CRASH LOG AUTO SCANNER & SETUP INTEGRITY CHECKER

CLASSIC README

CRASH LOG AUTO-SCANNER & SETUP INTEGRITY CHECKER (FALLOUT 4 LINK)

OTHER LINKS (FALLOUT 4)

How To Install Buffout 4

Fallout 4 Important Patches & Fixes

Fallout 4 Advanced Troubleshooting

XEDIT Plugin Auto Cleaning Tool (PACT)

HOW TO READ CRASH LOGS Online Doc

INTRODUCTION

CLASSIC is a tool used for scanning crash logs generated by Buffout 4 (Fallout 4) and Crash Logger (Skyrim), as well as scanning game/mod files for the same games. Starfield support is also on its way.

CLASSIC will provide detailed information on detected settings, errors and mods that might be causing the crash, along with various suggestions and steps to take depending on what it finds. There are currently around ~250 different checks implemented into the code. CLASSIC also allows you to easily backup, restore and remove certain mod files, check for Script Extender updates, monitor Papyrus logs, scan many other logs for errors and extensively scan game and mod files for any potential problems.

REQUIREMENTS (FALLOUT 4)

You can find detailed Buffout 4 installation instructions here.

- Fallout 4 Script Extender
- Address Library for F4SE Plugins
- Buffout 4 (or Buffout NG for VR)
- BSArch (for scanning mod files)

REQUIREMENTS (SKYRIM)

- Skyrim Script Extender
- Address Library for SKSE Plugins
- Crash Logger AE for VR
- BSArch (for scanning mod files)

Note that for both Fallout 4 and Skyrim, you should also install the Microsoft Visual C++ Redistributable All-In-One package and the DirectX Redist (June 2010) package. These packages contain important files and components required for many games / certain mods and can also prevent some forms of crashes.

INSTALLING CLASSIC AND ITS CONTENTS

Download the latest version of CLASSIC Portable from any available CLASSIC Nexus Page, all versions of CLASSIC 7.30 and up are universal and will work on all currently supported games (FO4, SSE).

Extract all contents of the downloaded archive to the same folder of your choice. Make sure all files are in the same folder, but never extract into your game installation folder (where game's exe is located). This applies to not just CLASSIC, but almost all other tools and programs, unless explicitly specified otherwise.

If you are using Vortex, run CLASSIC.exe directly or create a shortcut for it in Vortex.

If you are using Mod Organizer 2, you must create a shortcut for CLASSIC.exe in MO2.
To do this, run MO2 and select <Edit...> from the dropdown menu next to the Run button.

Now press the Plus Icon > Add From File... and select your CLASSIC.exe file from the new window. Press OK to save this executable and make sure it is selected in the MO2 dropdown menu, then press Run to run CLASSIC inside MO2. This is required for CLASSIC so it can correctly locate your game and mod files.

After running CLASSIC, the following files and folders will be generated:

CLASSIC Data folder - contains all data required for CLASSIC to function properly.

CLASSIC Backup folder – contains generated backups of your game executables, backups of any files that get removed during cleanup and all files you decide to create a backup of while using CLASSIC.

CLASSIC Settings.yaml – configuration file for the executable where various CLASSIC settings can be adjusted, either manually or through the CLASSIC interface.

