RICOH

Operating Instructions
RICOH IWB Network Environment Check Tool

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1 Introduction

This manual contains detailed instructions and notes on the operation and use of this product. For your safety and benefit, read this manual carefully before using the product. Keep this manual in a handy place for quick reference.

2 How to Read This Manual

2.1 Symbols

This manual uses the following symbols:
[ ]
Indicates the names of keys on the machine's display or control panels.

2.2 Disclaimer

In no event will the manufacturer be responsible for any documents created by you using this product or any results from the data executed by you.
Some illustrations or explanations in this guide may differ from your product due to improvement or change in the product.

2.3 Notes

Contents of this document are subject to change without notice.

3 Overview

RICOH Interactive Whiteboard provides remote whiteboard sharing functionality that allows you to share screens with other interactive whiteboard systems at different locations which are connected to the same network. The optional product, Remote License Type 1, is required to use this functionality.
The network diagnostics tool checks your network environment to determine whether this functionality can be used.
Two computers are required to use this tool.

4 Precautions for Usage

- The result of diagnosis reflects the state of the network during diagnosis. Note that the network use conditions might vary, depending on the time diagnosis is performed.
- This tool only diagnoses your network environment. The diagnosis result does not necessarily indicate network usability for remote whiteboard sharing.
- This tool cannot determine the causes of problems when two computers cannot be connected or communication speeds remain low.
- If each computer is using a different version of this tool, diagnosis will fail. Before diagnosis starts, make sure both computers are using the same version of the tool.

5 Operating Environment

The following environment is required to use this tool:

OS:
Windows 7 Home Premium/Professional/Ultimate/Enterprise SP1
32-bit or 64-bit
Japanese or English

Software used:
.NET Framework 4

Network ports used:
80, 50000, 50001, 50002, 61616

6 Using the Tool

This section describes how to use the network diagnostics tool.
This tool is used to check your network environment when you use remote whiteboard sharing. Start the tool on your computer and another computer connected to the same network to use this tool to check your network environment.

After the tool has started on both computers, use one computer to start diagnosis (the client computer). The other computer waits to receive the call for diagnosis (the server computer).

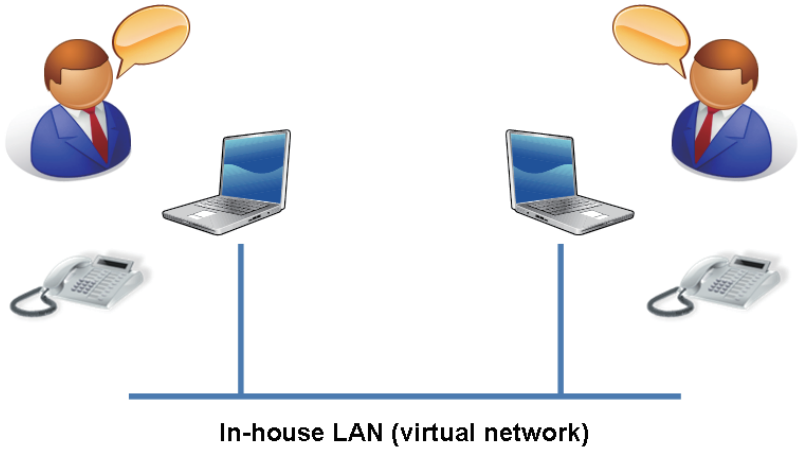


Figure 1: Using the network diagnostics tool

6.1 Before Using the Tool

This tool must be used on two computers connected to the same network. Make sure to connect these two computers to the network.
Before starting diagnosis, specify the server computer and client computer, and then report the IP address of the server computer. Make sure to prepare telephones or other devices that can be used for communication.

Caution

Use this tool with administrator permissions.
After the tool starts, a dialog box which prompts you to execute this tool with administrator permissions appears. Select [Yes] or enter the administrator password.
Contact your system administrator to check the administrator password of the computer you are using.

