



Cisco WAAS Mobile User Guide

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About This Document

Intended Audience

This guide is intended for users of the Cisco WAAS Mobile client.

Product Overview

Cisco Wide Area Application Services (WAAS) Mobile is a powerful software-based application accelerator designed specifically to address the performance challenges of teleworkers, small and home office workers, and mobile employees who travel outside the branch office.

Cisco WAAS Mobile enables PC users to experience up to 50x acceleration over WAN, WiMax, broadband, satellite, dial-up and wireless by providing:

- highest measured performance over last mile networks
- CIFS acceleration for remote file sharing
- HTTP acceleration for web browsing and web applications
- HTTPS acceleration for secure intranet applications
- email acceleration to transfer and download large messages and attachments
- soft phone voice-over-IP quality preservation
- virtual desktop acceleration
- simple client deployment with standard software distribution products
- extensive support for client OS, VPN and security software
- optimized performance for highly mobile users and high latency links

Chapter 1 Getting Started

Cisco WAAS Mobile is a software program which runs in the background on a user's PC and accelerates the speed of communications between the user's PC and servers for applications such as email, web browsers, and file transfers. The software is mostly transparent to the user. This guide explains the visible aspects of the software as well as the use of a few user options.

Software Registration

After installation, the system administrator may optionally require users to register the software. This registration information is used by your system administrator to assist in troubleshooting any issues that you may have, and is not sent outside of your organization. If this option has been configured, the user will be presented with the dialog box in Figure 1.

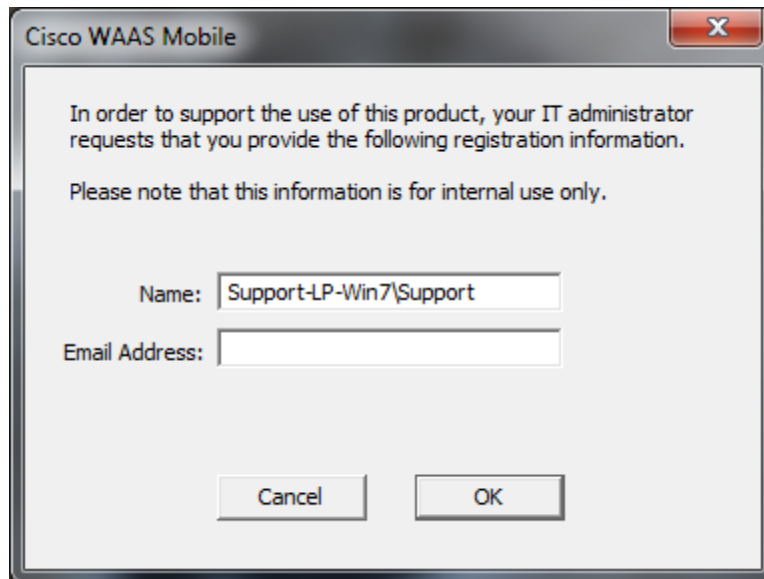


Figure 1 User Registration

Starting Up

By default, the WAAS Mobile client automatically starts when the user logs into the PC. If the WAAS Mobile program is not running, it may be started in one of two ways:

- Through the Windows Start menu, select All Programs > Cisco Systems > WAAS Mobile > WAAS Mobile Client, or
- If the WAAS Mobile client is configured to start when Windows starts (see the Advanced section in Chapter 3), rebooting the computer or logging off/on will restart the client.

Modes of Operation

While running, an “acceleration icon” will be displayed in the Windows system tray to indicate the software status.



Figure 2 System Tray Icon

The icon states and corresponding descriptions are as follows:



Accelerating. WAAS Mobile is running and accelerating applications.



Not Accelerating. WAAS Mobile has

- been disabled, or
- has lost its connection to the WAAS Mobile server and is not accelerating data, or
- is being bypassed because a high-speed network was detected (a configurable option).

Chapter 2 System Tray Menu

Right-clicking on the WAAS Mobile acceleration icon in the Windows system tray displays a pop-up menu of user options, as shown in Figure 3.