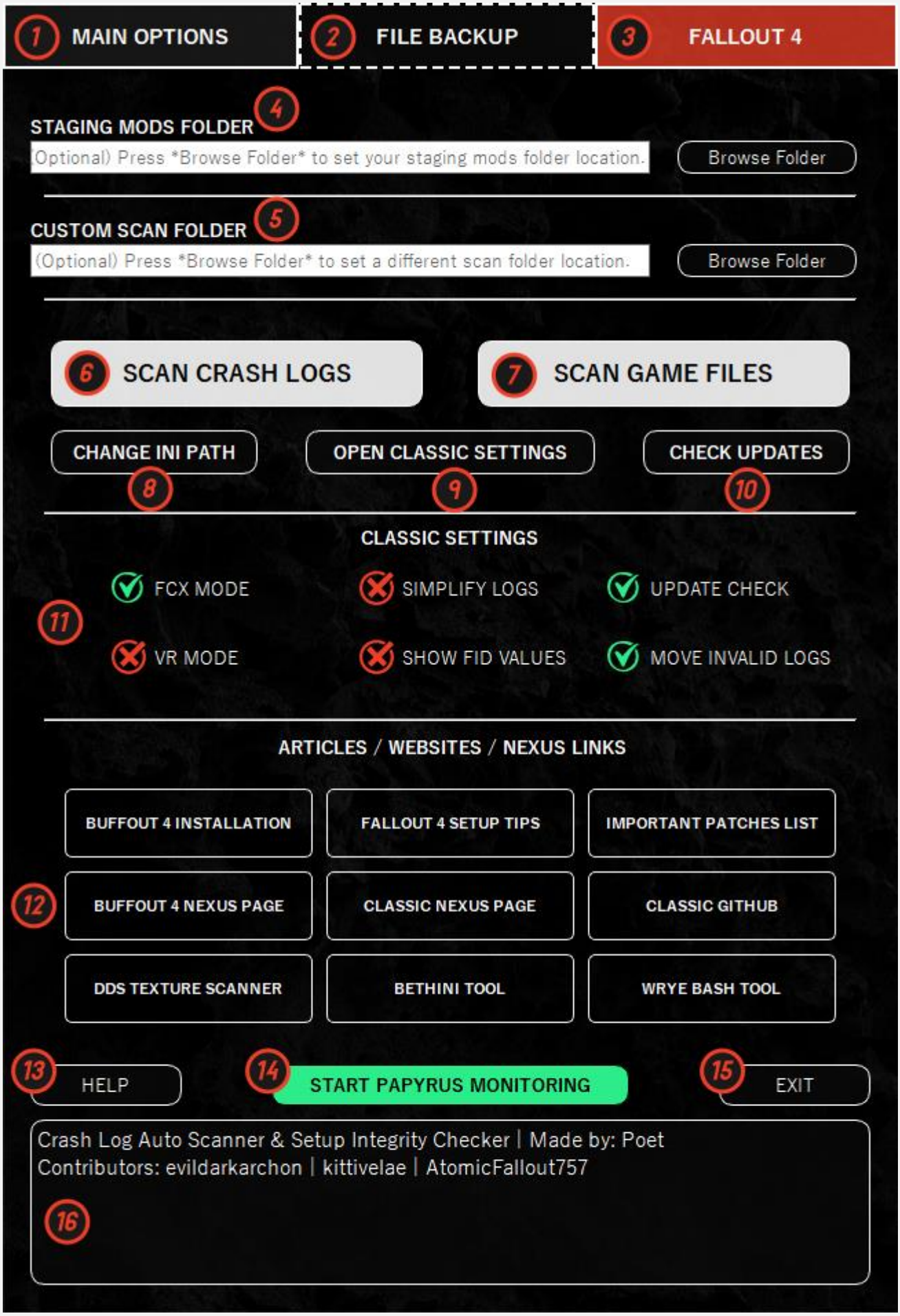
CLASSIC Ignore.yaml - configuration file where you can add plugin and DLL names that you want CLASSIC to ignore. Ignored plugins will not show up in AUTOSCAN.md reports until you unlist them from the file.

CLASSIC Journal.log – logging file mainly intended for CLASSIC developers to track various function calls, debug info and error messages. It gets automatically deleted and regenerated every 7 days.

HOW TO READ CRASH LOGS.pdf – currently only available for the Fallout 4 version, this PDF lists all currently known crash errors / messages and their possible solutions or workarounds.

RUNNING CLASSIC AND ALL AVAILABLE OPTIONS

The CLASSIC interface itself is currently divided into two main parts and each separate option below is marked with numbers for instructional purposes. Number explanations are located below the image.


