

cPanel GameServers (cPGS)

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cPGS

This add on provides hosting companies the ability to offer popular game server hosting within the framework of cPanel[®]. What has been a traditionally tedious task has now been simplified for “point and click” simplicity.

Topics Covered

- Installing cPGS on a cPanel server and a remote satellite on a non-cPanel server
- Configuring both front and backend for WHMTM and cPanel cPGS interfaces.

The Website

- <http://cpgs.cpanel.net/>
 - Link to the latest version of cPGS
 - Updates, news, errata
 - Voting Poll
 - Mirror sites for game server packages
 - Game server versions table to keep track of packages and server versions

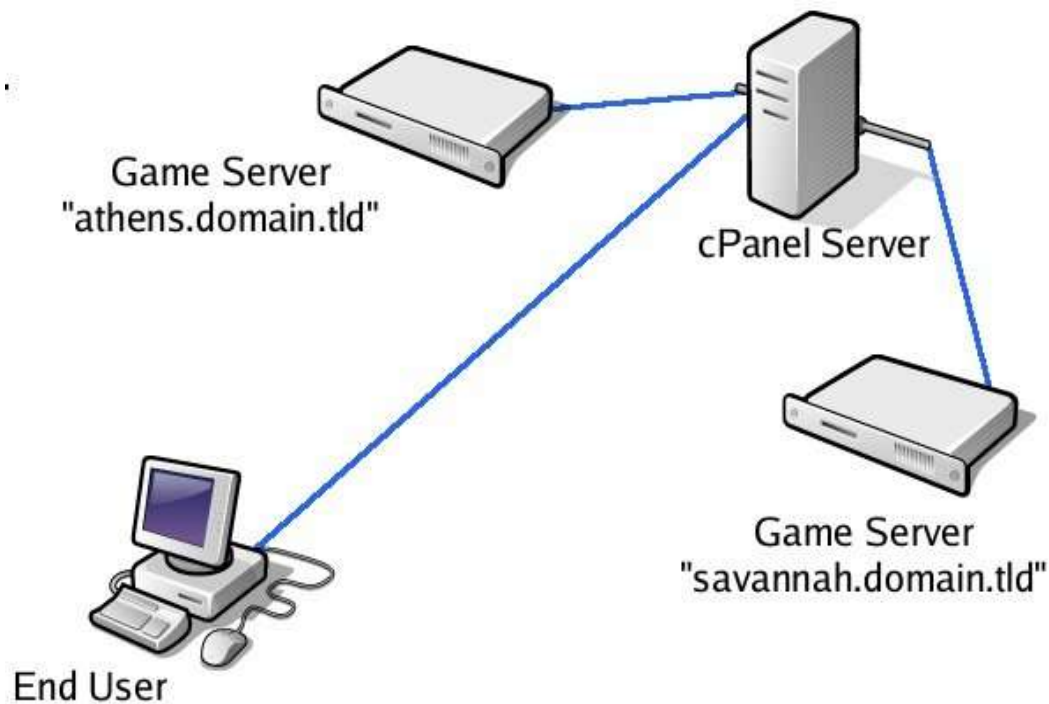
Operating Systems

- For game servers, Linux with glibc-3 works “best”
- FreeBSD with Linux-compat enabled works for most games
 - Needs linux base-8 installed for most games
- cPGS developed on Centos 4 and FreeBSD 5.4 boxen

Server/Client split

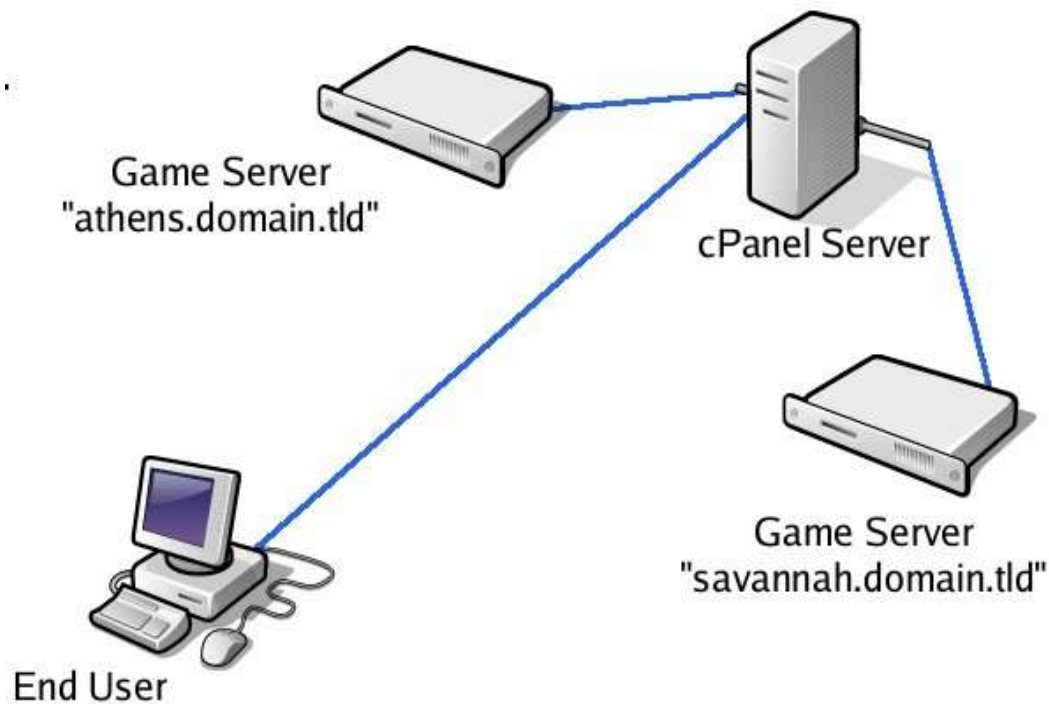
- cPanel machines handle all the services related to normal webhosting
 - Usually have some load already
 - Subject to frequent load spikes
- cPGS split since it's not practical to mandate that game servers should run on already loaded machines
 - cPGSD runs on most any server the game servers do (not MS Windows), including OS not supported by cPanel
 - Only one cPanel server needed to control hundreds of remote game server machines
 - Provides single user interface

