385” can be checked, but also regex patterns, e.g. “.\*7600.\*”.

#### Installation

1. Copy the folder **DriverVersionCheck** to C:\Diag on the head node of the cluster.
2. Open HPC Powershell and add the diagnostic to the cluster via the command:  
   **Add-HpcTest –File C:\Diag\DriverVersionCheck\DriverVersionCheck.xml**

#### Running

1. In Cluster Manager, select Diagnostics view, then Tests->Microsoft->Samples.
2. Select Driver Version Check and click Run.
3. In Configure Test Parameters, set the DriverVersion and Network parameters (or use the defaults). You can also change test credentials using Run Tests as Different User.
4. Click Run. Under Test Results, the new test will appear as Running, then move to a final state.

## PathAccessCheck

This diagnostic takes the parameter *Path* which is the directory path to check access to on each node. The default *Path* is C:

#### Installation

1. Copy the folder **PathAccessCheck** to C:\Diag on the head node of the cluster.
2. Open HPC Powershell and add the diagnostic to the cluster via the command:  
   **Add-HpcTest –File C:\Diag\PathAccessCheck\PathAccessCheck.xml**

#### Running

1. In Cluster Manager, select Diagnostics view, then Tests->Microsoft->Samples.
2. Select Path Access Check and click Run.
3. In Configure Test Parameters, set the Path parameter to the directory to check. You can also change test credentials using Run Tests as Different User.
4. Click Run. Under Test Results, the new test will appear as Running, then move to a final state.

## Ping Histogram

This diagnostic measures ping response time from the selected compute nodes and display the results in a histogram.

This diagnostic doesn’t take any parameter.

#### Installation

1. Copy the folder **PingHistogram** to C:\Diag on the head node of the cluster.
2. Open HPC Powershell and add the diagnostic to the cluster via the command:  
   **Add-HpcTest –File C:\Diag\ PingHistogram\Diag.xml**

#### Running

1. In Cluster Manager, select Diagnostics view, then Tests->Microsoft->Samples.
2. Select Ping Histogram and click Run.
3. In Select Tests and Nodes, choose the nodes you want to test. You can also change test credentials using Run Tests as Different User.
4. Click Run. Under Test Results, the new test will appear as Running, then move to a final state.