

Azzy AI v 1.35:

A generic mercenary and homunculus AI, including graphical user interface (GUI) for configuration, and a wide variety of features.

Features:

- Ability to behave aggressively or passively depending on merc/homun current hp.
- Ability to have specific behavior for different monsters (only practical on homun)
- Ability to have specific behavior for different players in pvp.
- Neither merc nor homun will kill alchemist summoned plants.
- Automatically use appropriate attack skill for the mercenary if configured to use skill attacks.
- Automatically use self-buffs if enabled. Will not recast buffs on teleport like most autobuff AIs.
- Option to select level of selfbuff used by homun.
- Option to "snipe" targets that can be 1-shot, without interrupting attacks on another monster (homun only)
- Automatically use player-buffs on owner if enabled.
- Automatically use anti mob skills when mobbed by enough aggressive monsters (threshold configurable)
- Follows intelligently, can be configured to stay back a number of cells from the owner through use of the FollowStayBack option.
- Option to kite targets and/or use pushback skills for archer mercenaries.
- Targets brandish spear to hit the most targets possible.
- Friendlisting (to let your mercenary/homun KS other players)
- Cross/Circle motions on friending like MirAI
- Option to "dance" while attacking to bypass the aspd delay on normal attacks (homun only).
- Random Walk - autofollow your mercenary with this turned on, and let it drag you around the map.
- Waypoint based "Route Walk" - make a route, and autofollow your merc while it drags you around. (mercenary only)
- Graphical User Interface for editing of most configuration options.
- Customize whether your homun/merc attacks on your use of skills (casting or on skill use), or just attack.
- Auto use chaotic blessings (even though it sucks)
- Auto-shutdown for homun AI on seeing certain monsters (DB protection)
- Developer Features:
 - Includes a utility lua file, which implements mercenary skill info and monster info skills for use in AIs developed by other members of the community.
 - Includes a skill list file, which allows you to call the ID of AI usable skills by their official name. Using this in your AIs will improve code readability.
 - Extras file allows adding functionality without modifying the and of the other LUA files.
 - Developer documentation describes how to make extensions to AzzyAI.

How to Install AzzyAI:

1. If you are using Windows Vista or Windows 7, please see below.
2. Download and extract this AI file.
3. Place the .lua files inside the AI package in the USER_AI folder (inside the AI folder in RO folder).
 - a. If you already have a homunculus AI and do not want to replace it with AzzyAI, do not copy over AI.lua
 - b. If you already have a mercenary AI and do not want to replace it with AzzyAI, do not copy over AI_M.lua.
4. If you are updating do not replace your A_Friends.lua file.
5. If you are updating, save the settings from your config and tactics files
6. Open H_Config.lua or M_Config.lua and set the configuration options according to your needs. The effects of the options are described in brief in the config file, and in detail below.
7. Type /merai until it says your mercenary soldier AI has been customized, or /hoai until it says that the homunculus AI has been customized.
8. Summon merc/homun (or relog if it's already out, or vap/recall for homun) and have fun.
9. A file named AAISartH.txt or AAISartM.txt will be created in the RO folder when the AI is used in game. This file contains full version information, as well as record of certain error conditions. If this file is not created when using the AI in game, the AI is not installed correctly.

Important note for users of Windows Vista and later:

Due to the UAC feature of these operating systems, it is extremely difficult to make a merc or homunculus AI work when Ragnarok Online is installed in a protected folder (of which Program Files is one). We recommend that you move the entire Ragnarok Online folder to an unprotected location, such as C:/Games. After doing this, delete the contents of USER_AI and reinstall the AI. Note that these steps are unnecessary if UAC is disabled.

See the forums for more information

<http://forums.warpportal.com/index.php?/forum/26-ai-scripting-your-pet/>

How to use FRIEND LIST FEATURE:

1. Command merc/homun to walk to 1 cell north or south from the player.

2. Merc/homun will walk a circle around the target if the friend was added, or move back and forth in a straight line if the friend was removed.

