# Fulcrum Mission System (FuMS) Users Guide

## What is the FuMS

### Requirements:

1. **You must be able to set up an Exile server.** I suggest you start with a vanilla mission and build up from there.
2. **You must be able to set up and run a headless client.** If you do not know what a headless client is, please Google it. If you are buying a server from a provider, you may not be able to run this system, or you may have to pay extra. I BELIEVE you can set up a headless client on a remote PC, say a second PC running at your house, but I have not tried that.

## History

I am the current caretaker of the system and have evolved it to its current form, version 0.5. I’ve included the history I could find but this system dates back to at least Arma 2. I found it broken and forgotten, and after a year have completely rebuilt it, added a ton of features, and polished off a lot of the work of the guys before me had started. If I am still on the scene when Arma 4 finally launches (I am currently in lockdown due to the Chinese virus April 1, 2020) I will be rushing to make this work. If not, I hope someone does. This is a very elegant system that I was fortunate enough to be able to work on and add to. It’s fun, it’s smart, and it’s HIGHLY configurable. I hope someday this thing really gets the glory it deserves.

* Steve Rodriguez (TheOneWhoKnocks)

## Features

**Common Asset Management System (CAMS)** – I have written the system used to control and tweak the mission content used here. Uses global variables to load your custom content and integrate into all missions. For example, the global variable *CAMS\_Packs\_ALL* is populated by the CART system with all of the content you run on your server (CUP, RHS, Unsung, etc) and then is used in the mission system to pick a backpack for AI. This allows you to add content without modifying the missions and will work with all of my other systems. (DAPE, DyCE)

**MissionFX System** – Another new module that can scan a mission that you create looking for certain key items. If found, it will replace that item with triggers for the various scripts. It is mainly used to launch ALIAS anomalies which are just proximity triggers for scripts. As a mission scripting tool, it lets you run any custom script as part of the mission system, so any future content can easily be added. See the MissionFX mission theme for a running example of the system.

## Installation – Headless Client

NOTE: I recommend that you install this in a clean environment to try it out at first. Installing it into an existing server can be done, but you really need to know how your server works to be successful.

**Configuring the Headless Client: A HEADLESS CLIENT IS REQUIRED FOR FuMS.** *You may see some server-side only code, I am working on it. It doesn’t work properly in this version.*

These instructions are for **installing a headless client on the same local PC as the server**. I assume if you are running a complex setup like a headless client on a second machine, you know what you are doing. You’ll need to make some adjustments for your specific setup.

I am not technical support for Bohemia so if you can’t figure out how to make the headless client work, this system will not work. If you cannot complete this first part, stop. This a complex system.

1. Review this video. (Hopefully it stays up) – <https://www.youtube.com/watch?v=p9h5fOR87x4&t=232s>. This is really the best way to do this, he does a great job of walking you through it. The following steps are how I have configured my system, but I learned from that video.
2. Locate the arma3server.exe file in the main server folder and note the directory (ex. C:\Arma\Server\)
3. Place a copy of your @Exile directory (Client folder) into the main server folder. This is from step 2. The Exile client can be copied from your client or downloaded from the main site
4. Create a batch file to launch your server. You should have one already, but this will allow you to launch both the client and the server, and it will restart your server for you if you have it on a scheduled shutdown. NOTE: I suggest you restart the server every 4 hours as this is a memory hog of a system)

Example batch file to launch HC and server (Copy and paste the code below to see it correctly since there is one long command in there, see the REM statements)

@echo off

color 0a

title Server Monitor

start "HC\_HAL" arma3server\_x64 -client 127.0.0.1 -mod=@Exile -profiles="C:\DEV\Logs\HC\_HAL"

:Serverstart

echo Launching Server

c:

cd "C:\DEV\ExileServer"

echo Server Monitor... Active !

REM The next line is one long command, not three different lines

start "Arma3" /min /wait arma3server.exe –mod=@Exile -servermod=@ExileServer;@FuMS -config=C:\Arma\Server\@ExileServer\config.cfg -port=2302 -cfg=C:\Arma\Server\@ExileServer\basic.cfg -filepatching –autoinit

REM This is the end of the command.

ping 127.0.0.1 -n 15 >NUL

echo Server Shutdown ... Restarting!

ping 127.0.0.1 -n 5 >NUL

cls

goto Serverstart

**Modifying the mission.sqm file**

See \Docs\Install Examples\mission.sqm to see a working file for Altis properly configured for a headless client.

