# Mud Server Status Protocol

#### MSSP

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MSSP Crawler

MSSP News

EOR

GMCP

MCCP

**MMCP** 

**MNES** 

MSDP

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MUD listings are often out dated and lack accurate information. Verifying that the one submitting a new MUD is a member of the MUD's administration can be quite tedious as well.

The MUD Server Status Protocol seeks to address these issues by providing a transparant protocol for MUD crawlers to gather detailed information about a MUD, including dynamic information like boot time and the current amount of online players. It also makes submitting a new mud entry very simple because it only requires a player or admin to fill in the hostname and port.

This document provides a technical description of the MSSP protocol.

## The MSSP Protocol

MSSP is implemented as a Telnet option RFC854, RFC855. The server and client negotiate the use of MSSP as they would any other telnet option. Once agreement has been reached on the use of the option, option sub-negotiation is used to send information about the server to the client.

#### Server Commands

IAC WILL MSSP indicates the server supports MSSP.

#### Client Commands

IAC DO MSSP indicates the client supports MSSP.
IAC DONT MSSP indicates the client doesn't support MSSP.

#### Handshake

When a client connects to a server the server should send IAC WILL MSSP. The client should respond with either IAC DO MSSP or IAC DONT MSSP. If the server receives IAC DO MSSP it should respond with: IAC SB MSSP\_WSSP\_VAR "variable" MSSP\_VAL "value" MSSP\_VAR "variable" MSSP\_VAL "value" IAC SE.

The quote characters mean that the encased word is a string, the quotes themselves should not be send.

#### MSSP definitions

MSSP 70

MSSP\_VAR 1 MSSP\_VAL 2

## Example MSSP handshake

server - IAC WILL MSSP

client - IAC DO MSSP

server - IAC SB MSSP MSSP\_VAR "PLAYERS" MSSP\_VAL "52" MSSP VAR "UPTIME" MSSP VAL "1234567890" IAC SE

#### Variables and Values

For ease of parsing, variables and values cannot contain the MSSP\_VAL, MSSP\_VAR, IAC, or NUL byte. The value can be an empty string unless a numeric value is expected in which case the default value should be 0. If your Mud can't calculate one of the numeric values for the World variables you can use "-1" to indicate that the data is not available. If a list of responses is provided try to pick from the list, unless "Etc" is specified, which means it's open ended.

The same variable can be send more than once with different values, in which case the last reported value should be used as the default value. It is up to the crawler to decide how to exactly process multiple values. It's also possible to attach several values to a single variable by using MSSP\_VAL more than once, with the default value reported last. This would look as following:

IAC SB MSSP MSSP\_VAR "PORT" MSSP\_VAL "80" MSSP\_VAL "23" MSSP\_VAL "3000" MSSP\_VAR "CREATED" MSSP\_VAL "1996" IAC SE

The quote characters mean that the encased word is a string, the quotes themselves should not be send.

Variable names should exist of upper case letters and may contain spaces. As many programming

languages have difficulties with variable names which contain spaces clients and crawlers can substitute spaces with underscores as the recommended solution.

### Official MSSP Variables

### Required

NAME Name of the MUD.

PLAYERS Current number of logged in players.

UPTIME Unix time value of the startup time of the MUD.

#### Generic

CHARSET ASCII, BIG5, CP437, CP949, CP1251, EUC-KR, GB18030, ISO-8859-1, ISO-8859-2, K018-R, UTF-8.

Name of the charset in use. You can report multiple charsets using the array format,

the preferred / default charset last. See man charsets for reference.

CODEBASE Name of the codebase, eg Merc 2.1. You can report multiple codebases using the array

format, make sure to report the current codebase last.

CONTACT Email address for contacting the MUD.

CRAWL DELAY Preferred minimum number of hours between crawls. Send -1 to use the crawler's default.

CREATED Year the MUD was created.

DISCORD URL to a Discord server, this should include the https:// prefix.

HOSTNAME Current or new hostname.

ICON URL to a square image in bmp, png, jpg, or gif format. The icon should be equal or

larger than 64x64 pixels, with a filesize no

larger than 256KB.

IP Current or new IP address.

IPV6 Current or new IPv6 address.

LANGUAGE English name of the language used, eg German

or English

LOCATION English short name of the country where the

server is

located, using ISO 3166.

MINIMUM AGE Current minimum age requirement, omit if not applicable.

PORT Current or new port number. Can be used multiple times, most important port last.

REFERRAL A list of other MSSP enabled MUDs for the crawler to check using the host port

format and array notation. Adding referrals is important to make MSSP decentralized.

Make sure to separate the host and port with a space rather than : because IPv6

addresses contain colons.

SSL The port number for a SSL (Secure Socket Layer) encrypted connection.

WEBSITE URL to MUD website, this should include the http://or https://prefix.