Alternately, friends can be added by directly editing A_Friends.lua, using the account ID of the player from ROPD et al. To add a friend, add a line:
MyFriends[(account number)]=1

How to configure the AI using the GUI:

Open the program AzzyAIConfig in your in your USER_AI folder. There are 6 tabs, Homunculus, Mercenary, Homunculus Tactics, Mercenary Tactics, PVP tactics and Extra Options. To save changes, click the Apply Changes button at the bottom of the screen.

How to manually configure the AI:

The AI configuration is controlled by three files each for mercenary and homunculus AI, a config file, a tactics file, and an extra components file. For the homunculus, these files are H_Config.lua, H_Tactics.lua, and H_Extra.lua respectively.

For the mercenary, these files are M_Config.lua, M_Tactics.lua, and M_Extra.lua respectively.

These files can be edited with any text editor. To easily edit them in windows, double click the file, and when you get the message saying that windows cannot open this file, choose "Select the program from a list", and choose Notepad, or a similar program (TextPad, Notepad++, etc). Check the box "always use this program to open files of this type", and click okay

Documentation conventions:

Regardless of which method is used to configure the AI, refer to the following chapters for details on the settings available. In the next sections, when the GUI Configuration tool and the Config files use a different name for an option, the name used in the GUI is written first, followed by the name used in the config files, in parenthesis. Also, for readability, the mercenary or homunculus is always referred to as a "homun" or "homunculus". Except where noted otherwise, all functions work for both mercenaries and homunculi.

A note about Vista and Windows 7 (again):

If you are using Windows Vista or later, and have installed RO to the Program Files folder, and UAC is not disabled, the AI configuration programs must be set to always run as admin. Note that as stated above, installations with this configuration are not supported in version 1.35.

Configuration options:

These options control both the basic and advanced behavior of the homunculus.

Options related to engaging and fighting enemies:

Your homunculus will normally engage (ie, seek out and attack, without having been attacked) monsters which it is configured to attack (see: Tactics) when they are near the mercenary or homunculus.

AggroDist – The homun will engage a monster only if they are this many cells away or closer. If your homun is configured to move to attack, this must be shorter than *MoveBounds*. Max is 14, beyond which you cannot see monsters, but smaller *AggroDist* can be useful, ex, to avoid pulling monsters from off screen.

AggroHP, AggroSP – The homun will engage monsters only when it has more than this percentage of it's HP or SP. If you set either to 100, it will never engage targets, and will only attack when homun/owner/friend is attacked.

SuperPassive – If set to true (1), the homun will never fight another monster unless directly commanded to.

DoNotChase – If set to true (1), the homun will never move to attack a monster. It will still engage monsters at range if it has access to a ranged attack, and is configured to use it.

DoNotUseRest – When this is set to 1, the homun will not “rest” when the owner sits.

DefendStandby – If set to 1, when homun is placed in standby mode using alt+t, it will continue to defend the owner.

StickyStandby – If set to 1, when homun defends owner while in standby, it will return to standby afterwards. Recommend setting to 1 when *DefendStandby* is in use.

UseDanceAttack – If set to 1, when homunculus is attacking with normal attacks, it will “dance” to increase it's effective attack speed. Homunculus only; this no longer works for mercenary skills.

TankMonsterLimit – Set this to the maximum number of monsters that the homun should attempt to tank for another killer using the *TACT_TANK* tactic.

AutoDetectPlants – When this is set to 1, the mercenary will assume that all monsters that it has not seen move or attack are plants/mushrooms, and should be treated differently (ignored, by default, see Tactics). This setting should be set to 0 when fighting stationary monsters.

Options related to movement:

FollowStayBack – Your homun will stay this many cells behind you when following you.

MoveBounds – If your homun is more than this many cells away from you, it will drop everything and try to get back to you, and avoid being left behind.

MoveSticky – If set to 1, if you command your homun to move, it will stay there, and not return to you, until you tell it to move again.

MoveStickyFight – If set to 1, when your homun is in the above “sticky move” state, it will still fight normally.

UseRandWalk – If this is set to 1, the homun will walk randomly while it is idle and it's HP is above AggroHP. This is intended for mercenaries only, because the player can shift+rightclick the merc to follow it, and in this way, the mercenary can drag the player around the map.