Server



- Server = cpgsd
 - handles almost every function
 - can run on remote servers without cPanel
 - runs on the servers that will run the game servers

Client



- Client is cPanel/WHM itself
 - One client cPanel server can control hundreds of remote game server machines
 - Allows for a client to manage their website/normal cPanel stuff and their game server(s) from a unified frontend

Server Installation

- Install server
 - Download the latest version from the website
 - Extract the archive and go to the newly created GameServerAddon directory
 - Run the cpgsd_install script
 - This will download the latest server daemon files and create the default config files, including generating a self signed pem for SSL.

Server Installation

- Edit `/var/cpanel/cpgsd.cfg`
 - 'allowedips'
 - Add your cPanel Server's main outgoing IP (the one that is licensed, usually.)
 - You can add as many IPs as you like. Any connection from an IP not in the list will be refused.
 - 'port'
 - Leave the port at 2092 if at all possible
 - 'savelocation'
 - Set to the directory you wish to download game server files to
 - Be sure this directory/partition can handle the often large game server files
 - 'logfile'
 - Location of the file to log messages to



Server Installation

- /var/cpanel/cpgsd.cfg (Cont'd)
 - 'root'
 - Location of cpgsd.pl itself. Leave at default if at all possible
 - 'globalconf'
 - Location of the main config file for users. Leave at default if at all possible
 - 'secret'
 - A password of sorts sent with every request. This must match on all server and client machines.
 - 'sslpem'
 - Location of the pem file for SSL. Leave at default if at all possible

Server Installation

- Try running the daemon
 - ``/var/cpanel/cpgsd.pl``
 - If you get a message about a missing perl module, follow the instructions on how to install it
 - `perl -MCPAN -e'force install IO::Socket::SSL``
 - On a machine with cPanel installed, use ``/scripts/perlinstaller IO::Socket::SSL``
 - If you get a message about missing the `cpgs.pem`, try running the `createpem.sh` script in the `GameServerAddon` directory
 - If all goes well, it should fork itself off into the background

Client Installation

- From the GameServerAddon directory, run the `./install` script`
 - Answer the questions it asks
 - No need to run the `cpgsd.pl` daemon on the cPanel server
 - Log into WHM, find the Control Game Server Limits link in the bottom left menu

WHM Config

- Always set the core config for the user+game combination first.



The screenshot displays the 'Game Server Limits Configuration' interface in WHM. At the top, there are three main sections: 'Currently Installed cPGS Version (0.4.15)', 'Latest Available cPGS Version (0.4.15)', and 'Force Self Reinstall to 0.4.15'. Below these are three buttons: 'Uninstall cPGS', 'Manage Resellers' cPGS Control', and 'View Currently Assigned IPs/Ports'. A second row of buttons includes 'Manage Global Config File', 'Download Gameserver Files', and 'Remove Gameserver Files'. The main area features a table with columns for 'User', 'Game', and 'Action'. The 'User' dropdown is set to 'cpgs' and the 'Game' dropdown is set to 'Team Speak'. The 'Action' dropdown is open, showing options: 'Core Config', 'Core Config', 'Manage Game', 'Manage IPs', and 'Manage Ports'. A 'Continue' button is located below the table.

