

**DiamondDogs**  
Operating System

# CS 450 MPX

## User's Manual

Version 1.0  
Sept 9 2021

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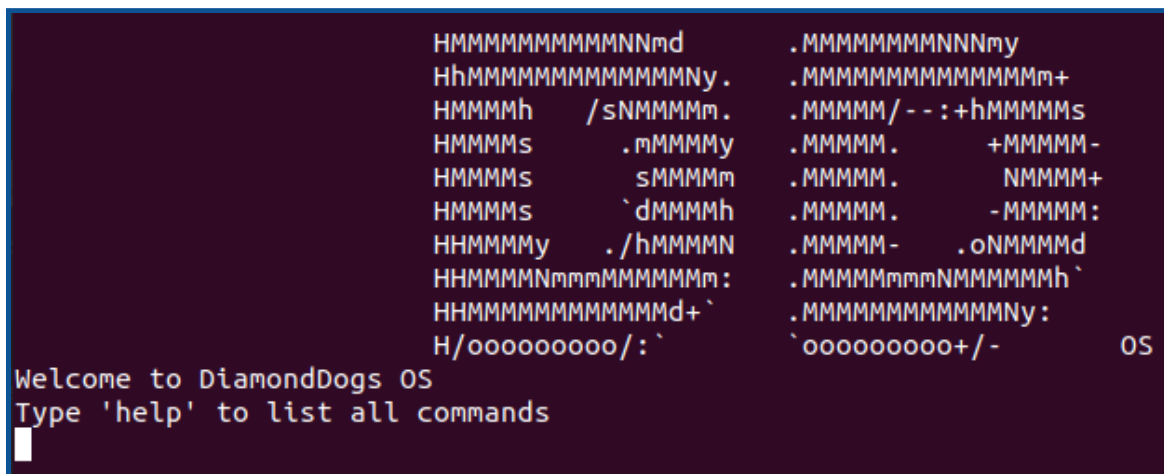
## I. MPX Project Overview:

The MPX Project is designed to implement various functions of an operating system. This module includes our first version of the command menu, allowing the user to interact with the OS through the terminal. The user will use the keyboard to send input and whenever a system response is generated, it will display on the terminal window.

## II. User Manual:

### i. Getting Started

The initial boot of our MPX system will provide the user with details including the system name and instructions for how to view the menu. This menu will list each command the user has access to as well as a short description of its functionality. At the close of the menu, there is an additional feature that will specify how the user should implement the individual commands.



```

HMMMMMMMMMMMMNNmd      .MMMMMMMMNNNNmy
HhMMMMMMMMMMMMMMMMNy.  .MMMMMMMMMMMMMMMMm+
HMMMMh   /sNMMMMm.     .MMMMM/ - - :+hMMMMMs
HMMMMs   .mMMMMy       .MMMMM.      +MMMMM-
HMMMMs   sMMMMm        .MMMMM.      NMMMM+
HMMMMs   `dMMMMh       .MMMMM.      -MMMMM:
HMMMMy   ./hMMMMN      .MMMMM-     .oNMMMMd
HHMMMMNmmmmMMMMMMm:    .MMMMmmmmNMMMMMMh`
HHMMMMMMMMMMMMMd+`     .MMMMMMMMMMMMMMNy:
H/ooooooooo/:`         `oooooooooo+/-      OS

Welcome to DiamondDogs OS
Type 'help' to list all commands
█
```

Figure 1: MPX DiamondDogs startup output.

```
Welcome to DiamondDogs OS
Type 'help' to list all commands
help

List of Commands:
'version' - To receive the OS current version.
'getdate' - To get the current date.
'gettime' - To get the current time.
'settime' - To set the current time.
'setdate' - To set the current date.
'shutdown' - To shutdown the OS.
'clear' - To clear the terminal window.

Please use <help 'commandname'> to view commands functionality.

```

*Figure 2: User input highlighted with system response below.*

## ii. Commands

There are 8 features included in the Version 1 menu that are directly accessible to the user. The options vary from simple data output to commands that directly update the OS based on user input. This section explains each command in more detail and provides an example of how to run each option.