UseOrbitWalk – Set this to 1 to make the homun walk in an awkward circle around the player while idle and with HP above AggroHP.

UseRouteWalk – Set this to 1 to enable RouteWalk, see Advanced Options.

RouteWalkCircle– When using RouteWalk, set this to 1 if the last point is within MoveBounds of the first one, and will move from the last point to the first. Otherwise, leave it at zero, and the mercenary will reverse direction when it reaches the end of the route

RestXOff, RestYOff – When you sit down, your merc/homun will go non-aggressive, and if it isn't doing anything else, it will move close to you. This is the x and y offset it from the players position that it will move to. Can be positive or negative.

DoNotUseRest – When this is set to 1, the homun will not “rest” when the owner sits.

Options relating to use of skills:

UseAutoSkill – Set this to 1 to enable automatic use of offensive skills.

UseSkillOnly – Set this to Skill Only (1) to only use skills to attack. Set this to While Attacking (0) to use skills while attacking, but not while chasing a monster. Set this to Chase (-1) to use while chasing or attacking. *Chase (-1) is the recommended setting, and is the correct setting for most users.*

AutoMobCount.- If the mercenary has a mob attack, it will use it only if there are at least this many targets attacking it. Mercenary only.

AutoSkillLimit – Set this to a number to limit the number of times an offensive skill will be used on any target. This can be overridden by tactics settings.

UseAutoSkill_MinSP – The homun will not use offensive skills when it has less than this much SP. Use to keep a reserve of SP for emergencies, or to ensure that homun can maintain buffs.

UsePierceSize – Set this to Small (1), Medium (2), or Large (3) to only use pierce on monsters of that size or larger. This options is only available for mercenaries, and requires a MobID file for monster identification.

UseAutoQuicken – If set to 1, the homun will attempt to maintain an offensive self-buff skill, if it has one. Applicable skills are Flitting, Urgent Escape, and Weapon Quicken.

UseAutoGuard – If set to 1, the homun will attempt to maintain a defensive self-buff skill, if it has one. Applicable skills are Amistr Bulwark, Guard, and Parrying.

UseAutoSight – If set to 1, the mercenary will attempt to keep sight up. Level 2 archer mercenary only.

UseAutoMag – If set to 1, the mercenary will attempt to keep magnificat up. Level 4 archer mercenary only.

UseProvokeOwner – If set to 1, the mercenary will attempt to keep its owner provoked, assuming it has Provoke. Mercenary only.

UseSacrificeOwner – If set to 1, the mercenary will attempt to keep its owner Sacrificed, assuming it has sacrifice. This only works if the mercenary is within 10 levels of the player, and the skill is extremely buggy. Mercenary only.

UseAutoPushback – Set this to 1 to enable automatic use of pushback skills to get monsters off of the mercenary. This is subject to override by the tactics list, but must be enabled here to use. This is most useful for archer mercenaries, particularly the level 6 one (with skid trap). Mercenary only.

AutoPushbackThreshold - This is the distance between the merc and target at which the mercenary will attempt to use a pushback skill on it.

UseAutoHeal – Set this to 1 to enable automatic use of healing skills (chaotic blessing or healing hands). Set this to 2 to enable automatic use of healing skills, but only when otherwise idle.

HealOwnerHP – This is the owner's HP, as a percentage, below which the homun will attempt to use a healing skill to heal the owner (assuming UseAutoHeal is enabled).

UseSmartFAS – Set this to 1 to try to hit as many targets as possible with Focus Arrow Strike, at the risk of aggroing additional monsters.

UseSmartBrandish – Set this to 1 to try to hit as many targets as possible with Brandish Spear, at the risk of aggroing additional monsters.

UseSmartBB – Set this to 1 to try to hit as many targets as possible with Bowling Bash at the risk of aggroing additional monsters. Not implemented

Options related to Berserk Mode:

Through this feature, you can have the homun attack more aggressively in response to commands or large mobs. In the case of responses to commands, it will leave berserk mode upon killing the target.

