NetUse2 Help Documentation

Release 1.0

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Feb 28, 2019

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CHAPTER

ONE

CHANGELOG

1.1 NetUse2 1.0

- 2/2019 - Initial Revision

CHAPTER

TWO

INTRODUCTION

NetUse2 is a network diagnostic tool to troubleshoot and identify potential network issues quickly. NetUse2 can also be used to monitor network speeds over long periods of time to help determine periods of network congestion for further troubleshooting.

2.1 System Requirements

- Java Runtime Environment 11
- Windows or Linux Operating System for data export/retrieval
- A network connection

2.2 Operational Modes

NetUse2 has two modes of operation:

- Analysis Mode: In Analysis Mode, NetUse2 will automatically attempt to troubleshoot common network issues and display the findings to the user.
- Duration Mode: In Duration Mode, NetUse2 will use a user-specified target and duration to map reply times over the specified duration. This capability will help identify periods of network congestion or resource downtime for further analysis.

CHAPTER

THREE

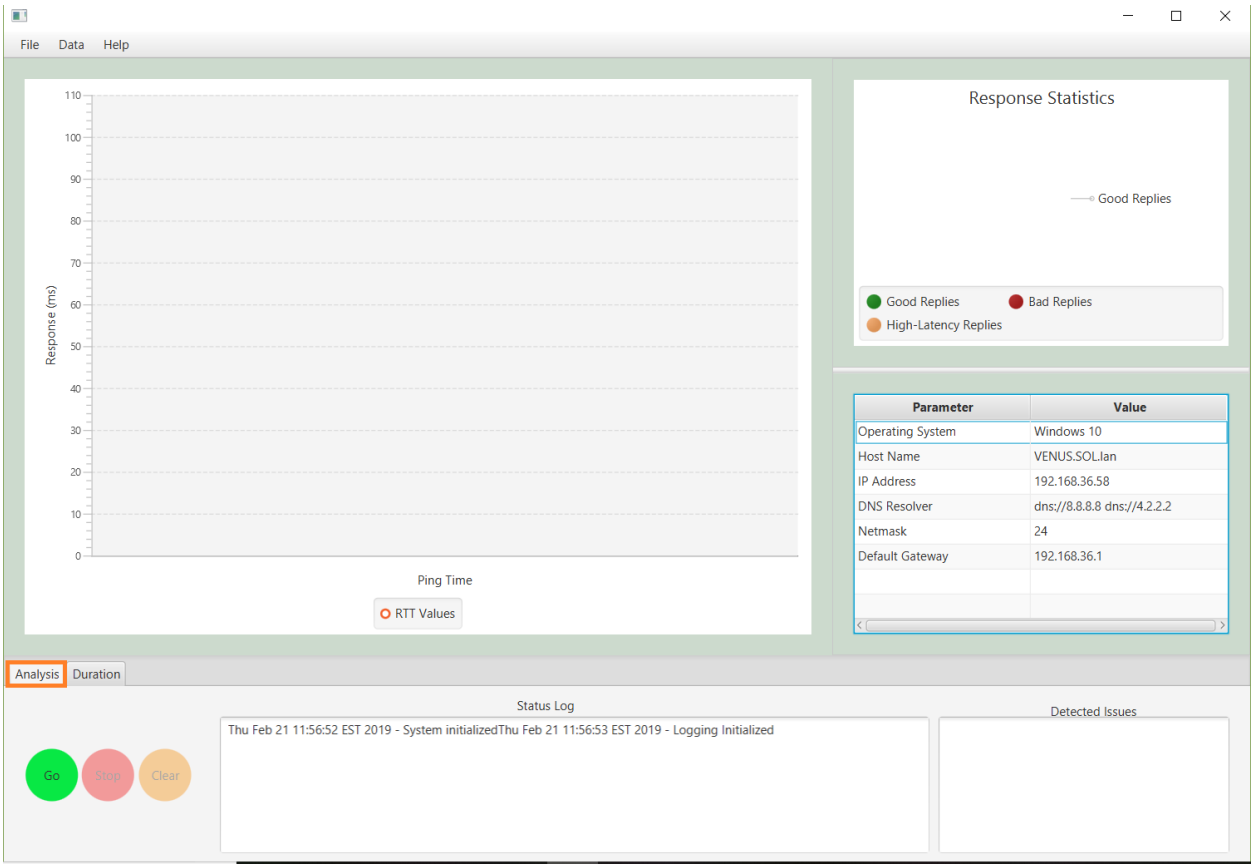
ANALYSIS MODE

3.1 Introduction

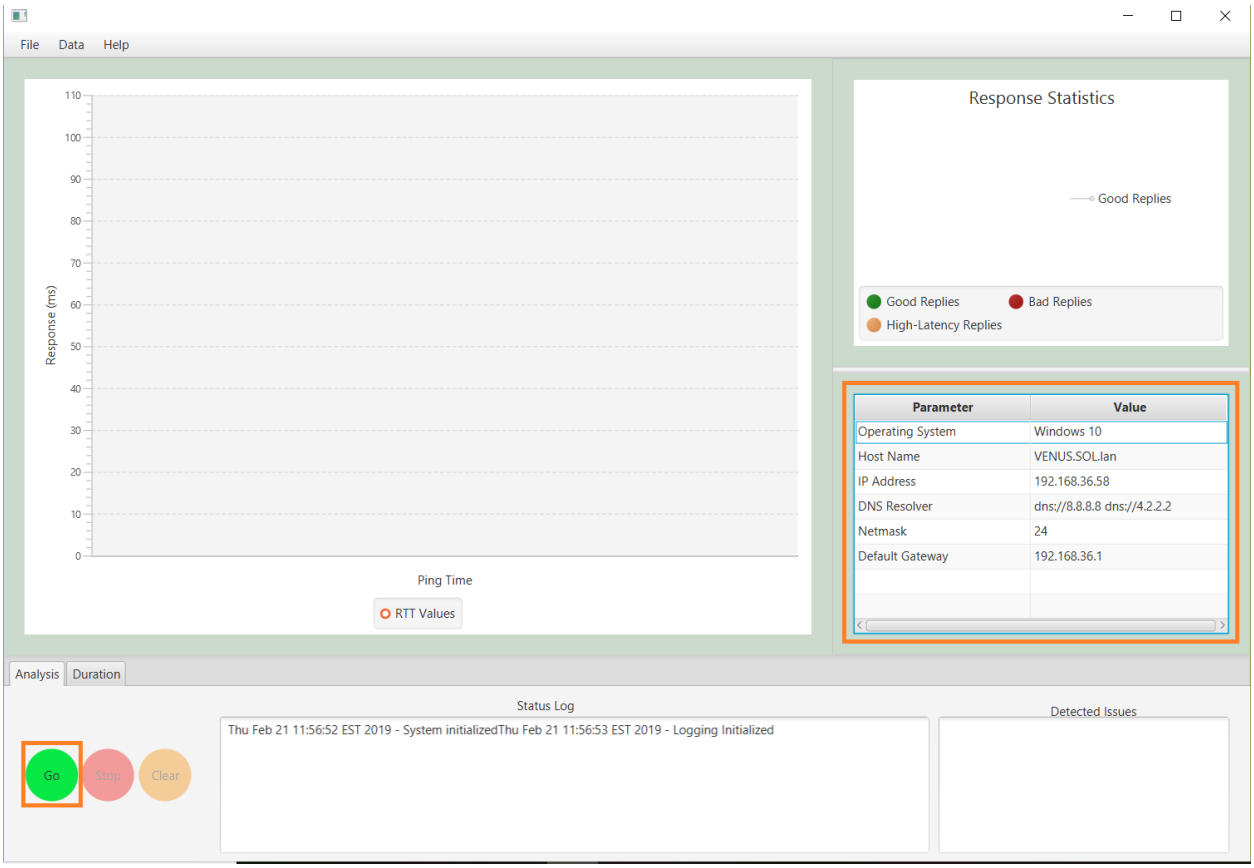
In Analysis Mode, NetUse2 will retrieve system network information and display it in the system parameters panel. If all system information is retrieved successfully, NetUse2 will attempt to ping http://www.google.com for a period of 60 seconds while recording whether the ping was successful and the reply time. NetUse2 will then attempt to ping the DNS resolver(s) and gateway(s) to determine if those resources are available. NetUse2 will display a line graph containing round-trip times (RTTs) over the 60 second interval for user analysis. NetUse2 also displays a pie chart containing the ratio of successful ping attempts, bad ping attempts, and high-latency (>300ms) ping attempts.

