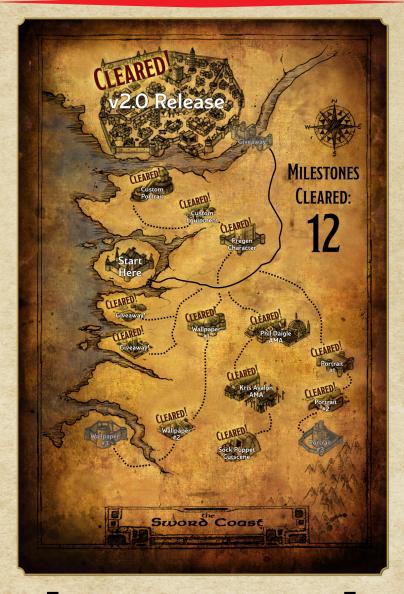
# RELEASE NOTES, V2.0



[Beambog]

#### RELEASE NOTES, V2.0 CREDITS

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Disclaimer: As with any major change to a piece of software, the application of the update described here may result in unexpected changes to existing saves, especially on modded copies of the game. As part of the update process, any mods you have applied will be cleared. If you don't wish to lose your mods, back up your installation before applying this update.

What? Oh, I see. If it's not filled with a half-dozen zingers and tongue-in-cheek references to Elminster then it's not worth reading, is it? Well WAKE UP AND SMELL THE TECHNOJARGON, President Fancy-Pants! Not all disclaimers are sunshine and irony! I swear, the next time I see some upstart trying to sell me some trumped up disclaimer about turnip paste and goblin wigs, I'll make them EAT those wigs, and the horse they rode in on! And that's a promise! Put THAT in your release notes!

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# How to Use This Document

The v2.0 update contains hundreds of bug fixes and enhancements. This document is designed to give you a comprehensive list of the fixes, as well as some details on the bigger changes. These release notes are organized into the following sections:

- Features and Enhancements: A full break-down of the headline enhancements from the v2.0 update, including the new UI system and the Shaman class. This section also includes explanations of the changes we've made to rules and mechanics-or to the documentation of existing rules and mechanics that were being reported incorrectly.
- Engine Fixes: A complete list of the bug fixes that apply universally across all Infinity Engine games.
- Bug Fixes BG:EE: A complete list of the bug fixes that apply specifically to Baldur's Gate: Enhanced Edition.

- Bug Fixes BGII:EE: A complete list of the bug fixes that apply specifically to Baldur's Gate II: Enhanced Edition.
- Modding Features: A brief look at the new scripting features and spell opcodes that you can make use of in your own mod creations.
- Using the New UI System: Some instructions on how to use the new UI system to change the game's user interface to suit your liking, or even to create your own screens.

v2.0 is the product of more than a year of work from our development team. We hope you enjoy the results.

#### WHAT'S NEXT?

We'll be spending the next few weeks making continuous improvements to the game's stability and to the layout and design of the User Interface.

# FEATURES AND ENHANCEMENTS

The v2.0 update includes a number of new features and enhancements that may require some explanation. We'll do our best to explain all of them below so that you can get right to enjoying them as quickly as possible. Unless otherwise noted, the changes in this section affect both Baldur's Gate: Enhanced Edition and Baldur's Gate II: Enhanced Edition.

#### NEW CLASSES AND KITS

This update adds one new class, the Shaman, and one new Cleric kit, the Priest of Tyr.

#### SHAMAN

The Shaman is an entirely new base class that combines the druid's spell list with the sorcerer's style of casting spells from a pool instead of preparing each spell separately. The Shaman also has the innate ability to summon spirits at will. The full description is provided in game, but here's the flavor text:

A Shaman is a holy person, though not necessarily one that would be called civilized. The Shaman's power derives from nature, like the Druid's, but is more spiritual than primal. Nowhere is this more evident than in their ability to summon powerful spirits to do their bidding. A being of two worlds, Shamans value balance over dominance.

#### PRIEST OF TYR

The Priest of Tyr is a Cleric kit that is being brought over from Icewind Dale: Enhanced Edition. The full kit description is provided in-game, but here's the flavor text:

Tyr is the deity of law and justice and is primarily con-cerned with the punishment of wrongdoers and the general furthering of law and good in the world. The belief in justice through (benevolent) force, or at least armed vigilance, is the reason for Tyr's existence.

#### USER INTERFACE

v2.0 introduces the first batch of updates to the game's user interface using the new UI System.

Special thanks goes to forum user 00zim00, who designed the layout we're currently using for the Character Record screen in Baldur's Gate: Enhanced Edition. This screen will likely change in future updates, but the version you see now is the result of weeks of beta testing and discussion with members of our community. Excellent work, 00zim00!

#### BALANCE PASSES

This update features three changes to items or abilities in order to rein in the power curve and prevent abuses that may ruin the experience for new and veteran players.

#### POISON WEAPON

The Poison Weapon ability of the Assassin and Blackguard kits has been updated to only apply to each creature no more than once per round, although successful applications on subsequent rounds will continue to stack. The duration and damage of the poison effect now also scales with the character's level.

The ability description, along with the kit descriptions for the Assassin and Blackguard, have been updated in-game to reflect these changes.

#### STUPEFIER

The Stupefier +1, which was stupefyingly overpowered, has been modified to cause its stunning effect less often, and now offers a saving throw to resist the effect. The stun effect's duration has also been reduced.

#### ENCHANTED WEAPON

The Enchanted Weapon spell, instead of creating a magical weapon that the caster can wield, now alters the target creature's currently equipped weapon to increase its effective enchantment level to +3. The spell's description has been updated to reflect this change.

#### BARD SONG

Bard songs in Baldur's Gate: Enhanced Edition now protect targets from fear effects in addition to improving morale, just like they do in Baldur's Gate II: Enhanced Edition.

In addition, deafened creatures are no longer affected by bard songs, and activating a bard song will now end a bard's invisibility. Multiple bard songs of the same type no longer stack their effects.

#### CLOAK OF FEAR

The Cloak of Fear spell no longer causes targets to drop inventory items on the ground, in order to avoid situations where a player might lose an item without realizing it until it's too late.

#### SUN SOULRAY

The Sun Soulray ability of the Sun Soul Monk kit now affects only a single target, instead of a cone-shaped area

#### WEAPON PROFICIENCIES

In Baldur's Gate II: Enhanced Edition, it used to be possible to create a new character with more weapon proficiencies assigned to a single weapon than would be allowed through the course of normal adventuring. This has been rectified. (Modders can change this behavior; see the section titled Modding Features.)

#### **IOUN STONES**

Ioun Stones now universally have a weight of 0, and no longer protect the wearer from critical hits.

#### THROWING DAGGERS

Throwing Daggers now universally have a weight of 0.

#### DESCRIPTION UPDATES

The Wizard Slayer kit and each of the Mage kits except for the Wild Mage have had their kit descriptions updated to more accurately reflect their in-game abilities.

#### WIZARD SLAYER

The Wizard Slayer kit has always caused 25% spell failure on successful attacks, but this was mistakenly documented as 10%. The error has been corrected in the kit description.

#### MAGE SPECIALISTS

Specialist mages have always received a +2 bonus (and bestowed a -2 penalty on enemy creatures) on saving throws to resist spells of their chosen school, Additionally, specialist mages have always received a +15% chance to learn spells from their chosen school, and a -15% chance to learn spells from all other schools. These features are now correctly reported in the description for each kit.

#### ADVANCED AI

New characters now come enabled with advanced scripting that makes intelligent tactical decisions without the need for micromanagement. This behavior can be fine-tuned by toggling options that appear on the Scripts screen (accessed from Character Record > Customize > Script during play).

#### DIFFICULTY SETTINGS

Two new difficulty settings, described below, have been added to the game to increase the number of options available to players. A new difficulty selection screen has been added to the end of character creation so that players can decide for themselves how hard the game will be on starting a new game.

#### STORY MODE

With Story Mode, the player's characters cannot be killed in combat and are gifted with Strength scores of 25. This difficulty mode is designed to facilitate a stress-free experience for those players who are not interested in plumbing the tactical depths of Infinity Engine combat.

#### LEGACY OF BHAAL

With Legacy of Bhaal, the creatures that are faced in combat will be given additional hit points, deal more damage, and generally be scarier. This difficulty option is designed for seasoned veterans who are looking for truly unethical levels of challenge.

#### CREATE PARTY

When starting a new game, players can now opt to create up to six characters to take with them. This functionality previously existed through the Multiplayer menus, but now players can create a party of player-created characters within Single Player as well.

#### NEW PORTRAITS

Four new portraits have been added to the available list during character creation. Two of these portraits are half-ores, and the other two are designed specifically to be used by Shaman characters—but of course, you can use them on any of your new or existing characters.

#### EXPANDED COLOR SEECTION

The available color options for Hair, Skin, and Clothing have been greatly expanded to give players as many realistic options possible for their characters' appearance.

#### INFRAVISION

In areas of limited lighting, characters with infravision now view living creatures with increasingly intense red overlays. Additionally, the red from infravision now displays based on the current lighting on the creature being viewed, rather than the creature with infravision.

#### STEAM ACHIEVEMENTS

The Steam platform now features achievements for both Baldur's Gate: Enhanced Edition and Baldur's Gate II: Enhanced Edition. Our goal was to create achievements that offer new or interesting challenges on how to play the game, as well as to reward players' innate desire to explore the world's farthest reaches.

#### NEW OPTIONS

All of the following features can be enabled or disabled through the game's Options menus. Features that are enabled by default are noted in the description.

#### AREA MAP BACKGROUND

On the local area map screen, players can now toggle an option to display a turquoise overlay showing the walkable parts of the current area, which can help when navigating dark dungeon corridors.

By default this option is disabled; if you find that you want it enabled by default when you open the map screen, you can change this setting from Options > Graphics.