UseBerzerkSkill – Set to 1 to enter berserk mode when commanded to use an offensive skill.

UseBerzerkAttack – Set to 1 to enter berserk mode when commanded to attack.

UseBerzerkMobbed – Set to 0 to disable, otherwise, when fighting this many or more monsters at once (total of monsters on homun and friends/owner), homun will go into berserk mode until there are fewer than this many monsters.

Berzerk_SkillAlways – Set to 1 to always use offensive skills when in berserk mode.

Berzerk_Dance – Set to 1 to use dance attack when in berserk mode (homun only).

Berzerk_IgnoreMinSP – Set to 1 to ignore UseSkillAuto_MinSP when in berserk mode.

Options related to Kiting:

When using archer mercenaries, it is frequently advantageous for the mercenary to try to run away from monsters that try to attack it, while attacking them. Note that kiting behavior can also be specified in the tactics, and this just specified default values.

KiteMonsters – Set this to 1 to enable kiting.

KiteParanoid – Set this to 1 to default to kiting before being attacked. This can be overridden by tactics settings.

ForceKite – By default, even if KiteMonsters is set to 1, kiting will only be used for homuns with ranged attacks. If ForceKite is set to 1, kiting will be enabled for all homuns. Be aware that this may produce broken behavior.

KiteStep – This is the number of cells that homun will move to kite. Leave at 5 unless you have good reason to change.

KiteThreshold – How close a monster has to be before triggering kiting, when monster has attacked homun. 3 works pretty well.

KiteParanoidStep – As above, when kiting before being attacked. Leave at 2 unless you need the homun to be unusually fearful.

KiteParanoidThreshold – As above, when kiting before being attacked.

KiteBounds – This is the maximum distance the homun will move from owner to kite. Must be less than MoveBounds.

FleeHP – Only kite when below this much hp, as a percentage. Set to 0 to ignore this condition.

Tuning Options:

These options may be used to tune behavior, particularly on laggy connection.

SpawnDelay – After spawning, the homun will wait this long (in milliseconds) before trying to act. It is important to not allow the homun to act immediately; that can result in failure of killsteal prevention measures while teleporting.

ChaseGiveUp – Homun will attempt to move to reach a target this many times before assuming the path is blocked and giving up. Increase this if your homun gives up while chasing targets.

AutoSkillDelay – Homun will wait this long between trying to use skills, even those with no skill cooldown, to prevent problems like “double casting” of skills. This is the length of the delay in milliseconds.

AssumeHomun – With this set to 1, the homun will attempt to automatically friend the owner’s mercenary (and vice versa). Turn off only if this causes problems

UseAvoid – Homun only. When this is set to 1, whenever the homun sees a monster of a type listed in H_Avoid.lua, it will forcibly exit the RO client. H_Avoid.lua comes populated with all MVPs that can be summoned from Bloody Branches, as well as several nasty DB monsters. You may customize it by following the examples in H_Avoid.lua.

PVPmode – Set to 1 to enable a feeble approximation of PVP functionality.

StandbyFriending – Set to 1 to use the old AzzyAI friending method.

MirAIFriending – Set to 1 (default) to emulate MirAI friending.

TACTICS:

Through the tactics system, it is possible to configure your merc or homun to treat different types of monsters differently – for example, prioritizing powerful monsters, and ignoring plants and mushrooms.

Mercenaries:

Mercenaries cannot identify monsters. In order for any entry other than the default entry to be used on a mercenary, you must have an updated MobID file for the map and server you are on. See the separate document describing the use and creation of MobID files. For mercenaries, only the default tactic, and the two others noted below, can be used without creating a MobID file.

