Star Wars® Battlefront™ II
Server Manager

Users Guide

v1.0

The Black Bag Operations Server Manager utilities are proudly made in Australia.

Table of Contents

Introduction

What is Server Manager?

Server Manager (or SM for short) is a management program that runs on your game server computer which can be used to launch the server process and manage it after it is running.

Server Manager allows you to manage:
- server settings
- map rotation
- players
- bans
- user accounts
- server schedule
- management clients

using a graphical user interface (GUI) or using in-game administration.

Remote Manager (or RM for short) is a client program which is used to remotely manage a game server that is managed by Server Manager. Remote Manager duplicates all the functions of Server Manager so you can manage your game server as if you were using SM at the server itself.

Server Manager and Remote Manager are client-server applications which means you must run SM on your server if you wish to administer it remotely using RM. You cannot administer your server remotely using RM without running SM on the server computer.

The following illustration shows how RM and SM communicate with each other and the server:

Remote Manager
(running on remote pc)

Server Manager
(running on server pc)

Battlefront™ II Server
(running on server pc)
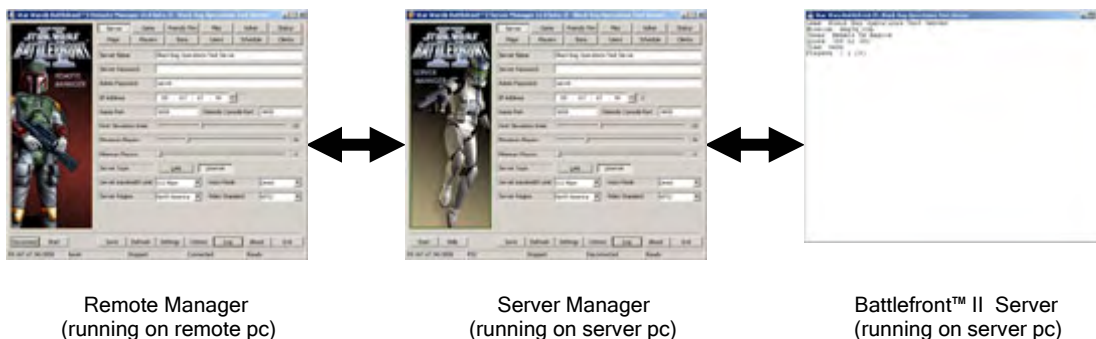
RM communicates with SM which in turn communicates with the server via a Remote Console (RCON) connection. Up to eight Remote Manager clients can connect to Server Manager simultaneously and manage the server together at the same time.

You can also choose to manage your server with SM alone, RM is not required. If you have Windows Remote Desktop access to your server computer, you can remotely administer it using SM alone.

Together, Server Manager and Remote Manager offer complete control over your game server anywhere in the world!

Program Features

Server Manager offers many powerful features for administrating game servers;

- Set all known server settings via a clean and functional graphical user interface (GUI)
- Each setting control has a ToolTip balloon that tells you clearly what each setting does
- Maintain multiple server configurations and easily switch between them
- Change server settings "on the fly" with a running server
- Automatically kick players at a nominated minus score
- Automatically kick players with high pings
- Automatically kick players who use banned words in their name or chat messages
- Make periodic announcements using a customisable message file
- Log player statistics at the end of each game (for use with third-party stats web pages)
- Clearly see the current status or your server and its running state on the Status page
- Create map rotations easily and customise them using the mouse with drag-and-drop
- Filter available maps by game mode and sort them by name, game mode or era
- Export and import your map rotations to and from files
- Change maps and set the next map on a running server using the GUI or in-game admin
- Set an 'idle map' to bait players into your server with a popular map when the server is empty
- Manage players using a customisable Player Menu in the GUI or in-game with chat messages
- Warn, kick and ban players quickly and easily using the Player Menu or in-game admin
- Ban players for an arbitrary length of time and automatically "un-ban" them (timed-bans)
- Kick or ban players with a custom message
- Manage the server ban list whether the server is running or not
- Export and import the server ban list to and from files
- Create restricted user accounts that limit the admin functions each remote user can perform
- Farm out admin responsibilities to multiple admins using restricted user accounts
- Restrict access to hardware server settings using permissions
- Configure custom access and permission presets for quick and easy setup of user accounts
- Export and import user accounts to and from files
- Schedule server starts, stops, config and map rotation changes
- Schedule events to recur daily, on weekdays, weekends or on specific days of the week
- Start and stop the server remotely using Remote Manager
- All administrative actions performed with SM and RM are centrally logged
- Create a CSV log of admin actions (for use with 3rd party "why was I banned?" systems)
- Automatically restart a server in the event of a server crash / hang / or popup window
- Start and stop servers with command-line switches (for use in server scripts and webpanels)
- Run Server Manager and the server as a Windows service using FireDaemon
- Run multiple server instances on a single computer using a single server installation
- Hide the server window off the desktop automatically
- and many more!

Getting started with Server Manager

This section will take you through the steps of installing Server Manager and starting a server.

Installing Server Manager for Windows

To install Server Manager you must first install the standalone server application on your server computer. The dedicated server does not require a game CD-ROM or DVD disc to run.

To install the standalone server application:

1 Download the standalone server application installer from the official SWBF2 website: http://www.swbattlefront2.com

2 Execute the installer and follow the instructions to complete installation.

Note: The game is not required to be installed on the server computer and you can safely uninstall it without affecting the dedicated server application if the latter is already installed.

When the server application is installed you can install Server Manager.

To install Server Manager for Windows:

1 Download the SWBF2SM distribution archive from the Black Bag Operations website: http://www.blackbagops.com

2 Extract *swbf2sm.exe* to the folder where you installed the dedicated server application (by default this is *C:\Program Files\LucasArts\Star Wars Battlefront II PC Server*).

Note: swbf2sm.exe *must reside in the same folder as* BattlefrontII.exe *(the server application). It will not start up in any other location.*

Server Manager is now installed and can now be used to configure and start a game server.

Starting a game server

Configuring and launching a server is made easy by Server Manager.

To start a dedicated server:

1 Execute *swbf2sm.exe* in the server folder to begin configuring the server.

2 Enter a name for your server in the *Server Name* field on the *Server* dialog page.

3 Enter the IP address of your server (see "Setting the server IP address" below).

4 Use the various controls on each dialog page to configure the server's settings according to your preferences. Hover the mouse pointer over a control to see a description of what the setting does.

5 Select at least one map in the list on the *Maps* dialog page by checking one of the boxes.

6 When you're ready to start the server, click the *Start* button.

If the server doesn't start, check the Server Manager log for error messages by clicking the *Log* button. The cause of most errors will be indicated by the error message recorded in the log.

Understanding the Server Manager Interface

The following diagram illustrates the various components of the Server Manager interface.
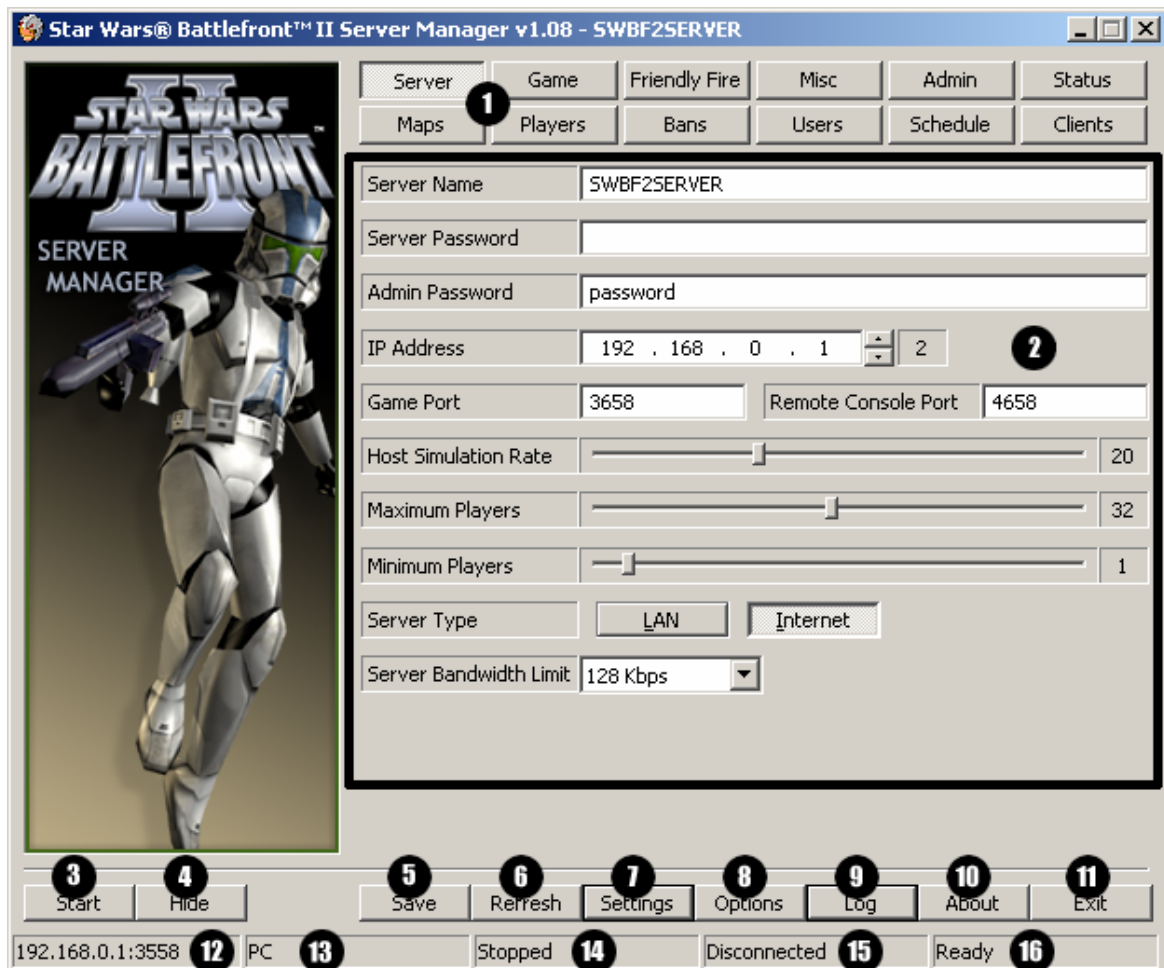
Control legend

1. Main tab control Use this control to select dialog pages.
2. Dialog page This area contains the controls for each dialog page.
3. Start button Starts/stops the server.
4. Hide button Hides/unhides the server window.
5. Save button Saves the setting changes made on all dialog pages to disk.
6. Refresh button Reloads the settings on the current dialog page from disk.
7. Settings Use this button-menu to load, save, default, or switch server settings.
8. Options button Displays the program options dialog (click again to hide the dialog).
9. Log button Displays the log file in a window (click again to hide the window).
10. About button Displays program version information (click again to hide the window).
11. Exit button Click this button to exit Server Manager.
12. Server address Displays the server IP and Server Manager listen port address.
13. Server type Indicates the type of server you are managing – PC or PS2.
14. Running state Indicates the current state of the server process – Running or Stopped.
15. Connection state Indicates the state of the connection between SM and the server.
16. Program state Indicates when Server Manager is busy performing a task in the background.

Setting the server IP address

Server Manager requires you to configure the server with the address of a local IP interface to which the server will bind and through which Server Manager can connect to the server's Remote Console.

Server Manager will discover all local IP interface addresses at startup. Use the spin control next to the IP edit control on the *Server* page to select one of the detected IP addresses.

Use the up/down arrows
to select an IP address

If you enter a server IP address that is not detected on the local computer, you will get a warning message when attempting to start the server and you will not be able to start the server until Server Manager can detect a network interface with the specified address.

If your server computer uses a dynamic IP address, you must start the server using Server Manager so it is properly configured to use the computer's current IP address. You can safely exit Server Manager once the server process has been started if you so desire.

Note: You cannot use the address of a network interface to start a server unless that interface is active. Windows 2000 and later versions of Windows will often not activate a network interface until there is an active device on the other end of the network cable. If you want to bind your server to a dialup network interface, this interface must be connected before you can start the server.

Remote administration

Server Manager uses its own list of user accounts to authenticate Remote Manager clients. These user accounts are not related to Windows user accounts or the server Remote Console password.

If you plan to use Remote Manager to administer your server remotely, you must create at least one user account that can be used by remote clients to connect with Server Manager. See "Getting started with Remote Manager" for more information.

Routers and firewalls

If your server is behind a router you will need to configure port forwarding from your router to your server on TCP port 3558 for RM clients to connect with SM. See the manual that came with your router for instructions about how to configure port forwarding.

If your server is behind a firewall you will need to allow inbound access on TCP port 3558 for RM clients to connect with SM. If your client computer also has a firewall, you will need to allow outbound traffic on TCP port 3558 to connect with SM. See the manual that came with your firewall for instructions about how to allow access to TCP/IP ports.

The following ports also need to be forwarded from your router to your game server computer for your game server to be visible on the Internet; Game Port (3658 UDP incoming), GameSpy master server port (27900 TCP outgoing), GameSpy stats port (29920 TCP outgoing).

Note: By default, Server Manager uses TCP port 3558 to communicate with Remote Manager clients. If you configure SM to use a different client port, you should open this port on your firewall instead.

Getting started with Remote Manager

This section will take you through the steps of installing Remote Manager and connecting to a server managed by Server Manager.

Installing Remote Manager

To install Remote Manager for Windows:

1 Download the SWBF2RM distribution archive from the Black Bag Operations website: http://www.blackbagops.com

2 Extract *swbf2rm.exe* to the folder where you installed the Battlefront II game (by default this is *C:\Program Files\LucasArts\Star Wars Battlefront II*).

Remote Manager is now installed and can be used to remotely manage game servers.

Creating an admin user account

This section will take you through quickly setting up an admin user account in Server Manager that you can use to connect with Remote Manager.

To setup an admin user account in Server Manager:

1 Execute *swbf2sm.exe* in the server folder to begin configuring the user.

2 Click on the *Users* button in the main tab control.

3 Type "admin" in the *Username* field.

4 Type a suitable (secure) administrator password in the *Password* field.

5 Click the Save button (next to the Username field) to save the new user in the user list.

6 Right-click on the *admin* user in the user list and choose "Grant admin access" from the menu.

7 Click the master Save button (next to Refresh) to save the user list to disk.

You can now connect via Remote Manager using the *admin* user account and perform all administrative functions remotely.

Connecting to Server Manager

The first step to managing your game server with Remote Manager is to connect with Server Manager. Server Manager should already be running on the server computer before you try to connect.
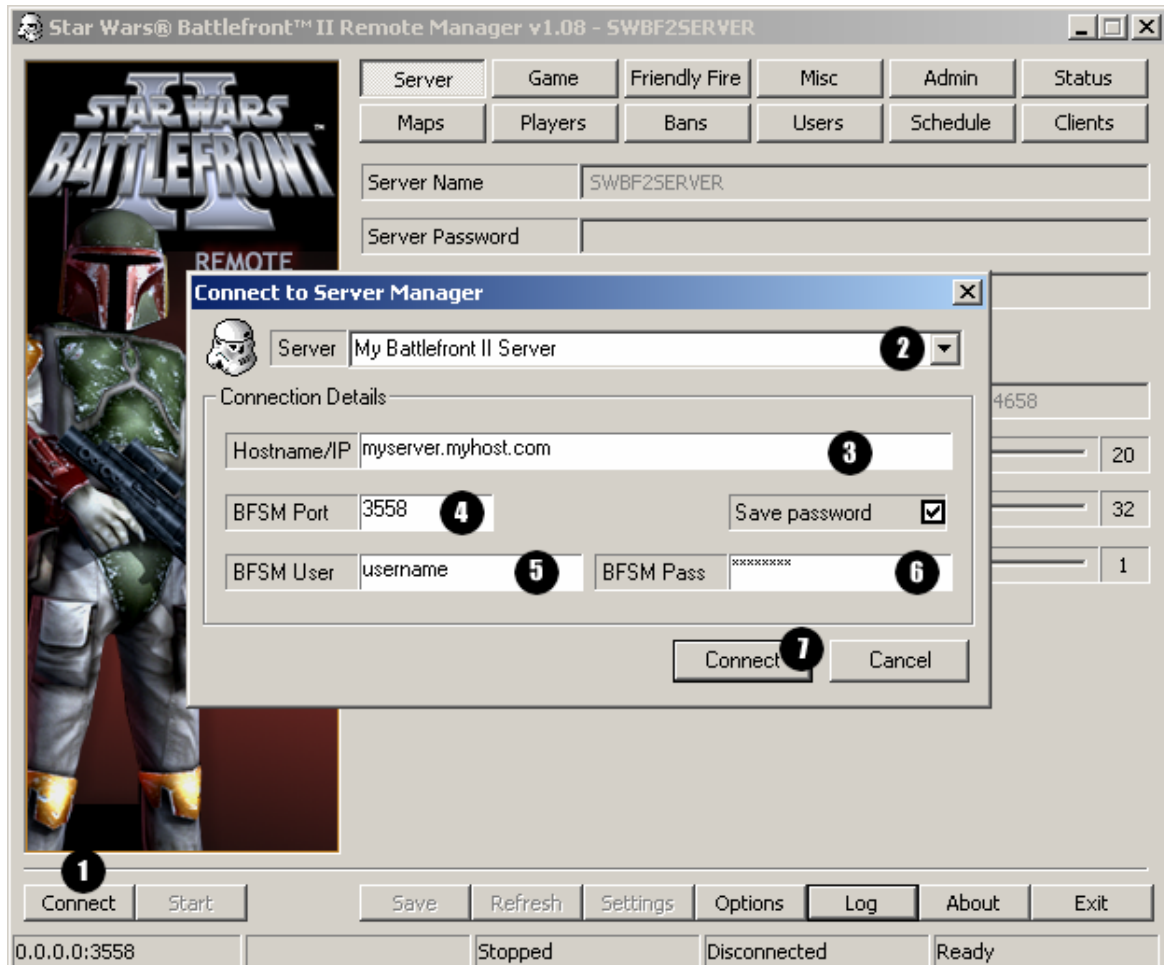
To connect with Server Manager:

1 Click the *Connect* button in the main dialog window.

2 If you wish to use an existing saved-connection, select the saved connection from the drop-down listbox. If you are creating a new connection, type a name for the connection in the *Server* field.