1 MAIN OPTIONS
2 FILE BACKUP
3 FALLOUT 4
STAGING MODS FOLDER
4
(Optional) Press *Browse Folder* to set your staging mods folder location.
Browse Folder
CUSTOM SCAN FOLDER
5
(Optional) Press *Browse Folder* to set a different scan folder location.
Browse Folder
6 SCAN CRASH LOGS
7 SCAN GAME FILES
CHANGE INI PATH
8
OPEN CLASSIC SETTINGS
9
CHECK UPDATES
10
CLASSIC SETTINGS
11
FCX MODE
SIMPLIFY LOGS
UPDATE CHECK
VR MODE
SHOW FID VALUES
MOVE INVALID LOGS
ARTICLES / WEBSITES / NEXUS LINKS
BUFFOUT 4 INSTALLATION
FALLOUT 4 SETUP TIPS
IMPORTANT PATCHES LIST
12
BUFFOUT 4 NEXUS PAGE
CLASSIC NEXUS PAGE
CLASSIC GITHUB
DDS TEXTURE SCANNER
BETHINI TOOL
WRYE BASH TOOL
13
HELP
14
START PAPYRUS MONITORING
15
EXIT
Crash Log Auto Scanner & Setup Integrity Checker | Made by: Poet
Contributors: evildarkarchon | kittivelae | AtomicFallout757
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(1) MAIN OPTIONS – Main tab that is automatically opened once you start CLASSIC.

(2) FILE BACKUP – Secondary tab that contains BACKUP / RESTORE / REMOVE options for certain game files. Note that backups of game executables are created automatically, no user input is needed.

(3) FALLOUT 4 (ON HOVER > CHANGE GAME) – Displays the currently managed game. Clicking on this button will allow you to change the game you currently wish to manage. (Disabled until next update).

(4) STAGING MODS FOLDER – Press *Browse Folder* to select the main folder where your mod manager keeps all extracted mod files in their separate mod folders (excluding the Data folder). CLASSIC will then include this folder and all contents inside for the scan once the *Scan Game Files* process is initiated.

(5) CUSTOM SCAN FOLDER - Press *Browse Folder* to select a custom folder containing your crash logs. Once game crashes, your crash logs are generated in the Documents / My Games / *game* / XSE folder by default. CLASSIC will automatically move crash logs from this Script Extender folder into the folder that contains CLASSIC.exe, then scan these logs once the *Scan Crash Logs* process is initiated.

(6) SCAN CRASH LOGS – Main option for scanning your crash log files. Once the scan is complete, CLASSIC will generate a -AUTOSCAN.md file for each valid crash log that was successfully scanned. Your job is to open these files with any better text editor (Notepad++ or similar) AND READ THEM!

(7) SCAN GAME FILES – Main option for scanning game/mod files. If *STAGING MODS FOLDER* option has not been set, only a rudimentary scan of game logs and some game files will be performed. For much more useful results, please provide a valid staging mods folder from your mod manager.

(8) CHANGE INI PATH – Option only required in cases where CLASSIC was unable to find your main game INI files. Clicking on this button will prompt you to manually set the main INI folder.

(9) OPEN CLASSIC SETTINGS – Option to open CLASSIC Settings.yaml in your default text editor.

(10) CHECK UPDATES – Option to check if a new version of CLASSIC is available. Note that CLASSIC should automatically check for updates every 7 days. Or make sure to track CLASSIC on Nexus.

(11) CLASSIC SETTINGS – Check boxes to directly toggle CLASSIC settings on or off.

(12) ARTICLES / WEBSITES / NEXUS LINKS – Buttons with links to other important websites.

