



Deep Six Technologies, SAS DS200 Management Client GUI

User's Guide – Client Version 0.1.1 Build 475

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1 - Introduction

1.1 Notes

In combination with DS200 Firmware release 0.8.897, Deep Six Technologies released the DS200 series management client. The DS200 management client is a web based Java applet graphical interface to facilitate common ongoing management tasks for DS200 series devices.

This document described how to access and use the Management Client to administrate Deep Six Technologies DS200 series devices.

For additional help or questions regarding this application please refer to Section 5 of this document.

2 - Running the Management Client

2.1 Accessing the Application

The DS200 management client web page and applet package is hosted on the Deep 6 Technologies web site to alleviate additional hosting burden to devices as well as to enable a rapid update path for future enhancements.

2.2 Application Requirements

Usage of the management GUI applet simply requires a web browser capable of running Java applets. The management GUI also requires security permissions for some of its tasks. These permissions are described in greater detail below.

2.3 Device Requirements

All DS200 firmware versions release since early 2005 support the DS Toolkit Sockets interface and will support connections from the management GUI application.

However, firmware versions prior to 0.8.897 do not contain functionality to support all management GUI operations.

The management GUI may be safely used with firmware versions prior to 0.8.897, however the only operations that will succeed, are connecting to the device, and adding white or black list entries.

If other operations are attempted with devices running earlier firmware, the operation will fail with an "Unknown Command" response notation in the Message Pane. This will have no effect on the DS200 device.

2.4 Application Loading and Permissions

To access the management GUI simply load the following URL into a browser which meets the requirements specified above:

<http://www.deep6tech.com/ds200/management/gui.html>

The applet package is digitally signed by Deep 6 Technologies. The management GUI requires access to network connections to establish communications with a DS200 device as well as the local file system if the user wants to save or restore configuration data.

When the management GUI is first loaded during a browser session, the user will be prompted to permit execution of the applet. The exact syntax of this prompt varies by platform. But in order to allow the applet to connect to the DS200 device or save configuration files for backup purposes, the user should respond to any security prompt with these requirements in mind.

In the event that proper permissions are not granted to the management GUI applet, the applet will still load, but will fail to connect or save files. The applet will be restricted to "off-line" mode and will not be able to perform any device management tasks.

When an error is encountered during connection attempts or when saving files, review the Message Panel (described below) for errors and verify that the failure is not a result of restricted permissions.

3 - Management Client Screen Elements

3.1 Screen Components

When loading the management GUI page, an html page will be displayed. The html page closely resembles the layout of the Web Gate html page currently served by the DS200 series devices, except that the Web Gate form has been replaced by the management GUI applet.

The applet graphical interface is divided into 3 sections:

- **Selection Tabs**
- **Action Pane**
- **Message Pane**

These sections are described in greater detail below.

3.2 Selection Tabs

The Top section of the management GUI window contains a set of Selection Tabs. The Selection Tabs provide access to the following functional areas:

- **Settings**
- **Black List**
- **White List**
- **Test Address**
- **Device Configuration**
- **About**

These sections are described in a later portion of this document.

Selection tabs provide "Hover Text" to provide brief descriptions of the section the tab enables. To view "Hover Text" simply position the mouse pointer over the tab and briefly pause until the hover text displays.

To select an area of function, simply click on the desired tab. When a Selection Tab is clicked, the Action Pane (described below) will contain the set of controls and options for the specified section.

Tab selection is asynchronous. This means that the user can select another tab at any time, even when a non-instantaneous operation is in progress. This is very helpful in that while one operation is in progress, the user can move to another area of the GUI to prepare for the next desired command. (For example, while waiting for the connection to be established, the user can switch to the Test Address function and load the IP address to be tested so that the Test IP Command can use issued the instant the connection is active.)

3.3 Action Pane

The screen area below the Selection Tabs is the Action Pane. The Action Pane is the portion of the management GUI where users will spend most of their time. The Action Pane contains the screen elements and commands for all the actions the management GUI may perform.