3 Enter the TCP/IP hostname or IP address of your server in the *Hostname/IP* field. If your server is on the LAN, the server's IP address will be the address of its network interface card. If your server is on the Internet, use the address of the server's external network interface or router.

4 Enter the TCP port address SM is using on the server. By default, SM uses TCP port 3558.

5 Enter the name of an active (checked) SM user account in the *BFSM User* field.

6 Enter the password for the account name you specified in Step 5 in the *BFSM Pass* field.

7 Click *OK* to connect to the server.

If Remote Manager does not successfully connect, check the log for error messages by clicking the *Log* button (see "Common reasons for connection failure" for troubleshooting information).

After connecting, Remote Manager will reconfigure the main tab control to show only the dialog pages your account has been granted access to (see "About user access" for more information).
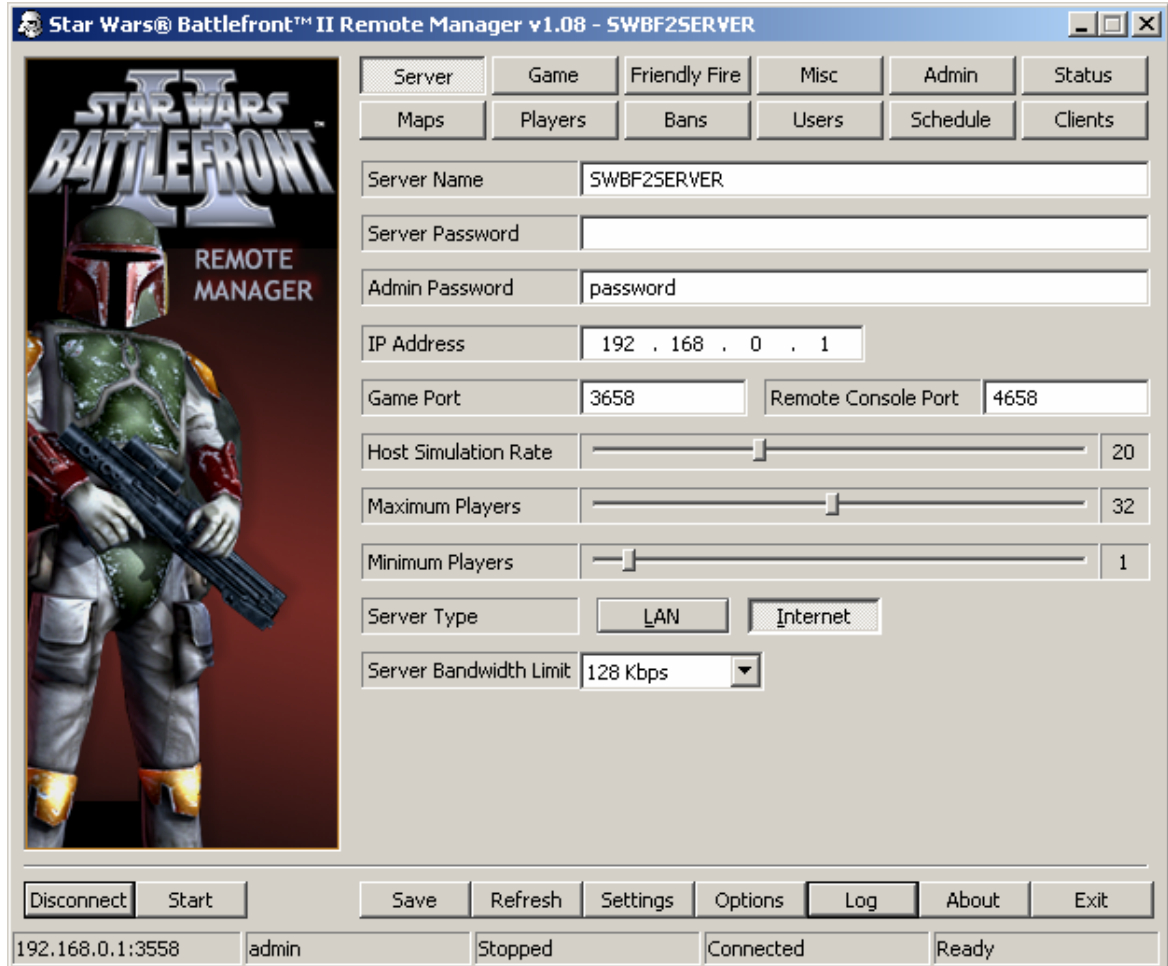
The dialog pages in Remote Manager are exact replicas of those in Server Manager and allow you to perform the same functions remotely. In the remainder of this guide, any reference to a dialog page in one utility applies equally to the same dialog page in the other.

Apart from the *Connect* button, the remaining lower dialog buttons in Remote Manager perform the same function as those in Server Manager (see "Control legend" for more information).

Common reasons for connection failure

1 Server Manager is not running on the server computer.
Solution: You must first start SM on the server computer to connect using RM.

2 The hostname or IP address you specified in the connection dialog is invalid.
Solution: Verify the server IP address is correct and try again.

3 You specified the wrong port in the connection dialog. SM uses port 3558 by default.
Solution: Don't try to use the server's game port or remote console port to connect.

4 There is a firewall on the server or the client computer blocking TCP port 3558.
Solution: Allow incoming/outgoing traffic through TCP port 3558 on the firewall.

5 The server is behind a router that is not configured to forward traffic on TCP port 3558.
Solution: Configure packet forwarding from the router to the server on TCP port 3558.

Server administration

The following sections describe how to use Server Manager and Remote Manager to administer your game server.

Changing server settings

Game server settings are configured using the controls on the first four dialog pages in Server Manager and Remote Manager.
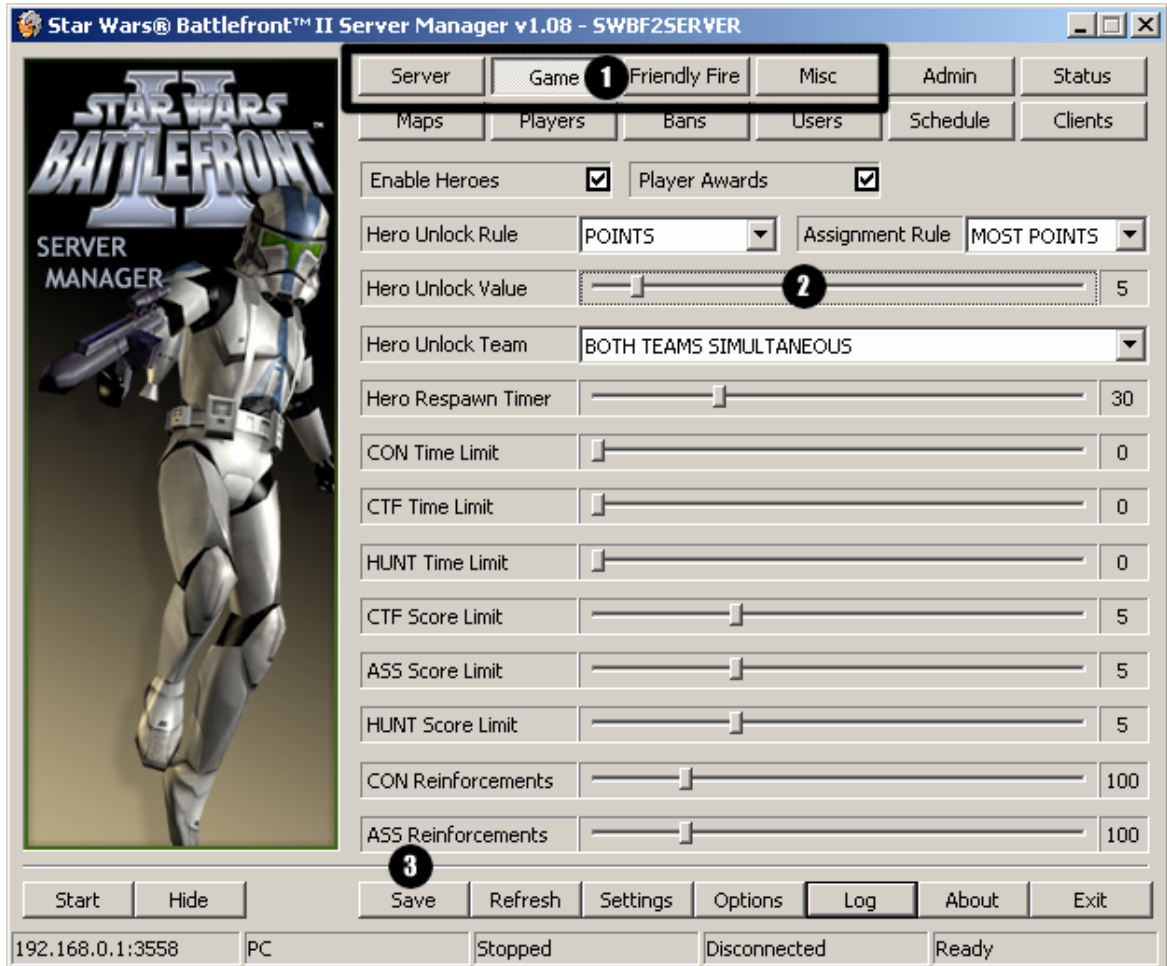
To change server settings:

1 Select the dialog page containing the server setting you want to change.

2 Use the corresponding control to select the value you want (e.g. Hero Unlock Value).

3 Click the master *Save* button to save the server configuration to disk.

Server Manager will save the changes you make to the server configuration file and update any changed settings dynamically on the server if it is running.

Note: *Not all server setting changes can be activated immediately – some server settings require a server restart to be activated. If in doubt, restart the server to positively force all config changes.*

Using multiple server configurations

By default, Server Manager will automatically load and save a single server configuration. If you require multiple server configurations you can use the *Settings* button-menu functions described below to manage them.
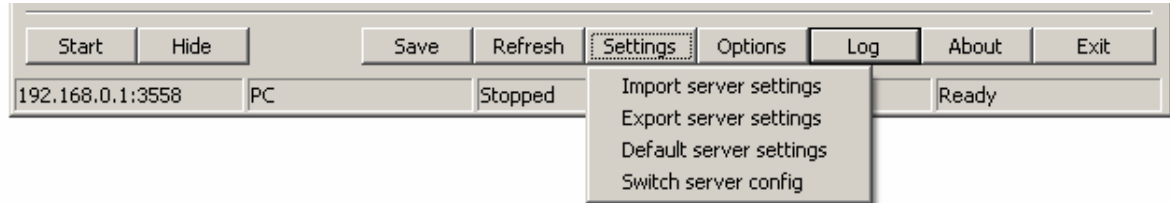
Server Manager allows you to save server setting configurations as files for easy switching between standard server configurations.

To save a server config to a file:

1 Click the *Settings* button in the main dialog and choose *Export sever settings* from the menu.

2 Select the config file (*.cfg) you want to save the server settings in and click *Save*.

You can load server settings files without activating the settings they contain.

To load a server config without switching:

1 Click the *Settings* button in the main dialog and choose *Import server settings* from the menu.

2 Select the config file (*.cfg) containing the server settings you want to load and click *Open*.

3 If you want to activate the settings contained in the file, click the master *Save* button.

4 If the server is running, Server Manager will update the changed settings on the server when you click *Save*.

Note: *Not all server setting changes can be activated immediately – some server settings require a server restart to be activated.*

Server Manager can also switch server configs and restart the server in a single operation.

To switch server configurations:

1 Click the *Settings* button in the main dialog and choose *Switch Config* from the menu.

2 Select the config file (*.cfg) containing the server settings you want to load and click *Open*.

3 Server Manager will stop the server if it is running and then (re)start it using the settings file you specified in Step 2.

Note: *The* Switch server config *command requires admin access to be used in Remote Manager.*

Perform the following steps to return all server settings to their Server Manager default values.

To return all server settings to their default values:

1 Click the *Settings* button in the main dialog and choose *Default server settings* from the menu.

2 Click the *Save* button.

About the "auto-admin" functions

Server Manager provides a number of "automatic administration" functions to help make game server administration easier and to make game servers a more enjoyable place for players.

The following auto-administration functions can be enabled on the *Admin* dialog page:

Auto-kick on minus score

This function will kick any player whose score is less than or equal to the value you set here. Players usually achieve negative scores by team-killing. Enabling this function helps keep the server free from team-killers.

Auto-kick on high-ping

Enable this function to automatically kick players who have a ping equal to or greater than the value you set here for three consecutive server monitor pulses (30 seconds). Players with high pings often cause 'popping' and other annoying problems that interfere with gameplay.

Enable high-ping warnings

Enable this function to make Server Manager broadcast warning messages about players whose ping exceeds the limit you set for auto-kick on high ping. This option informs players as to why they were kicked from the server.

Auto-kick on banned words

Enabling this function will cause any player whose name or chat messages contain a banned word to be kicked from the server.

Click the *Edit Banned Words* button and add the words that you want to ban one-per-line. By default, Server Manager perform will perform a partial, case-insensitive match of any word you specify here in player names and chat messages. You can control how Server Manager performs matching by prefixing a special character to the banned word.

Pattern	Matches (Conditions)
word	names and chat (partial match, case insensitive)
$word	name only (exact match, case sensitive)
@word	chat only (partial match, case insensitive)
#word	name only (partial match, case insensitive)

Enable auto-announce

Enable this function to periodically broadcast announcements as admin messages to all players connected to the server. Click the *Edit Announcements* button to setup a message rotation. Add messages to *Announcements.cfg* one-per-line. Use the *Announcement Period* control to select how often messages are broadcast.

Enable player stats logging

This function will save the name, team, score, kills, deaths, ping, IP address and CD-key hash of every player connected to the server when a game ends to a comma-separated-values (CSV) file. By default, Server Manager saves player statistics in *statistics.csv*. The date, time, server name, map name, game mode and final ticket values are also recorded for every game. You can select the name and location of the saved CSV file by clicking the *Select CSV File* button.

Note: *The dates/times in the CSV file are recorded in UTC.*

Using the Status page

The *Status* page shows key information about the state of the server process and the current game in progress. Use the *Status* page to get a quick view of your game server's current status.
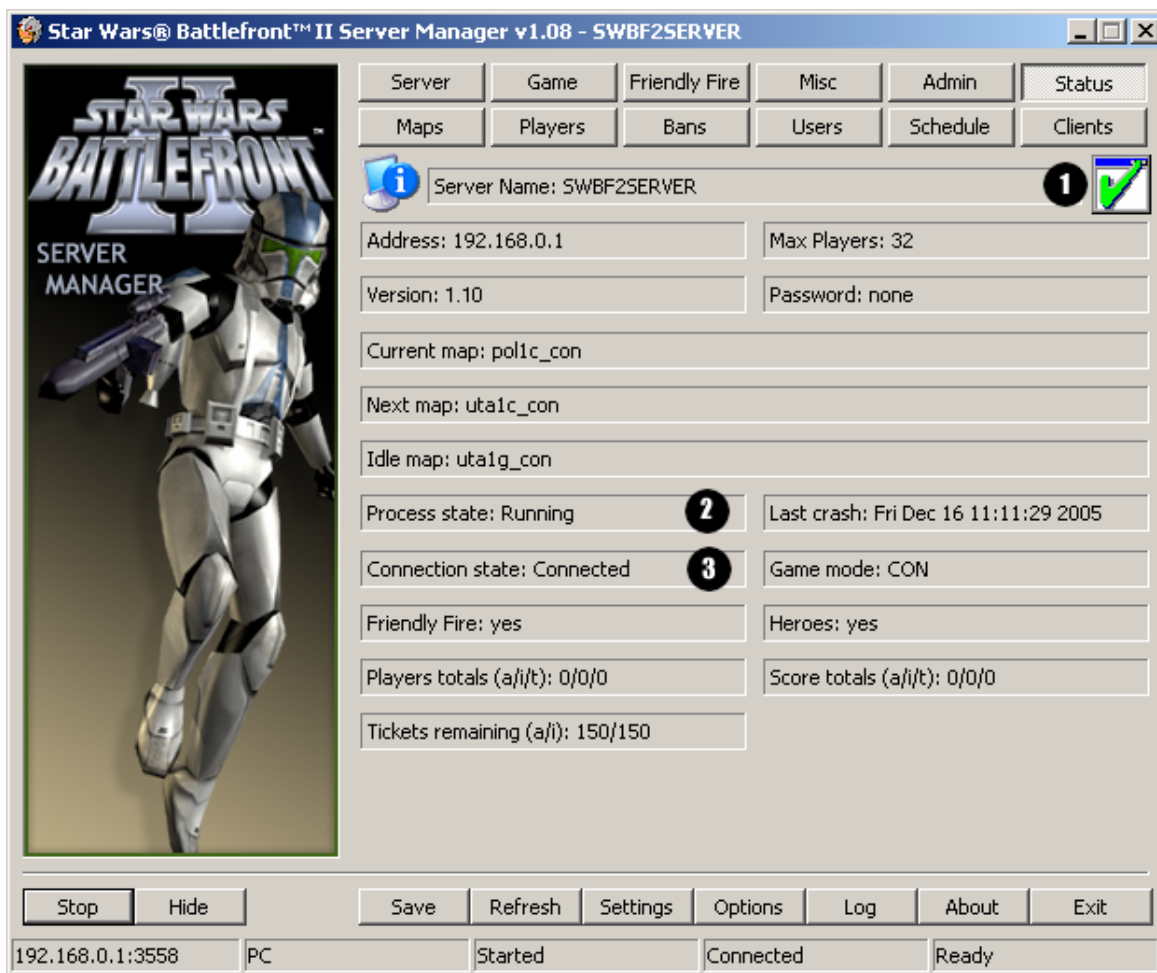
There are several key indicators on the *Status* page:

1 The icon in the top right corner gives a visual indication of the current server state:

means the server is up and available to players,

means the server is down and unavailable to players.