User	Game	Action
cpgs	Team Speak	Core Config
		Continue
		Core Config
		Manage Game
		Manage IPs
		Manage Ports

Client Configuration

- Core Config

- Select a user and a game server and “Core Config” from the dropdown menus first, click on “Continue”
 - IP for cPGSD I/O
 - Set this to the IP you are running the cpgsd.pl server daemon on.
 - This will be the IP the user will be connecting to when managing the specific game server you selected.
 - Other functions use the IPs specified here, such as the server file download feature
 - If using the cPanel server itself to run the games/test with, use the IP 127.0.0.1
 - Do not use domain names

Client Configuration

- Manage Game

- After the Core Config has been set, select this option for the same user + game combination.
 - 'Server Allow'
 - Check “Allowed” so the user will have the game available in their cPanel
 - 'Remote Username'
 - If the local cPanel username is different than the user on the remote server, you can change it here.
 - Ex: cPanel user `wickedclan` could be set to control game servers on a remote machine as the system user `wtclan`

Client Configuration

- 'Max Users'
 - Specify the max number of users allowed to play on this particular user's game server.
- 'tickrate'
 - Available with games that support it, don't edit this unless you know what it does
- 'Appended Command Line Options'
 - Lets you specify additional options to be run with the server every time it's started

Client Configuration

- Manage IPs

- Brings up a list of all IPs available on the server you set in “Core Config”
 - Select one or more IPs your client will be permitted to use for the game server

- Manage Ports

- Allows you to assign one or more ports for the user+game.
 - May be assigned one at a time, multiple's separated by commas, or in ranges using dashes
 - 27015
 - 27015,27016
 - 27015-27020

Client Configuration

- “View Currently Assigned IPs:Ports”
 - Lists all ip:port combinations for each user+game combo, any conflicting IP:Port assignments show up in red
- “Manage Global Config File”
 - Select the IP of the server you wish to connect to
 - Edit the location of each game server file and save
- “Manage Resellers' cPGS Control”
 - Select which resellers have access to manage their own users' access to game servers

Client Configuration

- “Download Gameserver Files”
 - Select the server to download the game server files to
 - The game server chart shows available files
 - Games already downloaded show with a blue background
 - Games that are missing show with a grey background
 - Select the game file and mirror to download from
 - You may want to follow the link to the mirror to see if the game file is really available on it
 - The game server download process will fork into the background

Client Configuration

- “UnInstall cPGS”
 - Useless option, ignore if at all possible :)
 - Will prompt on confirmation page to be sure this is intended
- “Update/Force Reinstall”
 - Updates to the latest available version directly from the website
 - Can reinstall itself if you think a file is corrupted

cPanel User Interface

- Dynamically shows the cPGS icon if:
 - cPGS is installed correctly
 - The user is using the “x” theme
 - The user has been “Allowed” at least one game server via the “Manage Game” controls in WHM
 - Will work with future themes which will be released at HostingCon
- Clicking on the cPGS icon takes the user to a list of all game servers they are allowed to run
 - If the game is installed, it's logo is available and clicking it takes the user to that games management page
 - If the game is not installed, it gives a link that alerts the user as to how much disk space is needed to install the game; clicking it takes them to the installer



cPanel User Interface

- If installing the game, the installer page is self explanatory as it simply shows the progress of the install
 - If the client closes their browser, the install will continue on the server regardless
 - Once the install is done, it shows a link that will take them to the primary management page for the game



CPANEL 10

Installing Game Server.. please wait..

Files	30%
Blocks	26%
Currently unpacking	bfv/mods/bfvietnam/archives/standardmesh.rfa
Blocks unpacked	128197 / 481850 Blocks
Files unpacked	51 / 166 Files
Average rate	2 File(s)/Sec.
Time spent	00:00:22
Time left	00:00:57

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[HOME](#)[LOGOUT](#)

CPANEL 10

Installing Game Server.. please wait..

Files	100%
Blocks	100%
Currently unpacking	Finished!
Blocks unpacked	507174 / 507173 Blocks
Files unpacked	161 / 161 Files
Average rate	2 File(s)/Sec.
Time spent	00:00:57
Time left	00:00:00

The game server has been installed
Please click [here](#) to continue..

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cPanel User Interface

- Options are laid out roughly the same for each game
 - Basic flow of managing the game
 - Configure the “simple config” items on the main page and save them
 - Includes selecting IPs, ports, mods, etc that are available
 - Configure any advanced config sections if needed
 - Start the game
 - Stop the game when desired
 - Configuration changes will not take effect until the server has been restarted
 - Some games like UT2004 will overwrite changes made to some config files if edited before the server is stopped.

Problems ?

- You **will** run across issues when dealing with gameservers. Try this (in order preferably)
 - Check for obvious errors in the startup line reported when it's started
 - Make sure the firewall is allowing traffic for it
 - If the game has a log file link, check it for errors
 - Try starting it from the shell (via ssh) as the user. If it works via ssh and not via cPGS, send in a ticket
 - Search favorite search engines and popular forums for the game server in question with any errors you see
 - Post on cPanel forums
 - Email me

Down the Road

- Current plans for the future
 - Support more games
 - Allow user uploads
 - Maps and Mods
 - Support more than one install of each type of game per user
 - Modularization
 - Easier to manage
 - Easier for community addons

Questions or Ideas?

- Let me know what you think so far
- Open for suggestions
- Can't make everyone happy all the time
- Must try to ensure usability for the majority and try to support the minority at the same time

Credits

- Graphics by Jakub Steiner
 - <http://jimmac.musichall.cz>