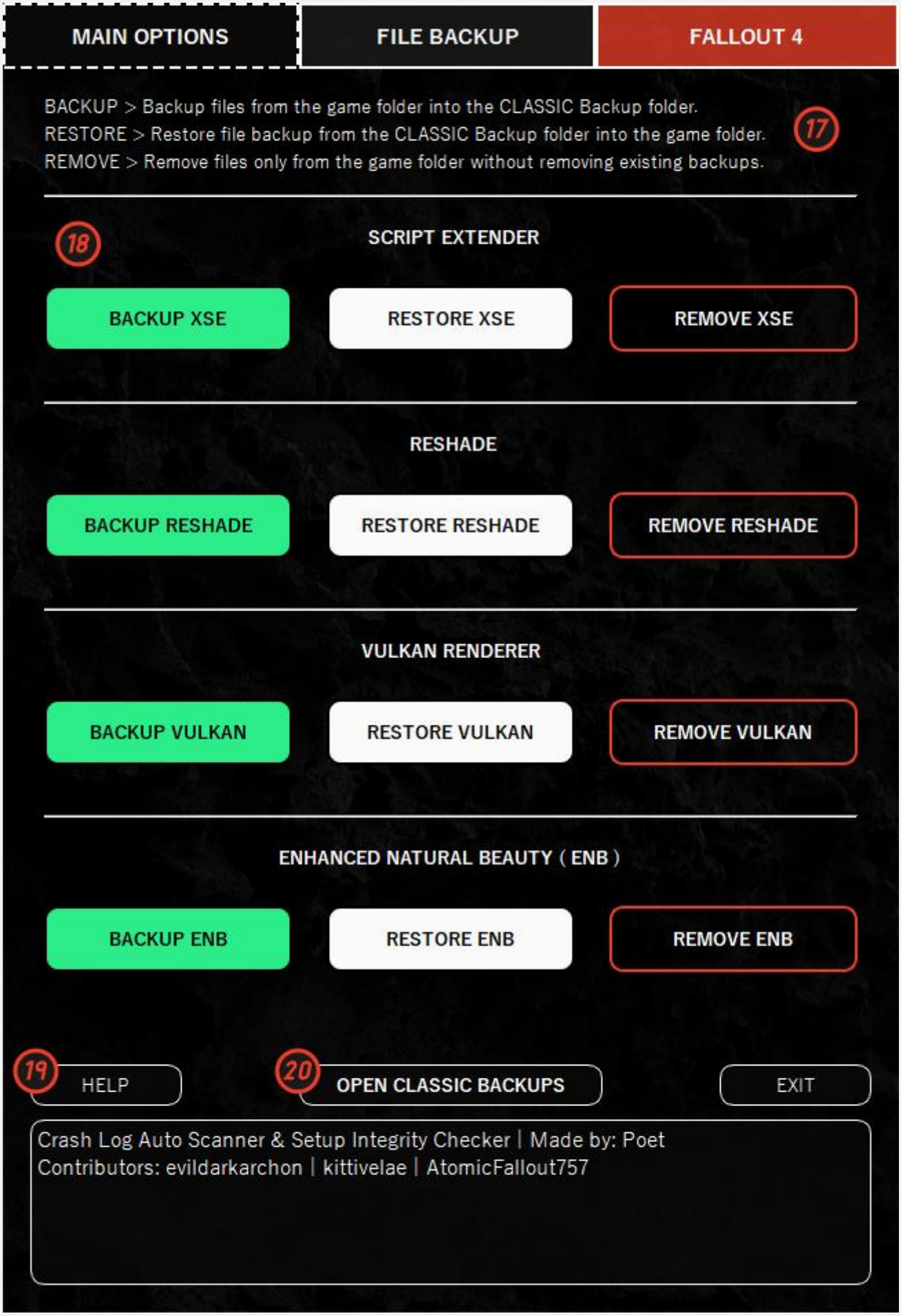
(13) HELP (MAIN OPTIONS) – Shows additional information for the main options and allows you to open the Collective Modding Discord server link in your browser in case you need further assistance.

(14) PAPYRUS MONITORING – Once monitoring has been started, CLASSIC will read the contents of your Papyrus.0.log file every 5 seconds and play a short warning sound if the game's scripting engine gets overloaded, which results in scripts getting dumped (written to log and scripts may get suspended).

(15) EXIT – Close CLASSIC.

(16) TEXT BOX – Used for displaying Papyrus results once monitoring has been started.

(17) BACKUP / RESTORE / REMOVE – Short explanations for each of the available options.



(18) AVAILABLE BACKUP OPTIONS – There are current 4 available options/mods for creating backups of, those being Script Extender, ReShade, Vulkan Renderer and Enhanced Natural Beauty (ENB).

(19) HELP (FILE BACKUP) – Shows additional information for backup / restore / remove options.

(20) OPEN CLASSIC BACKUPS – Opens the CLASSIC Backups folder in your default file explorer.

CRASH LOGS SCAN

AUTOSCAN.md files are generated by CLASSIC once you click the SCAN CRASH LOGS button.
For best clarity and formatting, I strongly recommend you open these files with Notepad++ or other similar, more advanced text editors. Avoid using regular Windows Notepad or WordPad.

YOU ARE MEANT TO OPEN AND READ AUTOSCAN FILES YOURSELF, NOT JUST POST THEM ON REDDIT OR OTHER SITES WITHOUT EVEN BOTHERING TO LOOK AT WHAT THEY SAY.

