Hey there!

Huge thanks for buying **Maintainer**, your attentive Unity3D projects housekeeping assistant!

Currently it contains only one module – **Issues Finder**, but it's just a beginning, I'm going to add new modules and improve Issues Finder further within next updates!

Please note: Maintainer is a Unity3D editor extension thus you need to obtain one license per seat.

Installation and setup

IMPORTANT:

- Always close Maintainer window before updating.
- Always completely remove previous version before updating.

    It will let you avoid different compatibility issues and errors.

As you import plugin, you'll see new menu commands:

- **Window > Code Stage > Maintainer** (CTRL / CMD + SHIFT + ALT + `)
  Opens Maintainer window.

- **Assets > Code Stage > Maintainer > Find Issues** (CTRL / CMD + SHIFT + ALT + F)
  Starts Issues Search and shows search results in the Maintainer window.
  Please note, this menu is also available as the RMB context menu of the Project Browser.

Maintainer stores its settings in the **CodeStage/Maintainer/Editor/Settings/MaintainerSettings.asset** file:

- It will create Settings folder and file itself on first usage.
- It will reset settings file on project path change (to avoid any issues when you copy-paste plugin from one project to another).
- It will reset settings file on own version change to avoid any compatibility issues.
- Feel free to delete **Settings** folder if you wish to revert **all** settings to default values.

Plugin features in-depth

Modules

Maintainer consist of different modules. Currently only **Issues Finder** module available, but there will be more in future.

Issues Finder [*video*]

This module allows to find different issues within your Unity3D project, like missing scripts, unused components, and many more (see detailed description below). In future it will be able to fix some of these issues in batch mode to let you quickly get rid of them.

You can use this module both from Maintainer window and directly via menu command / shortcut (see **Installation and setup**).

If you'll use it via menu command / shortcut, it will perform search with latest (or default) settings and will show results in the Maintainer window after that.

If you wish to tune settings before search, open Maintainer window first, go to the **Issues Finder** tab and tune them from there:
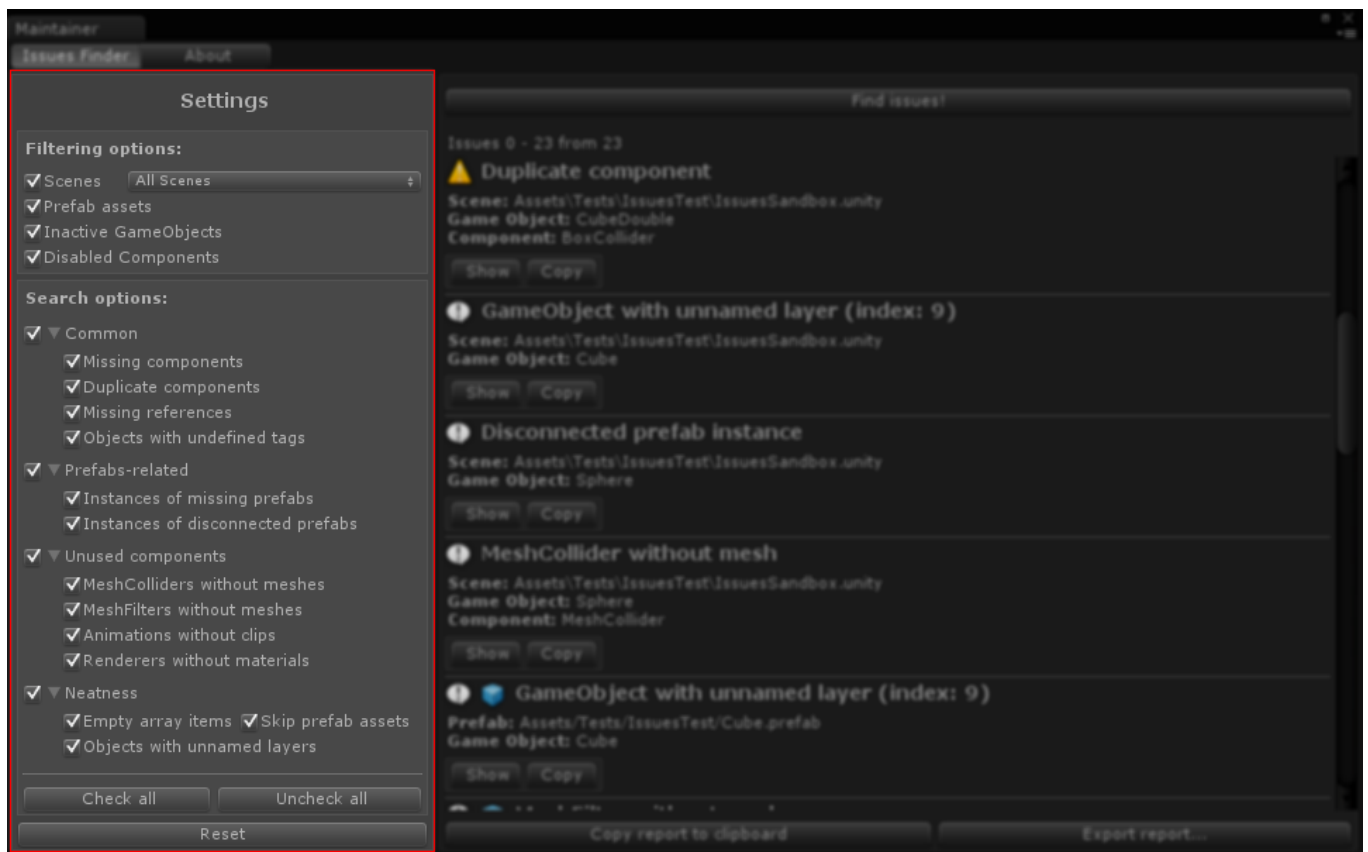
To the left, you can see different settings. There are two settings sections: **Filtering options** and **Search options**.