2 The *Process state* field indicates when the server process is *Running* or *Stopped*.

3 The *Connection state* field indicates when SM is *Connected* to the server or *Disconnected*.

In normal operation, the *Process state* field should indicate *Running* and the *Connection state* field should indicate *Connected*.

These fields indicate an error condition when the process state is *Running* and the connection state remains *Disconnected*. In this situation Server Manager will not be able to perform any administrative function that requires a connection with the server. Check the log for error messages that might indicate why Server Manager is not connecting to the server (see "Troubleshooting problems" for more information about viewing the log).

Using the Maps page

The *Maps* dialog page allows you to configure the server's map rotation before starting the server and to control it once the server is running.
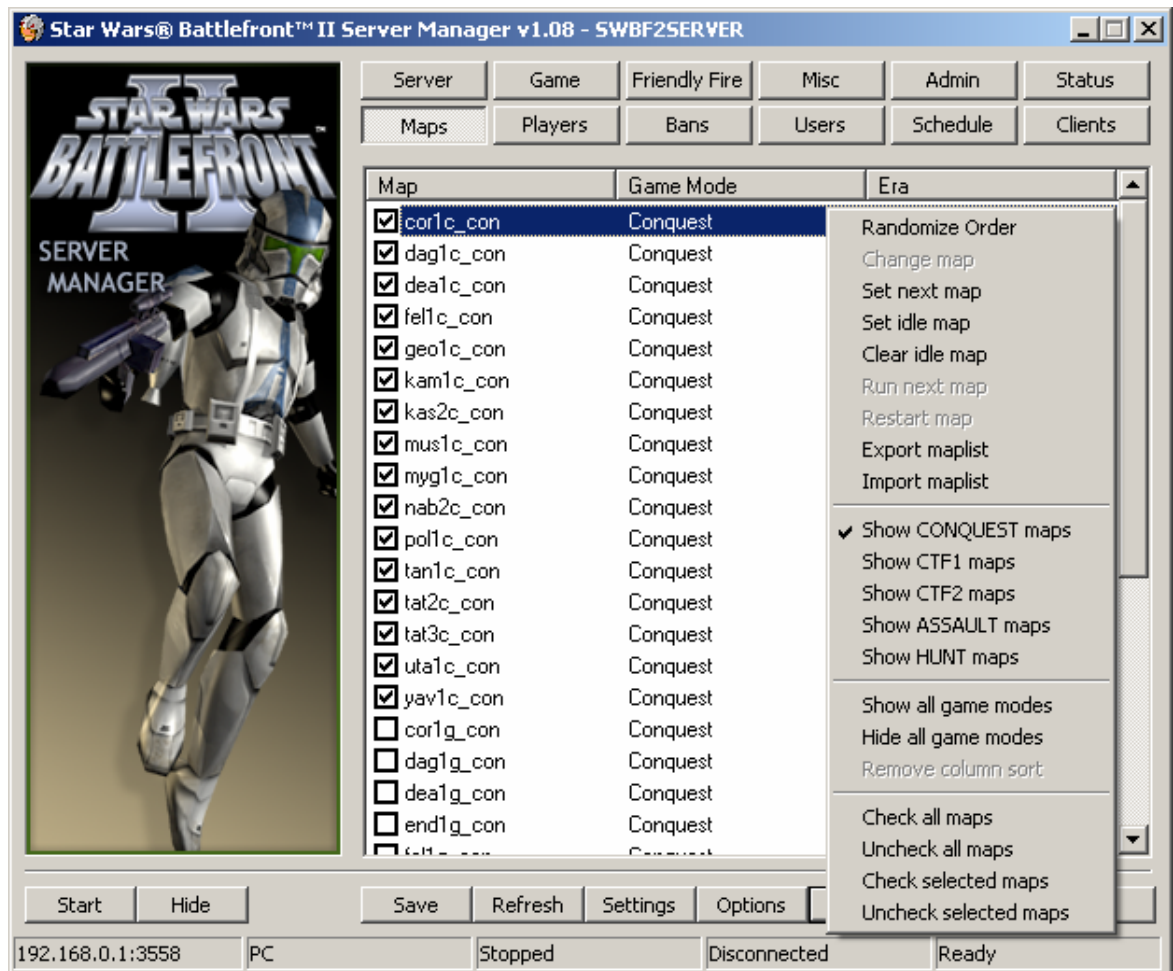
To configure the server map rotation:

1 Check the box next to the name of each map that you want to play.

2 Click the master *Save* button to save the map rotation to disk.

Note: *At least one map must be checked to start the server.*

By default, all of the available maps are listed in the listview control. You can filter the displayed maps using the menu options in the map menu.

To filter out unwanted game modes:

1 Right-click anywhere in the map list.

2 Uncheck the unwanted game modes in the menu by choosing the corresponding "Show" menu option.

Note: *Repeat this procedure to re-enable filtered game modes.*

Maps are played in the order they are listed and repeat in an endless cycle. To change the order of maps in the rotation simply drag-and-drop a map to a new location in the list. You can include the same map multiple times in the rotation by holding down Shift while you drag-and-drop.

To set the map that will be played first when the server starts:

1 Check the desired start map to include it in the rotation

2 Right-click on the desired start map.

3 Choose *Set next map* from the menu.

When the server is running you can use the right-click menu functions to manage the rotation.

To change the current map to a different map:

1 Right-click on the map you want to change to.

2 Choose *Change map* from the menu.

Note: *You can use this function to change to any available map – it does not have to be included in the map rotation. When the map ends the server will return to the normal map rotation cycle.*

To set the map that will play next after the current map:

1 Right-click on the map you want to play next.

2 Choose *Set next map* from the menu.

To change to the next map in the rotation:

1 Right-click anywhere in the map list.

2 Choose *Run next map* from the menu.

To restart gameplay on the current map:

1 Right-click anywhere in the map list.

2 Choose *Restart map* from the menu.

Use the *Export maplist* and *Import maplist* menu functions to save and load a map rotation from a file on disk.

Server Manager also allows you to configure an *idle map* to bait players into your server with a popular map when it is idle. Server Manager detects an idle server when it remains empty of players for five minutes or more. When Server Manager detects an idle server and there is an idle map set, it changes to the map you set as the idle map.

To set the idle map and enable this feature:

1 Right-click on the map you want to set as the idle map.

2 Choose *Set idle map* from the menu.

Note: *You can see the map currently configured as the idle map on the* Status *dialog page.*

To clear the idle map and disable this feature:

1 Right-click anywhere in the maplist.

2 Choose *Clear idle map* from the menu.

Using the Players page

Server Manager and Remote Manager make it easy to administrate players. All players currently connected to the server are displayed in the player list on the *Players* dialog page.
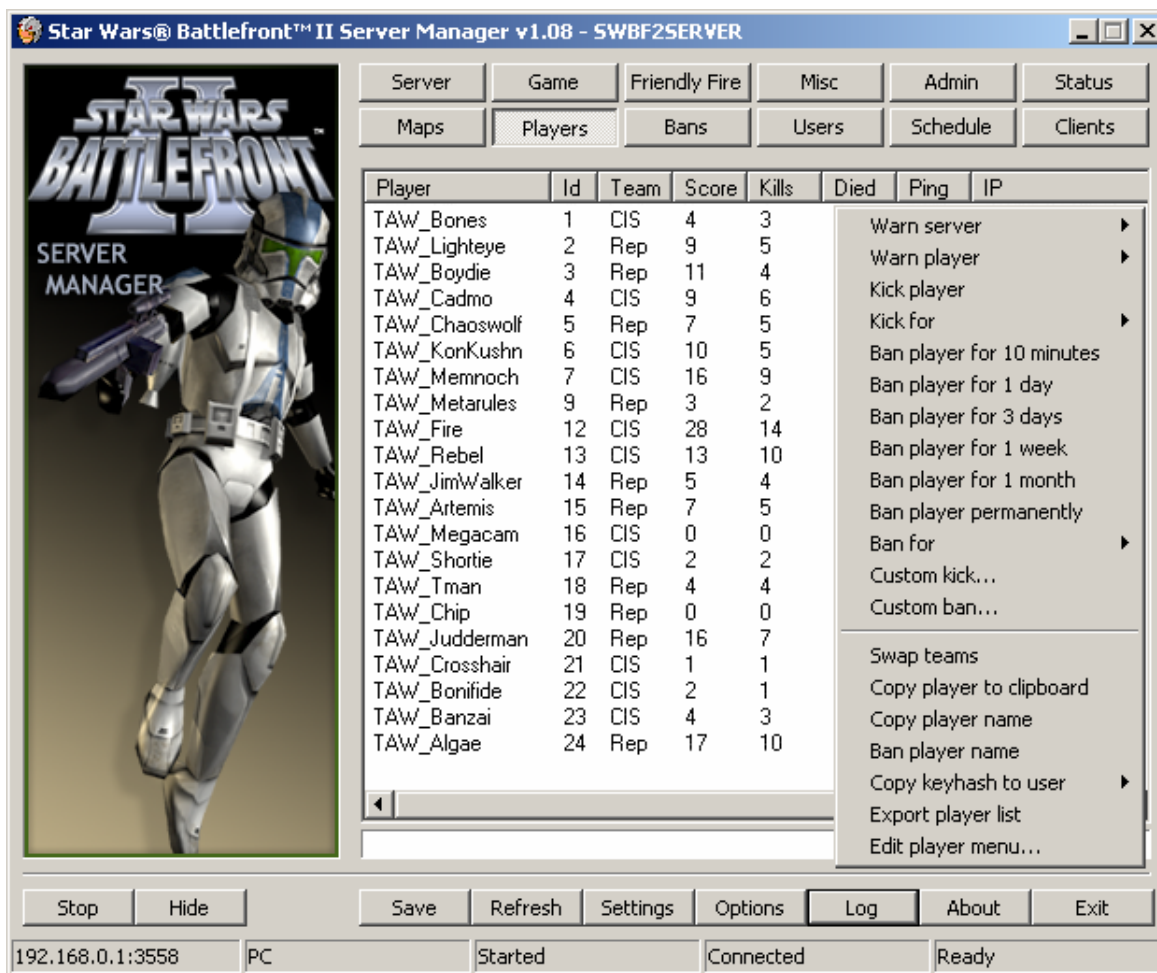
Players are managed using the player menu, accessed by right-clicking inside the player list. The player menu is configurable and contains many predefined options for warning, kicking and banning players, including timed bans.

To warn, kick or ban a player:

1 Right-click on the player you want to warn, kick or ban in the player list.

2 Choose an appropriate item from above the separator in the player menu.

When a player is banned from the server his or her CD-key hash is added to the server's ban list. To unban the player you must remove him or her from the ban list on the *Bans* dialog page.

Note: *The CD-key hashes of banned players are recorded in the log for future reference.*

The player menu also contains fixed menu options for swapping a player to the other team, copying player details to the Windows clipboard, copying the player name to the message control (under the player list), copying a player's CD-key hash to a SM user account (used to configure in-game admin), and exporting the player list to a file.

Customising the player menu

The player menu supports the configuration of various warning, kicking and banning commands that have associated messages. These messages are sent as admin messages in-game when you select an item from the menu.

Server Manager creates a default player menu when it is run for the first time but you can customise it with your own warnings, kicks and bans at any time. See Appendix C for a listing of the default player menu configuration file.

To customise the player menu:

1 Right-click anywhere inside the player list.

2 Choose *Edit player menu…* from the menu. Server Manager opens the player menu configuration file *PlayerMenu.cfg* in Notepad.

Note: *Remote Manager clients with the* Download player menu from server *program option enabled cannot edit the player menu while this option is enabled.*

Each line in *PlayerMenu.cfg* is either a comment or represents a command in the player menu. Commands can be made to kick or ban a player when selected. You can choose to ban players permanently or for an arbitrary length of time using "timed-bans". Timed-bans are automatically lifted when the ban time has expired (unlike permanent bans).

The format of each command line is: menuname>"message" |command,bantime,[alias]

menuname is the name of the submenu this command should appear in (optional).
message is text sent as an admin message when the command is selected.
command is one of (global, warn, kick, ban, cmd):

global	causes *message* to be sent as a global admin message
warn	causes *message* to be sent only to the player that was clicked on
kick	causes player to be kicked when this command is selected
ban	causes player to be banned when this command is selected
cmd	causes *message* to be issued as a console command (this needs a permission).

bantime is the time in seconds associated with a ban command (zero bans permanently).
alias is a unique name for this command which can be used to invoke it via in-game admin.

Items will appear in the menu in the same order as they appear in the player menu config file. However, items in the same submenu do not have to occur consecutively in the *PlayerMenu.cfg*.

Menu text enclosed in double-quotes will be broadcast as an admin message when the menu item is selected. Server Manager will automatically format the message as "Player <name> <message>" where <message> is the menu text of the item you selected from the menu.

Communicating with players

When administrating players it is often useful to send custom messages to them.

To send a custom admin message to players:

1 Type the text of your message into the edit control beneath the player list and press Enter.

2 Players will see the message in-game as an admin message.

Note: *You can see what players are saying in-game by viewing the log window.*

Using the Bans page

The ban list on the *Bans* page records all the players who have been banned from the server. You can add and remove bans from this list using the controls on this dialog page.
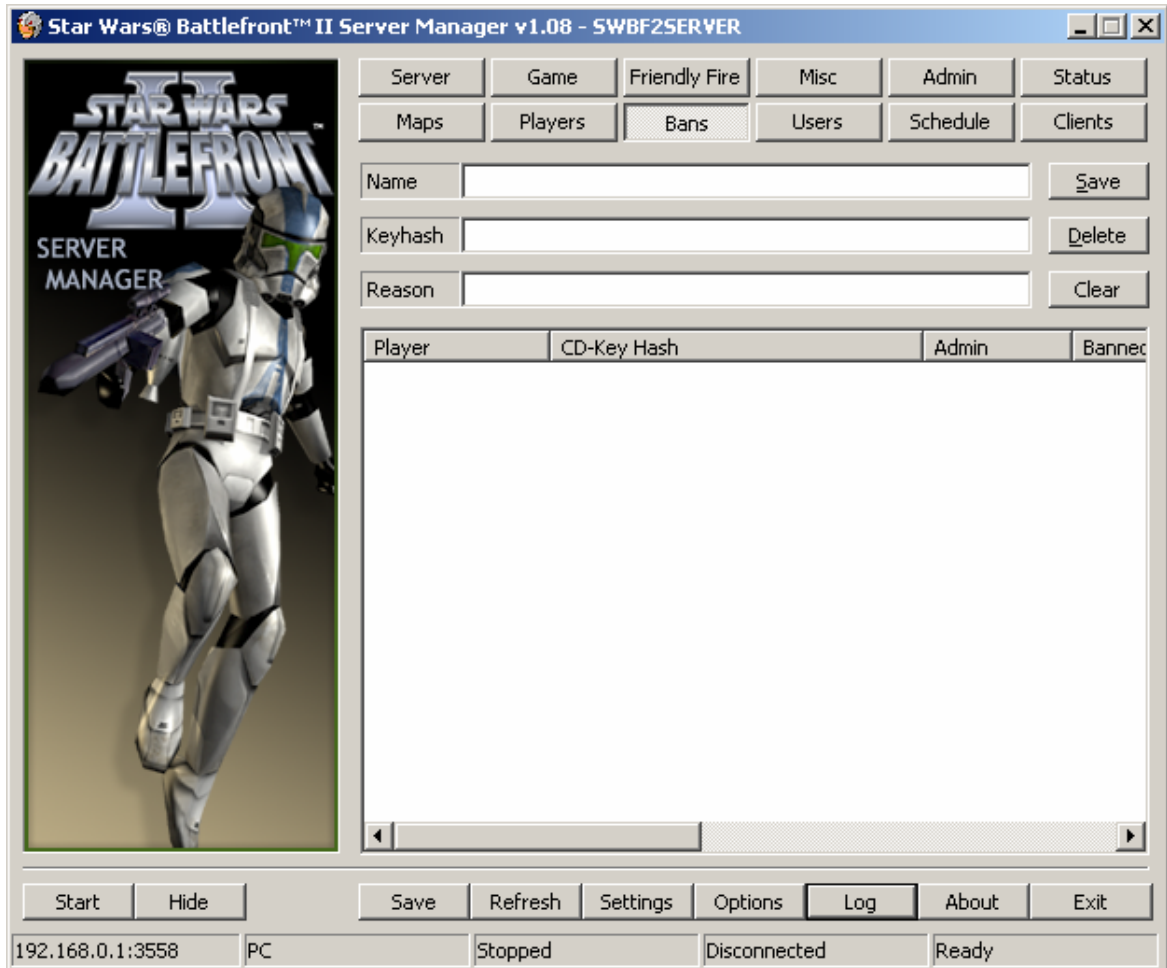
When you ban a player from the server on the *Players* dialog page, he or she is added to the ban list. To "unban" the player you must remove him or her from the ban list.