### 1. Get Date:

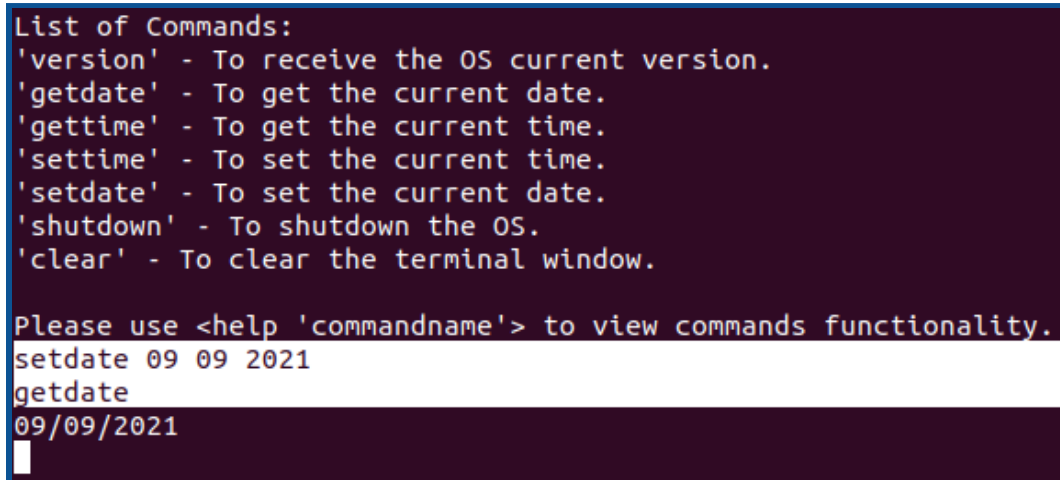
The get date command will output the date in MM/DD/YYYY format.

**\$ getdate**

### 2. Set Date:

The set date command will allow the user to specify the date, immediately updating the system. Input format should be HH MM SS as follows:

**\$ setdate 09 09 2021**

A screenshot of a terminal window with a dark purple background and light blue text. The text lists several commands and their functions: 'version' (OS current version), 'getdate' (current date), 'gettime' (current time), 'settime' (set current time), 'setdate' (set current date), 'shutdown' (shutdown OS), and 'clear' (clear terminal window). Below this list is a prompt: 'Please use <help 'commandname'> to view commands functionality.' The user has entered 'setdate 09 09 2021' and 'getdate'. The output of 'getdate' is '09/09/2021'.

```
List of Commands:
'version' - To receive the OS current version.
'getdate' - To get the current date.
'gettime' - To get the current time.
'settime' - To set the current time.
'setdate' - To set the current date.
'shutdown' - To shutdown the OS.
'clear' - To clear the terminal window.

Please use <help 'commandname'> to view commands functionality.
setdate 09 09 2021
getdate
09/09/2021
```

Figure 3: User input, highlighted, showing the setdate & getdate commands.

### 3. Set Time:

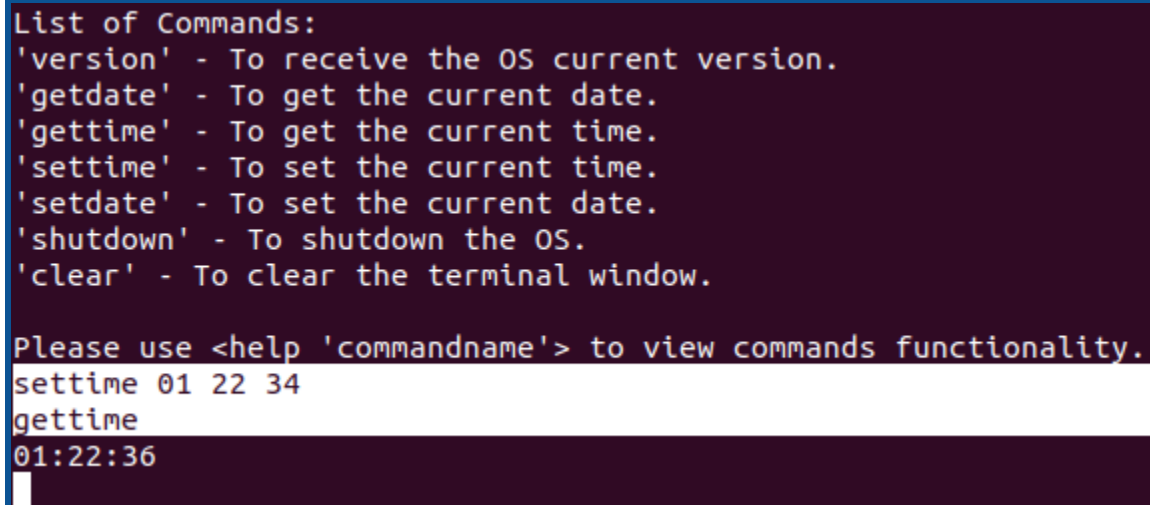
The set time command will allow the user to enter in the time, automatically updating the OS.

**\$ settime 01 22 35**

#### 4. Get Time:

The view time command outputs the current time in HH:MM:SS.