Filtering Options

- **Scenes**. Should we include scenes at all?
- **Scenes filtering selector:**

    - **All Scenes**. Performs search in all scenes in the project.
    - **Build Scenes Only**. Performs search only in those scenes which are enabled at the **Build Settings** list.
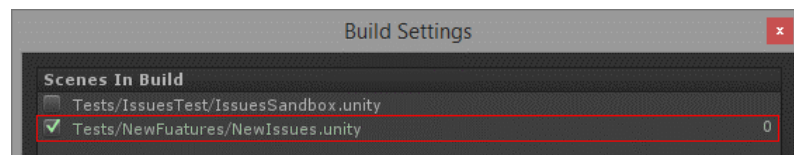
    - **Current Scene Only**. Performs search only in currently opened scene. Save scene dialog will not bother you if you have unsaved changes in the scene.

- **Prefab assets.** Should we include prefab assets files?
    IMPORTANT:
    - In-scene prefabs instances objects nested on 0 or 1 level which have no changed (overriding prefab) properties will be skipped when this option is checked since all such objects will be scanned as prefab assets.
- **Inactive GameObjects.** Should we include any inactive Game Objects?
- **Disabled Components.** Should we include any disabled (unchecked) Components?

Search Options

- **Common** group. Here we have most serious issues, which can affect your game behavior and stability.

    - **Missing components.** Search for the missing components on the Game Objects. Often happens when you delete from your project some component script placed on the Game Object.
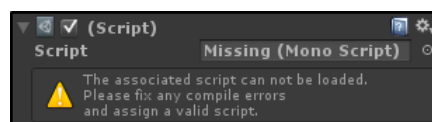
- **Duplicate components.** Search for the multiple instances of the same component with same values on the same object.
   **IMPORTANT:**
    - Gradient values are not supported for now (so you may get false positives if you have similar components with only differed gradients).
    - It may both ignore similar components and produce false positives, please report any issues.
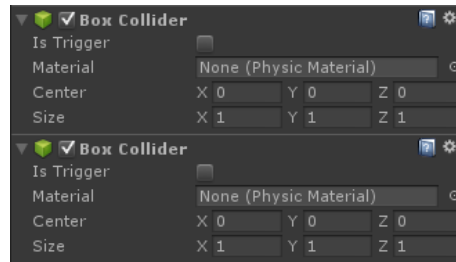
- **Missing references.** Search for any missing references in the serialized fields of the components. Often happens when you remove referenced item from the project.
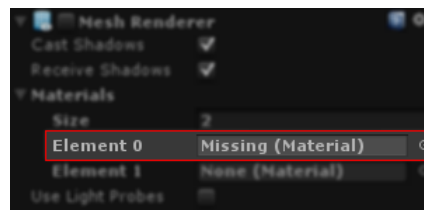

- **Objects with undefined tags.** Search for GameObjects without any tag. May happen if you use some custom tag and remove it from Tag Manager afterwards. It may be dangerous since you'll get exception if you'll try to access tag of such object.
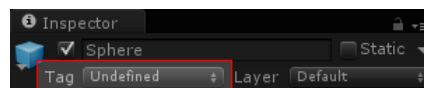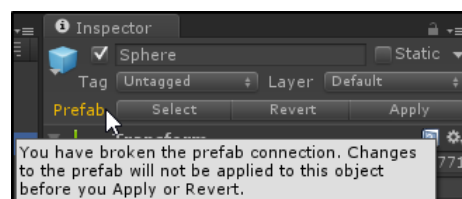

- **Prefabs-related** group. Contains different issues related to the prefabs.

