

Prepare Yourself for the Adventurers of Akalabeth

Adventurers of Akalabeth is a single or multi-player adventure game that was based on the work of Djeryv for over a decade. This is an English language only game. The world consists of elements of ideas, graphics, maps, and animations from various sources. The overall scripting is based on RunUO, but heavily modified to create a new and unique experience. Although built off the Age of Shadows era of Garriott's online game, the mechanics have been altered to provide new ways of doing things. Some skills that were previously useless now have a purpose. Some unused spells were brought back to life or made to work in a single-player environment. Character class archetypes have been enhanced, providing new ways to play and enjoy the game. The landscape has been changed to provide players a huge area to explore.

This version is an altered version of Djeryv's original game. It is branded as the "Adventurers of Akalabeth" to pay homage to Garriott's first game. It takes place in an alternate universe to Garriott's games, shortly after the events of his third game called Exodus. You can create a character that tries to make their way through many lands. You will have to find a way to feed yourself, and acquire equipment to explore your way around. Everything you need to know can be learned within the virtual environment. Knowledge can be acquired by talking to the citizens of the land, or you may find a book or scroll with clues and other information. There are also some commands you can use to bring up additional information.

The game is designed for characters to adventure alone. You can even craft items from your home, and have them purchased by the Merchants Guild if you choose to make your living that way. Your default health, mana, and stamina are valued equally to the associated attribute. So if you have a strength of 50, your health will be 50. You can change this behavior in the settings file if you wish. You can also obtain the title of grandmaster in 10 different skills (1,000 skill points), which should allow you to create a character archetype of your choice (like a wizard, fighter, thief, assassin, etc.). There are other play options that have different skill levels, benefits, and detriments as well.

This is built around older MUD methodologies and rules based on early 1970's Dungeons & Dragons games. There is also an abundance of randomness inspired by Rogue-like games of the 1970's. The spirit of this game is simply an experience of exploration and discovery, with the open sandbox feel of an enormous virtual world. The realm consists of 9 different lands, about 20 cities and villages, and over 100 dungeons to explore. Settlements sell their own goods and may change from time to time, but the merchants can be helpful in repairing or identifying items. Death brings with it penalties upon resurrection, either in the form of negative character effects or the parting of gold as tribute to the gods that bring your life back.

Dungeons are filled with many hideous monsters, but they contain much treasure. They can be filled with many hidden traps with varying effects. Some may harm you with fire, lightning, or poison. Others may curse one of your items or simply make it vanish. You could trip over a well-placed wire, breaking your potion bottles or arrows. You could even be hit with a magical force that turns all of your coins into lead. Traps can perhaps be avoided by those skilled in such things, have magic that protects them from traps, or even have luck on their side altogether. Some even carry a ten-foot pole to set off traps safely.

Like the games of yesteryear, this will have you slaying rabbits and deer as you work your combat skills to brave further into the wilderness. The further you can explore, and the more dangerous the area, the better the rewards. This is about finding treasure of a monetary and magical nature to aid you in your chosen path. It is also about resource management, as you need a supply of food and drink if you plan to be gone for long periods of time. You will also be faced with dilemmas on how you

will carry all of your found riches from the dungeons. Treasure is just not found in gold coins. You may find copper and silver coins, which can fill your pouches quickly. You may find exotic furs, rare kegs of ale, unusual carpets, strange books, or finely crafted statues...all of which can either decorate a home or be given to people in town in exchange for gold which can be aided if you can identify the item.

There are random quests in place that will have you traveling far and wide. Along with that, there is also a large quest inspired by the old computer role-playing game "The Bard's Tale". Garriott's lore has been incorporated into the game, but morphed to fit within this potentially multiplayer environment. You can take on quests to defeat the Shadow Lords and create a gem of immortality. You can also defeat the Banes and bring the Serpents of Chaos and Order back into balance. You can even work toward becoming the Titan of Ether. There are also many characters from the original game series that may give you quests, in which the rewards will be custom artifacts.