To manually add a player to the ban list:

1 Enter the player's name, keyhash and a reason for the ban in the respective fields.

2 Click the *Save* button (next to *Name*) to add the player to the ban list.

3 Click the master *Save* button (next to *Refresh*) to save the ban list changes to disk.

To remove a player from the ban list:

1 Select the player you want to unban in the list with the mouse.

2 Click the *Delete* button to remove the player from the ban list.

3 Click the master *Save* button (next to *Refresh*) to save the ban list changes to disk.

To remove all players from the ban list:

1 Click the *Clear* button and then click *Yes* when the failsafe prompt appears.

Using the Users page

Server Manager maintains a list of user accounts that records the access and permissions of Remote Manager users. If you do not intend to use Remote Manager, you can ignore this page.
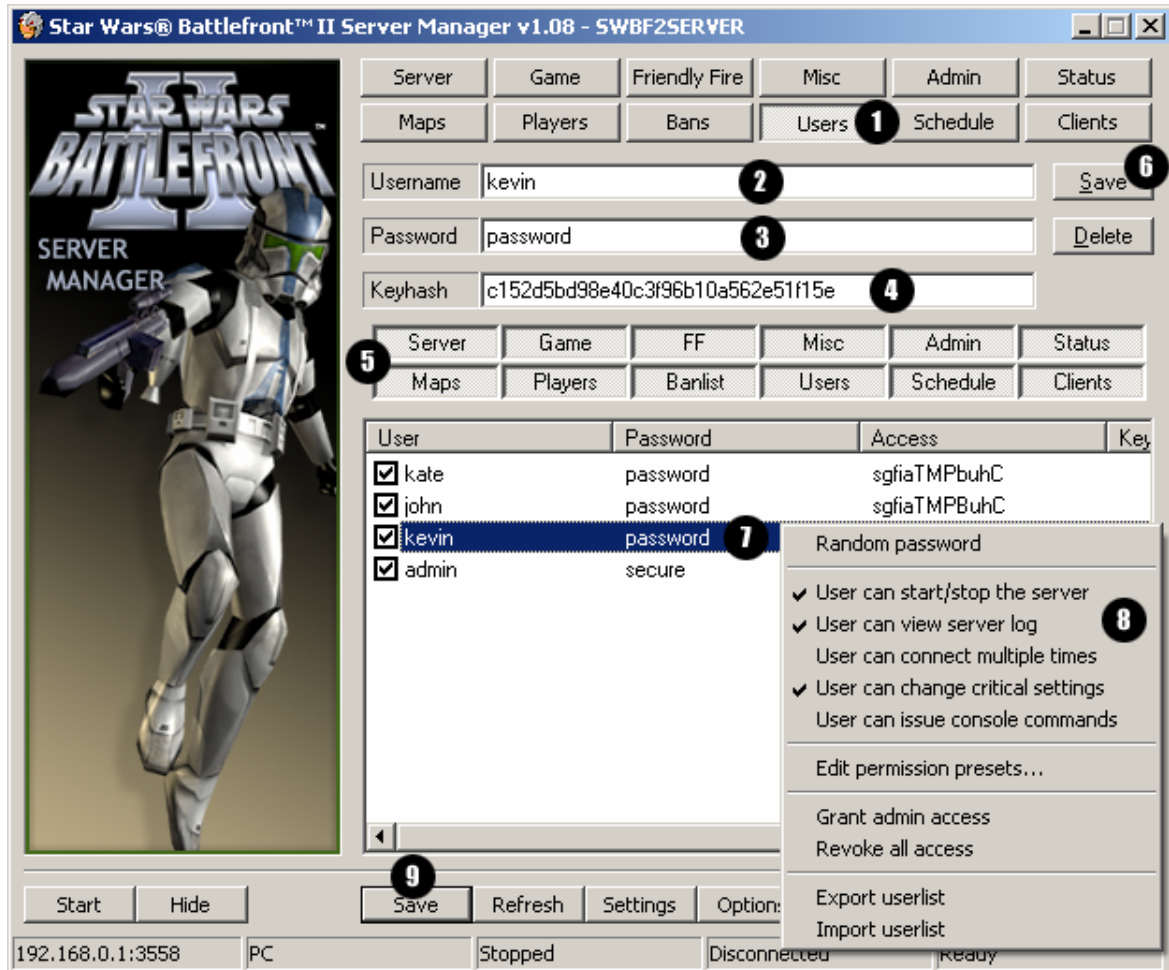
To create a new user account:

1 Go to the *Users* page in either Server Manager or Remote Manager.

2 Type in the name of a new user account in the *Username* field.

3 Type in a password for the user account in the *Password* field.

4 If you want to enable in-game admin for the new user, enter the user's keyhash in the *Keyhash* field. Otherwise, leave this field blank.

5 Select the Remote Manager dialog pages you want to be accessible to the user by depressing the corresponding page buttons. Clicking the buttons will toggle the highlight on and off.

6 Click the user *Save* button (next to *Username*) to add the new user account to the user list.

7 Right-click the new user account in the user list.

8 Choose the desired user permissions from the menu (repeat steps 7 and 8 as necessary).

9 When you have finished selecting user access and permissions, click the master *Save* button (next to *Refresh*) to save the user list changes to disk.

To modify a user account:

1 Select the user account you want to modify in the user list with the mouse.

2 Change the user account name, password, keyhash and/or access as desired.

3 Click the user *Save* button (next to *Username*) to save the changes to the user list.

4 Click the master *Save* button (next to *Refresh*) to save the user list changes to disk.

To delete a user account:

1 Select the user account you want to delete in the user list with the mouse.

2 Click the *Delete* button to remove the user account from the user list.

3 Click the master *Save* button (next to *Refresh*) to save the user list changes to disk.

To assign a secure password to a user account (recommended for admin accounts):

1 Right-click the user account you want to securely password in the list with the mouse.

2 Choose *Random password* from the menu.

3 Click the master *Save* button (next to *Refresh*) to save the user list changes to disk.

Server Manager user accounts can be *active* or *inactive*. Check a user account to make it active and disable a user account by clearing the checkbox. Disabling a user account prevents clients from connecting with the account without removing the user account from the system.

To enable or disable a user account:

1 Click the checkbox next to the user account name in the user list on the *Users* page.

2 Click the master *Save* button (next to *Refresh*) to save the user list changes to disk.

There is no limit on the number of user accounts that you can create but only eight Remote Manager clients can connect to Server Manager simultaneously and manage the server.

About user access and permissions

Server Manager allows you to restrict what changes remote users can make by limiting what dialog pages they can see in Remote Manager. This section describes user access and how you can use it to give remote users restricted management access.

User access

The *Access* column in the user list shows an access pattern for each user account. The access pattern indicates what dialog pages the user has access to in Remote Manager. An upper-case letter signifies the user has access to the page, a lower-case letter signifies they do not.

S Server	**G** Game	**F** Friendly-fire	**I** Misc	**A** Admin	**T** Status
M Maps	**P** Players	**B** Bans	**U** Users	**H** Schedule	**C** Clients

You must grant access to at least one dialog page in order to allow a remote user to connect.

User permissions

In addition to user *access* which restricts access to dialog pages, users can also be granted a number of *permissions* which restrict the use of certain program functions and user abilities.

A user account that has full access and all permissions has "administrator" privileges which is displayed as –admin – in the user list.

The following list describes the user permissions and what each one does:

- **User can start/stop the server** – enables the Start/Stop button in Remote Manager and allows remote users to start and stop the server process remotely.

- **User can view server log** – enables the "Server Manager Log" item in the Remote Manager log window menu and allows a remote user to view the contents of the SM log.

- **User can connect multiple times** – allows multiple remote users to connect with Server Manager simultaneously using the same user account. If this permission is not granted to a user account, only one remote user at a time can connect to Server Manager with it.

- **User can change critical settings** – allows remote users to change critical hardware settings on the *Server* dialog page in Remote Manager. If this permission is not granted to a user account, critical hardware setting controls will be disabled in Remote Manager.

- **User can issue console commands** – allows remote users to use player menu commands that issue console commands. Without this permission such commands will fail.

Remote Manager clients who have access to the *Users* dialog page will not see user accounts that have greater access than they do for security reasons. A Remote Manager client that is connected with a user account that has -admin- privileges will see all user accounts that exist.

Granting access

A user with access to the *Users* page can decrease his or her access but not increase it. Only a user with the desired access can grant it. If a user decreases his or her access and disconnects, only a user that has the access that was lost will be able to restore it.

Note: *If the access level of a user account is changed while a client is connected using that account, the client must reconnect to see the access changes.*

Users with restricted (non-admin) user access who have access to the *Users* page can only create, modify and delete user accounts that have access less than or equal to their own.

Restricted user accounts

Server owners can use restricted user accounts to delegate administrative authority to other users. Take, for example, the following arrangement of user accounts;

User ▽	Password	Access
☑ owner	password	-- admin --
☑ operator	password	sGFIAMPBUHTC
☑ level1	password	sGFIaMPBuHTC
☑ level2	password	sGFIaMPBuhTc
☑ level3	password	sgfiaMPBuhtc

The *owner* user account has admin access and global control. The *owner* user alone can determine server hardware settings like *IP Address* and server port settings.

The *operator* user account is excluded from the *Server* dialog page and cannot make changes to server settings but has control over all other facets of server administration. The *operator* user has less access than *owner* and so cannot see or modify the *owner* user account.

The *operator* user can further delegate admin responsibility to other users by creating the three *level* user accounts which have decreasing levels of access.

Using the Schedule page

Server Manager's *Schedule* page allows you programme server starts and stops according to a timetable. As well as starting and stopping the server this function can also be used to automate server config and map rotation changes.
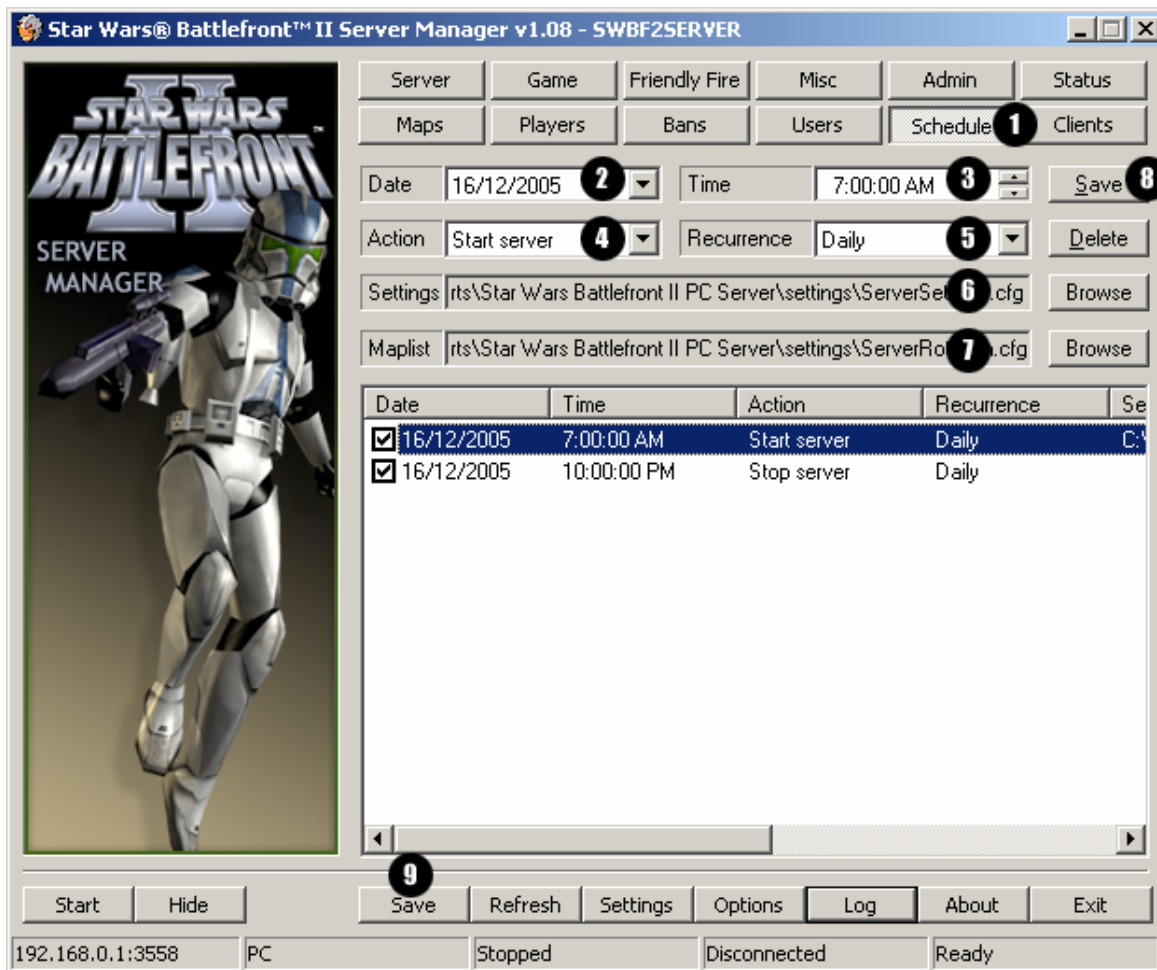
To schedule an event:

1 Select the *Schedule* dialog page in Server Manager or Remote Manager.

2 Select the date on which the event should occur using the *Date* control.

3 Select the local time of day at which the event should occur using the *Time* control.

4 Select whether the event should start or stop the server using the *Action* control.

5 Select when the event should recur using the *Recurrence* control.

6 If you are creating a 'start' event, select the server settings file to use when starting the server.

7 If you are creating a 'start' event, select the map rotation file to use when starting the server.

8 Click the *Save* button (next to *Time*) to save the event in the schedule list.

9 When you have created all of the events you want, click the master *Save* button (next to *Refresh*) to save the schedule to disk.

In Server Manager you can browse for a server settings file or map rotation file by clicking the *Browse* buttons. In Remote Manager you must type the server-side path to the config files that you want to use.

About scheduled events

A start event will automatically stop the server if it is already running before starting it again with the server settings file and map rotation file you specified so you do not have to schedule a stop event before every start event.

The time and date for an event must represent a future point in time when an event is created.

Note: Recurring events will automatically repeat on future days even though the event date/time will occur in the past.

Events should be scheduled according to local time. Server Manager will automatically convert the event date/time to the corresponding time at the server's location based on its timezone. Remote users will also see the event date/time in their local time when viewing the server's schedule remotely.

Note: It's a good idea to verify the server's date, time and timezone settings are correct in Windows when installing Server Manager on the server computer. If these settings are not configured correctly on the server computer, scheduled events may not fire at the correct date and/or time.

Creating config files for use with the scheduler

You can use some standard Server Manager menu functions to create the files you will need to schedule a start event.

To create a server settings file for use with the scheduler:

1 Use Server Manager or Remote Manager to configure the server settings you want to be active when the scheduled start event is fired.

2 When you have configured all the desired setting values, choose *Export server settings* from the *Settings* button menu.

3 Select the desired file name and location of the server settings file you are creating.

4 Click the *Save* button to save the server settings file to disk.

To create a map rotation file for use with the scheduler:

1 Use the *Maps* page in Server Manager or Remote Manager to configure the map rotation you want to be active when the scheduled start event is fired.

2 When you have configured all the desired maps, choose *Export maplist* from the map menu.

3 Select the desired file name and location of the map rotation file you are creating.

4 Click the *Save* button to save the map rotation file to disk.

Note: If the server is running when you perform either of the above procedures, avoid clicking the master Save *button to prevent changes to the current server configuration or map rotation. Click* Refresh *when you have finished to restore the current server setting values to the interface controls.*

Use the *Export schedule* and *Import schedule* commands in the schedule list menu to save and load the server schedule to and from a file, respectively.

Using the Clients page

The *Clients* page lists Remote Manager clients who are currently connected to Server Manager. You can use this page to see which admins are currently managing the server.
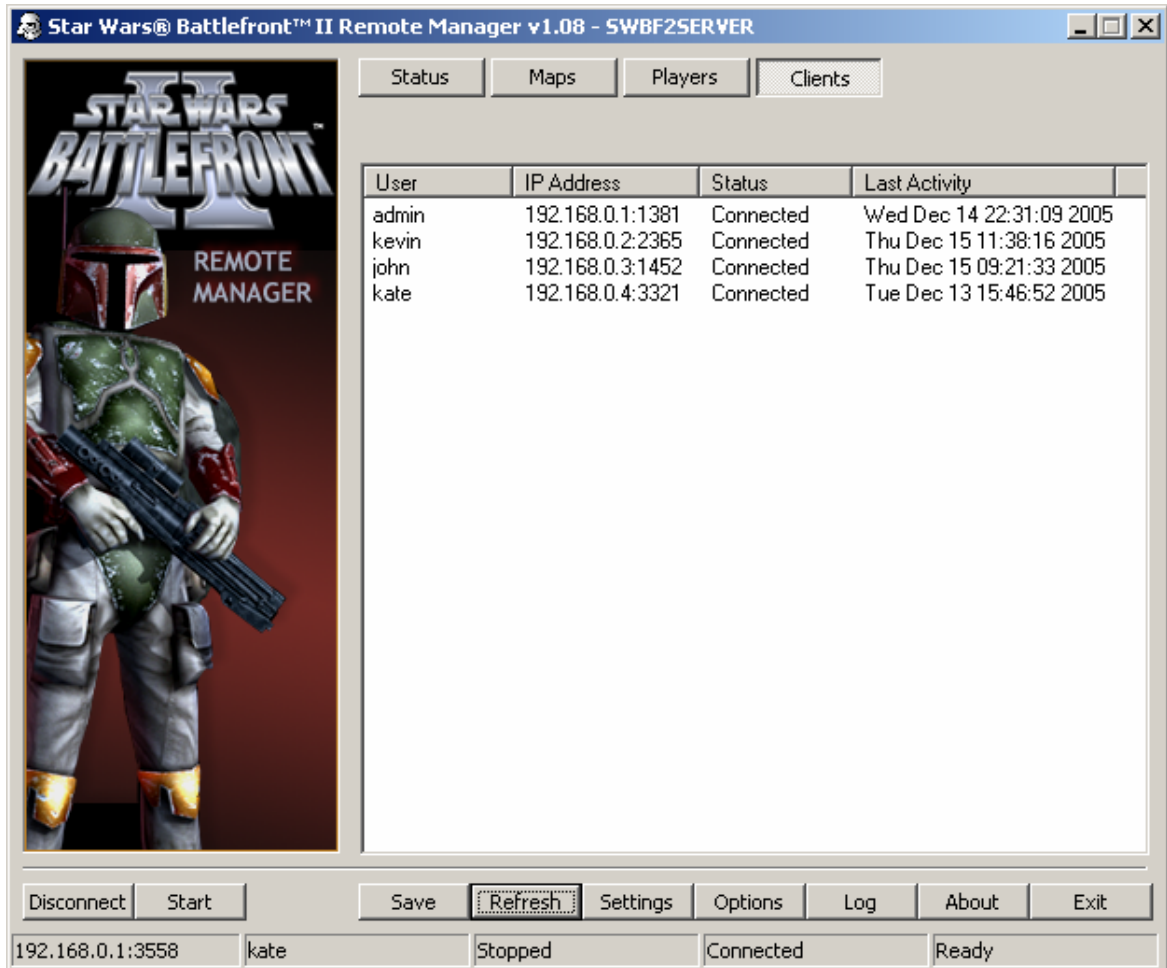
You can forcibly disconnect Remote Manager clients from within Server Manager or from within Remote Manager if you are connected with –admin- user access.

