

# Unit AI Compendium

## Diablo II Lord of Destruction 1.10 and 1.11

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0.7

### Idle 1

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### Skeleton 2

1. Chance to approach (when outside melee range)
2. Delay (frames) (**par1** fails; **par3** fails)
3. Chance to attack (when within melee range)
4. Chance to use A2 rather than A1 (**par3** succeeds)
5. n/a
6. n/a
7. n/a
8. n/a

### Zombie 3

The **zombie** will randomly wander around until a foe enters the activation radius, once this happens the **zombie** either approaches (**par1** succeeds) or keeps wandering. Once it gets within melee range the **zombie** will always attack.

1. Chance to approach (when outside melee range)
2. Activation Radius (subtiles)
3. n/a
4. Chance to use A2 rather than A1 (when attacking)
5. n/a
6. n/a
7. n/a
8. n/a

## BigHead 4

The **bighead** AI is rather interesting. First of all, while the **bighead**'s HP are above the threshold defined by **par1** it will approach the target (unless **par3** rolls successfully, if this is the case it will shoot a missile rather than approaching), once the target comes within melee range the **bighead** will always attack (thus **par2** serves no purpose, since the attack roll will never fail!). When HP drops below the threshold the bighead will avoid getting into melee range and barrage the target from a distance (when **par4** succeeds). The HP threshold will only be checked after the unit has taken at least one hit. Even when **par3** and **par4** are set to 0, the **bighead** will automatically retaliate missiles attacks by shooting **MSA2** at the owner of the missile that had just hit him.

1. HP threshold
2. n/a
3. Chance to shoot **MSA2** (while healthy)
4. Chance to shoot **MSA2** (while injured)
5. n/a
6. n/a
7. n/a
8. n/a

## BloodHawk 5

The **bloodhawk** by default wanders around using walking speed, **par1** is rolled at the end of each wandering cycle, when it succeeds the **bloodhawk** will approach the player. If it fails the **bloodhawk** will roll **par2**, should this parameter succeed the next wandering cycle will be performed at half speed (**par4** is not used by the game), otherwise it will keep wandering at normal walking speed. When approaching the walking speed is set to the percentage specified in **par5**. The **bloodhawk** will always attack when within melee range, thus **par3** is not used.

1. Chance to approach (when outside melee range)
2. Chance to wander slowly (**par1** fails)
3. n/a
4. n/a
5. Speed bonus
6. n/a
7. n/a
8. n/a

## Assertion warning!

If you set **par5** to a value greater than 126 the game will terminate once the **bloodhawk** starts approaching a target.

## Fallen 6

This AI seems trivial at first, but at closer inspection proves to be fairly complex. By default the **fallen** will randomly wander around or remain idle. Should the unit be a boss (a unit spawned via **Levels.txt**, not via the **minion1** and **minion2** columns in **MonStats.txt**) it will constantly roll **par1** until it succeeds every cycle, once it does succeed the boss will command any nearby minions to approach the target,

once they come into melee range they attack (as long as **par3** is successful). For this behavior to work **SetBoss** must be true. Another aspect of this AI will make the **fallen** scatter and retreat once an allied unit is slaughtered nearby, this behavior is controlled by the **BossXfer** column, which must be true for it to take effect.

1. Chance to order an attack (when outside melee range)
2. n/a
3. Chance to attack (when within melee range)
4. Chance to use **A2** rather than **A1** (**par3** succeeds)
5. n/a
6. n/a
7. n/a
8. n/a

## Brute 7

The **brute** will always approach the target, otherwise it works like the **skeleton** AI.

1. n/a
2. Chance to shuffle positions (**par3** fails)
3. Chance to attack (when within melee range)
4. Chance to use **A2** rather than **A1** (**par3** succeeds)
5. n/a
6. n/a
7. n/a
8. n/a

## SandRaider 8

This AI is badly used in vanilla, causing the **sandraider** to be the passive enemy he is known as. So how does this AI work. As long as the **HP** remains above the **HP** threshold (**par1**) the sand raider will either approach (**par4** succeeds) or wander around (**par4** fails), on the other hand should the **HP** plunge below the threshold the **sandraider** will escape from any nearby foes. Above this whole routine we got the charge up procedure, which is basically a countdown, it starts at the value indicated in **par5**, once this reaches 0 the **sandraider** uses **SK1** (which charges him up, basically shifts the **sandraiders** palette to the one specified in **par6** and triggers a special automated AI behavior). This special AI behavior causes the **sandraider** to approach the target irregardless of the **HP** threshold, and attack as soon as he comes within melee range using **S1** (the damage of which has nothing to do with the skill use).

1. **HP** threshold
2. Chance to randomly wander around (**par4** fails)
3. Chance to attack (when within melee range)
4. Chance to approach (when outside melee range)
5. Charge delay (frames)
6. Color parameter
7. Chance to use **A2** rather than **A1** (**par3** succeeds)
8. n/a

## Color Index Table

0 = Red (enchant style)

1 = Blue (chilled style)

### Bug warning!

Should **par1** be anything other than 0 the **sandraider** will get stuck once the special AI routine related to using **SK1** takes place, since it will attempt to flee and approach at the same time, causing the AI to hang.

### Wraith 9

Unlike the similar **goatman** AI (which is practically identical), the **wraith** AI uses the **walk-throughout walls** logic (when used in conjunction with the **wraith1 BaseID**).

1. Chance to approach (when outside melee range)
2. Delay (frames) (**par1** fails; **par2** fails)
3. Chance to attack (when within melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### CorruptRogue 10

The **corruptrogue** will first approach up to a distance of about 6 subtiles (engage range), when she gets there and **par1** is successful, the **corruptrogue** will engage in battle. While approaching (not while engaging) the **corruptrogue** will run rather than walk (before starting an approach **par5** needs to be successful), while using **RN**, the **corruptrogue** does no longer use the speed defined by the **Run** column, rather the normal walking speed is set to the percentage specified in **par4**.

1. Chance to engage (when within engage range)
2. Delay (frames) (**par1** fails; **par3** fails)
3. Chance to attack (when within melee range)
4. Speed bonus
5. Chance to use **RN** rather than **WL** when approaching
6. n/a
7. n/a
8. n/a

### Baboon 11

Two of the parameters formerly used by this AI are documented by Blizzard, but no longer serve a purpose. Anyway, while **HP** is above the percentage indicated by **par1**, the **baboon** will approach the target, when **HP** is below the percentage indicated by **par1** on the other hand, the **baboon** will escape from any nearby foes. Furthermore, while **HP** is below the **par1** threshold, the **baboon** gets a bonus to his life regeneration (defined by **par5**). As to the unused parameters, the **baboon** always attacks when within melee range, thus **par3**, which used to control the chance of attacking no longer server purpose, likewise **par2**, which controlled position shifting when **par3** fails will obviously never get used by the game.

1. HP threshold
2. n/a
3. n/a
4. Chance to use A1 rather than A1 (when attacking)
5. Life regeneration bonus
6. n/a
7. n/a
8. n/a

## Goatman 12

1. Chance to approach (when outside melee range)
2. Delay (frames) (**par1** fails; **par2** fails)
3. Chance to attack (when within melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## FallenShaman 13

The **fallenshaman** will first scan for allied corpses (of the unit type specified in the **minion1** column and its own **hclidx**, should it spawn as a boss) within the radius defined by **par4**, if such are found and **par1** is successful it will use **SK2** on a targeted corpse. When such corpses are not detected it will order an attack on the target (for this to work **SetBoss** must be true). If a target enters the radius defined by **par5** the **fallenshaman** will barrage the target using **SK1**. Should both **par1** and **par2** fail and no foe is within melee range, the **fallenshaman** will wander around (as long as **par3** succeeds). If a target comes within melee range the **fallenshaman** will switch to melee attacks (and attack as long as **par3** succeeds).

1. Chance to use **SK2** on fallen allies or order an attack
2. Chance to use **SK1** (when within **par5**-range)
3. Chance to wander around (**par1** fails, **par2** fails and outside melee range) or attack (when within melee range)
4. Radius (subtiles)
5. Radius (subtiles)
6. n/a
7. n/a
8. n/a

## QuillRat 14

Like the following **sandmaggot** AI, this AI is not offensive since it doesn't actively pursue foes. However, it gives of a nice illusion of being offensive. When undisturbed, it will wander around randomly, but will never move further from the subtile it originally spawned on then defined by **par4** (when it gets there it will simply turn around and walk back or in another direction). Should a foe come within range (defined by **par1**) the **quillrat** will barrage the foe with **MSA2** (one missile plus the number of bonus missiles specified by **par3** per salvo), should the foe continue to approach and get within melee range the **quillrat** will swap to melee attacks (which are always performed).