Editing the Tactics List Directly:

The tactics is stored in H_Tactics.lua or M_Tactics.lua, for merc and homun respectively. Each contains a consists with an entry for each kind of monster you plan to be fighting. For each entry, there are 7 fields for different settings. The format of a tactics list entry is:

```
MyTact[id]={TACT_BASIC,TACT_SKILL,TACT_KITE,TACT_CAST,TACT_PUSH  
BACK,TACT_DEBUFF,TACT_SIZE,TACT_RESCUE}
```

The 'id' is the type id of the monster (obtained from database site)

In addition to the ID's of monsters, there are several ID's used for more general behavior:

MyTact[0] is the default set of tactics the homun will use

MyTact[10] is the default set of tactics used with monsters detected as being summoned

MyTact[11] is the default set of tactics used for monsters that appear to be plants when AutoDetectPlants is turned on (mercenary only)

There is no limit to the number of tactics that can be added, however, there can only be one tactic for any given monster. See the notes in the Extras file for guidance on expanding the tactic system.

Editing the Tactics List using the GUI editor:

1. Using the GUI, open the appropriate tactics tab.
2. To add a new tactic, click the Add button, and fill in the monster name and id.
3. The name is only cosmetic; the key value is the ID, which can be obtained from a database site. Select the tactics from the dropdown menus.
4. To edit an existing tactic, click the tactic, and select the desired tactics from the dropdown menus.
5. To remove a tactics entry, click the tactic, and click the remove button.
6. When finished, click the Apply Settings button to save changes.

Basic Tactics (TACT_BASIC)

This option controls how the merc or homun will react to the monster.
The options are.

Tank (TACT_TANK): Hit monster once, and then hold it until something kills it.

Ignore (TACT_IGNORE): Do not attack the monster, at all, ever.

Attack tactics have a lower priority than any react tactic.

Attack – Low (TACT_ATTACK_L): Seek out and attack this monster only if there are no higher priority targets. Also, do not give higher priority if it is attacking homun/merc or player

Attack – Medium (TACT_ATTACK_M): Seek out and attack this monster, unless there are higher priority targets.

Attack – High (TACT_ATTACK_H) : Seek out and attack this monster, assuming not busy responding to React monsters

React – Low (TACT_REACT_L): Attack this monster when self/owner/friend attacked, low priority.

React – Medium (TACT_REACT_M): Attack this monster when self/owner/friend attacked, medium priority.

React – High (TACT_REACT_H): Attack this monster when self/owner/friend attacked, high priority.

React – Self (TACT_REACT_SELF): Attack this monster when merc/homun only attacked, top priority – intended for use on things that would pose a threat to homun if they were attacking the homun, and need to be killed ASAP.

Sniping tactics are treated like attack for the purpose of normal attacks, but if your homun is attacking another monster, and has a ranged attack skill (moonlight or caprice), and SP to use it, it will use it on a nearby monster with the Snipe tactic _which it is not currently fighting_. This works best when you know that the skill will 1-shot the monster.

Snipe – Low (TACT_SNIPE_L): Attempt to 1-shot this monster with bolts, even while attacking other monsters, low priority

Snipe - Medium (TACT_SNIPE_M): Attempt to 1-shot this monster with bolts, even while attacking other monsters, medium priority

Snipe - High (TACT_SNIPE_H): Attempt to 1-shot this monster with bolts, even while attacking other monsters, high priority

Skill Tactics (TACT_SKILL)

This option controls if and how many times an offensive skill will be used on a target of this type:

- SKILL_NEVER - never use skills
- SKILL_ALWAYS - always use skills.
- Set to a positive integer to use a skill that number of times.
- Set to a negative number to use a level of the attack skill less than the maximum level. (Homun only). This is the proper setting for SNIPE tactics.

Kiting Tactics (TACT_KITE)

This option controls whether to kite (run away from, generally rather clumsily) from this target, if kiting is enabled.

- KITE_NEVER - never kite from this kind of monster.
- KITE_REACT - kite from this kind of monster only if attacked.
- KITE_ALWAYS - always kite from this monster - recommended for aggressive monsters.

Reacting to cast (TACT_CAST)

This option controls whether to assume casts from this monster are aggressive acts. This is not very useful in pvm, except to stop homun from killing summoned geographers. The options are

- CAST_REACT – treat casting on self/player/friend as hostile
- CAST_PASSIVE. – do not treat casting as hostile.