Player versus player mode is enabled on for the game in case you decide to play this in a multi-player environment. This will add danger as your friend may cast fire field to stop some monsters and you accidentally walk into it as well. You may also decide to kill each other's characters. Along with this, there are areas called "public areas". These are small areas that have no player versus player mode and they are centralized to the world. So, as an example, if you go into the bank and do your business you will go to the same bank that every other player character goes into (no matter the town they are in). So if you play this in a multi-player environment, you may see your friends from time to time in these areas. When you leave the bank, you will be back in the town you entered from. The other public areas are the Wizards Guild, the Thieves Guild, the Black Magic Guild, the Inn, the Tavern, and a few others. Because the Adventurers of Akalabeth is widely expansive, these areas simply provide a way to run into other players.

Some dungeons have difficulty levels, and you will be notified on how difficult a dungeon is. So a skeletal knight in an easy dungeon will be much harder within a deadly dungeon. Treasure is scaled dependent on the dungeon difficulty. The dungeons in Sosaria are of normal difficulty, as this is the main world most characters begin.

There are many other different elements that you will have to discover on your own. If you enjoyed tales of Conan or Fafhrd and the Gray Mouser. If you played older D&D games where characters were in constant danger. If you like older computer role-playing games and want to play something where you simply exist in a fantasy world, then go ahead and give this a try. It was designed to play many different types of character classes, instead of the common ones most people play. You can be a very effective adventurer being a necromancer, alchemist, bard, thief, or assassin. You will get the most out of this game if you try different professions and see how you can navigate the dangers with them. There are a ton of things to do so you just need to pick a path and go as the only goal of the game is what you set for yourself.

Server Setup

Adventurers of Akalabeth was created using RunUO emulation technology, and thus needs a server to play whether single or multi-player. This requires a Windows operating system with the .NET Framework installed. To begin setting up the server, download the server package. The server is in a folder labeled "World". Extract the folder using a zip program and place it wherever you want. Once that is done, you should have a "World" folder on your hard drive with the contents shown in Figure A. For advanced features, see <u>Server Administration</u> on page 8.

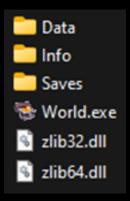


Figure A.

You must first review and edit your game settings. This is located in the "Settings.cs" file, which is in the "Info\Scripts" directory, Then you can run the World.exe application and wait for the game server to start. If everything is

successful, you will have a console window similar to Figure B. If you are running this for the first time, your Windows Security Alert may open asking you if you want to let the server communicate with Private or Public networks. If you are playing this in single-player mode, press Allow Access or Cancel. If you are going to play this in multi-player mode, I suggest checking both Private and Public networks and then pressing Allow Access.

```
System Initializing...
Running on .NET Framework Version 4.0.30319
Optimizing for 8 64-bit processors
Processing. Please wait...
Game: Loading...

Network:
Detecting public IP address...done
Listening: 127.0.0.1:2593

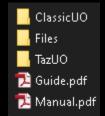
You may now play the Adventurers of Akalabeth!
```

Figure B.

If everything has occurred as described, you successfully setup your Adventurers of Akalabeth game server. You can close the server whenever you are done playing by clicking the top-right "X" of the console window. If enabled, you can also type help <ENTER> within the console window for a list of command. WARNING: If your cursor is selecting a part of the console window (white square somewhere within in), your game server will freeze until you press <ENTER> within the console window to clear the cursor. We can now focus on the client you need to play the game, so leave your server running for now.

Game Setup

There are two clients (ClassicUO and TazUO), that are also included in the download package within the "Game" folder, and it includes a copy of the documentation for your players to reference. This is the folder you and your players will need to play the game. They are both modern clients that have different features. Extract the folder using 7zip and you will see a "Game" folder within it that you can place where you want. The main



files and folders are shown on the right. The files within the ClassicUO or TazUO folders, have similar files shown in Figure C.