1. Radius (subtiles)
2. Chance to shoot **MSA2** (when target comes within **par1**-range)
3. Bonus missiles (a value between 0 and 5) [requires **quillrat1** BaseID]
4. Maximum distance (subtiles)
5. n/a
6. n/a
7. n/a
8. n/a

## SandMaggot 15

When the **sandmaggot** is undisturbed it will attempt to use **SK3** (unless it has been used **par3** times), should a foe come within missile range the **sandmaggot** will start sending out barrages of **MSA2**, if the foe continues to approach and comes within melee range the **sandmaggot** will swap over to melee attacks. Should the **sandmaggots** HP plunge beneath 25%, it will use **SK2** (a layer shifting skill), when this skill has been used the **sandmaggot** will wait until the interval set by **par5** has elapsed before using **SK1** (another layer shifting skill) to return to the playing field. *This AI will never become offensive, forget it.*

1. Chance to use **SK3** (when outside melee range)
2. Chance to shoot **MSA2** (when target comes within range)
3. Usage counter (for **SK3**)
4. Chance to attack (when target comes within melee range)
5. Interval before using **SK1** after having used **SK2**
6. n/a
7. n/a
8. n/a

## ClawViper 16

The **clawviper** will always approach the target.

1. Chance to use **SK1** (when outside melee range)
2. Radius (subtiles)
3. Chance to attack (when within melee range)
4. Chance to use **A2** rather than **A1** (**par2** succeeds)
5. Delay (frames) (**par1** fails; **par3** fails)
6. Color parameter
7. n/a
8. n/a

## Color Index Table

- 0 = No color shift
- 1 = Red color shift (enchant style)

## SandLeaper 17

For this AI to properly use a skill, that skill needs to have proper range settings, otherwise the AI will not know what to do with the skill and use the skill when within melee range, which can conflict

with the other parameters.

1. Chance to use **SK1** (when within cast range)
2. Chance to attack (when within melee range)
3. Chance to approach (**par1** fails and outside melee range)
4. Chance to shuffle position (**par2** fails)
5. n/a
6. n/a
7. n/a
8. n/a

## Pantherwoman 18

A rather nice melee AI, the **pantherwoman** generally works the way a **skeleton** would, however if the distance between the individual units is greater then the radius defined by **par3** and **par5** succeeds, they will cancel their approach and move back towards the point the pursuit started at, once the distance from allied units nearby is smaller then **par3** they will continue approaching the target together.

1. Chance to approach (when outside melee range)
2. Chance to attack (when within melee range)
3. Maximum Distance (subtiles)
4. Delay (frames) (**par1** fails; **par2** fails)
5. Chance to regroup (when outside melee range)
6. n/a
7. n/a
8. n/a

## Swarm 19

The **swarm** AI used to be different from the **goatman** AI, but this is no longer the case, since the game no longer uses **SK1** to generate the ambient sound (ambient sounds are handled differently by 1.10+)

1. Chance to approach (when outside melee range)
2. Delay (frames) (**par1** fails; **par3** fails)
3. Chance to attack (when within melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Scarab 20

The **scarab** automatically approaches any nearby targets, and attack when the target comes within melee range, if **par4** succeeds, the **scarab** will attack using a skill. When **par5** succeeds, the boss(es) of a group will order all nearby minions to attack the target. **Scarabs** performing a raid will always use **SK1** and never **A1** or **A2**. For the raiding behaviour to work properly you need to have **SetBoss** set to 1.

1. Chance to attack (when within melee range)
2. Chance to use **A2** rather than **A1** (**par1** succeeds)

3. Delay (frames) (**par1** fails)
4. Chance to use **SK1** rather than **A1** or **A2** (**par1** succeeds)
5. Chance to order a raid
6. n/a
7. n/a
8. n/a

## Mummy 21

This AI script is a little bit awkward. It has two independent approach parameters. When **par2** is successful, the **mummy** will approach until it gets within melee range, but will not attack. When **par3** is successful, the **mummy** will approach until it gets within melee range and attack the target when it arrives.

1. Activation Radius (subtiles)
2. Chance to approach (when outside melee range)
3. Chance to approach or attack (when outside melee range or within melee range)
4. Chance to use **A2** rather than **A1** (**par3** succeeds)
5. n/a
6. n/a
7. n/a
8. n/a

## GreaterMummy 22

The **gretermummy** is one of the more complex AI scripts existing in the game. By default this AI will barrage any foes with **SK3**, unless there are dead or injured units within the radius defined by **par5** (a unit needs to be hit by an attack while within this radius, otherwise it will not be treated as injured, even if it walks into the radius), if dead or injured units are present, it will first attempt to resurrect any undead corpses present within the radius, when done, or when **par2** fails, it will attempt to heal undead units (note: make sure that you give them a healing spell, otherwise the AI will get stuck attempting to heal the units because their **HP** doesn't increase). Should **par2**, **par3** and **par4** all fail, the **gretermummy** will approach the selected target and make either attack using **A1** or shooting **MSA2** (the poison breath). It is due to this behavior that **par1** is best set to 100%, otherwise the AI hangs.

1. Chance to attack or shoot **MSA2** (when within melee range)
2. Chance to use **SK1** on corpses of undead units (when outside melee range). 3. Chance to use **SK2** on injured undead units (**par2** fails and outside melee range). 4. Chance to use **SK3** (**par2** fails and outside melee range)
5. Radius (subtiles) (used by **par2** and **par3**)
6. n/a
7. n/a
8. n/a

## Vulture 23

When a **vulture** is activated (when a target enters **AIDist**), it will approach that target up to a distance of more or less 6 subtiles before any other parameter takes effect. Despite the fact **par3** and **par4** are documented, I doubt that they take effect.



1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** fails; **par5** fails)
3. n/a
4. n/a
5. Chance to approach (when outside melee range)
6. n/a
7. n/a
8. n/a

## Mosquito 24

In Blizzards AI documentation **par1**, **par2** and **par5** are considered active, but they no longer server any purpose, at least I couldn't notice anything happening when altering them.

1. n/a
2. n/a
3. Chance to attack (when within melee range)
4. Chance to use SK1 rather than A1 (**par3** succeeds)
5. n/a
6. n/a
7. n/a
8. n/a

## WillOWisp 25

The **willowisp** will play the S1 animation (vanish) before starting to walk.

1. Chance to use SK1
2. Chance to attack (**par1** fails and within melee range)
3. Chance to approach (**par1** fails and outside melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Arach 26

When struck by an attack the **arach** will always approach the attacker (normally the unit will only approach when **par3** succeeds, if **par3** fails it will wander around). When **HP** falls below the percentage indicated by **par5**, the **arach** will first use SK1 and then escape until the distance between it and any foe(s) is at least the distance indicated by **par4**. The condition threshold is only checked after the unit has been hit by an attack, thus even if it is set to 100 percent, the **arach** will not flee until it has been hit at least once. *Setting **par4** to very large values will cause the **arach** to run back and forth ad nauseum.*

1. Chance to attack (when within melee range)
2. Chance to shuffle positions (**par1** fails)
3. Chance to approach (when outside melee range)
4. Minimum escape distance (subtiles)

5. Condition threshold (HP percentage)
6. n/a
7. n/a
8. n/a

## ThornHulk 27

The **thornhulk** will always approach the selected target.

1. Chance to attack (when within melee range)
2. Chance to use **A2** rather than **A1** (**par1** succeeds)
3. Chance to shuffle position (**par1** fails)
4. Chance to use **SK1** rather than **A1** or **A2** (**par1** succeeds)
5. Frenzy speed bonus
6. Frenzy attack counter
7. n/a
8. n/a

## Frenzy setup

Due to the special setup used by the **thornhulk**, giving it a skill other than the one it currently has can lead to unexpected results. When **par4** succeeds, the **thornhulk** will use **SK1** instead of performing a regular melee attack, if this attack hits a foe the skill applies the **monfrenzy** state to the **thornhulk**, for the time this state is present the attack speed of the unit is boosted by the value specified in **par5** (I am unable to say by what factor however), the state remains active until the unit has done the number of swipes specified by **par6**. *Avoid setting **par5** to very large values, this causes the AI to remain idle.*

## Vampire 28

The **vampire** remains idle until a potential target enters the activation radius once this happens a target will be selected from the potential targets within the activation radius. The **vampire** will always approach the selected target.