#### STEAM CLOUD SAVES

Cloud saves are now supported on the Steam platform.

By default this feature is enabled. You can disable it at any time from Options > Gameplay.

#### JOURNAL POP-UP MESSAGES

When the player's journal is updated, a window now appears at the top of the screen with the new entry's text. Selecting the text in the window will bring up the Journal screen where the full entry can be read.

By default this feature is enabled. You can disable it at any time from Options > Gameplay > Feedback.

#### HEALTH BARS

When in combat, creatures now display an approximation of their current health visually with a colorized bar above their heads: blue for neutral creatures, green for friendly creatures, and red for enemies.

By default this option is enabled. You can disable it at any time from Options > Graphics.

#### GREYSCALE ON PAUSE

When the game is paused, the area is now set to display in greyscale, giving the player greater contrast when examining the battlefield.

By default this feature is enabled. You can disable it at any time from Options > Graphics.

#### SPRITE HIGHLIGHTING

Sprites now display a dark outline to make them stand out from the area's background more clearly. Additionally, hovering the mouse cursor over a creature highlights its sprite and outline in blue, making it easier to tell which creature the player is targeting with spells and attacks.

By default this feature is enabled. You can disable the highlighting and/or the sprite outlines from Options > Graphics. Note that in order to use the Sprite Highlighting option, Sprite Outlines must be enabled.

# **ENGINE FIXES**

The v2.0 update features many fixes and improvements to the Infinity Engine as a whole. The fixes and enhancements in this list affect all Infinity Engine games, which means that in addition to Baldur's Gate: Enhanced Edition and Baldur's Gate II: Enhanced Edition, these changes will also affect Icewind Dale: Enhanced Edition when it's next updated.

New opcodes, triggers, actions, and externalizations from this section are described in greater detail in the section titled Modding Features.

#### GENERAL FIXES

- Metal weapons will no longer risk breaking once the iron crisis has been resolved (BG:EE) (19766)
- Party members won't all comment at once on every reputation change (18983)
- Opcode 232 (Cast Spell On Condition) now supports spell states as conditions (17472)
- Ability scores that receive a bonus are now tinted green instead of red on the Record screen (12175)
- The 'Find Traps' opcode now respects the 'Trap Undetectable' flag on doors (10645)
- Opcode 144 can now disable access to the inventory screen when param2 is set to 15 (17209)
- Opcode 145 (Disable Spellcasting Abilities) can now be used without receiving a feedback message(17058)
- Players may now equip an off-hand weapon while a ranged weapon is present in a quick weapon slot (16944)
- Players can now equip a weapon or shield in the offhand slot regardless of what weapons are in the quick weapon slots (12362)
- Maximum spell level and maximum known spells are both now listed on the Record screen (16499)
- Full break-downs of AC, THACO, HP, and Damage can now be viewed by holding the Tab key while hovering the mouse over the relevant stat on the Inventory screen (15923)
- The Mage Spellbook and Priest Scroll UI screens have been completely redesigned (14405)
- Variables in-game can now be set from baldur.lua using SetPrivateProfileString('Global','Variable-Name','1') (12964)

- Players can now advance dialogue (as if pressing Continue or End Dialogue) by pressing the spacebar on a keyboard (12281)
- When an item is selected on the Inventory screen, the portrait of the character best suited to that item will now be highlighted in yellow (12215)
- AI Scripts now prefer the weapon a character is most proficient with (10441)
- Improved spawn method (9491)
- ForceRandomEncounter("") now clears the queue of forced encounters (17658)
- All language names are now displayed alphabetically (12399)
- Movies are now listed in chronological order on the Movies screen (11793)
- Deleting a character from the first party slot during party creation no longer causes issues with duplicated characters (17702)
- Black Blade of Disaster now correctly sets long sword proficiency to grandmastery for the duration of the spell (17695)
- Constitution of 20+ should no longer results in injured characters being healed when loading a save (16070)
- Party members no longer make random selection sounds if their banters fail to initiate (16053)
- Spell Trap now correctly refreshes 9th level spells (15537)
- Wild Surge 13 (which polymorphs the caster into a wolf) now correctly changes the character's paperdoll on the Inventory screen (15314)
- Having a familiar no longer prevents dialogues from starting (12604)
- Monks imported from BG:EE now arrive in BGII:EE with the correct AC bonus (12059)
- Increased APR from magical projectiles now ends correctly when they are depleted (11061)
- Bonus spells from the Staff of Arundel are no longer lost when the quick weapon slot is selected while the game is paused (10734)

- Project Image now correctly respects party summoning limits (9923)
- AttackOneRound() now makes the correct number of attacks based on the creature's attacks per round (5681)
- Party members no longer disappear when the party is moved en masse to a new area (such as the Pocket Plane in Throne of Bhaal) (15557)
- Water and lava overlays now render correctly on Android devices (11069)
- Interface elements in fullscreen mode will no longer become unresponsive on Windows operating systems when the display scaling is set to 150% (10500)
- Dual-classing a Berserker into a Mage no longer crashes the game or produces a blank spellbook (15994)
- Importing a character with the Cavalier kit no longer results in duplicated damage resistances (13154)
- Splitting stacks on the Inventory screen now works correctly when placing the second stack into its own inventory slot (5804)
- [Multiplayer] Logging out at Character Arbitration will no longer crash the game (18936)
- [Multiplayer] The game will no longer freeze after speaking to Mendas (18917)
- [Multiplayer] Game will no longer freeze if a client presses ENTER during Gorion's cutscene (18911)
- The game will no longer crash when creating a full party in ToB (18772)
- [Tutorial] Game Crash BG:EE Tutorial will no longer crash just before Belt Teleports you to your final test/ battle. (18468)
- The game will no longer crash when traveling to Adoy's enclave (18197)
- [Mac] The game will no longer rash to desktop after upgrading to OSX El Capitan 10.11.1 (17103)
- Game will no longer crash when loading a save where an injured enemy is leaving the area (11131)
- Zoom level will no longer change based off your screen size (19150)
- Enemies will no longer get stuck when attacking party members (11101)
- Savegames are now sorted by date (18866)

- Party members will no longer say their reputation reaction when killing an enemy (18710)
- Polymorphing into a zombie will no longer block movement (18709)
- [Mac OS X] Screen will no longer attempt to scroll (and shake while doing so) in a non-scrollable area. (18649)
- Poison resistances will now stack (18610)
- Cook's special dumplings will now have a drawing as part of the description (18478)
- Polymorph Other are now dispellable (18470)
- Backing out of a level-up will now remove the additional hit points (18433)
- Blackguards will no longer turn into Fallen Blackguards (18368)
- · Overhead text no longer displays for too long (18024)
- Characters with inactive thief levels are no longer able to steal (17263)
- Freeing a barbarian character from Imprisonment will no longer double his physical resistances (13179)
- Opening music tags are now played (12377)
- Combat music will now play closing tags (12376)
- [Localization] Russian VO will now play when the language is set to Russian. (11898)
- Containers and unique items will no longer duplicate if characters are destroyed (11086)

# BUG FIXES - BG:EE

The v2.0 update features hundreds of general bug fixes that specifically resolve issues in Baldur's Gate: Enhanced Edition.

#### GENERAL FIXES

- Recruited BG:EE NPCs now appear with experience close to the player's total (16104)
- Game Difficulty text will now accurately represent the features of the difficulty stages (20314)
- Nessie now mentions Dorn as a notable character in the Friendly Arm Inn (19712)
- · The dialogue of Familiars are now expanded (18451)
- The player's default AI script are now assigned at the start of the game (19135)
- Candlekeep tutors now have additional dialogue that better helps new players understand the gameplay mechanics (18964)
- Summoned creatures no longer turn hostile if attacked (18454)
- (Item) Dusty Rose Ioun Stone unidentified description are no longer "Ioun Stone" (19977)
- (Item) Hide Armor are no longer usable by Avengers (18706)
- (spell) Call Lightning graphics will now work (18723)
- (spell) Lightning Bolt projectile will now work(18724)
- (UI) Find Traps button are now renamed to Find Traps/Detect Illusion (18405)
- [AR2600] Jondalar/Erik: Both are now protected from death/chunking. (18481)
- [Container, Store, Item] Selling items from within a container will no longer partially hide the "sell" button in a store interface. (18659)
- [German] Baeloth's voice-overs and the extra recordings are no longer mute or in English (5309)
- [German] Neera's line 32213 will no longer have English voice-over (18663)
- [German] Player response to Xithiss will no longer have a voice-over (18662)
- [German] There are now no mistranslated voice-over for Neera's interjection to Baeloth (18364)

- [German] Tutorial voice-overs from BG2 are now adjusted for BG1 (18363)
- [Item] Neera's Gem Bag will no longer show name as Invalid: 65367 (18658)
- [Item] Scroll Case from Firebeard in Beregost will no longer show Invalid: 65371 for a Name. (18639)
- [Vendor] Second "Topsider's Crutch" are no longer 0 gold upon clicking to purchase. (18672)
- Acclamation will now have an icon (18403)
- All "The Mysterious Island" journal entries are now posted to the journal after talking to Durlyle (18369)
- Armor of faith will now function as per the description (18587)
- Aura of Despair will now display a portrait icon on the affected creatures (19736)
- BG:EE stores that purchase helmets will now also purshase hat type items (18420)
- Call Lightning will no longer have two different durations (18190)
- Characters are no longer able to start conversations while Time Stop is in effect (18826)
- Characters with Thief Ranged script will no longer act as though something hostile is in the centre of Centeols lair (10730)
- Cleric kits will now have the same alignment requirements as in BGII:EE. (16973)
- Commoners will no longer mention the guards' inability to find Brage after the PC has turned him in
  (18184)
- Copy the revised version of Baeloth's ring to BG:EE (18703)
- Damage feedback will now work per SoD/IWD:EE (18442)
- Dark Moon Monk Vampiric Touch ability will no longer use the same SPL file as the Bhaalpower (18547)
- · Detectable Spells are now added to BG:EE (19102)
- Dire Charm visual effect will no longer have a +3 saving throw bonus (18220)

