

comX – Bukkit Administration System

What is comX?

In short comX is a socket interface to allow safe communication with a Bukkit Server.

The idea for comX came from the inability for server operators to protect administrative accounts on offline servers. You can use various authentication packages to protect your server such as xAuth or IPLock, however these are often prone to various 0-day exploits. comX uses the least privileges model of security. Your administrative team no longer needs to have in game permissions or commands available to their accounts to be able to do common tasks such as ban, kick, lookup player information, etc. This can all be done by sending a custom string to a specified port on your Bukkit server, for example: `debug#password#kick#playername`.

Prerequisites for comX

For a basic installation of comX all you need is the comX jar file which goes into your plugins folder. If you wish to use some of the advanced features of comX such as the integrated database system there is a bit more to it. The various prerequisites for optional features in comX are listed below.

- comX Database
 - comXDB plugin
 - SimpleMySQL Java library (place jar file in “/plugins/lib” folder of your Bukkit installation)
 - MySQL installation with an account with sufficient permissions to create tables in a user specified database.
- Op security system
 - MCMYadmin

Installation

Installation of comX is simple close to other Bukkit plugins.

1. Put comX jar file into your Bukkit plugin folder and start Bukkit.
2. After Bukkit has initialized comX, close Bukkit back down.
3. Navigate to the plugins/comX folder and create an empty file named keys.key
4. Open keys.key with a text editor and add a line like this: `username#password`. (this will be your authentication key for sending commands to comX.)
5. Open config.yml with a text editor and configure it as follows:
dbHost: enter the ip address of your MySQL server.*

*dbUser: enter the username that has access to a database with create table permissions.**
*dbPass: enter the corresponding password that goes with dbUser.**
*dbName: enter the name of the MySQL database that you will create your comX tables in.**
*dbTable: enter the name of the comX table to create in dbName.**
*OpAccount: enter the name of your minecraft super user account.***
*OpGroup: enter the name of the Group to OP users to.***
comXPort: enter the port that comX will listen for requests on.

**Optional configuration for comXDB plugin.*

***Optional configuration for MCMYAdmin plugin.*

6. Start Bukkit back up.

Best Practices

Please adhere to these practices when setting up and using comX.

1. Do not use a root/super user account for your MySQL account.
2. Your OpAccount should be something obscure and should be secured with a strong password for example: asd67sdft60 with a password of s3jde783hf.
3. OpAccount should have * permissions.
4. Never leave accounts on your server with elevated permissions except for the configured OpAccount.

API

Here is a list of strings that comX will accept from a socket session.

debug#key#ping

Returns "Pong!"

debug#key#kick#user#reason

kicks user and prints and logs reason

debug#key#ban#user#reason

bans user and prints and logs reason

debug#key#msg#user#themessage

sends message to user and logs

debug#key#banip#ipaddress#reason

bans ip logs reason

debug#key#pardon#user#reason

pardons user logs reason

debug#key#pardonip#ipaddress#reason

pardons ip logs reason

debug#key#cloak#oldname#newname

changes player username to new username (displayname only) and logs

debug#key#tpcoord#user#world#x-coord#y-coord#z-coord

teleports user to world x,y,z and logs

debug#key#getUsers

returns list of online users with #endlist at the end

debug#key#getIP#user

returns user IP address

debug#key#opMode#user

sends command to MCMAdmin to place user in opGroup (see configuration section)

debug#key#deopMode#user

sends command to MCMAdmin to remove user from opGroup (see configuration section)

debug#key#queryUserDB#searchstring

sends query to comXDB if configured and returns results.

quit

Terminates the socket session.