1. Chance to attack (when within melee range)
2. Chance to use a **weak skill** (**par1** fails)
3. Activation Radius (subtiles)
4. Chance to use a **powerful skill** rather than a **weak skill** (**par2** succeeds)
5. Skill parameter (see below)
6. n/a
7. n/a
8. n/a

## Skill Index Table

1. Skills 1 and 4
2. Skills 1, 2 and 4
3. Skills 1, 2 and 4
4. Skill 3
5. Skills 1, 3 and 4
6. Skills 2 and 3
7. Skills 1, 2, 3 and 4

## Powerful skills

This pretty much depends on the skill-index (see table above), usually skills 1 and 4 are considered weak and are the only skills considered by **par2**, however skill-indexes 4 and 6 change this behavior, in this case skills 2 and 3 are likewise considered weak. Even if skills 1 and 4 are considered weak, they are included in the powerful skill list too, thus powerful skill actually only means chance to cast any of the available skills.

### BatDemon 29

Ever since the expansion came out this AI malfunctions, but not due to a bug, rather because Blizzard never cared to adapt it's behavior to 800x600 mode. What do I mean? When you first run into a **batdemon**, it will float on the ground, and then, after it is triggered, go into roosting mode (hanging on the ceiling). Prior to high resolution mode, it appeared to spawn in roosting mode (because the whole detection process occurred outside of the visible part of the screen!), to fix this problem set **AIDist** to 90 or so, unfortunately, *if the unit spawns as a champion, unique or superunique the problem persists*. Once the target comes within a distance of about 6 subtiles it will descend to the floor, approach and immediately attack (once) using **A2**. When **HP** falls below the percentage indicated by **par1** the unit will escape and go back into roosting mode as soon as possible, it will remain roosted, unless disturbed by the player, if this is the case they will descend again and continue to escape at least once, before attacking again, until **HP** raises above the indicated percentage again. While being roosted life regeneration recives the bonus of, (or is set to, the value indicated in **par5**. When the unit takes a hit, but HP does not fall below the threshold, the unit will escape, but not go into roosting mode, should **par2** succeed.

1. **HP** threshold
2. Chance to flee after taking a hit
3. Chance to attack (when within melee range)
4. Chance to use **A2** rather then **A1** (**par2** succeeds)
5. Life regeneration bonus
6. n/a
7. n/a
8. n/a

### Fetish 30

The **fetish** will first approach the target and attempt to attack in melee, once the first attack roll succeeds, he will continue to perform melee attacks until the number indicated in **par3** is reached, once this happens, the **fetish** will disengage, to a distance of about 6 subtiles and then repeat the whole process. Should **HP** fall below the **HP** threshold the fetish will disengage immediately no matter how many swipes are left in the attack loop. He will escape to more then 9 subtiles if a foe pursues him.

1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** fails)
3. Maximum swipes
4. **HP** threshold
5. n/a
6. n/a
7. n/a
8. n/a

## NpcOutOfTown 31

This is the AI used by the Tristram version of Deckard Cain (**cain1**), once spawned it will move a few steps, create a fake TP and vanish. Note that if there are multiple instances, the town portal will be created only once, for the first instance, the subsequent ones will simply vanish.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Npc 32

This is the generic NPC AI used by the game, the NPC by itself will not move at all, rather it expects to be assigned a path within the **DS1** map files. All other NPC related behaviors are 100 percent hardcoded and spread across countless different routines and subroutines.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## HellMeteor 33

The skill used by this AI by default is bugged (ever since 1.10 came out), the AI itself functions perfectly well. This AI will cast **SK1** at a random spot in one of 8 directions within the radius (the smaller the radius the better, larger radii will cause the individual meteors to disperse over a too wide area, and the player will only scarcely notice them!) defined by **par3**, should **par1** fail it will go into delay. *It does not target the player, neither does the player have to be within the radius* - the whole **hellmeteor** thing is an ambient effect for the River of Flame.

*Unfortunately, their original skill is too broken as to be easy to repair, if you want to make them work very near to the way they used to, give them a meteor clone that looks like the hellmeteor skill originally did.*

1. Chance to use **SK1**
2. Delay (frames) (**par1** fails)
3. Range (subtiles)
4. n/a
5. n/a
6. n/a

7. n/a
8. n/a

### Andariel 34

**Andariel** will always attack when a target comes into her melee range. The delay does take effect, but I could not, despite many attempts, find out how exactly.

1. Chance to use **SK1** rather than a melee attack (when within melee range)
2. Delay (frames) (event unclear)
3. Chance to use **SK2** rather than approaching (when outside melee range)
4. Chance to use **SK1** (when outside melee range)
5. n/a
6. n/a
7. n/a
8. n/a

### CorruptArcher 35

The **corruptarcher** will always shoot attackers. If you assign **SK1** to the **corruptarcher**, she will use that skill, rather than **MSA1**, as the default attack. Note that the **corruptarcher** will always approach, no matter what **par1** contains. To sum it up, when the AI detects a target it will approach this target until coming within melee range, unless **par4** succeeds, then it would retreat until the distance between it and the foe is at least as determined by **par5**, at this point the approach and escape routine ends and the attack cycle will start, unless the foe comes within the range defined by **par5** again, the **corruptarcher** will keep attacking, should the distance between her and the foe become too large (more or less one screen in 800x600 mode) the approach routine will kick in again. The two skill parameters are checked independently, but **par7** takes precedence over **par6**. *Unfortunately, the automatic approach routine broke the wonderfulness of this AI as it was known during 1.00-1.09 (it allowed perfect emulation of the D1 succubus behavior), in 1.10+ it will attempt to approach just after escaping, and this often leads to it running back and forth, like a target in a shooting boot, in order to avoid this you must set **par4** to something other than 100%, looking at the AI code might allow us to force the AI to use **par1** and **par8** again.*

1. n/a
2. Chance to shoot (when not approaching or escaping)
3. Delay (frames) (**par2** fails)
4. Chance to escape (when within **par5**-range)
5. Radius (subtiles)
6. Chance to use **SK2** rather than **A1** (**par2** succeeds)
7. Chance to use **SK3** rather than **A1** or **SK2** (**par2** succeeds)
8. n/a

### CorruptLancer 36

And again, an AI that now approaches automatically. This AI has two forms of approach, when the distance from the foe is more than **par5** indicates, the unit will run, rather than walk, if the distance is less it will walk, unless **par4** succeeds. It does not use running speed, neither is the speed boost controlled by the parameters. The boost is thus a hardcoded part of the AI code. Again, the two skill parameters are checked independently, with the later taking precedence over the former. *Note, the*

AI will hang if **par5** is set to 0.

1. n/a
2. Chance to attack (when within melee range)
3. Delay (frames) (**par2** fails)
4. Chance to use **RN** rather than **WL** (when outside melee range)
5. Always Run Distance (subtiles)
6. Chance to use **SK1** rather than **A1** (**par2** succeeds)
7. Chance to use **SK2** rather than **A1** or **SK1** (**par2** succeeds)
8. n/a

### SkeletonBow 37

Like some of the other ranged AI scripts, an attack is automatically retaliated. Parameters 4 and 5 are not used, I have set them to many different things without it having an effect in-game, the range settings are hardcoded.

1. Chance to attack (when within shoot-range)
2. Delay (par1 fails; par3 fails)
3. Chance to wander around (when outside shoot-range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### MaggotLarva 38

This AI is a little bit different from the ones described so far, the first delay takes effect after a successful roll, this is done in order to prevent the player from being overwhelmed with attacks if he is surrounded by maggot larvae (classic River of Flame). **Par5** is not used, when the attack fails the maggot will simply stay idle.

1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** succeeds)
3. Chance to approach (when outside melee range)
4. Delay (frames) (**par3** fails)
5. n/a
6. n/a
7. n/a
8. n/a

### PinHead 39

The first time a **pinhead** comes into melee range he will automatically attack.

1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** fails)
3. Chance to approach (when outside melee range)
4. Delay (frames) (**par3** fails)
5. Chance to use **SK1** rather than **A1** (**par1** succeeds).