- Dorn will no longer lag behind the party after being silenced during the fight with Simmeon (18302)
- · Dread Wolves are now classified as undead (18429)
- Familiars will now offer advice to the player (BG:EE) (18865)
- Fireplace flickering will no longer cause bright square on the area art in AR2602 (6166)
- Generic Mace +2 will no longer have the name and description of Krotan's Skullcrusher (18537)
- Gold Digger icon will no longer have a shadow in the left corner (7621)
- Half-orcs will now have infravision (17961)
- Implement standardized creature animation speeds in BG:EE (18908)
- Items and bags ported from BG2 will no longer have invalid strrefs (19039)
- Items and spell which use Opcode 106 (morale break) will now function properly (19042)
- Journal entry group are no longer empty once "A reminder from Belt" is complete. (6233)
- Monk's Lay On Hands ability will now have the correct description (18531)
- Myconids will now use the proper race entry (19133)
- Portraits will no longer look blurry if Scale UI is turned on (BG1) (20129)
- Reputation will now have text description next to it in the character record screen (18501)
- Rescuing Dynaheir will no longer give double or no XP reward (18648)
- Safana's Kiss: spell name and description name are now the same (18861)
- Simmeon will no longer respawn after he is killed (18268)
- Spook is no longer castable from outside of your character's line of sight (20207)
- Stalker Minor Spell Deflection will now protect against spells of up to 7th level (18439)
- Summoned creatures and summoning spells will now use the same stats as in BG2 (18458)
- Summoned Nymphs will no longer disregard the player's commands (18265)

- Tamoko will no longer cast Draw Upon Holy Might on her enemies (18609)
- The Acclamation spell will now have proper icons (18056)
- The Burning Earth +1 will now do fire damage (18632)
- The credits will now play when you beat the game. (20691)
- The description text on the Party AI screen are now properly centered (19127)
- The game will no longer auto-save when loading a savegame in Candlekeep (18543)
- The lightmap in AR5404 are now revised (18778)
- The player are now able to tell Taris about Hagar after they have dealt with Kryll. (18179)
- The priest of tyr kit are now able to select any blunt weapon for proficiencies (18402)
- The shrine in AR1803 are no longer darker than its surroundings (8563)
- There are now a Hagar body and skeleton around Kryll. (18178)
- Thralls of Azothet will no longer look like Balors (18428)
- Tiax and Dorn's banter will now work as designed (20708)
- Trolls will no longer save vs. fire arrows while knocked down (18384)
- Vampiric Touch damage effect will now match the description (18540)
- Waterfalls in Adoy's Enclave are no longer pixelated (2063)
- You are no longer able to walk into the bear cage in OH2000 before opening it.. (6323)
- You are now able to access Taerom's shop even if you insult him when selling an ankheg shell. (5758)
- Davaeorn's death cutscene now triggers correctly in all cases (8930)
- Throwing axes no longer apply the wielder's strength bonus to THACO when when used at range (18177)
- Trolls in the Black Pits are no longer unkillable (18145)

- Snow may now occur in the Cloud Peaks (18115)
- The loot pile in front of the cave entrance in the Cloud Peaks is now accessible (18090)
- Beruel's Retort +1 and Golden Axe +1 are no longer usable by Beast Masters (18087)
- The Stalker version of the Haste spell is no longer affected by magic resistance (18052)
- Jaheira now knows the Harper's Call spell and can cast it when she gains access to the appropriate level of spells (18047)
- Monk's Quivering Palm ability now only works with fist attacks (18040)
- Throwing daggers should get strength bonus to damage and not get strength bonus to THACO (17898)
- The Stalker kit's Minor Spell Deflection no longer displays Spell Turning icons (17541)
- The Berserk ability now prevents combat log text from appearing with regard to effects to which the berserk character is immune (17391)
- Summoned lesser fire elementals now have 64hp (17106)
- Medium fire elementals now have a strength of 20 (17105)
- Scrolls of Animate Dead, Cone of Cold, and Ice Storm are now sold in Sorcerous Sundries. (16971)
- Tiax's Summon Ghast ability and description now match (16409)
- Faldorn's Summon Dread Wolf ability and description now match (16408)
- Aec'Letec's physical attack no longer causes unconsciousness (16099)
- Aec'Letec now has proper immunities (16098)
- Aldeth will no longer betray the protagonist after exposing Sarevok (16056)
- Yeslick's Dispel Magic ability now dispels based on caster level (16035)
- Yeslick's Dispel Magic description now states the correct casting time (16034)
- Yeslick's Dispel Magic ability now uses the same icon as the priest spell (16033)
- Branwen's Spiritual Hammer now correctly reaches an enchantment level of +2 at level 7 instead of level

- 6 (16024)
- Beast Master's Animal Summoning I ability now lasts 3 turns (15996)
- Dorn now correctly initiates his plot dialogue even if he has the Silence status (15990)
- Rescuing Branwen but refusing her service no longer results in an open journal quest (15989)
- "A Farmer's Tales" journal entry is no longer listed as a quest (15988)
- Hulrik no longer asks for help if the xvarts have already been killed (15987)
- "Xvart Raids" journal entry is no longer listed as a quest (15986)
- Tutorial: Imoen now comes with a weapon she is proficient with (15983)
- Tutorial: kobolds' short swords no longer break (15981)
- Gamaz now correctly delivers a final speech before dying (15978)
- Safanano longer experiences stuttering if she loots the pirate treasure on her own (15977)
- Kivan now interjects the correct line when in the same party as Dorn (15975)
- Kivan no longer has spell slots before his Ranger levels would allow them
   (15962)
- Incorrect voice-overs no longer play during Dynaheir's dialogue (15959)
- Harrower +1 now correctly applies its +3 damage vs. undead creatures. (14283)
- Rasaad's quest now correctly starts when he is first encountered (11802)
- Berserk now correctly protects against Stun effects (11798)
- Dark Moon Monks now correctly start with +10%
   Detect Illusion instead of +24% (11797)
- Inquisitor's Dispel Magic now has level-appropriate effects at character levels 1-5 (11521)
- Creatures, spells, and other resources will no longer display the bizarre line "Someone disturbs me?! I have no time to talk with you, . Don't take it personally. I'm just a very busy man." (11041)
- · The weapon given to the player character in the Tuto-

- rial is now guaranteed to be usable by that character (10741)
- Demon Knight will now correctly defend himself when under the effects of Silence (10740)
- Teven no longer remains neutral if the the rest of the Bandit Camp has become hostile (10739)
- The Dryad of Cloud Peaks quest will now close properly if the dryad is killed (10738)
- "Prism the Sculptor" journal quest now closes properly when returning the emeralds to Oublek (10736)
- Quayle no longer has illegal Necromancy spells in his spellbook; the offending spells have been replaced with Chromatic Orb and Deafness (10733)
- Kissiq now gives a proper journal entry about a talking chicken rather than a quest entry (10732)
- Miner Kylee's information will no longer be listed as a quest entry (10729)
- Bounty Hunter Special Snare ability now slows the target instead of casting Otiluke's Resilient Sphere at levels 1-7 (10728)
- Tutorial, dialogue referring to the Hint button now correctly describes its location in the UI (10091)
- Avengers now correctly gain Improved Invisibility at level 7. (10008)
- Familiars no longer trigger reputation based encounters (7847)
- On Android devices, pressing the Return key on a bluetooth keyboard will now correctly confirm the user's multiplayer password and attempt to join the selected game (7846)
- Shapeshifts Natural Form ability from the Relair's Mistake cloak will now correctly wear off when the effect ends (7740)
- Wild surge 83 now correctly mimics the effects of Polymorph Other. (7714)
- The player can no longer speak to Daer'Ragh multiple times. (7639)
- Neera will no longer be silent after enemies have been dealt with (7603)
- RESTINN and RESTDUNG movies are no longer missing from the Movies list (7564)
- PCs under AI control will no longer stop moving for no reason (7528)

- Monk's stunning blow will now correctly only work on fist attacks (7204)
- The legacy CLERIC2 script can now cast Cure Medium Wounds (6494)
- Haste and Offensive Spin no longer stack (6492)
- Getting level-drained no longer causes invalid string references to appear in the combat log (6468)
- Dragon Disciple Breath Attack ability will now correctly hit everyone in the cone area (6302)
- Kryll will no longer cast Mirror Image on herself, since she is a Necromancer; instead, she will cast Horror (6295)
- Blackguard Aura of Despair ability will no longer affect every single enemy in the entire area (6223)
- Lord Binky the Buffoon will no longer ignore the rest of the party if the protagonist is invisible or using Stealth. (6189)
- Ring of Free Action will no longer block the 'Stunned' string from appearing in the combat log when its wearer is stunned (5885)
- "The Mysterious Island" journal entries will now correctly post to journal (4199)
- Sun Soulray will now work correctly when cast on targets at the edge of the visual range (3424)
- A human wizard wielding a quarterstaff will no longer display missing frames while attacking (2872)
- Hafiz the gnome will no longer be addressed as a dwarf by the player (16061)
- Gnome NPCs now correctly use the correct animations for their race (16060)
- Journal entries about Oublek offering bounties will now only be created when it is actually appropriate (16050)
- Combat log text that describes the entrance to the Tomb (in the Valley of the Tombs area) now displays even if the player is traveling alone (16049)
- Combat log text that describes the entrance to the Tomb (in the Valley of the Tombs area) no longer displays as though it were being spoken by a member of the party (16048)
- There will now only ever be one copy of Gorion's scroll, even if the player pick-pockets Gorion in Candlekeep (15985)

- Info text above the signpost in the Beregost Temple area no longer displays off to the left of the signpost itself (15976)
- Safana's innate Charm Person ability now has a unique description (11799)
- Charm Animal ability and description now match (11519)
- The Captive Audience item's behavior now matches its description (11112)
- Initiating dialogue with Safana while she is in the party will no longer result in a repeated banter between her and Dorn (11111)
- Polymorph effects from wild surges no longer result in a blank paper doll (11109)
- The abandonned house in SE Baldur's Gate now displays its info text entirely on-screen (8758)
- Bassilus's zombies now make zombie sounds when they speak
   (5958)
- Female Dark Moon Monks no longer play male voiceovers during their dialogue (2133)
- Zombies now have their own paper doll (18773)

# BUG FIXES - BGII:EE

The v2.0 update features hundreds of general bug fixes that specifically resolve issues in Baldur's Gate II: Enhanced Edition.