Caution

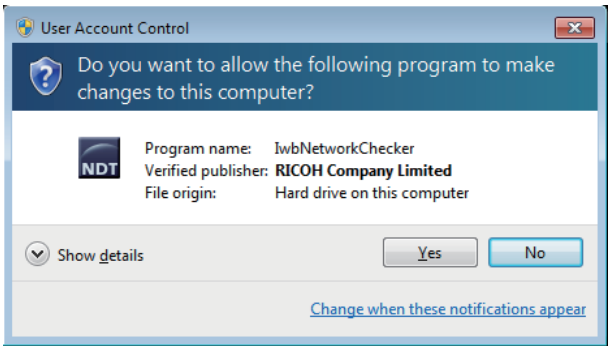
Before starting the tool, disable the firewall on the computer you are using.
When you are finished using the tool, make sure to re-enable the firewall.
For details about how to configure the firewall on the computer you are using, contact your system administrator.

6.2 Starting the Tool

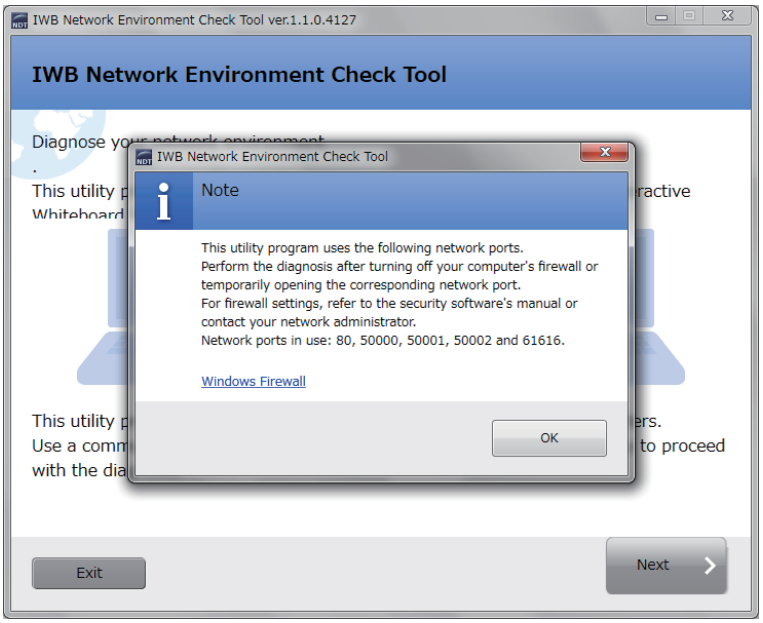
1. Start the tool.

   Run `IwbNetworkCheckTool.exe` (shown as the following icon).

   After the tool starts, a dialog box which prompts you to execute this tool with administrator permissions appears.



   Select [Yes] or enter the administrator password[1] to continue. The initial startup screen appears.



[1] If you are using an account with general user permissions, you must enter the administrator user password.

Close the [Note] dialog box, and then select [Next].

When you select [Windows Firewall] in the [Note] dialog box, the Windows firewall control panel appears. Disable the firewall. For details about how to configure the firewall, see "Appendix B".

2. Select the server computer or client computer.

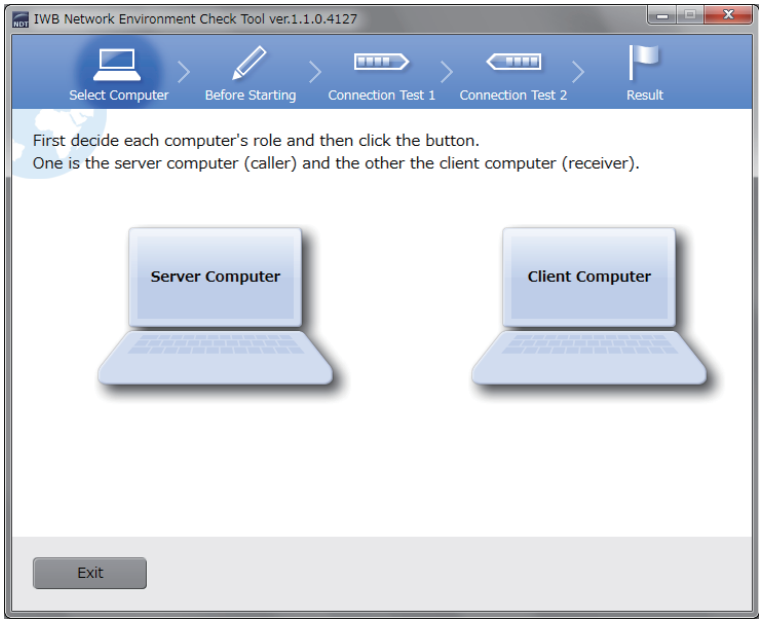


Figure 2: Server/client selection screen

If you are using the computer designated as the server computer, select the Server Computer icon on the left. For details about using the server computer, see "6.3 Using the Server Computer".