**\$ `gettime`**



```
List of Commands:
'version' - To receive the OS current version.
'getdate' - To get the current date.
'gettime' - To get the current time.
'settime' - To set the current time.
'setdate' - To set the current date.
'shutdown' - To shutdown the OS.
'clear' - To clear the terminal window.

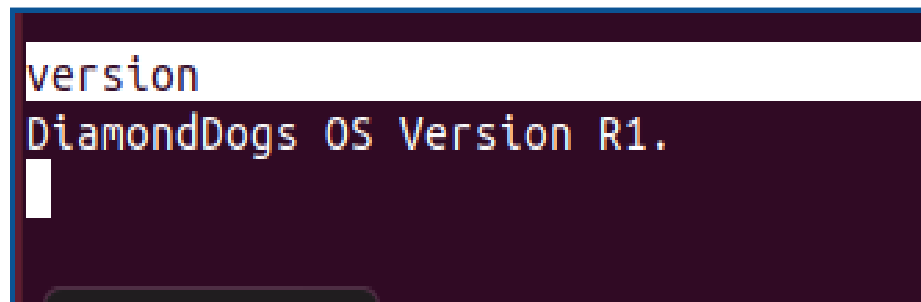
Please use <help 'commandname'> to view commands functionality.
settime 01 22 34
gettime
01:22:36
█
```

*Figure 4: The settime & gettime command syntax with execution response.*

#### 5. Version:

The version command will print out the operating system's current MPX version.

**\$ `version`**



```
version
DiamondDogs OS Version R1.
█
```

*Figure 5: Version command execution.*

## 6. Help:

The help command provides a more in depth explanation corresponding to each menu option.

**\$ help setdate**

```
List of Commands:
'version' - To receive the OS current version.
'getdate' - To get the current date.
'gettime' - To get the current time.
'settime' - To set the current time.
'setdate' - To set the current date.
'shutdown' - To shutdown the OS.
'clear' - To clear the terminal window.
Please use <help 'commandname'> to view commands functionality.
help setdate
Type 'setdate MM DD YYYY' to set the date to whatever date is current.
█
```

Figure 6: Help command execution.

## 7. Clear:

The clear command will clear the terminal window of all previous responses and commands without exiting the module. Cursor begins at top left of the new window.

**\$ clear**

```

HMMMMMMMMMMMMNNnd      .MMMMMMMMNNNNny
HhMMMMMMMMMMMMMMMMNy.  .MMMMMMMMMMMMMMMMm+
HMMMMh   /sNMMMMm.     .MMMMM/- -:hMMMMMs
HMMMMs   .mMMMMy       .MMMMM.      +MMMMM-
HMMMMs   sMMMMm        .MMMMM.      NMMMM+
HMMMMs   `dMMMMh       .MMMMM.      -MMMMM:
HHMMMMy   ./hMMMMN     .MMMMM-     .oNMMMMd
HHMMMMNNmmmmMMMMMMMM:  .MMMMMMmmmmNMMMMMMh`
HHMMMMMMMMMMMMMMMd+`   .MMMMMMMMMMMMMMNy:
H/oooooooooo/:`       `oooooooooo+/-      OS

Welcome to DiamondDogs OS
Type 'help' to list all commands
clear
```

Figure 7: Operating system **prior** to executing the clear command.



Figure 8: Operating system *after* executing the clear command.

#### 8. Shutdown:

The shutdown command will first prompt the user to confirm they would like to exit the module and once the user confirms, the system proceeds to shut down. Any other response will exit the shutdown execution.

**\$ shutdown**

```
List of Commands:
'version' - To receive the OS current version.
'getdate' - To get the current date.
'gettime' - To get the current time.
'settime' - To set the current time.
'setdate' - To set the current date.
'shutdown' - To shutdown the OS.
Please use <help 'commandname'> to view commands functionality.
shutdown
Are you sure you want to shutdown your system?
Type '1' to shutdown or Type '2' to continue working
█
```

Figure 9: shutdown sequence ending with the prompt for user confirmation.



\$ 1

```
Welcome to DiamondDogs OS
Type 'help' to list all commands
shutdown
Are you sure you want to shutdown your system?
Type '1' to shutdown or Type '2' to continue working
1
klogv: Starting system shutdown procedure...

klogv: Shutdown complete.
█
```

Figure 10: shutdown command with user confirmation.

```
shutdown
Are you sure you want to shutdown your system?
Type '1' to shutdown or Type '2' to continue working
no
Invalid command
1
Invalid command
█
```

Figure 11: shutdown sequence terminating with invalid response.