6. n/a
7. n/a
8. n/a

#### MaggotEgg 40

1. Delay (**par2** fails)
2. Chance to use SK1
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

#### Towner 41

This AI is used by the random human population of the towns in Act 2 and Act 3, this AI will walk in one direction and stop or turn around (or walk in a different direction) when the path is blocked.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

#### Vendor 42

The second random human AI, this AI is used by the street vendors in the town of Act 2, by default it remains idle, but when you come within range they will at times use mode S1.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

#### FoulCrowNest 43

This AI will use SK1 once a target comes within range, after using SK1 it will wait for the number of frames specified in **par1**. If it used SK1 more then **par2**-times, the AI will commit suicide (play mode DT). *If the AI kills itself the game will not drop items, so forget about using this as an item*

dropper.

1. Delay (frames)
2. Usage counter
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Duriel 44

Duriel will always approach when outside melee range, when within melee range he will always attack using A1. **Par2** takes precedence over **par3**, which likewise takes precedence over **par4**. How did

Blizzard nerf duriel? --- They simply made him stop using **SK1** and **A2**, fill those AI parameters with values again to restore his former, sorc slaying, glory.

The slvl of duriels aura (**SK4**) is controlled solely by **par1**, blizzard likely did this to fine-tune his aura without having to worry about the **DifficultyLevels.txt** bonus!

1. **SK4** slvl
2. Chance to use **SK3** rather than **A1** (when within melee range)
3. Chance to use **SK2** rather than **A1** (when within melee range)
4. Chance to use **A2** rather than **A1** (when within melee range)
5. Chance to use **SK1** (when outside melee range)
6. n/a
7. n/a
8. n/a

## Sarcophagus 45

This AI is the same as the foulcrownest AI. *If someone can find a difference between them let me know!*

This AI will use **SK1** once a target comes within range, after using **SK1** it will wait for the number of frames specified in **par1**. If it used **SK1** more then **par2**-times, the AI will commit suicide (play mode DT). *If the AI kills itself the game will not drop items, so forget about using this as an item dropper.*

1. Delay (frames)
2. Usage counter
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a



## ElementalBeast 46

An unused, but functional AI. By default it stands around idle, until a foe comes into the activation radius, then it will pursue this foe until it gets within melee range. So what does it do? First of all, they use the same approach mechanism as the **willowisp**, that is, they vanish, using mode **S1** and then approach (while being invisible), once they get into melee range they appear again and attack once using **A1** and then use mode **DT** and die, apparently there is some hardcoded death damage included too (*that or I've been hallucinating, but the sorc I tested it with got hit after they died*).

1. Chance to approach (when outside melee range)
2. Activation Radius (subtiles)
3. Delay (frames) (**par1** fails)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## FlyingScimitar 47

Setting **par4** to 100 percent will at times cause the AI to hang, so refrain from doing that.

1. Chance to approach (when outside melee range)
2. Chance to attack (when within melee range)
3. Delay (**par1** fails; **par4** fails)
4. Chance to shuffle positions (**par2** fails)
5. n/a
6. n/a
7. n/a
8. n/a

## ZakarumZealot 48

The **zakarumzealot** will always approach the target and attack once it comes into melee range, thus **par1** is not used by the game. If **HP** falls below the threshold, the unit will flee from any nearby foes. *Once the player has killed the council members in Travincal this AI will flee from any nearby foes (cool story-wise, but horrible for other purposes).*

1. n/a
2. Chance to use **A2** rather than **A1** (when attacking)
3. **HP** threshold
4. Chance to use **RN** rather than **WL** (when approaching)
5. n/a
6. n/a
7. n/a
8. n/a

## ZakarumPriest 49

When outside melee range this AI at times will wander around. **Par2** take precedence over **par3**. The delay determines the number of frames between individual uses of **SK4**. During the delay they will use **SK2** rather than **SK4**. When a unit gets injured within the **par6**-radius they will use **SK1** on that unit. When their own **HP** drops to about ½ (at least so it looked in my tests!) they will also cast **SK1** on themselves, if it drops to a 3<sup>rd</sup> then they will use **SK3** (teleport) and attempt to get out of melee range that way.

1. Chance to attack (when target comes within melee range)
2. Chance to use **SK4** (**par4** succeeds)
3. Chance to use **SK2** (**par4** succeeds)
4. Chance to cast a spell (when target outside of melee range)
5. Delay (frames)
6. Radius (subtiles)
7. n/a
8. n/a

## Mephisto 50

By default **mephisto** will first approach to a distance of about 6 subtiles and from here start casting (apparently random, usage frequency probably based on game seed - as it differed each time I made a new game) **SK1**, **SK2** and **SK4**. Should the player come within a short range, but not melee range, he

will use **SK5**. If one comes into melee range he will attack in melee, and scarcely use **SK3**. When the player gets too far away, **mephisto** will not attempt to approach, but rather cast **SK6** (and he ignores **LoS**!). There are many theories floating around about the parameters, notwithstanding the numerous tests I've done, I again fail to see any difference in his behavior, as was the case in 1.09. *This AI is not weak or dumb, in fact it's pretty aggressive, the main problem with **mephisto** in vanilla is his stage, which basically turns him into a sitting duck.*

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Diablo 51

Another prime evil, another un-configurable AI. When the distance between **Diablo** and the foe is about one screen (800x600) he will alternate between **SK1**, **SK3**, **SK4** and **SK8** (as long as he has those skills!), about ¼ of the time he will charge at the player, using **SK5** (which is basically only a sequence AFAIK). When in melee range **Diablo** will first attempt to use **SK2** to chill the player (or freeze a summon/hireling) and then proceed to use **A1** and **A2**, after a few swipes he might swap to use **SK2** again. If the player opens a townportal, while outside of the radius he would follow you in (as long as his **LoS** isn't blocked by a wall), he will cast **SK7** on the object if it hasn't been blocked by a prison yet) - he only does this if the player gets out of his **LoS** (at least my impression of it is that way). *The main fault of this AI, as with **mephisto**, is the stage. It is too large, and **Diablo** doesn't follow characters that are too far away.* Note that the inferno-behavior is part of the skill function, so any enemy that you give the **DiabLight** skill should be able to use it properly (that's part of the reason why

players are unable to use that skill, unless modified!). Another note, **Diablo** never uses **SK6**.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## FrogDemon 52

It is hard to configure this AI, because even slight mistakes can cause it to hang around idle for very long periods of time, I'll do my best describing it. By default the **frogdemon** spawns in a different layer, being invisible (this requires the usage of the **SplEndGeneric** and **SplClientEnd** columns as well as the **frogdemon1 BaseID**), when a foe comes within **par8**-range the **frogdemon** will come back into the actual game layer, once there it will approach the player, either up to melee range, or up to **par6**-range (should **par5** or **par4** succeed). Now, the melee attack of the **frogdemon** is used only when the target swaps position. That is, if you stand still and the frog has 0% chance to shoot **MSA2** in melee, then the AI will hang after the first swipe - the reason this happens is that their melee range is too short, to fix this you can edit **MonStats2.txt** (set **MeleeRng** column to 3). Another time when the **frogdemon** can hang is when **par4** and **par5** are both set to 0 but **par6**-range is something greater than the **frogdemon**'s melee range. So if you want a melee-attacking **frogdemon**, set **par6** to 0. Finally, when you leave the **frogdemon**'s LoS he might submerge again. *A bug with this AI is that the game rolls **par5** even when no foe is within the **par6**-radius, thus the **frogdemon** will always shuffle positions should **par4** be set to 100!*

1. Chance to attack (when within melee range)
2. Chance to use **MSA2** rather than **A1** (**par1** succeeds)
3. Chance to shuffle position (**par1** fails)
4. Chance to shuffle position (**par5** fails)
5. Chance to use **MSA2** (when within **par6**-range)
6. Range (subtiles)
7. Delay (frames) (**par3** fails)
8. Emerge distance (subtiles)

## Summoner 53

By default the **summoner** will wander around randomly. When the foe comes within **AIDist** the **summoner** will start rolling **par1**, if it succeeds he will either cast **SK4** (with the interval specified by **par5**) or **SK5** (if **par2** succeeds, which btw overrides all other AI parameters!), once the foe comes within **par8**-range the **summoner** starts rolling **par3**, which will either make him use **SK1** or **SK3** (never both of them, which he uses is apparently specified by the game seed or a similar mechanism). If the foe comes closer, into **par7**-range, he will cast **SK2** (in the interval specified by **par4**). The **summoner** does not use **par6** despite Blizzard documentation.