If you are using the computer designated as the client computer, select the Client Computer icon on the right. For details about using the client computer, see "6.4 Using the Client Computer".

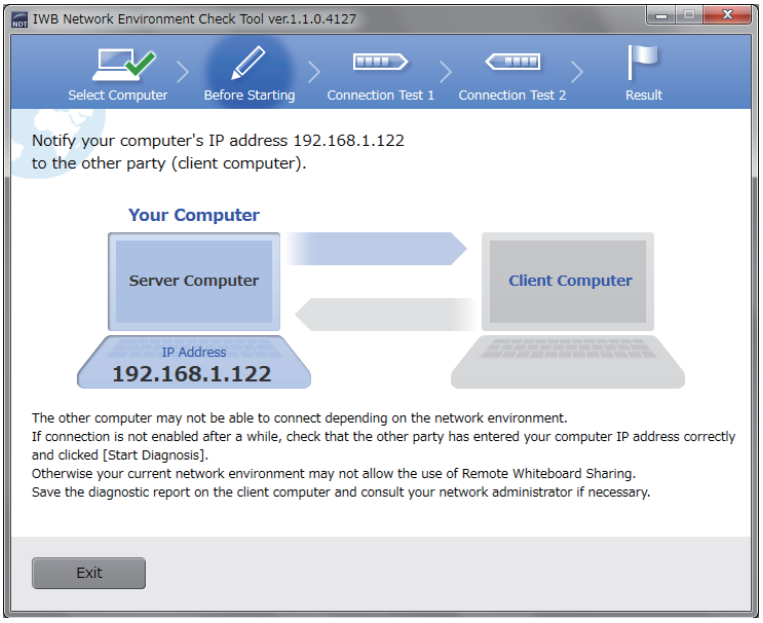
Before starting diagnosis on the client computer, select the server computer, and then provide the IP address displayed on the screen for the operator of the client computer.

6.3 Using the Server Computer

This section describes how to use the server computer (when you are the operator of the server computer).
Before starting diagnosis on the client computer, confirm that the IP address is displayed.

1. Provide the IP address of the server computer for the operator of the client computer.

When you select the Server Computer icon on the server/client selection screen (Figure 2), the IP address of the server computer you are using appears.

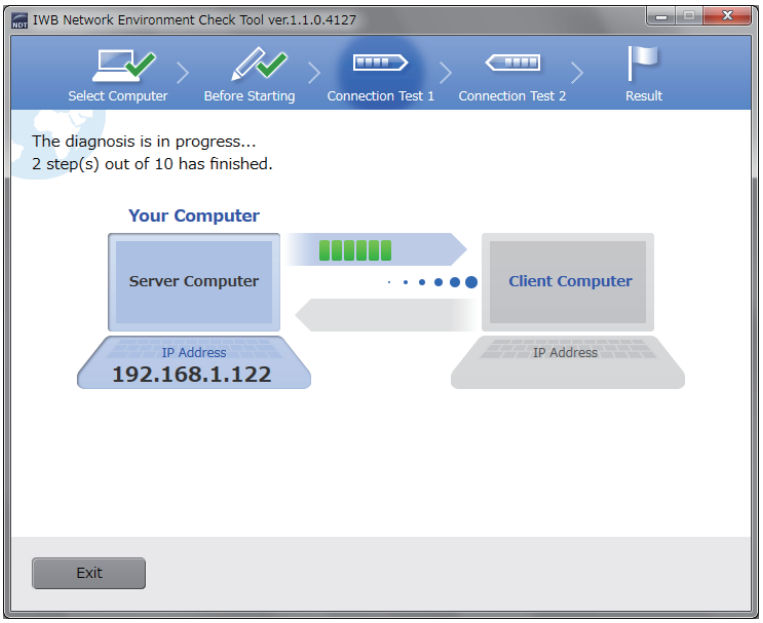


Provide the IP address displayed on the screen for the operator on the client side and ask the operator to start diagnosis.