    - **Instances of missing prefabs.** Search for instances of prefabs which were removed from project.
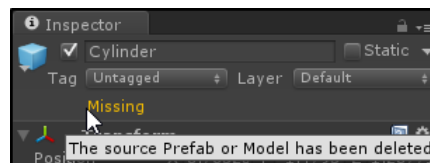

    - **Instances of disconnected prefabs.** Search for disconnected prefabs instances. Happens when you delete some nested object from the prefab instance for example.

- **Unused components** group. Contains different self-explanatory issues about not used by purpose components.
- **Neatness** group. Contains different issues related to the overall orderliness and neatness of the project.

    - **Empty array items.** Look for any unused items in arrays. All prefab files can be ignored using **Skip prefab assets** toggle.
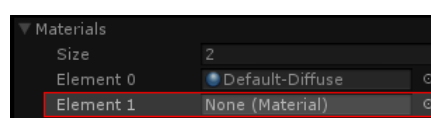

    - **Objects with unnamed layers**. Search for GameObjects with unnamed layers. Happens when you use some custom layer and remove it from Tag Manager afterwards.
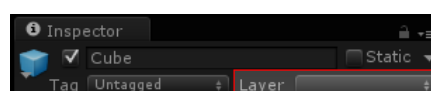
Use **Check all** and **Uncheck all** buttons to quickly check and uncheck all **Search options**.
Use **Reset** button to quickly reset all **Issues Finder** settings to defaults.

After you've done with settings, just press "**Find Issues!"** button or **CTRL / CMD + SHIFT + ALT + F** shortcut to start issues search. If you have any unsaved changes in current scene, you'll be prompted to save them before search starts in case you didn't choose Current Scene Only filtering option.
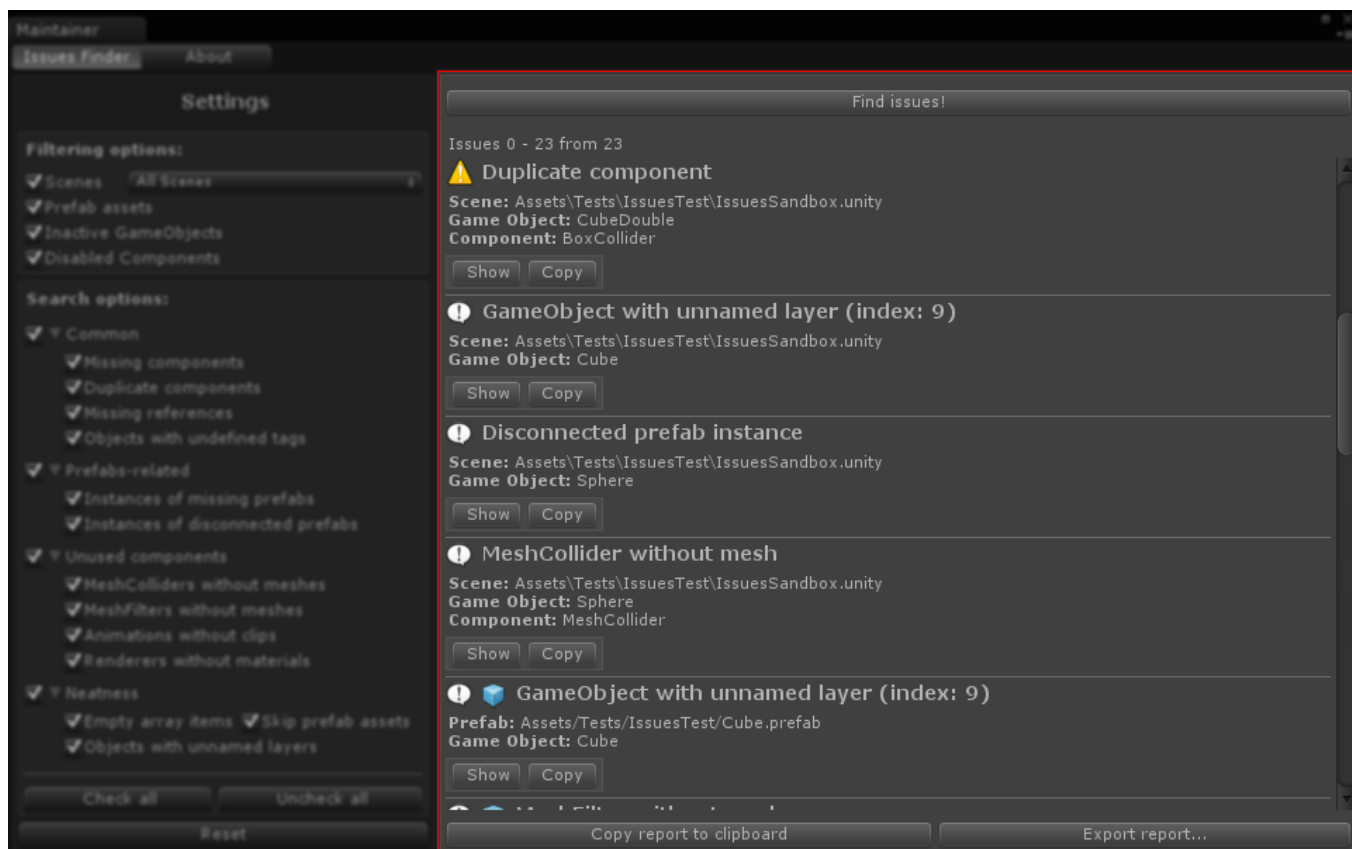
As search finishes, it will show results at the right side of the Issues Finder tab of the Maintainer window. Here you can see (from top to the bottom):