1. Chance to use a skill
2. Chance to use **SK5** (**par1** succeeds)
3. Chance to use **SK1** or **SK3** (**par1** succeeds, **par2** fails and within **par8**-range)
4. Interval (frames) (between uses of **SK2**)

5. Interval (frames) (between uses of **SK4**)
6. n/a
7. Range (subtiles)
8. Range (subtiles)

## NpcStationary 54

This is identical with the normal **NPC** AI, just that it remains idle on one spot, and doesn't use **DS1** paths.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Izual 55

**Izual** approaches in small steps, usually about 3 subtiles at once, when he comes within engage range (ca. 6 subtiles) he stops and starts rolling **par2**. If **par2** fails he will use **SK2**, if it succeeds he will engage and come into melee range. Now he will start rolling **par1**, if it fails he rolls **par4**. **Par6** is no longer used, it can be left empty.

1. Chance to attack (when within melee range)
2. Chance to engage (when within engage range)
3. Chance to use SK1 (**par2** fails)
4. Chance to use SK1 (**par1** fails)
5. Delay (frames) (**par3** fails; **par4** fails)
6. n/a
7. n/a
8. n/a

## Tentacle 56

By default the **tentacle** is submerged, when a foe comes within the emerge distance it will wait for **par3** seconds before emerging, once it emerges it will roll **par1**, if the foe is within melee range. After **par4** seconds have elapsed it will roll **par2**, if it succeeds it will submerge again and the whole process starts over. Might submerge again if you leave the emerge radius.

1. Chance to attack (when within melee range)
2. Chance to use **SK1**
3. Interval (seconds) (before using **SK2**)
4. Interval (seconds) (before rolling **par2**)
5. Delay (**par1** fails)
6. Emerge distance (subtiles)

7. n/a
8. n/a

## TentacleHead 57

By default the **tentaclehead** is submerged, when a foe comes within the emerge distance it will wait for **par3** seconds before emerging, once it emerges it will roll **par1**, if the foe is within missile range. After **par4** seconds have elapsed it will roll **par2**, if it succeeds it will submerge again and the whole process starts over. Might submerge again if you leave the emerge radius.

1. Chance to shoot **MSA1**
2. Chance to use **SK1**
3. Interval (seconds) (before using **SK2**)
4. Interval (seconds) (before rolling **par2**)
5. Delay (**par1** fails)
6. Emerge distance (subtiles)
7. n/a
8. n/a

## Navi 58

The AI used by **Flavie**, this is a standard stationary **NPC** AI, that unlike the other one, is offensive and will attack nearby foes.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Bloodraven 59

An excellent archer AI, that unfortunately is un-configurable (damn you Blizzard :P). **Bloodraven** will always attempt to escape when you come within melee range, and usually stays in motion. When the distance from any foes is high enough she will use **SK1**. Otherwise she will shoot **MSA1**, and on occasion use **SK2 (quickstrike)** which allows her to immediately turn around and fire **MSSQ** at the player.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## GoodNpcRanged 60

The unused **roguescout** uses this AI, it basically remains idle or wanders around, until a foe comes within missile range. The foe is then barraged by **MSA1**. The **roguescouts** were the first incarnation of the support NPC blizzard used in the expansion (the **barbarian combatants**) but never made it into the final game.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Hireable 61

Even the slightest bit of this AI's behavior is heavily hardcoded, and documenting this here is beyond the scope of the project, anyway - you all know how your mercs behave anyway. In rough words, it stays within a large radius of the player, and will attack any foe that comes within range, usually using the threat rating system to determine what unit is to be attacked first, the chance and way a skill is used is defined by **Hirelings.txt**. The AI is actually pretty dumb when one looks at it like this and compares it to some of the enemy AI scripts.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## TownRogue 62

This AI was supposed to belong to a subtype of rogue that guards the town from intrusion, but was never used in-game.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### GargoyleTrap 63

1. Radius (subtiles)
2. Chance to use **SK1** (when within **par1**-range)
3. Delay (frames) (**par2** succeeds)
4. Delay (frames) (**par2** fails)
5. n/a
6. n/a
7. n/a
8. n/a

### SkeletonMage 64

Wonderful, while Blizzard broke the **corruptarcher** AI, they really improved this one. First of all, almost everything is handled by the parameters below, only one thing seems to happen that is not handled by them, sometimes when you approach them while they are escaping they will stop and fire a missile at you (irregardless of **par1**).

1. Chance to shoot **MSA1** (when within **par6**-range)
2. Radius (subtiles)
3. Chance to approach (when outside **par2**-range)
4. Radius (subtiles)
5. Chance to escape (when within **par3**-range)
6. Radius (subtiles)
7. Chance to shuffle position (**par1** fails)
8. Delay (frames) (**par7** fails)

### FetishShaman 65

These guys will always use **SK1** when you remain idle for too long near them. **Par2** is unused, it does not serve as a usage counter. **Par3** determines the radius in which they can use **SK3**, **par5** determines the radius in which they search for potential heal/resurrect targets (they use the same skill for both). **SK2** is never used, prior to the expansion they were supposed to cast a buff of sorts on their minions, but this never worked (and instead of fixing it Blizzard simply removed it...). **Par4** is also unused, they will wander around by default if there are things to heal or resurrect within the **par3**-radius.

1. Chance to use **SK3** (when fallen or injured allies are within **par3**-range and **par5**-range)
2. n/a
3. Radius (subtiles)
4. n/a
5. Radius (subtiles)
6. n/a
7. n/a
8. n/a

### SandMaggotQueen 66

Generally the **sandmaggotqueen** functions like a **foulcrownest**, however there is one major (and

bad) difference, you are unable to alter what she spawns, this is hardcoded. To make it worse, none of the skills is actually used, this is totally hardcoded. Another difference from other nests, she will not die once she spawned the maximum permitted monsters.

1. Usage counter
2. Delay (frames)
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### NecroPet 67

There is no reason to discuss this AI here, it is the generic summon AI, and as such is totally hardcoded, every single aspect of the various summons' behavior is hardcoded and only that. In fact this AI is replaced by others when the summon is created as far as I know, it only serves as a place taker, there is a check whenever the summon will be a melee or ranged attacker in the code, which currently only defines the **necromage BaseID** as a ranged attacker.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### VileMother 68

When outside melee range the **vilemother** will approach the player when she is first activated, this will not be the case should **par3** succeed. Like all other spawners, this AI also has a usage counter which controls the maximum uses of the spawning skill, what is different, besides the fact this AI is mobile, is the secondary usage counter, which controls how many times in a row they can use the spawning skill (setting it to 0 will prevent them from using **SK1**). If the **par2** condition applies she will either approach, and if that fails wander around, should this fail as well she remains idle.

1. Usage counter
2. Secondary usage counter
3. Chance to use **SK1**
4. Chance to attack (when within melee range)
5. Chance to approach (when the **par2**-condition applies)
6. Chance to shuffle position (when **par5** fails)
7. Delay (frames) (**par4** fails)
8. n/a

### VileDog 69

1. Chance to attack (when within melee range)



2. Delay (frames) (**par1** fails)
3. Chance to approach (when outside melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## FingerMage 70

The **fingermage** will automatically attack when within melee range. First of all, this description is not 100% accurate and this complex AI might work differently in fact, but here is what I managed to figure out. When you come within **par7**-range the unit will approach into melee range, once it ends up there it will start performing melee attacks, **par2** takes precedence over this (not always however which is weird), if **par2** succeeds they will use **SK1**, if it fails they will instead go into a delay. When **HP** falls below the second threshold (**par4**) they will escape from the player, once hp rises above the threshold specified in **par3** they will return to their normal behavior again (this is an assumption, I didn't test this, the parameter might not be used at all in fact). **Par6** controls how often they can engage in the escape routine, it must be at least 1 in order for them to escape the first time **par4**-condition is true, setting it to two will allow them to escape twice. Note, since they always attack when in melee range **par1** does not control position shuffling, no matter what blizzard wrote.