1. Modify your mpmissions\Exile.Altis.pbo mission.sqm file
   1. Locate this section

class Groups

{

items = 1;

class Item 0

{

1. Change items = 1; to items = 2;
2. Add the following AFTER the closing }; for the 'class Item 0' definition

class Item1

{

side="LOGIC";

class Vehicles

{

items=1;

class Item0

{

position[]={10720.502,12.714643,11356.243};

id=100;

side="LOGIC";

vehicle="HeadlessClient\_F";

player="PLAY CDG";

init="this enableSimulation false; this allowDamage false";

leader=1;

skill=0.60000002;

text="HC\_HAL";

};

};

};

1. Save the mission.sqm file

**Modifying your server's config.cfg by adding the following lines:**

1. Add the following lines after the [motd] line (Around line 31):

localClient[] = {127.0.0.1};

headlessClients[] = {"127.0.0.1"};

battleyeLicense=1;

**Adding client side content**

I have added support for ALIAS anomalies that are pretty cool. In order to use the MissionFX system and accompanying mission, you must follow this step

1. Copy the contents of the directory ***exile.mission*** to your mission file (Example Exile.Altis).
2. Add the lines from the file **Examples\description.txt** to the end of your own **description.txt**.
   1. CHECK YOUR FILE BEFORE YOU DO THIS AND SEE IF YOU ALREADY HAVE A

**class CfgSounds** SECTION. If you do, you should merge the two instead

* 1. THE SAME IS TRUE OF THE **class RscTitles** section.If you have one, merge the content from the example files

1. Add the lines from the file **Examples\initServer.sqf** to the end of your own **initServer.sqf**.
2. Do not repack your mission PBO file just yet. You will be adding more in the next step, but that completes the headless client install.

## Your server is now ready to accept an HC!

## Installation - FuMS

a. Copy the HC folder in the distribution to your mpmissions/Exile.Altis.pbo

b. Edit the 'initPlayerLocal.sqf' in your mpmissions/Exile.Altis.pbo

add []execVM "HC\init.sqf";

Note: ENSURE it is NOT within any conditional (if/then) statements.

c. Copy the @FuMS folder to your base server directory (C:\Arma\Server)

Do this on your SERVER. No need to put this folder on your HC!

d. Modify your server start parameters to include -servermods=@FuMS;

e. Don't forget to repack your mpmissions pbo!

3) Start your HC, feel free to leave it running.

4) Start your Server. You should see the HC connect as soon as the server unlocks.

Default FuMS distribution has some theme sets starting with no players. All others are defaulted to start when at least one player is logged in.

5) Go read the \Docs\ Folder to learn how to customize the themes and missions to meet your server's needs!

6) Still can't figure it out. Send me a PM, or post on the thread!

## Configuration

CAMS System

Missions

AI

Custom configurations

Example of batch file to launch server and HC with 8 processors and the CUP content

@echo off

color 0a

title Server Monitor

start /affinity 3C "HC\_HAL" arma3server\_x64 -client 127.0.0.1 -mod=@CBA\_A3;@Exile;@CUP\_Units;@CUP\_Vehicles;@CUP\_Weapons -profiles="C:\DEV\Logs\HC\_HAL"

REM start /affinity 3C "HC\_HAL" arma3server\_x64 -client 127.0.0.1 -mod=@CBA\_A3;@Exile;@CUP\_Units;@CUP\_Vehicles;@CUP\_Weapons -profiles="C:\DEV\Logs\HC\_HAL"

rem start /affinity 3C "HC\_HAL" arma3server\_x64 -client 127.0.0.1 -mod=@Exile -profiles="C:\DEV\Logs\HC\_HAL"

:Serverstart

echo Launching Server

c:

cd "C:\DEV\ExileServer"

echo Server Monitor... Active !

start /affinity C0 "Arma3" /min /wait arma3server.exe -mod=@CBA\_A3;@Exile;@CUP\_Units;@CUP\_Vehicles;@CUP\_Weapons -servermod=@CBA\_A3;@ExileServer;@infiSTAR\_Exile;@FuMSDEV;@CUP\_Units;@CUP\_Vehicles;@CUP\_Weapons;@slz -config=C:\DEV\ExileServer\@ExileServer\config.cfg -port=2302 -cfg=C:\DEV\ExileServer\@ExileServer\basic.cfg -filepatching -autoinit

REM start /affinity C0 "Arma3" /min /wait arma3server.exe -mod=@CBA\_A3;@Exile -servermod=@CBA\_A3;@ExileServer;@infiSTAR\_Exile;@FuMSDEV;@CUP\_Units;@CUP\_Vehicles;@CUP\_Weapons;@slz -config=C:\DEV\ExileServer\@ExileServer\config.cfg -port=2302 -cfg=C:\DEV\ExileServer\@ExileServer\basic.cfg -filepatching -autoinit

rem start /affinity C0 "Arma3" /min /wait arma3server.exe -mod=@Exile -servermod=@ExileServer;@infiSTAR\_Exile;@FuMSDEV;@slz -config=C:\DEV\ExileServer\@ExileServer\config.cfg -port=2302 -cfg=C:\DEV\ExileServer\@ExileServer\basic.cfg -filepatching -autoinit

ping 127.0.0.1 -n 15 >NUL

echo Server Shutdown ... Restarting!

ping 127.0.0.1 -n 5 >NUL

cls

goto Serverstart