#### GENERAL FIXES

- Blocking Phaere's exit will no longer lock the game in cut scene mode (11581)
- Story Mode will now work in BGII:EE (17896)
- Having Death Ward active will no longer cause Irenicus dialogue to loop (15974)
- Dorn will no longer stutter if the protagonist has a romance with both him and with Hexxat (11175)
- Saemon Havarian will now appear next to the pirate ship after leaving the Vulgar Monkey Inn (11155)
- Neera's quests will no longer prevent travel to the Throne of Bhaal (11141)
- Rasaad will no longer stutter if the protagonist has a romance with both him and with Hexxat (11085)
- · Lich with Phreya will no longer be invincible (11084)
- Response to Dorn in Lunia will no longer have No valid replies or links (11080)
- [Dorn] Garfunkel will now die after his final speech (11062)
- Dorn will no longer step forward with the Divine

  Blade before he has acquired it (10639)
- Hardiness from the Wish spell will no longer stack with the Hardiness HLA (18089)
- Monk's Quivering Palm ability will now only work on fist attacks (18037)
- Monk's Stunning Blow ability will now only work on fist attacks (18036)
- Dark Justice +5 will now apply its extra damage the same way as similar weapons (18035)
- Story Mode will now prevent the relevant feedback messages from appearing in the combat log (17900)
- Keldorn will no longer be busy when he returns from reporting his wife to the courts
   (17894)
- Arenthis and Kamir will now defend themselves if attacked (17866)
- Sun Soulray will now only affect one target (17863)

- [DORN] Dorn will now initiate dialogue at Resurrection Gorge (OH5100) (17831)
- Aldun Forgecaster will nown't have incorrect dying/ death sounds (17825
- · Deva animatons will no longer be translucent (17716)
- Hexxat's Domination ability and description will now match (17491)
- Mazzy's Haste ability will no longer use the description of the wizard spell (17463)
- Mazzy's Lay On Hands ability will no longer use the description of Cure Light Wounds (17462)
- Mazzy's Strength ability will no longer use the description of the wizard spell (17396)
- Berserk will now disable strings for 2 turns (17392)
- Berserk will now protect against the feedback effects of stun (17390)
- Bracers and gauntlets will now have the correct unidentified name, unidentified description, and ground icon (17387)
- Drow Scimitar +3 will now be usable by Thieves, Mage/Thieves, and Monks (17377)
- Reaching Ring will no longer be usable by Monks (17370)
- Storm Ring and Dawn Ring will now be usable by Wizard Slayers (17369)
- Heartwood Ring will no longer be usable by Wizard Slayers (17353)
- Silver Sword will no longer be usable by Beast Masters (17352)
- Serpent Shaft poison effect and description will now match (17351)
- Staff of Thunder and Lightning +2 visual stun effect will now be subject to saving throw (17290)
- Ixil's Spike +6 pinning damage will now occur each round for 3 rounds (17288)
- Flail of Ages +1 will no longer be usable by Beast Masters (17287)
- Edwin's will now have the correct Tired sound and text once Degarden dispels his female form (17285)

- Dark Moon Monk's Vampiric Touch will now deal the correct amount of damage at level 10 (17279)
- Thugs attacking Renfeld will now give XP when killed (17278)
- Devas will now regenerate health (17277)
- Defensive Spin ability will now match the description (17275)
- Improved Chaos Shield spell and description will now match (17271)
- Fallorain's Plate +1 will no longer be a generic plate mail +1 and will now be unique in the game (17270)
- 12HD Earth Elementals will now have consistent stats (17254)
- Mage stronghold apprenti will no longer fail to leave once their tasks are done (17246)
- Ranged weapons with unlimited ammunition will now clearly state the launcher bonuses are included as part of the combat abilities (17074)
- [Hexxat] Claw of the Black Leopard journal entry will now remain until the claw is returned (16501)
- Walls around the Radiant Heart internal doors will now have consistent lighting (16488)
- [ToB, Rasaad] Rasaad's journey quest will now appear in Done Quests if his romance is active (16404)
- [ToB, Neera]Completing the Eight Staves quest will now remove the corresponding journal entry (16392)
- Minsc will no longer repeat his selection sounds after leaving berserk. (16256)
- Darksteel Shield +4 will now grant a +1 AC bonus vs. missile attacks (16236)
- Character generation will now enforce weapon proficiency rules (16195)
- Mage in the secret illithid lair will now attack when the party is spotted (16145)
- White Dragon Scale will now be usable by Stalkers, as intended by Bioware (16125)
- EighthNearest references will now be EighthNearest (16101)
- Import script will no longer get broken if a save is made while it is running (16091)
- · [ToB] Illasera will now cast additional spells (16071)

- Shapeshifter werewolf will now use correct weapon icon (16069)
- Fflar's Scabbard will now have a description image (16068)
- Burich will now be immune to poison (16059)
- Summoned black bears will now attack enemies on sight (16055)
- Summoned bears and panthers will no longer move towards each other
   (16054)
- Beast Master's Animal Summoning I will now last 3 turns (15997)
- Kamir, Arenthis and Risa will no longer disappear if their quest is active (15734)
- [Rasaad] Heretic temple skylight will no longer grant xp and a journal note if the temple has been entered through the door (15430)
- [Rasaad] Heretic Temple exterior staircases will no longer be accessible from the sides (15425)
- Sphere of Chaos effects will now be blocked by Magic Resistance (15423)
- Caster level 10 Sunfire will no longer be blocked by Minor Globe of Invulnerability (15422)
- It will now be possible to stake Dace if he has been destroyed without being spoken to (15421)
- Paladin stronghold barony quest will now check if the farmers have been killed (13236)
- Corgeig will now only provide an XP reward once when Nalia is freed (13014)
- Standard Attack AI script will no longer cancel requested actions (12580)
- · Good Deva will now be able to cast Chaos (12308)
- Party members raised by Mass Raise Dead will now gain additional healing (12232)
- [Multiplayer] Malaaq will no longer remain in the starting area if a party of 6 is used (12211)
- Thief Scout script will no longer target non-hostiles (12149)
- Chaos Shield spells will no longer stack (12142)
- Kangaxx will no longer be invincible in normal form (12110)
- · Herath will now respond correctly when asked why

- the PCs will nown't take up arms against the Twofold Trust. (12105)
- Cloak of the Sewers mustard jelly form will now use same stats as Polymorph Self (12065)
- Pregenerated Fighter/Clerics will now have a class description on the character selection screen (12013)
- Mazzy will no longer talk constantly when fatigued and Valygar is in the party. (11815)
- Charname will no longer claim that the Copper Coronet is not a public setting. (11804)
- Hexxat will now respond correctly to line 97187.
   (11740)
- Druid Earth Elemental shape will now be able to move consistently (11739)
- Cleric / Thief will now be able to hide in shadows via the thief controlled script (11731)
- Hexxat will now say the correct line and send the PCs home if she is kicked out in Korkorran's tomb.(11727)
- Characters wearing the Night Walker boots will now be immune to Web and Grease (11627)
- SoA cat familiar will now travel at the same speed as party members (11615)
- Unconscious targets will no longer wake up when attacked (11613)
- Bard songs of the same type will no longer stack (11573)
- Krotan's Skullcrusher +2 will now injure stone golems (11543)
- Xachrimos voiceover will now match his text responses
   (11498)
- Fil will now have the correct voiceover lines to match the text dialogue (11497)
- Nalia will now be able to cast a level 6 spell if she joins the party as a level 12 mage (11494)
- Neera's staff will now be identified (11492)
- Aerie will no longer have studded leather armour in a quickslot (11491)
- Charname will now have the correct responses to Algoroth's "welcome" in Deepstone's crystal chamber. (11268)
- Stalker Minor Spell Deflection will now protect against spells of up to 7th level (11255)

- There will no longer be a duplicate response to Cuddy if strength and charisma are both > 13 (11251)
- Charname will no longer repeat Hexxat's line when kicking her from the party iin ToB. (11250)
- Stalker Minor Spell Deflection will no longer show Spell Turning icons (11177)
- (Black Pits II) Avenger spells will no longer be removed upon arrival to the Black Pits (11168)
- (Black Pits II) If they have the quest, players will now be able to buy a Salve of Senile Serenity the first time they speak to Bellowgulp. (11165)
- (Black Pits II) The Salve of Senile Serenity will no longer be sellable for more than it costs to make.
   (11164)
- Hexxat will now say line 87005 after Charname says line 87104. (11162)
- Charname will now have the correct responses when Hexxat offers to distract her. (11161)
- Hexxat will now respond correctly when Charname flirts with her. (11158)
- Hexxat will now respond correctly when Charname calls her "a means to an end." (11157)
- Polymorph other will now transform targets to squirrels permanently (11140)
- Throwing axes and throwing hammers will now add strength bonus to damage when ranged (11137)
- The Slayer Change ability will no longer be available until after Irenicus flees Spellhold (11136)
- Viconia will no longer stop responding after being told a game is being played (11115)
- [Rasaad] Tears of Selune encounter will no longer trigger if he is dead (11110)
- Saving and reloading as Nalia is kidnapped will no longer see her remain nearby (11106)
- Druid Elemental Summoning HLA will now produce 16hd elementals with correct stats (11089)
- Tenser's Transformation will now apply the correct THAC0 bonus at levels 19 and 20 (11081)
- Dorn will now lose his Blackguard status & abilities if his patron is retributioned (11078)
- Viconia's level 13 incarnations will now have 7 level 3 spell slots (11075)