3.2 Procedure

1. Launch the NetUse2 application
2. In the NetUse2 application, ensure that the **Analysis** tab is selected in the Mode panel

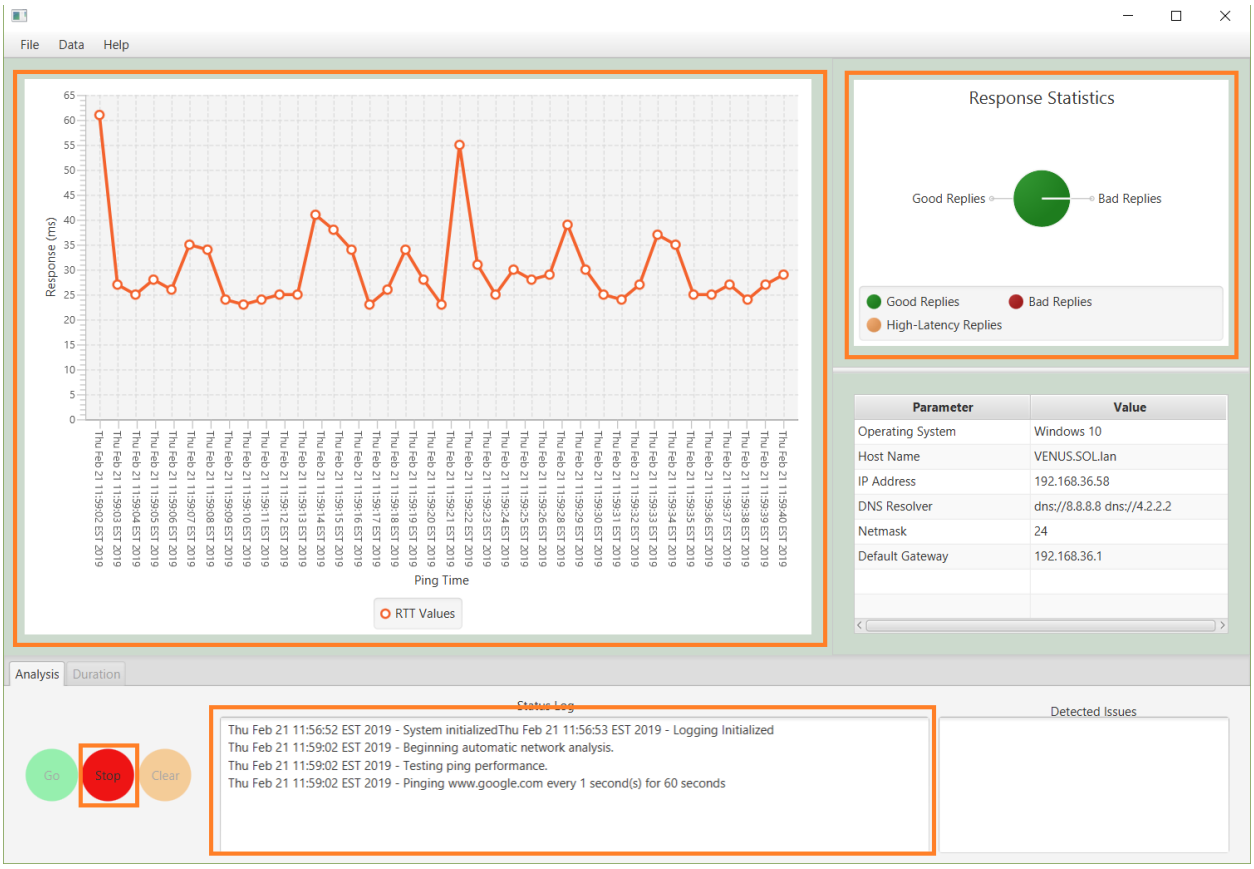


3. Inspect the **System Parameters** panel to verify system network parameters
4. In the **Analysis Tab**, click on the **Go** button to begin automatic analysis