To forcibly disconnect a Remote Manager client from Server Manager:

1 Right-click the client you want to disconnect in the list on the *Clients* dialog page.

2 Choose *Disconnect* from the menu.

In-game server administration

In addition to the graphical user interfaces, Server Manager also provides the capability to administrate your server using commands sent as in-game chat messages. This feature is referred to as "in-game admin" in this Users Guide.

Authorising users to use in-game admin

Only authorised Server Manager users can issue in-game admin commands via chat.

To authorise a Server Manager user to issue in-game admin commands:

1 Go to the *Users* dialog page in either Server Manager or Remote Manager (requires access).

2 Click on the user account you want to grant in-game admin access.

3 Enter the user's CD-key hash in the *Keyhash* field.

4 Click the user *Save* button (next to the *Username* field) to save the changes in the user list.

5 Click the master *Save* button (next to *Refresh*) to save the modified user list to disk.

If you don't know the user's CD-key hash you can use a different method described below.

To authorise a Server Manager user for in-game admin using the player menu:

1 Have the user join the running server as a player.

2 Go to the *Players* dialog page in either Server Manager or Remote Manager (requires access).

3 Right-click on the user (player) you want to grant in-game admin access.

4 Choose *Copy keyhash to user* followed by the desired user account name from the menu.

5 Click the master *Save* button (next to *Refresh*) to save the modified user list to disk.

The user account is now authorised to issue in-game admin commands.

Issuing commands

In-game admin commands are issued as player chat messages.

To issue an in-game admin command:

1 While in-game, press the key you configured to send a global chat message (T by default).

2 Enter an exclamation mark (!) followed by the command alias and an argument (if any).

3 Press Enter to send the command message.

Server Manager will see the command in player chat and process it. Sometimes Server Manager will also issue an in-game response to a command as an admin message.

There are several ways you can specify a player or players as the argument of a command.

To specify a player as the target of a warn, kick or ban:

1 Use a period (**.**) followed by the player's id number found in the game leaderboard, or

2 Use a partial player name that matches only a single player, or

3 Use an ampersand (@) followed by a partial player name that matches multiple players.

Global commands

Global commands are available to all players connected to the server. No authorisation is required to use a global command. There is just one global in-game admin command: !nextmap. This command displays the id of the map that will play next on the server.
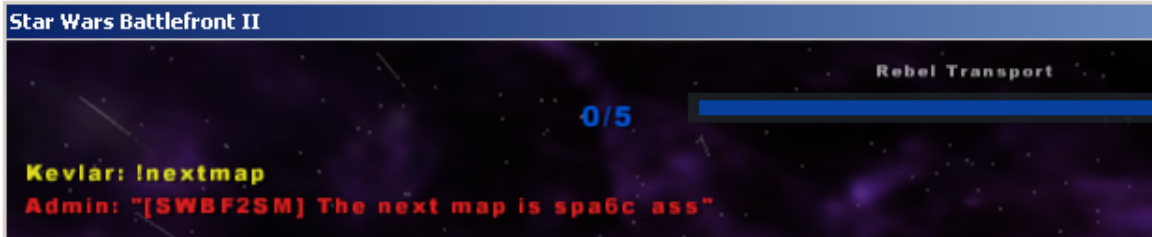
Managing the map rotation using In-game Admin

Server Manager allows users who have been authorised to use in-game admin and who have been granted access to the *Maps* page to issue the following in-game map commands.

Command	Function
!change <map id>	Changes to the indicated map immediately.
!setnext <map id>	Sets the indicated map to be the map that will play next on the server.
!runnext	Changes to the next map in the rotation immediately.
!restart	Restarts gameplay on the current map immediately.

Note: *See Appendix A for a complete list of official maps and their corresponding map ids.*

Managing players using In-game Admin

Server Manager allows users who have been authorised to use in-game admin and who have been granted access to the *Players* page to issue the following in-game player commands.

Command	Function
!swap <player>	Moves the indicated player over to the other team.
!kick <player>	Kicks the indicated player from the server.
!ban <player>	Bans the indicated player from the server.

There are many more warns, kicks and bans available in the default player menu than are shown in the table above.

Note: *See Appendix B for a complete list of command aliases available in the default player menu.*

Running multiple servers

Server Manager for Battlefront II supports running multiple game servers on a single computer using only a single installation of the dedicated server application. This section describes how to configure multiple servers.

About server port addresses

You must ensure that each server instance is configured to use unique port addresses. Failure to do this will cause server failures and management problems with SWBF2SM.

There are three port addresses that must be unique on each server:

1 The Server Manager client port (default 3558)
2 The game server game port (default 3658)
3 The game server remote console port (default 4658)

Use the default port addresses shown above with the first server instance and then increment the port number for each new server instance that you create.

Configuring multiple servers

This section will take you through the steps of configuring multiple servers.

To run multiple servers on a single computer:

1 Download and install the dedicated server application if you have not already done so.
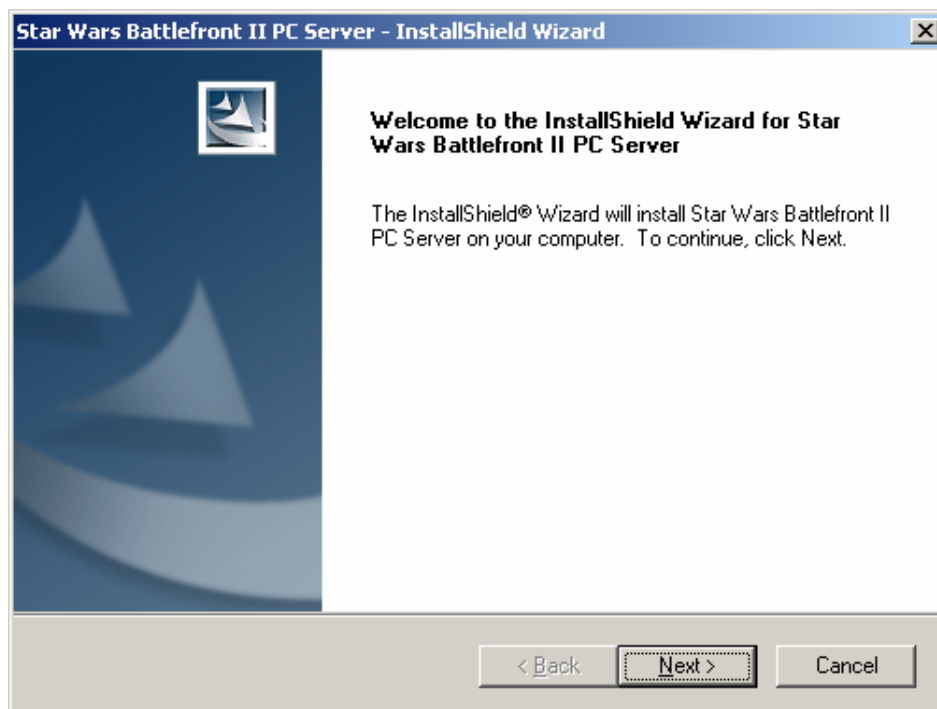
2 Create a number of shortcuts to swbf2sm.exe, one for each server that you require.
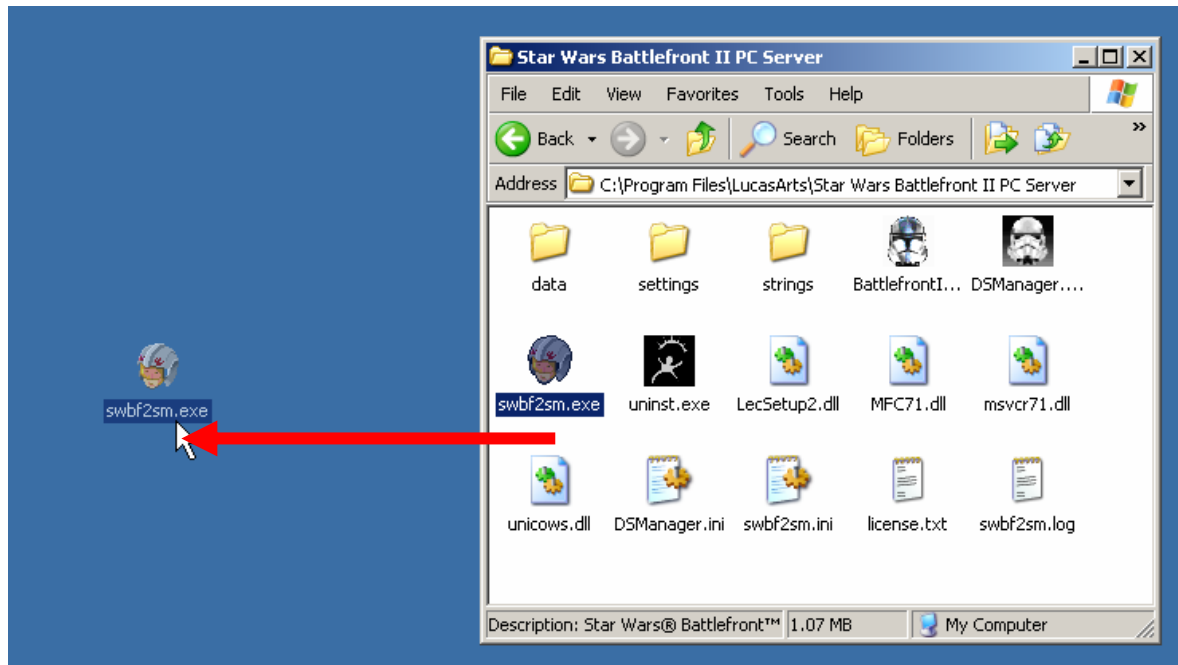
Drag and drop swbf2sm.exe to the desktop using the **right** mouse button and choose *Create Shortcuts Here* from the menu. You can rename the shortcuts to give them meaningful names for each of your servers.
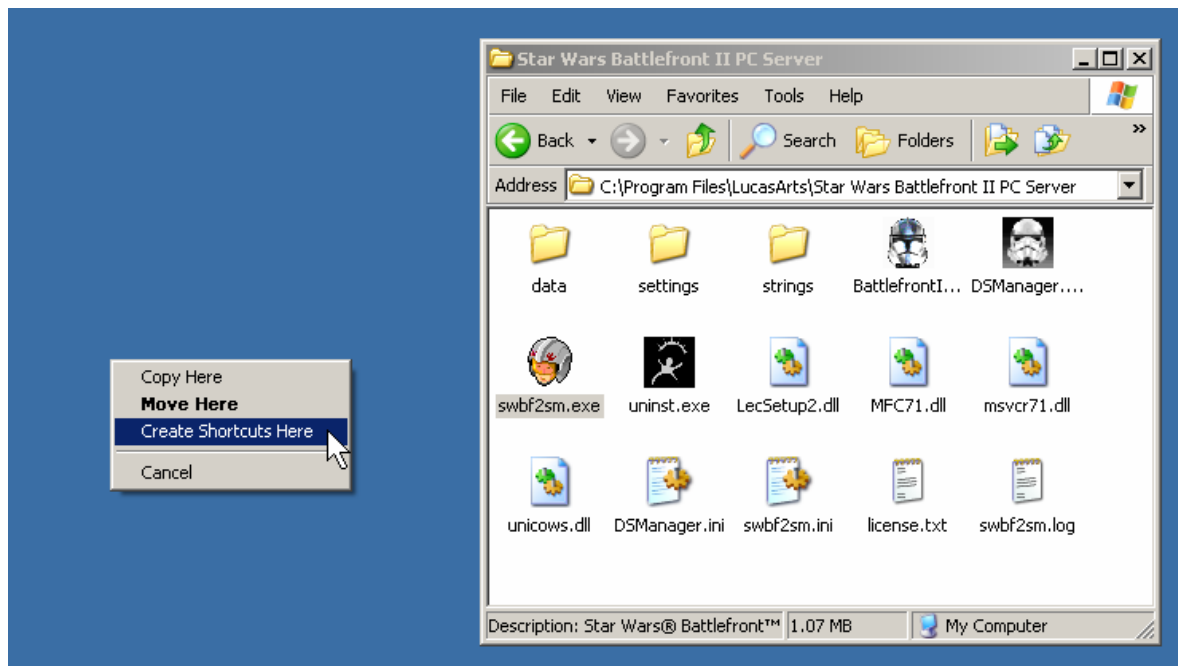
3 Configure each instance of Server Manager to use a unique client port and config name.
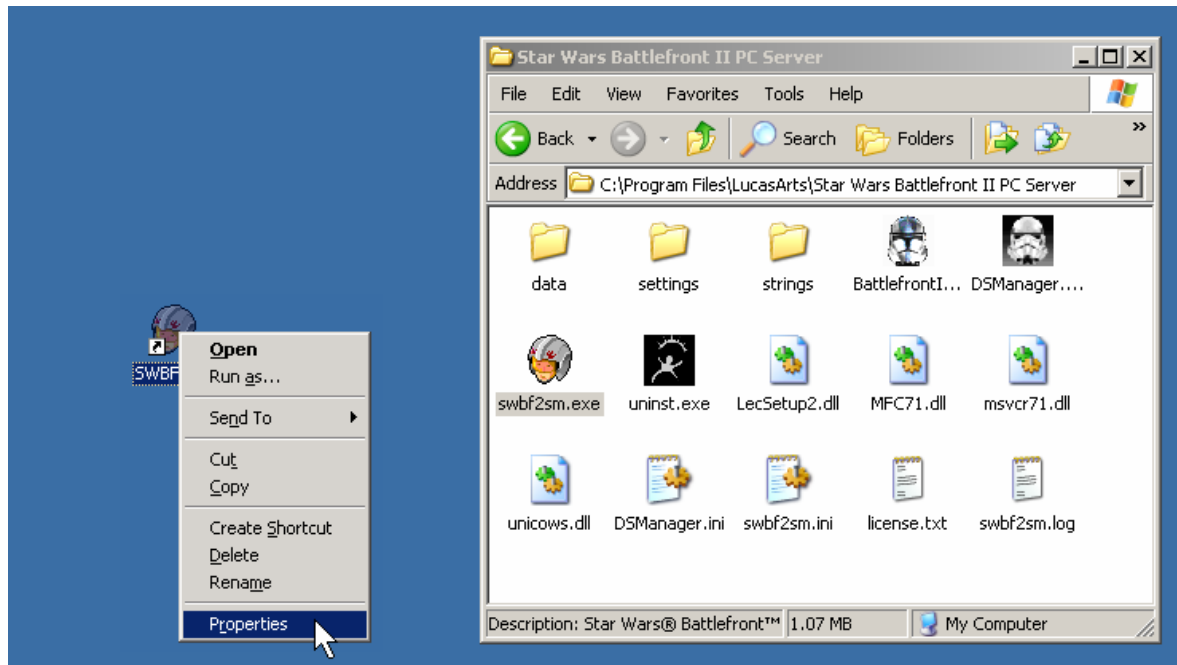
Right-click on the shortcut icon and choose *Properties* from the menu. In the *Target* field add the -port and -config switches to the command-line as shown below. Use 3558 and server1 with the first server and increment these numbers by one for each additional server. For example, the second server would use -port 3559 -config server2 etc.
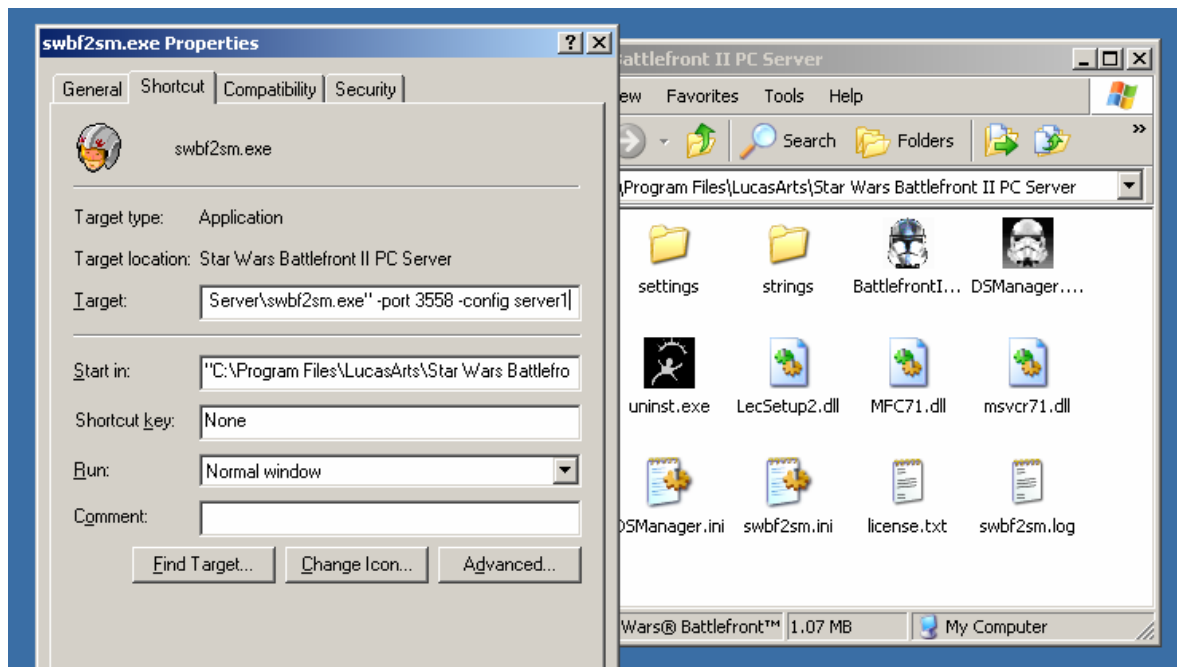
4 Configure each server to use unique game and remote console (RCON) ports.
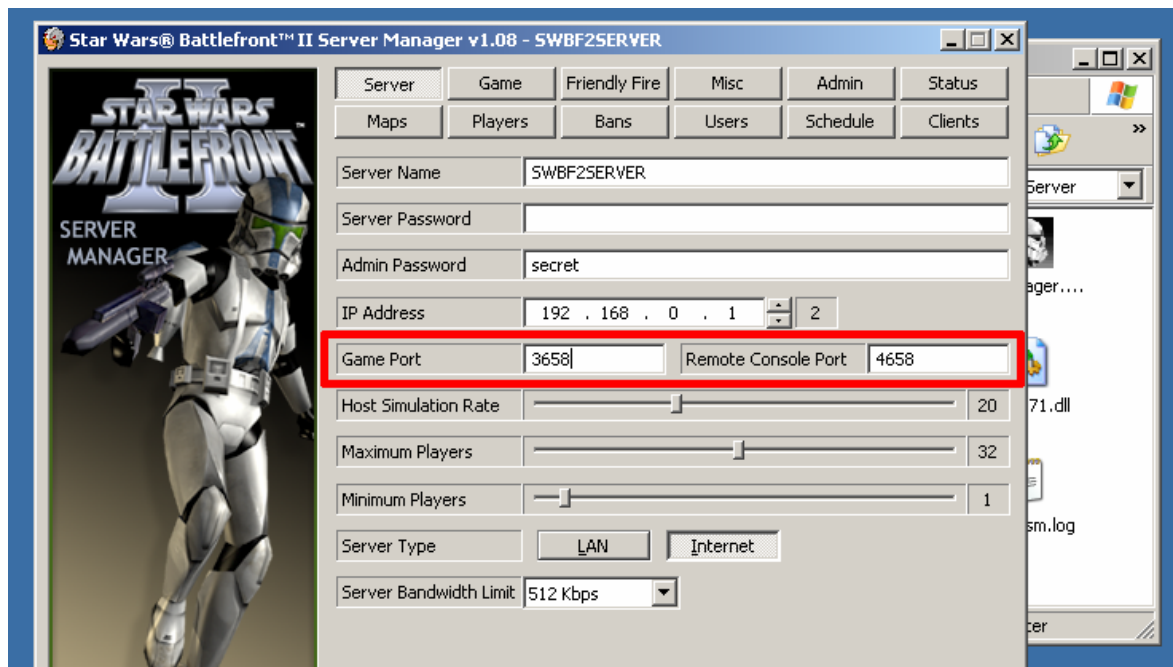
Start Server Manager using the new shortcuts on the desktop and configure the *Game Port* and *Remote Console Port* settings of each server to use unique port addresses. Use 3658 and 4658 respectively with the first server and increment these numbers by one for each additional server.
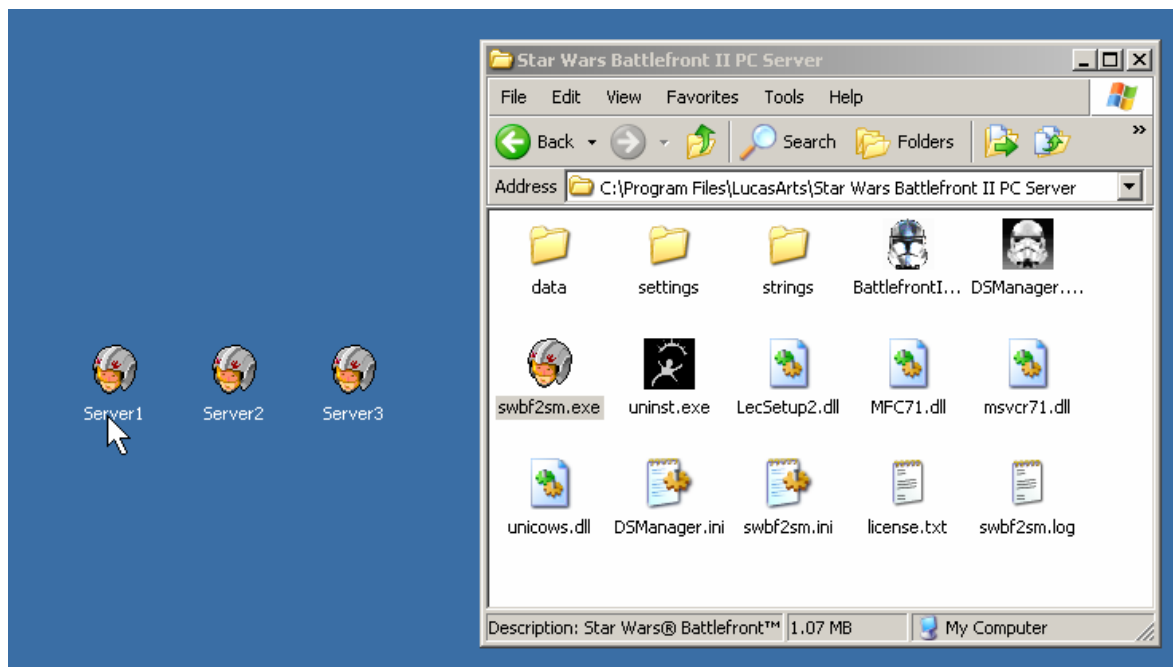
5 Server configuration is now complete. Each server can now be started by firstly starting Server Manager using the new desktop icons and then clicking the *Start* button.