1. Chance to approach (when within **par7**-range)
2. Chance to use **SK1** (when within **par5**-range)
3. **HP** Threshold
4. **HP** Threshold
5. Radius (subtiles)
6. Counter
7. Radius (subtiles)
8. Delay (frames) (**par2** fails)

## Regurgitator 71

This AI no longer works like it did, it no longer differentiates corpses within melee range and corpses outside melee range, both scanning parameters are still functional but they just apply to the whole area within the radius defined by **par6**. Once they've eaten a corpse they will immediately shoot **MSA2**.

1. Chance to attack (when within melee range)
2. n/a
3. Chance to approach (when outside melee range)
4. Chance to approach and eat a corpse (when a corpse is within **par6**-radius)
5. Chance to approach and eat a corpse (when a corpse is within **par6**-radius)
6. Radius (subtiles)
7. n/a
8. n/a

## DoomKnight 72

When attacked they sometimes automatically retaliate (once **HP** plunges beneath 50%).

1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** fails)
3. Chance to approach (when outside melee range)
4. Delay (frames) (**par3** fails)
5. n/a
6. n/a
7. n/a
8. n/a

### AbyssKnight 73

By default the **abyssknight** will use **SK1**, after using **SK1** they will go into a delay (the length of which is defined by **par6**), while this delay takes place they will roll **par7**, if it succeeds they will approach until they come within melee range. When **HP** plunges beneath the threshold defined by **par1** they will roll **par2**, if it succeeds they will use **SK2**, they will not reuse this skill as long as the state granted by it remains active. **SK3** is never used.

1. HP Threshold
2. Chance to use **SK2** (when **par1**-condition is met)
3. Chance to attack (when within melee range)
4. Delay (frames) (**par3** fails)
5. n/a
6. Delay (frames) (after using **SK1**)
7. Chance to approach (while **par6**-delay takes place and outside melee range)
8. n/a

### OblivionKnight 74

When the player comes within **par1**-range the **oblivionknight** will use **SK4** and then escape until the distance between it and the player is greater than **par1**-range. **SK2** and **SK5** are never used.

1. Radius (subtiles)
2. Radius (subtiles)
3. Interval (frames) (between uses of **SK6**)
4. Chance to use **SK6** (when within **par2**-range)
5. Chance to use **SK1** (while **par3**-interval is active and within **par2**-range)
6. Chance to use **SK3** rather than **SK1** (**par5** succeeds)
7. n/a
8. n/a

### QuillMother 75

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Delay (frames) (**par1** fails)
4. Delay (frames) (**par3** fails)
5. n/a
6. n/a
7. n/a

8. n/a

## EvilHole 76

These fallen spewing volcanoes are a remain from the alpha, they are heavily hardcoded, first of all, it is impossible to select them, this is not related to COF data or selection-booleans, this is hardcoded to the **evilhole1 BaseID**. They will also always spawn **fallen1**, there is no way to change this other then setting **PlacesSpawn** to true, but when you do that the AI will break and the unit will not spawn (but the **hclidx** provided in the **spawn** column will spawn in place of the **evilhole**). To properly fix them you will need a fair amount of work, but it's doable (documenting how is beyond the scope of this compendium however). As with other level populators, the counter controls the amount of times they can spawn a new unit. **SK1** is not used, the spawning is hardcoded.

1. Counter
2. Delay (frames) (between spawning **fallen1**)
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Trap-Missile 77, Trap-RightArrow 78, Trap-LeftArrow 79, Trap-Poison 80, Trap-Nova 92

These five AIs will have to remain untested, because trap AIs are setup to automatically die when they are not created by an object or by a map. They should still work like they did during 1.00-1.09, at least I failed to notice any real in-game differences.

## JarJar 81

This is the AI used by **Kaelan** (the annoying NPC that prevents you from entering the palace in Act II). It does nothing other then remaining idle in **NU** mode.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## InvisoSpawner 82

Another hardcoded mess. This is another unused level populator, it is unique in that it creates units within a radius, the size of this radius is hardcoded and likewise, the unit it creates is hardcoded as well (**mummy1**). The counter works as for all other level populators. To sum it up, when the player enters the radius defined by **par2** the **invisospawner** will start spawning units.

1. Counter
2. Radius (subtiles)
3. Delay (frames) (between spawning **mummy1**)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### MosquitoNest 83

Yet another unused level populator. First of all, thank you Blizzard for fixing this AI (it was broken prior to 1.10 and basically didn't do anything). When the unit is first activated it will use **SK1** once, after this it will wait until the player comes into **par2**-range to spawn any other units, the counter and delay work as for any other nest, that is, the counter controls how many times **SK1** can be used, and the delay controls the rate at which **SK1** is used.

1. Counter
2. Radius (subtiles)
3. Delay (frames) (between uses of **SK1**)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### BoneWall 84

I doubt I need to explain what this AI does, now do I. I don't exactly know in what way this is supposed to be different from idle.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### HighPriest 85

By default these guys will approach when outside melee range and use **A1** when within it or use **MSA2** if **par7** succeeds. Should they disengage they will not reengage unless **par1** succeeds. While being disengaged they will use **MSA2** (**par5** succeeds), if the player is within **par8**-range they will use **SK1**. This AI is quite complex, so there might be errors in my analysis, but all in all, this is how it should work. *Note, they use **MSA2** when using **SK1** or **SK2**, but this is probably a bug and not intentional, to fix this simply change the animation they use for casting **SK1** or **SK2**.*

1. Chance to engage (after having disengaged)
2. Chance to use **SK2** (when injured units are nearby and outside melee range)
3. Interval (frames) (between uses of **SK1** and **SK2**)
4. Chance to use **SK1** (when within **par8**-range)
5. Chance to shoot **MSA2** (when outside melee range)
6. Chance to disengage (when within melee range)
7. Chance to shoot **MSA2** rather than using **A1** (when within melee range)
8. Radius (subtiles)

## Hydra 86

The **hydra** remains idle until a target comes within range, when a target does come within range it will use **SK1**.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Trap-Melee 87

1. Chance to attack (when within melee range)
2. Delay (frames) (**par1** fails)
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## 7TIllusion 88

When the player comes within range this unit will shoot **MSA1** and then die. They will only shoot towards northwest. These unit is or was related to the final quest in Act II (the lightning that opens the chamber once you unlock it using the Horadric Staff), the only difference is that this unit actually fires a missile that can damage the player, so it can't be the one used by the game in it's current state for that quest.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## MegaDemon 89

Note, they will not stop to use **SK1** even when **par1** succeeds, **par1** is in fact only rolled when they are unable to approach.

1. Chance to use **SK1** (when outside melee range)
2. Chance to use **SK1** (when within melee range)
3. Chance to attack (**par2** fails)
4. Chance to approach (when outside melee range)
5. Chance to shuffle position (**par3** fails)
6. Delay (frames) (between uses of **SK1**)
7. n/a
8. n/a

## Griswold 90

This is a stupid AI, all that it does (and it does very slowly for the matter of fact) is scan for potential targets, and then approach until it comes into melee range. Once it is within melee range it will attack.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## DarkWanderer 91

This AI will remain inactive until it is triggered by a special hardcoded event (thus spawning it via **Levels.txt** will only create idle versions of the unit). Basically it walks a few steps and then kills itself, spawning a few **vilechild1** units after death.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## ArcaneTower 93

This is a rather straightforward AI script. It will use **SK1** **par1**-times, in between individual uses it will wait for **par2**-frames, once it is done wasting all **SK1** uses it will go into a long delay (defined by **par3**)

and then repeat the same thing with **SK2** (using **par4-6** instead) and so on and so forth.

1. Counter
2. Delay (frames) (between uses of **SK1**)
3. Delay (frames)
4. Counter
5. Delay (frames) (between uses of **SK2**)
6. Delay (frames)
7. n/a
8. n/a

## DesertTurret 94

When it is first activated this unit will use **SK1** once in the direction it is currently facing, otherwise it will wait until you enter **par5**-radius. Once you are in this radius it will use **SK1** **par2**-times + 1, with **par3**-frames delay in between uses, once all of the charges are used it up it will go into a long delay (defined by **par3**). **Par6** controls the degree of the arc the missiles are fired at, the larger the number the closer the three missiles are to each other, *setting this to 0 will prevent it from firing missiles.*

1. Delay (frames) (between uses of **SK1**)
2. Counter
3. Delay (frames)
4. Counter
5. Radius (subtiles)
6. Missile Radius
7. n/a
8. n/a

## PantherJavelin 95

When undisturbed they will randomly wander around. When approached (the distance is hardcoded) they will roll **par4**, if it succeeds they will start to retreat, they will not retreat beyond **par3**-distance however.