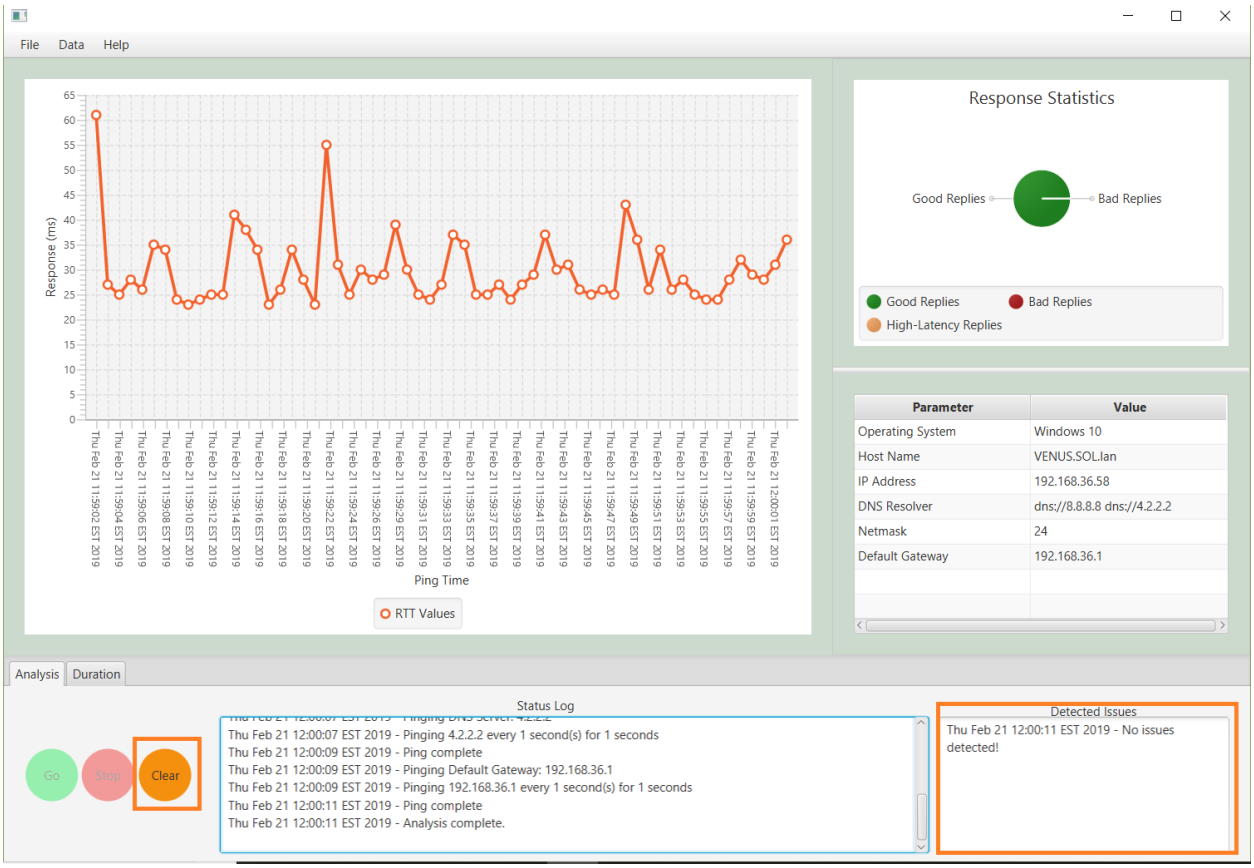
5. Observe the reply time graph and reply statistics chart fill with data and the status log populate with process status

   NOTE: The **Stop** button is now active to abort the command



6. When the analysis is complete, inspect the **Issues Detected** panel to see if any common network problems have been detected.