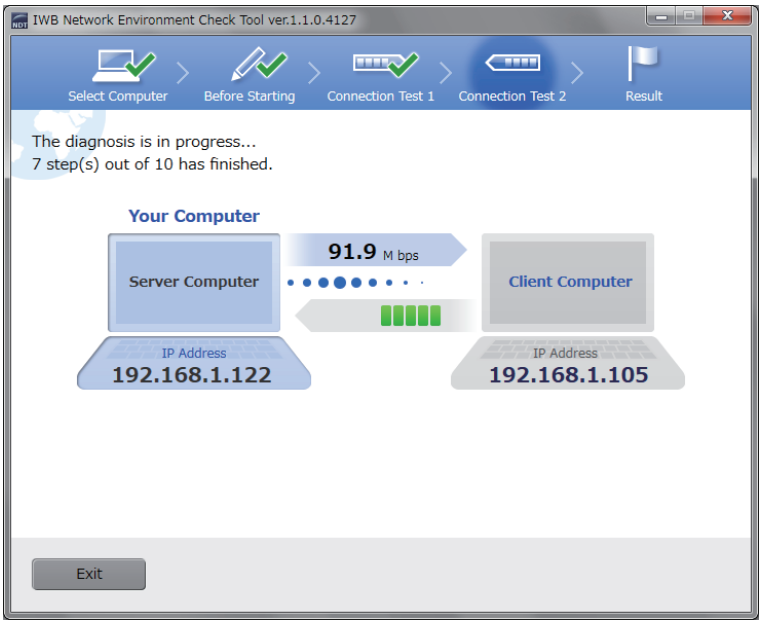
2. Diagnosis starts.

   Diagnosis will automatically start on the server side when the operator on the client side starts diagnosis.

   First, the tool checks whether or not the server computer is connected to the client computer.

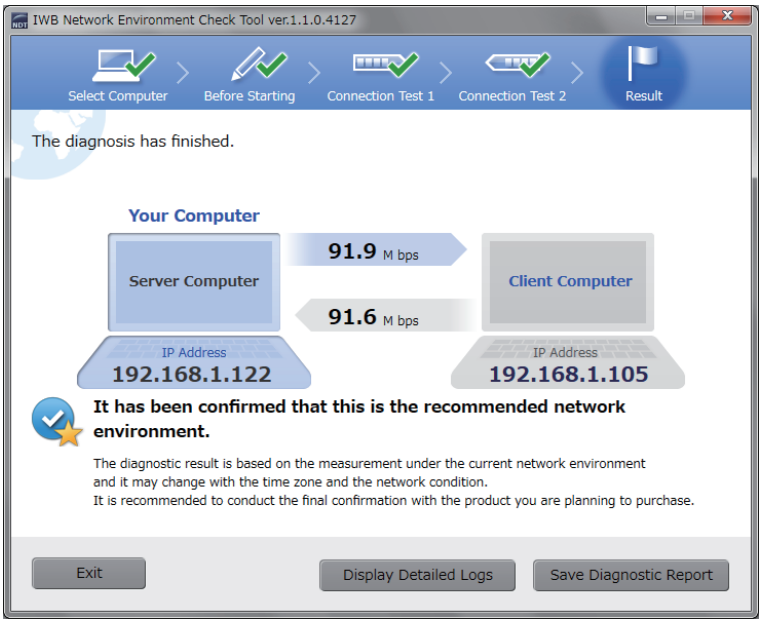


Next, the tool checks whether or not the client computer is connected to the server computer.



3. Diagnosis ends.

   At the end of the diagnosis, a screen which indicates the diagnosis is complete appears.