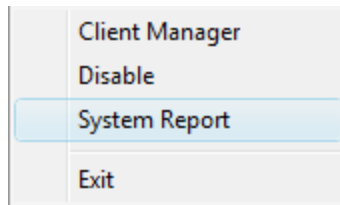


Figure 3 System Tray Icon Menu

Client Manager	Displays the WAAS Mobile Client Manager (see Chapter 3 for complete description of capabilities).
Disable/Enable	Allows the user to disable (or enable) acceleration manually. The menu item changes based on whether acceleration is currently enabled or disabled.
System Report	<p>Allows the user to send information about a problem to the system administrator. A pop-up window appears for entering a problem description and optionally to attach relevant files (see Figure 4). The information, along with a file that automatically captures critical system data, is sent to the WAAS Mobile server to assist the administrator in diagnosing the problem.</p> <p>System reports should be captured while WAAS Mobile is running and as soon after the problem occurs as possible. If the WAAS Mobile client has been exited or restarted after the problem occurred, the critical auto-generated system information will be lost and the administrator will receive only the user's problem description, severely limiting the administrator's ability to properly diagnose the problem.</p>
<hr/> <p>Note: This option may be disabled by the system administrator. In these cases, the menu item will not be seen in the acceleration icon menu.</p> <hr/>	
Exit	Terminates the client application and removes the icon from the system tray.

Cisco WAAS Mobile: Description and Additional Information

Please provide a description:

Please provide a description of what you were doing just before the incident. You may also provide any additional information that you think would help us resolve your problem.

Please attach any additional files that were involved in the incident:

Add File Remove File Cancel Send Report Save Report

Figure 4 Sending a System Report

Chapter 3 Using the Client Manager

Users benefit from Cisco WAAS Mobile's performance without even being aware of its operation. Nevertheless, users can review and, if authorized by their system administrator, customize the application's operation.

The WAAS Mobile Client Manager is accessed from the acceleration icon menu and contains the following tabs (user displays vary based on administrator-assigned privileges):

- *Home* – Summarizes WAAS Mobile compression performance and provides summary status.
- *Advanced Settings* – If enabled by the administrator, this tab contains configuration items that users may customize. Note: The administrator can over-ride user-established settings.
- *Diagnostics* – Contains general software release and support contact info as well as the ability to generate a system report, if enabled by the system administrator.