The Action Pane is context sensitive to the Selection Tab selections and will change contents based on the currently active Selection Tab.

Action Pane contents are persistent. When the user changes to a different area of the management GUI by selecting a different Selection Tab, the contents of the currently active tab are preserved. When the user later returns to this tab, all screen elements will still contain the data entered last by the user. This is a very convenient feature that allows users to review data used previously in other commands.

All Action Panes contain some similar elements. At the top of every Action Pane in a grey bar is a brief description of instruction on the usage of that pane. At the left of every action pane is a colored bar with vertical text which indicates which Action Pane the user is viewing. This vertical text bar is color coded so that the user may quickly ensure that they are using the appropriate form for the intended action. This helps to avoid mistakes such as accidentally white listing an address they intended to black list.

The remaining area of each Action Pane depends on the context of the area selected by the Selection Tabs.

Most action panes contain one or more command buttons. Such buttons are described in their respective section later in this document, but it should be noted, that all command buttons with the exception of Connect and Disconnect are disabled until a connection is established. Action Panes themselves are never disabled and may be selected at any time regardless of the connection state.

3.4 Message Pane

At the bottom of the management GUI screen area is the Message Pane. The Message Pane contains status and error messages produced during operation of the management GUI. Messages are appended to the Message Pane with the most recently added message appearing at the bottom of the pane. When the size of the messages exceeds the available display area, the contents of the message pane are always shifted so that the newest message is always visible.

The Message Pane contains a vertical scrollbar on the right which may be used to review earlier messages not visible in the display area.

The Message Pane may also be resized by dragging the horizontal bar above the Message Pane to the desired position.

Text may be copied to the clipboard from the Message Pane by dragging the mouse over the desired text to selecting it, and then pressing <CONTROL>+C.

4 – Action Pane Descriptions

4.1 Settings Pane

The Settings Pane allows the user to enter the device address and user information so that a Toolkit Sockets connection may be established.

To manage a DS200 device using the management GUI, a Toolkit Socket must first be configured and activated on the device. Toolkit Sockets are configured in the same way as Webgate and Weblog connections. In the Toolkit Socket configuration interface in the DS200 device console, simply specify an IP address and port combination where the socket is to listen for incoming connections. Note that the IP address specified must also exist in the device IP address configuration before the socket may be activated. For further details regarding the network configuration of the DS200, please refer to DS200 configuration/user's guide.

The following fields must be configured before a connection can be established:

- **Toolkit Socket IP Address** – The configured Toolkit Socket address for the DS200 device to be connected.
- **Toolkit Socket Port** – The configured port number of the specified Toolkit Socket IP address specified above.
- **User ID** - Management user ID to use for session authentication. User ID's used for Toolkit Socket authentication are the same as those used for management console logins.
- **Password** – Password for the specified user ID entered above.

Once the above fields have been entered, click the "Connect" button to initiate the connection to the device.

When the management GUI does not have an established connection to a DS200 device, the "Connect" button is enabled and the "Disconnect" button is disabled. When there is an established connection, the "Connect" button is disabled and the "Disconnect" button is enabled. This functionality also serves to indicate to the user whether the management GUI has an active connection to a device.

If the connection attempt fails, the user will be notified and a description of the error will be displayed in the Message Pane.

If the connection attempt succeeds, the connection will remain open until the user closes the web browser hosting the applet or the user clicks the "Disconnect" button. By allowing the user to control the connection and disconnection to a device, the user is able to leave the management GUI connected and active in the background, ready for instant use throughout the day.

4.2 White and Black List Panes

4.2.0 Common Pane Features

The White and Black List Panes contain several additional sub-panes. The sub-panes function identically in both the White and Black List Panes with the exception that all the sub-panes on the White List pane operate on the DS device's white list, and all the panes on the Black List pane operate on the DS device's Black List.

Each sub-pane for the White and Black List Panes are described in the following sections.

4.2.1 Add Sub-Pane

The Add Sub-Pane for the White and Black List Panes provide facilities for adding single or bulk IP address blocks to the DS device's white or black lists.