Pushback Tactics (TACT_PUSHBACK)

This option controls whether to use pushback skills, if applicable (merc only)

- PUSH_NEVER – do not use pushback skills on this monster.
- PUSH_SELF – Use pushback skills on this monster if merc is attacked
- PUSH_FRIEND Use pushback skills on this monster if owner/friend is attacked

Debuff Tactics (TACT_DEBUFF)

This option controls what, if any, debuff skills will be used (merc only):

- Set to the ID of the skill, or the name of the skill used in SkillList.lua to use that skill.
- Set to -ID to use that debuff while chasing.
- Set to 1 or -1 to use whatever debuff the merc might have while attacking or while chasing, respectively

Size (TACT_SIZE)

This defines the size of the monster for UsePierceSize. This option is applicable only to mercenaries using MobID file to identify monsters. Options are SIZE_SMALL, SIZE_MEDIUM, SIZE_LARGE and SIZE_UNDEFINED. Default is SIZE_UNDEFINED.

Rescue (TACT_RESCUE)

This option controls whether the homun or merc will drop everything to come to the rescue of the owner/friends/owner's other merc/homun if this monster is attacking them.

- Set to 1 to drop everything to aid the owner/friends if they are attacked by this monster.
- Set to 2 to drop everything to aid the owner's other merc/homun only.
- Set to 3 to drop everything to retaliate if attacked by this monster.
- Set to 4 to drop everything to aid the owner if he is attacked by this monster.
- Set to 5 to drop everything to respond to this monster for all above cases.

Advanced Settings:

These advanced settings are controlled by the Extras configuration.

This extras file is a page of lua code that is imported after all other parts of the AI are loaded. The included Extras files contain instructions for using them for several advanced features, and even guidance on using it to expand the AI. See the developer guide for more details on the facilities available in the Extras configuration.

Three relevant options are included in the default Extras configuration:

NewAutoFriend – Uncomment the NewAutoFriend = 0 line if you are using an AI other than AzzyAI for your mercenary (if this is for the homun) or vice versa. If this option is used, you may need to relog to refresh the friending between merc and homun.

FriendAttack – In this section, you can configure which motions, on the part of the owner of a friend, should be interpreted as offensive acts, and hence a queue for the homun to attack the targeted monster. Set them to 1 to treat them as offensive acts.

BasicDebuffs – In this section, you can configure which debuffs will be used if debuffs are enabled, but no specific debuff is specified in Tactics. Set a debuff to 1 to enable use of it.

Route Walk – Mercenaries support Route Walk. This is similar to random walk, in that you are expected to autofollow the mercenary when using it, and let the mercenary drag you around.

To enable it, set UseRouteWalk to 1 (under movement options).

Now, for the map you are leveling on, you must make a "route" file.
This is Route.lua.

The file has just one line, which is a list of n walkable cells, each within move bounds of the points adjacent to it.

The format is:

MyRoute={ {x1,y1},{x2,y2}, ... {xn,yn} }

The default route:

MyRoute={ {160,360},{165,366},{174,366},{174,357},{166,351},{158,355} } is for just south of the north morroc kafa, and will walk in a rectangle pattern there

For practical purposes, it may require many more points, so making this list for your map can be a laborious task.

In previous versions of AzzyAI, this was stored in the Route.lua file. It is now stored in M_Extra.lua, with other advanced feature configuration.

Alternate Tactics – the included (commented out) code serves as an example of switching between two tactics lists. See the Development documentation for more information.

PVP_Tactics:

The tactics used in PVPmode are stored in PVP_Tactics.lua. They are edited in the same way as normal tactics, however they are used only against other players. There are two ways to mark players.

- Add a tactic to PVP_Tactics using the player's account id number (from ROPD), and configure appropriately.
- Add a line to A_Friends.lua for that player including one of the key words KOS, ENEMY, NEUTRAL, FRIEND or ALLY, and configure the PVP_Tactics for those classes of target, eg:
MyFriends[1234567]=ALLY

PVP mode is presently still experimental. AzzyAI 1.35 is not intended to provide high performance in a PVP setting.