- Characters will no longer be able to walk through the closed door to the noble djinn (11063)
- Stone harp within the Palace in Suldanessellar will now be displayed correctly (11043)
- Rasaad's final ToB lovetalk will now fire and not contain an infinite loop. (11036)
- Meems will now have appropriate dialogue after the conclusion of Rasaad's quest. (11034)
- Deepstone's front face will no longer shift to the left when you open its doors. (11033)
- Charname will no longer have two "And...?" responses.
- [Rasaad Romance] The order of responses 97765 and 97766 will now be switched. (11023)
- [Rasaad Romance] The "meditation is for monks" reply will no longer be available to Charname if she is a monk. (11022)
- (Black Pits II) Load/quit options will now be presented after a game over. (11006)
- The player will no longer be able to mention Resurrection Gorge before they visit it. (10999)
- There will no longer be a duplicate response when speaking to the guard outside the heretic temple. (10998)
- The Vagrant Blades will now walk away instead of vanishing where they stand. (10996)
- Clara's death scene will no longer be interrupted by a talk about Dragomir's death. (10995)
- Hexxat will now have Dragomir's cloak before Edwin tries to touch it in ToB. (10976)
- Hexxat will now have Dragomir's cloak before Edwin asks to see it in SoA. (10975)
- [BP2] Completing a Black Pits II combat will no longer see multiple Dispel Effects strings (10974)
- (Black Pits II) Brodle will no longer voice "performers' lounge" if the PCs participated in the rebellion subplot. (10960)
- (Black Pits II) Gladiators will no longer have inappropriate lines when spoken to during the finale. (10944)
- (Black Pits II) Charname will no longer be called a villain when they have not said anything villainous. (10942)

- (Black Pits II) The "perplexing problem" response in Stannel's dialogue will no longer disappear prematurely. (10941)
- (Black Pits II) The 4th and 5th responses will no longer be missing from Stannel's dialogue after the water weird fight. (10940)
- (Black Pits II) Brodle will now give items to Player1.
   (10939)
- (Black Pits II) Cloak of the Lich's effects will now match its description. (10938)
- (Black Pits II) Players will no longer be able to ask Brodle to help plot a rebellion after they agree to help him plot a rebellion. (10924)
- (Black Pits II) The salve of senile serenity will no longer be equippable. (10923)
- (Black Pits II) Gezzthemin will no longer ask the PC for a drink he hasn't told them about. (10921)
- (Black Pits II) Tartle will no longer ask the PCs whether they want to fight a previous battle before they've fought their first battle. (10920)
- (Black Pits II) Journal entry 95946 will no longer be added prematurely. (10918)
- (Black Pits II) Rat poison will now have a proper description. (10917)
- (Black Pits II) Entering the banquet hall before the "dinner bell" cutscene will no longer lead to strange dialogue. (10901)
- It will no longer be possible to escape the Irenicus dungeon from the furnace room (10768)
- Assign Keys screen will now contain a full list of Mage and/or Priest spells (10759)
- The Winged is now visible in the BPII Feast cutscene when playing solo (10749)
- Remove Fear will no longer temporarily increase thieves Detect Traps ability score (10655)
- Charname will no longer say she'll "do what [she] can" when Hexxat points out Charname could easily kill her. (10561)
- Dorn will no longer attack Charname for saying they could use a sandwich. (10560)
- [Dorn][ToB] Planetar of Justice will no longer duplicate lines (10541)
- · Black Blade of Disaster will now have the appearance

of a Long Sword	(17696)	usable by Avengers	(18682)
Corthala Family Armor ground icon will now		• [Map UI] Map Notes Markers will now corre	
the equipped appearance	(17501)	the selected color	(20166)
The Woodland Staff will now produce a bard visual effect when equipped	kskin (15420)	• [ToB, Dorn] Journal entry for Dorn's bloody p will now close	eath quest (18217)
Chest in Vicross' estate will no longer appear body in the inventory bar	or as a (12231)	• [ToB, Hexxat] Jaheira conversation with Hex- no longer break Jaheira's romance	xat will (18202)
Charm Animal ability and description will no (11520)	ow match	• [Tob, Hexxat] Teleport will no longer have a border	olack (18198)
Joolon will no longer speak when casting Cle Fear	oak of (11253)	[ToB] Culac will now react regardless of Nee actions	ra's (18584)
Nahal's Reckless Dweomer will now have co- casting time and description of casting time		• [ToB] Decoy Lich will now be immune to poi (18588)	son
Trademeet statues will no longer be affected magic	by dispel (11102)	• [ToB] Hexxat's request journal entry will no lupdate until both enemies are dead	onger (18586)
Coran's cabin will now have the same gather requirements to leave as to enter	r party (11079)	• [ToB] Items dropped while fighting Korkorra now be returned with the party	n will (18591)
Bala's Axe will no longer say it is lowering merity resistance when you hit an enemy with it.	nagic (11074)	• [ToB] Korkorran journal update will no longer tion Hexxat's humanity if not discussed	er men- (18593)
Lizard man halberds will no longer fail to di included)	splay (fix (11032)	• [ToB] Korkorran will no longer ignore party I (18590)	NPC's
Del will now appear after speaking to Sansu	ıki(10962)	• [ToB] Necrotic barrier journal entry will no lo	
Vampire will no longer initiate dialog with se	omeone in	appear when returning to Amkethran	(18603)
a building	(10888)	<ul> <li>[ToB] Phreya will now have suitable dialogue at is dead</li> </ul>	if Hexx- (18589)
War Hammer The Brick +2 will now have The B			
and Melee tooltips	(10651)	<ul> <li>[ToB] Rasaad will no longer repeatedly tell A to face him</li> </ul>	lorgoth (18613)
All the quests from Aran Linvail will now be			
when travelling to Brynnlaw	(10227)	• [UI] Journal and Quests - Art Update (BG2)	(19209)
<ul> <li>Firkraag Himself journal entry will now clos he is killed</li> </ul>	se when (10223)	• [UI] MP Create Game - Art Update (BG2)	(19204)
		• [UI] MP Game Options - Art Update (BG2)	(19205)
<ul> <li>Game will no longer crash when playing mo selecting a language.</li> </ul>		• [UI] MP Join Game - Art Update (BG2)	(19206)
The game will no longer crash when the me covers the entire screen	ssagebox (18839)	• [UI] MP Player Permissions - Art Update (BC (19207)	G2)
The game will no longer crash after leaving	the	• [UI] MP Select Player - Art Update (BG2)	(19208)
options screen	(19957)	• [UI] MP Character Arbitration - Art Update (	BG2)
Dragomir will now drop his cloak even if tur	ned to	(19203)	
stone	(19402)	• [UI] Player AI screen - Art Update (BG2)	(19210)
Ust Natha will no longer remain sealed if the Mother is not present	e Matron (18669)	• A visual effect will now be shown when cold is applied	damage (11597)
(Item) Armor heavier than leather will no lost	nger be	Achievements in ACHIEVEM.2DA will now be	oe sorted

Adjust the out for the Maga enally of	(16624)	in BGII:EE	(18910)
Adjust the art for the Mage spellbook	(16624)	Innate non-magical abilities like Barbarian I	Rage will
Adjust the art for the Priest spellbook	(16625)	no longer be disrupted by damage	(19820)
Adjust the Skills screen artwork	(20044)		
		Items and spells that cause fear will no long	
AR2901 will no longer tell you to gather you     when you are sale.	(18720)	creatures to drop their weapons	(18657)
when you are solo.	(10720)	Items called "Poison" will no longer use the	name of
Aura of Despair will now display a portrait in		the priest spell	(19981)
affected creatures	(19737)	Jan's Create Bruiser Mates description will r	no longer
Baldur's Gate 2 Main Menu Background - A	rt Update	be blank	(17464)
(19802)		Knocked down trolls will now be detectable	via
BGII:EE will now start with the new D&D a	and Beam-	scripts	(18288)
dog splash movies	(19879)		
		Mask of Strohm will now reveal the guardia	n when
BGII:EE stores that purchase helmets will in the store in the sto		the wearer is in sight of it (18169)	
purshase hat type items	(18419)	Mazzy's Lay On Hands ability will no longer	use the
Black Pits 2 Intro cutscene will now be skp.	pable	icon of Cure Light Wounds	(18479)
(18895)		Monks will now be immune to the effects of	disease
Bolts from Wand of Lightning will no longer	r change	(17211)	
direction after hitting targets	(19975)	Myconids will now use the proper race entry	, (10122)
Boon of Lathander will now have the correct	et duration	• Mycomus will now use the proper race entry	(19132)
prior to level 10	(17274)	Neera's Staff +1 will now do fire damage as	designed
		(18608)	
Bow of Arvoreen +2 will no longer use the g		New status icons will no longer be missing	(20715)
icon of a longbow	(19976)	Party NPCs now have unique scripts	(18821)
Button tooltips will now be correct.	(18558)	• Tarty Wees now have unique scripts	(10021)
Characters will no longer be able to start co	onversa-	Ox-Tail Belt will no longer use the strref of D	
tions while Time Stop is in effect	(18173)	as unidentified name	(20746)
Create a background for the scrolling menu	in stores	• PCs will now be immune to death resulting	from
(16626)	i ili stores	Charisma loss in Story Mode.	(18744)
		PCs will now be immune to death resulting	from
Create description icons (B suffix) for innate	e abilities	Constitution loss in Story Mode.	(18823)
(18828)		PCs will now be immune to death resulting	from
Dire Charm visual effect will no longer have	e a +3	Dexterity loss in Story Mode.	(18743)
saving throw bonus	(18221)		
Dorn will now use the correct pronoun for A	Azothet	PCs will now be immune to death resulting	
when Bodhi tries to take him	(19713)	Intelligence drain in Story Mode.	(18737)
Edwin will now fire the correct banter when	n wounded	PCs will now be immune to death resulting	from
(20378)	i wounded	Strength drain in Story Mode.	(18738)
		Phreya will no longer be invincible if Hexxat	is killed
Ending Slayer Change will no longer set ma		(18396)	
age resistance to 100 for 40 seconds	(18336)	Polymorph Self's Ogre form will no longer k	reen
• Fallorain's Plate +1 minimum strength will	now be 11	changing clothing color	(18721)
(18475)			
Habib will now be worth XP.	(18554)	Portraits will no longer look blurry if Scale I	
		turned on (BG2)	(20130)