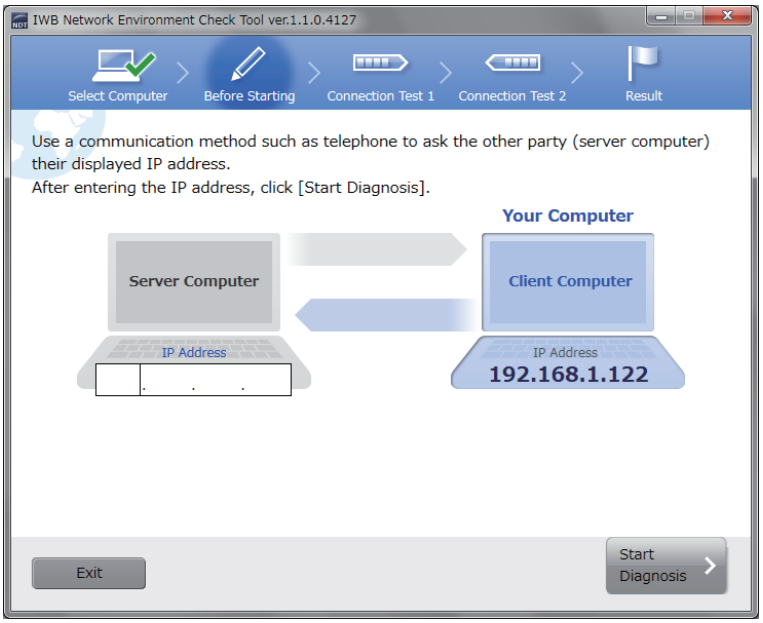
For details about how to check diagnosis results, see "6.5 Confirming the Result".

6.4 Using the Client Computer

This section describes how to use the client computer (when you are the operator of the client computer).
Before starting diagnosis on the client computer, check the IP address that is displayed on the server computer.

1. Enter the IP address of the server computer.

   When you select the Client Computer icon on the server/client selection screen (Figure 2), the screen for entering the IP address of the server computer appears.

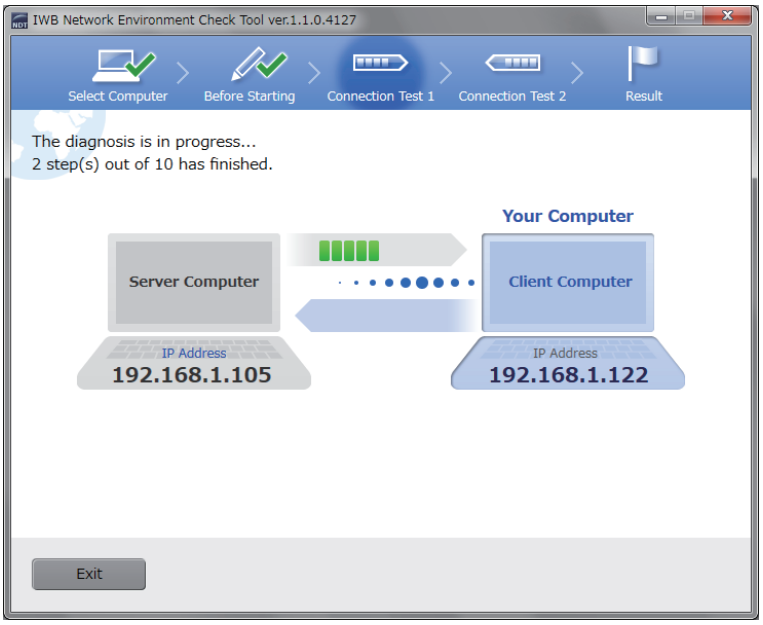


Contact the operator on the server side to obtain the IP address of the server computer, and then enter the IP address.

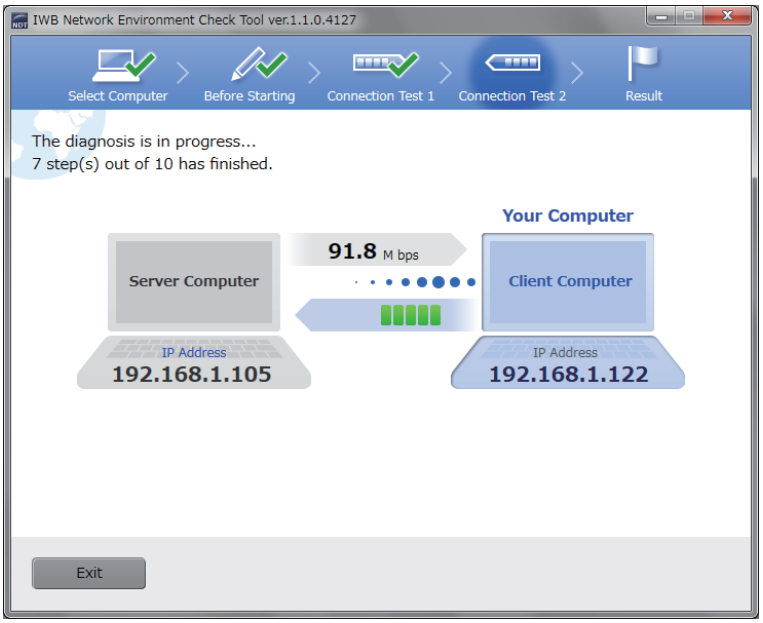
2. Start diagnosis.