1. Chance to approach (when outside **par6**-range)
2. Chance to shoot **MSA1** (when within **par6**-range)
3. Maximum Distance (subtiles)
4. Chance to retreat (when too near to the player)
5. Delay (frames) (**par2** fails)
6. Radius (subtiles)
7. n/a
8. n/a

## FetishBlowgun 96

These guys will approach until they get within **par1**-range, once they got there they will continuously shoot **MSA1**.

1. Radius (subtiles)
2. Chance to escape (when within melee range)

3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### Spirit 97

This unit will remain idle until the player comes within melee range, once this is the case it will attack in melee and die (after one attack).

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### Smith 98

Another dumb melee AI that is totally hardcoded, anyway, the **smith** will always approach when outside melee range, once he comes within melee range (for the first time), he will pause for a short period of time and then proceed to attack. If you escape and he approaches you again he will not pause, but attack right away.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### TrappedSoul 99

It remains idle until the player comes within melee range, once the player has entered melee range he will be attacked. Nothing more nothing less, it's basically an un-configurable version of **trap-melee**.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a



## Buffy 100

This is the AI used by **Hadriel**, it does nothing but remain idle in **NU** mode.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## SiegeTower 113

Don't know for sure, but the delay might control how many frames must elapse between different imps using the tower as a turret. I.E. after imp A leaves the tower, par1 frames must pass before imp B can use the tower, this is just a guess though.

1. Delay (frames)
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## ReanimatedHorde 114

By default this AI does absolutely nothing (if all pars are zero it remains idle). Par5 and Par6 are essentially the same thing, I didn't notice a difference (maybe one is for running [5] and the other is for walking [6]?), par8 is rather unreliable, setting it to high values actually prevents self-resurrection. The charge behaviour is bugged, they are unable to properly charge up to the player at times, to avoid this set the par3-radius to a very small value.

1. Chance to attack (when within melee range)
2. Delay (frames) (par1 fails)
3. Radius (subtiles)
4. Chance to use SK2 (when within par3-range)
5. Chance to approach (when outside melee range)
6. Chance to approach (when outside melee range)
7. Delay (frames) (par5 and par6 fail)
8. Chance to use SK1 (after death)

## Siegebeast 115

By default the siegebeast will approach the player. I assume the radius defined by par1 controls the radius in which the siegebeast commands imps to ride on it. Their speed is modified by the percentage

specified by par7 when they use SK2.

1. Radius (subtiles)
2. Chance to attack (when within melee range)
3. Chance to use SK1 (when within melee range)
4. Delay (frames) (par2 and par3 fail)
5. Chance to use SK1 (when outside melee range)
6. Chance to use SK2 (when outside melee range)
7. Speed bonus
8. n/a

## Minion 116

By default this AI is idle.

1. Chance to attack (when within melee range)
2. Delay (frames) (par1 fails)
3. Chance to approach (when outside melee range)
4. Delay (frames) (par3 fails)
5. Chance to use A2 rather than A1 (par1 succeeds)
6. n/a
7. n/a
8. n/a

## SuicideMinion 117

When the player comes into melee range they will self-destruct after par2-frames (par1 is the same thing, but isn't used). Setting it to 0 makes them blow up immediately.

1. n/a
2. Delay (frames)
3. Chance to approach (when outside melee range)
4. Damage Radius
5. n/a
6. n/a
7. n/a
8. n/a

## Succubus 118

Whenever they will use SK1/SK3 or SK2/SK4 depends on the amount of mana the targeted unit has, if it has more than, or exactly as much, mana as hp they will use SK2/SK4 (Blood Mana). [altering this behaviour should be simple via CE]. While they indeed properly use SK1 and SK2, this will make them ignore SK3 and SK4. I don't know if par7 really works like Duriel's aura level parameter, test for yourselves if you want absolute certainty. Finally, undocumented but functional, par8 controls the chance of them casting SK5 (Blood Star - wannabe skill).

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Chance to use SK1/SK3 or SK2/SK4 (when within par4-range)
4. Radius (subtiles)
5. Delay (frames) [par1 fails]

6. Delay (frames) [par2 fails]
7. n/a
8. Chance to use SK5

## SuccubusWitch 119

When all parameters are 0, they will randomly walk and wander around. To me it doesn't seem as if par5 has any effect. When par3 succeeds, they will cast SK1. SK2, SK3 and SK4 are unused. Likewise par5 and par7 seems to serve no purpose. Finally, par8 does not control the chance to cast Weaken, it controls the chance to use Blood Star (SK5). - This AI is a perfect example why I initially said Blizzards documentation is horrible.

1. Chance to attack (when within melee range)
2. Chance to approach (when outside par4-range)
3. Chance to escape (when within par4-range)
4. Radius (subtiles)
5. n/a
6. Delay (frames) [par2 fails]
7. n/a
8. Chance to use SK5

## Overseer 120

WARNING: Leaving all parameters blank will first cause the AI to hang once it comes into melee range, and afterwards lead to an assertion error (it is a hPath error, so I guess it attempts to walk into the tile occupied by the char...). Avoid at all cost. This error occurs when par4 is left blank. They will approach if outside of par4 range, and escape when within par4 range.

After being attacked, they will immediately start casting SK1 in the interval specified by par1. Cry Help works like attract, and is cast on the player attacking them, thus making it the primary target for all nearby monsters.

SK2 is used on injured units (when their HP plunges lower then 50%) and they have suffered that injury within par4-range. This is a indirect heal spell, it works like Holy Bolt, which leads to a problem, if the missile hits \_another\_ monster they will keep casting it over and over and over again not doing anything else (if par2 has a high chance). Par3 controls the chance to use SK3 on a nearby allied monster, this is what triggers Bloodlust (etc). I have no idea what exactly par5 is doing, but it seems to effect the range of par4 in some way. SK4 doesn't seem to be used at all. According to Blizzards original AI documentation (not the 1.10 one), par5 controls the chance to walk, but this is probably no longer valid.

1. Interval (frames)
2. Chance to use SK2.
3. Chance to use SK3.
4. Radius (subtiles)
5. Radius (subtiles)
6. Chance to attack (when within melee range)
7. Chance to use A2 rather then A1 (par6 succeeds)
8. n/a

## MinionSpawner 121

This AI and the unit itself got fixed in 1.10. This is a more advanced version of the normal spawner AI,

the usage counter as usual counts how often SK1 can be used. The two delays (par2 and par3) seem to control the interval between individual spawns being created. But par2 might not be used at all, since it will always use the skill (so it won't even fail). Par4 controls the activation radius, in which the unit will start using SK1. Par5 is unused (if it is supposed to do what I believe, but I might be wrong), use SparsePopulate instead.

1. Usage Counter
2. Delay (subtiles)
3. Delay (subtiles)
4. Radius (subtiles)
5. n/a
6. n/a
7. n/a
8. n/a

## Imp 122

Yes blizzard, "refer to source" is a wonderful description of what this AI does.

This AI requires 16 parameters (divided into groups of 4), so it is multiline, par4-1 and par4-2 seem to be unused.

Par1-1 seems to controls the HP threshold that is used by the escape routine (when hp plunges below this value they will avoid melee range either by using SK1 or by running off, note that when HP is above this threshold they will approach), par1-2 controls the radius in which the imp will use SK1 (Teleport). The imps will use SK1 depending on the outcome of par1-3, if it succeeds, they pick a random subtile within par2-range and teleport to it. Par1-4 controls the chance to walk in a random direction (during and after approaching). Note that setting par1-2 to a value above about 2-screens radius they will teleport to the same spot they are standing on.

Par2-1 controls the distance, in subtiles, the imp can teleport into a siege tower/beast from. Par2-2 controls the radius in which the imp can cast spells (SK3 or SK5) at the player when on a siege tower/beast, par2-3 controls the chance of doing so. The radius defined by par2-4 is referred to as Error-Range, leave it untouched, this is probably releated to tower-detection.

Par3-1 controls the radius that triggers the escape behaviour (when the player comes into this radius it'll try to escape), the chance to escaping is controlled by par3-2.