(18932)

· Implement standardized creature animation speeds

by number

- Priest script PRIEST5 will no longer make characters cast Draw Upon Holy Might on their enemies (20199)
- Psionic Life Drain will no longer result in an uninjured caster losing hp from their new maximum (19973)
- Quasit familiars will now be able to cast Blur successfully (18722)
- Quayle will no longer have Necromancy Spells in his spellbook (18471)
- Quit Game confirmation screen Art Update (BG2) (19798)
- Restore Sarevok's sword to the genie (18739)
- Slices need to be repainted (20002)
- SoA critical path cutscenes will now be skippable (18423)
- · SoA dream cutscenes will now be skippable (18894)
- SoD Party AI adjustments will now be ported to BGII:EE (19964)
- Spectral Brand +5 will now have a speed factor of zero (16126)
- Spell icons in the spell selection screen will now be aligned with the background art (18389)
- Spirit Form will now use the correct name, description and icons (18551)
- Spirit Ward will now provide a bonus to saves vs.
   enchantment spells (18376)
- Spiritual Clarity will now remove the visual effects of Myconid spores (18500)
- Spook will no longer be castable from outside of your characters line of sight (20208)
- Summoned Nymphs will no longer disregard the player's commands (18264)
- The Acclamation spell will now have proper icons (18057)
- The chapter button in the TBP2 journal will now be labeled correctly (20124)
- The correct text will now be displayed in the weapon proficiencies screen (18399)
- The correct text will now be displayed on the sound set selection screen (20334)

- The description text on the Party AI screen will now be properly centered (BGII:EE) (19128)
- The Headband of the Devout now has a unique inventory and description icon (17838)
- The name input field at character generation will now be centered (20336)
- The North Forest will now be visible on the worldmap (18328)
- The Quick Loot boxes will now be evenly spaced. (18557)
- The Sleeper +2 item type will now be morning star (20128)
- The Sleeper Morningstar now has a proper inventory and description icon (17568)
- The Sleeper Morningstar will no longer look like a flail on the game screen toolbar (11088)
- There will now be a delay between Hexxat's prompts to leave Nan Quan Chi's tomb (18289)
- Trolls will no longer produce a spell sound effect when knocked down (18106)
- Trolls will no longer save vs. fire arrows while knocked down (18385)
- Variables in Keldorn's personal quest will now set consistently. (17877)
- Watchers Keep Challenge Rooms will no longer be inaccessible (11786)
- Wilson will now move at the same pace as non-monk party members (18136)
- Wizard Slayer miscast magic description will now match the effect (11585)
- World Map will no longer show the names of locations which are not visible (18495)
- XPLEVEL.2DA will now contain proper values (18667)
- Zone of Sweet Air will now remove Writhing Fog (18275)
- Creatures with DOOM\_GUARD and DOOM\_ GUARD\_LARGER animations will no longer produce sounds (18317)
- Flail of Ages +4 will now use the correct icon on the Game Screen (11499)
- · Quick Spell and Cast Spell icons for Energy Blades

will no longer use the Black Blade of Disaster icon (11087)

- Sarevok's Sword will now have unique inventory and description icons (18280)
- The Wild Forest will now become accessible when leaving Watchers Keep (18704)

# MODDING FEATURES

This section details some new effects that you can use in your own mod creations. To make use of these new features, you'll need either Near Infinity or DLTCEP.

#### New Opcodes

Opcodes are the lifeblood of spells and items. Any time a resource in the game causes an effect on a creature, it uses an opcode.

#### SAVING THROW VS. SCHOOL (346)

Applies a selective modifier to the target's saving throws against a specific spell school (i.e. Necromancy).

Parameter 1: Statistic Modifier

Parameter 2: Type

0 Cumulative Modifier

1 Flat Value Modifier

MSpecial: School

0 No School

1 Abjuration

2 Conjuration

3 Divination

4 Enchantment

5 Illusion

6 Invocation

7 Necromancy

8 Transmutation

9 Generalist

10 Wild magic

Notes from the Developers: This effect doesn't have an irreversible permanent mode (it always sticks to the target until removal). Make sure you don't create excessive effects.

#### MAKE UNSELECTABLE (365)

This opcode renders the creature unselectable, making it impossible for the player to give it orders even if it is green circled.

Parameter 1: Disable Conversation

0 Disables the "talk" option for the target

1 Does not disable the "talk" option for the target

Parameter 2: Disable AI

0 Disables the target's normal AI

1 Does not disable the target's normal AI

MSpecial: Determine selection circle

0 Target's selection circle will be purple

1 Target's selection circle will be green

#### **ENCHANTMENT BONUS (344)**

This effect changes the enchantment level of the target's attacks to the value of the 'Enchantment' field. The affected creatures are determined by the usual IDS targeting method.

Parameter 1: IDS Entry

Parameter 2: IDS File

0 EA.IDS

0 General.IDS

0 Race.IDS

0 Class.IDS

0 Specific.IDS

0 Gender.IDS

0 Alignment.IDS

9+ not used

Parameter 3: Hand

0 Current Weapon

1 Main hand

2 Offhand

3 Both

Parameter 4: Item Type

0 All weapons

1 Specific item type

MSpecial: Enchantment (The new enchantment level) Note from the Developers: This opcode allows us to handle weapons like the Bastard Sword +1/+3 vs. Shapeshifters properly, by setting an on-equip effect for the sword that affects its Enchantment when attacking creatures of a specific type. It also allows us to modify the Enchant Weapon spell to affect any weapons the target is wielding, instead of creating a single weapon that may or may not match the target's proficiencies.

#### New Triggers

Triggers are used in scripts to detect elements of a creature. The trigger itself will not do anything, but it will tell a script whether or not to execute additional actions based on the trigger. All of the triggers in this section are included in TRIGGER.IDS.

#### MODALSTATEOBJECT()

ModalStateObject(O:Object\*,I:ModalState\*Modal)

IDS Entry: 0x40f1

**Trigger:** Returns true if the specified creature is currently using the specified modal state, such as Stealth or Shaman Dance

#### CLASSLEVEL()

ClassLevel(O:Object\*,I:Category\*CLASSCAT,I:Value\*)

IDS Entry: 0x40FD, 0x40FE, 0x40FF

**Trigger:** Returns true if the specified creature's level in the specified class category (rogue, warrior, wizard, priest) is equal to the specified value

Note from the Developers: Class categories are listed in CLASSCATIDS.

#### HAVEKNOWNSPELL()

HaveKnownSpell(I:Spell\*Spell)

IDS Entry: 0x4102, 0x4102

**Trigger:** Returns true if the current creature knows the specified spell

#### IsForcedRandomEncounterAc-

#### TIVE()

IsForcedRandomEncounterActive(S:Area\*)

IDS Entry: 0x40FB

**Effect:** Returns true if the specified area has been set to force a random encounter but the random encounter has not yet triggered.

#### ORIGINALCLASS()

OriginalClass(O:Object\*,I:Class\*CLASS)

IDS Entry: 0x40EA

**Trigger:** Returns true if the specified creature's inactive class is the specified class

Note from the Developers: This trigger is specifically designed for dual-class characters. Single-class or multiclass characters will not return true for this trigger. Original Class (0) will always return true if the current creature is dual-classed.

#### SECRETDOORDETECTED()

SecretDoorDetected(O:Object\*,I:Open\*BOOLEAN)

IDS Entry: 0x4100

**Trigger:** Returns true if the specified door has been flagged as detected (TRUE) or has not been so flagged (FALSE)

Note from the Developers: Normal doors will not be flagged as "detected" because they are not secret. This trigger should only be used for secret doors.

#### IMMUNETOSPELLLEVEL()

Immune To Spell Level (O: Object\*, I: Level\*)

IDS Entry: 0x40F9

Trigger: Returns true if the specified creature is im-

mune to spells of the specified level.

#### STORYMODEON()

StoryModeOn()

IDS Entry: 0x40FA

Trigger: Returns true if Story Mode is enabled

#### **New Actions**

Actions are performed by scripts. Each of the actions in this section are included in ACTIONS.IDS.

#### SETGLOBALTIMERRANDOM()

SetGlobalTimerRandom(S:Name\*,S:Area\*,I:Min\*G-

Times, I:Max\*GTimes)

IDS Entry: 377

**Effect:** Sets a random timer between a minimum and maximum value

Note from the Developers: I:Min\*GTimes sets a minimum length for the timer; I:Max\*GTimes sets a maximum length. Thus, SetGlobalTimerRandom("-GLOBAL","KILLPARTY",four\_hours, five\_hours) will trigger the global variable KILLPARTY sometime between four and five hours from now.