   Enter the IP address of the server computer, and then select [Start Diagnosis]. Diagnosis starts.

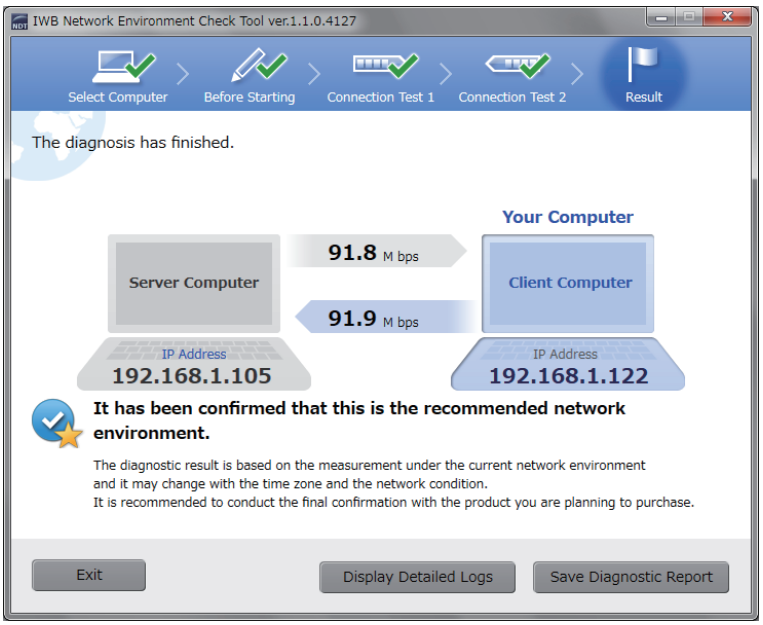
   First, the tool checks whether the server computer is connected to the client computer.



Next, the tool checks whether the client computer is connected to the server computer.



At the end of the diagnosis, a screen which indicates the diagnosis is complete appears.

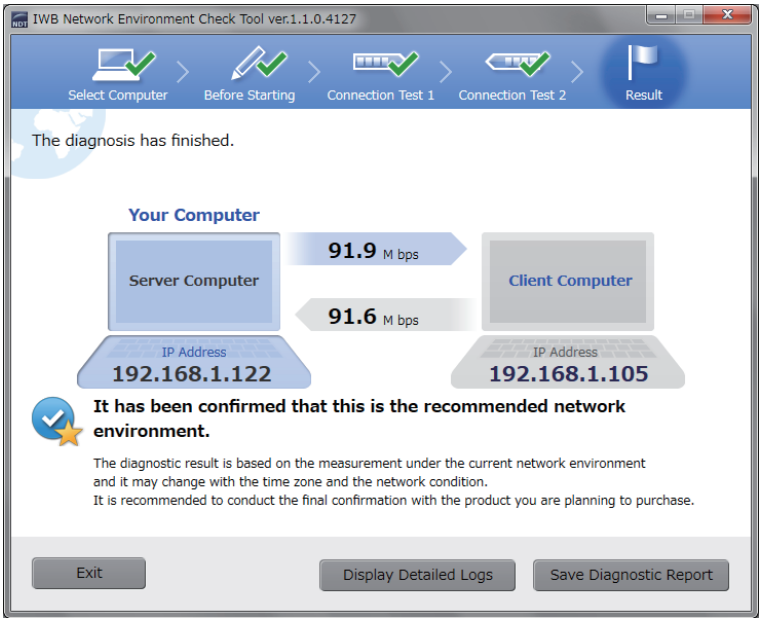


For details about how to check diagnosis results, see "6.5 Confirming the Result".

6.5 Checking Diagnosis Results

This section describes how to check diagnosis results.