Version History

Planned Features and fixes (general):

- Add a patrol mode to replace orbit walk.
- Add a "track owner target" option, wherein it would drop current target to attack whatever owner does.
- Allow for run-time use of homun to identify monsters for merc.

Features that appear to be impossible:

- Allow the mercenaries automatically use their status recovering skills. (the mercenary cannot see if players are effected by statuses)
- Allow the mercenaries to identify monsters without a MobID file.

- Total rewrite of targeting, should fix many problems.
- Cross/Circle motions when friending
- Amistr/Lif buff behavior fixed.
- Rescue behavior improved, new rescue options added.
- Intelligently target Brandish and FAS using UseSmartBrandish and UseSmartFAS option.
- Autouse of Amistr skill Bloodlust
- Autouse of healing skills (healing touch, chaotic blessings)
- Extras feature functionality expanded greatly.
- Greatly improved debugging facility.
- AAISart files created to verify proper installation
- Newly rewritten GUI
- Major internal changes which should streamline future development
- Fixes to unreachable target handling
- Corrected issue with supplied friendlist, present apparently since the inception of the friend list feature, which could cause homun to kill-steal pistola, an individual iRO player.

1.30b

- New GUI configuration program by Machiavellian. Please give feedback on this.
- Added support for new monster mercenaries: Doppleganger, Egnigem Cenia, and Alice.
- Added feature to not return to owner when told to move beyond following distance.
- Added berzerk mode feature.
- Implemented data gathering to identify herb plants (AutoDetectPlants)
- Improved obstacle handling while chasing and while attacking.
- Reduced number of files in the AI to reduce clutter.
- Added extra options files
- Fixed issue with sword mercenaries not using single target skills.
- Fixed issue with some monster mercenary skills not working correctly.
- Fixed issue with pvp just plain not working.
- Fixed issue with pushback bugging the merc.
- Fixed issue with retainer not using skills when trying to tank.
- Fixed issue where deletion of H_ID.txt or M_ID.txt would cause crashes.
- General minor improvements.

1.29

- Added support for Wild Rose monster mercenaries.
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1.28

- Fixed problem with bowling bash terminating mercenary contracts.
- Disabled dance for DS.
- Improved use of FAS./

1.28

- Fixed issue where homun would use skills in a manner contrary to tactics settings with SkillWhileChasing selected, correctly.
- Properly account for skill casting time when using sacrifice.

1.28

- Fixed stack overflows involving the fast change responsivity optimizations.
- Fixed a random crash problem.
- Fixed issue where homun would use skills in a manner contrary to tactics settings with SkillWhileChasing selected.
- Fixed issue where homun or merc would refuse to use skills when mobbed.
- Fixed issue where GUI would improperly save several settings.
- Added GUI support for future implementation of Chaotic Blessing use (albeit in a terrible manner)