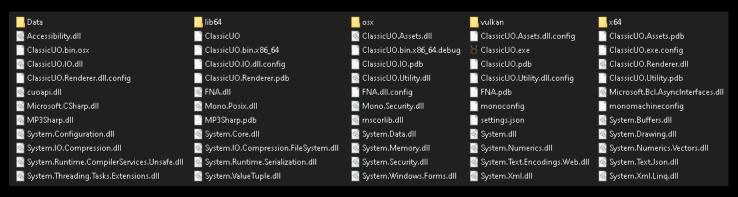


Figure C.

Once extracted, go into the directory of your chosen client, and locate the "settings.json" file. Open this with Notepad and pay attention to a particular line, the IP address as shown below:

```
"ip": "127.0.0.1",
```

Change this to your server's IP address, or leave it as shown if your server is running on the same computer as your client. You can even put a domain name in here if you have a public server setup. Save the file and then you can run the ClassicUO.exe application.

When you launch the client, you should be presented with a login screen as shown in Figure D. If your chosen game client has launched to this point successfully, then we will move onto the actual login for the first time.



Figure D.

Administrator Login

You need to at least login as the administrator once before you can begin playing. To do that, enter the information shown below and press ENTER.

Account Name: Admin

Password: password

If your client is truly communicating with your server, you will get another window displaying your server as shown in Figure E. You can select the blue portal to continue.



Figure E.

The next window should show you the administrator named Dungeon Master, as shown in Figure F. Double click the name "Dungeon Master" and you should then enter the world.



Figure F.

When you enter the world for the first time, you will appear on the bridge in the City of Britain, as shown in Figure G.



Figure G.

You should then consider changing your password. To change your password, type the "[password" command. You can now log out of the game and prepare yourself for adventure.

Player Login

You never want to play the game using the Admin account, because the world just doesn't care about the characters within that account. Logging in as a player will expose you to the dangers and treasure of the Adventurers of Akalabeth. This game will automatically create accounts for you, so all you have to do is choose your own account name and password. Enter that information into the login window as shown in Figure D and press ENTER. Then you will be presented with the screen shown in Figure E, where you can select the blue portal. Since you have no characters, you will be asked to create one as shown in Figure H. Go ahead and make your first adventurer. TIP: When you first enter the world, use the "Help" button located on your character's paper doll (ALT-P to open the paper doll). When you first enter the world, most will normally begin with the following default items: About 100 gold, a dagger, clothing, water, food, and a light source.

The LIBRARY section of the HELP screen discusses the BASICS of the standard client interface, so if you have played games like this before, you will learn nothing new from that. This game assumes player familiarity with Garriott's online game so how to use the interface and play the game is beyond the scope of this manual.



Figure H.

After you create your adventurer, you can enter the world and begin exploring. That is all you need to know to play the Adventurers of Akalabeth. You can continue onward in this manual if you want some additional information. *NOTE:* You begin in a dark forest by a gypsy tent, so look around a bit and investigate the different starting options.

Music Options

There are 2 different folders in the "Game\Files\music" directory. One is classic gaming music in the "Digital" folder. There is also a folder called "DigitalModern", which has more modern music for the game. If you want to switch between these two, you will need to close your client and then rename "Digital" to "DigitalClassic" and then rename one of the other folder to "Digital". When you start the client again, you will have different music. To switch back, close your client and then rename "Digital" back to what it was and then rename the other folder to "Digital". Then start the client again and you will have the other music.

Server Administration

The client included has been heavily customized so don't use any other client files. This excludes files you get from the client developer, as you can get those updates from them.

There are some processes that automatically executed bythe game. One of them is a command that builds the world, and it runs whenever you change any of the scripts and restart the server. You can run this command at any time, if you feel you want to force the world to rebuild. This command will leave player characters, their houses, boats, and belongings all intact. Login as the Admin account and run this command: [buildworld. It will take a few moments to complete.