Running servers as Windows Services

Battlefront II dedicated servers managed by Server Manager can be run in the background as Windows Services using FireDaemon, a Windows Service Controller from Sublime Solutions. This section will take you through the steps of setting up a server to run as a Windows Service.

The following procedure assumes that you have already installed the Battlefront II dedicated server application and Server Manager (see "Getting started with Server Manager") and you have already configured the server by using Server Manager interactively.

Important Note: *It is essential to test start the server interactively and be sure that it starts properly before trying to run it as a service. If you are configuring multiple servers as services, be sure to use the same server configuration and command-line switches in both scenarios when you test.*

To configure Server Manager as a Windows Service:

1 Download and install FireDaemon on the server computer.

2 Start the FireDaemon Service Manager.

3 Choose *Service* > *New* from the FireDaemon Service Manager menu.
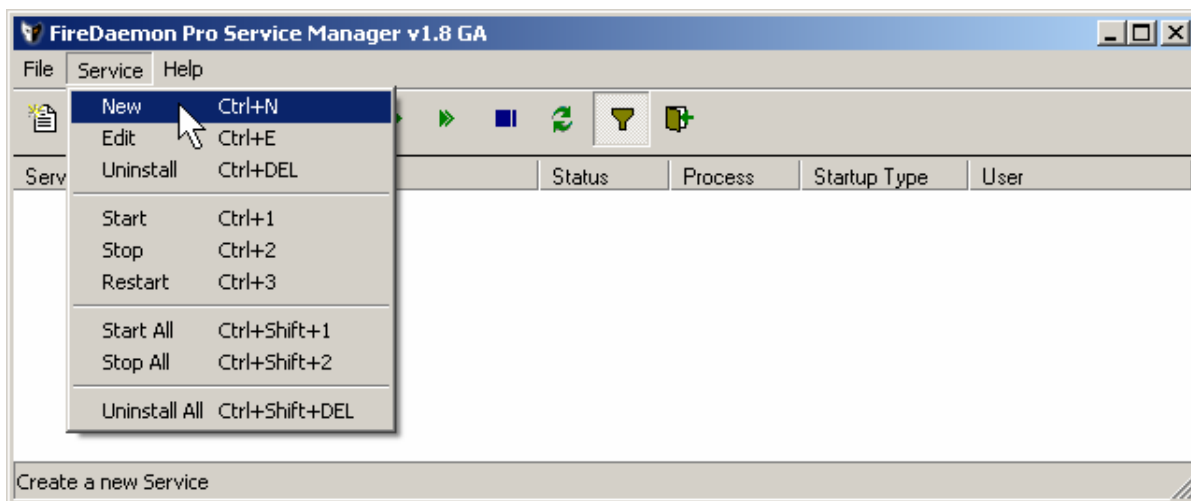
4 Configure the settings on the *Program* tab of the new service definition as shown over the page.

Note: *If you plan to run multiple servers as services, you should configure the server command line parameters as per the instructions in the previous section titled "Running multiple servers". Each server service must use unique port addresses!*
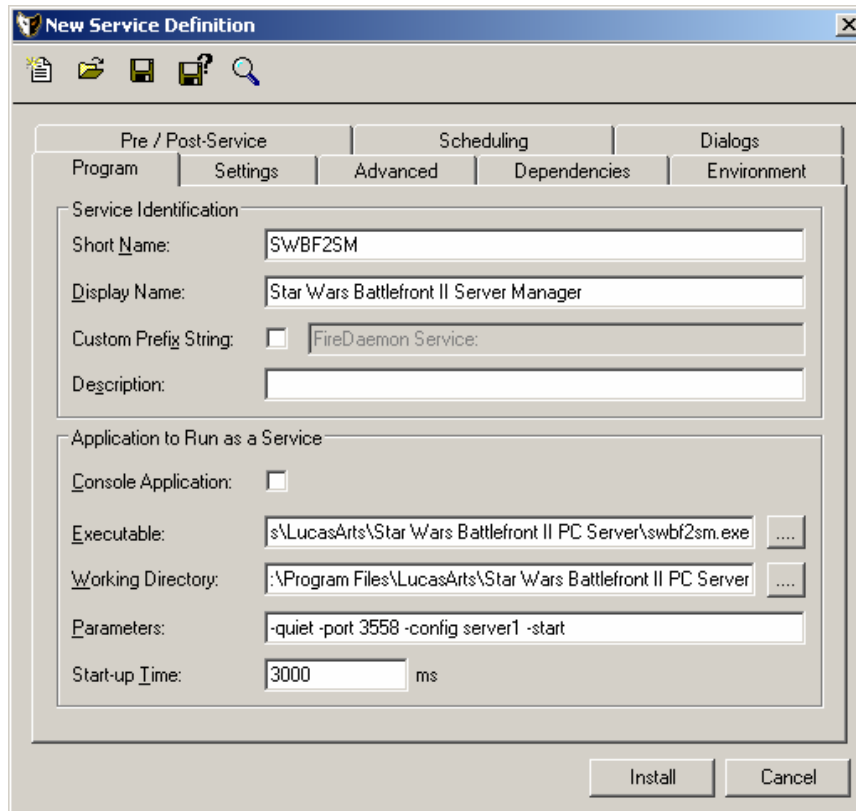
5 On the *Pre / Post Service* tab, click the *Insert* button to add a *Post-Service Program*.
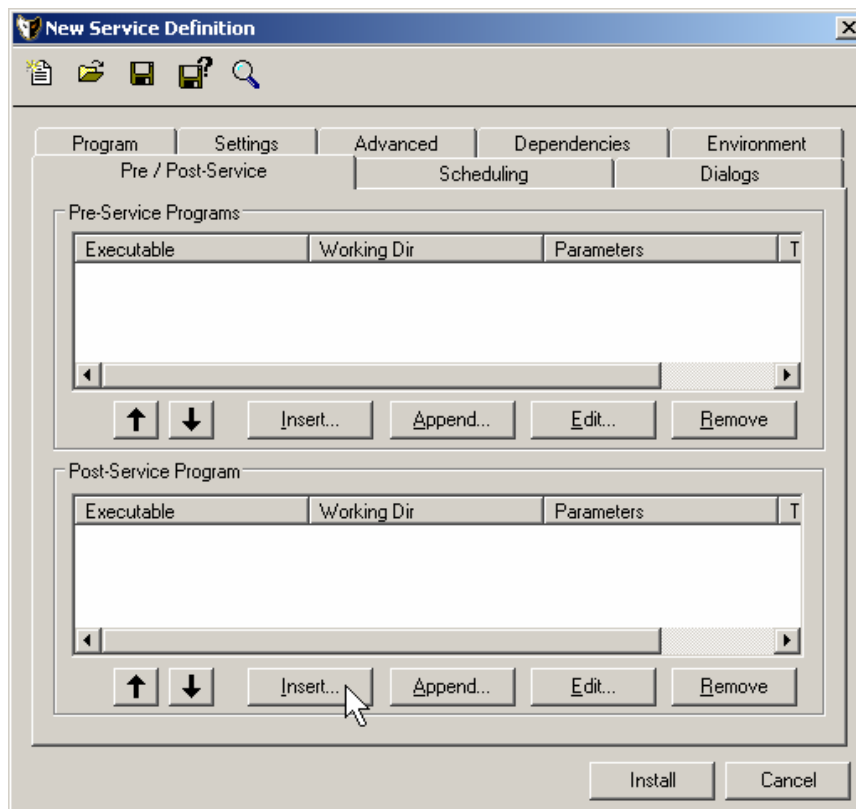
6 Configure the Post-Service Program as shown below and click *OK* to continue.
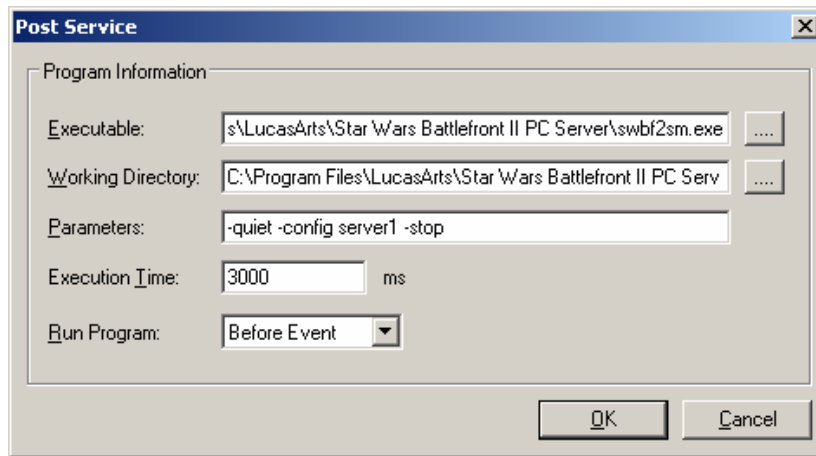
7 Click the *Install* button to complete the new service definition.
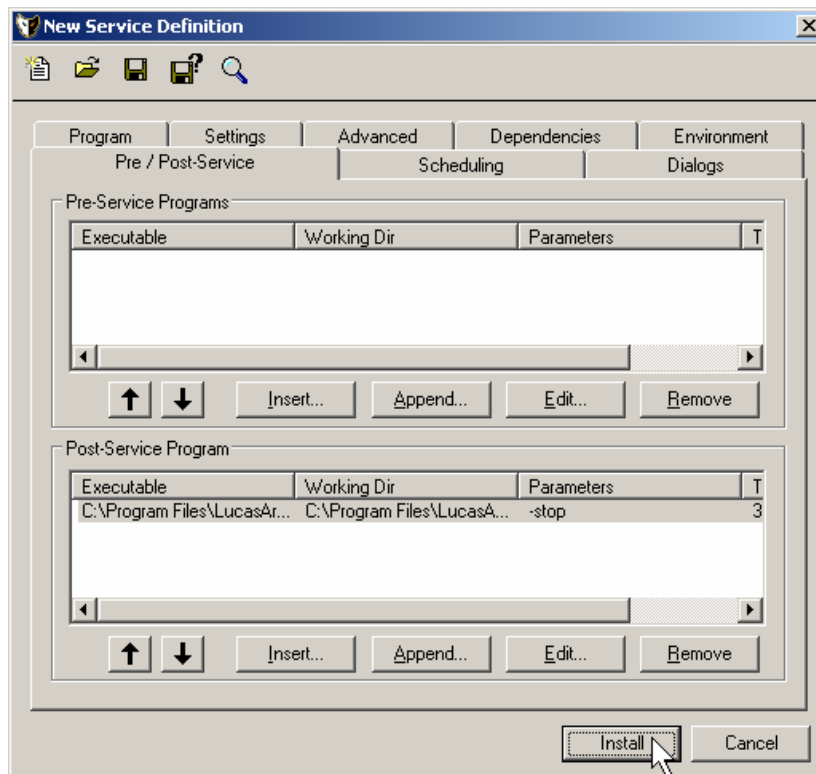
8 Click *OK* when the following message appears and FireDaemon will start the service.
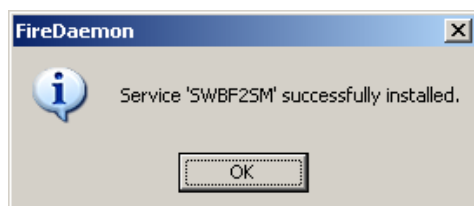
At this point you should see the new service displayed in the Services control panel applet: Start > Settings > Control Panel > Administrative Tools > Services.
You can use this window or the FireDaemon Service Manager to start and stop your server interactively.
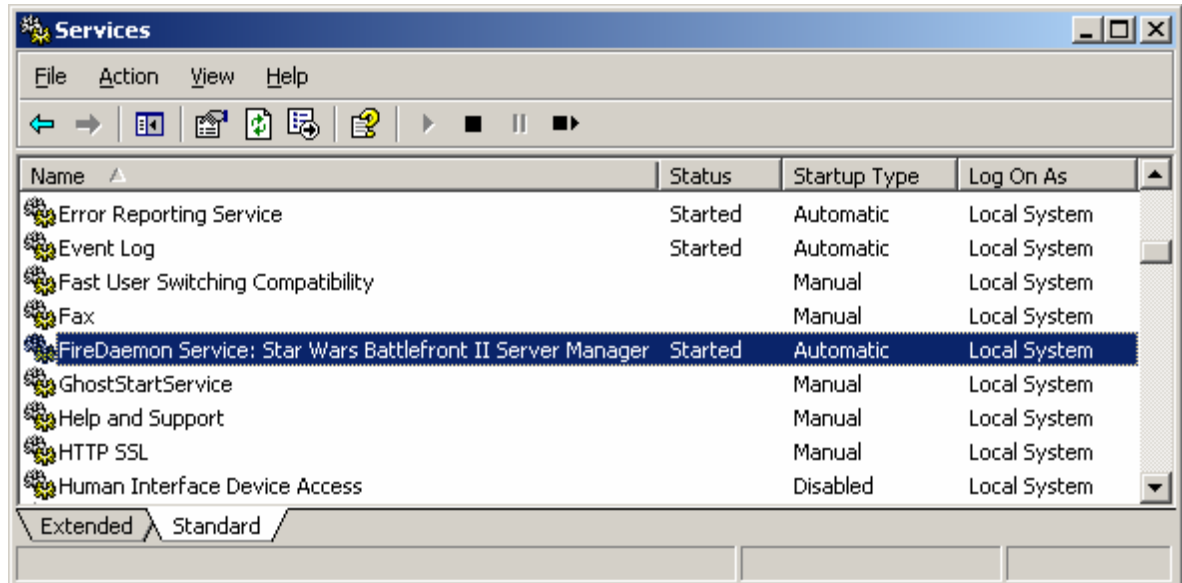
When Server Manager is run as a service, both the Server Manager window and the server process window are not visible. You may be wondering "how do I manage my server if I can't see the Server Manager window?". The answer is, of course, by using Remote Manager.