Home Tab

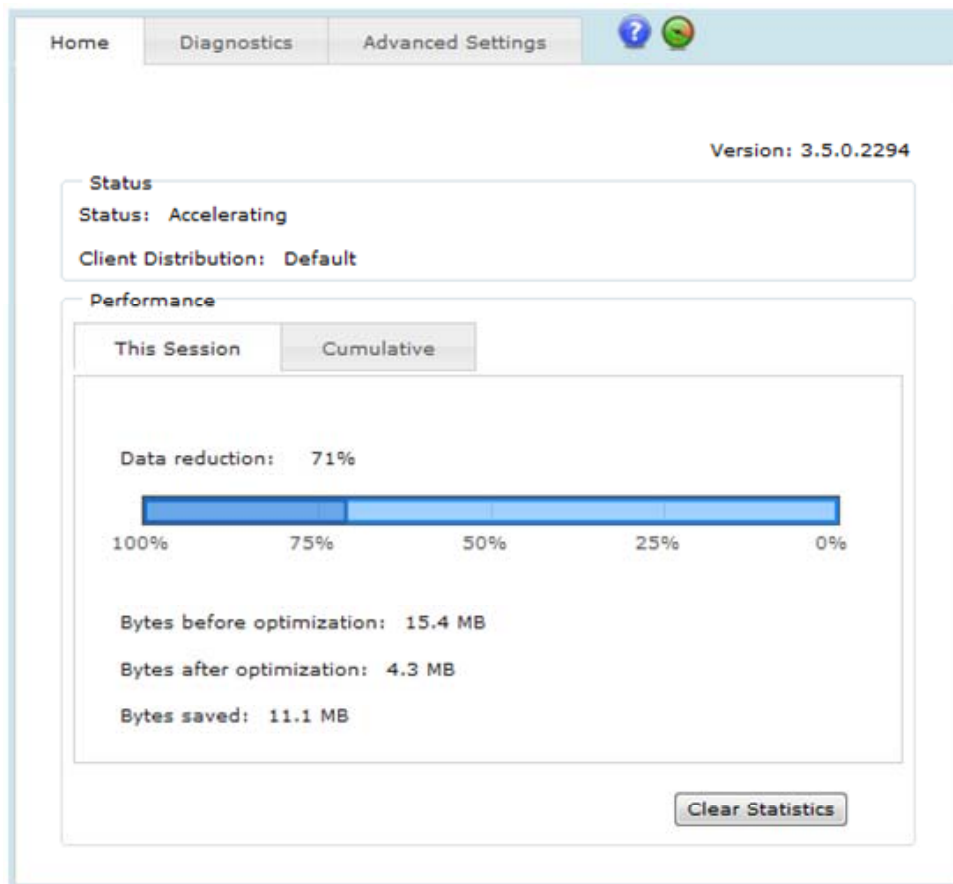


Figure 5 Client Manager – Home Tab

Status	<p>Status will be one of the following:</p> <p><i>Accelerating:</i> This is the “normal” mode and indicates that the client has established acceleration sessions to one or more WAAS Mobile servers.</p> <p><i>User Disabled:</i> Indicates that the user has disabled acceleration manually from the acceleration icon menu. Data is still sent and received over the communications link, but not at accelerated rates.</p> <p><i>Disconnected:</i> Indicates that the server currently is not able to provide acceleration, even though client acceleration is enabled. Data is still sent and received over the communications link, but not at accelerated rates.</p>
Client Distribution	<p>The client distribution is the name of the group configuration policy that has been used to configure this client.</p>
Performance	<p>Provides data compression information, which is one measure of the acceleration performance of Cisco WAAS Mobile.</p> <p>The dark blue bar in the graph represents the percent of data that remains after optimization; the light blue bar represents the data reduction savings.</p> <p>Although compression is only one aspect of acceleration performance, it’s generally true that if the compression ratio is high, acceleration performance is high as well.</p> <p>Separate cumulative statistics are provided for data being sent from and data being received by the computer. Clicking on the “Clear Statistics” button resets both the current and cumulative statistics.</p>

Diagnostics

If the administrator has configured the client user interface to allow the user to view diagnostics and generate system reports, a Diagnostics tab will be displayed, consisting of the following tabbed pages:

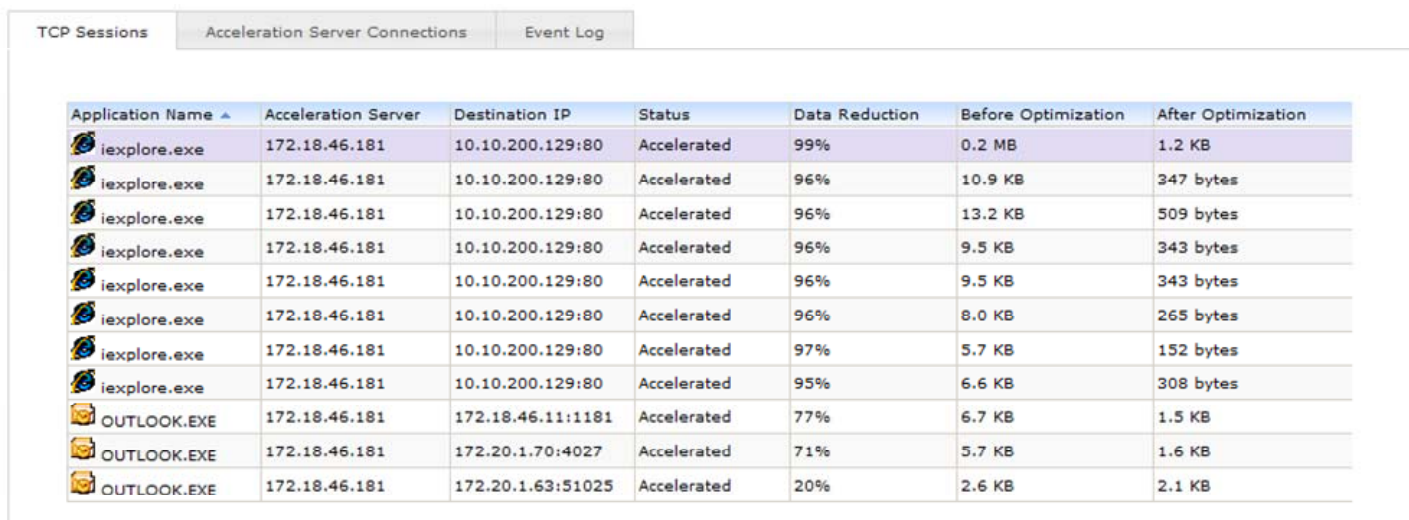
- TCP Sessions.
- Acceleration Server Connections
- Event Log

TCP Sessions Tab

This tab displays real time information regarding the acceleration of each active TCP connection, as shown in Figure 6, including:

- Application process name
- Acceleration server that is accelerating this TCP connection
- Destination IP of the TCP connection
- Acceleration status. If the TCP connection is not being accelerated by WAAS Mobile, the status field provides an explanation as to why not.
- Performance for each TCP connection, including data reduction, data before optimization, and data after optimization

NOTE: TCP session view is available for PCs running Windows XP SP2 and later OSs.