The autoscan file will be divided into several segments. Here's what each segments means:

==========
Main Error: EXCEPTION_ACCESS_VIOLATION...
==========

This segment shows the main error caught by Buffout 4 / Crash Logger.
In 98% of all cases, the main error will start with:

EXCEPTION_ACCESS_VIOLATION, meaning the game couldn't access some required data for one reason or another. The next part is the program or file where the crash originates from (ex: Fallout4.exe) and lastly the call stack address (ex: +24FE2E1) that was last accessed before the exception occurred.
NOTE: This value has NOTHING to do with any Mod, Plugin or Game IDs.

The part above the Main Error shows the name of the scanned crash log and the CLASSIC version used to scan it. The part below the Main Error shows the version of Buffout 4 / Crash Logger that was used when the crash log was generated and the latest available version of these mods at that time. Note that you should always have the latest version of Buffout 4 / Crash Logger installed.

==========
CHECKING IF LOG MATCHES ANY KNOWN CRASH MESSAGES
==========

This segment checks the database of all crash errors that are either known about or can be solved. If any crash messages show SUSPECT FOUND, this requires that you look up that crash error in this document.
[CTRL] + [F] keys are your friend; you can also use the Table Of Contents.

EXAMPLE
Let's say you see this in the -AUTOSCAN.md output file:
 # Checking for BA2 Limit Crash.....SUSPECT FOUND! #

Therefore, you would look up / search for BA2 Limit Crash in this document.
It will also show the crash log / error message Priority value (Ex. Priority : [5])
Crash errors / messages with a higher priority should be looked up and dealt with first!

==========
CHECKING IF NECESSARY FILES/SETTINGS ARE CORRECT
==========

This segment checks various log files for errors / problems and your Buffout 4 / Crash Logger config file inside the game's Data\xSE\Plugins folder. Depending on which mods you have installed, you might need to manually correct some parameters with a text editor (Notepad++) as explained by this segment.

==========
CHECKING FOR MODS THAT CAN CAUSE FREQUENT CRASHES
==========

This segment checks the database for mods that are known to cause major problems or frequently crash the game. You are supposed to temporarily disable any mods detected here and recheck your game to see if the crash went away. If the game still crashes, see recommendations from other segments.

==========
CHECKING FOR MODS THAT CONFLICT WITH OTHER MODS
==========

This segment checks the database for mods that are known to be incompatible or conflict with your other installed mods. If either of the two mods are reported as conflicting, you should choose which one you want to keep and disable or completely uninstall the other mod, to prevent various bugs and crashes.

==========
CHECKING FOR MODS WITH SOLUTIONS & COMMUNITY PATCHES
==========

This segment checks the database for mods that can cause problems or crashes, but have available patches, fixes or alternatives which will be linked in the same segment. For Fallout 4, you can also visit this article, which lists all important community patches and fixes for the base game and some mods.

==========
CHECKING FOR MODS PATCHED THROUGH OPC INSTALLER
==========

This segment is exclusive to Fallout 4 and checks the database for mods that are patched through my own Optimization Patches Collection mod. You are supposed to visit this page, then download and install the main file with your mod manager. I'm also currently working on updating and expanding this mod.

==========
CHECKING IF IMPORTANT PATCHES & FIXES ARE INSTALLED
==========

This segment checks if important mods, patches and fixes which all players should have, are installed. If you're missing any of these fixes and patches, I strongly recommend that you install them with your mod manager or check my main guide for detailed instructions, or this article for the Fallout 4 list.

==========
SCANNING THE LOG FOR SPECIFIC (POSSIBLE) SUSPECTS
==========

This segment checks any mentions of Plugins, FormIDs or Game Files that were possibly involved in this crash. Search for any mentioned game/mod files, look up any FormIDs in xEdit or disable any mentioned mod plugins to check if they caused the crash. Enable SHOW FID VALUES for more detailed results.

GENERATE AND SHOW FORMID VALUES

You can make the SPECIFIC (POSSIBLE) SUSPECTS segment in your AUTOSCAN files provide actual values (names) of most FormIDs found in your crash logs. Simply enable SHOW FID VALUES in CLASSIC Settings.