#### RESETPLAYERAI()

ResetPlayerAI()

IDS Entry: 409

Effect: Resets the current NPC's AI to the script set in

PARTYAI.2da

#### MOVETOOBJECTOFFSET()

MoveToObjectOffset(O:Target\*,P:Offset\*)

IDS Entry: 386

**Effect:** Moves the current creature to the target's coordinates, offset by the provided X and Y amounts

#### ZOOMLOCK()

ZoomLock(I:Lock\*BOOLEAN)

IDS Entry: 412

Effect: Resets the zoom level to default and prevents the player from changing the zoom level when set to TRUE: unlocks the zoom level when set to FALSE

#### RANDOMWALKTIME()

RandomWalkTime(I:Time\*)

IDS Entry: 410

**Effect:** The current creature will walk randomly until they have changed directions the specified number of times

#### RANDOMWALKCONTINUOUSTIME()

RandomWalkContinuousTime(I:Time\*)

IDS Entry: 411

**Effect:** The current creature will walk randomly until they have changed directions the specified number of times

#### DISPLAYSTRINGHEADNOLOG()

DisplayStringHeadNoLog(O:Object\*,I:StrRef\*)

IDS Entry: 388

**Effect:** Displays the specified string as tooltip text over the specified object, without printing that string to the combat log.

#### DISPLAYSTRINGPOINTLOG()

DisplayStringPointLog(I:Strref\*,P:Location\*)

IDS Entry: 408

**Effect:** Displays the specified string as tooltip text over the specified X,Y coordinates, and also prints the string to the combat log.

#### EXTERNALIZATIONS

Externalizations refer to gameplay mechanics or engine behaviors that were previously hidden from mod access, but that are now available to be modified using the existing modding tools. Most of these externalizations are tied to 2da files.

#### PICK POCKET REACTIONS (17221)

The reaction an NPC will have to the player picking the NPC's pocket is now determined a value set in PPBEHAVE.2da. By default, the following features are enabled (setting a value to 0 will disable the listed feature).

**TURN\_HOSTILE** Sends the AttackedBy() trigger on a failed attempt

**REPORT\_FAILURE** Sends the PickPocketFailed() trigger on a failed attempt

**BREAK\_INVISIBILITY** Even a successful attempt will break the thief's stealth and invisibility

**Notes from the Developers:** This is inspired by a feature from ToBEx.

#### **BARD SONG (17268)**

The effects of the default bard song ability have been externalized to BARDSONG.spl. You can make changes to this spell to alter the bard song's default effects.

**Note from the Developers:** This is inspired by a feature from ToBEx.

#### STATUS ICONS (17038)

Status icons, the small graphics that appear on the Character Record screen to denote effects like Stunned, Charmed, or Fatigued, have been externalized to STAT-DESC.2da and can now support any spell icon.

Note from the Developers: There is a new column in STATDESC.2da, BAM\_FILE. If that column is empty or has \*\*\*\* as a value, it will be ignored by all opcodes that use the file for setting icons. However, if that icon has a proper string (i.e. SPWI417C for enchanted weapon) then that BAM will be scaled down to display as an icon on the character's portrait.

#### SAVE GAME NAME (13276)

The names of the saves generated by the SaveGame() action have been externalized to SAVENAME.2da.

**SLOTNAME** The string that will be used for the save's name

**START** The save slot's index (this should usually be the same as the number in the first column)

**COUNT** The number of rotating saves that will be used for the listed save

Note from the Developers: This feature allows us to create a rotating stock of four Quick Saves. You can increase or decrease the number of rotating Quick Saves by modifying the number in the "Count" column.

#### Spellcasting Failure (16669)

The way that spellcasters fail after taking damage has been externalized to CONCENTR.2da. By default, any damage a spellcaster takes will cause them to fail their spellcasting.

#### CHECK MODE

- 0 Any damage
- 1 (1d20 + luck) vs. (spell level + damage taken)
- 2 (1d20 + Concentration) vs. (15 + spell level)

Note from the Developers: This is inspired by a feature from ToBEx. Be aware that Baldur's Gate games have no Concentration skill; using that option will use a basic 1d20+luck formula for the caster's check.

# THE NEW UI SYSTEM

If you're reading this section, it's because you want to know how the new UI system works and how you can make use of it to create your own UI layouts. Happily, the UI system created for v2.0 of the Infinity Engine is a lot more friendly to modification than the old system of CHU files. What you'll need:

- · A good text editor (I recommend Sublime Text)
- · A keyboard with working F5 and F11 keys
- · A desire to create stunning UI layouts

It also doesn't hurt to familiarize yourself with the Lua programming language, but it's not absolutely necessary. (If you want to know more about the Lua programming language, Google is your friend.)

It's very important to save and back up your work often. There may be occasional hiccups that can corrupt your UI.menu, which can ruin hours of hard work if you're not careful.

In each of the following section, we'll start with the basics, and then provide a short tutorial on how to do something specific.

#### UI EDIT MODE AND F11

First, find the file "baldur.lua" in the directory where your saved games are located, and open it with your trusty text editor.

Add the following line to the top of this file, and save it:

SetPrivateProfileString('Program Options','UI
Edit Mode','1')

This will allow you to do three things:

- First, it will let you enter "Edit Mode" on the game's
  user interface by pressing F11 on your keyboard.
   With Edit Mode, you can drag objects around the
  screen and place them exactly where you want them
  to live. Press F11 again to leave Edit Mode and save
  your changes.
- Second, it will let you preview changes you make to UI.menu without having to restart the game, by pressing F5.
- Finally, if you hover over an element and press the Tab
  key, you'll see exactly what line in UI.menu defines
  that element. This is profoundly helpful when making
  changes that require you to change the code, and we'll
  be using it extensively in the other two sections.

Your changes are saved to UI.menu, which will be copied to your override folder in the game's installation directory. If at any point you decide you want to get rid of all your changes and return to the game's default menu layouts, just rename UI.menu to something else or delete it altogether. Don't do this while the game is running. If you rename or delete UI.menu while the game is running and press F5, the game will crash because it's looking for the changes to a file that no longer exists.

If all you want to do is move buttons around on the screen, Edit Mode is all you need to get started.

#### TUTORIAL: UI EDIT MODE

First, make sure that you've added the following line to baldur.lua and saved it:

SetPrivateProfileString('Program Options','UI Edit Mode','1')

Now, launch Baldur's Gate: Enhanced Edition. When you get to the main menu screen, press F11.



See those yellow rectangles? Each one of them represents a UI element that you can resize and move. To start, hover the mouse over the Quit Game button until its entire rectangle is blue, and click and drag it up about a quarter of an inch.



Moving screen elements is as simple as clicking and dragging. Some smaller elements, though, may need to be enlarged before they can be moved. If you try hovering over the version number, for instance, you'll notice that no matter where you put your mouse, you can't get the entire rectangle to be blue.

So before we move it, we'll need to make it bigger. Hover over the top edge of the version number's rectangle until that top edge turns blue, then drag it up just a bit. Now when you hover over the rectangle you should be able to find the "sweet spot". Move it down to the space below the Quit Game button.



You can also make text boxes smaller, and the text will wrap itself automatically. Let's move the information text from the top right into the space above the Quit Game button.



Whoops! This text box is too big for the space and it looks bad. Luckily, we can resize it. Just click on the left edge of the rectangle and drag it in until it fits in the space.



And there you have it.

Any element can be moved or resized. Be aware, though, that shrinking or enlarging graphic elements like buttons and screen backgrounds won't shrink or enlarge the graphics themselves. Think of it like cropping an image: changing the size of the rectangle's frame changes the viewable area of the image, but doesn't alter the image itself.

Press F11 again, and you'll leave Edit Mode. Check out that handiwork!



#### TO RECAP:

- · Press F11 to enter Edit Mode
- Hover over an element until its entire rectangle turns blue, then click and drag it to move it around on the screen
- Hover over a rectangle's edge until it turns green, then click and drag it to resize the element's frame
- Press F11 again to leave Edit Mode and save your changes.

#### CHANGING GAME FONTS

Let's say you really like Comic Sans. Like, love it. When you write a paper for school, you write it in Comic Sans. When you create a poster, you use Comic Sans. Wouldn't it be great if you could see Comic Sans in Baldur's Gate, too?

In this section, I'll be showing you how to change the fonts that are used in-game, and how to make sure they're displayed correctly and legibly.

For this, you'll need a copy of Near Infinity, because you're going to be exporting BGEE.lua to your override folder.

Install Near Infinity and set it up according to argent77's instructions. Once it's set up and running, find the folder called LUA and expand it. Click on the file "BGEE.lua" and then, in the panel on the right, click "Save" to save a working copy of this file to your override. Now close Near Infinity, and open BGEE.lua using your favorite text editor.

(You can do everything in this section from Near Infinity instead, but we'll be using that text editor a lot and it's important to be able to make changes quickly.)

With the text editor open, find the following line:

fontcolors = {}

When you first open the file, this will be somewhere around line 648.

Everything for the next 150 lines or so pertains to the fonts that are used in-game. The first section dictates the colors:

```
fontcolors['1'] = 'FFCAE2E9' -- title
fontcolors['2'] = 'FFCAE2E9' -- title high-
fontcolors['3'] = 'FFCAE2E9' -- subtitle
fontcolors['4'] = 'FFEEFFFF' -- subtitle
highlight
fontcolors['5'] = 'FF000000' -- parchment
fontcolors['6'] = 'FFEEFFFF' -- parchment
fontcolors['7'] = 'FF000000' -- alternate
parchment
fontcolors['8'] = 'FF102526' -- alternate
parchment highlight
fontcolors['9'] = 'FFCDD6D9' -- semitrans dark
background
fontcolors['A'] = 'FFFDE6E9' -- semitrans dark
background highlight
fontcolors['B'] = 'FFCECECE'
fontcolors['C'] = 'FFC8F0C8' -- Minty update
fontcolors['D'] = 'FF96C8FF' -- orangy subti-
tle color
fontcolors['R'] = 'FF0000FF' -- red
fontcolors['G'] = 'FF00FF00' -- green
fontcolors['M'] = 'FF000080' -- parchment red
fontcolors['$'] = 'FF82E6FF' -- gold yellow/
orange
```

Change the color for a given code using ARGB codes.