Adding list records requires that the management GUI be in the "connected" state.

To add an IP address block to the respective DS device list, the user simply opens the White List Add Sub-Pane and enters the desired addresses into the multi-line IP Address field. When all the desired address blocks have been added, simply press button labeled: "Add Entries to BLACK LIST." All specified addresses will be transmitted to the DS device for inclusion in the respective device list. The Message Pane will display the results of each item as the device attempts to add the record to the database.

Each address is evaluated individually and if an address specification can not be added due to syntax errors or existing record conflicts, only the offending entry will be ignored. The remaining address specification will continue to be evaluated and if possible, added to the device database.

The DS device will perform a save of the list database to persistent storage if any change to the list database is made.

The syntax for records in the IP address list field for the Add Sub-Pane is as follows:

<Address>/<CIDR value> [ENTER]

Simply enter the IP or network address followed by "/" followed by the CIDR value for the record.

Each line must contain only one address specification. Blank lines are ignored.

The Add Sub-Pane displays the above formatting instructions for reference when using the management GUI.

4.2.2 Delete Sub-Pane

The Delete Sub-Pane allows the administrator to remove address blocks from the white and black lists in a DS device.

Deleting list entries requires that the management GUI be in the “connected” state.

To delete an address block simply open the Delete Sub-Pane for the appropriate list. Enter the desired IP or network address into the “IP to delete” field and press the button labeled: “Delete Entry from Black/White list.”

The specified IP or network address will be transmitted to the DS device. If the device does not find any matching list entries that contain the specified address, the user will be notified that no matching record was found.

If the DS device finds a single matching record which contains the specified address, that record will be deleted and the user will be informed of the deletion status.

If the DS device finds multiple matching records, the matching records will be displayed to the user in a dialog box so that the user may select which record to delete.

The DS device will perform a save of the list database to persistent storage if any change to the list database is made.

4.2.3 Search Sub-Pane

The Search Sub-Pane provides a means for the administrator to query a specific device list for the existence of a desired IP or network address.

Searching for list records requires that the management GUI be in the “connected” state.

To search a specific list for an IP or network address, simply open the Search Sub-Pane for the appropriate device list. Enter the IP or network address in to the field labeled: “IP to locate” and press the button labeled: “Search for entry in Black/White list.”

The management GUI will transmit the specified address and the DS device will perform a query of the selected white or black list.

Any matching records found in the list will be displayed along with the CIDR value specified in the record.

4.2.4 Backup Sub-Pane

The Backup Sub-Pane provides a means for administrators to backup the white or black list databases to a local computer system for archive or replication purposes. Backing up a device list requires the management GUI to be in the “connected” state.

To perform a device white or black list backup, simply open the Backup Sub-Pane for the appropriate list and click the button labeled: “Backup DS200 Black/White List Data.” The management GUI will retrieve the list backup package from the connected DS device.

The user will be provided with a dialog to select a file name for saving the list backup package. Simply select the desired file name and the list backup package will be saved.

List backup package files are tagged and signed to ensure validity at restoration time. The tagging of list backup packages prevents accidental restoration of the wrong category of backup package. For example, it is impossible to backup the black list database and restore it as a white list database.

Backup packages are not branded for a specific device and can be restored to any DS product of the same model (DS200, etc.) for disaster recovery or replication purposes.

4.2.5 Restore Sub-Pane

The Restore Sub-Pane provides a means for restoring the white or black list database of a DS device. To restore a DS device list database, an existing list backup package is required (for instructions to create backup packages or for more information on backup packages, see section **The Search Sub-Pane** provides a means for the administrator to query a specific device list for the existence of a desired IP or network address.

Searching for list records requires that the management GUI be in the “connected” state.

To search a specific list for an IP or network address, simply open the Search Sub-Pane for the appropriate device list. Enter the IP or network address in to the field labeled: “IP to locate” and press the button labeled: “Search for entry in Black/White list.”

The management GUI will transmit the specified address and the DS device will perform a query of the selected white or black list.

Any matching records found in the list will be displayed along with the CIDR value specified in the record.