- 1  
HP threshold  
Radius (subtiles)  
Chance to use SK1  
Chance to wander around
- 2  
Radius (subtiles)  
Radius (subtiles)  
Chance to use a SK3 or SK5 (when within par2-2 range)  
Radius (subtiles)
- 3  
Radius (subtiles)  
Chance to escape (when within par3-1 range)  
Radius (subtiles)  
Chance to use SK4 (when within par3-3 range)

4  
n/a  
n/a  
Radius (subtiles)  
Chance to use SK4 (when within par4-3 range)

### Catapult 123

How this works: The catapult shoots the missile created by the catapult spotter, the catapult spotter is what actually controls the skills, this only controls how often they are fired.

1. Chance to shoot MSA1
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### FrozenHorror 124

A fully configureable AI, it does nothing if all pars are blank.

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Chance to use SK1 (when within melee range)
4. Delay (frames) [par1 fails, par2 fails]
5. n/a
6. n/a
7. n/a
8. n/a

### BloodLord 125

Another fully configureable AI, it does nothing if all pars are blank. Note, the Frenzy behaviour of this monster doesn't seem to follow the rules of the Thornhulk.

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Chance to use SK1 rather than A1 (par1 succeeds)
4. Delay (frames) (par1 fails, par2 fails)
5. n/a
6. n/a
7. n/a
8. n/a

### CatapultSpotter 126

This is the invisible stationary unit that actually does all the work when it comes to the catapult, the

visual catapult is only there for the 'killing' and launch display. If all pars are blank it does nothing, so it is fully configurable.

So how exactly does this work, first the game will wait until the countdown specified by par2 hits 0, then it will roll par1, if par1 succeeds it will check if the player is within par3-radius, if he is, the AI will use a spell (see spell selection below), this spell will be targeted at the players x/y coordinates PLUS a random radius (0-par4), want the catapults to stop being so downright inaccurate? Set par4 to a very small value, and they will target the player, and not the rest of the screen.

The spell used is selected based on the par5-counter, after a spell has been used par5-times, they will use another spell, which is apparently randomly selected.

This AI is wonderful for ambient effects, with a high par4 radius, you can make it effect the whole screen ^^

1. Chance to use a spell (alternating between SK1, SK2, SK3, SK4 and SK5) [when within par3-range]
2. Delay (frames) (between rolls of par1)
3. Radius (subtiles)
4. Radius (subtiles)
5. Usage counter
6. n/a
7. n/a
8. n/a

### NpcBarb 127

This AI is badly hardcoded, first of all, it casts a hardcoded attract on itself, to make monsters target it instead of the player (discovered by Vendanna), second of all, it will always walk in one direction. You can't use this AI for an enemy, as it will attempt to attack other monsters (despite being set to align = 0).

1. Interval (frames) [between attacks]
2. Chance to approach (when within par3-range)
3. Radius (subtiles)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### Nihlathak 128

By default (automatic unchangeable behaviour) this AI will SK4 on the player, if he comes within skill-range.

When par1 succeeds this AI will use SK1 to teleport to a random subtile within par2-radius (similar to the imp AI). When the player comes within par5-radius he will escape. About 30 seconds after this AI is triggered, par6 is unlocked, this controls the chance to use SK5 (Minion Spawner), by default he won't summon anything, make sure to fill the spawn columns properly before enabling this undocumented and unused feature.

1. Chance to use SK1 (when within melee range)
2. Radius (subtiles)

3. Chance to use SK3 (on dead monsters)
4. Chance to use SK2 (on living monsters)
5. Radius (subtiles)
6. Chance to use SK5 (par unlocked after about 30 seconds ellapsed)
7. n/a
8. n/a

### GenericSpawner 129

Works like any other spawner AI would, I doubt the radius parameter that should be controlled by par2 does anything, this was never coded I guess, use the Mosquito Nest AI instead, the only spawner AI that still uses the radius param properly (Minion Spawner AI is nice too).

1. Delay (frames) [between uses of SK1]
2. n/a
3. Usage counter
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### DeathMauler 130

Totally parameter controlled AI.

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Radius (subtiles)
4. Chance to use SK1 (when within par3-range)
5. n/a
6. n/a
7. n/a
8. n/a

### Wussie 131

This is the AI used by the trapped barbs, this AI remains idle and plays the "help us" sound file over and over again, until the nearby door is shattered, then a portal is created to which these units will walk. They can actually die (making it harder to beat the quest), but in the normal game their HP is too high for that to happen.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## AncientStatue 132

This AI remains idle until triggered by the hardcoded quest event, then it uses SK1 and self destructs to summon the assigned Ancient boss.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## Ancient 133

These AIs are hardcoded, unless triggered by the quest event they will remain idle, furthermore, the same AI works differently depending on the unit ID.

### Whirlwind Barbarian

1. Radius (subtiles)
2. Chance to use SK1 (when within par1-range)
3. Chance to attack (when within melee range)
4. Radius (subtiles) [the end point for WW, how many subtiles behind the player will it stop WW'ding]
5. n/a
6. n/a
7. n/a
8. n/a

### Throwing Barbarian

1. Radius (subtiles)
2. Chance to shoot MSA1 (when within par1-range)
3. Chance to use SK1
4. Chance to escape (when within melee range)
5. Radius (subtiles) [distance to escape to]
6. n/a
7. n/a
8. n/a

### Leap Barbarian

1. Radius (subtiles)
2. Chance to use SK1 (when within par1-range)
3. Chance to attack (when within melee range)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a



## BaalThrone 134

After a boss wave has been slain, this A1 will use SK2 on the corpses. When exactly it uses SK3 and SK4 I can't say for sure. For reference, this is the baal that curses you in the Throne Room and summons the boss waves.

1. Chance to use SK1.
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## BaalCrab 135

This AI is totally hardcoded. When you come into spell range, he will either use SK1, SK2 or SK4. When further away, he might consider SK5 and SK6 (depending on the amount of mana you have), he also uses SK3 when you are far away (summons the tentacles), when he is under attack, he will either use SK5 to teleport away or summon the baal clone, which is not a skill but a hardcoded event. The problem with this AI is once again the map, not the AI itself, the Worldstone Chamber makes it too easy to cause the AI to get stuck in a position where it won't be able to hit you.

1. n/a
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

## BaalTaunt 136

This is the 'baal laughing and killing you if you remain idle' effect that kills leechers. ;) Basically, this thing will teleport to your char (this is ultra cool for a 'prison effect' if the enemies are not uncollideable) whenever you move, if you move away further than par1-subtiles, it'll walk to you again. If you are further away than par3-subtiles, it'll warp to you, rather than walk. After par2-seconds have elapsed, it'll use SK1 (unless you moved).

1. Radius (subtiles)
2. Delay (seconds) [between uses of SK1]
3. Radius (subtiles)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### PutridDefiler 137

This AI is hardcoded to a large extent, when there are allied units nearby, it'll cast SK1 on them. - What isn't hardcoded. It will escape once the player comes into par1-radius, it will escape to a distance of par2-subtiles. If it can't escape anymore it'll attack in melee.

1. Radius (subtiles)
2. Radius (subtiles)
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### BaalToStairs 138

This is the baal that appears after the final wave is killed, the one turning around and walking down the stairs, par1 controls the distance to the stairs, before it stops and vanishes.

1. Radius (subtiles)
2. n/a
3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### BaalTentacle 139

The baal tentacle will self-destruct after par1-minutes have elapsed (don't know if it's in minutes, but 10 seconds seems too short...)

1. Chance to attack (when within melee range)
2. Delay (frames) [par1 fails]
3. Delay (minutes?)
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a

### BaalCrabClone 140

This hardcoded AI is exactly the same as the BaalCrab one, just that it doesn't create the clone, otherwise it's the same.

1. n/a
2. n/a
3. n/a
4. n/a

5. n/a
6. n/a
7. n/a
8. n/a

### BaalMinion 141

1. Chance to attack (when within melee range)
2. Chance to approach (when outside melee range)
3. Chance to use SK1 (par1 succeeds)
4. Delay (frames) [par1 fails, par2 fails]
5. n/a
6. n/a
7. n/a
8. n/a

### ClawViperEx 142

This AI was added in 1.10, it is like the ClawViper AI, it however has an added ranged-attack capability.

1. Chance to use SK1 (when within par2-range)
2. Radius (subtiles)
3. Chance to attack (when within melee range)
4. Chance to shoot MSA1 (when within par7-radius)
5. Delay (frames) [like for normal clawviper I think]
6. Color Parameter [like for normal clawviper]
7. Radius (subtiles)
8. Interval (frames) [between rolls of par4]