At the end of a diagnosis, a screen which indicates the diagnosis is complete appears both on the server computer and the client computer.

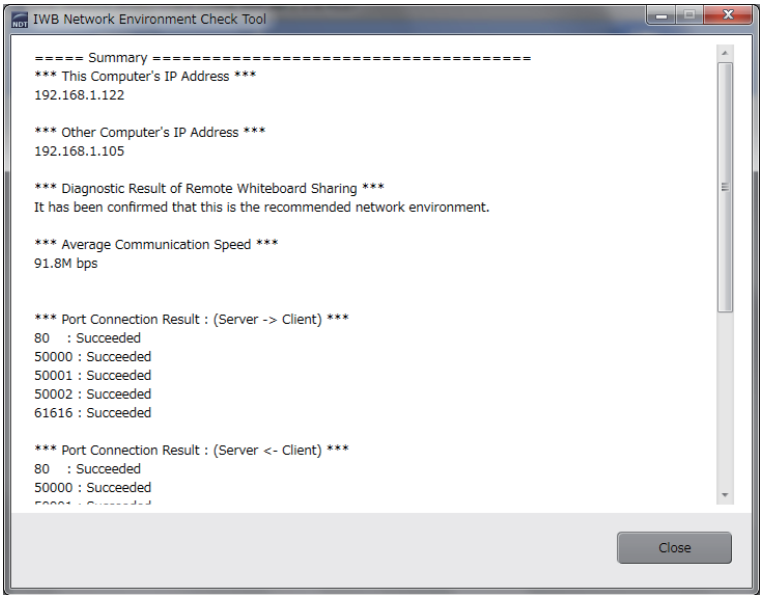


The following table lists the diagnosis result messages that appear.

Diagnosis result message	Description
It has been confirmed that this is the recommended network environment.	Your communication bandwidth is 512 kbps or higher. You can comfortably use remote whiteboard sharing.
It has been confirmed that this network environment is available for use.	Your communication bandwidth is between 200 and 512 kbps. You can use remote whiteboard sharing.
It has been confirmed that this network environment is available for use, but the quality may not be good.	Your communication bandwidth is 200 kbps or lower. During remote whiteboard sharing, you can share the information written on your whiteboard with other whiteboards, but it may not be recommended that you share the screens of the computer to which your whiteboard is connected.
It does not fulfill the requirements for usage. Save the diagnostic report and consult your network administrator.	You cannot use remote whiteboard sharing. Some or all of the used ports (80, 50000, 50001, 50002, and 61616) are closed. Contact your network administrator.

The communication result from the server computer to the client computer is compared to that from the client computer to the server computer. The lower bandwidth communication result is displayed as the diagnosis result. Even if the diagnosis result is poor, you may still be able to

use remote whiteboard sharing. Check the details of the diagnosis result to determine whether this functionality can be used. For more details, contact our service center.
Select [Display Detailed Logs] to view the details of the diagnosis result.



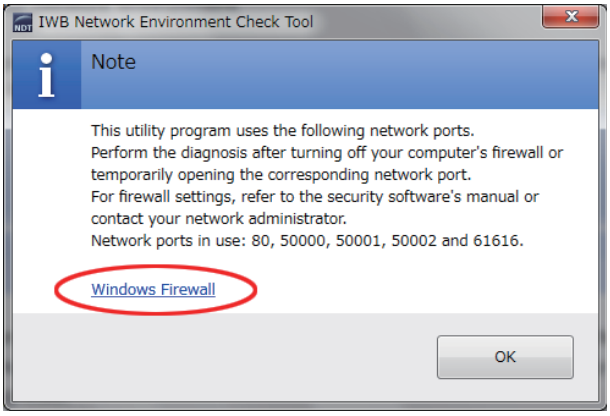
Select [Save Diagnostic Report] to save the confirmed result to a file. For details about the diagnosis result, contact your system administrator. After saving the result, press [Exit] to quit the tool.
After the diagnosis is complete, make sure to enable the firewall on the computer used for the diagnosis.