Application Name	Acceleration Server	Destination IP	Status	Data Reduction	Before Optimization	After Optimization
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	99%	0.2 MB	1.2 KB
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	96%	10.9 KB	347 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	96%	13.2 KB	509 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	96%	9.5 KB	343 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	96%	9.5 KB	343 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	96%	8.0 KB	265 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	97%	5.7 KB	152 bytes
iexplore.exe	172.18.46.181	10.10.200.129:80	Accelerated	95%	6.6 KB	308 bytes
OUTLOOK.EXE	172.18.46.181	172.18.46.11:1181	Accelerated	77%	6.7 KB	1.5 KB
OUTLOOK.EXE	172.18.46.181	172.20.1.70:4027	Accelerated	71%	5.7 KB	1.6 KB
OUTLOOK.EXE	172.18.46.181	172.20.1.63:51025	Accelerated	20%	2.6 KB	2.1 KB

Figure 6 Client Manager Diagnostics – TCP Sessions Tab

Acceleration Server Connections Tab

This tab displays real time information regarding the acceleration sessions between the client and each server to which it is connected, as shown in Figure 7, including

- Start time
- Connection state

- Performance of each acceleration server connection, including bandwidth up and down, latency, packet loss, data reduction, data before optimization, and data after optimization

Start Time	Acceleration Server	Connection State	Bandwidth Down	Bandwidth Up	Latency	Packet Loss	Data Reduction ▾	Before Optimization	After Optimization
2009-10-09 12:15:03	172.31.1.52	Active	15.2 Mbps	15.6 Mbps	16 ms	0.0%	83%	8.6 MB	1.4 MB
2009-10-08 16:04:05	172.18.46.189	Active	8.5 Mbps	15.6 Mbps	39 ms	0.7%	82%	0.10 GB	18.1 MB

Figure 7 Client Manager Diagnostics – Acceleration Server Connections Tab

Event Log Tab

This tab displays the contents of the client event log. The Troubleshooting chapter of the Administration Guide provides explanations for each event log message, including probable cause and, where appropriate, resolution guidance.

Advanced Settings

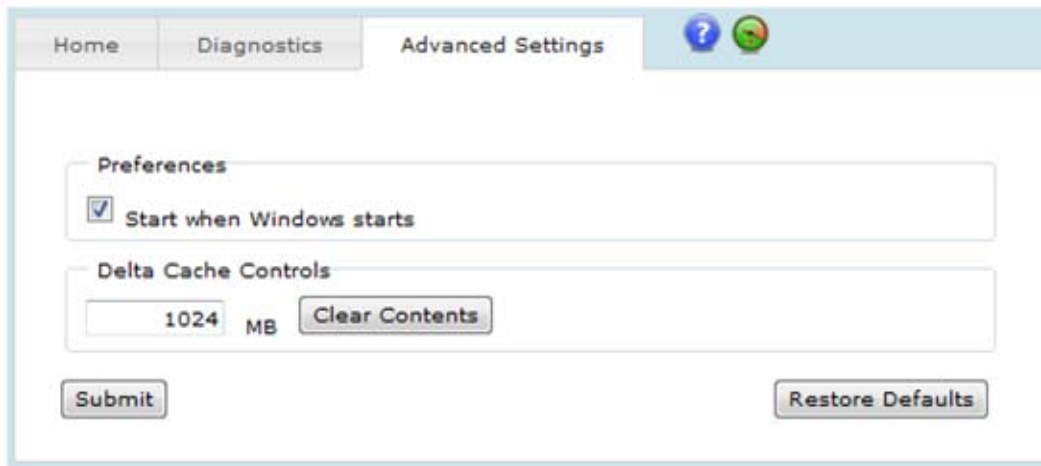


Figure 8 Client Manager -- Advanced Settings

NOTE: Advanced Settings are not enabled by default and must be enabled by the administrator.

Preferences	Allows the user to enable acceleration automatically upon Windows startup. The default is checked.
Delta Cache Controls	Indicates the amount of local disk allocated to data cache so that repeated file sequences achieve maximum acceleration. The default is set by the administrator, and is typically 1024 MB. Depending on the

configuration established by the administrator, if the computer has insufficient disk space to allocate the requested cache size, the software may automatically fall-back to a smaller cache size of 256 MB.

To change the size of the delta cache disk allocation, specify the desired value in the Delta Cache Controls entry box and click "Apply."

Note: If the user-specified value is greater than the maximum size allowed by the administrator, or if the value is greater than the free disk space on the computer, the following message will be displayed: "Requested delta cache size is too large."

Clicking on the "Clear Contents" button deletes all cache history.

Restore Defaults	Resets all values to the default settings.
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