Before running your server as a service, create an admin user account which you can use with Remote Manager to manage your server (see "Getting started with Remote Manager").

If your server is hosted by a Game Service Provider (GSP), your GSP may have created a restricted user account for you. In this case you should contact your GSP for your user account details.

To manage your server, connect to Server Manager with Remote Manager and proceed as described in "Server administration".

Purchase FireDaemon online at the secure eSellerate website here.

Automating server service starting and stopping

You can use the Windows NET command to automate starting and stopping of server services.

To start a server service in a batch file or command script:

net start swbf2sm

To stop as server service in a batch file or command script:

net stop swbf2sm

Note: *The above commands assume the server service has the short name 'swbf2sm'. You should substitute the short name of your server service in the above commands. The server service short name is configured on the* Program *tab of FireDaemon's* New Service Definition *dialog box.*

Program options

Click the *Options* button in the main dialog window to change program option settings.
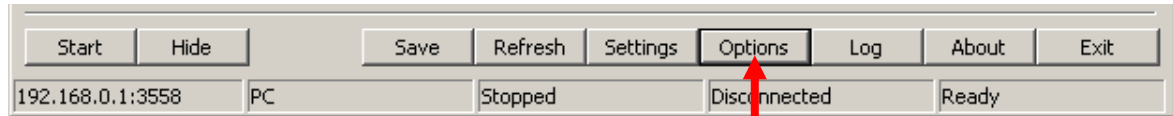
Auto-update the Players and Status pages
Enable this option to make Server Manager and Remote Manager refresh the *Players* and *Status* dialog pages automatically. With this option disabled, you must click *Refresh* to get an update.

Restart the server automatically (Server Manager only)
Enable this option to make Server Manager restart the server process if it detects that is has stopped, hung or is showing a popup error message window. With this option disabled, you will have to restart the server manually after a crash.

Download player menu config from server (Remote Manager only)
Enable this option to make Remote Manager download its player menu configuration from Server Manager when you connect. Use this option to share a single *PlayerMenu.cfg* file residing on the server with clients. Your player menu configuration will remain independent of the server with this option disabled.

Note: *If you enable this option the* Edit player menu *command in the player menu will be hidden.*

Enable user interface sounds
Enables custom user interface sounds.

Enable tool tip descriptions
Enables 'balloon help' tool-tips that appear when you hover the mouse pointer over a control.

Keep Server/Remote Manager window always on top
Enable this option to make the Server Manager window appear above all other windows on the desktop.

Keep a log of important events
Enable this option to record program messages and important information about the server state and administrative actions to a log file. The log is a powerful diagnostic tool and enabling this option is highly recommended. You can use the search control at the bottom of the log window to search the log file from within SM and RM (see "Troubleshooting problems" for more information).

Log player chat to Server/Remote Manager log file
Enable this option to have player chat messages included in the log.

Kick and ban players after a delay
Enable this option to make SM and/or RM wait ten seconds before kicking or banning a player. This option gives the player a chance to see the admin message that shows the reason why they are being kicked or banned from the server. Use this option to reduce the number of "why was I kicked?" or "why was I banned?" type questions from players.

Command-line options

Both Server Manager and Remote Manager will display a list of supported command-line options when started with the /? command-line switch.

Server Manager for Windows

Server Manager for Windows supports the following command-line options:

swbf2sm.exe [-ip <ip>] [-port <port>] [-start] [-stop] [-abovenormal] [-exit] [-quit] [-quiet]
              [-adminlog] [-ps2] [-configdir <name>]

<ip>	is the desired IP address of the server. This must correspond to the IP address of an active network interface in the server computer
<port>	is the desired Server Manager TCP listen port address (port 3558 by default)
-start	starts the dedicated server when Server Manager starts
-stop	stops a running server and terminates any instance of SM managing it
-abovenormal	runs the server process at ABOVENORMAL process priority
-exit	stops the server process when Server Manager exits
-quit	exits Server Manager when the server process terminates unexpectedly
-quiet	prevents Server Manager from displaying popup error messages
-adminlog	logs all administrative warns/kicks/bans to adminlog.csv
-ps2	enables PS2-only settings controls
<name>	enables multi-server mode with a config called <name>. The <name> parameter must not contain slashes and must be "double-quoted" if it contains spaces.

Remote Manager for Windows

Remote Manager for Windows supports the following command-line options:

swbf2rm.exe [swbf2rm://user:pass@host:port]

user:pass	is a valid Server Manager user account name and password
host:port	is the hostname (or IP address) and port address of a SM server

If you specify a connection string on the command-line Remote Manager will connect to Server Manager immediately on startup. This feature can be used to create handy desktop shortcuts or webpage links for quick administrative access to your game server(s).

To enable swbf2rm:// links in web pages:

1 Copy and paste the text that appears over the page into a new Notepad window.

2 Save the contents of Notepad as sw*bf2rm.reg* in a temporary folder.

3 Right-click on sw*bf2rm.reg* in Windows Explorer and choose *Merge* from the menu. Click *Yes* when prompted by Windows Registry Editor.

After this procedure is complete, you can use this feature by creating HTML anchor tags with hrefs that start with the swbf2rm:// protocol identifier.

Note: *The above procedure must be completed on each computer that needs to process swbf2rm:// links in web pages.*

The following textbox contains the contents of a registry editor file which can be used to enable processing of swbf2rm:// links in web pages:

```
Windows Registry Editor Version 5.00

[HKEY_CLASSES_ROOT\swbf2rm]
@="URL:SWBF2RM Protocol"
"EditFlags"=hex:02,00,00,00
"URL Protocol"=""

[HKEY_CLASSES_ROOT\swbf2rm\DefaultIcon]
@="\"C:\\Program Files\\LucasArts\\Star Wars Battlefront II\\swbf2rm.exe\",1"

[HKEY_CLASSES_ROOT\swbf2rm\shell]

[HKEY_CLASSES_ROOT\swbf2rm\shell\open]

[HKEY_CLASSES_ROOT\swbf2rm\shell\open\command]
@="\"C:\\Program Files\\LucasArts\\Star Wars Battlefront II\\swbf2rm.exe\" %1"
```

Note: The above registry file assumes that you installed Remote Manager in the default game installation folder. If you installed Remote Manager to a different location you will need to modify the above file to reflect the correct path to swbf2rm.exe.

Troubleshooting problems

The first step you should take when something does not operate as expected is to check the program log for error messages.

Viewing the program log

Click the *Log* button in the main dialog window to show the log window (and hide it again).

Carefully examine the log for error messages that may indicate why things did not happen as expected. The cause of most problems and often the solution appears as a message in the log.

When you are managing the server remotely with Remote Manager, it is often useful to view the Server Manager log to diagnose problems and deal with other issues that may arise.

To view the Server Manager log from within Remote Manager:

1 Click the *Log* button to view the log window.

2 Click the window menu icon in the top left corner of the log window.
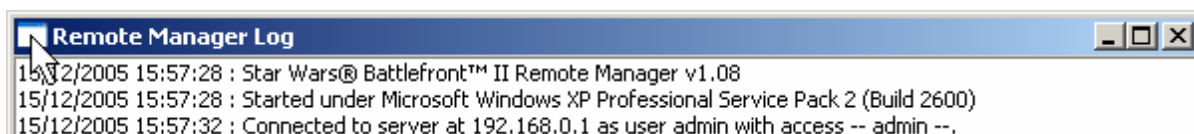
3 Select *Server Manager Log* from the window menu.
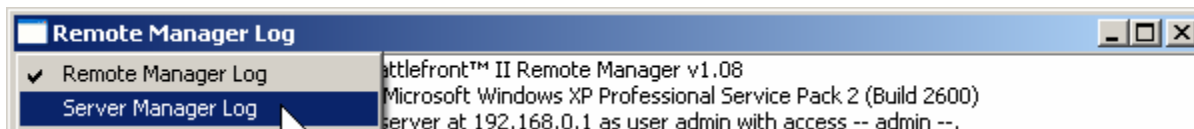
The last 32 kilobytes of the Server Manager log will be displayed in Remote Manager's log window. To refresh the view of the Server Manager log, use the above procedure to switch back to Remote Manager log view and then change to the Server Manager log view again.

Note: *A user permission is required to view the Server Manager log in Remote Manager. If you can't see the* Server Manager Log *menu item in the window menu, ask your server administrator or game server provider to grant you the required permission.*

If you cannot diagnose the cause of a problem by examining the program log, see "Technical support" for a list of resources that can be used to troubleshoot problems with SWBF2SM.

Configuration files

Server Manager uses plain text configuration files to store server configurations and settings. The default server config files live in a folder called "settings" under the dedicated server folder. This is normally the folder C:\Program Files\LucasArts\Star Wars Battlefront II PC Server\settings.

If you use the -config <name> command-line switch with Server Manager to run multiple servers from a single server application installation, the config files for each server configuration are kept in a subfolder of "settings" called <name>.

Announcements.cfg
Contains the text messages of periodic announcements made by the 'auto-announce' feature. See "About the 'auto-admin' functions" for more information.

BannedWords.cfg
Contains a list of words that are banned on the server. See "About the 'auto-admin' functions" for more information.

Maps.cfg
Contains a list of maps available on the server. This config file is used internally by Server Manager - do not attempt to modify the contents of this file.

PlayerMenu.cfg
Contains the configuration of the customisable Player Menu. See "About the player menu" for more information.

ServerAdmins.cfg
Contains a list of users permitted to administer the server remotely via Remote Manager.

ServerBans.cfg
Contains a list of players that have been banned from the server.

ServerRotation.cfg
Contains a list of maps in the server map rotation.

ServerSchedule.cfg
Contains a list of scheduled start/stop events for the server.

ServerSettings.cfg
Contains the default server configuration commands.

Server Manager requires you to logon using a Windows user account that has write-access to the config files in the server's "settings" folder. Server Manager will not run if it cannot write to these files. See Windows Help for more information about changing user and file permissions.

Technical support

These programs are not supported by Pandemic Studios or LucasArts. Do not contact them about any problems you may experience while using this software.

A list of resources for diagnosing and solving problems with SWBF2SM can be found at http://www.blackbagops.com/swbf2/support.shtml

You can submit bug reports to the author at kevlar@blackbagops.com or via the forums at http://www.blackbagops.com/forums/

Please make sure that you are running the latest version of Server Manager before submitting bug reports.

Download the latest version of Battlefront II Server Manager from http://www.blackbagops.com/swbf2/index.shtml

Read the answers to Frequently Asked Questions about Battlefront II Server Manager at http://www.blackbagops.com/swbf2/faq.shtml

Contact details for the author of this software can be found at http://www.blackbagops.com/contact.shtml

License agreement

This License Agreement is an agreement between you ("LICENSEE") (either an individual or a single entity) and the author ("BLACK BAG OPERATIONS") for the software product "Server Manager", which includes the binary program files and all documentation ("SOFTWARE"). By installing or otherwise using the SOFTWARE, you agree to be bound by the terms and conditions of this Agreement. If you do not agree to these terms and conditions, as a whole or any part of it, you are not authorised and may not use the SOFTWARE.

1. License: BLACK BAG OPERATIONS grants the LICENSEE a non-exclusive license (without the ability to sublicense) to install and use the SOFTWARE accompanying this document on an unlimited number of computers free of charge.

2. Ownership: The SOFTWARE is owned by BLACK BAG OPERATIONS and is protected by copyright laws. The SOFTWARE is licensed to you for use only under the terms set forth in this Agreement. BLACK BAG OPERATIONS reserves any right not expressly granted in this Agreement. You may own the media on which the SOFTWARE is stored, but BLACK BAG OPERATIONS retains title to the SOFTWARE.

3. Copyright: The SOFTWARE and documentation are Copyright © 2003 Kevin Lockitt. All rights reserved. This manual, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by BLACK BAG OPERATIONS. BLACK BAG OPERATIONS assumes no responsibility or liability for any errors or inaccuracies that may appear in this documentation.

4. Responsibility: By installing the SOFTWARE you assume sole responsibility for the installation, use and results obtained from the use of the SOFTWARE. Under no circumstances and under no legal theory, tort, contract, or otherwise, shall BLACK BAG OPERATIONS be liable to you or any other person for any indirect, special, incidental, or consequential damages of any character including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any and all other commercial damages or losses.

5. Restrictions: You are NOT permitted to do any of the following:
a) Sublicense, assign, or distribute copies of the SOFTWARE to others.
b) Modify, copy, reproduce, adapt, translate, reverse-engineer, rent, lease, loan, sell, distribute, or otherwise assign or transfer the SOFTWARE, or create derivative works based upon the SOFTWARE or any part thereof, except as expressly provided in this Agreement or by written agreement with BLACK BAG OPERATIONS.

6. Warranty Disclaimer: This SOFTWARE is provided by BLACK BAG OPERATIONS on an 'as is' basis. BLACK BAG OPERATIONS makes no representations or warranties of any kind, including without limitation the warranties of merchantability, fitness for a particular purpose and non-infringement. BLACK BAG OPERATIONS does not warrant that the SOFTWARE will meet LICENSEE specific requirements, nor does it warrant that the operation of the SOFTWARE be error-free. Though we shall strive to do our best in helping you, in no event shall BLACK BAG OPERATIONS or its parents, subsidiaries, affiliates, successors, officers, directors or employees be held liable for any support. If you are dissatisfied with any portion of the SOFTWARE, or with any of these terms of use, your sole and exclusive remedy is to discontinue using the SOFTWARE.

Legal notices

Server Manager and Remote Server Manager and this Users Guide are Copyright © 2005 Kevin Lockitt. All rights reserved.

Star Wars ® is a registered trademark of Lucasfilm Ltd. Battlefront™ is a trademark of LucasArts, a division of Lucasfilm Entertainment Company Ltd.

Windows ® is a registered trademark of Microsoft Corporation.

All other trademarks are the property of their respective owners.

Credits

Battlefront™ II Server Manager was designed and coded by Kevin Lockitt.

Thanks to Brad "Drone" Pickering at Pandemic Studios for his help in developing these tools.

Thanks to Keith "KonKushn" Harvey and the admin crew at TAW for beta-testing these utilities.

Thanks to Tom Kiblin and Defender Hosting for hosting Black Bag Operations.

Thanks to all those who have given bug reports, suggestions, donations and moral support.

Appendix A: Map ids

The following table lists all the official Battlefront II maps and their identifiers. The identifiers are used with the in-game admin map commands.