Note that CRASH LOGS SCAN will take up to twice as long if you have SHOW FID VALUES enabled, and even three times as long if you generate your own FormID list for mods. To ensure fast scan times, only scan a few crash logs (less than 10) at any given time. Delete or move the rest so CLASSIC can't find them.

CLASSIC can look up (most) values of FormIDs from your mods, but you need to generate this FormID list yourself (FormID values for base game plugins are already generated). To generate the FormID List:

1) Place the Generate FormID List.pas from the CLASSIC Data folder into your xEdit/Edit Scripts folder.

2) Now run xEdit (FO4Edit / SSEEdit) and check all plugins you wish to include in the FormID List
I RECOMMEND YOU CHECK / ENABLE ALL PLUGINS

3) Press OK while holding [Shift] to load your plugins in xEdit. Once all plugins have loaded, right click on any plugin and select Apply Script..., then from the dropdown menu select Generate FormID List and press OK. Depending on how many plugins you have loaded, FormID generation will take some time (5-30 mins).

4) Once the full FormID List is generated, FO4Edit will ask you to save this list. Save it as a text file, then rename it to FO4 FID Mods.txt then place that file into the CLASSIC Data/databases folder and overwrite the existing FO4 FID Mods file. *Make sure the original FO4 FID Mods.txt gets overwritten!*

5) Run CLASSIC, enable SHOW FID VALUES under CLASSIC Settings and that's it! Scan your crash logs, the autoscan will do the rest and you should see the actual FormID values in your AUTOSCAN report files.

- The script will not be able to generate values for ALL FormIDs, around 12% of them don't have usable names that CLASSIC can display. You will see [CHECK MANUALLY WITH XEDIT] for these FormIDs. These are usually NavMesh records, but you can check with FO4Edit / SSEEdit anyway.

- To stop CLASSIC from checking the FormID List, either disable the SHOW FID VALUES setting or delete, rename or move your generated FO4 FID Mods.txt file somewhere else. CLASSIC will simply create a placeholder file again if needed and stop checking FormID values until a new FormID List is provided.

GAME FILES SCAN

Another main CLASSIC feature is the ability to scan your game and mod files to detect additional problems. Once you click the SCAN GAME FILES button, CLASSIC will scan various game related logs and files to check if any mods failed to load or left error messages. It will also check if the game is installed outside of the Program Files folder and if OneDrive is overriding your Documents directory location.

Results of the scan will be saved to CLASSIC GFS Report.md file in the same folder with CLASSIC.exe.

To include your mod files in this scan, make sure to provide a valid path for the STAGING MODS FOLDER as well as download and extract BSArch into the CLASSIC Data folder so mod files packed into BA2 archives can also be scanned. If BSArch executable is not found, CLASSIC will only be able to scan unpacked / loose mod files, assuming that the STAGING MODS FOLDER was provided. The implemented mod file checks are:

(-FORMAT-) -> Any files with an incorrect file format will not work. Mod authors should convert these files to their proper game format. If possible, notify the original mod authors about these problems.

(-PREVIS-) -> Any mods that contain custom precombine/previs files should load after the PRP.esp plugin from Previs Repair Pack (PRP). Otherwise, see if there is a PRP patch available for these mods.

(ANIMDATA) -> Any mods that have their own custom Animation File Data may rarely cause an Animation Corruption Crash. For further details, read the How To Read Crash Logs.pdf included with CLASSIC.

(DDS-DIMS) -> Any mods that have texture files with incorrect dimensions are very likely to cause a Texture (DDS) Crash. For further details, read the How To Read Crash Logs.pdf included with CLASSIC.

(XSE-COPY) -> Any mods with copies of original Script Extender files may cause script related problems or crashes. For further details, read your AUTOSCAN report files after scanning your crash logs.

CLASSIC will also mention the exact mod and/or file that triggered any of these checks listed above.

Note that if you have ever used the Plugin Checker option from Wrye Bash (FO4) / Wrye Bash (SSE) and the generated ModChecker.html report file is still in your Documents folder, CLASSIC will include the results from that file in the GFS Report along with slightly more verbose explanations for each detected problem.

If you do not wish to see Plugin Checker results in the GFS Report or they are outdated, simply delete the ModChecker.html file from your Documents folder or run Plugin Checker again to generate new results.