The information contained from this point forward, assumes some prior knowledge to this game's emulation. It is not meant to be a technical tutorial.

The "Saves" folder contains the current game state. **NEVER** delete the "Saves" folder as this is your game with your characters, items, and world as you left it. If you feel, for any reason, that the world needs to be straightened up you can login as the Admin and run the "[buildworld" command as shown in Figure G. This rebuilds the world without affecting your characters or their belongings. You can, however, delete this folder if you are doing a restore (see Backups & Restores on page 9).

The "**Data**" folder contains files that allow the game to function properly. This folder and contents should not be modified. Any such actions can cause issues or create problems if updates are applied.

The "Backups" folder will be created by the game when the first backup of the world occurs. This folder is described later.

There is a folder named "**Info**" where custom files are stored. Within this directory, you have the opportunity to customize some game elements to your tastes. Unless an update specifically instructs you to update/change files within this folder, it is specific to your game and usually never overwritten during updates. Each section of the contents are described below:

News.txt – This file contains the information shown in the Message of the Day (MOTD). Edit this file as you see fit.

Rules.txt – This file has your particular server rules for other players to be aware of. The rules are displayed on a bulletin board in areas like taverns.

Articles – This folder contains up to 10 entries you can post (read 0.txt first), where these entries can be as long as you need them to be and people can read them on bulletin boards in places like taverns. This is really only important if you run a multi-player game and want to communicate things to your players.

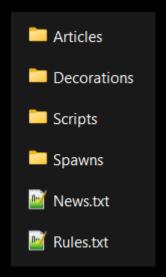


Figure I.

Decorations - This folder contains some CFG files you can add your own decorations to. Open these files to learn how to add your own custom decorations.

Scripts – This folder allows for any custom drag-and-drop scripts you wish to add to your game. Drag-and-drop refers to scripts that require no script editing within the "World/Data" folder. There are 2 scripts located in here, and they must remain:

1. Merchant.cs – This is the script if you enable the custom merchant in your game. Open it with a text editor where it explains the basics of setting up the merchant.

2. Settings.cs – This has all of the options you can customize for your game. Open this file in a text editor and go through it to see what you want changed. The default settings are considered to be the more difficult settings for the game, so review each one and acknowledge you review at the bottom. You can then restart the server for your changes to take effect. If you find a setting not to your liking later on, you can always edit this file again.

Spawns – This folder contains 2 files that must remain here. The first

- 1. Merchant.map If you enable the custom merchant in your game, this file will be used to place the merchant wagons in your world. Do not edit it in any way.
- 2. Spawns.map This file is yours to edit and add any custom spawns you want. They can be items or creatures. There are brief instructions in the file to explain to you how to use it.

One of the design goals was to include as much information in the game as possible, without the need to leave the game client and browse the Internet for information. This information, however, requires exploration to acquire. Some of this is not contained in a detailed help file to freely browse. If you want to know about the world, you need to seek it out. Find a sage to buy some useful books or talk to merchants. Players can learn everything within the game and these "Articles" and "Message of the Day" options allow you to keep players informed without the need of a website.

There is a task manager system that runs tasks every 60, 150, 200, and 250 minutes...as well as once per day. Some of these tasks also run at server start (by default, but it can be changed in the Settings.cs script within Info/Scripts), so when the server comes up, don't be alarmed if you cannot log into it instantly. It is just running a few routines. These things are in place to make a self-sufficient server that should require no administrative intervention.

There is a help system in place for many options and information. There is also a mechanism to save the server when a character logs out (by default, but it can be changed in the Settings.cs script within Info/Scripts)...but this is mostly for those that play this in a single player environment.