- **"Find Issues!"** button. Starts the Issues Finder search.
- Currently shown issues indexes and total issues count.
- Found issues list itself (will be covered in more details below).
- Paging controls if there is more than 100 issues found (one page shows 100 issues).
- Copy to clipboard and export buttons to let you easily share search results with your teammates for example.

Results list consists of separate issues records. One such record is shown below:
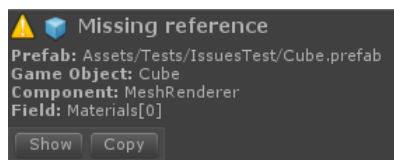
Note the prefab icon in the caption.
It shows only for the issues found in prefab assets.

Each record has such elements:

- Icon. Similar to the editor Console: Info, Warning and Error severity levels.
- Optional Prefab icon for issues found in prefab assets.
- Caption. Usually describes the issue nature + can contain some useful info like index of the unnamed layer to let you easily locate and name that layer in Tags Manager.
- Additional issue location details. Depends on issue type and can include such levels of precision:
    - Scene (for objects in scene) / Prefab (for objects in prefab assets)
    - Game Object
    - Component
    - Field (and array index if necessary)

- **Show** button. Selects Game Object with issue in the scene or Project Browser. Opens scene with needed Game Object if necessary and highlights this scene in the Project Browser.
- **Copy** button. Copies record text to the clipboard.

Using Maintainer from code

Maintainer has public API for **Issues Finder** module. It allows you to call Issues Finder from your code which may be useful when you wish to integrate Maintainer's Issues Finder into your build pipeline to make automated issues reports.

See online API docs for details:
http://codestage.ru/unity/maintainer/api

Troubleshooting

- If you have any errors in the console after plugin update consider making clean update: delete whole **CodeStage/Maintainer** folder before importing new plugin version into your project. If errors still there, please contact me and I'll try to help (see Support contacts below).
- If you can't see issue at the specified object, try to enable Debug Inspector mode, some issues may be not visible in Normal Inspector mode.

Compatibility

Plugin works with both Unity Personal and Professional editions.

Final words

I hope you will find **Maintainer** useful and helpful in your daily work with Unity and it will save you some of your priceless time!
Please, leave your reviews at the Asset Store and feel free to drop me bug reports, feature suggestions and other thoughts on the forum or via support contacts!

Maintainer links:

Asset Store | Web Site | Forum | YouTube

Support contacts:
E-mail: focus@codestage.ru
Other: blog.codestage.ru/contacts

Best wishes,
Dmitriy Yukhanov
Asset Store publisher
blog.codestage.ru
@dmitriy_focus

P.S. #0 I wish to thank my family for supporting me in my Unity Asset Store efforts and making me happy every day!
*P.S. #1 I wish to say huge thanks to **Daniele Giardini** (DOTween, HOTools, Goscurry and many other happiness generating things creator) for awesome logos, intensive help and priceless feedback on this plugin!*