1.271

- Critical bugfix.
- 1.27**
- Fixed bug with buff skills.
 - Added sniping tactics.
 - Added support for using debuff skills.
 - Added support for selecting levels of skills to use (for homun; merc skills are not level selectable)
 - Added basic emulation of MirAI friendlisting. Still doesn't do the movement upon friending.
 - Homun/Merc will now KS if you tell it to attack or skill on a monster that is fighting another player
 - Various minor fixes/tweaks
 - Updated AI to control features added with 1.26 and 1.27.
- 1.263**
- Fixed line 1344 error.
 - Added DoNotUseRest option.
 - Added StickyStandby and DefendStandby options.
- 1.262**
- Critical bugfix..
- 1.261**
- Removed bug with offensive skills and attacks (added in 1.26)
 - Fixed bug with the autofriend added in 1.26 which prevented proper friending of merc/homun.
- 1.26 (GUI v1.25, AI v1.26)**
- Homun and merc are now always friended to each other using H_ID and M_ID files. Disable this by changing NewAutoFriend to 0 in defaults.lua.
 - Dance Attack works now.
 - Support for a new target class on mercs: Summons. Now there is an option for Default Summon, which is the default behavior for any summon or retainer not friended to the mercenary. This should probably be left as is (react low), so that mercs will not kill summoned plants, even if aggressive.
 - Support for more sophisticated targeting of player/friend's enemies - targeting when player uses skills or is casting. Configured in H_FriendMotion and M_FriendMotion files.
 - Improved use of buffs - will now not recast buffs right after spawning in if they're still up. This is particularly important with guard, which apparently works the same way as the player skill, being taken down when recast.
 - Yet another attempt at fixing RouteWalk. This one appears to have been marginally successful.
 - Added bug that prevented mercenary from using offensive skills or attacks, and caused homunculus to attempt to use skills improperly.
- 1.25a (GUI v1.25, AI v1.21)**
- Minor GUI improvements, support for v1.25 features, including debuffing, which is not implemented in the AI yet.
 - Numerous minor tweaks to AI behavior that should significantly improve targeting and antiKS behavior.
 - Routewalk no longer crashes the client; it fails gracefully instead.
 - Dance attack temporarily out of order (something went wrong trying to improve it)
 - Errors if the default AI was not installed fixed for good.
- 1.20 Release**
- GUI Improvements
 - Dance mode no longer sucks as much.
 - Fixed bug causing dependence on the default AI being in the \AI\ folder
 - Various targeting changes for improved target selection:
 - Fixed detection of owner/friend targets. This had gone unreported since 1.09 or earlier!
 - Will now finish killing monsters that are on the owner/friend/self, before aggroing more targets.

- Monsters with the ATTACK_LOW and REACT_LOW priority are exempt from that - they will be ignored, even if attacking the owner/self/friend, if there are higher priority targets to attack.
- Made an attempt at fixing use of skills while chasing.
- Debuff while chasing still doesn't work, but using attack skills while chasing does.
- 1.20b0**
 - GUI for config
 - Minor bugfixes
 - Subtle changes to default config files and structure to make GUI easier to write.
 - TACTIC_IGNORE option removed for GUI compatibility.
- 1.09**
 - Added basic pvp support
 - Removed bug with DoNotChase and UseSkillOnly
 - Improved targeting speed
- 1.08**
 - Added homunculus support.
 - Added use debuff skills, but it doesn't work.
 - Added DoNotChase option
 - Recoded chasing routine, so it doesn't suck like it used to.
 - Fixed and tweaked a whole ton of stuff that I don't even remember.
 - Added defaults file, so that missing lines from config won't choke the AI.
 - Fixed unacceptable following behavior with archers, specifically in combination with AutoPushback
 - Fixed friending bug.
- 1.071**
 - Critical bugfix.
- 1.07**
 - Added full tactlist support based on actor IDs, MobID file required.
 - Fixed bug with follow command (standby mode)
 - Added another bug with follow command (standby mode)
 - Added support for live friending and unfriending
 - Added support for autofriending of homunculus.
- 1.061**
 - Critical bugfix.
- 1.06:**
 - Added feature to autocast provoke or sacrifice on user.
 - Added feature to auto use pushback skills (arrow repel and skid trap) if monsters are on the merc (doesn't work great).
 - Added feature to make the merc go non-aggro if the player sits down.
 - Added option to limit the number of times merc will use skills on a given enemy.
 - Did work on future support of tactics based on actor IDs.
 - Observed and captured several minor bugs with target acquisition for study (will be fixed later).
 - Fixed bug with random walk.
 - Improved friending AI (thanks Biochemist-ness)
 - Expanded motion list in Const_.lua for future expansion.
 - Dug up and fixed buried treasure in the follow command processing routine.
- 1.05:**
 - Recoded following to support following at distance (FollowStayBack),
 - Fast transition from Chase to Attack,
 - Added kiting support - it still leaves something to be desired, but I'm not sure what it's doing wrong... Poslag really hurts it bad.
 - Also added an option to only use skill attacks.

- Added bug with random walk.
- 1.04:**
- Critical bugfix.
- 1.03:**
- Added SuperPassive option, fixed random crash error (line 903 error)
- 1.02:**
- Successfully made AI coexist with MirAI
- 1.01:**
- Unsuccessfully made AI coexist with MirAI
- 1.00:**
- Initial release