Map Name	Map Id	Game Mode	Era
Coruscant: Jedi Temple	cor1c_con	Conquest	Clone Wars
Coruscant: Jedi Temple	cor1c_ctf	Capture the Flag (2 flags)	Clone Wars
Coruscant: Jedi Temple	cor1g_con	Conquest	Galactic Civil Wars
Coruscant: Jedi Temple	cor1g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Dagobah: Swamp	dag1c_con	Conquest	Clone Wars
Dagobah: Swamp	dag1c_ctf	Capture the Flag (2 flags)	Clone Wars
Dagobah: Swamp	dag1g_con	Conquest	Galactic Civil Wars
Dagobah: Swamp	dag1g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Death Star: Interior	dea1c_con	Conquest	Clone Wars
Death Star: Interior	dea1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Death Star: Interior	dea1c_1flag	Capture the Flag (1 flag)	Clone Wars
Death Star: Interior	dea1g_con	Conquest	Galactic Civil Wars
Endor: Bunker	end1g_con	Conquest	Galactic Civil Wars
Endor: Bunker	end1g_hunt	Hunt	Galactic Civil Wars
Endor: Bunker	end1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Felucia: Marshland	fel1c_con	Conquest	Clone Wars
Felucia: Marshland	fel1g_con	Conquest	Galactic Civil Wars
Felucia: Marshland	fel1c_1flag	Capture the Flag (1 flag)	Clone Wars
Felucia: Marshland	fel1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Geonosis: Dust Plains	geo1c_con	Conquest	Clone Wars
Geonosis: Dust Plains	geo1c_ctf	Capture the Flag (2 flags)	Clone Wars
Geonosis: Dust Plains	geo1c_hunt	Hunt	Clone Wars
Hoth: Echo Base	hot1g_con	Conquest	Galactic Civil Wars
Hoth: Echo Base	hot1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Hoth: Echo Base	hot1g_hunt	Hunt	Galactic Civil Wars
Kamino: Clone Facility	kam1c_con	Conquest	Clone Wars
Kamino: Clone Facility	kam1c_1flag	Capture the Flag (1 flag)	Clone Wars
Kamino: Clone Facility	kam1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Kamino: Clone Facility	kam1g_con	Conquest	Galactic Civil Wars
Kashyyyk: Beachhead	kas2c_con	Conquest	Clone Wars
Kashyyyk: Beachhead	kas2g_con	Conquest	Galactic Civil Wars
Kashyyyk: Beachhead	kas2c_hunt	Hunt	Clone Wars
Kashyyyk: Beachhead	kas2c_ctf	Capture the Flag (2 flags)	Clone Wars
Kashyyyk: Beachhead	kas2g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Mustafar: Refinery	mus1c_con	Conquest	Clone Wars
Mustafar: Refinery	mus1c_ctf	Capture the Flag (2 flags)	Clone Wars
Mustafar: Refinery	mus1g_con	Conquest	Galactic Civil Wars
Mustafar: Refinery	mus1g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Mygeeto: War-torn City	myg1c_con	Conquest	Clone Wars
Mygeeto: War-torn City	myg1c_ctf	Capture the Flag (2 flags)	Clone Wars
Mygeeto: War-torn City	myg1g_con	Conquest	Galactic Civil Wars
Mygeeto: War-torn City	myg1g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars

Map Name	Map Id	Game Mode	Era
Naboo: Theed	nab2c_con	Conquest	Clone Wars
Naboo: Theed	nab2g_con	Conquest	Galactic Civil Wars
Naboo: Theed	nab2g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Naboo: Theed	nab2c_ctf	Capture the Flag (2 flags)	Clone Wars
Naboo: Theed	nab2c_hunt	Hunt	Clone Wars
Polis Massa: Medical Facility	pol1c_con	Conquest	Clone Wars
Polis Massa: Medical Facility	pol1c_ctf	Capture the Flag (2 flags)	Clone Wars
Polis Massa: Medical Facility	pol1g_con	Conquest	Galactic Civil Wars
Polis Massa: Medical Facility	pol1g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Space Yavin	spa1g_ass	Assault	Galactic Civil Wars
Space Yavin	spa1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Space Kashyyyk	spa3c_ass	Assault	Clone Wars
Space Kashyyyk	spa3c_1flag	Capture the Flag (1 flag)	Clone Wars
Space Mygeeto	spa6c_ass	Assault	Clone Wars
Space Mygeeto	spa6c_1flag	Capture the Flag (1 flag)	Clone Wars
Space Felucia	spa7c_ass	Assault	Clone Wars
Space Felucia	spa7c_1flag	Capture the Flag (1 flag)	Clone Wars
Space Hoth	spa8g_ass	Assault	Galactic Civil Wars
Space Hoth	spa8g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Space Tatooine	spa9g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Space Tatooine	spa9g_ass	Assault	Galactic Civil Wars
Tantive IV: Interior	tan1c_con	Conquest	Clone Wars
Tantive IV: Interior	tan1c_1flag	Capture the Flag (1 flag)	Clone Wars
Tantive IV: Interior	tan1g_con	Conquest	Galactic Civil Wars
Tantive IV: Interior	tan1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Tatooine: Mos Eisley	tat2c_con	Conquest	Clone Wars
Tatooine: Mos Eisley	tat2c_ctf	Capture the Flag (2 flags)	Clone Wars
Tatooine: Mos Eisley	tat2g_con	Conquest	Galactic Civil Wars
Tatooine: Mos Eisley	tat2g_ctf	Capture the Flag (2 flags)	Galactic Civil Wars
Tatooine: Mos Eisley	tat2g_eli	Assault	Galactic Civil Wars
Tatooine: Mos Eisley	tat2g_hunt	Hunt	Galactic Civil Wars
Tatooine: Jabba's Palace	tat3c_1flag	Capture the Flag (1 flag)	Clone Wars
Tatooine: Jabba's Palace	tat3g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Tatooine: Jabba's Palace	tat3c_con	Conquest	Clone Wars
Tatooine: Jabba's Palace	tat3g_con	Conquest	Galactic Civil Wars
Utapau: Sinkhole	uta1c_1flag	Capture the Flag (1 flag)	Clone Wars
Utapau: Sinkhole	uta1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Utapau: Sinkhole	uta1c_con	Conquest	Clone Wars
Utapau: Sinkhole	uta1g_con	Conquest	Galactic Civil Wars
Yavin 4: Temple	yav1c_1flag	Capture the Flag (1 flag)	Clone Wars
Yavin 4: Temple	yav1c_con	Conquest	Clone Wars
Yavin 4: Temple	yav1g_1flag	Capture the Flag (1 flag)	Galactic Civil Wars
Yavin 4: Temple	yav1g_con	Conquest	Galactic Civil Wars

Appendix B: Player menu commands

The following table lists the available in-game admin player commands configured in the default player menu.

Command	Message	Ban time
Global Warnings		
!gwspam	Please do not chat spam	
!gwdis	Please do not play disruptively	
!gwtk	Please do not team kill	
!gwayot	Please do not attack your own team	
!gwsfv	Please do not shoot friendly vehicles	
!gwexp	Please do not use map exploits	
!gwtmstk	Please do not team stack	
!gwname	Please keep your username appropriate	
!gwlang	Please keep your language clean	
!gwlist	Please listen to the admins	
!gwreb	The server will be rebooting shortly	
!gwpw	The server will be passworded shortly	
Player warnings		
!wspam	Please do not chat spam	
!wdis	Please do not play disruptively	
!wtk	Please do not team kill	
!wayot	Please do not attack your own team	
!wsfv	Please do not shoot friendly vehicles	
!wname	Please change your name to something more appropriate	
!wlang	Please tone down your language	
!wtmstk	Please do not team stack	
!wlist	Please listen to the admins	
!wexp	Please stop using map exploits	
!wreb	The server will be rebooting shortly	
!wpw	The server will be passworded shortly	
Kicks		
!kspam	Player X kicked for chat spamming	
!kdis	Player X kicked for disruptive gameplay	
!ktk	Player X kicked for team killing	
!katk	Player X kicked for attempted team killing	
!ksfv	Player X kicked for shooting friendly vehicles	
!kname	Player X kicked for having an inappropriate name	
!klang	Player X kicked for using inappropriate language	
!ktmstk	Player X kicked for team stacking	
!kign	Player X kicked for ignoring admin requests	
!kexp	Player X kicked for using map exploits	
Bans		
!b10min		10 mins
!b1day		1 day
!b3day		3 days
!b1week		1 week
!b1mon		1 month

Command	Message	Ban time
!bspam	Player X banned for chat spamming	permanent
!bspam1day	Player X banned for chat spamming	1 day
!bspam3day	Player X banned for chat spamming	3 days
!bspam1week	Player X banned for chat spamming	1 week
!bspam1mon	Player X banned for chat spamming	1 month
!bdis	Player X banned for disrupting gameplay	permanent
!bdis1day	Player X banned for disrupting gameplay	1 day
!bdis3day	Player X banned for disrupting gameplay	3 days
!bdis1week	Player X banned for disrupting gameplay	1 week
!bdis1mon	Player X banned for disrupting gameplay	1 month
!btk	Player X banned for team killing	permanent
!btk1day	Player X banned for team killing	1 day
!btk3day	Player X banned for team killing	3 days
!btk1week	Player X banned for team killing	1 week
!btk1mon	Player X banned for team killing	1 month
!batk	Player X banned for attempted team killing	permanent
!batk1day	Player X banned for attempted team killing	1 day
!batk3day	Player X banned for attempted team killing	3 days
!batk1week	Player X banned for attempted team killing	1 week
!batk1mon	Player X banned for attempted team killing	1 month
!bsfv	Player X banned for shooting friendly vehicles	permanent
!bsfv1day	Player X banned for shooting friendly vehicles	1 day
!bsfv3day	Player X banned for shooting friendly vehicles	3 days
!bsfv1week	Player X banned for shooting friendly vehicles	1 week
!bsfv1mon	Player X banned for shooting friendly vehicles	1 month
!bname	Player X banned for having an inappropriate name	permanent
!bname1day	Player X banned for having an inappropriate name	1 day
!bname3day	Player X banned for having an inappropriate name	3 days
!bname1week	Player X banned for having an inappropriate name	1 week
!bname1mon	Player X banned for having an inappropriate name	1 month
!blang	Player X banned for using inappropriate language	permanent
!blang1day	Player X banned for using inappropriate language	1 day
!blang3day	Player X banned for using inappropriate language	3 days
!blang1week	Player X banned for using inappropriate language	1 week
!blang1mon	Player X banned for using inappropriate language	1 month
!btmstk	Player X banned for team stacking	permanent
!btmstk1day	Player X banned for team stacking	1 day
!btmstk3day	Player X banned for team stacking	3 days
!btmstk1week	Player X banned for team stacking	1 week
!btmstk1mon	Player X banned for team stacking	1 month
!bign	Player X banned for ignoring admin requests	permanent
!bign1day	Player X banned for ignoring admin requests	1 day
!bign3day	Player X banned for ignoring admin requests	3 days
!bign1week	Player X banned for ignoring admin requests	1 week
!bign1mon	Player X banned for ignoring admin requests	1 month
!bexp	Player X banned for using map exploits	permanent
!bexp1day	Player X banned for using map exploits	1 day
!bexp3day	Player X banned for using map exploits	3 days
!bexp1week	Player X banned for using map exploits	1 week
!bexp1mon	Player X banned for using map exploits	1 month

Appendix C: Default player menu

```
// Star Wars(R) Battlefront(TM) Server Manager
// Copyright (c) 2005 by Kevin Lockitt. All rights reserved.
// Player Menu Config File
//
// This file lives in your server's "settings" folder.
//
// Command format:
// menuname>"message"|command,bantime,[alias]
//
// menuname is the name of the submenu this command should appear in.
// message is sent as a chat message when the command is selected.
// command is one of (global,warn,kick,ban,cmd).
//  global = causes message to be sent as a global admin message
//  warn   = causes message to be sent as a directed admin message
//  kick   = causes player to be kicked when this command is selected
//  ban    = causes player to be banned when this command is selected
//  cmd    = causes message to be issued as a console command
// bantime is in seconds.
// alias allows this command to be invoked via in-game admin.

// Global Warnings
Warn server>"Please do not chat spam"|global,[gwspam]
Warn server>"Please do not play disruptively"|global,[gwdis]
Warn server>"Please do not team kill"|global,[gwtk]
Warn server>"Please do not attack your own team"|global,[gwayot]
Warn server>"Please do not shoot friendly vehicles"|global,[gwsfv]
Warn server>"Please do not use map exploits"|global,[gwexp]
Warn server>"Please do not team stack"|global,[gwtmstk]
Warn server>"Please keep your username appropriate"|global,[gwname]
Warn server>"Please keep your language clean"|global,[gwlang]
Warn server>"Please listen to the admins"|global,[gwlist]
Warn server>"The server will be rebooting shortly"|global,[gwreb]
Warn server>"The server will be passworded shortly"|global,[gwpw]

// Player warnings
Warn player>"please do not chat spam"|warn,[wspam]
Warn player>"please do not play disruptively"|warn,[wdis]
Warn player>"please do not team kill"|warn,[wtk]
Warn player>"please do not attack your own team"|warn,[wayot]
Warn player>"please do not shoot friendly vehicles"|warn,[wsfv]
Warn player>"please change your name to something more
appropriate"|warn,[wname]
Warn player>"please tone down your language"|warn,[wlang]
Warn player>"please do not team stack"|warn,[wtmstk]
Warn player>"please listen to the admins"|warn,[wlist]
Warn player>"please stop using map exploits"|warn,[wexp]
Warn player>"the server will be rebooting shortly"|warn,[wreb]
Warn player>"the server will be passworded shortly"|warn,[wpw]

// Kicks
Kick player|kick,[kick]
Kick for>"chat spamming"|kick,[kspam]
Kick for>"disrupting gameplay"|kick,[kdis]
Kick for>"team killing"|kick,[ktk]
Kick for>"attempted team killing"|kick,[katk]
```

```
Kick for>"shooting friendly vehicles"|kick,[ksfv]
Kick for>"having an inappropriate name"|kick,[kname]
Kick for>"using inappropriate language"|kick,[klang]
Kick for>"team stacking"|kick,[ktmstk]
Kick for>"ignoring admin requests"|kick,[kign]
Kick for>"using map exploits"|kick,[kexp]

// Bans
Ban player for 10 minutes|ban,600,[b10min]
Ban player for 1 day|ban,86400,[b1day]
Ban player for 3 days|ban,259200,[b3day]
Ban player for 1 week|ban,604800,[b1week]
Ban player for 1 month|ban,2592000,[b1mon]
Ban player permanently|ban,[ban]

// Chat spamming
Ban for>"chat spamming">for 1 day|ban,86400,[bspam1day]
Ban for>"chat spamming">for 3 days|ban,259200,[bspam3day]
Ban for>"chat spamming">for 1 week|ban,604800,[bspam1week]
Ban for>"chat spamming">for 1 month|ban,2592000,[bspam1mon]
Ban for>"chat spamming">permanently|ban,[bspam]

// Disruptive gameplay
Ban for>"disrupting gameplay">for 1 day|ban,86400,[bdis1day]
Ban for>"disrupting gameplay">for 3 days|ban,259200,[bdis3day]
Ban for>"disrupting gameplay">for 1 week|ban,604800,[bdis1week]
Ban for>"disrupting gameplay">for 1 month|ban,2592000,[bdis1mon]
Ban for>"disrupting gameplay">permanently|ban,[bdis]

// Team killing
Ban for>"team killing">for 1 day|ban,86400,[btk1day]
Ban for>"team killing">for 3 days|ban,259200,[btk3day]
Ban for>"team killing">for 1 week|ban,604800,[btk1week]
Ban for>"team killing">for 1 month|ban,2592000,[btk1mon]
Ban for>"team killing">permanently|ban,[btk]

// Attempted team killing
Ban for>"attempted team killing">for 1 day|ban,86400,[batk1day]
Ban for>"attempted team killing">for 3 days|ban,259200,[batk3day]
Ban for>"attempted team killing">for 1 week|ban,604800,[batk1week]
Ban for>"attempted team killing">for 1 month|ban,2592000,[batk1mon]
Ban for>"attempted team killing">permanently|ban,[batk]

// Shooting friendly vehicles
Ban for>"shooting friendly vehicles">for 1 day|ban,86400,[bsfv1day]
Ban for>"shooting friendly vehicles">for 3 days|ban,259200,[bsfv3day]
Ban for>"shooting friendly vehicles">for 1 week|ban,604800,[bsfv1week]
Ban for>"shooting friendly vehicles">for 1 month|ban,2592000,[bsfv1mon]
Ban for>"shooting friendly vehicles">permanently|ban,[bsfv]

// Inappropriate name
Ban for>"having an inappropriate name">for 1 day|ban,86400,[bname1day]
Ban for>"having an inappropriate name">for 3 days|ban,259200,[bname3day]
Ban for>"having an inappropriate name">for 1 week|ban,604800,[bname1week]
Ban for>"having an inappropriate name">for 1 month|ban,2592000,[bname1mon]
Ban for>"having an inappropriate name">permanently|ban,[bname]
```

```
// Inappropriate language
Ban for>"using inappropriate language">for 1 day|ban,86400,[blang1day]
Ban for>"using inappropriate language">for 3 days|ban,259200,[blang3day]
Ban for>"using inappropriate language">for 1 week|ban,604800,[blang1week]
Ban for>"using inappropriate language">for 1 month|ban,2592000,[blang1mon]
Ban for>"using inappropriate language">permanently|ban,[blang]

// Team stacking
Ban for>"team stacking">for 1 day|ban,86400,[btmstk1day]
Ban for>"team stacking">for 3 days|ban,259200,[btmstk3day]
Ban for>"team stacking">for 1 week|ban,604800,[btmstk1week]
Ban for>"team stacking">for 1 month|ban,2592000,[btmstk1mon]
Ban for>"team stacking">permanently|ban,[btmstk]

// Ignoring admin requests
Ban for>"ignoring admin requests">for 1 day|ban,86400,[bign1day]
Ban for>"ignoring admin requests">for 3 days|ban,259200,[bign3day]
Ban for>"ignoring admin requests">for 1 week|ban,604800,[bign1week]
Ban for>"ignoring admin requests">for 1 month|ban,2592000,[bign1mon]
Ban for>"ignoring admin requests">permanently|ban,[bign]

// Map exploits
Ban for>"using map exploits">for 1 day|ban,86400,[bexp1day]
Ban for>"using map exploits">for 3 days|ban,259200,[bexp3day]
Ban for>"using map exploits">for 1 week|ban,604800,[bexp1week]
Ban for>"using map exploits">for 1 month|ban,2592000,[bexp1mon]
Ban for>"using map exploits">permanently|ban,[bexp]
```