Backups & Restores

Whenever the Adventurers of Akalabeth saves itself, it will create a backup set of information in the "World/Backups" folder. The system keeps the 6 latest backups. If you ever run into an unrecoverable game system disaster, you can go into this "Backups" folder to obtain one of your prior versions. To do this, start by deleting the "Saves" folders in the "World" directory. Then go into your "Backups" folder and grab the particular version you want within the "Automatic" directory. This is usually the one called "Most Recent...". Copy this directory into the "World" folder. Then go into your "World" folder and rename the copied folder to "Saves". You can then start Adventurers of Akalabeth and the world will be from that point in time. You do not need to only grab the most recent backup, but instead can choose one of the other backups you captured if you want to go back further.

Compile Source

If you decide to modify the source code (located in the "Data/System/Source" directory, you will have to recompile to make a new World.exe. If you are using Windows, launch PowerShell and change to the "Data/System" directory. Then you can run the following command:

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\csc /optimize /unsafe /t:exe
/out:World.exe /win32icon:Source\icon.ico /d:NEWTIMERS /d:NEWPARENT /recurse:Source*.cs

If you want to compile the server to run on Linux, make sure you have Mono installed first. Also make sure you have zlib installed. Below is an example Linux command, but it is based on the version you use:

```
# apt install zlib1g-dev
```

The zlib package is needed for the server, to help show gumps to the client properly.

Then you can navigate to the Data/System folder and run this command:

```
# mcs -optimize+ -unsafe -t:exe -out:WorldLinux.exe -win32icon:Source/icon.ico
-nowarn:219,414 -d:NEWTIMERS -d:NEWPARENT -d:MONO -recurse:Source/*.cs
```

To launch the server, simply run the executable in a shell:

```
# mono World.exe
```

Multi-Player

This manual cannot go into great detail about the Adventurers of Akalabeth in a multi-player environment. This is mostly due to one's home network design and router manufacturer. One would need a basic understanding of IP addresses and firewalls to successfully setup a public server.

First of all, the server and client communicate using port 2593. So whatever Windows computer you have the server on, needs to allow TCP port 2593 traffic to communicate with it. We will use Figure I to go into an example of setting up a multi-player environment.

If your players are within your home and connected to the home's network, they would configure their "settings.json" file to use the IP address shown in yellow. So in this example, they would use 192.168.141.1 instead of the previously discussed 127.0.0.1 address.

Making the Adventurers of Akalabeth server visible over the Internet requires more configuration. Your home's router needs to have some traffic rules established to allow the Internet to communication with port 2593 of your Windows computer hosting the server.

Any client, connecting to your server from over the Internet, would use the address shown in red. So in this example, they would use 66.254.150.248 instead of the previously discussed 127.0.0.1 address. If you have acquired a domain name that points to 66.254.150.248, players can use that in their "settings.json" file instead. Again, those on your internal network (*or in your home*) would connect to 192.168.141.1 as shown in yellow.

NOTE: Look on your game server's console to acquire your particular IP addresses being used.

```
Running on .NET Framework Version 4.0.30319
Optimizing for 8 64-bit processors
Processing. Please wait...
Game: Loading...

Network:
Detecting public IP address...done (66.254.150.248)
Listening: 192.168.141.1:2593
Listening: 169.254.103.222:2593
Listening: 127.0.0.1:2593
```

Figure I.

If you do not get a "Detecting public IP address" message in the console, then things get a bit more technical. The issue could be that your local network IP address scheme is uncommon, or you cannot reach the site that reports your public IP address. These issues can be fixed in a file located here:

World\Data\Scripts\System\Misc\ServerList.cs

This file explains that you can manually enter your public IP address, but if you are concerned that this address will change often you can try some other troubleshooting methods. The first is your local network IP address scheme. Within the file, there are set addresses that the game looks for as being a local network (*Figure J*). If your IP address schemed does not appear in this section, then add it yourself and try launching the server again.

```
private static bool IsPrivateNetwork( IPAddress ip )
{
   if ( ip.AddressFamily == AddressFamily.InterNetworkV6 )
        return false;

   if ( Utility.IPMatch( "192.168.*", ip ) )
        return true;
   else if ( Utility.IPMatch( "10.*", ip ) )
        return true;
   else if ( Utility.IPMatch( "127.0.0.1", ip ) )
        return true;
   else if ( Utility.IPMatch( "169.254.*", ip ) )
        return true;
   else if ( Utility.IPMatch( "172.16-31.*", ip ) )
        return true;
   else return false;
}
```

Figure J.