GFS Report will also list any INI files that enable or force VSync in case you want it disabled everywhere.
(CLASSIC will not disable or modify these VSync settings, only notify you which INI files have it.)

FINDING THE CULPRIT WITH A BINARY SEARCH

Sometimes, the fastest or only available solution relies on brute force.
The most efficient method for this is done through a binary search.

First, backup your latest save file before doing this!
Saves are in your Documents\My Games*game*\Saves folder.

To perform a binary search, disable half of your mods and test each half in-game to see which half causes the crash. Once you determine which half crashes the game, disable half of the mods in that group to see which half crashes again. Repeat this procedure until you're left with just one mod, which should be the one that caused the crash. Once you find the culprit, see below for steps you can take to fix the mod or resolve the crash. Afterwards, enable all other mods. Here's a simple binary search representation:

Example with some mods A, B, C, D, E, F, G, and H:

A B C D E F G H >>> Crash

ABCD | ~~EFGH~~ >>> Crash

AB | ~~CD EFGH~~ >>> Crash

A | ~~B CDEFGH~~ >>> No Crash

Therefore, mod B must be causing the crash since the game didn't crash while only mod A was active, while it did crash when both mods A and B were active with all other mods disabled.

ONCE YOU FIND THE EXACT CULPRIT (FAULTY MOD OR PLUGIN)

Once you find the mod / plugin that's causing the crash, here's what you can do.

CAUTION: NEVER TRY TO MANUALLY DELETE FILES MENTIONED IN THE CRASH LOG. I'M SURPRISED I EVEN HAVE TO WRITE THIS KIND OF A WARNING. INSTEAD, DO THIS:

A) If you crash while starting a new game or during the intro sequence, completely disable that mod / plugin and only enable it after completing the game intro. The intro forces a lot of scripts to run at the same time and the game may not be able to handle all mod content at once.

B) Make sure you are using the latest version of that mod. Always check the mod's Nexus Posts, Bugs and Description tabs to see if there are any reported bugs or known issues and if there's a way to fix them. Check the Files tab for patches or updates and open the Requirements dropdown menu on the Description tab to see if anyone created any patches for this mod.

C) Adjust the load order of that mod. If you're lucky, the cause of that crash could be simply a conflict between two or several mods. You can try placing the mod that caused the crash at the end of your load order, so it loads after all other mods. This ensures that nothing from that mod gets overwritten and changing the load order doesn't affect your save files in any negative way.

D) Clean and pack the mod into BA2 archives. Cleaning is done with xEdit's Quick Auto Clean and the Creation Kit. Instructions for this can be found in my main OGC 2 guide or in this article!

And if the mod isn't already packed into BA2 archives, it's highly advised that you pack it yourself with Cathedral Assets Optimizer (CAO), the game is much more efficient in accessing data from packed mods. Download and use the latest 5.3.x version (note that versions 6.x.x are not yet compatible with FO4).

E) Keep the mod disabled or uninstall it completely. While the easiest solution, keep in mind that this isn't the best or even adequate solution in every case, since some mod data could get baked into your save file, which won't get properly cleared until you start a new game / playthrough.

This is a major problem for mods that are heavily scripted or add new quests and NPCs. If you're forced to disable these to prevent a crash, you'll be better off starting a new game / playthrough. You can still continue the same save despite my warnings, just know this could backfire. You have been warned.

If you need additional help, join the Collective Modding Discord server and follow steps from the bot messages in the welcome2 channel to unlock access to Fallout 4 / SSE channels.

OTHER TIPS & TRICKS WHILE USING CLASSIC

- The warning and notification sounds that CLASSIC plays are saved as WAV files in the CLASSIC Data / sounds folder. You can replace these with your own custom WAV sounds if you so wish.

- If your crash log does not contain a list of plugins, you can place your loadorder.txt file (from your mod manager profile folder) into the same folder with CLASSIC.exe, which CLASSIC will then detect and use as reference for all crash logs. Remove the file afterwards to disable this feature.

- You can edit specific parameters in CLASSIC Main.yaml / Fallout4.yaml / SkyrimSE.yaml to expand or modify some CLASSIC features. Ex. you can edit CLASSIC_AutoBackup in CLASSIC Main.yaml to create auto-backups of additional files. And feel free to suggest new features you'd like to see!