   NOTE: The **Clear** button is now active to reset NetUse2 for another use



7. If you wish to perform another command, click the **Clear** button to reset NetUse2. If you would like to export the data, refer to the *Data* section to learn how to import and export ping data.

CHAPTER

FOUR

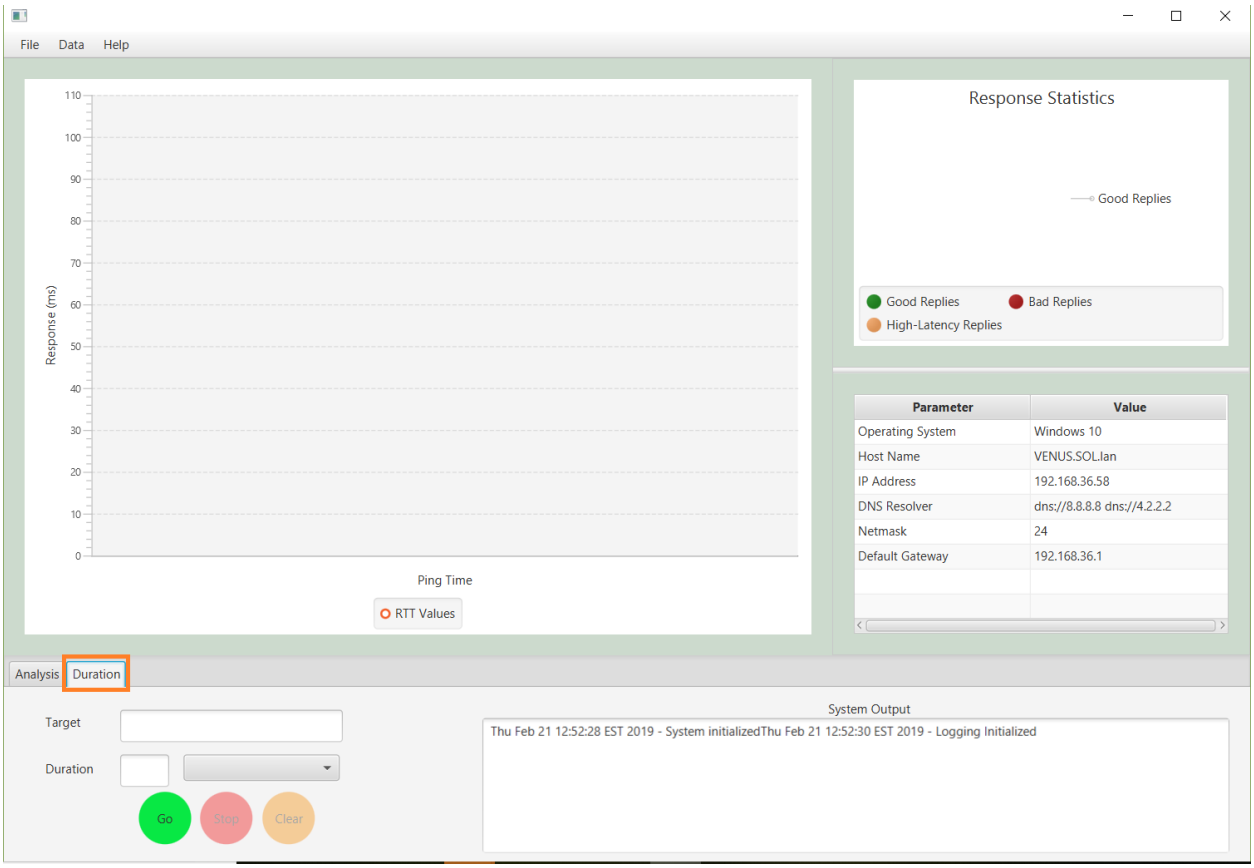
DURATION MODE

4.1 Introduction

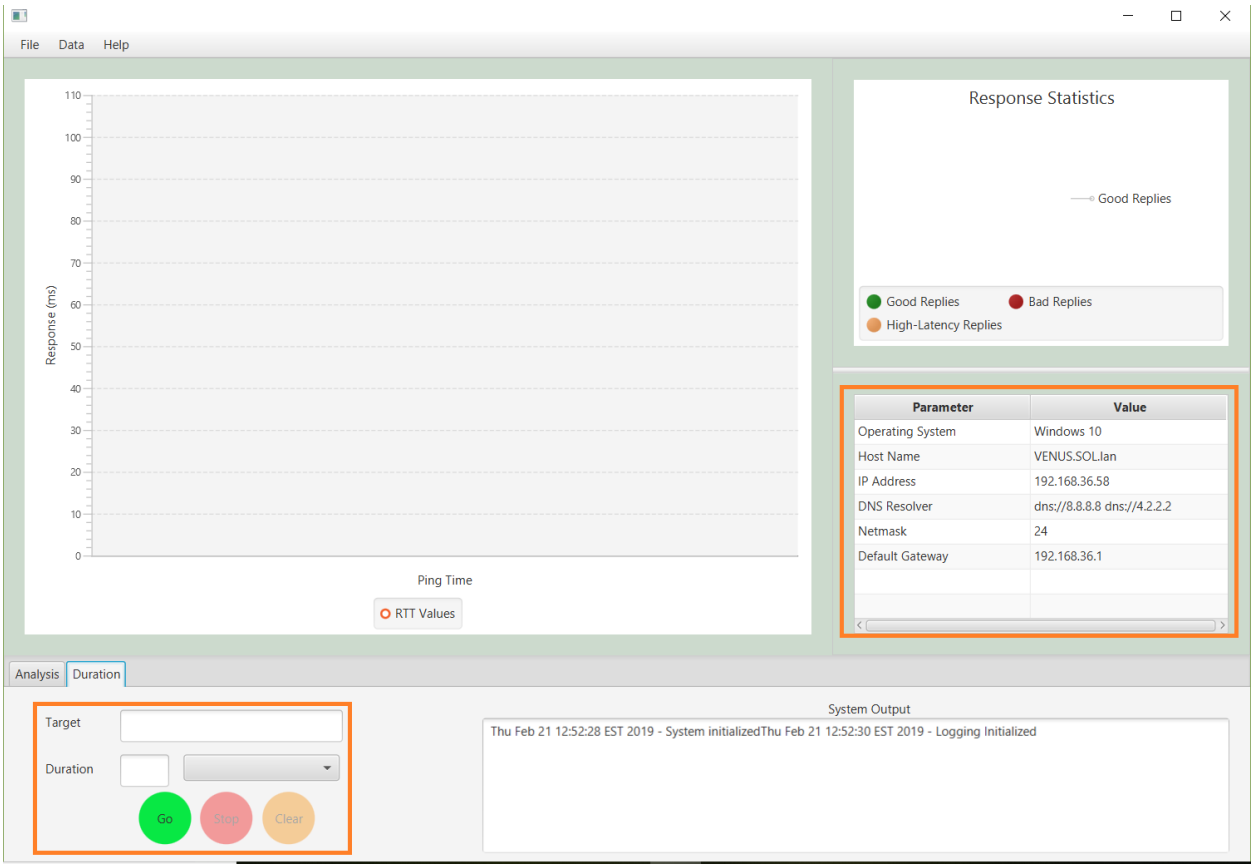
In Duration Mode, the user is responsible for selecting a **ping target** and **duration** in seconds, minutes, or hours. The **ping target** can be a local or external resource via either DNS name or IPv4 address. A duration can be a minimum of 1 second or a maximum of 12 hours and to limit the quantity of packets the ping interval is automatically converted to 10 seconds on durations longer than 1 minute and 5 minutes on durations longer than 1 hour. The same line graph and pie chart is displayed containing the results of the operation. This chart can be used to identify periods of network congestion for further troubleshooting.