Lastly, there is a site that the game looks for to have a public IP address returned as shown in Figure K. If you cannot reach this site and get an IP address returned, then you need to find a similar site that you can reach. It must return an IP address with nothing else on the web page.

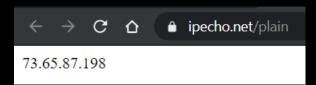


Figure K.

To change the web address that the game looks at, you can find it by referencing Figure L below. If you cannot find such a site to return an IP address to you, you may have to manually set the public IP address as previously described.

```
private static IPAddress FindPublicAddress()
{
    try {
        WebRequest req = HttpWebRequest.Create( "https://ipecho.net/plain" );
        req.Timeout = 15000;
```

Figure L.

Figure M has an example of a D-Link router, and how a port forwarding rule would look like to have someone on the Internet connect to your Adventurers of Akalabeth server. Every router is unique, however, so you will either need to figure out how your router functions in this manner or seek help from the router's user manual.

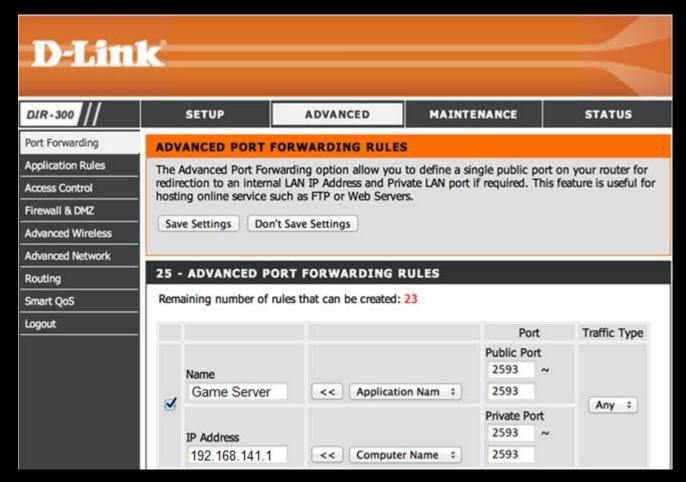


Figure M.

Updating

From time to time, I will be releasing updates to either fix the game or add new features. When a new version is released, there are general ways to update to that version. Here we will cover how you update the World and the Client, when the situation arises. Any update tasks, outside of the scope described here, will have special notes in the update information being released. Those special situations are uncommon and vary in process, so they will not be covered here.

When the "World" requires an update, download the package and follow these steps:

- 1. Go into your **World** directory and delete the **Data** folder.
- 2. Extract the **World\Data** folder, from the package, into your **World** directory.
- 3. Extract these 3 files from the package's **World\Data** directory and overwrite yours.
 - Guide.pdf
 - Manual.pdf
 - World.exe
- 4. You can start the World.exe. Once the world starts, your update is complete.

When the "Client" requires an update, download the package and follow these steps:

- 1. Go into your **Game** directory and delete the **Files** folder.
- 2. Extract the **Game\Files** folder, from the package, into your **Game** directory.
- 3. Extract these 2 files from the package's **Game** directory and overwrite yours.
 - Guide.pdf
 - Manual.pdf
- 4. You can start game and you are done updating your client.

Final Words

It seems that the development of the original game, from which this is based, has ceased. So I decided to branch off my own version and thus rebrand it as requested by the original designer. By doing this, I can fix any newly discovered issues and also implement my own ideas into the game. All I ask is that if my version is branched, that you rebrand your game to something other than "Adventurers of Akalabeth".