The single-character "code" (ex. fontcolors['M']) is used to call the listed color in the various styles, which are described in the next section. Here's an example:

This block contains all of the information about this style; when you use the "normal" style in UI.menu, this is the style you're using.

#### Some terms

- "color" selects the fontcolor defined in the previous section. You can also set an 8-character hex code directly, but for consistency it's better to change your colors in the fontcolors section.
- "font" selects the specific font that will be used. You
  can use one of the game's existing fonts, or you can
  copy a TTF file into your override folder and use
  that one. Be aware, though, that the file name must
  be eight characters or less; if your font has a longer
  name, you'll need to shorten its file name before it will
  be recognized here.
- "point" determines the default size of the style. If you've ever used a word processor, the size you use for text is exactly the same as the size used here. If you decide to use a font that looks smaller or large, you may want to adjust this "point" size accordingly.
- "valign" determines vertical alignment for the text within the frame. "top" will align it to the top; "bottom" will align it to the bottom; "center" will center it within the frame.
- "halign" determines the horizontal alignment for the text within the frame. "left" will align it to the left side of the frame; "right" will align it to the right side; "center" will align it to the middle.
- "upper" determines whether the text will be displayed in all upper-case letters (1) or not (0). If you don't include an entry for this field, it will default to 0.
- "pad" assigns padding to the borders of the text frame, ensuring that the text will always be a specific number of pixels from each edge. This field is listed as a series of four numbers, which refer (respectively) to the frame's left, top, right, and bottom edges.
- "useFontZoom" is what determines whether or not this style will resize itself based on the user's Font Size settings. If this field is set to 0, this style will always appear at the defined point-size, regardless of the user's Font Size settings (which is important if you're putting text on a button, but less important for item descriptions).

If all you want to do is swap out an existing font for a new one, of course, you don't need to open BGEE.lua at all; just copy the desired font to your override folder, and rename it "NORMAL" or "STONESML", or any of the other fonts that you see defined in the "styles" block.

#### TUTORIAL: CHANGING FONTS

In this tutorial, we'll be changing all of the game's fonts to Comic Sans. Before we begin, you will want to grab a copy of your Comic Sans font. This font comes installed on most computers, and you can find it in your Font Book (Mac) or Fonts library (Windows). If you need help finding your fonts, Google is your friend.

Once you've found Comic Sans, make sure you have it as a .ttf file; .otf and .ttc won't be recognized by the game's engine. (You can use any font you like, but Comic Sans is a visually distinct font that will also be a little goofy to see in game.)

Copy the Comic Sans ttf file to your override folder. Now, rename it to something that's eight letters long. I'll be using COMIC.ttf for ease of reference. It should be sitting happily right next to BGEE.lua.

Now, open BGEE.lua (you saved a copy to your override already, and find the "styles" block.

Within this block, every time you see a line beginning with font =, change the text in the single-quotes to COM-IC. The full line should look like this:

font = 'COMIC' ,

Comic Sans is a smaller font; because of this, you may want to increase the point-size on some of the styles that are used as set-pieces.

When you're done, save BGEE.lua and launch the game. Voila! Everything's in Comic Sans!



#### TO RECAP:

- Modify BGEE.lua when you want to make specific changes to one or more text styles.
- Use override files to test the visual appearance of fonts and see them in game.

Note from Dee: It is better to make changes using BGEE.lua once you know how you want your fonts to appear; you can more clearly define how the game's text appears, and you'll save yourself a lot of copying of the same font file as well.

#### THE BASICS OF UI.MENU

Up until now we've been swimming in the shallow end of the pool. Now it's time to get out the hard hats and the adult-size crayons and start making things do magic. If you haven't chosen your text editor by now, go do that now. Trust me, it will make your life a lot simpler to have things highlighted for you, and with keyboard shortcuts to handle commenting.

Again, I recommend Sublime Text, and that's the tool I'm using, but there's a wealth of excellent text editors out there. Find one you like, and that you'll be comfortable using for a long time.

If you kept the copy of UI.menu that was created back when we were moving things around the main menu, go ahead and open that up with your text editor. If you can, set that text editor as the default program for this file; if you're serious about UI modding, you'll be opening this file a lot.

A lot.

Sublime Text lets me change the language, which allows the editor to highlight syntax in a way that makes it easy to spot things I need. If your editor doesn't have this feature and syntax highlighting is important to you, find a tool that has it. I'm setting my language to "Lua", and setting .Menu files to always use this language. (If you do work with other .menu files that aren't related to Baldur's Gate, don't do that last part; otherwise, it will make your life easier in the long run to have this set as a default.)

Now that you've got UI.menu open, you'll see what looks like a horrible, horrible mess. Like something that Cthulhu might have spat up in the sink and said "Ew, gross, what's that" (except in the mind-disintegrating language that Cthulhu speaks, rather than English).

If you're familiar with Lua or other programming languages, you've already begun to figure out what it all means. For the uninitiated, what you're seeing is code.

Don't worry. We're going to be very safe about this. With this file still open, launch Baldur's Gate: Enhanced Edition, and on that first menu screen, press F11. Hover the mouse over the Tutorial button and press the Tab key on your keyboard.

You'll see a tooltip appear with the following text:

Type: Button Line: 7160 Pos: 50, 306 Size: 300x44

"Type: Button" means that this element is in a block with the "button" type. Pos defines the xy coordinates of the element's top-left corner, and Size defines the element's pixel width and height (respectively) on the screen. The "Line" entry means that when you open UI.menu, this element is defined on or around line 7160. So let's go take a look.

Open up UI.menu, and find line 7160. If your text editor doesn't show you line numbers, find a text editor that does and use that instead.

You'll see that 7160 is in the middle of a block that looks like this:

```
button

{
    bam 'STARTMBT'
    sequence 6
    area 50 306 300 44
    align center center
    text style "button"
    text "TUTORIAL_BUTTON"
    action
    "
    startEngine:On-
TutorialButtonClick()
    "
```

This block defines everything about that Tutorial button, from the graphic that's used for its background (the "bam" entry) to what happens when you click on it (the "startEngine:OnTutorialButtonClick()" block). Any changes you make to that block will be reflected in the corresponding element in game.

In fact, you can see the change you've made right away without having to restart the game! Just press F5 from in-game, and the screen will refresh to read the changes you made to UI.menu. You may need to switch back and forth between screens to see everything populate, but that's a lot faster than having to shut down the game between previews.

#### USING LUA IN UI.MENU

UI.menu supports Lua code. The very first thing you see when you open UI.menu is a block of Lua:

```
--reload language

if(uiTranslationFile) then

Infinity_DoFile("L_" .. uiTransla-

tionFile)

else

Infinity_DoFile("L_en_us")

end

listMetaInfo = {}
```

Everything inside the `symbols is Lua. I won't tell you what it means, because I don't know what it means, and the goal of this guide is to give you the basics so you don't get yourself into trouble. If you already know how Lua works, you can probably figure it out anyway.

Before you make changes to an existing copy of UI.menu, be sure to back up your copy so you don't lose any of your work. Making changes to UI.menu while the game is running can cause corruption in the file.

#### TUTORIAL: THE AUTO-ROLLER

So you know how it goes. You're up late, you want to play the game, and you get to the Abilities screen in character creation. Here we go again, you think, as you settle into the process of methodically rerolling your ability scores. Wouldn't it be great if you didn't have to sit there for an hour and a half waiting for that 85 to show up?

Let's see if we can make that dream come true. So you're on the Abilities screen in character creation. Hit F11, and mouse-over the Reroll button.



Take note of the line number, and open UI.menu. Find that line, and you'll see something like this:

That line at the end—action "createCharScreen:OnAbilityReRollButtonClick()"—is Lua, calling to the game's engine to use a specific action that the engine already understands. In this case, the action will reroll the ability scores once. Well, we don't want to reroll once. We want to reroll as many times as it takes to get a total of 92. Luckily, the Total you see on the screen gives us exactly what we need. Find this block:

```
label

{
    area 362 568 50 54
    text lua "chargen.total-

Roll"

text style "normal"
    text align center center
}
```

The displayed text for that field is driven, again, by a Lua variable—chargen.totalRoll.

If you're familiar with the basic principles of Lua, you know that you can set a "while" condition to repeat an action until the specified condition is no longer true. So we can say, in plain English:

While the total roll is not equal to 85, reroll.

Now, all we have to do is convert that into language that the engine will understand:

- · "while" is how we start the command
- · "the total roll" we now know to be chargen.totalRoll
- · "is not equal to" in Lua is written as "~="
- · "85" is our target number
- "reroll" we know to be createCharScreen:OnAbilityReRollButtonClick()
- every "while" block has to end with "end" on a line by itself

Put that all together, and we get:

Now, copy the block for the Reroll button, and paste it right beneath the existing button. Comment out the first copy so we have it saved for later, and now replace the contents of the action " " with our new block of code. The new button's action should look like this:



Save that, and return to the game and press F5. Press the Reroll button, and voila! Nothing but 85 totals.



Now, I've done a little tinkering of my own beyond what you see above. See if you can figure out how I did it, using nothing but the following screenshot to guide you:



#### TO RECAP:

- You can enter Lua code in UI.menu as long as you surround it with `symbols
- You can call a Lua variable to generate a piece of text for a label using the text lua field
- You can script a button to perform a block of Lua code using the action field

That's all you need to know to start exploring the new UI system. Got a design you're in love with? Share it with the community on the official Beamdog forums, or send us a screenshot via Twitter at @BeamdogInc with the hashtag #UI - spread the joy of UI design to the world!