4.2 Procedure

1. Launch the NetUse2 application
2. In the NetUse2 application, ensure that the **Duration** tab is selected in the Mode panel

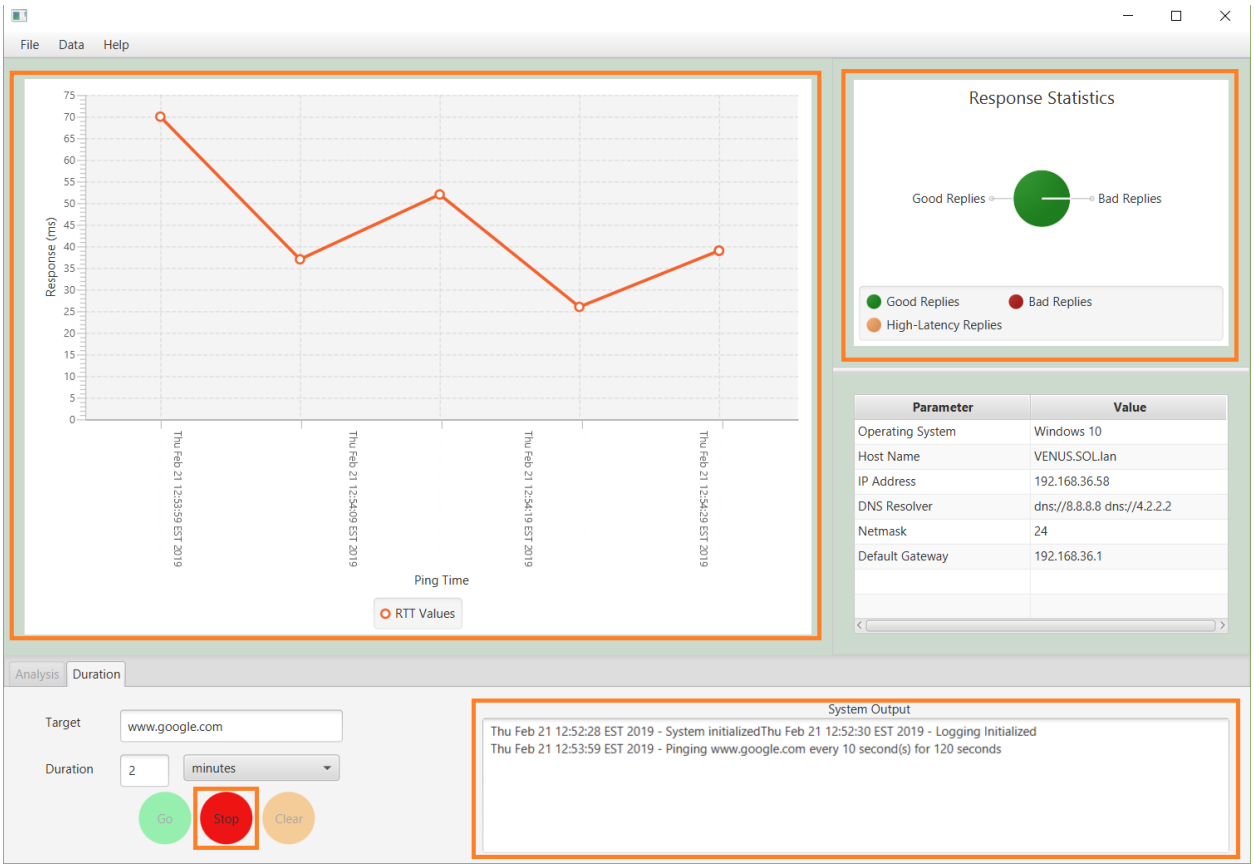


3. Inspect the **System Parameters** panel to verify system network parameters
4. In the **Duration Tab**, enter the ping **Target** and **Duration** desired and click on the **Go** button to begin automatic analysis