A Frequently Asked Questions

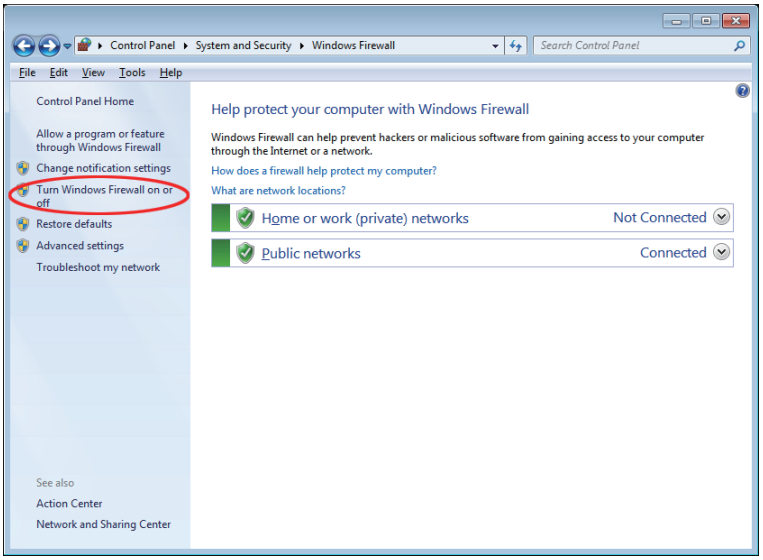
The tool does not start.	Start the tool with administrator permissions.
Diagnosis does not start.	1. Disable the computer firewall. 2. Designate one computer as the server computer and the other as the client computer. 3. To start diagnosis on the client computer, enter the correct IP address of the server computer. 4. Start the server computer before starting diagnosis on the client computer. 5. Use the ping command to check that the two computers can communicate with each other. 6. If the network between the two computers uses network address translation (NAT) to connect to the Internet, the connection will fail. Use a virtual private network (VPN) for diagnosis.
The message "It does not fulfill the requirements for usage." was issued. Is it impossible to use remote whiteboard sharing?	Contact your system administrator and ask to open network ports 80, 50000, 50001, 50002, and 61616.

B Configuring the Windows Firewall

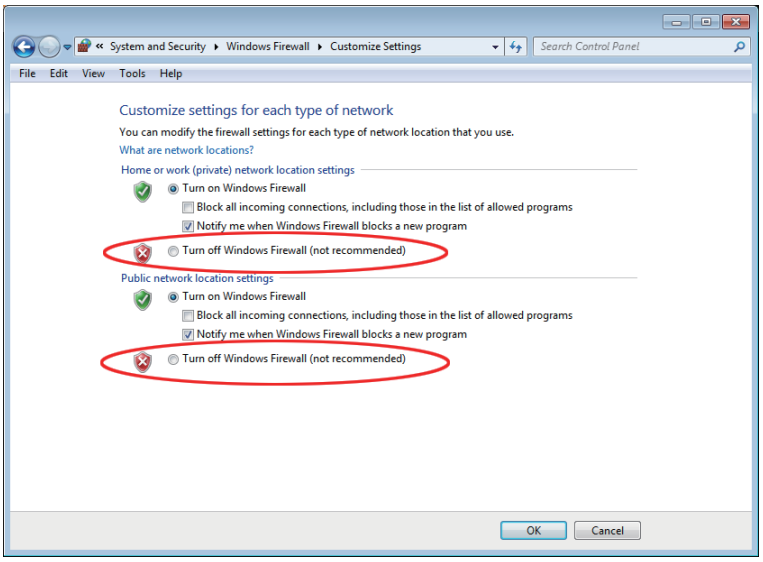
You must disable the firewall of the computer you are using to use this tool. This section describes how to disable the Windows firewall.
The procedure for disabling the firewall depends on the security software you are using. For details, contact your system administrator.
After the tool starts, the following dialog box appears. Click the link in the dialog box to display the control panel used to configure the firewall.



When you select the link, the Windows firewall control pane appears.



If you select the “Turn Windows Firewall on or off” specified in red, the control panel to enable or disable the Windows firewall appears.



Select "Turn off Windows Firewall", depending on your network environment. This option is specified in red in the image above.

In addition to the Windows firewall, if you are also using the firewall of a security software program, disable that firewall as well. For details, contact your system administrator.

After using the tool, make sure to enable the firewall.

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  Microsoft® Windows® 7 Professional
  Microsoft® Windows® 7 Ultimate
  Microsoft® Windows® 7 Enterprise

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