# Categorization

FAMILY AberMUD, CoffeeMUD, DikuMUD, Evennia, LPMud, MajorMUD, MOO, Mordor, SocketMud,

TinyMUD, TinyMUCK, TinyMUSH, Custom.

Report Custom unless it's a well established family.

You can report multiple generic codebases using the array format, make sure to report the most distant codebase (aka the family) last.

 $\label{eq:check the MUD family tree} \mbox{ for naming and capitalization.}$ 

GENRE Adult, Fantasy, Historical, Horror, Modern, Mystery, None, Romance, Science Fiction, Spiritual

GAMEPLAY Adventure, Educational, Hack and Slash,

None, Player versus Player, Player versus Environment,

Questing, Roleplaying, Simulation, Social,

Strategy

STATUS Alpha, Closed Beta, Open Beta, Live

GAMESYSTEM D&D, d20 System, World of Darkness, Etc.

Use Real Time, Tick Based, Turn Based, or Custom if using a custom gamesystems. Use None if not available.

INTERMUD AberChat, I3, IMC2, MudNet, Etc.

Can be used multiple times if you support several protocols, most important protocol last.

Leave empty or omit if no Intermud protocol is supported.

SUBGENRE Alternate History, Anime, Cyberpunk, Detective, Discworld, Dragonlance, Christian Fiction, Classical Fantasy,

Crime, Dark Fantasy, Epic Fantasy, Erotic, Exploration, Forgotten Realms, Frankenstein, Gothic, High Fantasy,

Magical Realism, Medieval Fantasy, Multiverse, Paranormal, Post-Apocalyptic, Military Science Fiction,

Mythology, Pulp, Star Wars, Steampunk, Suspense, Time Travel, Weird Fiction, World War II, Urban Fantasy, Etc.

Use None if not applicable.

#### World

**AREAS** Current number of areas. HELPFILES Current number of help files. Current number of unique mobiles. MOBILES **OBJECTS** Current number of unique objects. **ROOMS** Current number of unique rooms, use 0 if roomless. **CLASSES** Number of player classes, use 0 if classless. **LEVELS** Number of player levels, use 0 if level-

less.

RACES Number of player races, use 0 if raceless.

SKILLS less.

Number of player skills, use 0 if skill-

#### Protocols

ANSI Supports ANSI colors ? 1 or 0

UTF-8 Supports UTF-8 ? 1 or 0

VT100 Supports VT100 interface ? 1 or 0
XTERM 256 COLORS Supports xterm 256 colors ? 1 or 0
XTERM TRUE COLORS Supports xterm 24 bit colors ? 1 or 0

#### Commercial

PAY TO PLAY
Pay to play ? 1 or 0
PAY FOR PERKS
Pay for perks ? 1 or 0

## Hiring

HIRING BUILDERS Game is hiring builders ? 1 or 0 HIRING CODERS Game is hiring coders ? 1 or 0

### Links

#### Contact

If you want a link added, or added MSSP to your Mud, you can email me at mudclient@gmail.com. I'll add muds that correctly report a substantial section of the official variables to the MSSP crawler.

## Debugging

You can use the **TinTin++ MUD client** to display MSSP output from a MUD server.

After launching the client you need to enter '#config telnet debug' and to create a connection enter '#session mssp <hostname> <port>'. To exit press ctrl-d.

For additional debug information you can save the **mssp debug script** to a text file in the directory from which you launched tintin, for example

'debug.tin'. Use '#read debug.tin' to load the script into tintin. If you are using WinTin++ you need to save the file in the /bin/ directory. The WinTin++ folder in the Windows start menu contains a link to the tintin directory.

#### Clients

TinTin++ Mud Client
Mudlet the MUD client

#### Codebases

BasedMUD - DikuMUD/ROM - As of version 1.5.

Evennia - As of version 0.8.

FluffOS - LpMUD - As of version 2.16.

Lowlands - DikuMUD/MrMud - As of version 1.4.

NekkidMUD - SocketMUD/NakedMud - As of version 1.5.

PennMUSH - As of version 1.8.4p1.

WickedMUD - SocketMUD - As of version 1.0

#### **Directories**

Grapevine

MSSP Mud Crawler

MudStats (defunct)

MudVerse

#### Telnet Servers

A list of MSSP enabled MUDs including debug information is available on the MSSP Mud Crawler page. MUDs need to be listed on TMC in order to be automatically added.

#### Discussion

MUDhalla Discord channel for TELNET related discussion

# Snippets

KaVir's MUD Protocol Handler - Handles ATCP, CHARSET, MSDP, MSSP, MSP, MXP links, NAWS, TTYPE, UTF-8 and 256 colors.

**PennMUSH** MSSP - MSSP Patch for the PennMUSH codebase.

Scandum's MUD Telopt Handler - Handles CHARSET, EOR, MCCP2, MCCP3, MSDP, MSDP over GMCP, MSSP, MTTS, NAWS, NEW-ENVIRON, TTYPE, and xterm 256 colors.