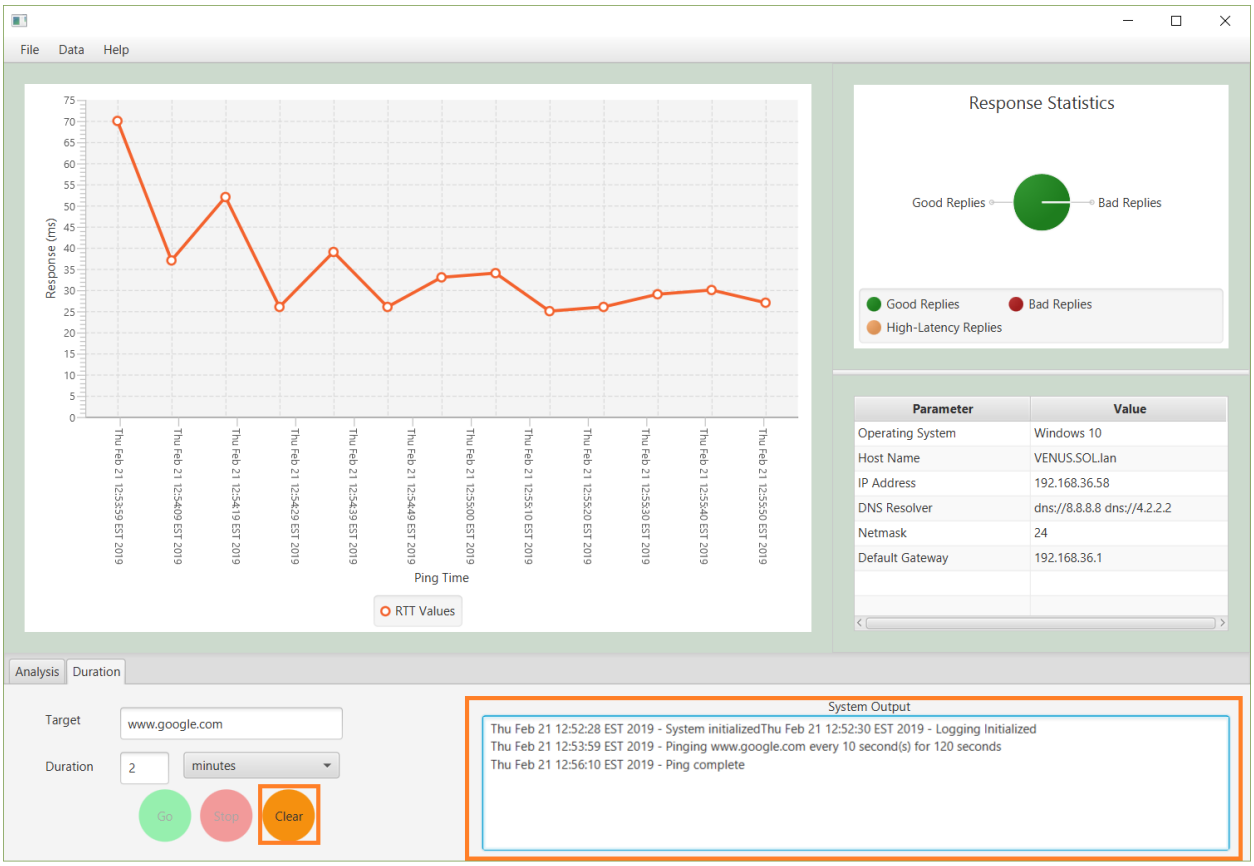
5. Observe the reply time graph and reply statistics chart fill with data and the status log populate with process status

   NOTE: The **Stop** button is now active to abort the command



6. When the command is complete, inspect the line graph to view reply times over the duration

   NOTE: The **Clear** button is now active to reset NetUse2 for another use



7. If you wish to perform another command, click the **Clear** button to reset NetUse2. If you would like to export the data, refer to the *Data* section to learn how to import and export ping data.

CHAPTER

FIVE

MANAGING DATA

5.1 Introduction

NetUse2 has the capability to export and load data from a ping set for sharing or archiving. The dataset is saved with the .nu2 file extension and is compatible with Windows or Linux systems. Saved ping data can only be used for the reply-time visualization, analysis is not currently supported.

5.2 Export Procedure

1. Launch the NetUse2 application
2. Execute an **Analysis** or **Duration** mode command to populate data
3. From the **Data** dropdown, select **Save** to open the Save Dialog window
4. Select a location and name for the data file and click **Save** to write the file

5.3 Import Procedure

1. Launch the NetUse2 application
2. From the **Data** dropdown, select **Load** to open the Load File Dialog window **NOTE:** This will destroy any unsaved ping data
3. Select the data file and click **Load** to load the ping data

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