4.2.4 Backup Sub-Pane.

Restoring a device list requires the management GUI to be in the “connected” state.

To restore a device list, simply open the Restore Sub-Pane for the desired list (white or black) and click the button labeled: “Restore DS200 Back/White List Data.”

The user will be provided with a dialog box to select a previously saved list backup package for restoration. When a file is selected, the backup package is transmitted to the connected device. The backup package is then validated and if no errors are detected, the backup package is applied.

When applying a backup package to a device, any existing database for the specified list is first destroyed. The backup package is validated before the existing database is destroyed. The existing database is destroyed only when the new database is valid and ready to be activated. The list database is also saved to persistent storage on the device upon completion of the restoration.

Restoring a list to a DS device is performed in real time without device interruption and does not require a reboot.

4.3 Test Address Pane

The Test Address pane provides the administrator of DS devices with the ability to test a specific IP address and obtain the score the DS device would assign to that address during a mail connection. This allows administrators to trouble shoot rejection criteria for a rejected mail transaction and to fine tune the device filter parameters such as Maximum Accept Score and Missing Reverse DNS Score.

To test an IP address the user simply enters the IP Address to be tested into the “IP Address to test” field on the Test Address Pane and clicks the Test Address button. The management GUI must be in the “connected” state to perform and address test.

The time required to perform the test depends on the selection of active filter matrix for the device, DNS server response time, and the response time of any DNSBL's which are queried by the DS device. Testing time can be as quick as a few seconds, or over a minute for heavily loaded or improperly configured installations.

When the test is complete the user is show the current score assigned by the connected DS device, confirmation of the IP address that was tested, and a list of any DNSBL's queried by the DS device which list the specified address.

4.4 Device Configuration Pane

The Device Configuration pane provides the administrator with a way to backup and restore DS device configuration settings. The backup and restore facilities of the management GUI backup all device configuration data except for the white and black list databases. Backup of the white and black list databases is handled via the White List and Black List panes described above. When restoring configuration to a device using the device configuration pane, White and Black lists must be restored separately. Configuration data backed up includes all configurable items in the DS device menu system except for the White and Black lists, including filter settings, management users, webgate sockets, protected hosts, http logs, toolkit sockets, remote management console sockets, etc.

To use the backup and restore capabilities of the management GUI, the management GUI must be in the “connected” state.

To backup a DS device’s configuration, simply open the Device Configuration Pane and click on the “Backup DS200 Configuration Data” button. The management GUI will retrieve the configuration package from the DS device and prompt the user with a dialog to select a file name for the configuration package.

To restore a DS device’s configuration data from a saved backup file, simply open the Device Configuration Pane and click on the “Restore DS200 Configuration Data” button. The user will be provided with a dialog to select the backup package file. Once a valid package has been selected, the management GUI will deliver the package to the DS device. The DS device will then validate the configuration package. If the configuration package is valid and there are no errors, the package will be applied and the DS device will reboot.

Configuration packages do not contain any plain text user passwords, but the contents of the actual configuration data are not encrypted. Therefore it is important to safeguard any configuration package files you create.

Configuration packages are digitally signed to ensure integrity of the package and protect against invalid file selection.

Configuration packages are not branded to a specific device and can be restored to any DS device of the same model for disaster recovery or replication purposes.

4.5 About Pane

The About Pane is a simple pane which identifies the application. This pane provides information about the management GUI application and contact information for Deep Six Technologies, SAS.

This pane may be used to identify the specific version of the management GUI that is running

5 - Getting Help

5.1 Contacting Deep Six for Additional Assistance

Deep Six Technologies is committed to making the DS series devices as effective and easy to use as possible.

When contacting Deep Six Technologies with issues relating to the management GUI, please be sure to indicate the version of both the DS200 firmware and GUI client that you are using.

For additional information or assistance, please visit our website at:

<http://www.deep6tech.com>

You may also contact us via email with problems, questions, or suggestions at:

support@deep6tech.com

We appreciate your business and support and hope that you find this product helpful in your efforts to control spam.